** Revised **

PATRICIA SCOTT, CHAIR
JOHN GAGNEPAIN, VICE-CHAIR
CORINNE AWAD, SECOND VICE-CHAIR
TAURUS JONES, COMMISSIONER
MICHELLE PETERSON, COMMISSIONER

REGULAR MEETING AGENDA
PLANNING COMMISSION OF THE CITY OF SAN JACINTO
TUESDAY, OCTOBER 27, 2026
6:00 PM OPEN SESSION

COMMUNITY CENTER
625 S. PICO AVENUE
SAN JACINTO, CA 92583
951-487-7330

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the office of the City Clerk at 951-487-7330 ext. 339. Notification 48 hours prior to a meeting will enable the City to make reasonable arrangements to ensure accessibility to that meeting [28 CFR 35.102.35.104 ADA Title II].

The Planning Commission meeting may be observed virtually by accessing https://horizon.agendalink.app/engage-v2/sanjacintoca/agendas and selecting the “Watch” button next to the corresponding agenda for the meeting date, or in person at the San Jacinto Community Center.

Public Comments will only be accepted in person during the meeting or in writing to the Community Development Clerk no later than 3:00 PM on the day of the meeting. Participants viewing the Livestream will not have a comment option.

Watch the Meeting (Official Livestream)
The official way to watch and listen to the Planning Commission meeting is through the City's AgendaLink Livestream by selecting the **"Watch"** option for the applicable meeting on the City's website.

Provide Live Public Comment by Telephone
Members of the public wishing to provide live public comment may participate by telephone using the Microsoft Teams dial-in information below. The telephone line is intended **only** for individuals who wish to address the Planning Commission during the designated Public Comment period.

Dial in by phone:
+1 (951) 465-7684
Conference ID: 706 805 861#

Public Comment Workflow

When the Chair opens the Public Comment portion of the meeting, the process will be as follows:

- Members of the public will call the Teams dial-in number and wait in the Teams lobby.
- Callers should remain in the Teams lobby until the applicable Public Comment period opens. They should not be admitted before the Chair opens Public Comment.
- The Clerk will admit one caller at a time from the lobby as they are ready to speak. If multiple callers are waiting, they should remain in the lobby until it is their turn.
- Once admitted, callers should be able to speak. If necessary, the Clerk can unmute the caller.
- The Chair will recognize the caller, and the caller should first state their name for the record before providing their public comment.
- Each caller will have up to three (3) minutes to speak.
- After completing their comments, callers may either hang up, or the Clerk may remove them from the meeting before admitting the next speaker.

Written public comments ***may only be submitted via email*** to comments@sanjacintoca.gov or by hard copy to the Office of the Community Development Clerk at 595 S. San Jacinto Ave., San Jacinto, CA 92583, no later than 3:00 PM on the day of the meeting. Comments via text and social media (Facebook, Twitter, etc.) will not be accepted. Please identify the agenda item number and "PUBLIC COMMENT" in the subject line of the email or hard copy document. All written correspondence received by the 3:00 PM deadline will be distributed to the legislative body prior to the meeting and retained with the official meeting record. All email comments shall be subject to the same rules as would otherwise govern in-person speaker comments at the Planning Commission meeting.

Reading of Public Comments: The Community Development Clerk will read all email comments, provided that the reading shall not exceed three (3) minutes or such other time as the Chair may provide, consistent with the time limit for speakers at a Planning Commission meeting. The email comments submitted shall become part of the record of the Planning Commission meeting.

1. ORGANIZATION

1.1 Roll Call

1.2 Pledge of Allegiance

2. PUBLIC COMMENTS

3. MINUTES

3.1 Minutes of the Regular Planning Commission Meeting of September 22, 2026
RECOMMENDATION:
Staff recommends that the Planning Commission APPROVE the minutes of the Regular Planning Commission Meeting of September 22, 2026.

4. PUBLIC HEARINGS

4.1 Bradley Gardens Expansion Project
A Conditional Use Permit and Site Plan and Design Review to expand the existing Bradley Gardens Care Facility from 44 beds to 103 beds on a 2.98-acre parcel. The project includes an approximately 17,100-square-foot, building addition (43 beds) and the conversion of an existing 2,596-square-foot office building into a care facility (16 beds).

— DETERMINE that the Project, as analyzed in the Initial Study/Mitigated Negative Declaration (IS/MND) as revised by the Errata, will not have a significant effect on the environment with the incorporation of mitigation measures, and that the Errata does not require recirculation pursuant to CEQA Guidelines §15073.5; and ADOPT the IS/MND, as revised, and the associated Mitigation Monitoring and Reporting Program (MMRP), pursuant to the California Environmental Quality Act (CEQA); and

— APPROVE a Conditional Use Permit, which includes a Nonconforming Adjustment to expand the Bradley Gardens facility from 44 beds to 103 beds, which and covert an existing 2,596 square foot vacant office building to a 16-bed Care Facility.

— APPROVE a Site Plan and Design Review (USE26-0126) for construction of a 17,100 square foot single-story addition to the existing facility.

5. COMMUNITY DEVELOPMENT UPDATE

6. COMMISSIONER COMMENTS

7. ADJOURNMENT

DOCUMENTS RELATED TO OPEN SESSION AGENDAS (SB343) - Any public record, relating to an open session agenda item, that is distributed within 72 hours prior to the meeting is available for public inspection at the public counter located in the Administration Building of City Hall, 595 S. San Jacinto Avenue, San Jacinto, CA 92583.

I, Lori Matley, Community Development Clerk of the City of San Jacinto, do hereby certify that I caused to be posted the foregoing agenda this October 23, 2026 as requested by law.

Lori Matley, Community Development Clerk

Date Posted: October 23, 2026

October 27, 2026

TO:	Planning Commission
REQUESTED BY:	Lori Matley, Community Development Clerk
APPROVED BY:	Kevin White, Community Development Director
SUBJECT:	Minutes of the Regular Planning Commission Meeting of September 22, 2026

RECOMMENDATION:

Staff recommends that the Planning Commission **APPROVE** the minutes of the Regular Planning Commission Meeting of September 22, 2026.

Attachments

Minutes_of_Regular_Planning_Commission_Meeting_of_September_22_2026.pdf

PATRICIA SCOTT, CHAIR
JOHN GAGNEPAIN, VICE-CHAIR
CORINNE AWAD, SECOND VICE-CHAIR
TAURUS JONES, COMMISSIONER
MICHELLE PETERSON, COMMISSIONER

ACTION MINUTES
SAN JACINTO PLANNING COMMISSION – REGULAR MEETING
TUESDAY, SEPTEMBER 22, 2026
6:00 PM OPEN SESSION

SAN JACINTO COMMUNITY CENTER
625 S. PICO AVENUE
SAN JACINTO, CA 92583
951-487-7330

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1. ORGANIZATION

1.1. Call to Order

Chair Patricia Scottt called the Meeting to order at 6:00 p.m.

1.2. Roll Call

Community Development Clerk Lori Matley conducted the roll call.

Present: Commissioner Taurus Jones, Commissioner Michelle Peterson, Commissioner Patricia Scott

Absent: Commissioner Awad**,** Commissioner Gagnepain

1.3. Pledge of Allegiance

Commissioner Jones lead the Pledge of Allegiance.

2. PUBLIC COMMENTS

There were no public comments.

3. MINUTES

3.1. Minutes of the Regular Planning Commission Meeting of July 28, 2026

A motion was made by Commissioner Peterson and seconded by Commissioner Jones to approve the Regular Planning Commission Meeting Minutes of July 28, 2026. **Motion carried** 3/0.

AYES:	Jones, Peterson, Scott
NAYS:	None
ABSENT:	Awad. Gagnepain
ABSTAIN:	None

4. PUBLIC HEARING

4.1. Annexation of 43.68 Acres into the City of San Jacinto (Annexation A), a Lot Line Adjustment 22-01, and Tentative Tract Map 34271

Assistant Planner Matthew Kramer presented the Staff Report.

Commissioner Scott opened the Public Hearing at 6:15 pm. The applicant Bryan Menne was present and agreed with the conditions. Chair Scott closed the Public Hearing at 6:29 pm.

Following discussion by the Planning Commission, a motion was made by Commissioner Jones and seconded by Commissioner Peterson to: 1. **DETERMINE** that the proposed Project will not have a significant effect on the environment with the incorporation of mitigation based on the findings set forth in the case record and ADOPT a Mitigated Negative Declaration (MND) and Mitigation Monitoring and Reporting Program, pursuant to the California Environmental Quality Act (CEQA); 2. **AUTHORIZE** the Annexation of 2 parcels on 43.68 acres into the City of San Jacinto, subject to review and approval by the Riverside Local Agency Formation Commission (LAFCO); 3. **APPROVE** Lot Line Adjustment between two parcels, subject to approval of the Annexation by LAFCO and final adoption; and 4. **APPROVE** Tentative Tract Map (TTM) 34271 to subdivide 41.74 acres, into 151 residential lots for the ultimate construction of 151 single-family detached residences, and to create 7 lettered lots for onsite roadways, a detention basin, parks, and on-site landscape subject to the Recommended Conditions of Approval subject to approval of the Annexation by LAFCO and final adoption. (P22-004). **Motion carried** 3/0.

AYES:	Jones, Peterson, Scott
NAYS:	None
ABSENT:	Awad, Gagnepain
ABSTAIN:	None

4.2. Annexation of 143.62 Acres in the City of San Jacinto (Annexation B) P22-084

Assistant Planner Matthew Kramer presented the Staff Report.

Commissioner Scott opened the Public Hearing at 6:29 pm. There were no public comments. Commissioner Scott closed the Public Hearing at 6:29 pm.

Following discussion by the Planning Commission, a motion was made by Commissioner Jones and seconded by Commissioner Peterson to: 1. **DETERMINE** pursuant to the California Code of Regulations the project is exempt from CEQA as the project is consistent with the General Plan policies for which an EIR was certified, CEQA Guidelines Section 15183; and 2. **AUTHORIZE** the Annexation of 94 parcels on 143.62 acres within the City's Sphere of Influence. (P22-084). **Motion carried** 3/0.

AYES: Jones, Peterson, Scott
NAYS: None
ABSENT: Awad, Gagnepain
ABSTAIN: None

5. COMMUNITY DEVELOPMENT UPDATE

5.1. Community Development Director Kevin White provided an update on the following:

- Development Activity
- Beyond Market
- The Magnet
- Trunk or Treat
- State of the City
- Mile on Main Street

6. COMMISSIONER COMMENTS

Commissioners provided their comments.

7. ADJOURNMENT

With no further business to discuss, Commissioner Peterson adjourned the meeting at 6:37 p.m.

Respectfully submitted,

_____
Planning Commission Secretary

City of San Jacinto
Planning Commission

_____
Planning Commission Chair

October 27, 2026

TO:	Planning Commission
REQUESTED BY:	Frank Chen, Associate Planner
APPROVED BY:	Kevin White, Community Development Director
SUBJECT:	Bradley Gardens Expansion Project

RECOMMENDATION:

Staff Recommends that the Planning Commission:

1. **DETERMINE** that the Project, as analyzed in the Initial Study/Mitigated Negative Declaration (IS/MND) as revised by the Errata, will not have a significant effect on the environment with the incorporation of mitigation measures, and that the Errata does not require recirculation pursuant to CEQA Guidelines §15073.5; ADOPT the IS/MND, as revised, and the associated Mitigation Monitoring and Reporting Program (MMRP), pursuant to the California Environmental Quality Act (CEQA); and
2. **APPROVE** a Conditional Use Permit, which includes a Nonconforming Adjustment to expand the Bradley Gardens facility from 44 beds to 103 beds, and covert an existing 2,596 square foot vacant office building to a 16-bed Care Facility.
3. **APPROVE** a Site Plan and Design Review (USE26-0126) for construction of a 17,100 square foot single-story addition to the existing facility.

DISCUSSION:

The proposed project is a submittal by Generations Healthcare to expand the Bradley Gardens Care Facility. The Bradley Gardens site has been utilized as both a Convalescent and Congregate Care facility since 1964. The facility currently has been improved with a 12,132-square-foot facility (Building A) which houses 44 beds, a 2,609-square-foot office (Building B), and a 2,596-square-foot office (Building C) In addition the site includes a 1,074-square-foot maintenance building and a 443-square-foot storage building. The project site is located on a 2.98-acre parcel (APN 435-330-003), located at the southeast corner of 7th Street and Grand Avenue. The site is relatively flat with a gentle slope to the southeast and includes driveways, a parking lot, an outdoor courtyard, and landscaping.

The applicant seeks to continue operating the facility as both a Convalescent and Congregate Care Facility that includes 24-hour Skilled Nursing Facility (SNF), Special Treatment Program (STP), and Psychiatric Health Facility (PHF). The proposed project would also expand the established use within the existing parcel. Specifically, the proposed project would expand Building A with an approximately 17,100-square-foot addition, and convert Building C in the northwest corner of the site to a 16-bed PHF. To construct the addition, the project proposes to demolish the maintenance and storage buildings. Building B, the existing 2,609 square-foot administrative office building, will be left unchanged. With this project, the facility will have a total of 103 beds and 100 new employees across all shifts.

To facilitate the project, the applicant submitted a Conditional Use Permit to expand an existing legal non-conforming use in accordance with the Development Code, and a Site Plan and Design Review for the addition of Building A and the conversion of Building C from an office to patient care.

ANALYSIS:

The General Plan designation for the site is Industrial (I). The Industrial designation provides for low and non-polluting industrial and manufacturing activities, and allows other uses that are determined to be compatible with the primary uses. The site is zoned Industrial Light (IL), which is applied to areas appropriate for light industry, manufacturing, and heavier commercial service uses. The IL zone is consistent with the Industrial General Plan land use designation.

The site is surrounded primarily by industrial zoned land, most of which is vacant. A metal fabrication plant is located across 7th Street to the north. An existing mobile home development is located to the south, beyond one vacant parcel, and to the southwest across Grand Avenue.

Caption

Project Site and Surrounding Land Use, General Plan, and Zoning			
	Land Use	**General Plan**	**Zoning**
Project Site	Convalescent Facility (Skilled Nursing / Psychiatric Care)	Industrial (I)	Industrial Light (IL)
North	Metal Fabrication Plant; Single-Family Residences	Industrial (I)	Industrial Light (IL)
South	Vacant	Industrial (I)	Industrial Light (IL)
East	Vacant	Industrial (I)	Industrial Light (IL)
West	Vacant	Industrial (I)	Industrial Light (IL)
Southwest	Mobile Home Development	High Density Residential (HDR)	Residential, High Density (RH)

Conditional Use Permit

The Bradley Garden Facility is classified as both a Congregate Care Facility and Convalescent Facility, as the existing operations provide for different types of patient care that include skilled nursing, 24-hour care with regular medical attention, and care for persons who may be mentally impaired. Table 2-2 of the Development Code indicates the land uses allowed within each zone and the planning permit required to establish each use. Table 2-2 does not permit Congregate Care or Convalescent facilities in the IL zone, and therefore the existing use is nonconforming. A nonconforming use is a land use that legally existed before the effective date of the Development Code but which is no longer allowed in the zone in which it is located. As previously mentioned, the facility was established in 1964, and the use became legal nonconforming through changes to the Development Code and Zoning Map.

Section 17.705.120 (B)(1) provides a procedure for the City to review requests to continue a legal nonconforming use and allow a legal nonconforming use to be expanded through a Nonconforming Adjustment A Nonconforming Adjustment requires approval by the Planning Commission with a Conditional Use Permit. Approval of the proposed project would allow the continued use and reinvestment in an established healthcare facility that has operated on the site while expanding its capacity to provide needed skilled nursing and psychiatric care services. The proposed expansion is not anticipated to adversely affect surrounding properties or conflict with nearby land uses. Additionally, the existing buildings are specifically configured to support healthcare operations, and their specialized design and layout would make them difficult to re-purpose for other uses permitted within the Industrial Light zone. Allowing the facility to expand within its existing site would promote the productive use of developed property and avoid the potential for prolonged vacancy.

Site Plan and Design Review

The project includes an expansion to Building A and a change of use from an Office to Congregate Care for Building C. The expansion to Building A will connect at the easternmost portion of the existing building and extend to the southeast portion of the site, in place of the existing storage and maintenance buildings that will be demolished. Like the existing building, the expansion will be a single-story building, with a maximum 22 feet in height. It will include patient rooms, a nurse station, kitchen, dining and recreation rooms, a rehabilitation room, offices, and support spaces. Building C will transition from an office building to Congregate Care for the PHF. All proposed changes will be internal except for minor facade upgrades. The 2,596-square-foot building will include patient rooms, a nurse station, dining, activity, and support rooms. The building will remain a single-story, approximately 14 feet in height, at its existing location in the northwest corner of the site.

Other changes to the site include a new open space area with seating, walkways, artificial turf, and decorative planting behind the existing buildings for use by patients, staff, and visitors. These features will be enclosed by the buildings and a combination of fences and decorative walls to control access to portions of the facility. The upgraded facility will also include a new trash enclosure with decorative walls painted to match the structures on site.

Architecture and Materials

The project site is developed with three single-story buildings characterized by a combination of gray, light tan, and beige painted stucco exterior walls and low-pitched gray composition-shingle gable roofs. Architectural elements include painted metal doors, modest roof overhangs, and regularly spaced windows along the building elevations. The proposed building expansion will also utilize complimentary painted stucco, but include stone veneer accents, asphalt shingle roofs, and aluminum windows in brown, beige, and gray tones that match the existing buildings. Staff finds the design consistent with the existing facility and appropriate for its setting.

Access and Circulation

The existing facility currently has three 17-foot-wide driveways that connect to 7th Street, including two driveways near the center of the site and one driveway on the eastern portion of the property. The project proposes to consolidate the two central driveways into a single 24-foot driveway, and widen the eastern driveway from 15 feet to 24 feet. The eastern driveway will wrap around the rear portion of the facility and connect with a new single driveway on Grand Avenue. This connection will serve as an emergency access lane consistent with the requirements of the Fire Department.

Road Improvement

7th Street is classified as a Major roadway in the Mobility Element of the General Plan. To comply with the specifications of a Major roadway, the project will be conditioned to dedicate 3 feet of right-of-way. In addition, the condition of approval will require the developer to install curb, gutter, and sidewalk along 7th Street. The portion of Grand Avenue adjacent to the project site is classified as a Collector roadway. In order to comply with the General Plan, the project will be conditioned to dedicate 6 feet of right-of-way and install curb, gutter, and sidewalk along the project frontage.

Landscaping

The project will add new landscaping within the parking lot and along the 7th Street and Grand Avenue frontages. In addition, new landscaping next to the proposed building additions and the new open space area. In total, approximately 24 percent of the site will be landscaped, which will include 24-inch box trees, shrubs, and succulents concentrated near the expanded portions of building A.

Water, Wastewater, and Drainage

The City of San Jacinto provides water and sewer service. The project connects to the existing 12-inch water line and 8-inch sewer line in 7th Street. Regarding the on-site and off-site drainage the project has been conditioned to remove the existing swale along 7th Street and install a 24-inch storm drain to collect and convey runoff from the project frontage from the easternmost portion of the property, and discharge the flows at the southwest intersection of Grand Avenue and Seventh Street.

Development Standards

The design of the project has been analyzed for compliance with the standards for the IL zone (SJDC Table 2-7), as noted in the table below

Standard	Required	Existing Structures	Compliant?	Proposed Structures	Compliant?
Maximum FAR	0.50	0.15	Yes	0.27	Yes
Maximum Height	45 ft.	~14-20 ft.	Yes	22 ft. (addition)	Yes
Front Setback (7th St.), adjacent to nonresidential	10 ft.	Building A ~68 ft. Building B ~90 ft. Building C ~11 ft.	Yes Yes Yes	Building A 68 ft.	Yes
Street Side Setback abutting nonresidential	10 ft.	Building A ~114 ft. Building B ~10 ft. Building C ~3 ft.	Yes Yes No	Building A 68 ft.	Yes
Rear Setback (south), abutting nonresidential	None required	Building A ~95 ft. Building B ~68 ft. Building C ~211 ft.	Yes Yes Yes	36 ft.	Yes
Maximum Impervious Coverage	80%	72%	Yes	76%	Yes

The existing and proposed structures meet all of the Development Standards except for Building C, which will not be consistent with the street side yard setback after dedication of right-of way for Grand Avenue required by the project. Staff has reviewed the location of the building as it relates to the proposed street improvements and finds that the building will not impact circulation.

Parking

The proposed facility requires 1 space for each on-duty employee and 1 space for every 10 beds. The proposed facility will have 41 employees on the largest shift and 103 beds. Therefore, the Project is required to have 51 parking spaces. The project provides 52 parking spaces, which include 48 standard spaces and 4 accessible spaces. In addition, the project also provides 6 bicycle parking spaces.

ENVIRONMENTAL ANALYSIS

The City of San Jacinto is the lead agency on the proposed Project and has reviewed all submitted drafts, technical studies, and reports. An Initial Study was prepared to evaluate the Project's potential impacts on the environment as required by the California Environmental Quality Act (CEQA). The Initial Study found that the Project would have a less than significant impact on all environmental topics, except Biological Resources, Cultural Resources, and Geology and Soils, which would be less than significant with the mitigation measures described below.

Biological Resources

The site is within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) area but is not within a Criteria Cell or conservation area. The site is developed and sparsely vegetated, so it does not support native habitat, riparian areas, wetlands, or jurisdictional waters, and no special-status plant or wildlife species were identified. However, existing trees and shrubs could support nesting birds. Mitigation Measure BIO-1 requires a pre-construction nesting bird survey within three days before vegetation removal or ground disturbance during the nesting season (February 1 through August 31).

Cultural Resources

A Cultural Resources Study did not identify any previously recorded cultural resources on the site. Because the site has been developed since 1964, the potential to encounter intact archaeological resources is low, but Mitigation Measure CUL-1 requires work to stop and a qualified archaeologist to evaluate any resources discovered during construction.

Geology and Soils

The site is underlain by Holocene and late Pleistocene-aged young alluvial valley deposits, which have a low potential to yield significant paleontological resources. To address ground disturbance deeper than these deposits, Mitigation Measure GEO-1 requires a Paleontological Resources Impact Mitigation Plan and full-time paleontological monitoring of excavation deeper than 3 feet.

Mitigated Negative Declaration

Based upon the information contained in the Initial Study, as revised by the Errata, and pursuant to the requirements of CEQA, it has been determined that this Project, with the incorporation of mitigation measures, will not have a significant impact on the environment. The mitigation measures are included in the Mitigation Monitoring and Reporting Program and the conditions of approval. As a result, it is recommended that the Planning Commission adopt a Mitigated Negative Declaration for this Project.

SCAQMD asked that the emergency generator required for care facilities be evaluated and that SCAQMD be identified as a Responsible Agency. In response to the comment from SCAQMD, an Errata to the Initial Study was prepared to evaluate the Project's backup emergency generator; the Errata found that air quality, health risk, energy, greenhouse gas, and noise impacts would remain less than significant and did not change any significance conclusion or add any mitigation measure.

In addition staff received a comment letter from a resident in the vicinity of the project. The resident raised concerns about shift-change traffic, intersection and pedestrian safety, emergency vehicle sirens, site security, and neighborhood compatibility.

The project expands a use that has operated on the site since 1964 and would add only 8 new morning and 13 new evening peak hour trips, as documented in the initial study. Furthermore the project will consolidate driveways on 7th Street and adds sidewalks on both adjacent street frontages. Operational noise at the nearest residences is well below City standards, and the facility will continue to have 24-hour staffing and controlled access. The facility is not a hospital or emergency receiving facility, and patient transfers are generally scheduled and non-emergency. Siren noise from emergency vehicles is exempt from the City's noise standards under SJMC Section 8.40.070(C), which excludes public safety personnel performing official duties.

Written responses to both letters are attached.

PUBLIC NOTICE AND COMMENTS

A 10-day notice of public hearing was advertised on October 17, 2026, in the Press Enterprise. In addition, notices of the public hearing were mailed to all property owners within a 300-foot radius of the project site. No comment letters were received during the review period:

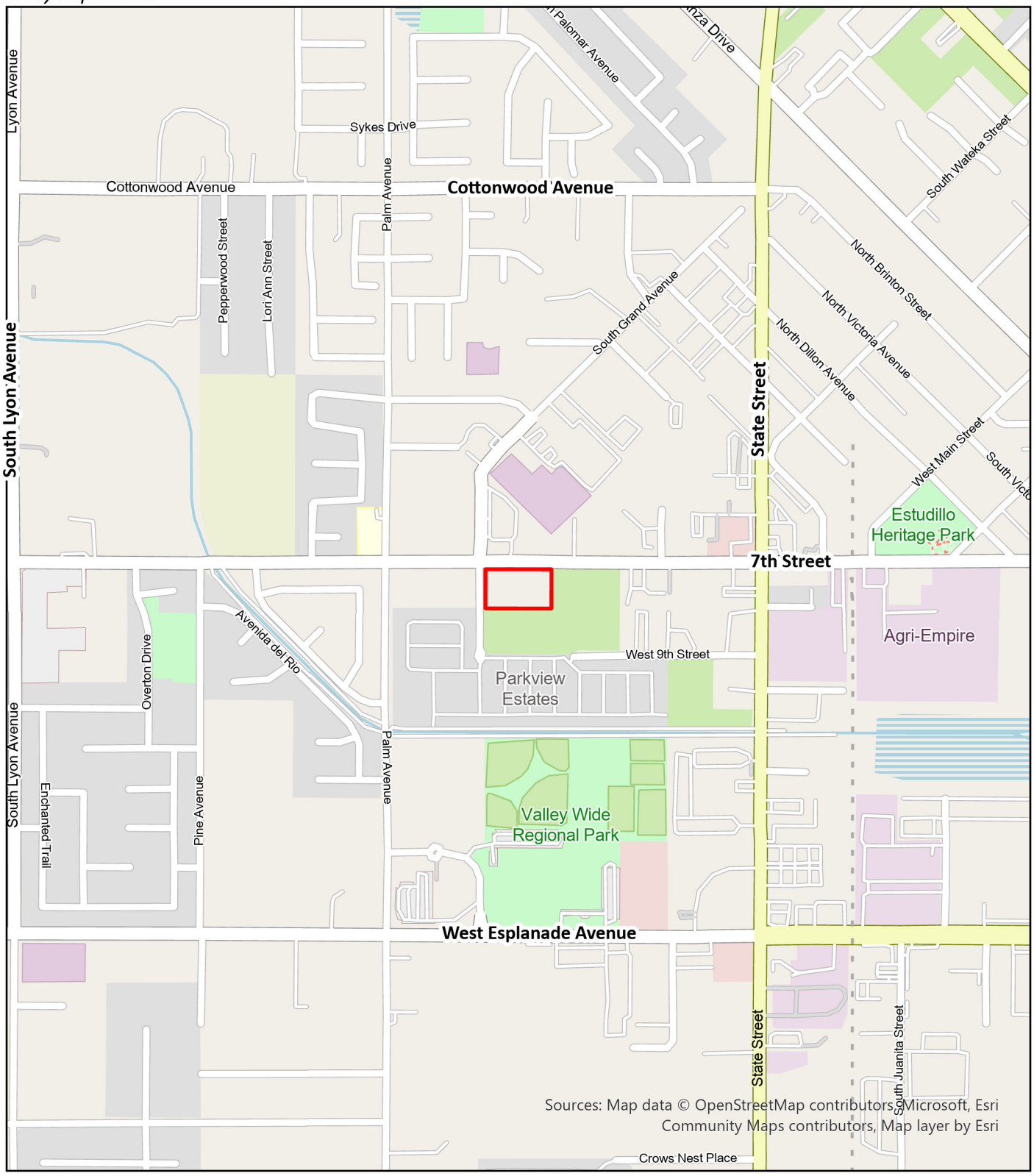
CONCLUSION:

The project expands a care facility that has operated on the site since 1964. The proposed expansion will remain within the existing parcel and all additions will meet the IL zone development standards. With mitigation, all environmental impacts would be less than significant and the conditions of approval will ensure that needed improvement to infrastructure will be constructed. Therefore Staff recommends that the Planning Commission adopt the Mitigated Negative Declaration and approve PROJ25-0178, subject in accordance with the Findings.

Attachments

Vicinity_zoning_and_General_Plan_maps.pdf
Bradley_Gardens_Plan_Set_092926_v4.pdf
Findings_of_Fact_Bradley_Gardens.pdf
CONDITIONS_OF_APPROVAL_BRADLEY_GARDENS_DRAFT.pdf
Bradley_Gardens_Prelim_Landscape_092426_v1.pdf
Revised_Appendix_A_Air_Quality_Energy_and_Greenhouse_Gas_Assessment.pdf
Revised_Appendix_B_Construction_and_Operational_Health_Risk_Assessment.pdf
Appendix_C_Biological_Resources_Assessment.pdf
Appendix_D_Cultural_Resources_Study.pdf
Appendix_E_Geotechnical_Investigation_Report.pdf
Appendix_F_Paleontological_Resources_Assessment.pdf
Appendix_G_Phase_I_Environmental_Site_Assessment.pdf
Appendix_H_WQMP.pdf
Appendix_I_Hydrology_Report.pdf
Revised_Appendix_J_Noise_and_Vibration_Impact_Analysis.pdf
Appendix_K_VMT_Screening_Memo.pdf
Bradley_Gardens_Final_MND.pdf
Public_Comment_1_Resident.pdf
Public_Comment_2_SCAQMD.pdf

Figure 2-2: Local Vicinity



Legend

Project Boundary

0 0.15 0.3 Miles

N

Figure 2-3: Aerial View



Created with Vertical © 2026 Nearmap US, Inc.

Legend

Project Boundary

0 100 200
US Feet

N

Figure 2-6: Existing Zoning Designations

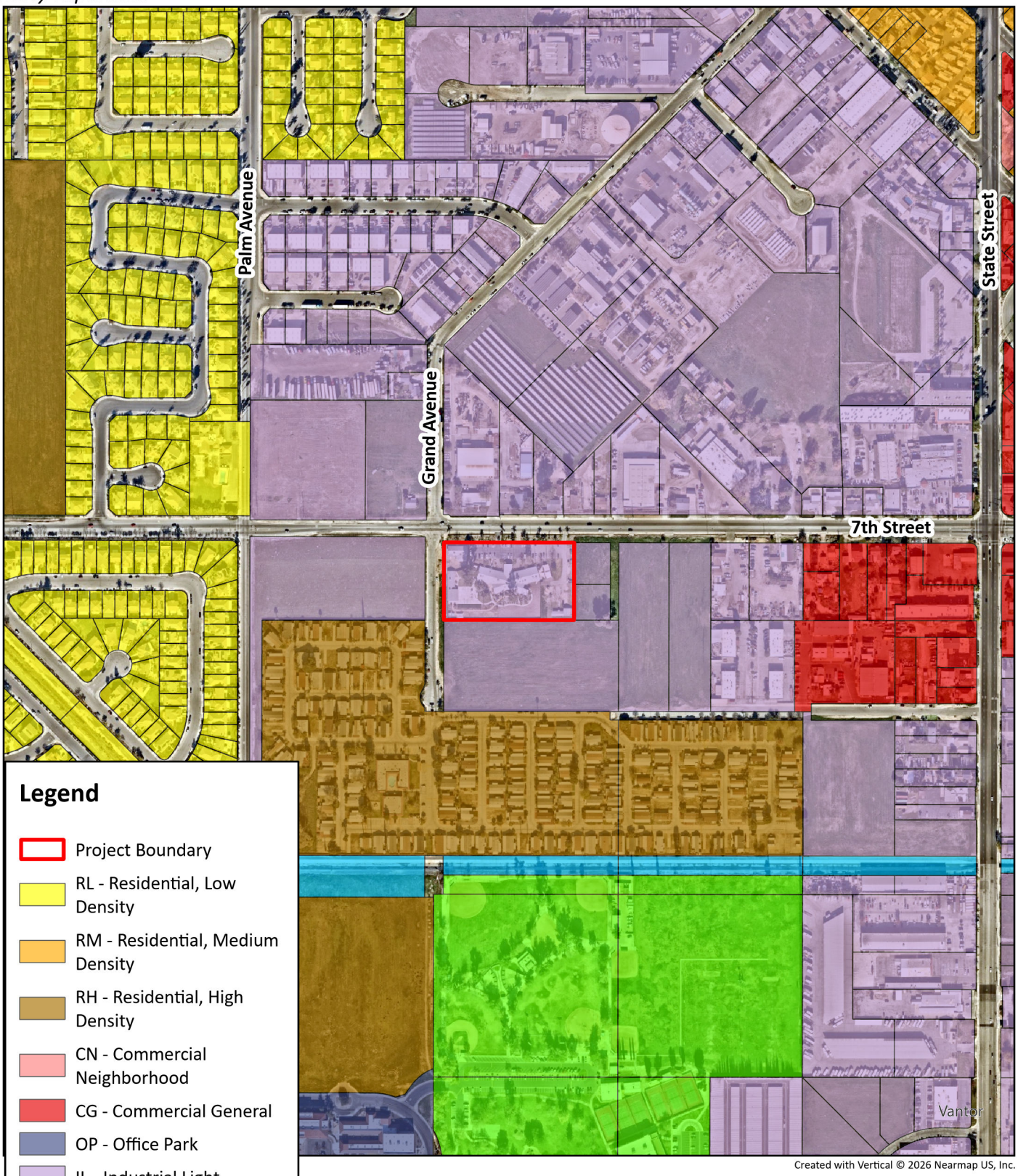


Figure 2-5: Existing General Plan Land Use Designations

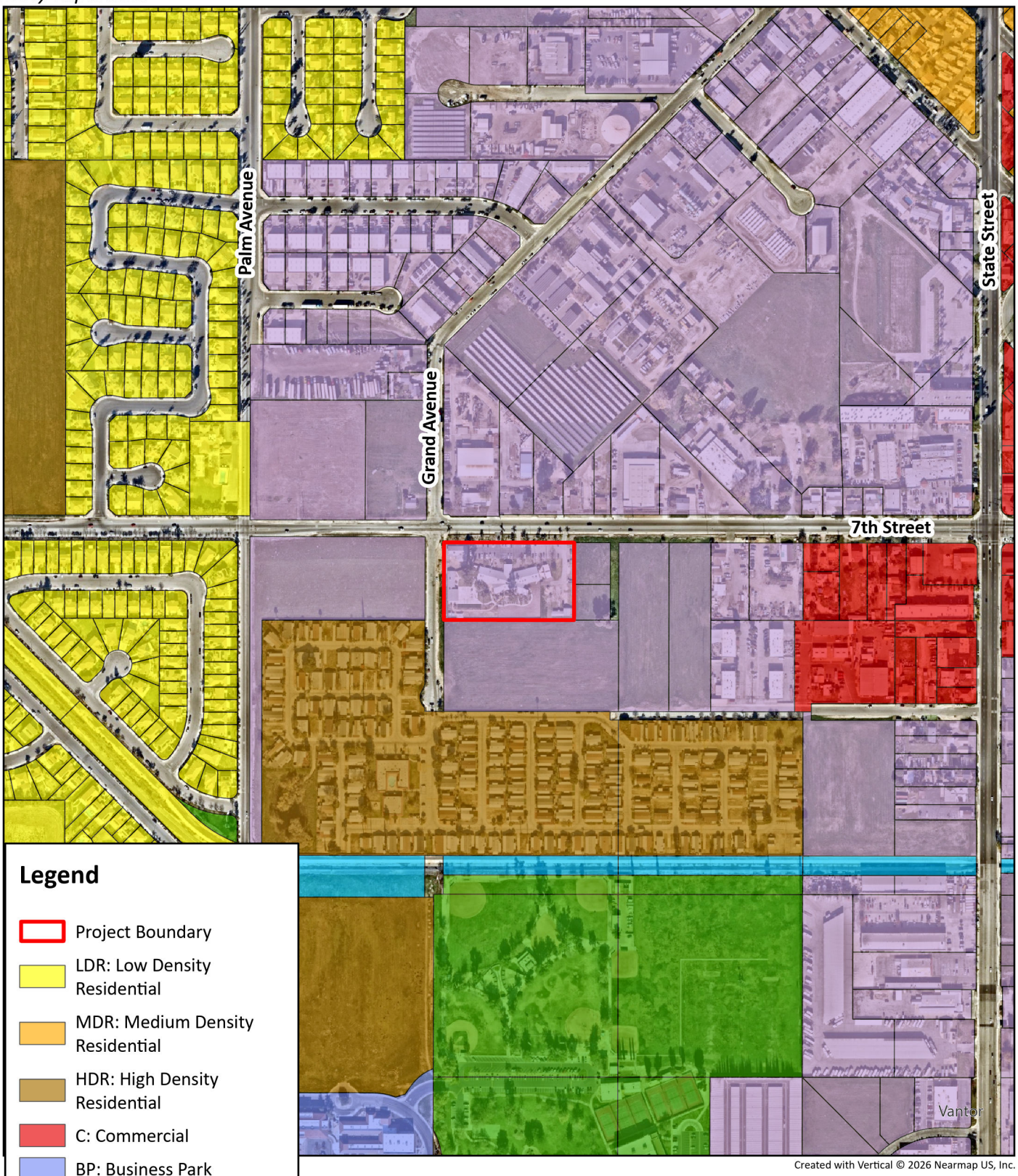




Photo 1: View of the Skilled Nursing Facility Building from east side of the parking lot.



Photo 2: View of the administrative office building from the outdoor courtyard west of the skilled nursing building.



Photo 3: View of the vacant office building in the northwest corner of the site from W. 7th Street.



Photo 4: View of the maintenance and storage building in the southeast corner of the site.

Original Photos Taken by Partner Engineering and Science, Inc.

SITE INFORMATION:

APN(S):	435-330-003
PARCEL GROSS AREA:	±164,000 S.F. (3.765 ACRES)
PARCEL NET AREA:	±127,846 S.F. (2.935 ACRES)
ZONING:	INDUSTRIAL LIGHT (IL)
SITE ADDRESS:	980 W. 7TH STREET SAN JACINTO, CA 92582
FAR:	±34,518 S.F. = 27% (MAX FAR - 50%)
LANDSCAPED AREA:	±30,683 S.F. = 24%
IMPERVIOUS SURFACE AREA:	±97,163 S.F. = 76% (MAX AREA - 80%)

EXISTING BUILDING A - SNF DATA:

EXISTING USE:	SKILLED NURSING FACILITY
OCCUPANCY:	I-2 (W/ CONTROLLED EGRESS)
CONSTRUCTION TYPE:	V-A
FIRE SPRINKLERED:	YES
STORIES:	1
AREA:	±12,132 S.F.
EXISTING LICENSED BEDS:	44 BEDS

PROPOSED BUILDING A1 (ADDITION) - 43-BED SNF-STP DATA:

PROPOSED USE:	SKILLED NURSING FACILITY
OCCUPANCY:	I-2 (W/ CONTROLLED EGRESS)
CONSTRUCTION TYPE:	V-A
FIRE SPRINKLERED:	YES
STORIES:	1
AREA:	±17,100 S.F.
PROPOSED LICENSED BEDS:	43 BEDS (TOTAL OF 87 BEDS)

EXISTING OFFICE BUILDING B DATA:

EXISTING USE:	AUXILLARY TO SKILLED NURSING FACILITY
OCCUPANCY:	B
CONSTRUCTION TYPE:	V-B
FIRE SPRINKLERED:	NO
STORIES:	1
AREA:	±2,609 S.F.

PROPOSED BUILDING C - 16-BED PHF DATA :

EXISTING USE:	MEDICAL OFFICE
PROPOSED USE:	PSYCHIATRIC HEALTH FACILITY (PHF)
OCCUPANCY:	I-2 (W/ CONTROLLED EGRESS)
CONSTRUCTION TYPE:	V-A
FIRE SPRINKLERED:	YES
STORIES:	1
TOTAL AREA:	±2,596 S.F.
PROPOSED LICENSED BEDS:	16 BEDS

PARKING TABULATION:

REQUIRED PARKING FOR "CONGREGATE CARE FACILITY (15 OR MORE)":

1 SPACE FOR EACH ON DUTY EMPLOYEE AND 1 SPACE FOR EACH 10 BEDS

REQUIRED PARKING:

PROPOSED 87-BED SNF - (87/10)	9
PROPOSED 16-BED PHF - (16/10)	2
PROPOSED TOTAL STAFF (1 PER STAFF)	41
TOTAL PARKING REQUIRED:	**52**

PROPOSED PARKING:

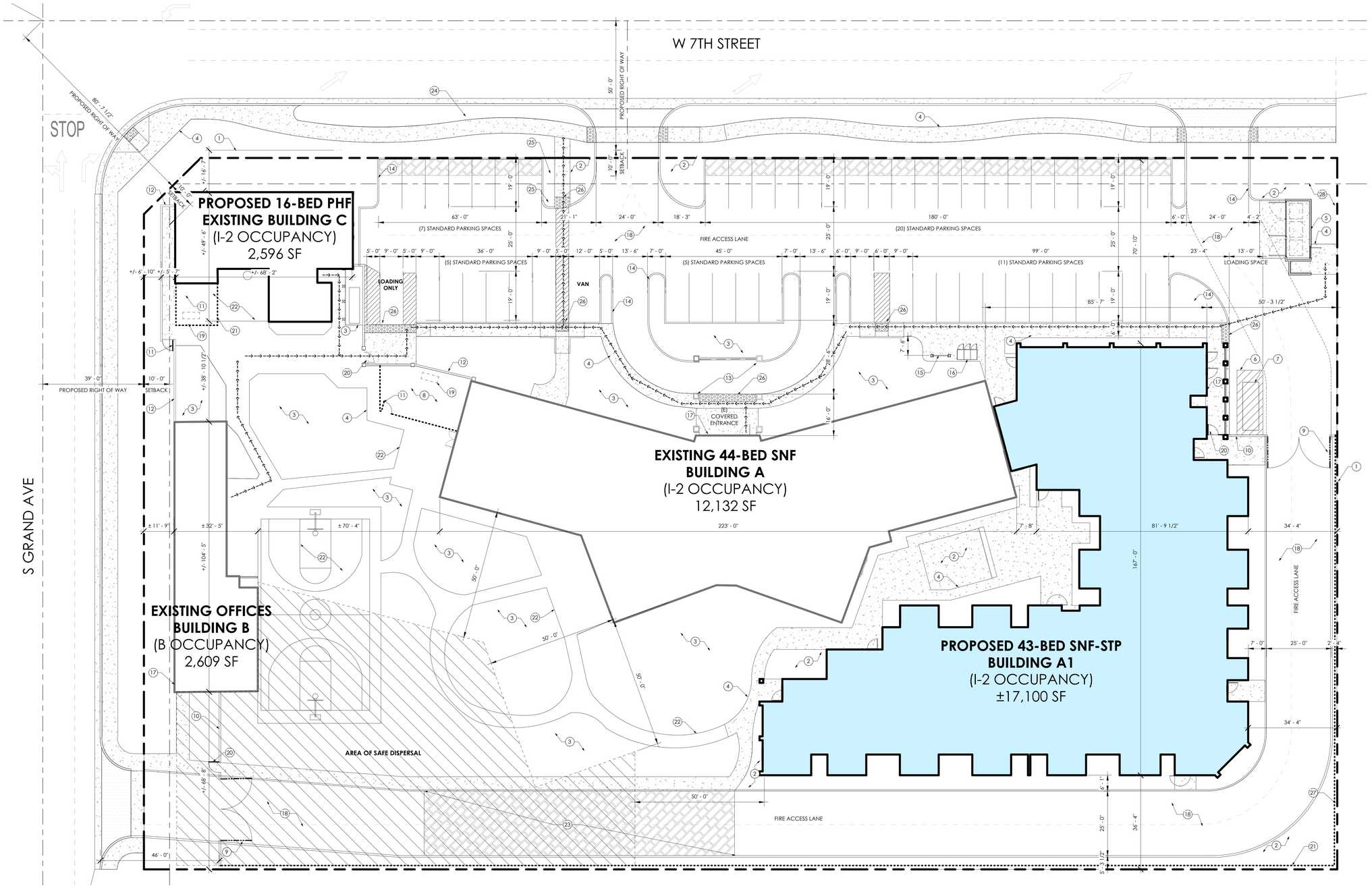
PROPOSED STANDARD SPACES	48
PROPOSED HANDICAP SPACES	4
TOTAL PARKING PROPOSED	**52**

REQUIRED BICYCLE PARKING:

5% OF REQUIRED MOTOR VEHICLE SPACES

PROPOSED BICYCLE PARKING:

PROPOSED SHORT-TERM SPACES	3
PROPOSED LONG-TERM SPACES	3
TOTAL BICYCLE SPACES	**6**



PROPOSED SITE PLAN

PROJECT DESCRIPTION

PROJECT #: PROJ25-0178

1. NEW FREESTANDING SKILLED NURSING FACILITY BUILDING ADDITION WITH 43 BEDS - 23 ROOMS WHEREIN MENTAL HEALTH PATIENTS ARE RESTRAINED AND DESIGNED WITH CONTROLLED EGRESS AT BUILDING EXITS AND DELAYED EGRESS AT EXTERIOR GATES.
2. INTERIOR REMODEL TO EXISTING SKILLED NURSING FACILITY
3. INTERIOR REMODEL TO EXISTING BUILDING FOR NEW 16-BED PSYCHIATRIC HEALTH FACILITY

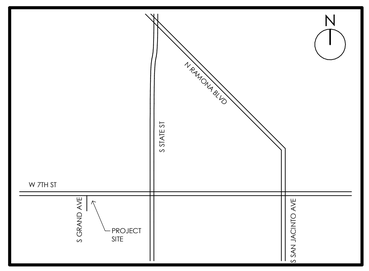
LEGEND

ACCESSIBLE PATH OF TRAVEL

KEYNOTES

1	PROPERTY LINE
2	LANDSCAPING
3	EXISTING LANDSCAPING TO REMAIN
4	CONCRETE WALKWAY, TYP.
5	TRASH ENCLOSURE PER 17.305.130 WITH ADJACENT CAN WASH AREA
6	10' X 25' LOADING SPACE
7	GREASE INTERCEPTOR PER EMWD STANDARDS
8	ELECTRICAL SERVICE YARD
9	12'-0" W. X 7'-0" H. MANUAL VEHICULAR GATES WITH HEAVY DUTY HINGES, FOR FIRE LANE ACCESS ONLY
10	7'-0" H. CMU WALL
11	EXISTING 4'-0" W. GATE TO REMAIN
12	EXISTING 7'-0" H. CMU WALL TO REMAIN
13	EXISTING PORTE COCHERE WITH 5'-0" X 20'-0" MINIMUM PASSENGER DROP OFF AND LOADING ZONE
14	6" CONCRETE CURB
15	3 SPACE BICYCLE RACK PARKING
16	3 BAY BICYCLE LOCKERS
17	KNOX BOX
18	ASPHALT CONCRETE PAVING
19	EMERGENCY GENERATOR ON 8" CONCRETE PAD
20	4'-0" W. GATE TO MATCH EXISTING GATES, WITH PANIC HARDWARE AND CONTROLLED EGRESS
21	EXISTING 7'-0" H. CHAIN LINK FENCE WITH VINYL SLATS TO REMAIN
22	EXISTING CONCRETE FLATWORK TO REMAIN
23	PERVIOUS SURFACE FIRE ACCESS LANE TO BE DESIGNED AND CONSTRUCTED TO MEET OFM-01A REQUIREMENTS
24	FIRE HYDRANT
25	FIRE P.I.V. AND DCDA (BACKFLOW PREVENTOR)
26	TRUNCATED DOMES
27	EXISTING CHAINLINK FENCE TO BE DEMOLISHED AND REPLACED WITH NEW 7'-0" H CHAIN LINK FENCE WITH VINYL SLATS
28	EXISTING CHAIN LINK FENCE TO BE REMOVED

VICINITY MAP



REVISION RECORD

ISSUED: 04/06/2026

NO.	DATE	DESCRIPTION
1	04/06/2026	REVISION 1
2	06/30/2026	REVISION 2
3	09/29/2026	REVISION 3

SCALE: 1/16"=1'-0"

43-BED SNF-STP BUILDING ADDITION AND REMODEL

980 WEST 7TH STREET

GENERATIONS HEALTHCARE
6 HUTTON CENTRE DR #400
SANTA ANA, CA, 92707
P: (714) 241 - 5600

ARCHITECTURE + INTERIORS + PLANNING
321 NORTH RAMPART STREET, SUITE 101
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PROJECT#: 24060 . SEPTEMBER 29, 2026

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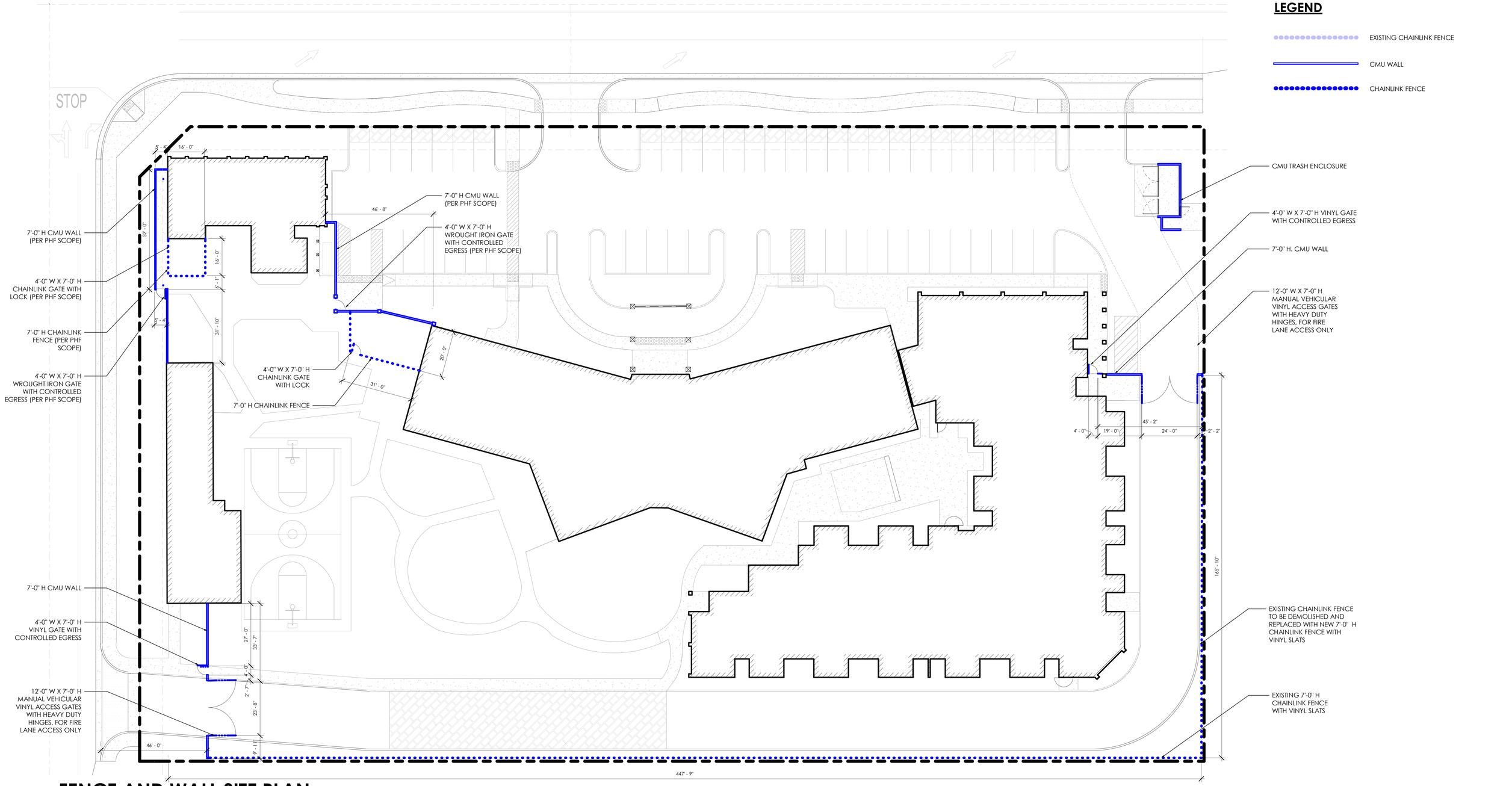

LEGEND

- EXISTING CHAINLINK FENCE
- CMU WALL
- CHAINLINK FENCE

FENCE AND WALL SITE PLAN

43-BED SNF-STP BUILDING ADDITION AND REMODEL

980 WEST 7TH STREET

GENERATIONS HEALTHCARE

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SANTA ANA, CA, 92707
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SCALE: 1/16"=1'-0"

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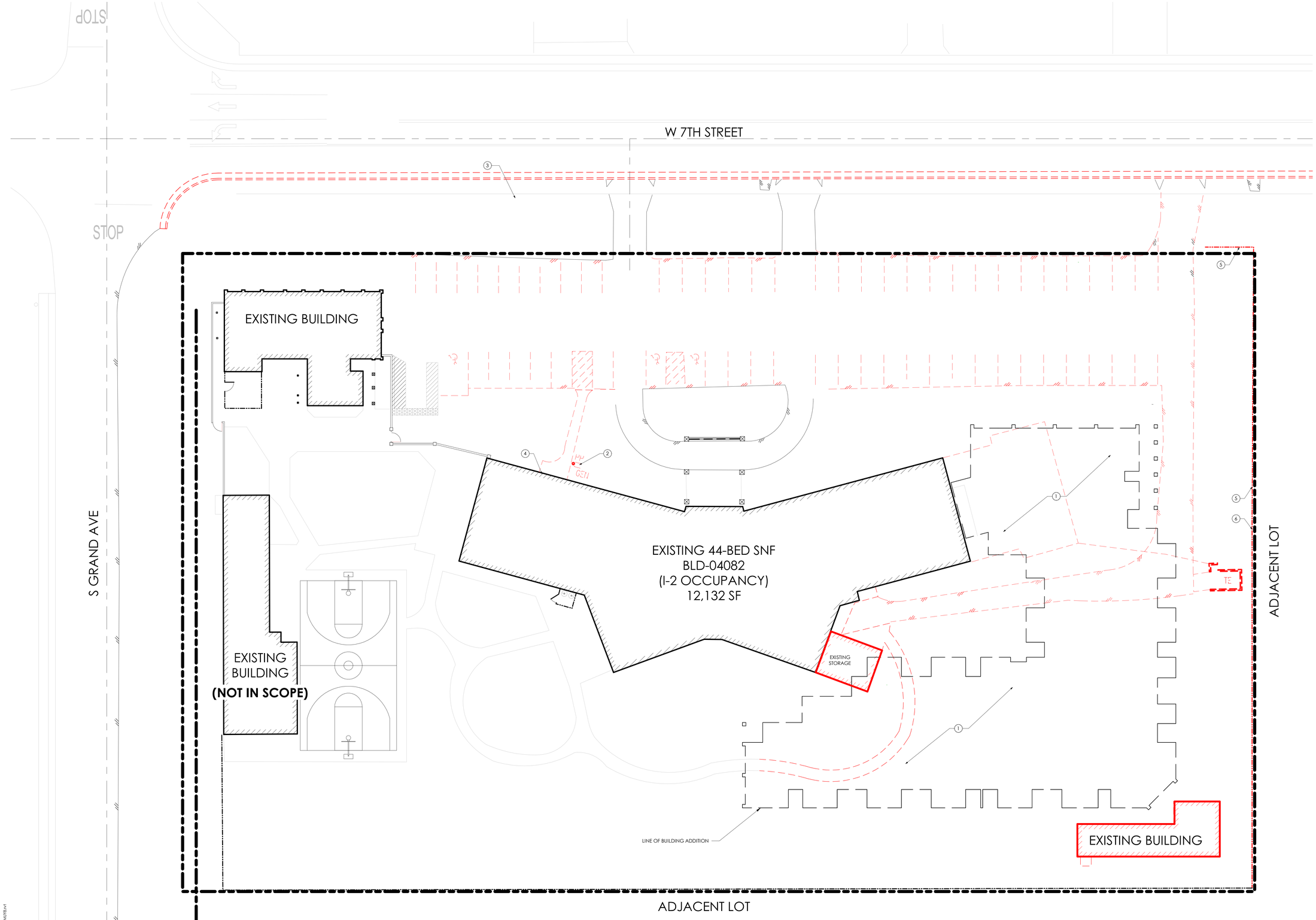

KEYNOTES

1. EXISTING LANDSCAPING & HARDSCAPING TO BE REMOVED FOR FUTURE BUILDING PAD
2. EXISTING TEMPORARY GENERATOR TO BE REMOVED
3. EXISTING FIRE HYDRANT TO BE REMOVED
4. EXISTING FIRE F.D.C. TO BE REMOVED
5. EXISTING CHAIN LINK FENCE TO BE REMOVED
6. EXISTING CHAINLINK FENCE TO BE DEMOLISHED AND REPLACED WITH NEW 7'-0" H CHAIN LINK FENCE WITH VINYL SLATS

LEGEND

- AREAS TO BE DEMOLISHED
- STRUCTURE TO BE DEMOLISHED

EXISTING SITE PLAN

0 8' 16' 32' 64'

SCALE: 1/16"=1'-0"

NORTH

43-BED SNF-STP BUILDING ADDITION AND REMODEL

980 WEST 7TH STREET

GENERATIONS HEALTHCARE
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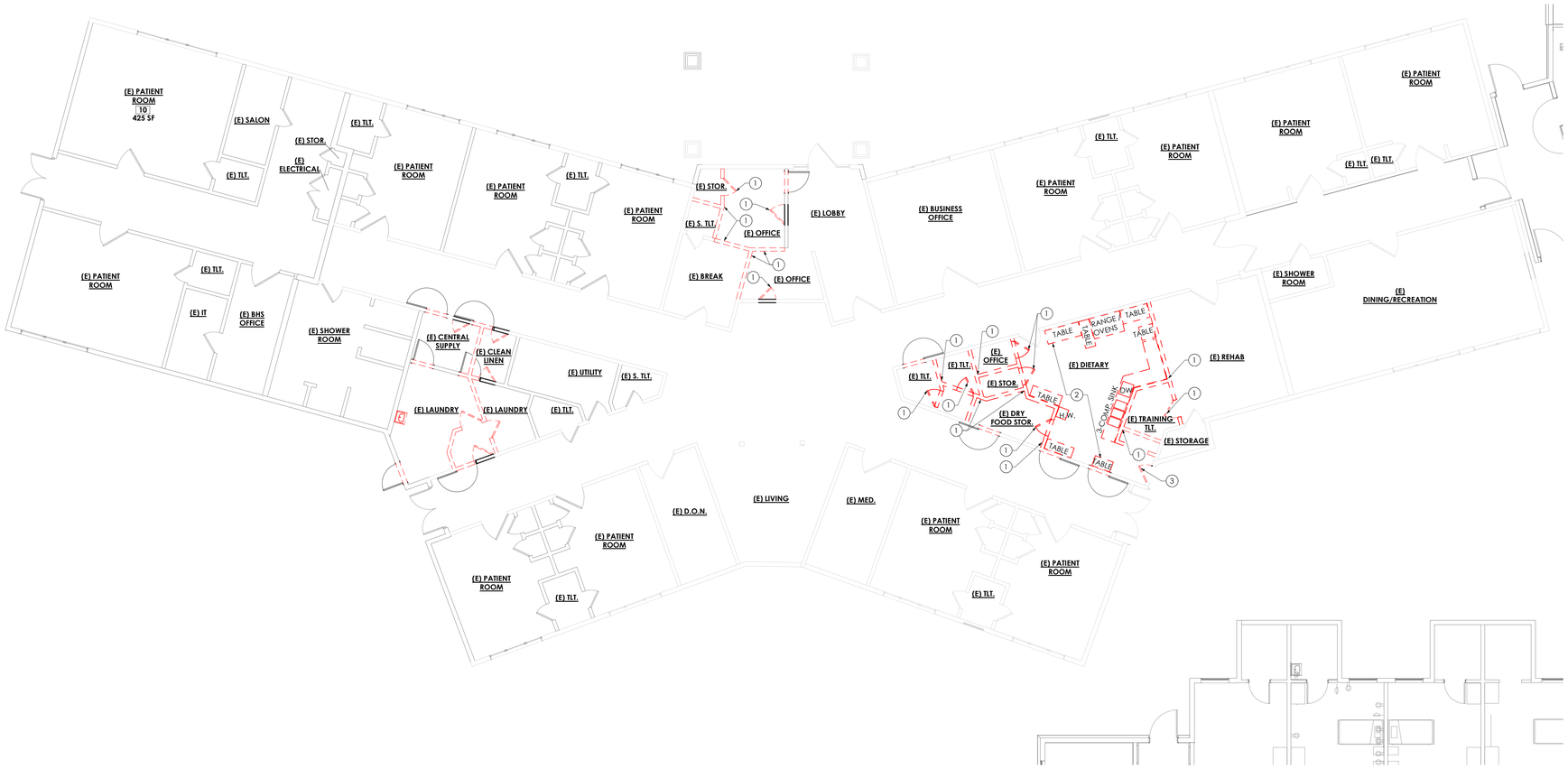

KEYNOTES

1 <varies>

2 EXISTING KITCHEN EQUIPMENT TO BE REMOVED

3 EXISTING DOOR AND DOOR FRAME TO BE DEMOLISHED, INFILL WALL PATCH AND REPAIR WALL FINISH TO MATCH ADJACENT FINISHES

LEGEND

AREAS TO BE DEMOLISHED

STRUCTURE TO BE DEMOLISHED

EXISTING FLOOR PLAN AFTER OCCUPANCY OF NEW ADDITION

0 8' 16' 32' 64'

SCALE: 1/16"=1'-0"

NORTH

43-BED SNF-STP BUILDING ADDITION AND REMODEL

980 WEST 7TH STREET

GENERATIONS HEALTHCARE

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OVERALL SNF FLOOR PLAN

0' 8' 24' 48'

SCALE: 3/32" = 1'-0"

NORTH

43-BED SNF-STP BUILDING ADDITION AND REMODEL

980 WEST 7TH STREET

GENERATIONS HEALTHCARE
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PROPOSED ENLARGED PARTIAL SNF FLOOR PLAN

0 4' 8' 16' 32'

SCALE: 1/8"=1'-0"

43-BED SNF-STP BUILDING ADDITION AND REMODEL

980 WEST 7TH STREET

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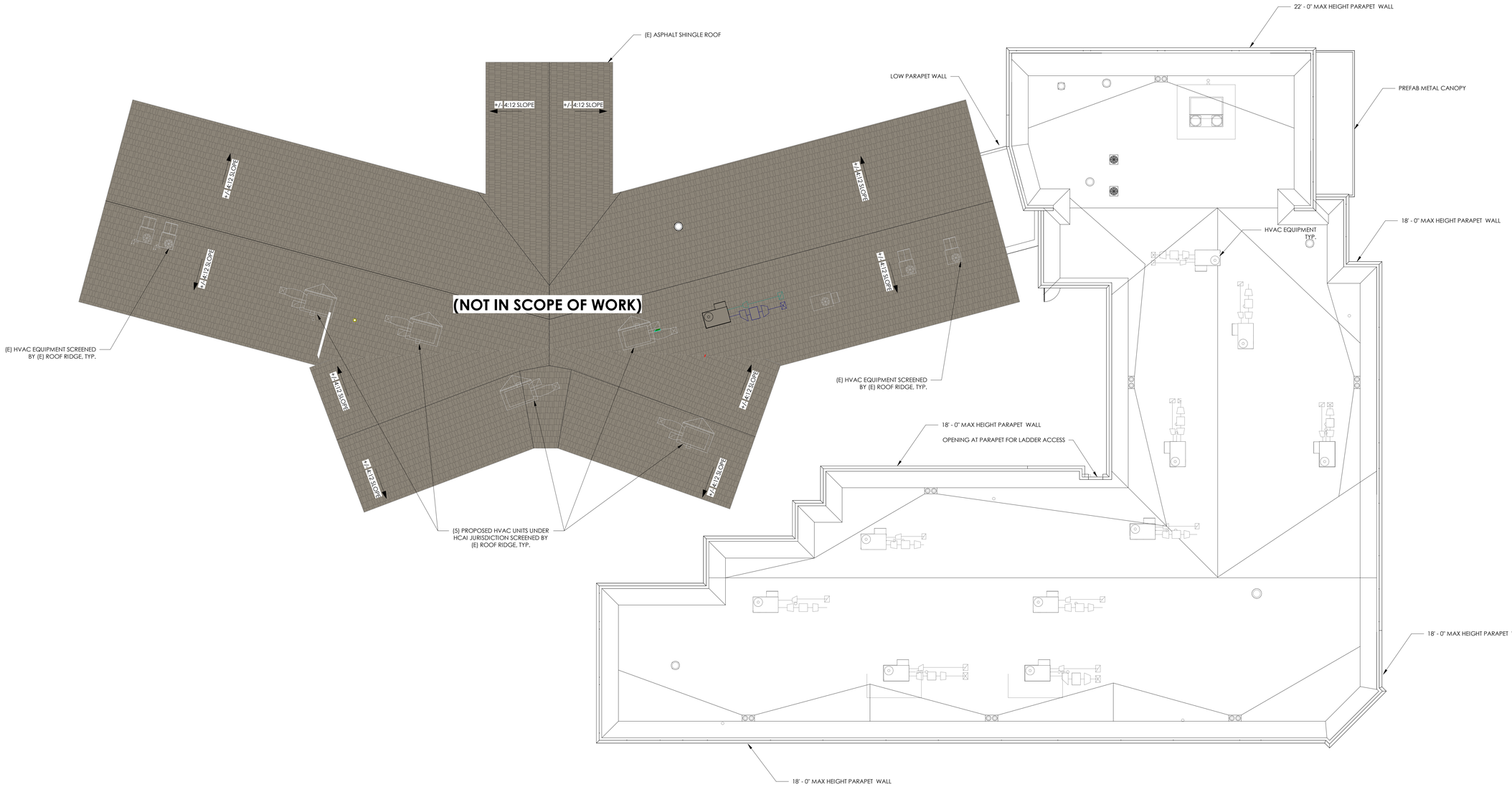

PROPOSED SNF ROOF PLAN

0' 8' 24' 48'

SCALE: 3/32" = 1'-0"

NORTH

43-BED SNF-STP BUILDING ADDITION AND REMODEL

980 WEST 7TH STREET

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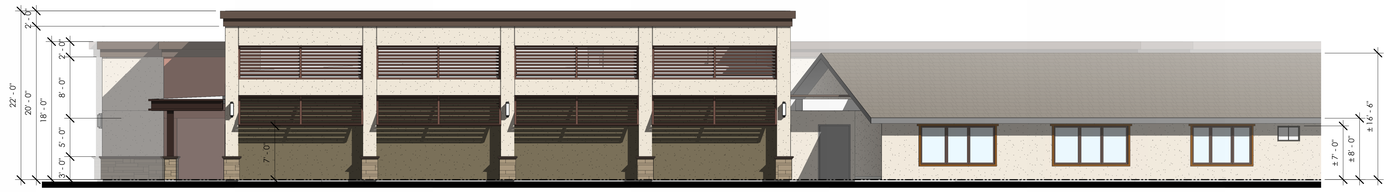

SNF EXTERIOR ELEVATION - NORTH

0 4' 8' 16' 32'

SCALE: 1/8"=1'-0"



SNF EXTERIOR ELEVATION - EAST

0 4' 8' 16' 32'

SCALE: 1/8"=1'-0"



SNF EXTERIOR ELEVATION - SOUTH

0 4' 8' 16' 32'

SCALE: 1/8"=1'-0"



SNF EXTERIOR ELEVATION - WEST

0 4' 8' 16' 32'

SCALE: 1/8"=1'-0"

43-BED SNF-STP BUILDING ADDITION AND REMODEL

980 WEST 7TH STREET

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NORTH EAST SNF PERSPECTIVE VIEW

43-BED SNF-STP BUILDING ADDITION AND REMODEL

980 WEST 7TH STREET

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NORTH SNF PERSPECTIVE VIEW

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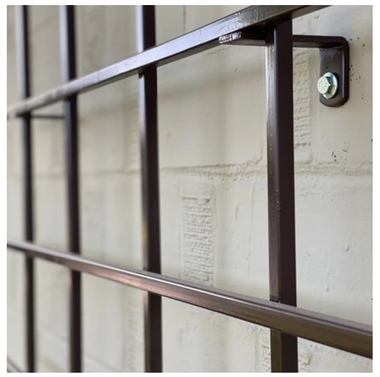
ASPHALT SHINGLE



STONE VENEER PANEL



ALUMINUM GRID

STUCCO
PRIMARY

STUCCO
SECONDARY

STUCCO
ACCENT 1

STUCCO
ACCENT 2

PROPOSED SNF MATERIAL BOARD

43-BED SNF-STP BUILDING ADDITION AND REMODEL

980 WEST 7TH STREET

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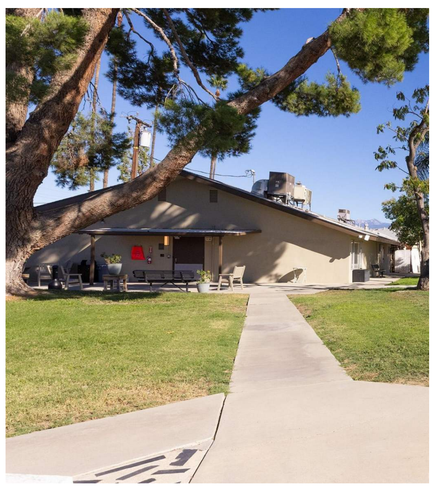





EXISTING SNF PHOTO DOCUMENTATION

43-BED SNF-STP BUILDING ADDITION AND REMODEL

980 WEST 7TH STREET

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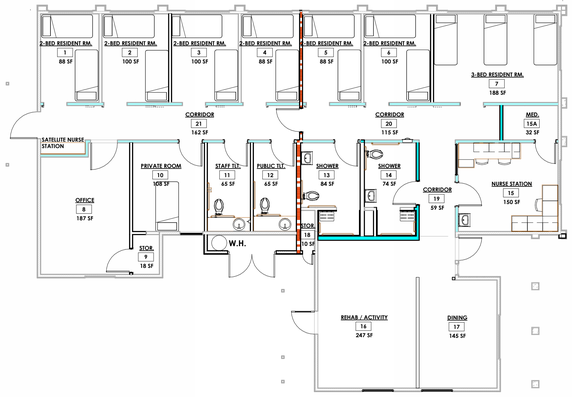
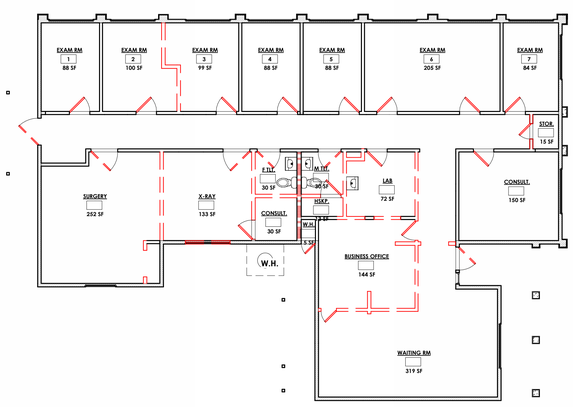


PROPOSED PHF OVERALL FLOOR PLAN

NORTH

0 4' 8' 16' 32'

SCALE: 1/8"=1'-0"



EXISTING PHF OVERALL FLOOR PLAN

NORTH

0 4' 8' 16' 32'

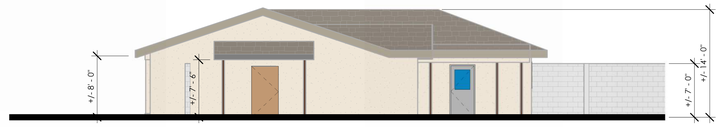
SCALE: 1/8"=1'-0"



PROPOSED PHF - NORTH ELEVATION

0 4' 8' 16' 32'

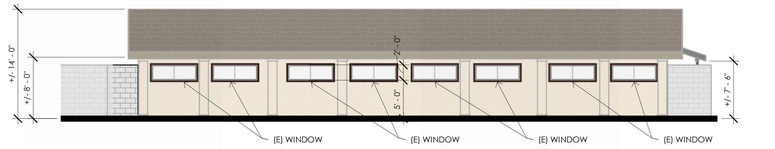
SCALE: 1/8"=1'-0"



PROPOSED PHF - EAST ELEVATION

0 4' 8' 16' 32'

SCALE: 1/8"=1'-0"



PROPOSED PHF - SOUTH ELEVATION

0 4' 8' 16' 32'

SCALE: 1/8"=1'-0"



PROPOSED PHF - WEST ELEVATION

0 4' 8' 16' 32'

SCALE: 1/8"=1'-0"

CHANGE OF USE & TENANT IMPROVEMENT

980 W 7TH ST

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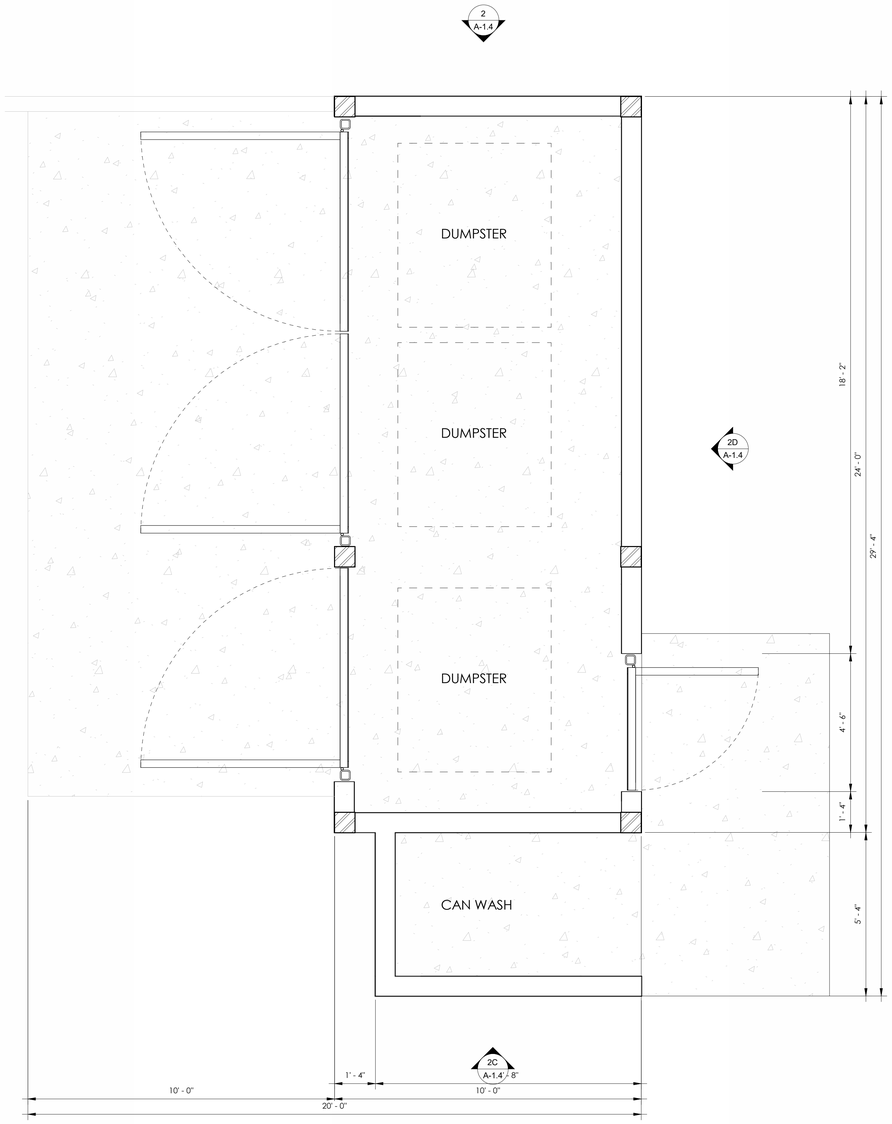
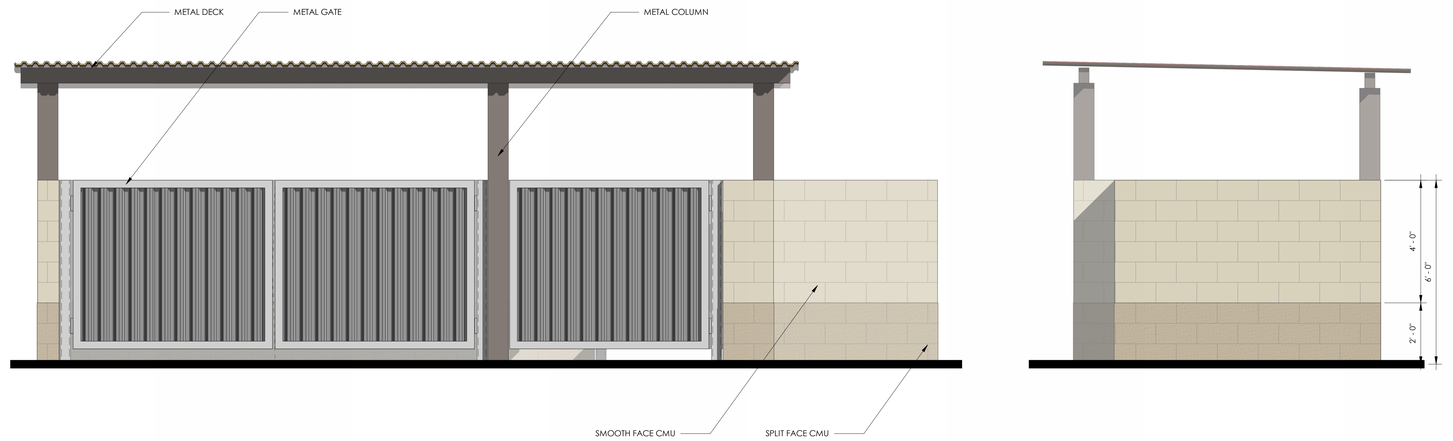


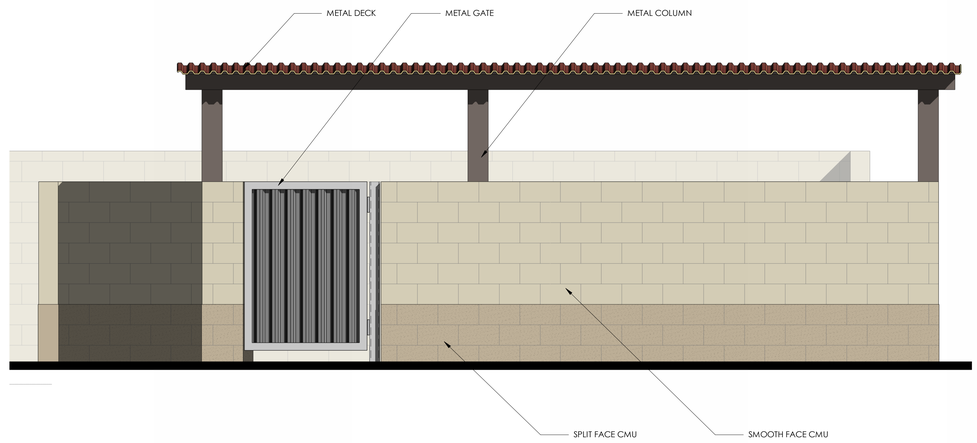
PROPOSED TRASH ENCLOSURE - PLAN

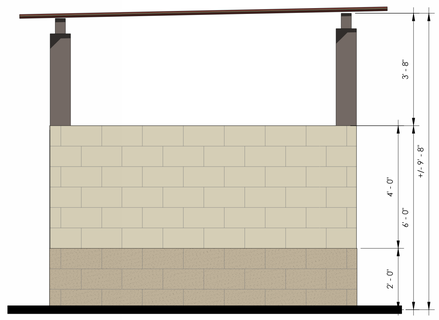
NORTH

0 1' 2' 4' 8'

SCALE: 1/2"=1'-0"







PROPOSED TRASH ENCLOSURE - ELEVATIONS

0 1' 2' 4' 8'

SCALE: 1/2"=1'-0"

43-BED SNF-STP BUILDING ADDITION AND REMODEL

980 WEST 7TH STREET

GENERATIONS HEALTHCARE
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FINDINGS OF FACT:

NONCONFORMING ADJUSTMENT FINDINGS – SJDC SECTION 17.705.120(C) (USE25-0092)

Pursuant to Section 17.705.120(B)(1), the Planning Commission may approve a Nonconforming Adjustment with the granting of a Conditional Use Permit. The Nonconforming Adjustment proposed would allow the expansion of the existing Facility from 44 to 103 beds, including the approximately 17,100 square foot addition, convert the existing 2,596 square foot office building to a Care Facility.

1. The Nonconforming Adjustment is necessary because the subject use or structure was legal when it was originally initiated or constructed, but changes in this Development Code or the applicable zone development standards caused the use or structure to become legal nonconforming.

The site has operated as a Congregate Care and Convalescent Facility since 1964. County Assessor records cited in the Phase I Environmental Site Assessment show three of the four buildings constructed in 1964 and the fourth by 1971. Historical directories show occupancy by Colonial Nursing Home (1964), Colonial Convalescent Hospital (1974–1996), and Bradley Gardens Convalescent Center (2001–present). On June 10, 2024, the City issued a Certificate of Occupancy recognizing the facility as a convalescent use, and the operator holds a current City business license BL-004803-2025. These records confirm the use is active and has not been discontinued for 180 or more consecutive days (Section 17.705.070).

The site is zoned Industrial Light (IL). Under Table 2-2 of the Development Code, as comprehensively updated by Ordinance 22-10 (December 2022), the use, classified as Convalescent Facility in combination with Congregate Care Facility, is not permitted in the IL zone; both are allowed only with a Conditional Use Permit in residential or commercial zones. The use therefore became legal nonconforming through a change in the Development Code, not through any act of the owner. Section 17.705.050(A)(4) prohibits the expansion of a nonconforming use except through a Nonconforming Adjustment; the adjustment is therefore necessary to allow the proposed expansion. The setback nonconformity of the PHF building results from the corner cut-back dedication at 7th Street and Grand Avenue required by the City as part of this project, not from any act of the owner; after dedication, the building will be approximately 3 feet from the new corner property line.

2. Approving the Nonconforming Adjustment for the subject use or structure will not pose a serious hazard to the public health or safety of persons residing or working on or adjacent to the subject parcel.

The expansion continues a use that has operated on the site for over 60 years. The Phase I Environmental Site Assessment identified no recognized, controlled, or historical recognized environmental conditions on the property. The site is in FEMA Flood Zone X and is outside an Alquist-Priolo Earthquake Fault Zone, a Very High Fire Hazard Severity Zone, and the Hemet-Ryan Airport Land Use Compatibility Plan area. The addition will be built to current California Building Code seismic standards and the recommendations of the site-specific geotechnical investigation. The skilled nursing facility (SNF) addition is subject to plan review by the California Department of Health Care Access and Information (HCAI), and the PHF conversion is subject to City building permit review. Asbestos and lead-based paint surveys are required before demolition

of the maintenance and storage building. The construction Health Risk Assessment found a maximum cancer risk of 4.88 in one million at the maximally impacted sensitive receptor, below the 10 in one million threshold, with a non-cancer hazard index below 1.0. Operational noise from the project at the nearest residences is 40.7 dBA daytime and 36.1 dBA nighttime, below the City's 65 and 45 dBA standards. The facility is staffed 24 hours a day with controlled access. Fire access is provided by a gated emergency driveway from S. Grand Avenue equipped with a Knox lock and a fire lane along the south and east sides of the addition designed for an 80,000-pound apparatus load, subject to the Riverside County Fire Department conditions of approval.

3. The location, size, and operating characteristics of the legal nonconforming use or structure are compatible with the existing and future land uses in the vicinity.

The facility has coexisted with surrounding industrial uses since 1964, including the metal fabrication plant across W. 7th Street. Land to the south, east, and west is primarily vacant industrial land, and a mobile home development is located to the south beyond one vacant parcel and to the southwest across S. Grand Avenue. The expansion stays within the existing 2.98-acre parcel and does not extend the use onto adjacent land. The addition is single-story, approximately 22 feet in height, and is set back approximately 34 feet from the east property line and 36 feet from the south property line, providing separation from future industrial development on the adjacent vacant parcels. The site floor area ratio increases to 0.27, below the IL maximum of 0.50, and impervious coverage is 76 percent, below the 80 percent maximum. The project generates 180 net new daily trips (8 AM and 13 PM peak hour trips), screens out of vehicle miles traveled analysis, and adds 0.09 dBA CNEL to traffic noise on W. 7th Street. The new patient rooms are located in the addition on the south and east portion of the site, approximately 72 feet from 7th Street, the main noise source in the area, and the new common open space is located between the buildings, away from both street frontages. As conditioned, a recorded disclosure will notify future owners and operators that the adjacent IL land may develop with industrial uses.

CONDITIONAL USE PERMIT FINDINGS – SJDC SECTION 17.605 (USE25-0092)

1. The proposed use is consistent with the General Plan and any applicable specific plan.

The site is designated Industrial (I) in the General Plan. The Industrial designation provides for low- and non-polluting industrial uses and allows other uses that are determined to be compatible with the primary uses. The project continues an established health care use and is consistent with Policy ED-2.3 (Medical Facilities) by expanding local skilled nursing, short-term psychiatric, and psychiatric health facility capacity serving San Jacinto Valley residents and adding approximately 100 jobs. It is consistent with Policy LU 2.1 (Plan for New Development), as it connects to existing water, sewer, and storm drain lines in W. 7th Street and pays applicable development impact fees, and with Policy LU 2.2 (Infill Development), as it reuses a developed site and an existing building and adds sidewalks on both frontages. Consistent with Policy LU 3.1 (Surrounding Uses), the project remains single-story and low-rise. Consistent with Policy LU 3.4 (Environmental Compatibility), the site is outside fault, flood, and landslide hazard areas, and liquefaction potential is addressed through California Building Code design and the geotechnical recommendations. Consistent with Policies PS-6.1 and PS-6.2 (Noise), the new patient rooms are placed approximately 72 feet from W. 7th Street, the dominant noise source, and the common open space is shielded between buildings; project operational noise at the nearest residences is below City standards. The site is not located within a specific plan area.

2. The proposed use is allowed within the applicable zone and complies with all other applicable provisions of this Development Code and the Municipal Code.

The site is zoned IL. The use is classified as Convalescent Home – 7+ persons in combination with Congregate Care Facility – 7+ persons, neither of which Table 2-2 lists as allowed in the IL zone. The existing use is legal nonconforming, as described in Nonconforming Adjustment Finding 1. Section 17.705.050(A)(4) allows a nonconforming use to be expanded through a Nonconforming Adjustment, and Section 17.705.120(B)(1) authorizes the Planning Commission to approve the adjustment with a Conditional Use Permit. With the concurrent Nonconforming Adjustment, the use is allowed in the IL zone. As required by Section 17.705.050(B)(8), the addition complies with the IL development standards of Table 2-7, including floor area ratio (0.27; 0.50 maximum), height (approximately 22 feet; 45 feet maximum), setbacks (approximately 72 feet north, 34 feet east, and 36 feet south), and impervious coverage (76 percent; 80 percent maximum). Parking meets the Congregate Care Facility ratio of one space per on-duty employee plus one space per 10 beds: the 52 spaces provided serve 103 beds and up to 41 on-duty employees, a limit made a condition of approval (Section 17.705.110). Site Plan and Design Review (USE26-0126) is processed concurrently. As conditioned, the project will comply with the Water Efficient Landscape requirements (Chapter 17.325), exterior lighting standards (Section 17.300.080), and permitted construction hours (SJMC Section 8.40.090).

3. The design, location, size, and operating characteristics of the proposed activity will be compatible with the existing and future land uses in the vicinity.

The facts supporting Nonconforming Adjustment Finding 3 are incorporated here. In addition, the addition and the converted PHF building use stucco, stone veneer, asphalt shingle roofs, and aluminum windows in brown, beige, and grey tones, matching the existing skilled nursing building. Landscaping increases by 4,015 square feet to 40,362 square feet, approximately 31 percent of the site, and a new common open space is placed between the existing building and the addition, away from the street frontages. The two central driveways on W. 7th Street are consolidated into

a single 24-foot driveway, and the eastern driveway is widened. Exterior lighting will be shielded to prevent spill toward the residences southwest of the site. The facility's operating characteristics, 24-hour staffed care with controlled access, do not change; the expansion adds beds and staff, not a new type of activity.

4. The proposed use will not be materially detrimental to the health, safety and general welfare of the public or otherwise injurious to the environment or to the property or improvements within the area.

An Initial Study/Mitigated Negative Declaration was prepared and circulated for public review from September 17, 2026, to October 19, 2026 (SCH No. 2026090689). In response to a comment from the South Coast Air Quality Management District, an Errata evaluated the backup emergency generator and found no change to any significance conclusion and no new mitigation. All potentially significant impacts are reduced to less than significant with Mitigation Measures BIO-1 (nesting birds), CUL-1 (cultural resources), and GEO-1 (paleontological resources), which are included in the Mitigation Monitoring and Reporting Program and the conditions of approval. Construction health risk, operational noise at nearby residences, and traffic are below applicable thresholds. Regulated medical waste is handled by a registered medical waste hauler under the Medical Waste Management Act. The facility is licensed and inspected by the State, and the SNF addition is subject to HCAI plan review. The facts supporting Nonconforming Adjustment Finding 2 are incorporated here.

5. The site is physically suitable in terms of:

a. Its design, location, shape, size, and operating characteristics of the proposed use: The 2.98-acre corner parcel has frontage on W. 7th Street and S. Grand Avenue and is relatively flat. It accommodates the addition, the converted PHF, 52 parking spaces, 6 bicycle parking spaces, landscaping, open space, and the fire lane within the IL development standards. The geotechnical investigation found the site suitable for the proposed construction with its recommendations incorporated into the building design, and the Phase I Environmental Site Assessment found no recognized environmental conditions.

b. The provision of public and emergency vehicle (e.g., fire and medical) access: Access is provided from two 24-foot driveways on W. 7th Street with a 27.3-foot drive aisle through the parking lot. A gated emergency driveway from S. Grand Avenue, equipped with a Knox lock, connects to a fire lane along the south and east sides of the addition designed for an 80,000-pound apparatus load. The Riverside County Fire Department has reviewed the project, and as conditioned, it meets their requirements, including approval of the fire lane surface and structural section prior to grading permit. Right-of-way dedications of 3 feet on W. 7th Street and 6 feet on S. Grand Avenue, the corner cutback, and new curb, gutter, and sidewalk improve public access.

c. Public protection services (e.g., fire protection, police protection, etc.): Fire protection and emergency medical services are provided by the Riverside County Fire Department from Station 25, approximately 1.4 miles from the site, and Station 78, approximately 2.5 miles from the site. Police protection is provided under contract by the Riverside County Sheriff's Department from the San Jacinto Station at 160 W. 6th Street, approximately 1.1 miles from the site. The Initial Study found that existing facilities can serve the project without new or expanded stations. The project will pay applicable development impact fees, and 24-hour on-site staffing with controlled access limits demand for police services.

d. The provision of utilities (e.g., potable water, schools, solid waste collection and disposal, storm drainage, wastewater collection, treatment, and disposal, etc.): Eastern Municipal Water District (EMWD) provides water and sewer service. The project connects to the existing 12-inch water line and 8-inch sewer line in W. 7th Street. Added water demand of approximately 7,473 gallons per day is within the supplies projected in EMWD's 2025 Urban Water Management Plan. Wastewater is treated at EMWD's San Jacinto Valley Regional Water Reclamation Facility, which has adequate remaining capacity. Storm drainage is managed on site through pervious concrete, landscape infiltration, and new catch basins in accordance with the approved Water Quality Management Plan, discharging to the existing 24-inch storm drain in W. 7th Street. Southern California Edison and SoCalGas serve the existing facility. Solid waste will be disposed of at Riverside County landfills with remaining permitted capacity, and regulated medical waste is collected separately by a registered hauler. The project adds no residential units and generates no direct school enrollment; statutory school fees will be paid to the San Jacinto Unified School District at building permit issuance, as applicable.

General Notes, Requirements, and Conditions of Approval
PROJ25-0178 (USE26-0126 and USE25-0092)

Approval Date: TBD
Effective Date: TBD
Expiration Date: TBD

PROJECT LOCATION: The project site is located at 980 W. 7th Street, at the corner of W. 7th Street and S. Grand Avenue. APN: 435-330-003.

APPLICANT: Generations Healthcare
Attn: Thomas Jurbala
6 Hutton Centre Dr. Suite 400
Santa Ana, CA 92707

ACCEPTED AND AGREED TO BY: _____
Applicant **Date**

PROJECT DESCRIPTION:

A proposal by Generations Healthcare, for a Conditional Use Permit (USE25-0092) and Site Plan and Design Review (USE26-0126), processed under the legal nonconforming provisions of SJMC Section 17.705.120 (Nonconforming Adjustment), to expand the existing Bradley Gardens skilled nursing facility with an 17,100 square-foot single-story addition (43 additional skilled nursing beds) and to convert an existing 2,596 square-foot vacant office building into a 16-bed psychiatric health facility, for a total capacity of 103 beds, on 2.98-acres in the Industrial Light (IL) zone. The project also includes parking, landscaping, drainage, driveway and frontage improvements.

General Requirements & Information – CUP/SPDR

A) The applicant shall by accepting these conditions agree to defend (with legal counsel of City's selection), indemnify, and hold harmless the City and its elected and appointed officials, agents, attorneys, employees and officers, from any action, claim or proceeding brought against the City or its elected and appointed officials, agents, employees and officers to attack, set aside, void, or annul a discretionary land use approval of the City, which action is brought within the applicable statute of limitations. The required indemnification shall include damages awarded against the City, if any, costs of suit, attorneys' fees and other costs and expenses incurred in connection with the action.

B) All plans subsequently submitted to the City shall be in substantial conformance with the plans in this approval, as conditioned. This condition applies to site plans, grading plans, landscape plans, building plans, elevations, and all other illustrations, text, or plans submitted to the City in connection with the Project.

C) A copy of all pages of these conditions shall be included in the construction drawing packages on the first sheet of all grading, improvement, building, landscape, and irrigation plan sets submitted to the City or to HCAI.

D) The effective date of issuance of this Project is **TBD**. This approval shall expire three (3) years after the effective date unless, before that date, a City grading permit or an HCAI or City building permit for the Project has been issued and construction has commenced and is diligently pursued, as determined by the Community Development Director pursuant to SJMC § 17.660.080, or unless a time extension is approved by the City's applicable review authority pursuant to SJMC § 17.660.090. Applications for time extensions must be received prior to the expiration date.

E) The Project shall comply with all required standards of the Development Code and Municipal Code in their entirety, except for the following deviations approved under the Nonconforming Adjustment (SJMC Section 17.705.120): the existing building to be converted to the psychiatric health facility may encroach into the front setback of 10 feet at the corner of Seventh Street and Grand Avenue, resulting from the right-of-way dedication required by COA 53 or COA 54, as applicable. This deviation applies only to that existing building, as shown on the approved Site Plan. New construction, and any enlargement or reconstruction of that building beyond the scope of this approval, shall meet the setback standards of the Development Code.

F) The project authorized under this permit shall be in compliance with and not violate any federal, state, or local laws, rules, regulations or ordinances, or any conditions of approval. Failure to comply with these requirements may constitute grounds for modification or revocation of this approval, following notice and hearing pursuant to SJMC § 17.725.070, or if the project is operated or maintained in a manner that constitutes a nuisance or adversely affects public health, safety, or welfare.

G) Upon reasonable notice (except in an emergency), the City shall have the right to inspect the exterior site and the non-patient-care areas of the facilities, in a manner consistent with patient privacy laws, to ensure compliance with the conditions of approval and other requirements and to recover its costs related to such inspections pursuant to the City's adopted fee from the property owner, tenant, or any responsible party.

H) The developer, applicant, or successor-in-interest shall pay any outstanding planning application or processing fees within ten (10) days of the City's written request, and in all cases prior to issuance of the first grading, building, or encroachment permit. Failure to do so will be grounds for revocation of PROJ25-0178 (USE26-0126 and USE25-0092).

I) The added skilled nursing/short-term psychiatric beds and the psychiatric health facility authorized by this approval shall not commence operation until all conditions of approval with a timing requirement at or before occupancy have been satisfied, as verified by the Planning Division. This condition does not affect the continued operation of the existing licensed facility.

J) **All mitigation measures in the Mitigation Monitoring and Reporting Program (MMRP) adopted on October 27, 2026 with the Mitigated Negative Declaration ("MND") for the Bradley Gardens Skilled Nursing Facility Expansion Project (CEQA26-0019), attached as an Exhibit ,are conditions of this approval. Compliance with mitigation measures is required as specified in the Mitigation Monitoring and Reporting Program or MND, including timeframes. No permit or occupancy release shall be issued while a mitigation measure due at or before that milestone remains unsatisfied.**

K) In the event of a conflict between any conditions for this approval, the more restrictive requirement shall apply, as determined by the Community Development Director, and a mitigation measure in the MMRP shall control over any conflicting condition.

L) The facility shall not exceed a total capacity of 103 licensed beds, consisting of 87 skilled nursing and 16 psychiatric health facility beds, as analyzed in CEQA26-0019. Any increase in beds or floor area, or any change of use, shall require review and approval by the City.

M) The required parking and loading features (e.g., landscaping, parking surfaces, striping, signs, etc.) shall be continuously maintained in good condition by the person having control of the premises (e.g., lessee, owner, tenant, etc.) as follows:

a. Landscaping shall be kept alive and continually maintained in compliance with Section 17.330.090 (Landscaping Standards for Parking Areas) and Chapter 17.325 (Water Efficient Landscape and Irrigation).
b. Parking surfaces shall be kept free of holes and substantial deterioration.
c. Striping shall be visible.
d. Signs shall be kept in place, legible, and continually maintained.
e. Parked vehicles shall not extend over a property line or into a public right-of-way.

N) Nothing in this approval substitutes for State licensure or State building approval of the facility. The applicant shall obtain and maintain all licenses, permits and approvals required by the California Department of Public Health, the Department of Health Care Services, the Department of Health Care Access and Information, and any other agency with jurisdiction over the skilled nursing facility and the psychiatric health facility.

Engineering Department General Requirements & Information

O) The project grading shall be in a manner to perpetuate existing natural patterns. Any deviation from this, concentration or increase in runoff must have approval of adjacent property owners and City Engineer. The developer/property owner shall accept the offsite runoff and convey to acceptable outlet.

P) The developer/property owner shall secure City's and appropriate agencies' clearances and approvals of the improvement plans.

Q) Prior to commencement of any construction or installation of fencing in public right-of-way, an encroachment permit shall be obtained from the City Engineer's office.

R) Any work within public right-of-way shall require an encroachment permit and shall be coordinated with City Engineer for inspections and acceptance.

S) The Project consists of (1) the skilled nursing facility addition and (2) the psychiatric health facility conversion of the existing office building. Unless a condition states otherwise: frontage improvements, utility undergrounding, and CFD annexation are tied to the skilled nursing addition; on-site conditions apply to each component to the extent of its scope of work; and construction-period conditions timed prior to grading permit shall also be satisfied prior to the first demolition or building permit for the psychiatric health facility conversion if that component proceeds without a grading permit.

Conditions of Approval

Timing	Responsible Department	Condition of Approval	Met ?
Prior to a Specific Date			
Within 3 Days Prior to Vegetation Removal or Ground Disturbance (Feb 1 – Aug 31)	Planning	1. **MM BIO-1: Pre-Construction Nesting Bird Survey.** Per MM BIO-1 of the IS/MND: a qualified biologist shall conduct a nesting bird clearance survey within 3 days before vegetation removal or ground disturbance during the nesting season, and document negative findings in a letter report to the Lead Agency. If an active nest is found, the biologist sets a no-disturbance buffer, marked in the field and overseen by a biological monitor, that stays in place until the young have fledged and the biologist confirms the nest is no longer active.*	☐
Prior to Issuance of Grading Permit / Earthwork Activities			
Prior to Issuance of Grading Permit / Earthwork Activities	Planning	2. An Archaeological Mitigation and Monitoring Plan (AMMP) prepared by a qualified archaeologist shall be submitted to and approved by the Planning Division prior to issuance of the first demolition or grading permit, whichever occurs first. The plan shall involve monitoring of ground-disturbing activities in native (previously undisturbed) soils by an archaeologist on the City or County List of Qualified Archaeologists, consistent with MM CUL-1 and the archaeological monitoring recommendation of the Cultural Resources Study (Appendix D); tribal monitoring is governed by the Treatment and Disposition Agreement required by condition 3. The plan shall include a protocol for the mitigation and significance testing of inadvertent archaeological finds. The archaeologist and any tribal monitor shall have the authority to halt and redirect earthmoving activities within 50 feet of a find so that it can be evaluated in accordance with MM CUL-1 and/or the TDA required by condition 3.	☐
Prior to Issuance of Grading Permit / Earthwork Activities	Planning	3. Prior to issuance of the first grading permit, the applicant/developer shall submit to the Planning Division an executed Treatment and Disposition Agreement (TDA) with the Soboba Band of Luiseño Indians to address treatment and disposition of archaeological, or Tribal Cultural Resources and human remains associated with	☐

		the Soboba Band of Luiseño Indians that may be uncovered or otherwise discovered during ground-disturbing activities related to the project. *	
Prior to Issuance of Grading Permit / Earthwork Activities	Planning	4. Prior to issuance of the first demolition, grading, or building permit for each Project component, the contractor shall submit to Planning a signed letter acknowledging and agreeing to implement the following during construction: a. Construction activities shall be limited to the hours permitted by SJMC § 8.40.090. Construction shall be permitted only between 7:00 a.m. and 7:00 p.m. on weekdays and Saturdays, and between 9:00 a.m. and 6:00 p.m. on Sundays and holidays, subject to any applicable restrictions under the Municipal Code. b. SCAQMD Rule 403 dust control: all clearing, grading, earth-moving, or excavation activities cease when winds exceed 25 mph; disturbed unpaved roads and disturbed areas are watered with complete coverage at least 3 times daily during dry weather; traffic speeds on unpaved roads and project site areas are 15 miles per hour or less; and the contractor provides regular street sweeping and removes mud and dirt from equipment and vehicles before they leave the site. (PPP AQ-1)* c. SCAQMD Rule 1113: only paints with no more than 50 grams/liter of VOC and/or High Pressure Low Volume (HPLV) applications are used for architectural coatings. (PPP AQ-2)* d. SCAQMD Rule 402: no discharge of air contaminants or other material that causes injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public. (PPP AQ-3)* e. Signs are posted at the job site entrance(s) and within the on-site construction zones prohibiting unnecessary engine idling; all other equipment is turned off if not in use for more than 5 minutes. f. Loaded trucks maintain a minimum buffer distance of 10 feet, and small bulldozers a minimum buffer distance of 1 foot, from the existing building. (PPP N-1)* g. Construction worker parking, equipment staging, and material storage shall occur on the project site or at an off-site location approved by the City Engineer,	☐

		and not on adjacent residential streets; haul trucks shall use a haul route approved by the City Engineer.	
Prior to Issuance of Grading Permit / Earthwork Activities	Planning	5. **MM CUL-1: Inadvertent Discovery.** Per MM CUL-1 of the IS/MND: if potential archaeological resources are discovered, work ceases within 50 feet of the find until a qualified archaeologist from the City or County List of Qualified Archaeologists evaluates whether it is a unique archaeological resource (PRC Section 21083.2(g)); if it appears Native American in origin, a Native American Monitor evaluates it and may consult on treatment and curation; the discovery is reported to the City and the South Central Coastal Information Center (SCCIC). Before issuing any permit for ground-disturbing activity, the City ensures grading and construction plans require halting work and contacting an archaeologist.*	☐
Prior to Issuance of Grading Permit / Earthwork Activities	Planning	6. **MM GEO-1: Paleontological Monitoring.** Per MM GEO-1 of the IS/MND: before grading permit issuance the applicant shall provide a letter from a professional paleontologist confirming a qualified paleontologist is retained, and a Paleontological Resources Impact Mitigation Plan (PRIMP) approved by the City, which requires the paleontologist at the pre-grading meeting. Planning verifies the grading and construction plans specify the PRIMP and unanticipated discovery requirements. Full-time monitoring is required from 3 feet below the surface; ground disturbance within 50 feet of a find ceases until the paleontologist evaluates it under Society of Vertebrate Paleontology guidelines. Recovered resources go to an accredited repository under a repository agreement in hand before recovery, at the applicant's expense, and a final monitoring report is submitted to the City.* In addition to the requirements of MM GEO-1, the PRIMP shall provide for bulk sampling and screening of fine-grained sedimentary deposits that show indications of microfossil potential (approximately 600 pounds for a test sample and 6,000 pounds for a standard sample, per Society of Vertebrate Paleontology guidelines), shall identify an accredited repository.	☐
Prior to Issuance of Grading Permit / Earthwork Activities	Planning / Engineering Department	7. Prior to grading permit issuance, the Project developer shall have a Final WQMP approved by the City Engineer. The project shall comply with the San Jacinto Municipal Code and the Municipal Separate Storm Sewer System (MS4) permit requirements in effect for the Santa Ana Regional Water Quality Control Board	☐

		(RWQCB) at the time of grading permit to control discharges of sediments and other pollutants during operations of the Project. (PPP HYD-2)*	
Prior to Issuance of Grading Permit / Earthwork Activities	Engineering Department	8. Prior to grading permit issuance, the Project developer shall have a SWPPP prepared by a Qualified SWPPP Developer (QSD) pursuant to the San Jacinto Municipal Code Chapter 17.600. The SWPPP shall incorporate all necessary BMPs and other City requirements to comply with the NPDES requirements to limit the potential of polluted runoff during construction activities. Project contractors shall be required to ensure compliance with the SWPPP and permit periodic inspection of the construction site by San Jacinto City staff or its designee to confirm compliance. (PPP HYD-1)*	☐
Prior to Issuance of Grading Permit / Earthwork Activities	Planning	9. Prior to issuance of a grading permit, the applicant shall obtain Riverside County Fire Department approval (load rating per COA 33) and City Engineer approval (as a WQMP BMP) of, and shall submit to Planning the manufacturer's cut sheet for, the pervious surface of the fire access lane along the south and east sides of the SNF-STP addition. The surface product shall be identified consistently on the site plan, precise grading plan, and Final WQMP.	☐
Prior to Issuance of Grading Permit / Earthwork Activities	Planning	10. All parking and drive aisles shall be shown on the grading and site improvement plans in compliance with Chapter 17.330 (Off-Street Parking and Loading Standards). Parking areas adjacent to a street shall have a landscape border of not less than 10 feet in depth. The site shall provide a total of 52 passenger vehicle parking spaces, including 4 accessible spaces, and 6 bicycle parking spaces.	☐
Prior to Issuance of Grading Permit / Earthwork Activities	Planning	11. Trash areas and receptacles shall be enclosed by a six-foot (6') high solid decorative masonry wall with solid gates, a solid roof, and ADA-accessible pedestrian access. Provide a color elevation of the trash enclosure to ensure consistency with the proposed color palette of the building.	☐
Prior to Issuance of Grading Permit / Earthwork Activities	Planning	12. All ground-mounted equipment (i.e., gas/electric meters, utility/mechanical cabinets, etc.) shall be screened from view from adjacent public streets with walls or landscaping at least as tall as the equipment, to the extent permitted by the serving utility's and the Fire Department's access and visibility requirements (e.g., backflow	☐

		devices, meters, and fire department connections). Solid walls or landscape features may be used for ground screening; Chain-link fencing is not an approved ground screening material.	
Prior to Issuance of Grading Permit / Earthwork Activities	Planning	13. Submit Wall and Fence Plan(s) and application(s), pursuant to Development Code and Landscape Design Guidelines, for review and approval.	☐
Prior to Issuance of Grading Permit / Earthwork Activities	Engineering Department	14. The developer/property owner shall have approved grading and improvement plans, executed grading agreement as directed by the City Engineer, and posted securities.	☐
Prior to Issuance of Grading Permit / Earthwork Activities	Engineering Department	15. The developer/property owner shall submit the following plans and reports to the City Engineer for review and approval: a. Onsite Grading and Erosion Control Plans – Plans shall show the approved WDID number. b. Geotechnical Report (for reference) c. Street Improvement Plan d. Storm Drain Improvement Plans e. Hydrology and Hydraulic Analysis f. Final WQMP (for reference) including WDID No. g. Sewer and Water Improvement Plan, per Fire Department and EMWD standards, shall be submitted to the City Engineer for review and approval. Fire Department and City of San Jacinto approval of Water Improvement Plan is required prior to City Engineer's approval. h. Street Light Plan prepared by a registered Electrical Engineer i. Signing and Striping Plan	☐
Prior to Issuance of Grading Permit /	Engineering Department	16. The plans and reports shall comply with EMWD, RCFCD, Riverside County Transportation Department, Caltrans, City of San Jacinto, and ADA most recent	☐

Earthwork Activities		standards, criteria, and requirement and in effect at the time of construction and shall be coordinated with the approved plans of the adjacent developments.	
Prior to Issuance of Grading Permit / Earthwork Activities	Cal Fire – Riverside County Fire Department	17. Water Plans-Fire: The applicant or developer shall furnish one copy of the water system plans to the Fire Department for review. Plans shall be signed by a registered civil engineer, containing a Fire Department approval signature block, and shall conform to hydrant type, location, spacing and minimum fire flow. Once plans are signed by the local water company, the originals shall be presented to the Fire Department for signature.	☐
Prior to Issuance of Grading Permit	Planning	18. Grading plans shall carry notes for SCAQMD Rule 403 dust control, the PPP N-1 equipment buffer distances, the permitted construction hours, MM BIO-1, MM CUL-1, MM GEO-1, and the human remains requirements of Health and Safety Code Section 7050.5, State CEQA Guidelines Section 15064.5(e) and Public Resources Code Section 5097.98 (PPP CUL-1)*.	☐
Prior to the Issuance of Building Permits (City or HCAI)			
Prior to Issuance of Building Permits	Building & Safety	19. Prior to issuance of any demolition or building permit that disturbs existing building materials, the applicant shall submit verification to the Building and Safety Division that asbestos and lead-based paint surveys have been conducted for all areas of existing buildings to be demolished or renovated. If asbestos or asbestos-containing material is found, the applicant shall follow all procedural requirements and regulations of SCAQMD Rule 1403, including notification of SCAQMD prior to construction activity, asbestos removal in accordance with prescribed procedures, placement of collected asbestos in leak-tight containers or wrapping, and proper disposal. If lead-based paint is found, the applicant shall follow all procedural requirements and regulations for proper removal and disposal, including CCR Title 8, Section 1532.1. (PPP HAZ-1, HAZ-2)*	☐
Prior to the Issuance of Building Permits	Building & Safety/ SCAQMD	20. Prior to issuance of the permit for any emergency generator, boiler, or other equipment requiring an SCAQMD permit, the applicant shall provide the Building and Safety Division with the SCAQMD Permit to Construct (Rule 201) or documentation that the equipment is exempt. Prior to operation of the equipment,	☐

		the applicant shall provide the SCAQMD Permit to Operate (Rule 203) or other SCAQMD authorization to operate.	
Prior to Commencement of Construction of the PHF	Building & Safety	21. Prior to commencement of construction for the psychiatric health facility conversion, the applicant shall obtain a building permit from the City's Building and Safety Division.	☐
Prior to HCAI Building Permit Issuance of the SNF	Planning	22. The applicant shall submit to Planning for review and approval architectural plans showing exterior improvements to the existing skilled nursing facility that visually integrate it with the new addition. Improvements may include, but are not limited to, stone veneer, awnings, wall-plane or roofline articulation, trim, window treatments, and coordinated colors and materials. The design, extent and location of the improvements shall be determined in consultation with Planning, and the approved improvements shall be incorporated into the construction plans submitted to HCAI.	☐
Prior to HCAI Building Permit Issuance of the SNF	Planning / HCAI	23. Prior to HCAI building permit issuance for the SNF submit for Planning approval an outdoor lighting plan with photometric plan for site and parking lighting. a. All parking lot light standards (25 feet maximum height, measured from the usable parking or driving surface), building-mounted fixtures, up-lighting, walk lights and lighting diffused off wall surfaces, with cut sheets for all fixtures. b. Lighting that is indirect and hooded, arranged to reflect light away from adjoining properties and streets in compliance with Section 17.300.080 (Outdoor Light and Glare), and shielded to prevent light or glare beyond the property line, upon right-of-way, or upward to the sky. (PPP AES-1)* c. A minimum of one-foot candle at parking, drive aisles and pedestrian areas and no more than one-half foot candle along the property lines, with beam spreads and/or photometric calculations.	☐
Prior to HCAI Building Permit Issuance of the SNF	Planning / HCAI	24. The construction plans submitted to HCAI (skilled nursing facility) and to the City (psychiatric health facility) shall conform to the elevations approved with this entitlement. Before submitting plans to HCAI or the City, the applicant shall obtain Planning Division approval of the elevation sheets, accompanied by the architect's letter certifying conformance. Any HCAI-required change to the exterior elevations,	☐

		rooftop equipment, or site layout shall be submitted to the Planning Division for a substantial-conformance determination before the changed element is constructed.	
Prior to HCAI Building Permit Issuance of the SNF	Planning / HCAI	25. Rooftop Mechanical Screening & Noise: Prior to submitting building plans to HCAI or the City Building Division, the applicant shall submit construction plans and an architect's line-of-sight exhibit to the Planning Division demonstrating that: a. All rooftop HVAC and mechanical equipment is fully screened from public view by parapet walls or integrated screens at least as tall as the equipment; and b. Operational equipment complies with City stationary noise limits (SJMC § 8.40.050), consistent with the Noise and Vibration Impact Analysis (Appendix J, June 2026).	☐
Prior to HCAI Building Permit Issuance of the SNF	Engineering Department	26. The developer/property owner shall submit to Building and Safety, prior to submittal of plans to HCAI for skilled nursing facility addition, a compaction certification from the Soils Engineer in compliance with the approved geotechnical/soils report and the pad elevation certification from the Civil Engineer in compliance with the approved Precise Grading Plan.	☐
Prior to HCAI Building Permit Issuance of the SNF	Engineering Department	27. Prior to issuance of the first encroachment or public improvement permit, and in all cases prior to Temporary Occupancy of the PHF, the developer/property owner shall have approved improvement plans, executed public improvement agreement, and posted securities.	☐
Prior to HCAI Building Permit Issuance of the SNF	Engineering Department	28. All weather access per Fire Department standards shall be provided to the proposed buildings per the Precise Grading Plan. All-weather access shall also be in place before combustible construction materials are delivered to the skilled nursing facility addition site.	☐
Prior to HCAI Building Permit Issuance of the SNF	Engineering Department	29. Drainage facilities, including catch basins with sump conditions, shall be designed to convey the tributary storm flows and shall include a secondary emergency overflow route. The proposed 24-inch storm drain shall collect and convey runoff from the project frontage, including flows in the roadside swale located at the easternmost portion of the property. The storm drain shall discharge at the southwest intersection of Grand Avenue and Seventh Street. An adequate outlet	☐

		shall be provided, with the discharge daylighting within the Seventh Street right-of-way. The existing culvert shall be removed. The San Jacinto Valley Master Drainage Plan (MDP), Line E-4, from Grand Avenue to the existing Line E channel, is identified in the City's Capital Improvement Program (CIP). The proposed drainage improvements shall be coordinated with the planned CIP improvements to ensure consistency with the overall drainage system.	
Prior to HCAI Building Permit Issuance of the SNF	Special District	30. ***Prior to permit issuance, the entirety of the project is subject to conditions A & B:*** a. Establish a funding mechanism for the maintenance of public improvements. Annexation into the Public Facilities Maintenance Community Facilities District (CFD 2020-1) is an option to fulfill the funding requirement for maintenance of public improvements. If a property owner opts not to annex into a CFD, the funding mechanism (HOA/POA) must be fully established to satisfy this condition. b. Annex into the Public Safety Community Facilities Districts (CFD 2003-1) to fulfill the funding requirement for public safety services. *Funding of services under the City's CFDs will consist of an annual assessment based on the costs of such services, as determined by a Maintenance Cost Estimate.*	☐
Prior to Commencement of Construction of the SNF / Building Permit of the PHF	Building & Safety	31. The developer/applicant or successor in interest shall pay school fees as required by State law. The developer/applicant or successor in interest shall receive written clearance from the San Jacinto Unified School District. Clearance shall be provided prior to commencement of construction of the skilled nursing facility addition and prior to issuance of the building permit for the psychiatric health facility conversion, as applicable.	☐
Prior to Issuance of Building Permits (HCAI or City)	Building & Safety	32. The Project is required to comply with the California Building Standards Code as included in Section 15.04.020 of the San Jacinto Municipal Code to preclude significant adverse effects associated with seismic and soils hazards. CBC related and geologist and/or civil engineer specifications for the proposed Project shall be incorporated into grading plans and building specifications as a condition of construction permit approval. (PPP GEO-1)*	☐

Prior to the Issuance of Building Permits (City or HCAI)	Cal Fire – Riverside County Fire Department	33. Fire Protection Water Supplies/Fire Flow - Minimum fire flow for the construction of all buildings is required per CFC Appendix B. Prior to building permit issuance for new construction, the applicant shall provide documentation to show there exists a water system capable of delivering the required fire flow. Specific design features may increase or decrease the required fire flow. Reference CFC 507.3.	☐
Prior to the Issuance of Building Permits (City or HCAI)	Cal Fire – Riverside County Fire Department	34. Fire Protection Water Supplies/Hydrants - The minimum number of fire hydrants required, as well as the location and spacing of fire hydrants, shall comply with CFC Appendix C and NFPA 24. Fire hydrants shall be located no more than 400 feet from all portions of the exterior of the building along an approved route on a fire apparatus access road, unless otherwise approved by the Fire Department. Fire hydrants shall be at least 40 feet from the building it is serving. A fire hydrant shall be located within 20 to 100 feet of the fire department connection for buildings protected with a fire sprinkler system. The size and number of outlets required for the approved fire hydrants are 4” x 2 ½” x 2 ½” (super hydrant). Reference CFC 507.5, CFC Appendix C and NFPA 24.	☐
Prior to the Issuance of Building Permits (City or HCAI)	Cal Fire – Riverside County Fire Department	35. Fire Department Access - Fire apparatus access roads shall be provided to within 150 feet of all exterior portions of buildings, unless otherwise approved by the Fire Department. Fire apparatus access roads shall have an unobstructed width of not less than 24 feet. Dead-end fire apparatus access roads in excess of 150 feet shall be provided with an approved turn around. The minimum required turning radius of a fire apparatus access road is 45 feet outside radius and 21 feet inside radius. The construction of the fire apparatus access roads shall be all weather and capable of sustaining 80,000 lbs. Unless otherwise approved, the grade of a fire apparatus access road shall not exceed 16 percent and the cross slope shall not exceed 2.5 percent. The angles of approach and departure for fire apparatus access roads shall be a maximum of 6 percent grade change for 25 feet of approach/departure. Reference CFC 503.1.1, 503.2.1 as amended by the County of Riverside and Riverside County Office of the Fire Marshal Guidelines.	☐
Prior to the Issuance of	Cal Fire – Riverside	36. Fire Department Access Turn Around - Dead-end fire apparatus access roads in excess of 150 feet in length shall be provided with a bulb turnaround at the terminus measuring a minimum of 45 feet outside radius and 21 feet inside radius. Parallel	☐

Building Permits (City or HCAI)	County Fire Department	parking around the perimeter of the bulb is acceptable provided the bulb outside turning radius is increased by 8 feet. In-lieu of a bulb, a hammer-head type turnaround is acceptable where the top of the "T" dimension is 120 feet with the stem in the center. Additional turnaround designs may be acceptable as approved by the Fire Department. Reference CFC 503.1.1, 503.2.1 as amended by the County of Riverside and Riverside County Office of the Fire Marshal Guidelines.	
Prior to the Issuance of Building Permits (City or HCAI)	Cal Fire – Riverside County Fire Department	37. Fire Department Building Construction Plan Review - Submittal of construction plans to the Fire Department will be required. This will require a separate permit application submitted directly to the Fire Department. This shall include a full site plan including all fire apparatus access roads. Final fire and life safety conditions will be addressed when the Fire Department reviews the plans. These conditions will be based on California Fire Code, California Building Code (CBC), and related codes/standards adopted at the time of construction plan submittal. Contact the Fire Department for submittal instructions. Reference CFC 105.1.	☐
Prior to the Issuance of Building Permits (City or HCAI)	Cal Fire – Riverside County Fire Department	38. Fire Sprinkler System - All new commercial buildings and structures 3,600 square feet or larger will be required to install a fire sprinkler system. Reference CFC 903.2 as amended by the County of Riverside.	☐
Prior to the Issuance of Building Permits (City or HCAI)	Cal Fire – Riverside County Fire Department	39. Fire Alarm and Detection System - A water flow monitoring system and/or fire alarm system may be required as determined at time of building construction plan review. Reference CFC 903.4 and CFC 907.2.	☐
Prior to the Issuance of Building Permits (City or HCAI)	Cal Fire – Riverside County Fire Department	40. Gate Access: All electronically operated gates shall be provided with Knox key switches and automatic sensors for access. These gates shall be provided with access to gate equipment or another method to open the gate if there is a power failure. (Manual gates shall not be locked unless a Knox Box containing the key to the lock is installed in an approved location on the approach side of the gate). A pedestrian gate, if used to provide access, shall be a minimum 3 feet wide and provided with a Knox Box/Padlock if locked. Reference CFC 506.1.	☐
Prior to Occupancy (Temporary Occupancy of the PHF / Final Occupancy of the PHF and SNF)			

Prior to Final Occupancy of the SNF / Final Occupancy of the PHF	Building & Safety	41. The applicant shall provide the final HCAI approval or closure of the building permit for the skilled nursing facility addition and the City final for the psychiatric health facility.	☐
Prior to Issuance of Temporary Occupancy of the PHF	Planning	42. Submit Landscape and Irrigation Plan(s) and application(s), pursuant to Development Code and Landscape Design Guidelines, for review and approval. The plans shall be consistent with the approved conceptual landscape plan(s), unless deviation approved by City Planning.	☐
Prior to Final Occupancy of the SNF	Planning	43. All landscaping including 24-inch box trees, irrigation systems, walls and fences (including the 7-foot western boundary block wall), and pedestrian walkways shown on the approved landscape plan shall be installed and accepted by the Planning Division.	☐
Prior to Final Occupancy of the SNF	Planning	44. The developer/applicant or successor in interest shall submit the following items for the landscape and irrigation development and maintenance: a. The signed Landscape Certificate of Completion pursuant to Section 17.325.070 – Certificate of Completion of the Development Code; b. The irrigation scheduling pursuant to Section 17.325.080 – Irrigation Scheduling of the Development Code; c. The Landscape and Irrigation Maintenance Schedule pursuant to Section 17.325.090 – Landscape and Irrigation Maintenance Schedule of the Development Code; and d. The Irrigation Audit, Irrigation Survey, and Irrigation Water Use Analysis are pursuant to Section 17.325.100 — Irrigation Audit, Irrigation Survey, and Irrigation Water Use Analysis of the Development Code.	☐
Prior to Final Occupancy of the SNF	Planning	45. Prior to final occupancy, the applicant shall submit letters from the project paleontologist, archaeologist, and any tribal monitor confirming completion of field monitoring. The paleontologist's final monitoring report required by MM GEO-1 (including the repository acceptance letter required by COA 7), the archaeological	☐

		monitoring report required by the AMMP, and any tribal monitoring documentation under the TDA shall be submitted to and accepted by the Planning Division.	
Prior to Final Occupancy of the SNF	Planning / Engineering Department	46. The engineer of record shall certify that the WQMP BMPs, including the pervious surfaces and infiltration features, were built per the approved Final WQMP, and the recorded BMP maintenance agreement, including the inspection schedule, shall be on file with the City. (PPP HYD-2)*	☐
Prior to Final Occupancy of the SNF	Planning	47. The applicant shall request a Planning Division inspection; exterior lighting shall be shielded per the approved photometric plan PPP AES-1, and rooftop HVAC units shall be located and screened per the approved roof plan and line-of-sight exhibit.*	☐
Prior to Temporary Occupancy of the PHF or Final Occupancy of the SNF, Whichever Occurs First	Planning	48. Facility Security and Operations Plan. Prior to occupancy release for the skilled nursing facility addition or the psychiatric health facility, whichever occurs first, the applicant shall submit to the Planning Division for approval, after consultation with the law enforcement agency serving the City and the Riverside County Fire Department, a Facility Security and Operations Plan covering the entire facility. The plan shall address, at a minimum: (a) controlled building entries and exits and visitor check-in; (b) procedures to prevent and respond to unauthorized patient departure, including immediate notification of law enforcement; (c) arrangements so that patients are not discharged to the public street without arranged transportation or release to a responsible party; (d) emergency incident response and coordination with law enforcement, fire, and emergency medical services; and (e) the facility liaison required by these conditions. The plan may incorporate policies required by State licensing and shall be updated when those policies materially change. The approved plan shall be implemented for the life of the use and provided to the City upon request.	☐
Prior to Final Occupancy of the SNF	Building & Safety	49. Specific addresses for each building shall be provided to make such number plainly visible from the public street, avenue, court, or alley upon which property fronts, and shall be contrasting color and background.	☐

Prior to Final Occupancy of the SNF	Special Districts	50. Prior to occupancy, the entirety of the project is subject to conditions a - e: a. Annexation into the applicable CFDs must be complete. b. Development must comply with Storm Water Basin & Pump Specifications and Standards. Privately maintained storm water and water quality systems will be required to submit an Irrevocable Offer of Dedication, or similar dedication language upon map recordation, for each basin lot. c. Development must comply with Landscape and Irrigation Design Guidelines. d. Landscape improvements shall include irrigation meters and backflow devices with tampering preventive cage, exclusive for right-of-way landscaping. Right-of-way landscaping must be divided from private property by form or mow-curb or other approved materials. e. Landscape areas in the right-of-way shall include an independent irrigation control system, with separate electric meter, exclusive for right-of-way landscaping. Cal-Sense version approved by the Public Utilities Superintendent is required for City maintained irrigation areas. *(Must be operational and certified by Cal-Sense)*	☐
Prior to Issuance of Temporary Occupancy of the PHF	Engineering Department	51. Application for property line corner cutbacks shall submitted per County of Riverside Standard No. 805.	☐
Prior to Issuance of Temporary Occupancy of the PHF	Engineering Department	52. The developer/property owner shall sign the consent and waiver form to join the City's Lighting and Landscape Districts and City's Flood Control District as appropriate. The proposed streetlights shall be maintained by the City and cost paid by the developer/property owner through the said annexation.	☐
Prior to Issuance of Temporary Occupancy of the PHF	Engineering Department	53. Application for all easements and/or street rights-of-way shall be offered for dedication to the public or other appropriate agencies in perpetuity and shall continue in force until the City or the appropriate agency accepts or abandons such offers.	☐

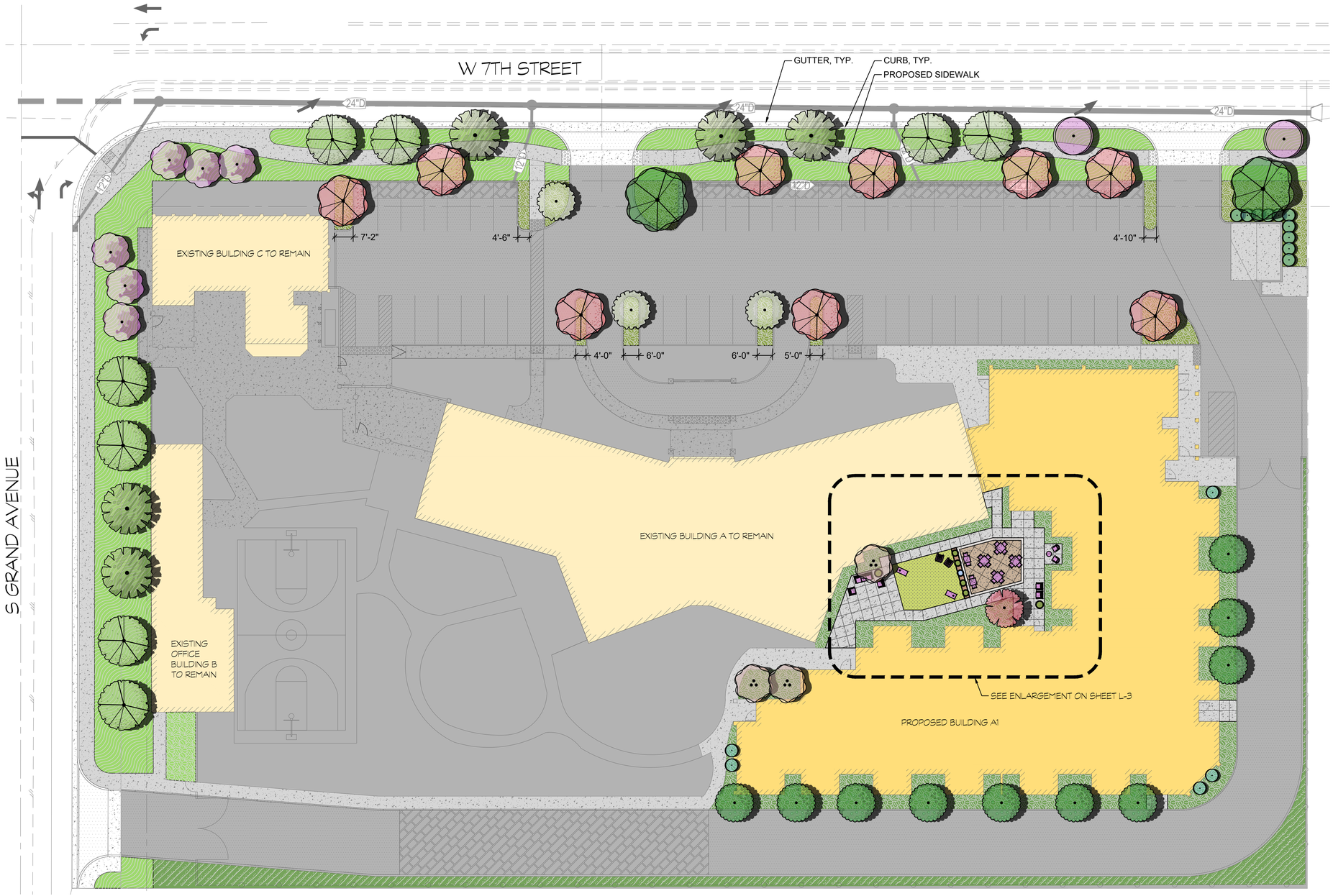
Prior to Issuance of Temporary Occupancy of the PHF	Engineering Department	54. Grand Avenue is classified as a Collector (78'/44') per the City General Plan. A 33-foot wide halfwidth right-of-way is currently dedicated along the property's easterly frontage. The developer/property owner shall submit application to dedicate the required additional 6 feet (6') of right-of-way to provide for a 39-foot wide halfwidth right-of-way.	☐
Prior to Issuance of Temporary Occupancy of the PHF	Engineering Department	55. Seventh Street is classified as a Major (106'/64') per the City General Plan. A 50-foot wide halfwidth right-of-way is currently dedicated along the property's northerly frontage. The developer/property owner shall submit application to dedicate the required additional 3 feet (3') of right-of-way to provide for a 53-foot wide halfwidth right-of-way.	☐
Prior to Final Occupancy of the SNF	Engineering Department	56. NOTICE OF DRAINAGE FEES: Notice is hereby given that this property is located in San Jacinto Valley Area Drainage Plan which was adopted by the City of San Jacinto pursuant to Ordinance 13-01 and Section 66001, et seq, of the Government Code and that said property is subject to fees for said drainage area. Notice is further given that, pursuant to Ordinance 13-01, payment of the drainage fees shall be paid to the City of San Jacinto prior to issuance of the occupancy permit for a parcel, and that the property owner shall pay the fee required at the rate in effect at the time of issuance of the actual permit.	☐
Prior to Final Occupancy of the SNF	Engineering Department	57. The following improvements shall be deemed complete by the Engineering Department: a. Onsite Grading and Erosion Control Plans – Plans shall show the approved WDID number. b. Geotechnical Report (for reference) c. Street Improvement Plan d. Storm Drain Improvement Plans e. Hydrology and Hydraulic Analysis f. Final WQMP (for reference) including WDID No. g. Sewer and Water Improvement Plan, per Fire Department and EMWD standards, shall be submitted to the City Engineer for review and approval. Fire	☐

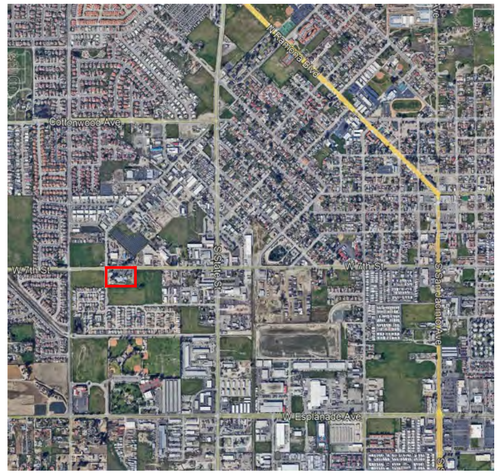
		Department and City of San Jacinto approval of Water Improvement Plan is required prior to City Engineer's approval. h. Street Light Plan prepared by a registered Electrical Engineer i. Signing and Striping Plan j. Traffic Signal Plan (if necessary)	
Prior to Final Occupancy of the SNF	Engineering Department	58. Grand Avenue shall be improved to provide for a 39-foot wide halfwidth right-of-way, asphalt paving (using a TI of 7.0 and PG 70-10), 8-inch curb and gutter 22 feet east of centerline, a 17-foot wide parkway consisting of landscaping, a 6-foot wide sidewalk, and streetlights subject to photometric analysis per City of San Jacinto, County of Riverside, and Caltrans standards.	☐
Prior to Final Occupancy of the SNF	Engineering Department	59. Seventh Street shall be improved to provide for a 53-foot wide halfwidth right-of-way, asphalt paving (using a TI of 9.0 and PG 70-10), 8-inch curb and gutter 32 feet south of centerline, a Class II: Buffered Bike Lane per the City of San Jacinto Trails Master Plan, and a 21-foot wide parkway consisting of landscaping, a 6-foot meandering sidewalk, and streetlights subject to photometric analysis per City of San Jacinto, County of Riverside, and Caltrans standards.	☐
Prior to Final Occupancy of the SNF	Engineering Department	60. If the existing pavement is in substandard condition the developer/property owner may use grind and overlay technique as determined by the City Engineer.	☐
Prior to Final Occupancy of the SNF	Engineering Department	61. All driveways shall be improved to comply with County of Riverside Standard No. 207A.	☐
Prior to Final Occupancy of the SNF	Engineering Department	62. The developer/property owner shall provide for utility trench surface repair as directed by the City Engineer if applicable.	☐
Prior to Final Occupancy of the SNF	Engineering Department	63. Associated existing public and private pavement and appurtenances damaged or broken during the development of this project shall be repaired or removed and replaced and grinded and overlayed by the developer/property owner to the satisfaction of the City Engineer. Any survey monuments damaged or destroyed	☐

		shall be reset by qualified professional pursuant to the California Business and Professional Code 8771.	
Prior to Final Occupancy of the SNF	Engineering Department	64. This development is within the City of San Jacinto sewer and water service area. Water and sewer improvements shall be designed and installed per EMWD Standards. City of San Jacinto sewer and water will-serve letters.	☐
Prior to Final Occupancy of the SNF	Engineering Department	65. Curb ramps shall include truncated domes per Riverside County Standard 403.	☐
Prior to Final Occupancy of the SNF	Engineering Department	66. 7th street taper conforms with traffic engineer's recommendation and is approved by city engineer.	☐
Prior to Final Occupancy of the SNF	Engineering Department	67. Existing power poles with cables 66kV and under shall be removed and cables undergrounded per the Municipal Code, Section 15.32.010. Poles with cables over 66kV shall be relocated as necessary, but other utilities on the pole must be undergrounded. Provide an undergrounding of utilities study by a utility consultant/electrical engineer analyzing and determining the extent of conformance.	☐
Operational Conditions			
Operational	Planning	68. The use of parking and loading spaces for patients, visitors and employees, including ADA spaces, shall not be prevented, prohibited, limited, restricted, eliminated or adapted for other use, unless City Planning provides written approval. Required parking shall remain usable and accessible.	☐
Operational	Planning	69. Parking Management. The operator shall direct all employees, vendors, and patient-transport providers to park on the project site. If the City determines, based on documented complaints or staff observation, that parking generated by the facility regularly occurs on adjacent public streets, the operator shall, within 30 days of written notice, submit a Parking Management Plan for Planning Division approval (which may include staggered shift-change times, designated employee parking, off-site employee parking with shuttle service, or rideshare incentives) and shall implement the approved plan within 30 days of approval.	☐

Operational	Planning	70. Facility Liaison. Prior to occupancy and for the life of the use, the operator shall designate a facility liaison, reachable 24 hours a day, to respond to neighborhood concerns. The liaison's name and telephone number shall be provided to the Planning Division and updated within 10 days of any change. The operator shall keep a log of complaints received and actions taken and provide it to the City upon request.	☐
Operational	Planning	71. Deliveries, loading and unloading activities, and trash pick-up hours shall be limited to daytime hours only (7:00 a.m. to 7:00 p.m.). This condition does not restrict emergency vehicle access or patient transport. Non-emergency patient transport, delivery, and vendor vehicles shall load and unload on-site and shall not stage, queue, or idle on public streets.	☐
Operational	Planning	72. No outdoor storage and display of supplies or equipment is permitted, except within enclosures shown on the approved site plan (refuse/recycling, regulated medical waste, medical gas storage, and emergency generator).	☐
Operational	Planning	73. The added skilled nursing/short-term psychiatric beds and the psychiatric health facility shall not admit patients until the applicant provides the Planning Division a copy of the license or license amendment issued by the California Department of Public Health or the Department of Health Care Services, as applicable.	☐
Operational	Engineering Department	74. The BMPs and infiltration features shall be maintained and inspected per the approved Final WQMP and the recorded maintenance agreement.	☐
Operational	Planning	75. Rooftop mechanical equipment screening shall be maintained, and the facility shall not discharge air contaminants or odors that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public (SCAQMD Rule 402). (PPP AQ-3)*	☐

*Denotes mitigation measure or plan, program or policy (PPP) from the Mitigated Negative Declaration (CEQA26-0019) in effect.





UTILITY LEGEND

- STORM DRAIN PIPE
- STORM DRAIN
- STORM DRAIN MAN HOLE

PROPOSED PARKWAY

PROPOSED PARKING ISLANDS

PROPOSED LANDSCAPE DEVELOPMENT

N.A.P.

SQUARE FOOTAGE OF LANDSCAPE:

- OVERALL: 4,015 SF

LANDSCAPE CONCEPT NOTE:

THIS LANDSCAPE WILL CONSIST OF CALIFORNIA-FRIENDLY, LOW AND MEDIUM WATER USE PLANT MATERIAL. ALL PLANTS HAVE BEEN CHOSEN FROM THE LOW OR MEDIUM WATER USE CATEGORY ACCORDING TO WUCOLS. PLANTS HAVE BEEN CHOSEN TO CREATE A UNIFORM THEME ACROSS THE SITE CONSISTING OF MEDITERRANEAN AND CALIFORNIA FRIENDLY PLANT MATERIAL. MAINTENANCE AND LONGEVITY OF PLANT MATERIAL HAS BEEN TAKEN INTO CONSIDERATION. ROOT PANELS AND BARRIERS WILL BE UTILIZED ON ALL TREES NECESSARY, CONSISTENT WITH ALL STANDARDS AND SPECIFICATIONS. A 3" LAYER OF BARK MULCH WILL BE USED IN ALL LANDSCAPE AREAS. ALL LANDSCAPE AREAS WILL CONFORM TO ALL CURRENT LANDSCAPE GUIDELINES.

IRRIGATION CONCEPT NOTE:

THE IRRIGATION DESIGN WILL INCORPORATE THE LATEST IN SMART IRRIGATION TECHNOLOGIES. ALL NEW LANDSCAPE AREAS WILL INCLUDE HIGH EFFICIENCY, LOW WATER USE IRRIGATION EQUIPMENT AND METHODS. A SMART IRRIGATION CONTROLLER WITH A RAIN SHUT OFF DEVICE WILL ALSO BE INCORPORATED. BARK MULCH WILL BE USED TO RETAIN MOISTURE AND REDUCE EVAPORATION AND AN IRRIGATION SCHEDULE WILL BE PROVIDED TO PROGRAM THE CONTROLLER. TWO IRRIGATION SCHEDULES SHALL BE PREPARED, ONE FOR PLANT ESTABLISHMENT AND ONE FOR MAINTENANCE. ALL NEW IRRIGATION SYSTEMS WILL COMPLY WITH ALL CURRENT LANDSCAPE GUIDELINES.

ALL STREET LANDSCAPE WITHIN THE CITY OF SAN JACINTO RIGHT-OF-WAY, LMD/CFD, PARKS, OPEN SPACE AREAS, AND ALL OTHER PUBLIC LANDSCAPE IRRIGATION SYSTEMS SHALL BE INSTALLED WITH CAL-SENSE CONTROLLERS. THE CAL-SENSE CONTROLLER INSTALLATION SHALL INCLUDE THE CONTROLLER ASSEMBLY, FLOW SENSOR, ET GAUGE, AND TIPPING RAIN-BUCKET. CONTROLLER INSTALLATIONS SHALL BE CERTIFIED BY CAL-SENSE.

THE LANDSCAPE PLANS SHALL COMPLY WITH ALL APPLICABLE WITH THE SAN JACINTO LANDSCAPE DESIGN GUIDELINES.

NORTH

0' 20' 40' 60'

1"=20'-0"

BRADLEY GARDENS ADDITION - OVERALL SITE PLAN

L-1

CONCEPTUAL LANDSCAPE PLAN

PREPARED FOR CORCORAN CONSTRUCTION

26590 MADISON AVENUE, MURRIETA, CA 92562 (951) 643-0440

bmla
LANDSCAPE ARCHITECTURE
310 NORTH JOY STREET | CORONA, CA 92879
T: 951.737.1124 | F: 951.737.6551

TREES



ACER PALMATUM 'BUTTERFLY'
(BUTTERFLY JAPANESE MAPLE)



ARBUTUS 'MARINA'
(MARINA STRAWBERRY TREE)



ERIOBOTRYA DEFLEXA
(BRONZE LOQUAT)



LAGERSTROEMIA INDICA 'NATCHEZ'
(NATCHEZ CRAPE MYRTLE)



X CHITALPA TASHKENTENSIS
(CHITALPA)



MAGNOLIA GRANDIFLORA 'LITTLE GEM'
(DWARF SOUTHERN MAGNOLIA)

TREES - PARKWAY



CERCIS OCCIDENTALIS
(WESTERN REDBUD)



PRUNUS CERASIFERA 'THUNDERCLOUD'
(THUNDERCLOUD PLUM)



QUERCUS SUBER
(CORK OAK)



STYPHNOLOBIUM JAPONICUM
(JAPANESE PAGODA TREE)

TREES - SCREENING



LAURUS NOBILIS
(SWEET BAY)

TREE SCHEDULE

SYMBOL	BOTANICAL / COMMON NAME	SIZE	WUCOLS
TREES			
	ACER PALMATUM 'BUTTERFLY' BUTTERFLY JAPANESE MAPLE	24"BOX	H
	ARBUTUS 'MARINA' MARINA STRAWBERRY TREE	24"BOX	M
	ERIOBOTRYA DEFLEXA BRONZE LOQUAT	24" BOX	M
	LAGERSTROEMIA INDICA X FAURIEI 'NATCHEZ' NATCHEZ CRAPE MYRTLE	24"BOX	M
	MAGNOLIA GRANDIFLORA 'LITTLE GEM' LITTLE GEM DWARF SOUTHERN MAGNOLIA	24"BOX	M
	X CHITALPA TASHKENTENSIS CHITALPA	15 GAL	L
PARKWAYS			
	CERCIS OCCIDENTALIS WESTERN REDBUD	24" BOX	L
	PRUNUS CERASIFERA 'THUNDERCLOUD' THUNDERCLOUD PURPLELEAF PLUM	24" BOX	M
	QUERCUS SUBER CORK OAK	24" BOX	L
	STYPHNOLOBIUM JAPONICUM JAPANESE PAGODA TREE	36" BOX	M
SCREENING			
	LAURUS NOBILIS SWEET BAY	15 GAL	L

WATER EFFICIENT LANDSCAPE WORKSHEET

PROJECT: Bradley Gardens Addition — DATE: 9/24/2026

This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package.

Reference Evapotranspiration (ETo) 56.8
Conversion Factor 0.62

Hydrozone # /Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (sq. ft.)	ETAF x Area	Estimated Total Water Use (ETWU)[d]
Regular Landscape Areas							
Low water use plantings	0.2	Drip Bubblers	0.81	0.25	6,813	1,682	59,241
Medium water use plantings	0.5	Drip Bubblers	0.81	0.62	2,615	1,614	56,846
Low water use plantings - parkway	0.2	Drip Bubblers	0.81	0.25	7,805	1,927	67,867
Medium water use plantings - parkway	0.5	Drip Bubblers	0.81	0.62	2,770	1,710	60,215
				TOTALS	**20,003**	**6,933**	**244,169**
Special Landscape Areas							
Turf areas parks				1.00	0	0	0
Irrigated w/ recycled water				1.00	0	0	0
				TOTALS	**0**	**0**	**0**
						ETWU Total	**244,169**
					Maximum Allowed Water Allowance (MAWA)[e]		**387,434**

MAWA

ETAF for residential areas is .55 or .45 for commercial areas

MAWA =	ETO *	Conv Factor *	((ETAF	*	LA)	+	(1-ETAF)	*	SLA))
	56.8	0.62	0.55		20,003		0.45		0
MAWA=	**387,434**								

ETAF Calculations

Regular Landscape Areas		All Landscape Areas	
Total ETAF x Area	6,933	Total ETAF x Area	6,933
Total Area	20,003	Total Area	20,003
Average ETAF	**0.35**	**Sitewide ETAF**	**0.35**

Average ETAF for Regular Landscape Aeas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

BRADLEY GARDENS ADDITION - PLANTING SCHED. & IMAGES L-2

CONCEPTUAL LANDSCAPE PLAN

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T: 951.737.1124 | F: 951.737.6551

SHRUBS AND GROUNDCOVER



CAREX DIVULSA
(EUROPAaEAN GREY SEDGE)



DIANELLA REVOLUTA 'LITTLE REV'
(LITTLE REV FLAX LILY)



DIANELLA TASMANICA 'VARIEGATA'
(VARIEGATED FLAX LILY)



DIETES BICOLOR
(FORTNIGHT LILY)



LANTANA MONTEVIDENSIS 'DWARF YELLOW'
(YELLOW TRAILING LANTANA)



LAVANDULA STOECHAS
(SPANISH LAVENDER)



LOMANDRA LONGIFOLIA 'BREEZE'
(DWARF MAT RUSH)



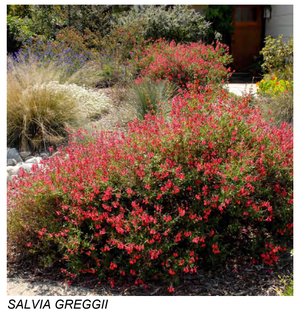
OLEA EUROPAEA 'MONTRA'
(DWARF OLIVE)



PITTOSPORUM TOBIRA 'CREME DE MINT'
(CREME DE MINT DWARF MOCK ORANGE)



ROSMARINUS OFFICINALIS 'TUSCAN BLUE'
(TUSCAN BLUE ROSEMARY)



SALVIA GREGGII
(AUTUMN SAGE)



SALVIA LEUCANTHA 'SANTA BARBARA'
(SANTA BARBARA MEXICAN BUSH SAGE)



ALOE 'BLUE ELF'
(BLUE ELF ALOE)

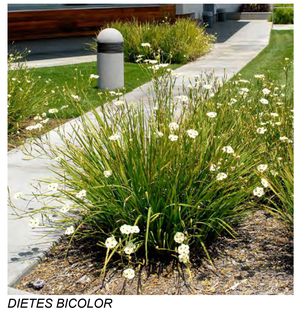
SHRUBS AND GROUNDCOVER - PARKWAY



ARBUTUS UNEDO 'COMPACTA'
(DWARF STRAWBERRY TREE)



COTONEASTER HORIZONTALIS
(ROCKSPRAY COTONEASTER)



DIETES BICOLOR
(FORTNIGHT LILY)



MAHONIA REPENS
(CREEPING MAHONIA)



PRUNUS CAROLINIANA 'COMPACTA'
(COMPACTA CHERRY LAUREL)



SALVIA LEUCOPHYLLA
(PURPLE SAGE)

CONCEPT PLANT SCHEDULE

PLANTING AREA

CAREX DIVULSA / EUROPEAN GREY SEDGE	1 GAL, L	12" o.c.
DIANELLA REVOLUTA 'LITTLE REV' / LITTLE REV FLAX LILY	1 GAL, L	24" o.c.
DIANELLA TASMANICA 'VARIEGATA' / VARIEGATED FLAX LILY	1 GAL, M	24" o.c.
DIETES BICOLOR / FORTNIGHT LILY	5 GAL, M	36" o.c.
LANTANA MONTEVIDENSIS 'DWARF YELLOW' / YELLOW TRAILING LANTANA	5 GAL, L	60" o.c.
LAVANDULA STOECHAS / SPANISH LAVENDER	1 GAL, L	24" o.c.
LOMANDRA LONGIFOLIA 'BREEZE' / BREEZE™ MAT RUSH	1 GAL, M	36" o.c.
OLEA EUROPAEA 'MONTRA' / LITTLE OLLIE® OLIVE	5 GAL, L	48" o.c.
PITTOSPORUM TOBIRA 'CREME DE MINT' / CREME DE MINT DWARF MOCK ORANGE	5 GAL, M	48" o.c.
ROSMARINUS OFFICINALIS 'TUSCAN BLUE' / TUSCAN BLUE ROSEMARY	5 GAL, L	48" o.c.
SALVIA GREGGII / AUTUMN SAGE	1 GAL, L	36" o.c.
SALVIA LEUCANTHA 'SANTA BARBARA' / SANTA BARBARA MEXICAN BUSH SAGE	5 GAL, L	48" o.c.
ALOE X 'BLUE ELF' / BLUE ELF ALOE	5 GAL, VL	24" o.c.

PARKWAY

ARBUTUS UNEDO 'COMPACTA' / COMPACT STRAWBERRY TREE	5 GAL, L	60" o.c.
COTONEASTER HORIZONTALIS / ROCKSPRAY COTONEASTER	1 GAL, M	30" o.c.
DIETES BICOLOR / FORTNIGHT LILY	1 GAL, M	42" o.c.
MAHONIA REPENS / CREEPING MAHONIA	1 GAL, L	30" o.c.
PRUNUS CAROLINIANA 'COMPACTA' / COMPACT CAROLINA CHERRY LAUREL	5 GAL, M	60" o.c.
SALVIA LEUCOPHYLLA / PURPLE SAGE	1 GAL, L	48" o.c.

HYDROSEED
NON-IRRIGATED CALIFORNIA NATIVE HYDROSEED MIX

BRADLEY GARDENS ADDITION - PLANTING SCHED. & IMAGES L-3

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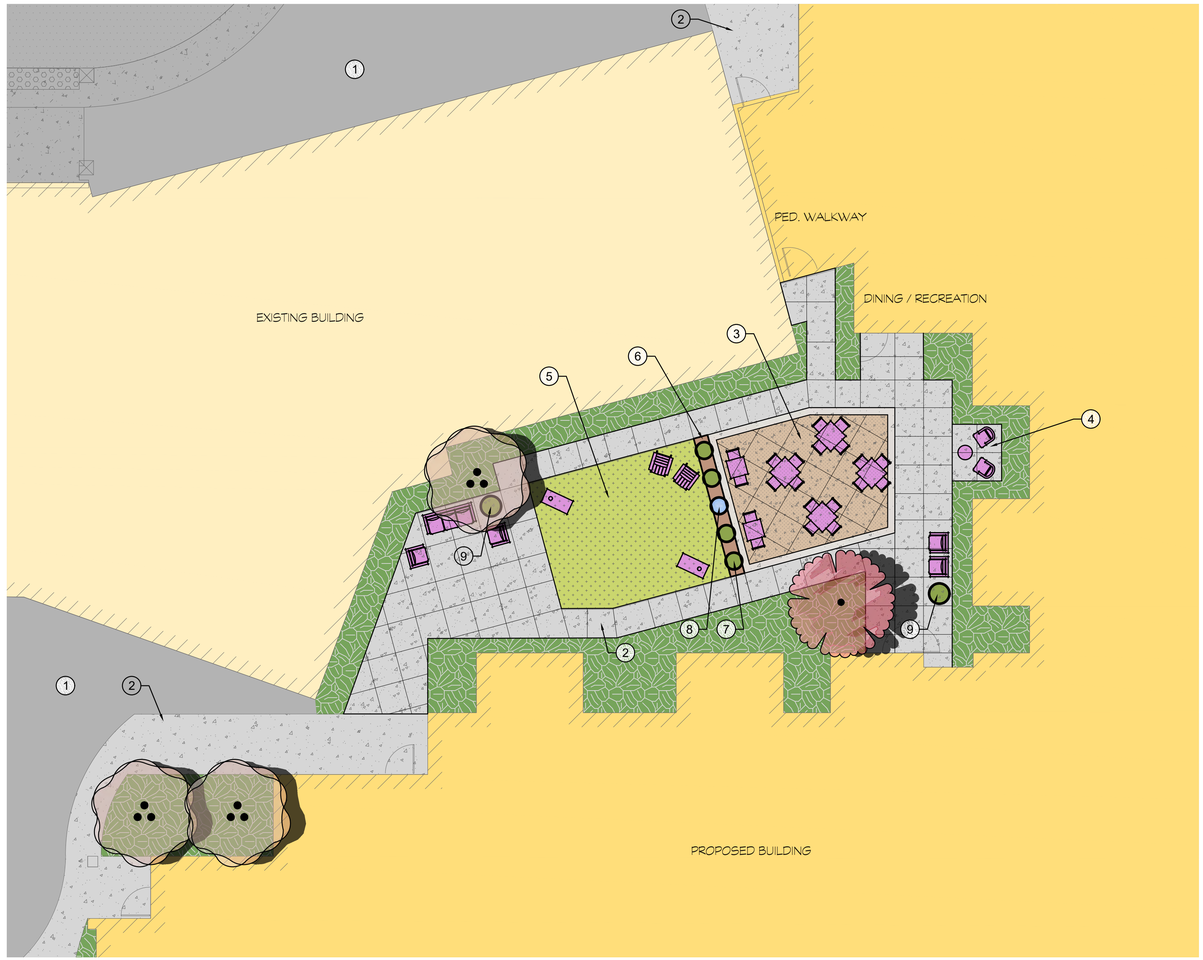

AMENITIES





MODEL VIEW







LEGEND

1. EXISTING PLANTING AREA TO REMAIN
2. CONCRETE WALKWAY
3. ENHANCED PAVING SEATING AREA WITH TABLE AND CHAIRS
4. CONCRETE SEATING AREA WITH ROCKING CHAIRS
5. ARTIFICIAL TURF
6. 24" TALL STUCCO WALL WITH PRECAST CAP
7. PLANTING BOWLS ON TOP OF THE WALL
8. WATER FEATURE BOWL ON TOP OF THE WALL
9. DECORATIVE PLANTING POT

BRADLEY GARDENS ADDITION - COURTYARD ENLARGEMENT

L-4

NORTH

0' 10' 20' 30'
1"=10'-0"

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To: City of San Jacinto Planning Department

From: Maryam Javanmardi, Tina Yuan, Alex J. Garber, EPD Solutions, Inc.

Date: 10/21/2026

Re: Air Quality, Energy, and Greenhouse Gas Impact Analysis for the Bradley Gardens Skilled Nursing Facility Expansion Project EPD Project No. 26-017

Project Overview

This technical memorandum evaluates the proposed Bradley Garden Skilled Nursing Facility Expansion Project ("Project," or "proposed Project"). The Project site is within the southwestern portion of the City of San Jacinto in Riverside County, California. The Project site is located at 980 West (W.) 7th Street, at the southeast corner of the intersection of W. 7th Street and South (S.) Grand Avenue. Regional access to the Project site is provided by State Route (SR) 79 and SR 74. Local access to the site is provided by W. 7th Street and S. Grand Avenue. The Project site consists of one parcel encompassing approximately 2.98 acres. The site is identified as Assessor's Parcel Number (APN) 435-330-003. The Project site is developed and currently operates as the Bradley Gardens facility, which offers a variety of psychiatric-focused care to patients with varying health needs, including supervised Psychiatric Health Facility (PHF) care beds, Skilled Nursing Facility (SNF) and Short-Term Psychiatric (STP) care beds, and rehabilitation and therapy programs.

The Project proposes the expansion of the existing Bradley Gardens Nursing Facility on the 2.98-acre site. The Project includes demolition of the existing 1,074-square-foot (SF) maintenance and storage building for the construction of an 18,000 SF building addition to the existing 44-bed SNF building that would provide 43 additional SNF and STP beds, resulting in a total capacity of 87 beds. The Project also proposes the conversion of the existing 2,596 SF vacant office building into a 16-bed PHF. The Project would also include a proposed emergency generator. The existing emergency generator has a temporary use permit and would be replaced as part of the Project. Because the existing generator would be removed, its emissions were not included in this analysis. The proposed Project would result in a floor area ratio (FAR) of 0.27. Additional improvements would include landscaping, utility connections, implementation of stormwater facilities, lighting, and pavement of parking areas and driveways. With the completion of the proposed Project, there would be a total of 103 beds (SNF, STP, and PHF beds) on the Project site. The Project site has an existing General Plan land use designation of Industrial (I) and is zoned as Industrial Light (IL). The proposed Project site plan is shown in Figure 1, *Conceptual Site Plan*. It should be noted that the Project site plan shows 17,372 SF for the 43-bed addition; this analysis utilized 18,000 SF for this 43-bed addition, presenting a conservative analysis.

To support the California Environmental Quality Act (CEQA) documentation for the Project, this report analyzes the proposed Project's construction and net operational impacts to air quality (emission of criteria pollutants), energy usage, and GHG emissions using the California Emissions Estimator Model

(CalEEMod Version 2022.1) and Emission Factor model (EMFAC Version 2021). The Project site is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). Therefore, significance thresholds from the SCAQMD are used in this analysis.

Table 1, *Construction Schedule*, shows the construction schedule modeled. Construction would last approximately 11 months.

Table 1: Construction Schedule

Activity	Start Date	End Date	Total Working Days
Demolition	12/1/2026	12/9/2026	7
Site Preparation	12/10/2026	12/16/2026	5
Grading	12/17/2026	12/23/2026	5
Building Construction	12/24/2026	12/8/2027	250
Paving	12/24/2026	12/30/2026	5
Architectural Coating	11/24/2027	11/30/2027	5

Source: CalEEMod output sheets are provided in Attachment A.

Modeling Assumptions and Adjustments

The following non-default assumptions and adjustments were used in the CalEEMod emission model for this analysis:

- **Land Use:** The lot acreage was adjusted to match the site plan provided by the applicant.
- **Construction Phases:** The following phases were adjusted to adhere to the construction start date and occupancy year as provided by the client:
    - Demolition: reduced from 20 days to 7 days.
    - Site Preparation: increased from 3 days to 5 days.
    - Grading: reduced from 6 days to 5 days.
    - Building Construction: increased from 220 days to 250 days.
    - Paving: reduced from 10 days to 5 days.

  Additionally, the paving phase was revised to begin concurrently with building construction. Architectural coating was set to begin two weeks before the completion of building construction. Reduced phase durations and overlapping phases during construction would result in a conservative analysis.
- **Construction Equipment:** It was assumed that all construction equipment would be used 8 hours a day per workday. Tractor/loaders/backhoes were replaced with crawler tractors in the site preparation and grading construction phases.
- **Demolition:** Based on client-provided information, the demolition of the existing building and hardscape is anticipated to generate approximately 5 tons of debris.
- **Construction Earthmoving Activity:** Based on client-provided grading information, the Project is anticipated to achieve a balanced site condition; however, for conservative analysis purposes, approximately 1,000 cubic yards of export are assumed to account for potential on-site spoils during grading activities.

- **Operations:** Hearths, wood stoves, and wood fireplaces were removed in accordance with SCAQMD Rule 445, which prohibits the installation of wood-burning devices in an effort to reduce particulate matter and production of volatile organic compounds (VOCs).[1] Gas and propane fireplaces were also removed as neither are proposed for the Project.
- **Operational Trip Rates:** Weekday, Saturday, and Sunday trip rates were adjusted based on the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 12th Edition*, to match the auto trip rates for Nursing Homes (Land Use Code 620).
- **Emergency Generator:** The Project would include a proposed emergency diesel generator, modeled at 236 horsepower (hp), with a load factor of 0.73 and up to 200 hours of operation per year. Annual diesel fuel consumption and associated emissions were calculated based on these operating parameters.

EMFAC Off-Model Adjustment Factors

EMFAC2021 currently accounts for emissions reductions attributed to compliance with several regulations: the Advanced Clean Trucks Regulation, Zero-Emission Airport Shuttle Regulation, Heavy-Duty Warranty Amendments (Phase 1), and the Heavy-Duty Omnibus Regulation. On June 12, 2025, three congressional resolutions were signed into law to disapprove previously approved preemption waivers which allowed the enforcement of these regulations. Therefore, the California Air Resources Board (CARB) released the EMFAC2021 Off-Model Adjustment Factors (Adjustment Factors), which negates emissions reductions attributed to these regulations. On November 21, 2025, the EPA approved use of the Adjustment Factors.[2] These factors are provided for each vehicle under EMFAC2021's vehicle categories, for every year from 2022 to 2050. In addition, factors are provided for different fuel types (diesel, gas, natural gas, electric, and plug-in hybrid electric).

CalEEMod v. 2022.1 uses emissions data from EMFAC2021. However, CalEEMod has not yet incorporated the Adjustment Factors due to the recency of its approval. To account for the potential increase in emissions, diesel adjustment factors from the construction years of 2026 through 2027 were applied to construction off-site emissions from hauling and vendor trips. Adjustment factors were not applied to the operational mobile emissions, as the EMFAC adjustment factors provided for passenger vehicles are 1.0. Calculations to obtain the adjusted emission rates are provided in Attachment B.

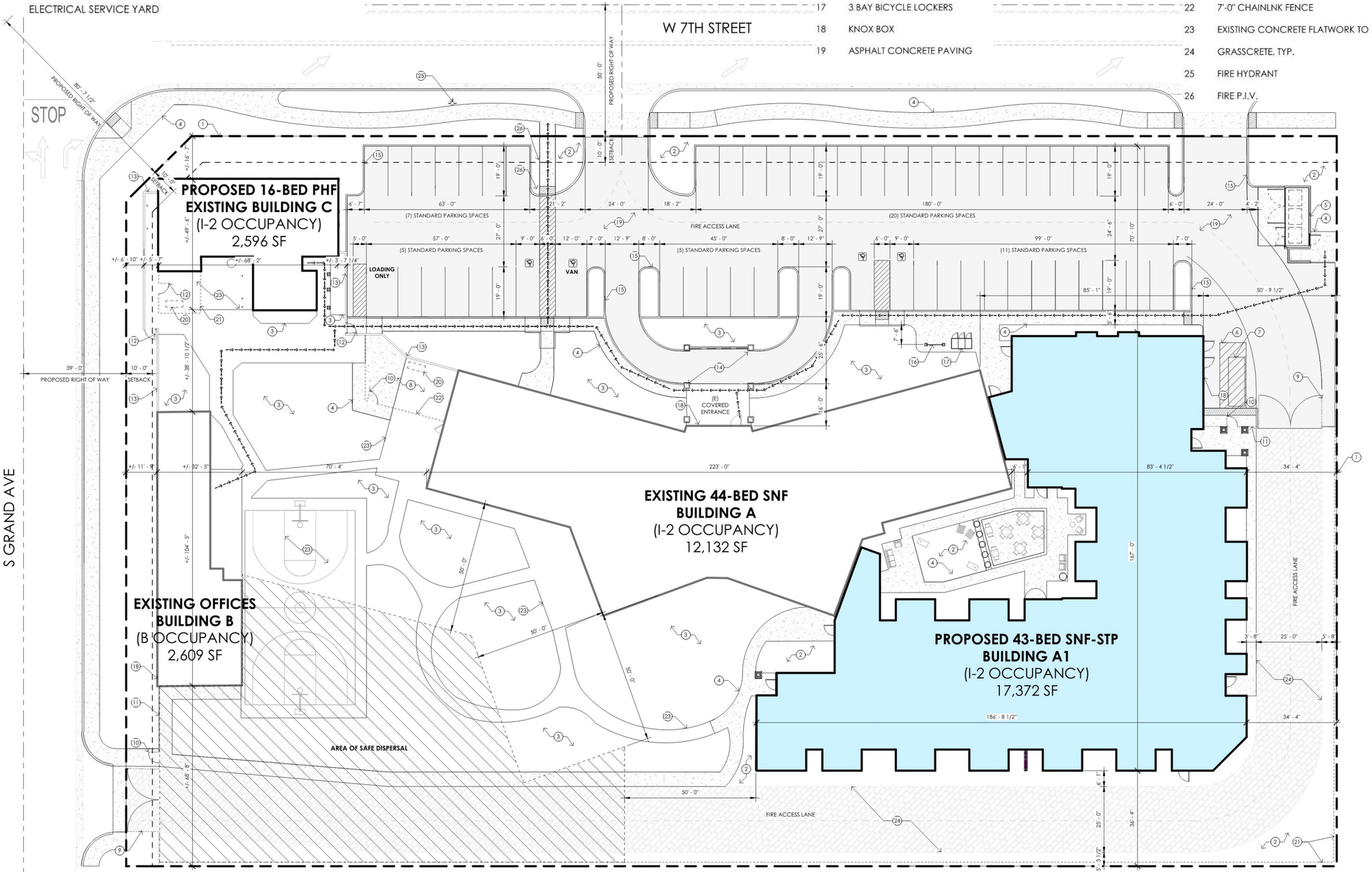
[1] SCAQMD. (2020). *Rule 445, Wood-Burning Devices*. Referenced at https://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-445.pdf

[2] USEPA. (November 2025). *EPA Off-Model Adjustment Factors Approval Letter*. Referenced at https://ww2.arb.ca.gov/sites/default/files/2025-12/EPA%20Off-Model%20Adjustment%20Factors%20Approval%20Letter.pdf

Figure 1: Conceptual Site Plan

KEYNOTES

1 PROPERTY LINE
2 LANDSCAPING
3 EXISTING LANDSCAPING TO REMAIN
4 CONCRETE WALKWAY, TYP.
5 TRASH ENCLOSURE PER 17.305.130 WITH ADJACENT CAN WASH AREA
6 10' X 25' LOADING SPACE
7 GREASE INTERCEPTOR
8 ELECTRICAL SERVICE YARD
9 12'-0"W. X 7'-0"H. VEHICULAR GATES WITH HEAVY DUTY HINGES, FOR FIRE LANE ACCESS ONLY
10 4'-0"W. GATE TO MATCH EXISTING GATES, WITH PANIC HARDWARE AND CONTROLLED EGRESS
11 EXISTING 7'-0"H. VINYL FENCE WITH STEEL FRAMES AT VEHICULAR GATES
12 EXISTING 4'-0" W. GATE TO REMAIN
13 EXISTING 7'-0" H. CMU WALL TO REMAIN
14 EXISTING PORTE COCHERE WITH 5'-0" X 20'-0" MINMUM PASSENGER DROP OFF AND LOADING ZONE
15 6" CONCRETE CURB
16 3 SPACE BICYCLE RACK PARKING
17 3 BAY BICYCLE LOCKERS
18 KNOX BOX
19 ASPHALT CONCRETE PAVING
20 EMERGENCY GENERATOR ON 8" CONCRETE PAD
21 EXISTING 7'-0" CHAINLINK FENCE TO REMAIN
22 7'-0" CHAINLNK FENCE
23 EXISTING CONCRETE FLATWORK TO REMAIN
24 GRASSCRETE, TYP.
25 FIRE HYDRANT
26 FIRE P.I.V.



GREGG MAEDO + ASSOCIATES

E | P | D SOLUTIONS, INC

Summary of Air Quality, Energy, and GHG Impacts

Air Quality

The construction and operation of the proposed Project would not exceed SCAQMD thresholds for any of the criteria pollutants. Projects that do not exceed the regional thresholds are assumed to not have a significant impact on both a project level and cumulative level. Additionally, the proposed Project aligns with the SCAQMD'S 2022 Air Quality Management Plan (AQMP), reflecting adherence to regional air quality management goals and standards. Furthermore, odors produced by the construction and operation of the proposed Project would be minimal and comply with SCAQMD Rule 402. Therefore, impacts to air quality from the proposed Project would be less than significant. No mitigation would be required.

Energy

The proposed Project's energy consumption for construction activities would be conditioned to require compliance with existing fuel standards, machinery efficiency standards, and California Air Resources Board (CARB) requirements that limit idling of construction trucks and equipment. There are no unusual Project characteristics that would cause the use of construction equipment that would be less energy efficient compared with other similar construction sites in other parts of the state. Additionally, through compliance with existing standards, the operation of the Project would not result in an energy demand on a per-development basis that is greater than that of other development projects in Southern California. The proposed Project would be required to meet the California Code of Regulations (CCR) Title 24 energy efficiency standards and comply with all applicable City energy codes. Therefore, the Project would not inhibit the use of renewable energy. Additionally, the Project would not result in inefficient, wasteful, or unnecessary consumption of energy. Impacts related to energy would thus be less than significant. No mitigation would be required.

GHG Emissions

The proposed Project's construction and operational greenhouse gas (GHG) emissions would total 810 metric tons of carbon dioxide equivalent ($MTCO_2e$). When compared to emissions from the existing buildings, the Project would result in a net increase of 478 $MTCO_2e$ per year, which is below the SCAQMD Tier III significance threshold of 3,000 $MTCO_2e$ per year. The Project would comply with applicable regulatory requirements, including the California Building Standards Code (Title 24), and would be consistent with applicable measures of the Western Riverside Council of Governments' (WRCOG) 2021 Subregional Climate Action Plan. The Project would not conflict with the GHG reduction framework established in the 2022 Scoping Plan adopted by the California Air Resources Board and would be consistent with applicable GHG reduction policies of the City of San Jacinto, as implemented through the WRCOG Subregional Climate Action Plan. Therefore, the Project would have a less-than-significant impact on GHG emissions. No mitigation would be required.

Air Quality

Regional Emissions

The SCAQMD has adopted maximum daily emission thresholds (pounds/day) for the criteria pollutants during the construction and operation of a project.[3] While incremental regional air quality impacts of an individual project are generally very small and difficult to measure, the SCAQMD's regional maximum emission thresholds set standards to reduce the burden of the SCAQMD to attain and maintain ambient air quality standards. The CalEEMod Project emissions, along with regional construction and operational thresholds for each of the criteria pollutants, are listed in Table 2, *Regional Construction Emission Estimates*, and Table 3, *Regional Operation Emission Estimates*, respectively. These emission thresholds include the Project emissions generated both from on-site sources (such as off-road construction equipment and fugitive dust) and off-site sources (vehicle travel arriving at and leaving from the site). In addition, Project construction would be required to comply with several SCAQMD rules and regulations, which would further reduce potential construction-related air quality emissions. These rules include:

- Rule 402, Public Nuisance, which prohibits the discharge of air contaminants that cause injury, nuisance, or annoyance to the public or damage to property;
- Rule 403, Fugitive Dust, which aims to minimize fugitive particulate matter dust emissions during construction activities;
- Rule 1113, Architectural Coatings, which requires the use of low-VOC paints; and
- Rule 1403, Asbestos Demolition and Removal, which establishes work practice requirements to limit asbestos emissions from building demolition or renovation, including asbestos surveying, notification, removal and handling procedures, and disposal requirements.
- Rule 1470 operational hour requirements, which limit stationary emergency diesel engines to 50 hours per year for maintenance and testing, with a permit allowing up to 200 hours of total annual operation.

The CalEEMod output sheets for the proposed Project can be found in Attachment A, *CalEEMod Output Sheets.* In addition, detailed tables showing emissions for each construction phase are provided in Attachment B, *Detailed Calculation Sheets*. As noted in Table 2, maximum daily construction emissions would not exceed the SCAQMD regional construction thresholds and thus would result in a less-than-significant regional operational air quality impact.

[3] SCAQMD. (March 2023). *South Coast AQMD Air Quality Significance Thresholds*. Referenced at https://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf?sfvrsn=25.

Table 2: Regional Construction Emission Estimates*

Construction Year	Maximum Daily Regional Emissions (pounds/day) [1,2,3]					
	ROG	**NOx**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
2026	2.3	15.6	23.5	<0.01	4.1	1.8
2027	52.7	11.3	17.5	<0.01	1.6	0.6
Maximum Daily Emissions (2026-2027)	**52.7**	**15.6**	**23.5**	**<0.01**	4.1	1.8
SCAQMD Significance Thresholds	75	100	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: ROG = reactive organic gases, NOx = nitrogen oxides, CO = carbon monoxide, SO2 = sulfur dioxide, PM_{10} = particulate matter 10 microns in diameter, $PM_{2.5}$ = particulate matter 2.5 microns in diameter

1. Values may vary slightly due to rounding.

2. Winter and Summer emissions rates were compared across all pollutants; the table above presents the greater emission rate for each season and therefore presents a conservative analysis.

3. Emissions for ROG, NOx, PM_{10}, and $PM_{2.5}$ have accounted for the 2026 and 2027 Adjustment Factors.

Source: CalEEMod output sheets are provided in Attachment A. Detailed calculation sheets are provided in Attachment B.

* Regional construction emissions presented in this table are analyzed based on full buildout of the expanded facility, including a total of 103 beds. Because the analysis assumes construction emissions associated with the entire expanded facility rather than only the proposed expansion, the results represent a conservative estimate. Actual construction emissions associated with the new building, which would accommodate 43 additional SNF-STP beds, are anticipated to be much lesser than the emissions presented in this table.

The estimated maximum daily regional operational emissions associated with the existing facility, proposed expansion, and expanded facility are provided in Table 3, *Regional Operational Emission Estimates.* Emissions from operations of the existing facility on-site were subtracted from the expanded facility's operational emissions to obtain the net emissions associated with operation of the proposed Project. As shown, proposed Project operational emissions and expanded facility operational emissions would remain below all applicable SCAQMD regional thresholds. Therefore, the Project would result in less-than-significant regional operational air quality impacts, and no mitigation would be required.

Table 3: Regional Operation Emission Estimates

Operational Activity	Maximum Daily Regional Emissions (pounds/day) [1,2]					
	ROG	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
Mobile	1.2	1.3	12.3	<0.01	3.1	0.8
Area	1.4	0.1	6.0	<0.01	<0.01	<0.01
Energy	<0.01	0.4	0.2	<0.01	<0.01	<0.01
Stationary	0.4	1.1	1.0	<0.01	0.1	0.1
Total Expanded Facility Operational Emissions	**3.0**	**2.9**	**19.5**	**<0.01**	**3.2**	**0.9**
Existing Operational Emissions	1.1	0.8	7.9	<0.01	1.3	0.4
Net New Operational Emissions (proposed Project Emissions)	**1.9**	**2.1**	**11.6**	**<0.01**	**1.9**	**0.5**
SCAQMD Significance Thresholds	55	55	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: ROG = reactive organic gases, NOx = nitrogen oxides, CO = carbon monoxide, SO_2 = sulfur dioxide, PM_{10} = particulate matter 10 microns in diameter, $PM_{2.5}$ = particulate matter 2.5 microns in diameter
1. Values may vary slightly due to rounding.
2. Winter and Summer emissions rates were compared across all pollutants, the table above presents the greater emission rate for each season and therefore presents a conservative analysis.
Source: CalEEMod output sheets are provided in Attachment A. Detailed calculation sheets are provided in Attachment D.

Local Emissions

Localized significance thresholds (LSTs) were also adopted by the SCAQMD to evaluate projects which would not exceed the regional emission significance thresholds but may have the potential to exceed State and national air quality standards within a project's vicinity. These thresholds set the maximum rates of daily construction or operational emissions from a project site that would not exceed a national or State ambient air quality standard.[4] The differences between regional thresholds and LSTs are as follows:

1. Regional thresholds include all sources of project construction and operational emissions generated from on-site and off-site emission sources whereas the LSTs only consider the emissions generated from on-site emission sources.
2. LSTs only apply to carbon monoxide (CO), nitrogen oxides (NOx), and particulate matter (PM_{10} and $PM_{2.5}$), while regional thresholds include both reactive organic gases (ROG) and sulfur dioxide (SO_2).
3. Regional thresholds apply to emission sources located anywhere within the SCAQMD whereas the LSTs are location dependent and rely on the size of the project and emission location relative to the nearest sensitive receptor. A sensitive receptor is defined as an individual who is most susceptible to negative health effects when exposed to air pollutants and includes children, the elderly, and adults with chronic health issues. Locations for sensitive receptors include residences, schools, elderly care centers, and hospitals.

[4] SCAQMD. (2008). *Final Localized Significance Threshold Methodology*. Referenced at http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf

The SCAQMD provides screening tables (Appendix C of the SCAQMD *2008 Final Localized Significance Threshold Methodology*) for projects that disturb less than or equal to 5 acres in a day.[5] These tables were created to easily determine if the daily emissions of NOx, CO, PM_{10}, and $PM_{2.5}$ from a project could result in a significant impact to the local air quality. The thresholds are determined by:

- Source receptor area (SRA), which is the geographic area within the SCAQMD that can act as both a source of emissions and a receptor of emission impacts (the Project is located within SRA 28, Hemet/San Jacinto Valley);
- Size of grading disturbance (construction)/size of the project (operation); and
- Distance to the nearest sensitive receptor.

Using the SCAQMD methodology for estimating acres of ground disturbance, the site preparation and grading phases would result in a maximum of 1.5 acres of disturbance per day. Construction emissions were evaluated by interpolating between the 1-acre and 2-acre disturbance threshold tables to approximate LST values corresponding to a 1.5-acre daily disturbed area, consistent with SCAQMD guidance for conditions that fall between published threshold categories. Site disturbance calculations are provided in Attachment B. The nearest sensitive receptor is located at 943 W 7th Street, approximately 90 feet (27 meters) north of the Project site boundary. Therefore, the 25-meter receptor distance category was applied, consistent with the nearest available distance category in the SCAQMD LST lookup tables. There are also existing sensitive receptors located on-site associated with the operations of the existing facility. Although portions of the Project may be closer than 25 meters to the existing facility operations, the lowest applicable SCAQMD threshold category (25 meters) was conservatively applied. Construction activities within the proposed 16-bed PHF building would consist of interior renovations and would not involve continuous operation of heavy construction equipment. Additionally, windows in buildings occupied by sensitive receptors would be kept closed during construction to minimize potential exposure to construction-related emissions.

Table 4, *Localized Construction Emission Estimates,* shows the thresholds and estimated maximum daily construction emissions for the proposed Project. As shown in Table 4, the proposed Project would not exceed the SCAQMD LST screening thresholds and would therefore have a less-than-significant localized construction air quality impact.

[5] SCAQMD. (2008). *Final Localized Significance Threshold Methodology Appendix C*. Referenced at http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2.

Table 4: Localized Construction Emission Estimates*

Construction Activity	Maximum Daily Localized Emissions (pounds/day)			
	NOx	**CO**	**PM_{10}**	**$PM_{2.5}$**
2026				
Demolition	10.9	10.8	0.4	0.4
Site Preparation	13.4	13.2	3.1	1.5
Grading	13.4	13.2	3.5	1.6
Building Construction	9.9	11.5	0.3	0.3
Building Construction and Paving	14.9	18.7	0.6	0.5
Maximum On-Site Emissions (2026)	***14.9***	***18.7***	**3.5**	**1.6**
2027				
Building Construction	9.5	11.4	0.3	0.3
Building Construction and Architectural Coating	10.6	12.9	0.3	0.3
Architectural Coating	1.1	1.5	<0.01	<0.01
Maximum On-Site Emissions (2027)	***10.6***	***12.9***	***0.3***	***0.3***
Maximum On-Site Emissions	**14.9**	**18.7**	**3.5**	**1.6**
SCAQMD Screening Thresholds	198.0	925.0	5.5	3.5
Threshold Exceeded?	**No**	**No**	**No**	**No**

Notes: NOx = nitrogen oxides, CO = carbon monoxide, PM_{10} = particulate matter 10 microns in diameter, $PM_{2.5}$ = particulate matter 2.5 microns in diameter
Source: CalEEMod output sheets are provided in Attachment A. Detailed calculation sheets are provided in Attachment B.
* Localized construction emissions presented in this table are analyzed based on the full buildout of the expanded facility, including a total of 103 beds. Because the analysis assumes construction emissions associated with the entire expanded facility rather than only the proposed expansion, the results represent a conservative estimate. Actual construction emissions associated with the new building, which would accommodate 43 additional SNF-STP beds, are anticipated to be much lesser than the emissions presented in this table.

The localized significance thresholds for operation are determined by the size of the Project site and the distance to the nearest sensitive receptor, as well as the maximum trip length possible within the Project site. As the Project site is 2.98 acres, operational LSTs were estimated by interpolating between the 2-acre and 5-acre site thresholds to approximate values corresponding to the Project site area. Consistent with the localized construction emissions analysis, the 25-meter receptor distance category was applied. The operational LSTs, including emissions from mobile, area, energy, and stationary sources, are included in this analysis.

As shown in Table 5, *Localized Operational Emission Estimates,* the Project is estimated to generate emissions of NOx, CO, PM_{10}, and $PM_{2.5}$ that would be below the applicable localized significance thresholds established by the SCAQMD. Therefore, localized operational air quality impacts would be less than significant.

Table 5: Localized Operational Emission Estimates

Operational Activity	Maximum Daily Localized Emissions (pounds/day)			
	NOx	**CO**	**PM_{10}**	**$PM_{2.5}$**
Mobile	0.3	1.9	<0.01	<0.01
Area	0.1	6.0	<0.01	<0.01
Energy	0.4	0.2	<0.01	<0.01
Stationary	1.1	1.0	0.1	0.1
Total Project Emissions	**1.9**	**9.1**	**0.1**	**0.1**
SCAQMD Significance Thresholds	260.9	1,269.5	2.4	1.2
Threshold Exceeded?	**No**	**No**	**No**	**No**

Source: CalEEMod output sheets are provided in Attachment A. Detailed calculation sheets are provided in Attachment B.

Air Quality Management Plan Consistency

The SCAQMD's CEQA Handbook provides the following two criteria to determine whether a project would be consistent with the 2022 AQMP:

1. The Project would not generate population and employment growth that would be inconsistent with Southern California Association of Governments (SCAG)'s growth forecasts from the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS); or
2. The Project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

Consistency Criterion No. 1 refers to the SCAG's growth forecasts, and associated assumptions included in the AQMP. The future air quality levels projected in the AQMP are based on SCAG's growth projections, which are based, in part, on the general plans of cities located within the SCAG region. Therefore, if the level of housing and employment growth related to the proposed Project is consistent with the applicable assumptions used in the development of the AQMP, the Project would not jeopardize attainment of the air quality levels identified in the AQMP. While SCAG has updated the RTP/SCS to the Connect SoCal 2024, which provides growth and forecasting estimates for 2024 through 2050, this update was adopted after the 2022 AQMP. Therefore, the analysis below uses assumptions from the 2020-2045 RTP/SCS for consistency with the most recent AQMP.

The Project site has an existing General Plan land use designation of Industrial (I) and is zoned Industrial Light (IL). The Industrial (I) General Plan designation supports industrial and employment-generating uses, including light industrial, manufacturing, warehouse, service commercial, and related support uses. The IL zoning district allows for general manufacturing uses and light industrial activities, including auto repair services, pest control services, pool maintenance services, and woodworking shops. Other uses may be permitted where determined to be compatible with the primary allowed uses.

The proposed Project includes demolition of the existing 1,074 SF maintenance and storage building and construction of a new 18,000 SF building addition to the existing skilled nursing facility (SNF), resulting in

a total of 87 beds within the SNF building. In addition, the existing 2,596 SF vacant office building would be converted into a 16-bed Psychiatric Health Facility (PHF), resulting in a total campus capacity of 103 beds.

The proposed Project represents the expansion of an existing health care facility. Given that it does not propose the development of housing, the Project would not directly generate a permanent residential population. The Project also does not include infrastructure improvements or extensions that would directly induce population growth.

The existing Bradley Gardens facility has a total of 150 employees, and the proposed Project would add 100 new employees, resulting in a total of 250 employees. The employees that would fill these roles are anticipated to come from within the City or the region.

According to SCAG's 2020-2045 RTP/SCS Demographics and Growth Forecast Technical Report[6], the City of Jacinto is projected to add approximately 6,200 jobs between 2016 and 2045. Based on these growth projections, the full buildout of the proposed Project would represent approximately 4 percent of projected employment growth within the City of San Jacinto. Thus, the employment growth that would occur from the proposed Project is within the growth projections used to prepare SCAG's 2020-2045 RTP/SCS.

The Project site is designated Industrial under the City's General Plan, which allows a maximum FAR of 0.5. The proposed Project would result in an FAR of approximately 0.27, which is within the FAR allowed by the existing General Plan land use designation of the site. The Project would not introduce new land uses beyond the institutional healthcare uses already occurring on-site.

Therefore, the proposed Project would be within the development intensity anticipated for the site under the General Plan and would remain consistent with the growth framework for the area. Accordingly, the Project would be consistent with the growth assumptions used in the development of the 2020-2045 RTP/SCS and would not jeopardize attainment of the air quality levels identified in the AQMP. With the required City approvals, the Project would be consistent with the applicable General Plan and zoning designations and thus satisfies Consistency Criterion No. 1.

Consistency Criterion No. 2 refers to the California Ambient Air Quality Standards. An impact would occur if the long-term emissions associated with the proposed Project exceed the SCAQMD's regional significance thresholds for construction and operational emissions. As presented in Tables 3 and 4 above, the proposed Project would not result in emitting emissions that exceed SCAQMD established thresholds. Therefore, the proposed Project would be consistent with Criterion No. 2. Since the Project would be consistent with both Criterion No. 1 and 2, impacts related to consistency with the AQMP would be less than significant.

[6] Southern California Association of Governments (SCAG). 2020. *Demographics and Growth Forecast Technical Repor*t. Retrieved from 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy: https://scag.ca.gov/sites/default/files/2024-05/0903fconnectsocal_demographics-and-growth-forecast.pdf

Odors

Odors would be produced during the construction of the proposed Project due to the operation of heavy-duty off-road equipment. The primary odor emitted would be diesel particulate matter from the vendor trucks and heavy-duty off-road equipment. This odor may be noticeable by nearby residents; however, these odors would be expected and not necessarily objectionable. These odors would also dissipate quickly and would be temporary. Therefore, due to the nature of the odor produced during construction as temporary and non-objectionable to a substantial number of people, the odor impact from the construction of the proposed Project would be less than significant.

For operational odor emissions, the SCAQMD's *CEQA Air Quality Handbook* describes odor complaints associated with the following land uses:

- Agricultural uses
- Chemical plants
- Composting activities
- Dairies
- Fiberglass molding
- Food processing plants
- Landfills
- Refineries
- Wastewater treatment plants

The Project does not propose any of the above land uses and is required to comply with SCAQMD Rule 402, *Nuisance*, which states:

> *A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.*

Thus, impacts associated with odor produced by the operation of the proposed Project would be less than significant.

Conclusion

The proposed Project's maximum daily regional and localized construction and operational emissions would not exceed the SCAQMD's regional thresholds of significance, as detailed in Tables 2 through 5. All construction activities would comply with applicable SCAQMD rules and regulations, ensuring minimal and temporary odor exposure during construction. Operational impacts are also anticipated to be minimal and consistent with surrounding land uses. In addition, the proposed Project is consistent with the SCAQMD'S 2022 AQMP, reflecting adherence to regional air quality management goals and standards. During construction, any odors produced will be temporary and not significantly objectionable. Additionally, the proposed Project involves land uses that do not typically generate significant odor complaints and would comply with SCAQMD Rule 402, which addresses potential odor impacts. Overall, the proposed Project's impacts related to air quality would be less than significant. No mitigation would be required.

Energy

The State CEQA Guidelines do not have quantitative thresholds for energy consumption. Rather, the criteria in Appendix G: VI Energy ask (a) "[Would the proposed Project] Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?" and (b) "[Would the project] Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?"[7] Therefore, for the purpose of this analysis, a significant impact would occur if:

(a) The project design and/or location encourages wasteful, inefficient, and unnecessary consumption of energy, especially fossil fuels such as coal, natural gas, and petroleum, as well as the use of fuel by vehicles anticipated to travel to and from the project; or
(b) The project design impedes the growth of future renewable energy developments.

Southern California Edison and the Southern California Gas Company would provide electricity and natural gas, respectively, for construction and operation of the proposed Project. The following assumptions were used to calculate the energy (electricity, natural gas, and petroleum) consumption of the proposed Project:

- Construction equipment fuel consumption was derived from the CARB OffRoad2021 emission model.
- Fuel consumption from vehicle travel was derived from the CARB EMFAC2021 emission model.
- Electrical and natural gas usage was derived from CalEEMod (Version 2022.1).

Construction

Electricity and Natural Gas Usage

Due to the Project size and the fact that construction is temporary, the electricity used during construction of the proposed Project would be substantially less than that required for Project operation and would have a negligible contribution to the Project's overall energy consumption. The electric power used would be for as-necessary lighting and electronic equipment such as computers inside temporary construction trailers. Natural gas is not anticipated to be needed for construction activities. Any natural gas consumption during construction would be minor and negligible in comparison with countywide consumption.

Petroleum Fuel Usage

The equipment associated with construction activities (off-road/heavy duty vehicles) would rely on diesel fuel as would vendor and haul trucks involved in delivering building materials and removing soil material from the Project site. Construction workers would travel to and from the Project site throughout the duration of construction, and for a conservative analysis, it is assumed that construction workers would travel in gasoline-powered passenger vehicles. The trips included worker vehicles, vendor vehicles, and haul vehicles. Table 6, *Total Construction Fuel Usage*, shows the overall fuel consumption for Project

[7] California Energy Commission. (2023). *CEQA Statutes and Guidelines Attachment 10 Appendix G: Environmental Checklist Form*. Referenced at: https://www.energy.ca.gov/sites/default/files/2024-01/11_Attachment_10_-_Appendix_G_from_CEQA_Handbook_ada.docx

construction, obtained from the CARB OffRoad 2021 emission model and the CARB EMFAC2021 model. Detailed tables of fuel consumption by construction equipment and on-road vehicles can be found in Attachment B.

Table 6: Total Construction Fuel Usage*

Construction Source	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
Construction Vehicles	7,730	25,025
Off-Road Construction Equipment	25,320	-
Total	**33,050**	**25,025**
Riverside Countywide Consumption	50,504,775	430,881,899
Percentage Increase (%)	**0.07**	**<0.01**

Source: CalEEMod Output Sheets (see Attachment A) and Detailed Calculation Sheets (see Attachment B).
[1]OFFROAD2021 (v1.0.5) emissions inventory model output for Riverside County, covering calendar year 2027.
* Total construction fuel usage presented in this table is analyzed based on the full buildout of the expanded facility, including a total of 103 beds. Because the analysis assumes construction emissions associated with the entire expanded facility rather than only the proposed expansion, the results represent a conservative estimate. Actual construction emissions associated with the new building, which would accommodate 43 additional SNF-STP beds, are anticipated to be much lesser than the emissions presented in this table. Assumed all construction equipment would consume diesel fuel as a conservative analysis.

As shown in Table 6, construction of the proposed Project would require a total of 33,050 gallons of diesel fuel and 25,025 gallons of gasoline fuel from construction vehicles. This would result in a 0.07 percent increase in countywide construction diesel fuel consumption and a <0.01 percent increase in countywide on-road gasoline consumption. Thus, increased energy consumption from the construction of the proposed Project would be nominal. Additionally, it should be noted that this total fuel consumption is a conservative analysis and would likely overstate the amount of fuel usage, as specific construction equipment is not expected to operate during the entire duration of the construction activity.

Operation

The operation of the proposed Project would consume electricity, natural gas, and petroleum (gasoline). Electricity and natural gas consumption can be found in the CalEEMod Output Sheets attached (Attachment A). The gasoline consumption rates utilize the same assumptions that were used for the worker vehicles. The Project's estimated net energy consumption is shown in Table 7, *Project Net Annual Operational Energy Consumption*, below.

The most recent data available for electricity from the California Energy Commission is from 2023. In 2023, electricity consumption in Riverside County was estimated at 16,286,000,000 kilowatt-hours.[8] The most recent data available for natural gas from the California Energy Commission is from 2024, when natural gas consumption in Riverside County was estimated at 42,670,000,000 British thermal units (Btu).[9] As

[8] California Energy Commission. (2023). *Electricity Consumption by County.* Referenced at: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-0
[9] California Energy Commission. (2024). *Natural Gas Consumption by County.* Referenced at: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-1

previously shown in Table 6, gasoline consumption in Riverside County in 2027 is estimated at 430,881,899 gallons (see Attachment B). The proposed Project is expected to require electricity, natural gas, gasoline, and diesel. However, the proposed Project's energy consumption would be consistent with that of similar-sized projects and would not constitute an inefficient use of energy. As shown in Table 7, operation of the proposed Project would result in a countywide net increase of less than 0.01 percent in electricity consumption, less than 0.01 percent in natural gas consumption, less than 0.01 percent in gasoline consumption, and less than 0.01 percent in diesel consumption. Accordingly, the Project's operational electricity, natural gas, and gasoline consumption would be minimal at the countywide scale. The Project would not result in wasteful, inefficient, or unnecessary consumption of energy. The proposed Project would result in less-than-significant operational energy impacts. No mitigation would be required.

Table 7: Project Net Annual Operational Energy Consumption

Operational Source	Energy Usage	Countywide Energy Consumption	Percentage Increase in Countywide Consumption from Project
Electricity (Kilowatt-Hour)			
Proposed Project	646,337	NA	
Existing Conditions	313,592		
Net Electricity Consumption from Project	332,746	16,286,000,000	<0.01%
Natural Gas (Thousands British Thermal Units)			
Proposed Project	1,399,933	NA	
Existing Conditions	639,257		
Net Natural Gas Consumption from Project	760,676	42,670,000,000	<0.01%
Petroleum (Gasoline Fuel) Consumption (Gallons)			
Proposed Project	52,117	NA	
Existing Conditions	22,263		
Net Petroleum (Gasoline) Consumption from Project	29,853	430,881,899	<0.01%
Petroleum (Diesel Fuel) Consumption (Gallons)			
Proposed Project	1,723	NA	
Net Petroleum (Diesel) Consumption from Project	1,723	227,147,767	<0.01%

NA=Not Applicable, as this analysis compares the net increase of the Project in countywide consumption.
Source: CalEEMod Output Sheets (see Attachment A) and Detailed Calculation Sheets (see Attachment B).

Future Renewable Energy Developments

The proposed Project would be required to meet the CCR Title 24 energy efficiency standards in effect during permitting of the proposed Project and comply with all applicable City energy codes. The City's administration of the CCR Title 24 requirements includes review of design components and energy conservation measures that occur during the permitting process, which ensures that all requirements are met. In addition, Project design and operation would comply with State Building Energy Efficiency

Standards, appliance efficiency regulations, and green building standards. As such, the Project would not inhibit the use of renewable energy.

Conclusion

The proposed Project's energy consumption for construction activities would be conditioned to require compliance with existing fuel standards, machinery efficiency standards, and California Air Resources Board (CARB) requirements that limit idling of construction trucks and equipment. There are no unusual Project characteristics that would cause the use of construction equipment that would be less energy efficient compared with other similar construction sites in other parts of the state. Additionally, through compliance with existing standards, the operation of the Project would not result in an energy demand on a per-development basis that is greater than other development projects in Southern California. Furthermore, the proposed Project would be required to meet the California Code of Regulations (CCR) Title 24 energy efficiency standards and comply with all applicable City energy codes. The Project would comply with applicable Title 24 Part 6 energy code requirements for healthcare facilities. Therefore, the Project would not inhibit the use of renewable energy. Additionally, the Project would not result in inefficient, wasteful, or unnecessary consumption of energy. Thus, impacts related to energy would be less than significant. No mitigation would be required.

Greenhouse Gas Emissions

Regulatory Background and Thresholds

California State Executive Order S-3-05, issued by Governor Arnold Schwarzenegger in June 2005, established comprehensive GHG reduction targets for the state.[10] It mandated reducing GHG emissions to 2000 levels by 2010, to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. This Executive Order laid the foundation for subsequent climate change mitigation efforts in California, including the development of various policies and programs aimed at reducing emissions across sectors such as transportation, energy, and industry. The objective of the Executive Order is to contribute to capping worldwide CO_2 concentrations at 450 parts per million (ppm), stabilizing global climate change.

The SCAQMD convened a GHG Emissions CEQA Significance Threshold Working Group to help lead agencies determine significance thresholds for GHG emissions where the SCAQMD is not the lead agency. The last working group was held in September 2010 (Meeting No. 15) and proposed a tiered approach (Tier I to Tier V), equivalent to the existing consistency determination requirements in CEQA Guidelines Sections 15064(h)(3) or 15125(d).[11] The applicable screening threshold tier for the City of San Jacinto is described in further detail below.

Tier III – Numerical Screening Thresholds

The SCAQMD's draft threshold uses the Executive Order S-3-05 goal as the basis for the Tier III screening level. Tier III consists of screening values which the lead agency can choose from, but it must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project impact would be less than significant:

- Option 1, all land use types: 3,000 $MTCO_2e$ per year
- Option 2, based on land use type:
    - Residential: 3,500 $MTCO_2e$ per year
    - Commercial: 1,400 $MTCO_2e$ per year
    - Mixed-use: 3,000 $MTCO_2e$ per year

Based on the foregoing guidance, the City has elected to rely on compliance with the SCAQMD threshold in the determination of significance of project-related GHG emissions. Specifically, the City has selected the 3,000 $MTCO_2e$ per year threshold recommended by SCAQMD staff against which to compare Project-related GHG emissions.

The City understands that the 3,000 $MTCO_2e$ per year threshold was proposed by the SCAQMD a decade ago and was adopted as an interim policy; however, no permanent, superseding policy or threshold has since been adopted. The 3,000 $MTCO_2e$ per year threshold was developed and recommended by the

[10] Executive Department State of California. Executive Order S-3-05. Referenced at: https://www.library.ca.gov/wp-content/uploads/GovernmentPublications/executive-order-proclamation/5129-5130.pdf

[11] SCAQMD. (2010). *Minutes of the GHG CEQA Significance Threshold Stakeholder Working Group #15*. Referenced at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf.

SCAQMD, an expert agency, based on substantial evidence as provided in the *Draft Guidance Document – Interim CEQA Greenhouse Gas Significance Threshold* document and subsequent Working Group meetings (latest of which occurred in 2010).[12] The SCAQMD has not withdrawn its support of the interim threshold and all documentation supporting the interim threshold remains on the SCAQMD website on a page that provides guidance to CEQA practitioners for air quality analysis (and where all SCAQMD significance thresholds for regional and local criteria pollutants and toxic air contaminants also are listed). Further, as stated by SCAQMD, this threshold "uses the Executive Order S-3-05 goal (80 percent below 1990 levels by 2050) as the basis for deriving the screening level," and thus remains valid for use in year 2026 and for purposes of this analysis. Lastly, this threshold has been used for hundreds of GHG analyses performed for projects located within the SCAQMD jurisdiction.

Project GHG Emissions

The Project's construction GHG emissions are shown in Table 8, *Project Construction GHG Emissions*, and the overall construction and operational emissions are shown in Table 9, *Total Project GHG Emissions*, below. Similar to the previous energy analysis, this GHG analysis likely overstates the Project's GHG emissions, since Title 24 measures have not been accounted for in the model. Therefore, this report provides a conservative analysis of potential GHG impacts.

These emissions were estimated using CalEEMod. Construction emissions were amortized over 30 years and combined with operational greenhouse gas (GHG) emissions for evaluation. As shown in Table 9, the proposed Project's total construction and operational GHG emissions would be 810 metric tons of carbon dioxide equivalent ($MTCO_2e$). When compared to emissions from the existing buildings, the Project would result in a net increase of approximately 478 $MTCO_2e$ per year, which is below the SCAQMD Tier III significance threshold of 3,000 $MTCO_2e$ per year. Therefore, the Project would result in a less-than-significant GHG impact.

Table 8: Project Construction GHG Emissions*

Construction Year	Annual GHG Emissions ($MTCO_2e$)
2026	33
2027	386
Total Emissions	**419**
Total Emissions Amortized Over 30 Years	14

Source: CalEEMod Output Sheets (see Attachment A) and Detailed Calculation Sheets (see Attachment B).
* Construction GHG emissions presented in this table are analyzed based on full buildout of the expanded facility, including a total of 103 beds. Because the analysis assumes construction emissions associated with the entire expanded facility rather than only the proposed expansion, the results represent a conservative estimate. Actual construction emissions associated with the new building, which would accommodate 43 additional SNF-STP beds, are anticipated to be much lesser than the emissions presented in this table.

[12] SCAQMD. (2008). *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans*. Referenced at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf.

Table 9: Total Project GHG Emissions

Activity	Annual GHG Emissions ($MTCO_2e$)
Mobile	509
Area	2
Energy	177
Water	12
Waste	96
Refrigeration	0.1
Stationary	18
Total Project Operation Emissions	**814**
Amortized Project Construction Emissions	14
Total Project Emissions	**828**
Existing Emissions	349
Net New Emissions	**478**
Tier III Significance Threshold	3,000
Threshold Exceeded?	**No**

Source: CalEEMod Output Sheets (see Attachment A) and Detailed Calculation Sheets (see Attachment B).
* Total Project GHG emissions presented in this table are analyzed based on full buildout of the expanded facility, including a total of 103 beds. Because the analysis assumes construction emissions associated with the entire expanded facility rather than only the proposed expansion, the results represent a conservative estimate. Actual construction emissions associated with the new building, which would accommodate 43 additional SNF-STP beds, are anticipated to be much lesser than the emissions presented in this table.

Project Consistency with Plans, Policies, and Regulations

CARB's 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) sets California's GHG emission reduction target for 2045 at 85 percent below 1990 levels, which was codified by Senate Bill (SB) 32.[13] In addition to the CARB 2022 Scoping Plan, the City of San Jacinto is one of 12 Western Riverside Council of Governments (WRCOG) jurisdictions that participated in preparing the 2021 Subregional Climate Action Plan (WRCOG Subregional CAP).[14] The WRCOG Subregional CAP establishes a community-wide emissions reduction target of 15 percent below 2010 levels by 2020 and 49 percent below 2010 levels by 2035, consistent with guidance from CARB and the Governor's Office of Planning and Research. CARB and the California Attorney General have determined that this approach is consistent with the statewide AB 32 goal of reducing emissions to 1990 levels.

[13] California Air Resources Board. (2022). *California's 2022 Climate Change Scoping Plan Table 2-1: Actions for the Scoping Plan Scenario: AB 32 GHG Inventory Sectors.* Referenced at: https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf

[14] Western Riverside Council of Governments. (2022). *Subregional Climate Action Plan.* Referenced at: https://wrcog.us/DocumentCenter/View/9987/Climate-Action-Plan-Toolkit

As shown below in Table 10, *2022 Scoping Plan Consistency Summary,* and Table 11, *WRCOG Subregional CAP Consistency Summary,* the Project would be consistent with applicable policies and measures in the 2022 Scoping Plan and the WRCOG Subregional CAP.

Table 10: 2022 Scoping Plan Consistency Summary

Action	Consistency
GHG Emissions Reductions Relative to the SB 32 Target	
40 percent Below 1990 levels by 2030.	**Consistent.** The proposed Project would comply with applicable Title 24, Part 6 building energy efficiency standards and other State and local requirements supporting statewide greenhouse gas reduction targets consistent with SB 32.
Smart Growth/Vehicle Miles Traveled VMT	
VMT per capita reduced 25 percent below 2019 levels by 2030, and 30 percent below 2019 levels by 2045.	**Consistent.** The Project site has an existing General Plan land use designation of Industrial (I) and is zoned Industrial Light (IL). The Industrial (I) designation supports industrial and employment-generating uses, including light industrial, manufacturing, warehouse, service commercial, and related support uses. The IL zoning district allows for general manufacturing and light industrial activities, including auto repair services, pest control services, pool maintenance services, and woodworking shops, as well as other compatible uses. The proposed Project includes demolition of an existing 1,074-square-foot storage building and construction of a new 18,000-square-foot building addition to the existing SNF, resulting in a total of 87 SNF beds. The Project also includes the conversion of an existing 2,596-square-foot vacant office building into a 16-bed PHF, resulting in a total campus capacity of 103 beds. The Project would have a floor area ratio (FAR) of approximately 0.27, which is consistent with the development intensity permitted by the existing General Plan land use designation. The Project represents the expansion of an existing institutional healthcare facility and does not introduce residential uses. It would not generate substantial population or employment growth beyond that anticipated under the General Plan or regional growth forecasts. As previously evaluated in the air quality analysis, the Project is consistent with the SCAG's 2020–2045RTP/SCS and would not conflict with regional VMT reduction strategies or statewide greenhouse gas reduction targets.
Light-Duty Vehicle (LDV) Zero-Emission Vehicles (ZEVs)	
100 percent of LDV sales are ZEV by 2035.	**Consistent.** The proposed Project would be designed and constructed in accordance with Title 24, Parts 6 and 11 requirements applicable to healthcare facilities,

Action	Consistency
	including provisions for electrical infrastructure to support future electric vehicle charging where required by code.
New Residential and Commercial Buildings	
All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed statewide by 2030.	**Consistent.** The proposed Project would comply with Title 24, Part 6 energy efficiency requirements, including the installation of electrical wiring for built-in appliances. Although the Project would include natural gas use on-site, the Project would incorporate energy-efficient building design features and would not result in inefficient energy consumption.
Construction Equipment	
25 percent of energy demand electrified by 2030 and 75 percent electrified by 2045.	**Consistent.** The proposed Project would be required to use construction equipment that is registered by CARB and meet CARB's standards. CARB sets its standards to be in line to reduce energy demand by 25 percent in 2030 and 75 percent in 2045.
Transportation Electrification	
Create a jurisdiction-specific ZEV ecosystem to support deployment of ZEVs statewide (such as permit streamlining, infrastructure siting, consumer education, or preferential parking policies).	**Consistent.** The proposed Project would be designed and constructed in accordance with the Title 24 Part 6 and Part 11 requirements, which include constructing homes to allow for electric vehicle charging. Therefore, the proposed Project would not interfere with the implementation of a ZEV ecosystem within the City.
VMT Reduction	
Adopt and implement Complete Streets policies and investments, consistent with general plan circulation element requirements.	**Consistent.** The Project includes redevelopment of an existing SNF campus and consists of building expansion, conversion of an existing vacant office building into a PHF, and associated site improvements, including drive aisles, driveways, landscaping, and pedestrian pathways. The Project would provide internal pedestrian circulation improvements through on-site pathways connecting building areas and access points. The Project would also include widening improvements along W. 7th Street and S. Grand Avenue. These improvements are limited to the Project site and do not include modifications to the surrounding public roadway network. The Project would not conflict with the implementation of Complete Streets policies or planned circulation improvements.
Increase public access to shared clean mobility options (such as planning for and investing in electric shuttles, bike share, car share, transit).	**Consistent.** The Project includes redevelopment of an existing SNF campus and consists of building expansion, conversion of an existing vacant office building into a PHF, and associated site improvements, including drive aisles, driveways, landscaping, and pedestrian pathways. The Project would not include shared mobility services such as shuttle programs, bike share, or car share systems. However, it would maintain internal pedestrian

Action	Consistency
	circulation through on-site pathways connecting building areas and access points. The nearest public transit stop is the S. State Street and W. 7th Street bus stop (Stop ID: 3214), located approximately 0.28 miles (approximately 1,500 feet) from the Project site. This stop provides access to regional bus transit services. Given the Project's infill location within an existing developed area, it would not conflict with implementation of transit services or regional shared mobility programs and would remain accessible to existing multimodal transportation options in the vicinity.
Amend zoning or development codes to enable mixed-use, walkable, and compact infill development (such as increasing allowable density of the neighborhood).	**Consistent.** The General Plan includes policies that encourage amendments to zoning and development codes to support mixed-use, walkable, and compact infill development. While the Project does not propose zoning amendments or mixed-use development, it represents infill redevelopment of an existing developed healthcare campus through the expansion of a SNF and conversion of an existing vacant office building to a PHF. The Project site has a zoning designation of Industrial Light (IL). The IL zoning designation allows for general manufacturing uses, auto repair services, pest control services, pool maintenance services, and woodworking shops. The Project does not include a change in land use designation or zoning. The proposed redevelopment would occur within an existing developed urbanized site and reflects efficient use of previously developed land consistent with infill development objectives and compact growth patterns. Therefore, the Project is consistent with the intent of this policy and does not conflict with the General Plan's objectives for compact and efficient land use patterns
Building Decarbonization	
Adopt all-electric new construction reach codes.	**Consistent.** The proposed Project would comply with Title 24 Parts 6 and 11, which include electric heat pumps installed during construction and electric hookups for all appliances.
Adopt policies and incentive programs to reduce electrical loads from equipment plugged into outlets (such as purchasing Energy Star equipment for municipal buildings, occupancy sensors, smart power strips, equipment controllers, etc.).	**Consistent.** The proposed Project would be constructed in accordance with Title 24 CALGreen requirements, which include the installation of Energy Star equipment and appliances in new buildings.
Facilitate deployment of renewable energy production and distribution and energy storage.	**Consistent.** The proposed Project would be constructed in accordance with the CALGreen Building Energy Efficiency Standards (Title 24 Part 6) and meet all other requirements related to energy efficiency standards.

Source: California Air Resources Board. (2022). *California's 2022 Climate Change Scoping Plan Table 2-1: Actions for the Scoping Plan Scenario: AB 32 GHG Inventory Sectors.* Referenced at: https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf

Table 11: WRCOG Subregional CAP Consistency Summary

Measure	Consistency
Energy	
LE-1: Expand Local Renewable Energy Production. Increase solar PV installations on new and existing buildings.	**Consistent.** The Project would comply with Title 24 Part 6 building energy requirements and applicable California Energy Code provisions for healthcare facilities.
LE-4: Building & Appliance Electrification. Transition energy use away from fossil natural gas to clean electricity and renewable natural gas.	**Consistent.** The Project would comply with Title 24 Part 6 energy efficiency and electrification requirements for nonresidential healthcare facilities, including building systems and equipment electrification to the extent required by code.
LE-6: Shade Trees. Strategically plant trees to reduce the urban heat island effect.	**Consistent.** The Project would provide private open space for each proposed residence, as well as common open space and landscaped areas totaling approximately 4,015 square feet. These landscaped areas would allow for the incorporation of shade trees and vegetation throughout the Project site, including within open space areas and along pedestrian circulation routes, which supports reduction of localized heat island effects consistent with the intent of this policy.
LT-2: Pedestrian Infrastructure Improvements. Expand and improve pedestrian infrastructure, including sidewalks, crosswalks, and pedestrian signals.	**Consistent.** The Project includes internal site improvements consisting of pedestrian pathways, drive aisles, and driveways that provide circulation within the existing campus and connect building areas and site access points. These on-site pedestrian improvements would enhance internal pedestrian connectivity and access to existing public sidewalks in the surrounding area. The Project would also include widening and frontage improvements along W. 7th Street and S. Grand Avenue that would enhance pedestrian access adjacent to the site. The Project would not modify the public roadway network but would support improved pedestrian access consistent with LT-2.
LT-7: Increase Housing Density. Increase the density of planned housing units within the city.	**Consistent.** The Project does not propose residential development or any increase in housing density. It involves the expansion of an existing healthcare facility on a site designated Industrial (I) and zoned Industrial Light (IL). The Project does not affect housing capacity assumptions under the General Plan or regional growth forecasts.
LT-8: Increase Land Use Diversity. Provide for a variety of development types and uses.	**Consistent.** The Project site is designated Industrial (I) and zoned Industrial Light (IL), which allows for a range of industrial, service commercial, and compatible uses. The Project involves the expansion of an existing SNF and conversion of a vacant office building to a PHF within an existing developed campus. The Project does not introduce new land use categories or require a change in land use designation or zoning. It represents continued use and expansion of institutional healthcare services within an existing developed industrial setting.

LT-9: Transit-Oriented Development. Place new developments in close proximity to transit services.	**Consistent.** The Project is located approximately 0.28 miles (approximately 1,500 feet) from the nearest transit stop (S. State Street and W. 7th Street, Stop ID: 3214), providing access to regional transit services. The Project supports transit accessibility by locating redevelopment within an existing developed area near transit service.
LT-10: Local ZEV Programs. Provide charging stations and other support for zero emission vehicles (ZEVs).	**Consistent.** The proposed Project would be designed and constructed in accordance with Title 24, Part 6 and Part 11 requirements, which include EV-ready infrastructure to support electric vehicle charging on-site. Electric vehicle charging stations would be provided in surface parking areas and/or designated parking locations associated with the medical facility.
Solid Waste	
LS-1: Zero Waste Initiatives. Support the State's mandates and strive for zero waste.	**Consistent.** The proposed Project would be required to comply with applicable City of San Jacinto solid waste and recycling requirements implemented in accordance with statewide regulations, including AB 341 and SB 1383. These regulations require recycling of commercial solid waste and diversion of organic waste from landfills through recycling and organics collection programs, supporting statewide waste reduction and landfill methane reduction goals.

Source: Western Riverside Council of Governments. (2022). *Subregional Climate Action Plan.* Referenced at: https://www.wrcog.us/wp-content/uploads/2025/08/Climate-Action-Plan-Toolkit-1.pdf

In addition to the CARB 2022 Scoping Plan and the WRCOG Subregional CAP, the Project would comply with all applicable State and local regulatory requirements in effect at the time of construction and operation, including the California Building Standards Code (Title 24), which incorporates the California Energy Code and CALGreen requirements. The Project is also consistent with Connect SoCal 2024 (2024–2050 RTP/SCS), which establishes long-range regional transportation, land use, and emissions reduction strategies for the SCAG region, including transportation investments, programming, and regional growth considerations. These policies are implemented at the regional and local level through agency coordination and planning processes. The Project would not conflict with Connect SoCal 2024 and would remain consistent with regional growth assumptions, as it involves the expansion and conversion of an existing institutional healthcare facility, does not include residential development, and would not alter regional population or housing growth patterns.

Overall, the Project would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions.

Conclusion

As described above, the proposed Project's total construction and operational GHG emissions would be 810 $MTCO_2e$. When compared to emissions from the existing buildings, the Project would result in a net increase of approximately 478 $MTCO_2e$ per year, which is below the SCAQMD significance threshold of 3,000 $MTCO_2e$ per year. Furthermore, as shown in Tables 10 and 11, the Project is consistent with applicable measures of the WRCOG Subregional CAP and 2022 Scoping Plan. The Project would also comply with applicable regulatory requirements, including Title 24 energy efficiency and CALGreen Code standards, and would not conflict with applicable plans, policies, or regulations adopted for the purpose

of reducing greenhouse gas emissions. Therefore, the Project's GHG emissions impacts would be less than significant, and no mitigation would be required.

ATTACHMENT A: CALEEMOD OUTPUT SHEETS

26-017 Bradley Gardens San Jacinto-Proposed Project -10-19 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	26-017 Bradley Gardens San Jacinto-Proposed Project -10-19
Construction Start Date	12/1/2026
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50000
Precipitation (days)	22.4000
Location	980 W 7th St, San Jacinto, CA 92582, USA
County	Riverside-South Coast
City	San Jacinto
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5571
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

Data Field	Value
App Version	2022.1.1.46

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Congregate Care (Assisted Living)	103.000	Dwelling Unit	0.75000	32,741.0	40,362.0	—	333.000	Congregate Facility Units
Other Non-Asphalt Surfaces	1.70000	Acre	1.70000	0.02000	0.00000	—	1,040.00	—
Parking Lot	52.0000	Space	0.47000	0.00000	0.00000	—	—	Parking Space
General Office Building	2.60900	1000sqft	0.06000	2,609.00	0.00000	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Unmit.	1.41121	10.0908	16.4997	0.02530	0.31429	1.39241	0.54637	3,549.85

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Unmit.	52.6852	15.6315	23.5403	0.03580	0.71654	4.07632	1.80679	4,756.01
Average Daily (Max)	—	—	—	—	—	—	—	—
Unmit.	1.63587	6.82289	10.3866	0.01697	0.21069	0.92467	0.36405	2,332.83
Annual (Max)	—	—	—	—	—	—	—	—
Unmit.	0.29855	1.24518	1.89556	0.00310	0.03845	0.16875	0.06644	386.226
Exceeds (Daily Max)	—	—	—	—	—	—	—	—
Threshold	75.0000	100.0000	550.000	150.000	150.000	150.000	55.0000	—
Unmit.	No	No	No	No	No	No	No	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—
Threshold	75.0000	100.0000	550.000	150.000	150.000	150.000	55.0000	—
Unmit.	No	No	No	No	No	No	No	—

2.2. Construction Emissions by Year

2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—

Year	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
2027	1.41121	10.0908	16.4997	0.02530	0.31429	1.39241	0.54637	3,549.85
Daily - Winter (Max)	—	—	—	—	—	—	—	—
2026	2.28866	15.6315	23.5403	0.03580	0.71654	4.07632	1.80679	4,756.01
2027	52.6852	11.3076	17.5406	0.02760	0.33969	1.61386	0.61569	3,832.27
Average Daily	—	—	—	—	—	—	—	—
2026	0.10043	0.84111	0.95022	0.00164	0.03597	0.13699	0.06709	201.424
2027	1.63587	6.82289	10.3866	0.01697	0.21069	0.92467	0.36405	2,332.83
Annual	—	—	—	—	—	—	—	—
2026	0.01833	0.15350	0.17342	0.00030	0.00656	0.02500	0.01224	33.3480
2027	0.29855	1.24518	1.89556	0.00310	0.03845	0.16875	0.06644	386.226

2.2.2. Onsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—
2027	1.10319	9.47687	11.4072	0.02273	0.30915	0.30915	0.28441	2,166.54
Daily - Winter (Max)	—	—	—	—	—	—	—	—
2026	1.93267	14.8651	18.6587	0.03323	0.68347	3.49274	1.62384	3,272.35
2027	52.3373	10.5851	12.9077	0.02503	0.33454	0.33454	0.30778	2,345.16
Average Daily	—	—	—	—	—	—	—	—
2026	0.09322	0.79983	0.84548	0.00144	0.03543	0.10688	0.05926	148.996

Year	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
2027	1.44017	6.35782	7.65514	0.01524	0.20725	0.20725	0.19067	1,452.46
Annual	—	—	—	—	—	—	—	—
2026	0.01701	0.14597	0.15430	0.00026	0.00647	0.01951	0.01082	24.6680
2027	0.26283	1.16030	1.39706	0.00278	0.03782	0.03782	0.03480	240.471

2.2.3. Offsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—
2027	0.30802	0.61395	5.09251	0.00257	0.00514	1.08326	0.26195	1,383.32
Daily - Winter (Max)	—	—	—	—	—	—	—	—
2026	0.35600	1.97289	4.88152	0.01157	0.03307	1.24665	0.30025	1,871.69
2027	0.34786	0.72254	4.63285	0.00257	0.00514	1.27931	0.30791	1,487.11
Average Daily	—	—	—	—	—	—	—	—
2026	0.00721	0.04129	0.10475	0.00020	0.00054	0.03011	0.00782	52.4276
2027	0.19570	0.46507	2.73148	0.00172	0.00344	0.71742	0.17338	880.370
Annual	—	—	—	—	—	—	—	—
2026	0.00132	0.00753	0.01912	0.00004	0.00010	0.00550	0.00143	8.67999
2027	0.03571	0.08488	0.49849	0.00031	0.00063	0.13093	0.03164	145.755

2.3. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Unmit.	3.00253	2.74958	19.3798	0.03779	0.11135	3.15062	0.88055	5,404.24
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Unmit.	2.40298	2.78383	11.3285	0.03547	0.10842	3.14770	0.87834	5,171.97
Average Daily (Max)	—	—	—	—	—	—	—	—
Unmit.	2.50531	2.26949	14.6624	0.03305	0.08319	2.88444	0.79245	4,914.12
Annual (Max)	—	—	—	—	—	—	—	—
Unmit.	0.45722	0.41418	2.67589	0.00603	0.01518	0.52641	0.14462	813.588
Exceeds (Daily Max)	—	—	—	—	—	—	—	—
Threshold	55.0000	55.0000	550.000	150.000	150.000	150.000	55.0000	—
Unmit.	No	No	No	No	No	No	No	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—
Threshold	55.0000	55.0000	550.000	150.000	150.000	150.000	55.0000	—
Unmit.	No	No	No	No	No	No	No	—
Exceeds (Annual)	—	—	—	—	—	—	—	—
Threshold	—	—	—	—	—	—	—	3,000.00
Unmit.	—	—	—	—	—	—	—	No

2.4. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Mobile	1.23277	1.25620	12.2661	0.03341	0.02286	3.06214	0.79278	3,472.03
Area	1.36184	0.05629	5.96728	0.00026	0.00294	0.00294	0.00221	16.1470
Energy	0.02068	0.35462	0.15892	0.00226	0.02858	0.02858	0.02858	1,066.51
Water	—	—	—	—	—	—	—	72.4253
Waste	—	—	—	—	—	—	—	577.920
Refrig.	—	—	—	—	—	—	—	0.42211
Stationary	0.38724	1.08247	0.98751	0.00186	0.05697	0.05697	0.05697	198.787
Total	3.00253	2.74958	19.3798	0.03779	0.11135	3.15062	0.88055	5,404.24
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Mobile	1.16116	1.34674	10.1821	0.03135	0.02287	3.06215	0.79279	3,255.90
Area	0.83390	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Energy	0.02068	0.35462	0.15892	0.00226	0.02858	0.02858	0.02858	1,066.51
Water	—	—	—	—	—	—	—	72.4253
Waste	—	—	—	—	—	—	—	577.920
Refrig.	—	—	—	—	—	—	—	0.42211
Stationary	0.38724	1.08247	0.98751	0.00186	0.05697	0.05697	0.05697	198.787
Total	2.40298	2.78383	11.3285	0.03547	0.10842	3.14770	0.87834	5,171.97
Average Daily	—	—	—	—	—	—	—	—
Mobile	1.07694	1.28318	9.87520	0.02960	0.02138	2.82263	0.73114	3,076.85

Sector	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Area	1.19550	0.03856	4.08718	0.00018	0.00201	0.00201	0.00152	11.0596
Energy	0.02068	0.35462	0.15892	0.00226	0.02858	0.02858	0.02858	1,066.51
Water	—	—	—	—	—	—	—	72.4253
Waste	—	—	—	—	—	—	—	577.920
Refrig.	—	—	—	—	—	—	—	0.42211
Stationary	0.21219	0.59313	0.54110	0.00102	0.03122	0.03122	0.03122	108.924
Total	2.50531	2.26949	14.6624	0.03305	0.08319	2.88444	0.79245	4,914.12
Annual	—	—	—	—	—	—	—	—
Mobile	0.19654	0.23418	1.80222	0.00540	0.00390	0.51513	0.13343	509.408
Area	0.21818	0.00704	0.74591	0.00003	0.00037	0.00037	0.00028	1.83105
Energy	0.00377	0.06472	0.02900	0.00041	0.00522	0.00522	0.00522	176.573
Water	—	—	—	—	—	—	—	11.9908
Waste	—	—	—	—	—	—	—	95.6812
Refrig.	—	—	—	—	—	—	—	0.06989
Stationary	0.03872	0.10825	0.09875	0.00019	0.00570	0.00570	0.00570	18.0337
Total	0.45722	0.41418	2.67589	0.00603	0.01518	0.52641	0.14462	813.588

3. Construction Emissions Details

3.1. Demolition (2026)

3.1.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18962	10.8750	10.8001	0.01856	0.43873	0.43873	0.40363	1,919.79
Demolition	—	—	—	—	—	0.00987	0.00149	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02281	0.20856	0.20712	0.00036	0.00841	0.00841	0.00774	36.8179
Demolition	—	—	—	—	—	0.00019	0.00003	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00416	0.03806	0.03780	0.00006	0.00154	0.00154	0.00141	6.09562
Demolition	—	—	—	—	—	0.00003	0.00001	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	0.02993	0.03282	0.40841	0.00000	0.00000	0.09803	0.02298	96.2644
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00029	0.02217	0.00531	0.00013	0.00038	0.00555	0.00183	20.2906
Average Daily	—	—	—	—	—	—	—	—
Worker	0.00057	0.00069	0.00819	0.00000	0.00000	0.00185	0.00043	1.87202
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00001	0.00043	0.00010	< 0.000005	0.00001	0.00011	0.00003	0.38933
Annual	—	—	—	—	—	—	—	—
Worker	0.00010	0.00013	0.00150	0.00000	0.00000	0.00034	0.00008	0.30994
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	< 0.000005	0.00008	0.00002	< 0.000005	< 0.000005	0.00002	0.00001	0.06446

3.2. Site Preparation (2026)

3.2.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Off-Road Equipment	1.52120	13.4444	13.1519	0.02119	0.68347	0.68347	0.62879	2,303.58
Dust From Material Movement	—	—	—	—	—	2.39293	0.94998	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02084	0.18417	0.18016	0.00029	0.00936	0.00936	0.00861	31.5559
Dust From Material Movement	—	—	—	—	—	0.03278	0.01301	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00380	0.03361	0.03288	0.00005	0.00171	0.00171	0.00157	5.22444
Dust From Material Movement	—	—	—	—	—	0.00598	0.00237	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	0.02993	0.03282	0.40841	0.00000	0.00000	0.09803	0.02298	96.2644

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—
Worker	0.00041	0.00049	0.00585	0.00000	0.00000	0.00132	0.00031	1.33716
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Worker	0.00007	0.00009	0.00107	0.00000	0.00000	0.00024	0.00006	0.22138
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3. Grading (2026)

3.3.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	1.52120	13.4444	13.1519	0.02119	0.68347	0.68347	0.62879	2,303.58
Dust From Material Movement	—	—	—	—	—	2.80927	0.99505	—

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02084	0.18417	0.18016	0.00029	0.00936	0.00936	0.00861	31.5559
Dust From Material Movement	—	—	—	—	—	0.03848	0.01363	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00380	0.03361	0.03288	0.00005	0.00171	0.00171	0.00157	5.22444
Dust From Material Movement	—	—	—	—	—	0.00702	0.00249	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	0.02993	0.03282	0.40841	0.00000	0.00000	0.09803	0.02298	96.2644
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.02535	1.94007	0.46462	0.01157	0.03307	0.48555	0.15997	1,775.43
Average Daily	—	—	—	—	—	—	—	—

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Worker	0.00041	0.00049	0.00585	0.00000	0.00000	0.00132	0.00031	1.33716
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00037	0.02672	0.00630	0.00016	0.00045	0.00658	0.00217	24.3329
Annual	—	—	—	—	—	—	—	—
Worker	0.00007	0.00009	0.00107	0.00000	0.00000	0.00024	0.00006	0.22138
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00007	0.00488	0.00115	0.00003	0.00008	0.00120	0.00040	4.02859

3.4. Building Construction (2026)

3.4.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15048	9.85821	11.4601	0.02273	0.34482	0.34482	0.31724	2,166.60
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01801	0.15434	0.17941	0.00036	0.00540	0.00540	0.00497	33.9194
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00329	0.02817	0.03274	0.00006	0.00099	0.00099	0.00091	5.61574
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	0.29926	0.32819	4.08379	0.00000	0.00000	0.98025	0.22977	962.579
Vendor	0.00686	0.38350	0.11706	0.00257	0.00514	0.10301	0.03218	360.639
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—
Worker	0.00466	0.00562	0.06688	0.00000	0.00000	0.01513	0.00354	15.2808
Vendor	0.00011	0.00603	0.00181	0.00004	0.00008	0.00159	0.00050	5.64968
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Worker	0.00085	0.00103	0.01221	0.00000	0.00000	0.00276	0.00065	2.52991
Vendor	0.00002	0.00110	0.00033	0.00001	0.00001	0.00029	0.00009	0.93537
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5. Building Construction (2027)

3.5.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10319	9.47687	11.4072	0.02273	0.30915	0.30915	0.28441	2,166.54
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10319	9.47687	11.4072	0.02273	0.30915	0.30915	0.28441	2,166.54
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73834	6.34264	7.63458	0.01521	0.20690	0.20690	0.19035	1,450.01
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13475	1.15753	1.39331	0.00278	0.03776	0.03776	0.03474	240.066
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Worker	0.30091	0.26040	4.98156	0.00000	0.00000	0.98025	0.22977	1,029.15
Vendor	0.00711	0.35354	0.11096	0.00257	0.00514	0.10301	0.03218	354.166
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	0.28438	0.29430	3.76551	0.00000	0.00000	0.98025	0.22977	944.609
Vendor	0.00661	0.36938	0.11423	0.00257	0.00514	0.10301	0.03218	353.579
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—
Worker	0.19033	0.21744	2.64521	0.00000	0.00000	0.64662	0.15142	640.966
Vendor	0.00459	0.24675	0.07544	0.00172	0.00344	0.06815	0.02134	236.780
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Worker	0.03473	0.03968	0.48275	0.00000	0.00000	0.11801	0.02763	106.119
Vendor	0.00084	0.04503	0.01377	0.00031	0.00063	0.01244	0.00389	39.2017
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6. Paving (2026)

3.6.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53591	5.00686	7.19863	0.01050	0.21085	0.21085	0.19398	1,105.75
Paving	0.24628	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00734	0.06859	0.09861	0.00014	0.00289	0.00289	0.00266	15.1473
Paving	0.00337	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00134	0.01252	0.01800	0.00003	0.00053	0.00053	0.00048	2.50781
Paving	0.00062	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Worker	0.04988	0.05470	0.68068	0.00000	0.00000	0.16339	0.03830	160.441
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—
Worker	0.00068	0.00082	0.00975	0.00000	0.00000	0.00221	0.00052	2.22860
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Worker	0.00012	0.00015	0.00178	0.00000	0.00000	0.00040	0.00009	0.36897
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7. Architectural Coating (2027)

3.7.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15113	1.10822	1.50052	0.00230	0.02540	0.02540	0.02337	178.628

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Architectural Coatings	51.0830	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00207	0.01518	0.02056	0.00003	0.00035	0.00035	0.00032	2.44696
Architectural Coatings	0.69977	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00038	0.00277	0.00375	0.00001	0.00006	0.00006	0.00006	0.40512
Architectural Coatings	0.12771	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	0.05688	0.05886	0.75310	0.00000	0.00000	0.19605	0.04595	188.922
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Average Daily	—	—	—	—	—	—	—	—
Worker	0.00078	0.00089	0.01083	0.00000	0.00000	0.00265	0.00062	2.62384
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Worker	0.00014	0.00016	0.00198	0.00000	0.00000	0.00048	0.00011	0.43441
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	1.23277	1.25620	12.2661	0.03341	0.02286	3.06214	0.79278	3,472.03
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
General Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	1.23277	1.25620	12.2661	0.03341	0.02286	3.06214	0.79278	3,472.03
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	1.16116	1.34674	10.1821	0.03135	0.02287	3.06215	0.79279	3,255.90
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
General Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	1.16116	1.34674	10.1821	0.03135	0.02287	3.06215	0.79279	3,255.90
Annual	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	0.19654	0.23418	1.80222	0.00540	0.00390	0.51513	0.13343	509.408
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
General Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.19654	0.23418	1.80222	0.00540	0.00390	0.51513	0.13343	509.408

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	556.085
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	0.00000
Parking Lot	—	—	—	—	—	—	—	17.1097
General Office Building	—	—	—	—	—	—	—	43.4162
Total	—	—	—	—	—	—	—	616.611
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	556.085
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	0.00000
Parking Lot	—	—	—	—	—	—	—	17.1097
General Office Building	—	—	—	—	—	—	—	43.4162
Total	—	—	—	—	—	—	—	616.611
Annual	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	92.0662
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	0.00000
Parking Lot	—	—	—	—	—	—	—	2.83270

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
General Office Building	—	—	—	—	—	—	—	7.18805
Total	—	—	—	—	—	—	—	102.087

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	0.01962	0.33529	0.14268	0.00214	0.02711	0.02711	0.02711	426.772
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
General Office Building	0.00106	0.01933	0.01624	0.00012	0.00147	0.00147	0.00147	23.1305
Total	0.02068	0.35462	0.15892	0.00226	0.02858	0.02858	0.02858	449.902
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	0.01962	0.33529	0.14268	0.00214	0.02711	0.02711	0.02711	426.772
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
General Office Building	0.00106	0.01933	0.01624	0.00012	0.00147	0.00147	0.00147	23.1305
Total	0.02068	0.35462	0.15892	0.00226	0.02858	0.02858	0.02858	449.902

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Annual	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	0.00358	0.06119	0.02604	0.00039	0.00495	0.00495	0.00495	70.6570
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
General Office Building	0.00019	0.00353	0.00296	0.00002	0.00027	0.00027	0.00027	3.82951
Total	0.00377	0.06472	0.02900	0.00041	0.00522	0.00522	0.00522	74.4865

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Hearths	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Consumer Products	0.76392	—	—	—	—	—	—	—
Architectural Coatings	0.06998	—	—	—	—	—	—	—
Landscape Equipment	0.52794	0.05629	5.96728	0.00026	0.00294	0.00294	0.00221	16.1470
Total	1.36184	0.05629	5.96728	0.00026	0.00294	0.00294	0.00221	16.1470
Daily, Winter (Max)	—	—	—	—	—	—	—	—

Source	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Hearths	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Consumer Products	0.76392	—	—	—	—	—	—	—
Architectural Coatings	0.06998	—	—	—	—	—	—	—
Total	0.83390	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Hearths	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Consumer Products	0.13942	—	—	—	—	—	—	—
Architectural Coatings	0.01277	—	—	—	—	—	—	—
Landscape Equipment	0.06599	0.00704	0.74591	0.00003	0.00037	0.00037	0.00028	1.83105
Total	0.21818	0.00704	0.74591	0.00003	0.00037	0.00037	0.00028	1.83105

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	65.6023
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	0.00000

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Parking Lot	—	—	—	—	—	—	—	0.00000
General Office Building	—	—	—	—	—	—	—	6.82294
Total	—	—	—	—	—	—	—	72.4253
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	65.6023
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	0.00000
Parking Lot	—	—	—	—	—	—	—	0.00000
General Office Building	—	—	—	—	—	—	—	6.82294
Total	—	—	—	—	—	—	—	72.4253
Annual	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	10.8612
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	0.00000
Parking Lot	—	—	—	—	—	—	—	0.00000
General Office Building	—	—	—	—	—	—	—	1.12962
Total	—	—	—	—	—	—	—	11.9908

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	573.345
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	0.00000
Parking Lot	—	—	—	—	—	—	—	0.00000
General Office Building	—	—	—	—	—	—	—	4.57508
Total	—	—	—	—	—	—	—	577.920
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	573.345
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	0.00000
Parking Lot	—	—	—	—	—	—	—	0.00000
General Office Building	—	—	—	—	—	—	—	4.57508
Total	—	—	—	—	—	—	—	577.920
Annual	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	94.9237
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	0.00000

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Parking Lot	—	—	—	—	—	—	—	0.00000
General Office Building	—	—	—	—	—	—	—	0.75746
Total	—	—	—	—	—	—	—	95.6812

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	0.41577
General Office Building	—	—	—	—	—	—	—	0.00635
Total	—	—	—	—	—	—	—	0.42211
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	0.41577
General Office Building	—	—	—	—	—	—	—	0.00635
Total	—	—	—	—	—	—	—	0.42211
Annual	—	—	—	—	—	—	—	—

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	0.06884
General Office Building	—	—	—	—	—	—	—	0.00105
Total	—	—	—	—	—	—	—	0.06989

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Emergency Generator	0.38724	1.08247	0.98751	0.00186	0.05697	0.05697	0.05697	198.787
Total	0.38724	1.08247	0.98751	0.00186	0.05697	0.05697	0.05697	198.787
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Emergency Generator	0.38724	1.08247	0.98751	0.00186	0.05697	0.05697	0.05697	198.787
Total	0.38724	1.08247	0.98751	0.00186	0.05697	0.05697	0.05697	198.787
Annual	—	—	—	—	—	—	—	—
Emergency Generator	0.03872	0.10825	0.09875	0.00019	0.00570	0.00570	0.00570	18.0337
Total	0.03872	0.10825	0.09875	0.00019	0.00570	0.00570	0.00570	18.0337

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Annual	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Total	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—

Species	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Subtotal	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	12/1/2026	12/9/2026	5.00000	7.00000	—
Site Preparation	Site Preparation	12/10/2026	12/16/2026	5.00000	5.00000	—
Grading	Grading	12/17/2026	12/23/2026	5.00000	5.00000	—
Building Construction	Building Construction	12/24/2026	12/8/2027	5.00000	250.000	—
Paving	Paving	12/24/2026	12/30/2026	5.00000	5.00000	—
Architectural Coating	Architectural Coating	11/24/2027	11/30/2027	5.00000	5.00000	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.000000	8.00000	33.0000	0.73000
Demolition	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Demolition	Tractors/Loaders/ Backhoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000
Site Preparation	Tractors/Loaders/ Backhoes	Diesel	Average	0.00000	8.00000	84.0000	0.37000
Site Preparation	Crawler Tractors	Diesel	Average	1.000000	8.00000	87.0000	0.43000
Site Preparation	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Site Preparation	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Grading	Tractors/Loaders/ Backhoes	Diesel	Average	0.00000	8.00000	84.0000	0.37000
Grading	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Grading	Crawler Tractors	Diesel	Average	1.000000	8.00000	87.0000	0.43000
Building Construction	Forklifts	Diesel	Average	1.000000	8.00000	82.0000	0.20000
Building Construction	Cranes	Diesel	Average	1.000000	8.00000	367.000	0.29000
Building Construction	Tractors/Loaders/ Backhoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000
Building Construction	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Building Construction	Welders	Diesel	Average	3.00000	8.00000	46.0000	0.45000

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Paving	Pavers	Diesel	Average	1.000000	8.00000	81.0000	0.42000
Paving	Rollers	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Paving	Cement and Mortar Mixers	Diesel	Average	1.000000	8.00000	10.00000	0.56000
Paving	Tractors/Loaders/ Backhoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000
Paving	Paving Equipment	Diesel	Average	1.000000	8.00000	89.0000	0.36000
Architectural Coating	Air Compressors	Diesel	Average	1.000000	8.00000	37.0000	0.48000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	Worker	7.50000	18.5000	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2000	HHDT,MHDT
Demolition	Hauling	0.28571	20.0000	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	Worker	7.50000	18.5000	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2000	HHDT,MHDT
Site Preparation	Hauling	0.00000	20.0000	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	7.50000	18.5000	LDA,LDT1,LDT2

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	Vendor	—	10.2000	HHDT,MHDT
Grading	Hauling	25.0000	20.0000	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	74.9949	18.5000	LDA,LDT1,LDT2
Building Construction	Vendor	11.4383	10.2000	HHDT,MHDT
Building Construction	Hauling	0.00000	20.0000	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	12.5000	18.5000	LDA,LDT1,LDT2
Paving	Vendor	—	10.2000	HHDT,MHDT
Paving	Hauling	0.00000	20.0000	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	14.9990	18.5000	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2000	HHDT,MHDT
Architectural Coating	Hauling	0.00000	20.0000	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	66,300.5	22,100.2	3,913.50	1,304.50	5,671.51

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00000	0.00000	0.00000	5.00000	0.00000
Site Preparation	0.00000	0.00000	5.00000	0.00000	0.00000
Grading	0.00000	1,000.000	7.50000	0.00000	0.00000
Paving	0.00000	0.00000	0.00000	0.00000	2.17000

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Congregate Care (Assisted Living)	—	0%
Paving	Other Non-Asphalt Surfaces	1.70000	0%

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Parking Lot	0.47000	100%
Paving	General Office Building	0.00000	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00000	346.196	0.03300	0.00400
2026	0.00000	346.196	0.03300	0.00400

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Congregate Care (Assisted Living)	315.180	238.960	248.230	107,575	4,292.54	3,254.48	3,380.73	1,465,106
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
General Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Congregate Care (Assisted Living)	Wood Fireplaces	0	0
Congregate Care (Assisted Living)	Gas Fireplaces	0	0
Congregate Care (Assisted Living)	Propane Fireplaces	0	0
Congregate Care (Assisted Living)	Electric Fireplaces	0	0
Congregate Care (Assisted Living)	No Fireplaces	103	103
Congregate Care (Assisted Living)	Conventional Wood Stoves	0	0
Congregate Care (Assisted Living)	Catalytic Wood Stoves	0	0
Congregate Care (Assisted Living)	Non-Catalytic Wood Stoves	0	0
Congregate Care (Assisted Living)	Pellet Wood Stoves	0	0
Other Non-Asphalt Surfaces	Wood Fireplaces	0	0
Other Non-Asphalt Surfaces	Gas Fireplaces	0	0
Other Non-Asphalt Surfaces	Propane Fireplaces	0	0
Other Non-Asphalt Surfaces	Electric Fireplaces	0	0
Other Non-Asphalt Surfaces	No Fireplaces	0	0
Other Non-Asphalt Surfaces	Conventional Wood Stoves	0	0
Other Non-Asphalt Surfaces	Catalytic Wood Stoves	0	0
Other Non-Asphalt Surfaces	Non-Catalytic Wood Stoves	0	0
Other Non-Asphalt Surfaces	Pellet Wood Stoves	0	0
Parking Lot	Wood Fireplaces	0	0
Parking Lot	Gas Fireplaces	0	0

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Parking Lot	Propane Fireplaces	0	0
Parking Lot	Electric Fireplaces	0	0
Parking Lot	No Fireplaces	0	0
Parking Lot	Conventional Wood Stoves	0	0
Parking Lot	Catalytic Wood Stoves	0	0
Parking Lot	Non-Catalytic Wood Stoves	0	0
Parking Lot	Pellet Wood Stoves	0	0
General Office Building	Wood Fireplaces	0	0
General Office Building	Gas Fireplaces	0	0
General Office Building	Propane Fireplaces	0	0
General Office Building	Electric Fireplaces	0	0
General Office Building	No Fireplaces	0	0
General Office Building	Conventional Wood Stoves	0	0
General Office Building	Catalytic Wood Stoves	0	0
General Office Building	Non-Catalytic Wood Stoves	0	0
General Office Building	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
66,300.5	22,100.2	3,913.50	1,304.50	5,671.51

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	250.000

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Congregate Care (Assisted Living)	582,893	346.196	0.0330	0.0040	1,327,960
Other Non-Asphalt Surfaces	0.00000	346.196	0.0330	0.0040	0.00000
Parking Lot	17,934.5	346.196	0.0330	0.0040	0.00000
General Office Building	45,509.2	346.196	0.0330	0.0040	71,973.6

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Congregate Care (Assisted Living)	4,189,399	782,183
Other Non-Asphalt Surfaces	0.00000	0.00000
Parking Lot	0.00000	0.00000

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	463,707	0.00000

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Congregate Care (Assisted Living)	304.071	0.00000
Other Non-Asphalt Surfaces	0.00000	0.00000
Parking Lot	0.00000	0.00000
General Office Building	2.42637	0.00000

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Congregate Care (Assisted Living)	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088.00	0.00225	2.50000	2.50000	10.00000
Congregate Care (Assisted Living)	Household refrigerators and/or freezers	R-134a	1,430.00	0.22222	0.60000	0.00000	1.000000
General Office Building	Household refrigerators and/or freezers	R-134a	1,430.00	0.01679	0.60000	0.00000	1.000000

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.000000	1.000000	200.000	236.000	0.73000

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	23.2500	annual days of extreme heat
Extreme Precipitation	3.30000	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	8.49000	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—

Indicator	Result for Project Census Tract
AQ-Ozone	93.6279
AQ-PM	39.6017
AQ-DPM	17.7100
Drinking Water	10.7531
Lead Risk Housing	42.7599
Pesticides	39.2069
Toxic Releases	19.5299
Traffic	19.2750
Effect Indicators	—
CleanUp Sites	40.8361
Groundwater	2.72290
Haz Waste Facilities/Generators	83.8120
Impaired Water Bodies	0.00000
Solid Waste	70.4238
Sensitive Population	—
Asthma	49.1152
Cardio-vascular	47.7567
Low Birth Weights	62.1119
Socioeconomic Factor Indicators	—
Education	73.6269
Housing	79.5691

Indicator	Result for Project Census Tract
Linguistic	40.4385
Poverty	94.3342
Unemployment	95.7184

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	3.156679071
Employed	9.713845759
Median HI	7.108943924
Education	—
Bachelor's or higher	11.36917747
High school enrollment	100
Preschool enrollment	95.7141024
Transportation	—
Auto Access	7.878865649
Active commuting	49.74977544
Social	—
2-parent households	10.26562299
Voting	6.300526113

Indicator	Result for Project Census Tract
Neighborhood	—
Alcohol availability	82.20197613
Park access	32.13139997
Retail density	46.36211985
Supermarket access	31.09200565
Tree canopy	1.488515334
Housing	—
Homeownership	23.90606955
Housing habitability	15.01347363
Low-inc homeowner severe housing cost burden	17.3232388
Low-inc renter severe housing cost burden	9.611189529
Uncrowded housing	62.10701912
Health Outcomes	—
Insured adults	10.45810343
Arthritis	5.1
Asthma ER Admissions	39.8
High Blood Pressure	6.7
Cancer (excluding skin)	27.6
Asthma	7.7
Coronary Heart Disease	4.3
Chronic Obstructive Pulmonary Disease	2.1

Indicator	Result for Project Census Tract
Diagnosed Diabetes	16.2
Life Expectancy at Birth	2.3
Cognitively Disabled	1.7
Physically Disabled	2.2
Heart Attack ER Admissions	28.8
Mental Health Not Good	11.5
Chronic Kidney Disease	7.4
Obesity	8.3
Pedestrian Injuries	60.0
Physical Health Not Good	8.6
Stroke	5.6
Health Risk Behaviors	—
Binge Drinking	78.7
Current Smoker	7.4
No Leisure Time for Physical Activity	9.9
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	51.6
Elderly	34.9
English Speaking	65.2

Indicator	Result for Project Census Tract
Foreign-born	31.0
Outdoor Workers	17.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	79.2
Traffic Density	34.1
Traffic Access	23.0
Other Indices	—
Hardship	84.7
Other Decision Support	—
2016 Voting	12.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	59.0000
Healthy Places Index Score for Project Location (b)	7.00000
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	Adjusted based on information provided on the Site Plan.
Construction: Construction Phases	The construction start date and operational date were provided by the client, along with the number of days for each construction phase. The paving phase was set to begin concurrently with the building construction phase, and would be completed after the default amount of days. Architectural coating was set to begin approximately 2 weeks before building construction was completed, and would span the CalEEMod default amount of days.
Construction: Off-Road Equipment	Assumed all construction will be utilized 8 hours per work day. Replaced Tractors/Loaders/Backhoes with Crawler Tractors in the Site Preparation and Grading Phases.
Construction: Dust From Material Movement	Adjusted per the client's grading information to balance the site.
Operations: Vehicle Data	Adjusted rates for Weekday Trips (based on ITE 12th Edition), Saturday Trips, and Sunday Trips to match ITE trip rates for 620 – Nursing Home.
Operations: Hearths	Fireplaces and Wood Stoves are removed in accordance with SCAQMD Rule 445.

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	6.43750	0.75000
Building Area	sq. ft	109,180	32,741.0
Landscape Area	sq. ft	—	40,362.0
Building Area	sq. ft	0.00000	0.02000
Landscape Area	sq. ft	—	0.00000
Lot Area	acre	0.46800	0.47000
Landscape Area	sq. ft	—	0.00000
Lot Area	acre	0.05989	0.06000
Landscape Area	sq. ft	—	0.00000

8.4. Construction

8.4.1. Construction Phases

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Demolition	Demolition	End Date	12/29/2026	12/9/2026
Demolition	Demolition	Work Days per Phase	20.0000	7.00000
Site Preparation	Site Preparation	Start Date	12/30/2026	12/10/2026
Site Preparation	Site Preparation	End Date	1/3/2027	12/16/2026
Site Preparation	Site Preparation	Work Days per Phase	3.00000	5.00000
Grading	Grading	Start Date	1/4/2027	12/17/2026
Grading	Grading	End Date	1/12/2027	12/23/2026

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Grading	Grading	Work Days per Phase	6.00000	5.00000
Building Construction	Building Construction	Start Date	1/13/2027	12/24/2026
Building Construction	Building Construction	End Date	11/17/2027	12/8/2027
Building Construction	Building Construction	Work Days per Phase	220.000	250.000
Paving	Paving	Start Date	11/18/2027	12/24/2026
Paving	Paving	End Date	12/2/2027	12/30/2026
Paving	Paving	Work Days per Phase	10.00000	5.00000
Architectural Coating	Architectural Coating	Start Date	12/3/2027	11/24/2027
Architectural Coating	Architectural Coating	End Date	12/17/2027	11/30/2027
Architectural Coating	Architectural Coating	Work Days per Phase	10.00000	5.00000

8.4.2. Off-Road Equipment

Phase Name	Equipment Type	Model Parameter	Default Value	New Value
Demolition	Tractors/Loaders/Backhoes	Number per Day	3.00000	1.000000
Site Preparation	Tractors/Loaders/Backhoes	Number per Day	1.000000	0.00000
Site Preparation	Tractors/Loaders/Backhoes	Hours Per Day	7.00000	8.00000
Site Preparation	Rubber Tired Dozers	Number per Day	3.00000	1.000000
Grading	Tractors/Loaders/Backhoes	Number per Day	2.00000	0.00000
Grading	Tractors/Loaders/Backhoes	Hours Per Day	7.00000	8.00000
Building Construction	Forklifts	Number per Day	2.00000	1.000000
Building Construction	Forklifts	Hours Per Day	7.00000	8.00000

Phase Name	Equipment Type	Model Parameter	Default Value	New Value
Building Construction	Tractors/Loaders/Backhoes	Hours Per Day	6.00000	8.00000
Paving	Rollers	Number per Day	2.00000	1.000000
Architectural Coating	Air Compressors	Hours Per Day	6.00000	8.00000

8.4.4. Dust from Material Movement

Phase Name	Model Parameter	Units	Default Value	New Value
Site Preparation	Material Imported	Cubic Yards	—	0.00000
Site Preparation	Material Exported	Cubic Yards	—	0.00000
Site Preparation	Total Acres Graded	acres	7.50000	5.00000

8.5. Operations

8.5.1. Mobile Sources

8.5.1.1. Vehicle Data

Land Use	Model Parameter	Units	Default Value	New Value
Congregate Care (Assisted Living)	Weekday Trip Rate	size/day	2.60000	3.06000
Congregate Care (Assisted Living)	Saturday Trip Rate	size/day	2.93000	2.32000
Congregate Care (Assisted Living)	Sunday Trip Rate	size/day	3.15000	2.41000
Congregate Care (Assisted Living)	Res H-W Trip Length	miles	17.7130	17.4561
Congregate Care (Assisted Living)	Res H-S Trip Length	miles	8.99125	9.25967
Congregate Care (Assisted Living)	Res H-O Trip Length	miles	5.46927	9.27228

Land Use	Model Parameter	Units	Default Value	New Value
Congregate Care (Assisted Living)	Res H-W Trip	%	18.0154	53.1247
Congregate Care (Assisted Living)	Res H-S Trip	%	7.46354	4.44535
Congregate Care (Assisted Living)	Res H-O Trip	%	74.5210	42.4299
General Office Building	Weekday Trip Rate	size/day	9.74000	0.00000
General Office Building	Saturday Trip Rate	size/day	2.21000	0.00000
General Office Building	Sunday Trip Rate	size/day	0.70000	0.00000

8.5.2. Area Sources

8.5.2.1. Hearths

Land Use	Model Parameter	Units	Default Value	New Value
Congregate Care (Assisted Living)	Wood Fireplaces	—	5	0
Congregate Care (Assisted Living)	Gas Fireplaces	—	88	0
Congregate Care (Assisted Living)	No Fireplaces	—	10	103
Congregate Care (Assisted Living)	Hours/Day	—	3	0
Congregate Care (Assisted Living)	Days/Year	—	25	0
Congregate Care (Assisted Living)	Wood Mass	lb/year	1,019	0
Congregate Care (Assisted Living)	Catalytic Wood Stoves	—	5	0
Congregate Care (Assisted Living)	Non-Catalytic Wood Stoves	—	5	0
Congregate Care (Assisted Living)	Days/Year	—	25	0
Congregate Care (Assisted Living)	Wood Mass	lb/year	1,000	0

ATTACHMENT B: DETAILED CALCULATION SHEETS

Construction Emissions

Construction Activity	Maximum Daily Regional Emissions (pounds/day)					
	ROG	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
2026 (Year 1)						
Maximum Daily Emissions (2026)	2.3	15.6	23.5	0.0	4.1	1.8
2027 (Year 2)						
Maximum Daily Emissions (2027)	52.7	11.3	17.5	0.0	1.6	0.6
Maximum Daily Emissions	**52.7**	**15.6**	**23.5**	**0.0**	**4.1**	**1.8**
SCAQMD Thresholds	75	100	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: ROG = reactive organic gases, NOx = nitrogen oxides, CO = carbon monoxide, SOx = sulfur oxides, PM_{10} = particulate matter 10 microns in diameter, $PM_{2.5}$ = particulate matter 2.5 microns in diameter

Source: CalEEMod Output Sheets.

Construction Emissions

Construction Activity	Maximum Daily Regional Emissions (pounds/day)					
	ROG	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
2026 (Year 1)						
Demolition	**1.2**	**10.9**	**11.2**	**0.0**	**0.6**	**0.4**
Off-Road	1.2	10.9	10.8	0.0	0.4	0.4
Demolition					0.0	0.0
Off-Site (Worker Trip)	0.0	0.0	0.4	0.0	0.1	0.0
Off-Site (Hauling Trip)	0.0	0.0	0.0	0.0	0.0	0.0
Site Preparation	**1.6**	**13.5**	**13.6**	**0.0**	**3.2**	**1.6**
Off-Road	1.5	13.4	13.2	0.0	0.7	0.6
Dust From Material Movement					2.4	0.9
Off-Site (Worker Trip)	0.0	0.0	0.4	0.0	0.1	0.0
Grading	**1.6**	**15.5**	**14.0**	**0.0**	**4.1**	**1.8**
Off-Road	1.5	13.4	13.2	0.0	0.7	0.6
Dust From Material Movement					2.8	1.0
Off-Site (Worker Trip)	0.0	0.0	0.4	0.0	0.1	0.0
Off-Site (Hauling Trip)	0.0	2.0	0.5	0.0	0.5	0.2
Building Construction	**1.5**	**10.6**	**15.7**	**0.0**	**1.4**	**0.6**
Off-Road	1.2	9.9	11.5	0.0	0.3	0.3
Off-Site (Worker Trip)	0.3	0.3	4.1	0.0	1.0	0.2
Off-Site (Vendor Trip)	0.0	0.4	0.1	0.0	0.1	0.0
Building Construction and Paving	**2.3**	**15.6**	**23.5**	**0.0**	**1.8**	**0.8**
Off-Road	1.7	14.9	18.7	0.0	0.6	0.5
Paving	0.2	0.0	0.0	0.0	0.0	0.0
Off-Site (Worker Trip)	0.3	0.4	4.8	0.0	1.1	0.3
Off-Site (Vendor Trip)	0.0	0.4	0.1	0.0	0.1	0.0
Maximum Daily Emissions (2026)	***2.3***	***15.6***	***23.5***	***0.0***	***4.1***	***1.8***
2027 (Year 2)						
Building Construction	**1.4**	**10.1**	**16.5**	**0.0**	**1.4**	**0.5**
Off-Road	1.1	9.5	11.4	0.0	0.3	0.3
Off-Site (Worker Trip)	0.3	0.3	5.0	0.0	1.0	0.2
Off-Site (Vendor Trip)	0.0	0.4	0.1	0.0	0.1	0.0
Building Construction and Architectural Coating	**52.7**	**11.3**	**18.8**	**0.0**	**1.6**	**0.6**
Off-Road	1.3	10.6	12.9	0.0	0.3	0.3
Architectural Coating	51.1					
Off-Site (Worker Trip)	0.4	0.3	5.7	0.0	1.2	0.3
Off-Site (Vendor Trip)	0.0	0.4	0.1	0.0	0.1	0.0
Architectural Coating	**51.3**	**1.2**	**2.3**	**0.0**	**0.2**	**0.1**
Off-Road	0.2	1.1	1.5	0.0	0.0	0.0
Architectural Coating	51.1					
Off-Site (Worker Trip)	0.1	0.1	0.8	0.0	0.2	0.0
Maximum Daily Emissions (2027)	***52.7***	***11.3***	***18.8***	***0.0***	***1.6***	***0.6***
Maximum Daily Emissions	**52.7**	**15.6**	**23.5**	**0.0**	**4.1**	**1.8**
SCAQMD Thresholds	75	100	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: ROG = reactive organic gases, NOx = nitrogen oxides, CO = carbon monoxide, SOx = sulfur oxides, PM_{10} = particulate matter 10 microns in diameter, $PM_{2.5}$ = particulate matter 2.5 microns in diameter

Source: CalEEMod Output Sheets.

Calendar.Y	EMFAC2007	Weighted_	Weighted_ROG_VMT	Weighted_	Weighted_NOx_VMT	Weighted_	Weighted_PM10_VMT	Weighted_P	Weighted_PM2.5_VMT
2026	MHDT	1.005794	1.005891427	1.026844	1.026203899	1.014291	1.014000801	1.0121785	1.012039916
2026	HHDT	1.008937	1.007888341	1.026521	1.024192193	1.010868	1.00871352	1.0100997	1.008119405
2027	MHDT	1.010783	1.010876543	1.045633	1.044475736	1.024582	1.024048848	1.0213828	1.021061898
2027	HHDT	1.014271	1.012452886	1.041698	1.03765143	1.017657	1.014016617	1.0163976	1.013033151

	ROG	NOx	CO	SOx	PM10	PM2.5
	0.30	**0.05**	**0.68**	**0.00**	**0.16**	**0.04**
Off-Road Equipment	0.5	5.0	7.2	0.0	0.2	0.2
Paving	0.2					
Off-Site (Worker Trip)	0.0	0.1	0.7	0.0	0.2	0.0

Proposed Operational Emissions

Operational Activity	Maximum Daily Regional Emissions (pounds/day)					
	ROG	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
SUMMER						
Mobile	1.2	1.3	12.3	0.0	3.1	0.8
Area	1.4	0.1	6.0	0.0	0.0	0.0
Energy	0.0	0.4	0.2	0.0	0.0	0.0
Stationary	0.4	1.1	1.0	0.0	0.1	0.1
Total Summer Proposed Project Operational Emissions	***3.0***	***2.7***	***19.4***	***0.0***	***3.2***	***0.9***
Winter						
Mobile	1.2	1.3	10.2	0.0	3.1	0.8
Area	0.9	0.0	0.0	0.0	0.0	0.0
Energy	0.0	0.4	0.2	0.0	0.0	0.0
Stationary	0.4	1.1	1.0	0.0	0.1	0.1
Total Winter Proposed Project Operational	***2.4***	***2.8***	***11.3***	***0.0***	***3.1***	***0.9***
Maximum						
Mobile	1.2	1.3	12.3	0.0	3.1	0.8
Area	1.4	0.1	6.0	0.0	0.0	0.0
Energy	0.0	0.4	0.2	0.0	0.0	0.0
Stationary	0.4	1.1	1.0	0.0	0.1	0.1
Maximum Operational Emissions	**3.0**	**2.8**	**19.3**	**0.0**	**3.1**	**0.8**
SCAQMD Significance Thresholds	*55*	*55*	*550*	150	150	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Net Operational Emissions	**1.9**	**2.0**	**11.4**	**(0.0)**	**1.8**	**0.4**

Existing Project Operational Emissions

Operational Activity	Maximum Daily Regional Emissions (pounds/day)					
	ROG	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
Summer						
Mobile	0.5	0.5	5.2	0.0	1.3	0.3
Area	0.6	0.0	2.6	0.0	0.0	0.0
Energy	0.0	0.2	0.1	0.0	0.0	0.0
Total Summer Proposed Project Operational Emissions	***1.1***	***0.7***	***7.9***	***0.0***	***1.3***	***0.4***
Winter						
Mobile	0.5	0.6	4.3	0.0	1.3	0.3
Area	0.3	0.0	0.0	0.0	0.0	0.0
Energy	0.0	0.2	0.1	0.0	0.0	0.0
Total Winter Proposed Project Operational Emissions	***0.9***	***0.7***	***4.4***	***0.0***	***1.3***	***0.4***
Maximum						
Mobile	0.5	0.6	5.2	0.0	1.3	0.3
Area	0.6	0.0	2.6	0.0	0.0	0.0
Energy	0.0	0.2	0.1	0.0	0.0	0.0
Maximum Operational Emissions	**1.1**	**0.8**	***7.9***	**0.0**	**1.3**	**0.4**
SCAQMD Significance Thresholds	*55*	*55*	*550*	150	150	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Localized Operational Emission Estimates

Operational Activity	Maximum Daily Localized Emissions (pounds/day)			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Mobile	0.3	1.9	0.0	0.0
Area	0.1	6.0	0.0	0.0
Energy	0.4	0.2	0.0	0.0
Stationary	1.1	1.0	0.1	0.1
Total Daily Emissions	**1.8**	**9.1**	**0.1**	**0.1**
SCAQMD Screening Thresholds	260.9	1269.5	2.4	1.2
Threshold Exceeded?	**No**	**No**	**No**	**No**

2. Emissions Summary

2.4 Operations Emissions by Sector, Unmitigated

Sector	NOx	CO	PM10T	PM2.5T
Daily, Summer (Max)				
Mobile	0.259058854	1.705928381	0.04168114	0.011593829
Area	0.056291296	5.967279291	0.002937873	0.002214126
Energy	0.354621462	0.15891531	0.028577739	0.028577739
Water				
Waste				
Refrig.				
Stationary	1.082465297	0.987512201	0.056971858	0.056971858
Total	1.752436909	8.819635183	0.13016861	0.099357552
Daily, Winter (Max)				
Mobile	0.274053893	1.936569778	0.041692114	0.011604328
Area	0	0	0	0
Energy	0.354621462	0.15891531	0.028577739	0.028577739
Water				
Waste				
Refrig.				
Stationary	1.082465297	0.987512201	0.056971858	0.056971858
Total	1.711140653	3.082997289	0.127241711	0.097153925
Average Daily				
Mobile	0.255307325	1.828108587	0.038441467	0.010710802
Area	0.038555682	4.087177597	0.002012242	0.001516525
Energy	0.354621462	0.15891531	0.028577739	0.028577739
Water				
Waste				
Refrig.				
Stationary	0.59313167	0.541102576	0.031217456	0.031217456
Total	1.241616139	6.61530407	0.100248904	0.072022523
Annual				
Mobile	0.046593587	0.333629817	0.007015568	0.001954721
Area	0.007036412	0.745909911	0.000367234	0.000276766
Energy	0.064718417	0.029002044	0.005215437	0.005215437
Water				
Waste				
Refrig.				
Stationary	0.10824653	0.09875122	0.005697186	0.005697186
Total	0.226594945	1.207292993	0.018295425	0.01314411

Localized Construction Emission Estimates

Construction Activity	Maximum Daily Localized Emissions (pounds/day)			
	NO_x	CO	PM_{10}	$PM_{2.5}$
2026 (Year 1)				
Demolition	10.9	10.8	0.4	0.4
Site Preparation	13.4	13.2	3.1	1.5
Grading	13.4	13.2	3.5	1.6
Building Construction	9.9	11.5	0.3	0.3
Building Construction and Paving	14.9	18.7	0.6	0.5
Maximum On-site Emission (2026)	14.9	18.7	3.5	1.6
2027 (Year 2)				
Building Construction	9.5	11.4	0.3	0.3
Building Construction and Architectural Coating	10.6	12.9	0.3	0.3
Architectural Coating	1.1	1.5	0.0	0.0
Maximum On-site Emission (2027)	10.6	12.9	0.3	0.3
Maximum On-site Emission	**14.9**	**18.7**	**3.5**	**1.6**
SCAQMD Screening Thresholds	198.0	925.0	5.5	3.5
Threshold Exceeded?	**No**	**No**	**No**	**No**

Construction Equipment Modeled in CalEEMod and Acres Disturbed Per Day

Activity	Equipment Type	Equipment Quantity	Operating Hours per Day	Acres Disturbed per Piece of Equipment per Day	Acres Disturbed per Day
				Total Acres Disturbed Per Day	
Site Preparation	Crawler Tractors	1	8	0.5	0.5
	Graders	1	8	0.5	0.5
	Rubber Tired Dozers	1	8	0.5	0.5
				Total Acres Disturbed Per Day	**1.5**
Grading	Graders	1	8	0.5	0.5
	Rubber Tired Dozers	1	8	0.5	0.5
	Crawler Tractors	1	8	0.5	0.5
				Total Acres Disturbed Per Day	1.5
				Maximum Acres Disturbed Per Day	**1.5**

Source: CalEEMod Output Sheets.

Construction Equipment Fuel Usage (Off-Road)

Activity	Equipment	Number	Hours per day	Horse-power	Load Factor	Days of Construction	Total Horsepower-hours	Fuel Rate (gal/hp-hr)	Fuel Use (gallons)	
Demolition	Concrete/Industrial Saws	1	8	33	0.73	7	1,349	0.04295075	58	
	Tractors/Loaders/Backhoes	1	8	84	0.37	7	1,740	0.04637299	81	
	Rubber Tired Dozers	1	8	367	0.4	7	8,221	0.04739936	390	
Site Preparation	Crawler Tractors	1	8	87	0.43	5	1,496	0.05041578	75	
	Graders	1	8	148	0.41	5	2,427	0.05198203	126	
	Rubber Tired Dozers	1	8	367	0.4	5	5,872	0.04739936	278	
Grading	Graders	1	8	148	0.41	5	2,427	0.05198203	126	
	Rubber Tired Dozers	1	8	367	0.4	5	5,872	0.04739936	278	
	Crawler Tractors	1	8	87	0.43	5	1,496	0.05041578	75	0.149797172
Building Construction	Forklifts	1	8	82	0.2	250	32,800	0.05343999	1,753	0.762325037
	Cranes	1	8	367	0.29	250	212,860	0.05388133	11,469	
	Tractors/Loaders/Backhoes	1	8	84	0.37	250	62,160	0.04637299	2,883	
	Generator Sets	1	8	14	0.74	250	20,720	0.09412483	1,950	
	Welders	3	8	46	0.45	250	124,200	0.03435461	4,267	
Paving	Pavers	1	8	81	0.42	5	1,361	0.05163287	70	
	Rollers	1	8	36	0.38	5	547	0.05346164	29	
	Cement and Mortar Mixers	1	8	10	0.56	5	224	0.05217442	12	
	Tractors/Loaders/Backhoes	1	8	84	0.37	5	1,243	0.04637299	58	
	Paving Equipment	1	8	89	0.36	5	1,282	0.66377762	851	
Architectual Coating	Air Compressors	1	8	37	0.48	5	710	0.6913296	491	
								Total	**25,320**	

Source: Fuel Calculation Sheets (see Attachment C.1)

Model Output: OFFROAD2021 (v1.0.9) Emissions Inventory
Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2027
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2021 Equipment Types
Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	Calendar Year	Vehicle Category	Model Year	Horsepower E	Fuel	Fuel Consur	Horsepower_Hours_	Fuel Rate
Riverside (SC)	2027	Construction and Mining - Rubber Tired Dozers	Aggregate	Aggregate	Diesel	191238.43	4034620.644	0.047399
Riverside (SC)	2027	Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	Aggregate	Diesel	11953.75	257773.95	0.046373
Riverside (SC)	2027	Construction and Mining - Graders	Aggregate	Aggregate	Diesel	761987.84	14658677.94	0.051982
Riverside (SC)	2027	Construction and Mining - Excavators	Aggregate	Aggregate	Diesel	5113147.8	100015614.7	0.051123
Riverside (SC)	2027	Construction and Mining - Scrapers	Aggregate	Aggregate	Diesel	1982973.9	41222034.97	0.048105
Riverside (SC)	2027	Industrial - Forklifts	Aggregate	Aggregate	Diesel	381527.71	7139366.867	0.05344
Riverside (SC)	2027	Light Commercial - Misc - Generator Sets	Aggregate	Aggregate	Diesel	210409.61	2235431.55	0.094125
Riverside (SC)	2027	Construction and Mining - Cranes	Aggregate	Aggregate	Diesel	589160.85	10934416.28	0.053881
Riverside (SC)	2027	Light Commercial - Misc - Welders	Aggregate	Aggregate	Diesel	209758.35	6105683.5	0.034355
Riverside (SC)	2027	Construction and Mining - Pavers	Aggregate	Aggregate	Diesel	331428.21	6418938.987	0.051633
Riverside (SC)	2027	Construction and Mining - Paving Equipment	Aggregate	Aggregate	Diesel	64560.04	97261.55	0.663778
Riverside (SC)	2027	Construction and Mining - Rollers	Aggregate	Aggregate	Diesel	890223.3	16651627.16	0.053462
Riverside (SC)	2027	Light Commercial - Misc - Air Compressors	Aggregate	Aggregate	Gasoline	1752867.4	2535501.7	0.69133
Riverside (SC)	2027	Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	Aggregate	Diesel	2328.0382	54202.5	0.042951
Riverside (SC)	2027	Construction and Mining - Crawler Tractors	Aggregate	Aggregate	Gasoline	1617601.4	32085218.02	0.050416
Riverside (SC)	2027	Construction and Mining - Off-Highway Trucks	Aggregate	Aggregate	Diesel	2133252.3	43834291.49	0.048666
Riverside (SC)	2027	Light Commercial - Misc - Pumps	Aggregate	Aggregate	Gasoline	363491.66	1610288.75	0.225731
Riverside	2027	Construction and Mining - Other Construction Equipment	Aggregate	Aggregate	Diesel	835750.06	16018385.82	0.052174

Construction On-Road Fuel Consumption

Construction Source	Total Trips	VMT	Fuel Rate (Miles/Gallons)	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
Haul Trucks	125.0	2500.0	6.4	393.6	-
Vendor Trucks	5,719.2	58335.4	8.0	7,336.8	-
Worker Vehicles	38,027.4	703507.5	28.1	-	25,025.1
			Total	**7,730.5**	**25,025.1**

Source: CalEEMod Output Sheets (see Attachment B)

	Duration(days)
Demo	7
SP	5
GR	5
BC	250
PV	5
C	5

5.3. Construction Vehicles

5.3.1 Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	Worker	7.5	18.5	LDA,LDT1,LDT2
Demolition	Vendor		10.2	HHDT,MHDT
Demolition	Hauling	0.285714286	20	HHDT
Demolition	Onsite truck			HHDT
Site Preparation				
Site Preparation	Worker	7.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor		10.2	HHDT,MHDT
Site Preparation	Hauling	0	20	HHDT
Site Preparation	Onsite truck			HHDT
Grading	Worker	7.5	18.5	LDA,LDT1,LDT2
Grading	Vendor		10.2	HHDT,MHDT
Grading	Hauling	25	20	HHDT
Grading	Onsite truck			HHDT
Building Construction	Worker	74.9948884	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	11.43831838	10.2	HHDT,MHDT
Building Construction	Hauling	0	20	HHDT
Building Construction	Onsite truck			HHDT
Paving	Worker	12.5	18.5	LDA,LDT1,LDT2
Paving	Vendor		10.2	HHDT,MHDT
Paving	Hauling	0	20	HHDT
Paving	Onsite truck			HHDT
Architectural Coating	Worker	14.99897768	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor		10.2	HHDT,MHDT
Architectural Coating	Hauling	0	20	HHDT
Architectural Coating	Onsite truck			HHDT

	Weighted Vendor	
MHD	9.07	0.5882
HHD	6.35	0.4118

	Weighted Worker	
LDA	31.49	0.376563
LDT1	26.01	0.31099
LDT2	26.13	0.312446
	83.63	

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2027 2027 Construction start year
Season: Annual
Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT ar	Calendar Year	Vehicle Category	Model Year	Speed
Riverside (SC)	2027	MHDT	Aggregate	Aggregate
Riverside (SC)	2027	HHDT	Aggregate	Aggregate

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2027
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	VMT	Fuel Consu	Fuel Rate	
Riverside (SC)		LDA	Aggregate	Aggregate	Diesel	580928.6	64.04015	9.07	100%
Riverside (SC)		LDT1	Aggregate	Aggregate	Diesel	2023648	318.642	6.35	100%
Riverside (SC)		LDT2	Aggregate	Aggregate		Weighted Vendor		7.95103	

HAULING TRIPS

	CalEEMod Daily Trucks	CY/per truck	CY	Total Trucks	Miles	Truck Miles			
Import	*25*	*16*		0	20.0	0			
Export	*25*	*16*	1000	63	20.0	2500	mpg	gal fuel	
				63		2500	10.2	245.10	

Fuel	VMT	Fuel Consumption		
Gasoline	20354485	646.3182	31.49	100%
Gasoline	1456607	56.00412	26.01	100%
Gasoline	9414153	360.2721	26.13	100%
	GP From Vehicle Splits		28.11206	

Construction Fuel Consumption Summary

Construction Source	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
Construction Vehicles	7,730	25,025
Off-Road Construction Equipment	25,320	-
Total	**33,050**	**25,025**
Countywide	50,504,775	430,881,898.5
Percentage Increase	**0.0654%**	**0.0058%**

Model Output: OFFROAD2021 (v1.0.5) Emissions Inventory
Region Type: County
Region: Riverside
Calendar Year: 2027
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2021 Equipment Types
Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	Calendar Year	Vehicle Category	Model Yea	Horsepowe	Fuel	Fuel Consun	Total_Activity_I	Total_Popu	Horsepower_Hours_hhp
Riverside		2027 Construction and Mining - Concrete Mixer	Aggregate	Aggregate	Diesel	2235.2763	1113.590958	2.23529	43560.23
Riverside		2027 Construction and Mining - Concrete Pump	Aggregate	Aggregate	Diesel	22740.621	6350.790755	9.730586	447677.4
Riverside		2027 Construction and Mining - Crane less than 35ton	Aggregate	Aggregate	Diesel	11685.495	5495.742186	23.15044	212053.1
Riverside		2027 Construction and Mining - Cranes	Aggregate	Aggregate	Diesel	589160.85	129431.8064	507.6858	10934416
Riverside		2027 Construction and Mining - Crawler Tractors	Aggregate	Aggregate	Diesel	1617601.4	334455.7757	794.8067	32085218
Riverside		2027 Construction and Mining - Crushing/Processing Equipment	Aggregate	Aggregate	Diesel	86248.531	18797.45221	32.34596	1703124
Riverside		2027 Construction and Mining - Excavators	Aggregate	Aggregate	Diesel	5113147.8	1723483.29	2998.645	1E+08
Riverside		2027 Construction and Mining - Graders	Aggregate	Aggregate	Diesel	761987.84	170304.4211	465.5778	14658678
Riverside		2027 Construction and Mining - Hopper Tractor Trailer	Aggregate	Aggregate	Diesel	1457.5387	296.6549602	0.525951	28893.66
Riverside		2027 Construction and Mining - Misc - Cement And Mortar Mixe	Aggregate	Aggregate	Gasoline	34258.332	0	1981.986	0
Riverside		2027 Construction and Mining - Misc - Cement And Mortar Mixe	Aggregate	Aggregate	Diesel	59.3987	0	45.92933	0
Riverside		2027 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	Aggregate	Gasoline	44244.648	4208.45	284.3283	194705.6
Riverside		2027 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	Aggregate	Diesel	2328.0382	1642.5	4.207846	54202.5
Riverside		2027 Construction and Mining - Misc - Cranes	Aggregate	Aggregate	Gasoline	4956.7	1660.75	3.96	105225.8
Riverside		2027 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	Aggregate	Gasoline	3566.13	87.6	132.9435	5781.6
Riverside		2027 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	Aggregate	Diesel	4.8036	0	1.940776	0
Riverside		2027 Construction and Mining - Misc - Excavators	Aggregate	Aggregate	Diesel	34.2311	0	3.043203	0
Riverside		2027 Construction and Mining - Misc - Other	Aggregate	Aggregate	Gasoline	7599.3	1387	6.318226	174762
Riverside		2027 Construction and Mining - Misc - Other	Aggregate	Aggregate	Diesel	127.7443	0	29.32446	0
Riverside		2027 Construction and Mining - Misc - Pavers	Aggregate	Aggregate	Diesel	9.0413	0	1.204106	0
Riverside		2027 Construction and Mining - Misc - Paving Equipment	Aggregate	Aggregate	Gasoline	64560.04	2273.95	1420.309	97261.55
Riverside		2027 Construction and Mining - Misc - Paving Equipment	Aggregate	Aggregate	Diesel	15.3327	0	2.981239	0
Riverside		2027 Construction and Mining - Misc - Rollers	Aggregate	Aggregate	Gasoline	31222.966	4763.25	149.4669	294828.8
Riverside		2027 Construction and Mining - Misc - Rollers	Aggregate	Aggregate	Diesel	262.08	0	80.40557	0
Riverside		2027 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	Aggregate	Gasoline	18622.3	5153.8	10.51663	350400
Riverside		2027 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	Aggregate	Diesel	6.2821	0	0.791209	0
Riverside		2027 Construction and Mining - Misc - Tractors/Loaders/Backhoa	Aggregate	Aggregate	Gasoline	11953.75	4091.65	5.594928	257773.9
Riverside		2027 Construction and Mining - Misc - Tractors/Loaders/Backhoa	Aggregate	Aggregate	Diesel	163.62	0	22.37446	0
Riverside		2027 Construction and Mining - Off-Highway Trucks	Aggregate	Aggregate	Diesel	2133252.3	250823.3999	323.301	43834291
Riverside		2027 Construction and Mining - Pavers	Aggregate	Aggregate	Diesel	331428.21	101981.4377	210.815	6418939
Riverside		2027 Construction and Mining - Paving Equipment	Aggregate	Aggregate	Diesel	366756.68	114967.8246	219.6468	7153092
Riverside		2027 Construction and Mining - Rollers	Aggregate	Aggregate	Diesel	890223.3	465815.7903	1064.295	16651627
Riverside		2027 Construction and Mining - Rubber Tired Dozers	Aggregate	Aggregate	Diesel	191238.43	35545.31736	66.14988	4034621
Riverside		2027 Construction and Mining - Rubber Tired Loaders	Aggregate	Aggregate	Diesel	3740964.2	954186.265	1395.041	74352309
Riverside		2027 Construction and Mining - Scrapers	Aggregate	Aggregate	Diesel	1982973.9	225940.2349	699.2061	41222035
Riverside		2027 Construction and Mining - Skid Steer Loaders	Aggregate	Aggregate	Diesel	1777065.8	1168103.602	2594.296	31823480
Riverside		2027 Construction and Mining - Spray Truck	Aggregate	Aggregate	Diesel	21680.467	7532.285673	13.67508	420772.4
Riverside		2027 Construction and Mining - Tanker Truck Trailer	Aggregate	Aggregate	Diesel	2811.7388	1111.108179	1.70934	53972.69
Riverside		2027 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	Aggregate	Diesel	5055567.6	2294074.626	4478.258	94590090
Riverside		2027 Construction and Mining - Water Truck	Aggregate	Aggregate	Diesel	168014.78	25897.99654	44.5902	3333269
Riverside		2027 Industrial - Forklifts	Aggregate	Aggregate	Diesel	381527.71	362699.7298	766.1708	7139367
Riverside		2027 Industrial - Misc - Sweepers/Scrubbers	Aggregate	Aggregate	Gasoline	75515.147	21724.8	69.56394	1090543
Riverside		2027 Industrial - Misc - Sweepers/Scrubbers	Aggregate	Aggregate	Diesel	14.1209	0	2.643102	0
Riverside		2027 Industrial - Other General Industrial Equipment	Aggregate	Aggregate	Diesel	112400.66	47949.80955	108.7137	2218224
Riverside		2027 Industrial - Other Truck	Aggregate	Aggregate	Diesel	67267.002	12588.45191	18.89109	1337638
Riverside		2027 Industrial - Railcars or Track Cars	Aggregate	Aggregate	Diesel	5186.1559	1433.251246	2.379481	102913.8
Riverside		2027 Industrial - Sweepers/Scrubbers	Aggregate	Aggregate	Diesel	22685.316	13700.59976	47.45597	405719.3
Riverside		2027 Industrial - Tow Tractor	Aggregate	Aggregate	Diesel	153.30813	19.10194082	0.035505	3039.119
Riverside		2027 Industrial - Yard Goat	Aggregate	Aggregate	Diesel	180005.63	51981.59732	44.17195	3578979
Riverside		2027 Light Commercial - Misc - Air Compressors	Aggregate	Aggregate	Gasoline	1752867.4	38846.95	18307.81	2535502
Riverside		2027 Light Commercial - Misc - Air Compressors	Aggregate	Aggregate	Diesel	38692.764	33660.3	51.24513	1245431
Riverside		2027 Light Commercial - Misc - Air Compressors	Aggregate	Aggregate	Electric	0	0	223250.1	0
Riverside		2027 Light Commercial - Misc - Generator Sets	Aggregate	Aggregate	Gasoline	2945862.4	82453.5	119836.3	3445494
Riverside		2027 Light Commercial - Misc - Generator Sets	Aggregate	Aggregate	Diesel	210409.61	67740.35	773.4128	2235432
Riverside		2027 Light Commercial - Misc - Generator Sets	Aggregate	Aggregate	Electric	0	0	21590.58	0
Riverside		2027 Light Commercial - Misc - Generator Sets	Aggregate	Aggregate	Nat Gas	14943.1	1733.75	15.55	194260.3
Riverside		2027 Light Commercial - Misc - Pumps	Aggregate	Aggregate	Gasoline	363491.66	24068.1	10272.85	1610289
Riverside		2027 Light Commercial - Misc - Pumps	Aggregate	Aggregate	Diesel	114882.15	35364.85	410.5232	1308499
Riverside		2027 Light Commercial - Misc - Pumps	Aggregate	Aggregate	Electric	0	0	117445.6	0
Riverside		2027 Light Commercial - Misc - Welders	Aggregate	Aggregate	Gasoline	755705.42	40945.7	13673.36	2456870
Riverside		2027 Light Commercial - Misc - Welders	Aggregate	Aggregate	Diesel	209758.35	132732.25	417.8049	6105684
Riverside		2027 Light Commercial - Misc - Welders	Aggregate	Aggregate	Electric	0	0	57643.6	0
Riverside		2028 Construction and Mining - Bore/Drill Rigs	Aggregate	Aggregate	Diesel	479499.4	85585.67901	146.9614	9650913
Riverside		2028 Construction and Mining - Bucket	Aggregate	Aggregate	Diesel	11598.992	3403.661299	6.209717	221783.7
Riverside		2028 Construction and Mining - Compactor	Aggregate	Aggregate	Diesel	18568.943	5880.569937	10.17919	365204.4
Riverside		2028 Construction and Mining - Concrete Mixer	Aggregate	Aggregate	Diesel	1689.7727	858.5017927	1.730694	33687.95
Riverside		2028 Construction and Mining - Concrete Pump	Aggregate	Aggregate	Diesel	17678.501	4907.648075	7.533095	346813.2
Riverside		2028 Construction and Mining - Crane less than 35ton	Aggregate	Aggregate	Diesel	9479.9695	4242.222292	17.92207	163676.9
Riverside		2028 Construction and Mining - Cranes	Aggregate	Aggregate	Diesel	468206.57	100453.0701	393.0228	8486400
Riverside		2028 Construction and Mining - Crawler Tractors	Aggregate	Aggregate	Diesel	1264836.8	259296.1389	615.3479	24867301
Riverside		2028 Construction and Mining - Crushing/Processing Equipment	Aggregate	Aggregate	Diesel	66383.042	14469.12088	25.03933	1310677
Riverside		2028 Construction and Mining - Excavators	Aggregate	Aggregate	Diesel	3953625.4	1330509.346	2321.474	77262422
Riverside		2028 Construction and Mining - Graders	Aggregate	Aggregate	Diesel	605769.1	132062.4289	360.4661	11359725
Riverside		2028 Construction and Mining - Hopper Tractor Trailer	Aggregate	Aggregate	Diesel	1120.8865	227.9191063	0.407137	22220
Riverside		2028 Construction and Mining - Misc - Asphalt Pavers	Aggregate	Aggregate	Gasoline	1874.45	430.7	3.939611	18122.25
Riverside		2028 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	Aggregate	Gasoline	1197.75	113.15	3.471599	9957.2
Riverside		2028 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	Aggregate	Diesel	32.9	0	5.374181	0
Riverside		2028 Construction and Mining - Misc - Cement And Mortar Mixe	Aggregate	Aggregate	Gasoline	8099.8	0	469.0329	0
Riverside		2028 Construction and Mining - Misc - Cement And Mortar Mixe	Aggregate	Aggregate	Diesel	47.45	0	36.69034	0
Riverside		2028 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	Aggregate	Gasoline	9831.8	821.25	66.73655	38022.05
Riverside		2028 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	Aggregate	Diesel	1855.85	1343.2	3.40761	44325.6
Riverside		2028 Construction and Mining - Misc - Cranes	Aggregate	Aggregate	Gasoline	1003.75	328.5	0.74	20257.5
Riverside		2028 Construction and Mining - Misc - Crushing/Proc. Equipmen	Aggregate	Aggregate	Gasoline	47.8	0	0.356403	0
Riverside		2028 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	Aggregate	Gasoline	833.6	0	31.35954	0
Riverside		2028 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	Aggregate	Diesel	3.83	0	1.548954	0
Riverside		2028 Construction and Mining - Misc - Excavators	Aggregate	Aggregate	Diesel	27.3	0	2.428986	0
Riverside		2028 Construction and Mining - Misc - Other	Aggregate	Aggregate	Gasoline	1481.9	270.1	1.2456	34032.6
Riverside		2028 Construction and Mining - Misc - Other	Aggregate	Aggregate	Diesel	102.1	0	23.45186	0
Riverside		2028 Construction and Mining - Misc - Pavers	Aggregate	Aggregate	Diesel	7.21	0	0.96001	0
Riverside		2028 Construction and Mining - Misc - Paving Equipment	Aggregate	Aggregate	Gasoline	15035.95	438	335.0632	18640.55
Riverside		2028 Construction and Mining - Misc - Paving Equipment	Aggregate	Aggregate	Diesel	12.2	0	2.378101	0
Riverside		2028 Construction and Mining - Misc - Plate Compactors	Aggregate	Aggregate	Gasoline	5548.2	0	183.7121	0
Riverside		2028 Construction and Mining - Misc - Plate Compactors	Aggregate	Aggregate	Diesel	34.2	0	21.23308	0
Riverside		2028 Construction and Mining - Misc - Rollers	Aggregate	Aggregate	Gasoline	6582.5	938.05	34.78144	57732.05
Riverside		2028 Construction and Mining - Misc - Rollers	Aggregate	Aggregate	Diesel	209.9	0	64.25438	0
Riverside		2028 Construction and Mining - Misc - Rough Terrain Forklifts	Aggregate	Aggregate	Gasoline	6774.4	1328.6	3.26	108770
Riverside		2028 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	Aggregate	Gasoline	3642.7	1011.05	2.03904	68941.2
Riverside		2028 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	Aggregate	Diesel	4.98	0	0.627054	0
Riverside		2028 Construction and Mining - Misc - Signal Boards	Aggregate	Aggregate	Gasoline	157.32	0	2.217081	0
Riverside		2028 Construction and Mining - Misc - Signal Boards	Aggregate	Aggregate	Diesel	1347.95	485.45	186.5456	17961.65
Riverside		2028 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	Aggregate	Gasoline	13811.95	3525.9	35.15686	176601.6
Riverside		2028 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	Aggregate	Diesel	1400	0	247.6706	0
Riverside		2028 Construction and Mining - Misc - Surfacing Equipment	Aggregate	Aggregate	Gasoline	6740	0	89.8766	0
Riverside		2028 Construction and Mining - Misc - Tampers/Rammers	Aggregate	Aggregate	Gasoline	841	0	46.67558	0
Riverside		2028 Construction and Mining - Misc - Tractors/Loaders/Backhoa	Aggregate	Aggregate	Gasoline	2328.7	799.35	1.08101	50359.05
Riverside		2028 Construction and Mining - Misc - Tractors/Loaders/Backhoa	Aggregate	Aggregate	Diesel	131	0	17.8838	0
Riverside		2028 Construction and Mining - Misc - Trenchers	Aggregate	Aggregate	Gasoline	11931.4	2544.05	31.96041	99316.5
Riverside		2028 Construction and Mining - Misc - Trenchers	Aggregate	Aggregate	Diesel	175.7	0	27.74266	0
Riverside		2028 Construction and Mining - Nurse Rig Other	Aggregate	Aggregate	Diesel	105.85888	58.29177749	0.101784	2098.504
Riverside		2028 Construction and Mining - Off-Highway Tractors	Aggregate	Aggregate	Diesel	712771.65	212879.8088	280.8503	13910841

Operational Energy Consumption

Operational Source	Energy Usage	Countywide Energy Consumption	Percentage Increase
Electricity (Kilowatt-Hour)			
Proposed Project	646,337		
Existing Project	313,592		
Net	332,746	16,286,000,000.0	0.0020%
Natural Gas (Thousands British Thermal Units)			
Proposed Project	1,399,933		
Existing Project	639,257		
Net	760,676	42,670,000,000.0	0.0018%
Petroleum (Gasoline) Consumption			
Proposed Project	52,117		
Existing Project	22,263		
Net	**29,853**	430,881,898.5	0.0069%
Petroleum (Gasoline) Consumption			
Proposed Project	**1,723**		
Existing Project	**-**		
Net	**1,723**	227,147,766.9	0.0008%

236* 0.73 *200 * 0.050= 1,723 gal/year

The U.S. EPA's Greener Cleanups methodology specifies an assumed diesel brake-specific fuel consumption (BSFC) of 0.050 gallons per horsepower-hour, based on a fuel energy value of 7,000 Btu/HP-hour and diesel's higher heating value of 139,000 Btu/gallon.

Source: CalEEMod Output Sheets (see Attachment B)

Proposed

CalEEMod Output

Land Use Type	VMT/Year
Congregate Care (Assisted Living)	1465106.474
Other Non-Asphalt Surfaces	0
Parking Lot	0

Other Non-Asphalt Surfaces
5.11. Operational Energy Consumption
5.11.1 Unmitigated

Land Use	Electricity (kWh/yr)	Natural Gas (kBTU/yr)
Congregate Care (Assisted Living)	582893.3571	1327959.676
Other Non-Asphalt Surfaces	0	0
Parking Lot	17934.5232	0
General Office Building	45509.23609	71973.581
		0

Existing

CalEEMod Output

Land Use Type	VMT/Year
Congregate Care	625870.7268
General Office Bu	0
Parking Lot	0

Other Non-Asphalt Surfaces
5.11. Operational Energy Consumption
5.11.1 Unmitigated

Land Use	Electricity (kWh/yr)	Natural Gas (kBTU/yr)
Congregate Care	249002.9875	567283.7452
General Office Bu	45509.23609	71973.58096
Parking Lot	19079.28	0
		0
		0

Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2027
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for Combustion VMT and Electric VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption, kWh/day for Energy Consumption,

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Fuel Consumpt
Riverside (SC)	2027	HHDT	Aggregate	Aggregate	Gasoline	0.069141356
Riverside (SC)	2027	HHDT	Aggregate	Aggregate	Diesel	511.4778146
Riverside (SC)	2027	LDA	Aggregate	Aggregate	Gasoline	442.5918383
Riverside (SC)	2027	LDA	Aggregate	Aggregate	Diesel	0.649427753
Riverside (SC)	2027	LDT1	Aggregate	Aggregate	Gasoline	48.27301373
Riverside (SC)	2027	LDT1	Aggregate	Aggregate	Diesel	0.012058467
Riverside (SC)	2027	LDT2	Aggregate	Aggregate	Gasoline	326.6336318
Riverside (SC)	2027	LDT2	Aggregate	Aggregate	Diesel	0.465596967
Riverside (SC)	2027	LHDT1	Aggregate	Aggregate	Gasoline	35.22468605
Riverside (SC)	2027	LHDT1	Aggregate	Aggregate	Diesel	18.74132768
Riverside (SC)	2027	LHDT2	Aggregate	Aggregate	Gasoline	8.732188926
Riverside (SC)	2027	LHDT2	Aggregate	Aggregate	Diesel	20.46871194
Riverside (SC)	2027	MCY	Aggregate	Aggregate	Gasoline	3.159616504
Riverside (SC)	2027	MDV	Aggregate	Aggregate	Gasoline	293.5427178
Riverside (SC)	2027	MDV	Aggregate	Aggregate	Diesel	8.452226625
Riverside (SC)	2027	MH	Aggregate	Aggregate	Gasoline	7.951119814
Riverside (SC)	2027	MH	Aggregate	Aggregate	Diesel	1.521107845
Riverside (SC)	2027	MHDT	Aggregate	Aggregate	Gasoline	11.49448865
Riverside (SC)	2027	MHDT	Aggregate	Aggregate	Diesel	58.02197449
Riverside (SC)	2027	OBUS	Aggregate	Aggregate	Gasoline	1.498634211
Riverside (SC)	2027	OBUS	Aggregate	Aggregate	Diesel	1.432474562
Riverside (SC)	2027	SBUS	Aggregate	Aggregate	Gasoline	1.327274679
Riverside (SC)	2027	SBUS	Aggregate	Aggregate	Diesel	1.079928206

	Diesel	622.322649	227147766.9
	Gasoline	1180.49835	430881898.5
Total		1802.821	

Total 1802.821

COUNTYWIDE NATURAL GAS CONSUMPTION https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-1

427 MM Therms
42,670,000,000.00 Therms

EXHIBIT 3.11B – QUANTIFYING FUEL USE FOR HEAVY EQUIPMENT USE

The following table can be used to organize and calculate fuel use associated with heavy equipment use. Two different calculation options are provided in decreasing order of known information. It is preferable to use the calculation Option 1 where possible. Option 2 can be used if the information is not available for Option 1.

Activity	Input #1		Input #2		Fuel Use
Option 1 – Known Fuel Use or Equipment Owner Estimated Fuel Use					
	Event	×	**Fuel use per event**	=	**Fuel Use (gals)**

Option 2 – Known or Estimated Horsepower Rating, Fuel Type, and Hours of Operation									
	HP	×	**Hours**	×	**BSFC**	×	**PLF**	=	**Fuel Use (gals)**

Notes:
Option 1 – "Event" can refer to a specific task, time period, or entire scope of work. Fuel use per event is assumed to be a reasonable estimate by the equipment owner based on fuel use for a similar, but previously executed event.
Option 2 – "HP" = horsepower rating of equipment "Hours" = hours of operation
"BSFC" brake-specific fuel capacity "PLF" = partial load factor

The assumed BSFC for diesel and biodiesel is 0.050 gallons per HP-hr.
The assumed BSFC for gasoline is 0.056 gallons per HP-hr.

BSFC values are consistent with 7,000 British thermal units (Btu)/HP-hr (as used by EPA AP-42, Compilation of Air Pollutant Emission Factors, Chapter 3) and fuel higher heating values of 139,000 Btus for diesel and 124,000 Btus for gasoline (as used by Climate Leaders).

The following table provides HP and PLF values for common types of equipment.

Equipment Type	HP	PLF	Production Rate
Medium/large excavator (2 CY bucket)	175	0.75	720 cy/day
Medium loader (3 CY bucket)	200	0.75	1200 cy/day
Medium dozer, 100+ foot haul	200	0.75	500 cy/day
Direct-push rig for soil sampling	60	0.75	250 ft/day
Hollow-stem auger for well installation	150	0.75	100 ft/day
Air or mud rotary for well installation	500	0.75	200 ft/day

Production rates and equipment sizes are generally consistent with production rates reported RS Means Building Construction Cost Data and are representative averages. Actual production rates may vary due to a number of factors including site conditions and operator experience. Site teams are encouraged to use more site-specific production rates if they can be documented. Absent other information a PLF of 0.75 is a reasonable estimate for heavy equipment. The PLF may decrease if work is inefficient for a variety of reasons. Many of the same inefficiencies would also reduce the production rate. Therefore, if the assumed production rate is lower, it is appropriate for the PLF to be lowered by a commensurate amount resulting in no net change in fuel use.

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Construction Fuel Consumption Summary

Construction Source	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
Countywide	50,504,775.2	430,881,898.5

Diesel	50504775.2
Gasoline	30627408.4

Model Output: OFFROAD2021 (v1.0.5) Emissions Inventory
Region Type: County
Region: Riverside
Calendar Year: 2027-2031
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2021 Equipment Types
Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	Calendar Year	Vehicle Category	Model Yea	Horsepow	Fuel	Fuel Consum	Total_Activi	Total_Popı	Horsepower_Hours_hhp
Riverside	2027	Construction and Mining - Concrete Mixer	Aggregate	Aggregate	Diesel	2235.2763	1113.591	2.23529	43560.22977
Riverside	2027	Construction and Mining - Concrete Pump	Aggregate	Aggregate	Diesel	22740.6212	6350.7908	9.730586	447677.4129
Riverside	2027	Construction and Mining - Crane less than 35ton	Aggregate	Aggregate	Diesel	11685.4954	5495.7422	23.15044	212053.061
Riverside	2027	Construction and Mining - Cranes	Aggregate	Aggregate	Diesel	589160.854	129431.81	507.6858	10934416.28
Riverside	2027	Construction and Mining - Crawler Tractors	Aggregate	Aggregate	Diesel	1617601.42	334455.78	794.8067	32085218.02
Riverside	2027	Construction and Mining - Crushing/Processing Equipment	Aggregate	Aggregate	Diesel	86248.5315	18797.452	32.34596	1703123.765
Riverside	2027	Construction and Mining - Excavators	Aggregate	Aggregate	Diesel	5113147.79	1723483.3	2998.645	100015614.7
Riverside	2027	Construction and Mining - Graders	Aggregate	Aggregate	Diesel	761987.842	170304.42	465.5778	14658677.94
Riverside	2027	Construction and Mining - Hopper Tractor Trailer	Aggregate	Aggregate	Diesel	1457.53873	296.65496	0.525951	28893.66236
Riverside	2027	Construction and Mining - Misc - Cement And Mortar Mixe	Aggregate	Aggregate	Gasoline	34258.332	0	1981.986	0
Riverside	2027	Construction and Mining - Misc - Cement And Mortar Mixe	Aggregate	Aggregate	Diesel	59.3987	0	45.92933	0
Riverside	2027	Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	Aggregate	Gasoline	44244.648	4208.45	284.3283	194705.6
Riverside	2027	Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	Aggregate	Diesel	2328.0382	1642.5	4.207846	54202.5
Riverside	2027	Construction and Mining - Misc - Cranes	Aggregate	Aggregate	Gasoline	4956.7	1660.75	3.96	105225.85
Riverside	2027	Construction and Mining - Misc - Dumpers/Tenders	Aggregate	Aggregate	Gasoline	3566.13	87.6	132.9435	5781.6
Riverside	2027	Construction and Mining - Misc - Dumpers/Tenders	Aggregate	Aggregate	Diesel	4.8036	0	1.940776	0
Riverside	2027	Construction and Mining - Misc - Excavators	Aggregate	Aggregate	Diesel	34.2311	0	3.043203	0
Riverside	2027	Construction and Mining - Misc - Other	Aggregate	Aggregate	Gasoline	7599.3	1387	6.318226	174762
Riverside	2027	Construction and Mining - Misc - Other	Aggregate	Aggregate	Diesel	127.7443	0	29.32446	0
Riverside	2027	Construction and Mining - Misc - Pavers	Aggregate	Aggregate	Diesel	9.0413	0	1.204106	0
Riverside	2027	Construction and Mining - Misc - Paving Equipment	Aggregate	Aggregate	Gasoline	64560.04	2273.95	1420.309	97261.55
Riverside	2027	Construction and Mining - Misc - Paving Equipment	Aggregate	Aggregate	Diesel	15.3327	0	2.981239	0
Riverside	2027	Construction and Mining - Misc - Rollers	Aggregate	Aggregate	Gasoline	31222.966	4763.25	149.4669	294828.75
Riverside	2027	Construction and Mining - Misc - Rollers	Aggregate	Aggregate	Diesel	262.08	0	80.40557	0
Riverside	2027	Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	Aggregate	Gasoline	18622.3	5153.8	10.51663	350400
Riverside	2027	Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	Aggregate	Diesel	6.2821	0	0.791209	0
Riverside	2027	Construction and Mining - Misc - Tractors/Loaders/Backhoe	Aggregate	Aggregate	Gasoline	11953.75	4091.65	5.594928	257773.95
Riverside	2027	Construction and Mining - Misc - Tractors/Loaders/Backhoe	Aggregate	Aggregate	Diesel	163.62	0	22.37446	0
Riverside	2027	Construction and Mining - Off-Highway Trucks	Aggregate	Aggregate	Diesel	2133252.31	250823.4	323.301	43834291.49
Riverside	2027	Construction and Mining - Pavers	Aggregate	Aggregate	Diesel	331428.214	101981.44	210.815	6418938.987
Riverside	2027	Construction and Mining - Paving Equipment	Aggregate	Aggregate	Diesel	366756.675	114967.82	219.6468	7153092.238
Riverside	2027	Construction and Mining - Rollers	Aggregate	Aggregate	Diesel	890223.299	465815.79	1064.295	16651627.16
Riverside	2027	Construction and Mining - Rubber Tired Dozers	Aggregate	Aggregate	Diesel	191238.426	35545.317	66.14988	4034620.644
Riverside	2027	Construction and Mining - Rubber Tired Loaders	Aggregate	Aggregate	Diesel	3740964.23	954186.27	1395.041	74352308.96
Riverside	2027	Construction and Mining - Scrapers	Aggregate	Aggregate	Diesel	1982973.94	225940.23	699.2061	41222034.97
Riverside	2027	Construction and Mining - Skid Steer Loaders	Aggregate	Aggregate	Diesel	1777065.8	1168103.6	2594.296	31823479.55
Riverside	2027	Construction and Mining - Spray Truck	Aggregate	Aggregate	Diesel	21680.4674	7532.2857	13.67508	420772.356
Riverside	2027	Construction and Mining - Tanker Truck Trailer	Aggregate	Aggregate	Diesel	2811.73877	1111.1082	1.70934	53972.68988
Riverside	2027	Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	Aggregate	Diesel	5055567.55	2294074.6	4478.258	94590089.88
Riverside	2027	Construction and Mining - Water Truck	Aggregate	Aggregate	Diesel	168014.783	25897.997	44.5902	3333269.445
Riverside	2027	Industrial - Forklifts	Aggregate	Aggregate	Diesel	381527.709	362699.73	766.1708	7139366.867
Riverside	2027	Industrial - Misc - Sweepers/Scrubbers	Aggregate	Aggregate	Gasoline	75515.1472	21724.8	69.56394	1090543.35
Riverside	2027	Industrial - Misc - Sweepers/Scrubbers	Aggregate	Aggregate	Diesel	14.1209	0	2.643102	0
Riverside	2027	Industrial - Other General Industrial Equipment	Aggregate	Aggregate	Diesel	112400.66	47949.81	108.7137	2218223.504
Riverside	2027	Industrial - Other Truck	Aggregate	Aggregate	Diesel	67267.002	12588.452	18.89109	1337638.039
Riverside	2027	Industrial - Railcars or Track Cars	Aggregate	Aggregate	Diesel	5186.15586	1433.2512	2.379481	102913.829
Riverside	2027	Industrial - Sweepers/Scrubbers	Aggregate	Aggregate	Diesel	22685.3162	13700.6	47.45597	405719.3302
Riverside	2027	Industrial - Tow Tractor	Aggregate	Aggregate	Diesel	153.308129	19.101941	0.035505	3039.118784
Riverside	2027	Industrial - Yard Goat	Aggregate	Aggregate	Diesel	180005.628	51981.597	44.17195	3578978.579
Riverside	2027	Light Commercial - Misc - Air Compressors	Aggregate	Aggregate	Gasoline	1752867.38	38846.95	18307.81	2535501.7
Riverside	2027	Light Commercial - Misc - Air Compressors	Aggregate	Aggregate	Diesel	38692.7644	33660.3	51.24513	1245431.1
Riverside	2027	Light Commercial - Misc - Air Compressors	Aggregate	Aggregate	Electric	0	0	223250.1	0
Riverside	2027	Light Commercial - Misc - Generator Sets	Aggregate	Aggregate	Gasoline	2945862.41	82453.5	119836.3	3445494.15
Riverside	2027	Light Commercial - Misc - Generator Sets	Aggregate	Aggregate	Diesel	210409.612	67740.35	773.4128	2235431.55
Riverside	2027	Light Commercial - Misc - Generator Sets	Aggregate	Aggregate	Electric	0	0	21590.58	0
Riverside	2027	Light Commercial - Misc - Generator Sets	Aggregate	Aggregate	Nat Gas	14943.1	1733.75	15.55	194260.3
Riverside	2027	Light Commercial - Misc - Pumps	Aggregate	Aggregate	Gasoline	363491.661	24068.1	10272.85	1610288.75
Riverside	2027	Light Commercial - Misc - Pumps	Aggregate	Aggregate	Diesel	114882.154	35364.85	410.5232	1308499.45
Riverside	2027	Light Commercial - Misc - Pumps	Aggregate	Aggregate	Electric	0	0	117445.6	0
Riverside	2027	Light Commercial - Misc - Welders	Aggregate	Aggregate	Gasoline	755705.42	40945.7	13673.36	2456869.75
Riverside	2027	Light Commercial - Misc - Welders	Aggregate	Aggregate	Diesel	209758.347	132732.25	417.8049	6105683.5
Riverside	2027	Light Commercial - Misc - Welders	Aggregate	Aggregate	Electric	0	0	57643.6	0
Riverside	2028	Construction and Mining - Bore/Drill Rigs	Aggregate	Aggregate	Diesel	479499.403	85585.679	146.9614	9650913.365
Riverside	2028	Construction and Mining - Bucket	Aggregate	Aggregate	Diesel	11598.9916	3403.6613	6.209717	221783.6776
Riverside	2028	Construction and Mining - Compactor	Aggregate	Aggregate	Diesel	18568.9431	5880.5699	10.17919	365204.3875
Riverside	2028	Construction and Mining - Concrete Mixer	Aggregate	Aggregate	Diesel	1689.77267	858.50179	1.730694	33687.94679
Riverside	2028	Construction and Mining - Concrete Pump	Aggregate	Aggregate	Diesel	17678.5009	4907.6481	7.533095	346813.1953
Riverside	2028	Construction and Mining - Crane less than 35ton	Aggregate	Aggregate	Diesel	9479.96953	4242.2223	17.92207	163676.8985
Riverside	2028	Construction and Mining - Cranes	Aggregate	Aggregate	Diesel	468206.572	100453.07	393.0228	8486400.335
Riverside	2028	Construction and Mining - Crawler Tractors	Aggregate	Aggregate	Diesel	1264836.79	259296.14	615.3479	24867301.39
Riverside	2028	Construction and Mining - Crushing/Processing Equipment	Aggregate	Aggregate	Diesel	66383.0424	14469.121	25.03933	1310676.602
Riverside	2028	Construction and Mining - Excavators	Aggregate	Aggregate	Diesel	3953625.45	1330509.3	2321.474	77262422.26
Riverside	2028	Construction and Mining - Graders	Aggregate	Aggregate	Diesel	605769.104	132062.43	360.4661	11359724.8
Riverside	2028	Construction and Mining - Hopper Tractor Trailer	Aggregate	Aggregate	Diesel	1120.8865	227.91911	0.407137	22220.00374
Riverside	2028	Construction and Mining - Misc - Asphalt Pavers	Aggregate	Aggregate	Gasoline	1874.45	430.7	3.939611	18122.25
Riverside	2028	Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	Aggregate	Gasoline	1197.75	113.15	3.471599	9957.2
Riverside	2028	Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	Aggregate	Diesel	32.9	0	5.374181	0
Riverside	2028	Construction and Mining - Misc - Cement And Mortar Mixe	Aggregate	Aggregate	Gasoline	8099.8	0	469.0329	0
Riverside	2028	Construction and Mining - Misc - Cement And Mortar Mixe	Aggregate	Aggregate	Diesel	47.45	0	36.69034	0
Riverside	2028	Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	Aggregate	Gasoline	9831.8	821.25	66.73655	38022.05
Riverside	2028	Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	Aggregate	Diesel	1855.85	1343.2	3.40761	44325.6
Riverside	2028	Construction and Mining - Misc - Cranes	Aggregate	Aggregate	Gasoline	1003.75	328.5	0.74	20257.5
Riverside	2028	Construction and Mining - Misc - Crushing/Proc. Equipmen	Aggregate	Aggregate	Gasoline	47.8	0	0.356403	0
Riverside	2028	Construction and Mining - Misc - Dumpers/Tenders	Aggregate	Aggregate	Gasoline	833.6	0	31.35954	0
Riverside	2028	Construction and Mining - Misc - Dumpers/Tenders	Aggregate	Aggregate	Diesel	3.83	0	1.548954	0
Riverside	2028	Construction and Mining - Misc - Excavators	Aggregate	Aggregate	Diesel	27.3	0	2.428986	0
Riverside	2028	Construction and Mining - Misc - Other	Aggregate	Aggregate	Gasoline	1481.9	270.1	1.2456	34032.6
Riverside	2028	Construction and Mining - Misc - Other	Aggregate	Aggregate	Diesel	102.1	0	23.45186	0
Riverside	2028	Construction and Mining - Misc - Pavers	Aggregate	Aggregate	Diesel	7.21	0	0.96001	0
Riverside	2028	Construction and Mining - Misc - Paving Equipment	Aggregate	Aggregate	Gasoline	15035.95	438	335.0632	18640.55
Riverside	2028	Construction and Mining - Misc - Paving Equipment	Aggregate	Aggregate	Diesel	12.2	0	2.378101	0
Riverside	2028	Construction and Mining - Misc - Plate Compactors	Aggregate	Aggregate	Gasoline	5548.2	0	183.7121	0
Riverside	2028	Construction and Mining - Misc - Plate Compactors	Aggregate	Aggregate	Diesel	34.2	0	21.23308	0
Riverside	2028	Construction and Mining - Misc - Rollers	Aggregate	Aggregate	Gasoline	6582.5	938.05	34.78144	57732.05
Riverside	2028	Construction and Mining - Misc - Rollers	Aggregate	Aggregate	Diesel	209.9	0	64.25438	0
Riverside	2028	Construction and Mining - Misc - Rough Terrain Forklifts	Aggregate	Aggregate	Gasoline	6774.4	1328.6	3.26	108770
Riverside	2028	Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	Aggregate	Gasoline	3642.7	1011.05	2.03904	68941.2
Riverside	2028	Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	Aggregate	Diesel	4.98	0	0.627054	0
Riverside	2028	Construction and Mining - Misc - Signal Boards	Aggregate	Aggregate	Gasoline	157.32	0	2.217081	0
Riverside	2028	Construction and Mining - Misc - Signal Boards	Aggregate	Aggregate	Diesel	1347.95	485.45	186.5456	17961.65

Project Construction GHG Emissions

Activity	Annual GHG Emissions ($MTCO_2e$)
	CO2e
Year 1	33
Year 2	386
Total Emissions	**419**
Total Emissions Amortized Over 30 Years	**14**

Source: CalEEMod Output Sheets

Total Project GHG Emissions

Activity	Annual GHG Emissions ($MTCO_2e$)[1]
	CO2e
Project Operation	
Mobile	509
Area	2
Energy	177
Water	12
Waste	96
Refrigeration	0
Stationary	18
Total Project Gross Operation Emissions	814
Project Construction	
Amortized Construction Emissions	14
Project Construction and Operation	
Project Total Emissions	**828**
Existing Emissions	**349**
Net New Emissions	**478**
Significance Threshold	**3,000**
Threshold Exceeded?	**No**

Notes: 1. Numbers may vary due to rounding.

Source: CalEEMod Output Sheets

Fleet Mix

Land Use Subtype	HHD	LDA	LDT1	LDT2	LHD1	LHD2	MCY	MDV	MH	MHD	OBUS	SBUS	UBUS	Total
CalEEMod default	0.924704	48.18853	4.100928	24.77305	2.78405	0.730755	2.259754	14.63827	0.271332	1.119368	0.082574	0.065283	0.061403	100

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	Passenger
LDA	0.481885
LDT1	0.041009
LDT2	0.24773
MCY	0.022598
MDV	0.146383
Sum	0.939605
Trucks	
LHD1	0.02784
LHD2	0.007308
MHD	0.011194
HHD	0.009247
Sum	0.055589
	0.995194

Bradley Gardens Skilled Nursing Facility Expansion

Construction and Operational Health Risk Assessment

Prepared For

City of San Jacinto Planning Department

October 2026

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1 INTRODUCTION

This Health Risk Assessment (HRA) evaluates the potential impacts of the proposed Bradley Gardens Skilled Nursing Facility Expansion Project ("Project", or "proposed Project"). The Project site is within the southwestern portion of the City of San Jacinto in Riverside County, California. The Project site is located at 980 West (W.) 7th Street, at the southeast corner of the intersection of W. 7th Street and South (S.) Grand Avenue. Regional access to the Project site is provided by State Route (SR) 79 and SR 74. Local access to the site is provided by W. 7th Street and S. Grand Avenue. The Project site consists of one parcel encompassing approximately 2.98 acres. The site is identified as Assessor's Parcel Number (APN) 435-330-003. The Project site is developed and currently operates as the Bradley Gardens facility, which offers a variety of psychiatric-focused care to patients with varying health needs, including supervised Psychiatric Health Facility (PHF) care beds, Skilled Nursing Facility (SNF) and Short-Term Psychiatric (STP) care beds, and rehabilitation and therapy programs. The proposed Project is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The Project site location is shown in Figure 1, *Project Aerial.*

The Project proposes the expansion of the existing Bradley Gardens Nursing Facility on the 2.98-acre site. The Project includes demolition of the existing 1,074-square-foot (SF) maintenance and storage building for the construction of an 18,000 SF building addition to the existing 44-bed SNF building that would provide 43 additional SNF and STP beds, resulting in a total capacity of 87 beds. The Project also proposes the conversion of the existing 2,596 SF vacant office building into a 16-bed PHF. The Project would also include a proposed emergency generator. The existing emergency generator has a temporary use permit and would be replaced as part of the Project. Because the existing generator would be removed, its emissions were not included in this analysis. The proposed Project would result in a floor area ratio (FAR) of 0.27. Additional improvements would include landscaping, utility connections, implementation of stormwater facilities, lighting, and pavement of parking areas and driveways. With the completion of the proposed Project, there would be a total of 103 beds (SNF, STP, and PHF beds) on the Project site. The Project site has an existing General Plan land use designation of Industrial (I) and is zoned as Industrial Light (IL). The proposed Project site plan is shown in Figure 2, *Conceptual Site Plan*. It should be noted that the Project site plan shows 17,372 SF for the 43-bed addition; this analysis utilized 18,000 SF for this 43-bed addition, presenting a conservative analysis.

Figure 1: Project Aerial



Created with Vertical © 2026 Nearmap US, Inc.

Legend

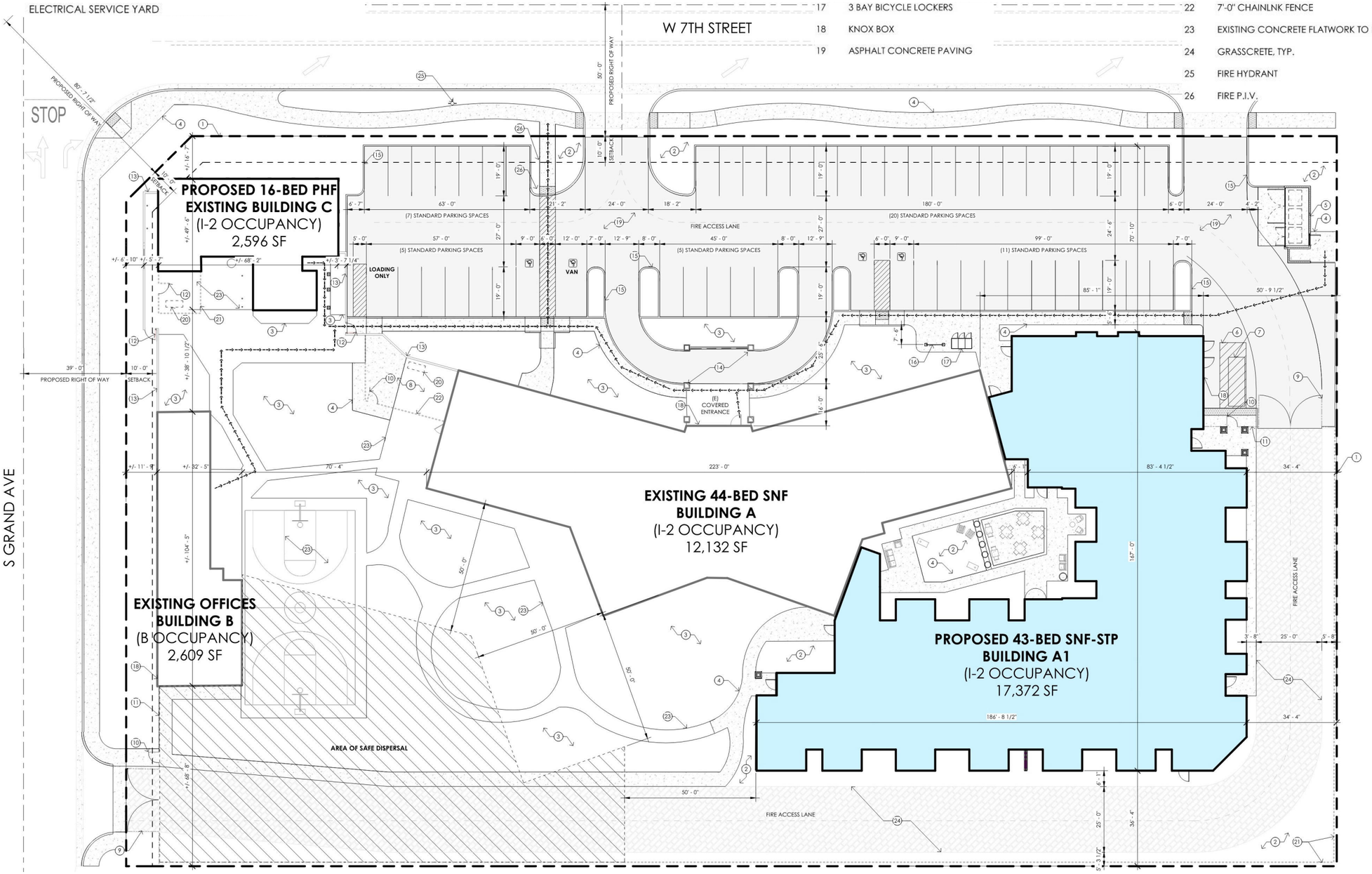
Project Boundary

0 100 200
US Feet

N

KEYNOTES

1 PROPERTY LINE
2 LANDSCAPING
3 EXISTING LANDSCAPING TO REMAIN
4 CONCRETE WALKWAY, TYP.
5 TRASH ENCLOSURE PER 17.305.130 WITH ADJACENT CAN WASH AREA
6 10' X 25' LOADING SPACE
7 GREASE INTERCEPTOR
8 ELECTRICAL SERVICE YARD
9 12'-0"W. X 7'-0"H. VEHICULAR GATES WITH HEAVY DUTY HINGES, FOR FIRE LANE ACCESS ONLY
10 4'-0"W. GATE TO MATCH EXISTING GATES, WITH PANIC HARDWARE AND CONTROLLED EGRESS
11 EXISTING 7'-0"H. VINYL FENCE WITH STEEL FRAMES AT VEHICULAR GATES
12 EXISTING 4'-0" W. GATE TO REMAIN
13 EXISTING 7'-0" H. CMU WALL TO REMAIN
14 EXISTING PORTE COCHERE WITH 5'-0" X 20'-0" MINMUM PASSENGER DROP OFF AND LOADING ZONE
15 6" CONCRETE CURB
16 3 SPACE BICYCLE RACK PARKING
17 3 BAY BICYCLE LOCKERS
18 KNOX BOX
19 ASPHALT CONCRETE PAVING
20 EMERGENCY GENERATOR ON 8" CONCRETE PAD
21 EXISTING 7'-0" CHAINLINK FENCE TO REMAIN
22 7'-0" CHAINLNK FENCE
23 EXISTING CONCRETE FLATWORK TO REMAIN
24 GRASSCRETE, TYP.
25 FIRE HYDRANT
26 FIRE P.I.V.



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1.1 Access and Parking

Access to the proposed Project would be provided via three driveways. The Project would consolidate the two existing driveways on W. 7th Street that are located along the center of the site's northern boundary into one 24-foot-wide driveway. The existing driveway on W. 7th Street in the northeastern corner of the site would be widened to a width of 24 feet. Both these driveways would provide unrestricted ingress and egress for automobiles. In addition, a gated 25-foot-wide driveway is proposed from S. Grand Avenue in the southwest corner of the site to provide emergency vehicle access to the site. A 27.3-foot-wide drive aisle would be constructed in the surface parking lot.

Upon implementation of the proposed Project, the expanded Bradley Gardens facility would include a total of 52 passenger vehicle parking spaces, including 4 accessible spaces. The proposed parking spaces would be provided in a surface lot along the northern boundary of the Project site for employees, patients, and visitors. In addition, up to 3 short-term bicycle parking spaces and 3 long-term bicycle parking spaces would be provided near the entrance to the existing SNF building for a total of 6 bicycle parking spaces.

1.2 Construction Characteristics

Construction of the Project would have a duration of approximately 11 months, as shown below in Table 1, *Construction Schedule*. Construction activity was assumed to occur eight hours per day, five days a week.

Table 1: Construction Schedule

Activity	Start Date	End Date	Total Working Days
Demolition	12/1/2026	12/9/2026	7
Site Preparation	12/10/2026	12/16/2026	5
Grading	12/17/2026	12/23/2026	5
Building Construction	12/24/2026	12/8/2027	250
Paving	12/24/2026	12/30/2026	5
Architectural Coating	11/24/2027	11/30/2027	5

Source: CalEEMod Output Sheets (see Appendix A)

1.3 Operational Characteristics

The Project is analyzed as a healthcare facility. Typical operational characteristics include employees, patients, and visitors traveling to and from the site. The proposed Project would not change the existing operations of the Bradley Gardens facility, which operates 24 hours a day, seven days a week. The proposed

Project would add 100 new employees across all shifts to the existing facility, which currently includes 150 employees, resulting in a total employee count of 250. The existing facility currently has a capacity of 44 beds. Implementation of the proposed Project would add 59 beds, consisting of 43 additional SNF/STP beds and 16 PHF beds, resulting in a total capacity of 103 beds at the facility. Operational characteristics include trips from residents (passenger vehicles), as well as an emergency generator operating at a maximum of 200 hours per year. The Project is expected to begin operation in 2028.

1.4 Purpose of the Report

To support the California Environmental Quality Act (CEQA) document for the proposed Project, this report evaluates the potential health impacts to sensitive receptors from the construction and operation of the Project. This HRA focuses on diesel particulate matter (DPM) emissions from on-road vehicles and off-road equipment used during Project construction, as well as emissions from the proposed emergency generator during Project operation. DPM has been identified by the California Air Resources Board (CARB) as a carcinogenic substance responsible for nearly 70 percent of the airborne cancer risk in California (California Air Resources Board, 2017). The estimated health risk impacts from the Project construction were compared to the health risk significance thresholds recommended by the SCAQMD for use in CEQA assessments.

This HRA employed the following tools to estimate the health impact of the Project:

- The California Air Pollution Control Officers Association (CAPCOA) California Emissions Estimator Model (CalEEMod, Version 2022.1) to calculate exhaust emissions from mobile sources such as diesel trucks and construction equipment, such as crawler tractors and cranes, during the construction of the Project.
- The United States Environmental Protection Agency (USEPA) AMS/EPA Regulatory Model (AERMOD Version 26135) air dispersion model to estimate DPM impacts to sensitive receptors.
- Cancer risk methodology from the California Office of Environmental Health Hazards Assessment (OEHHA) (California Office of Environmental Health Hazards Assessment, 2015) and the SCAQMD (South Coast Air Quality Management District, 2017).
- The California Air Resources Board (CARB) EMFAC2021 emissions model to estimate diesel particulate matter (DPM) emissions from the proposed emergency generator during Project operation, based on the generator's horsepower, load factor, and annual operating hours.

1.5 Summary of the Results

The emissions from the Project's construction and operation, would not result in cancer health risks that exceed the lifetime cancer risk threshold of 10 in one million at the maximum impacted sensitive receptors. The Project's emissions for construction and operation would also not result in a non-cancer risk greater than the 1.0 non-cancer hazard index threshold. The Project's maximum construction, operational, and combined health risk impacts would result in the following. The Project's maximum health risk results are summarized below.

Maximum Project Construction Health Risk Results:

- Sensitive/residential receptor: 4.76 in one million
- Worker receptor: 0.13 in one million
- Sensitive/residential receptor chronic non-cancer HI: 0.01
- Worker receptor chronic non-cancer HI: 0.01

Maximum Project Operational Health Risk Results:

- Sensitive/residential receptor for the 30-year lifetime exposure duration: 2.21 in one million
- Worker receptor: 0.24 in one million
- Sensitive receptor chronic non-cancer HI: <0.01
- Worker receptor chronic non-cancer HI: 0.05

Combined Project Construction and Operational Cancer Risk Results:

- Sensitive/residential receptor for the 30-year exposure duration: 2.37 in one million
- Worker receptor: 0.36 in one million

The Project construction and operational individual and cumulative health risk results, would not exceed the SCAQMD significance threshold of 10 in one million or the HI threshold of 1.0. Therefore, the construction and operation of the proposed Project would result in a less-than-significant project-level and cumulative impact for cancer and non-cancer health risk.

2 HEALTH RISK ASSESSMENT

A Health Risk Assessment (HRA) is a guide that helps determine whether the risks from current or future exposures to a toxic chemical or substance in the environment could affect the health of a population. In general, the quantification of risk from the development of a project depends on the following factors:

- Identification of the toxic air contaminants (TACs) that may be present in the air;
- Estimation of the amount of TACs released from all emission sources using emission models;
- Estimation of the airborne concentrations of TACs in the geographic area of concern using air dispersion models with information about emissions, source locations, weather, and other factors;
- Estimation of the level of exposure to different concentrations of the TACs at different geographic locations and their consequential health impacts.

Thus, an HRA identifies the TACs that could affect public health, identifies the sources and quantities of the TAC emissions, estimates where the emissions are transported by prevailing meteorological conditions, and assesses the consequential health impacts due to the identified exposures.

The State of California Office of Environmental Health Hazards Assessment (OEHHA) has developed methods for conducting HRAs. As defined under the Air Toxics "Hot Spots" Information and Assessment Act:

> "*A health risk assessment means a detailed, comprehensive analysis prepared pursuant to Section 44361 to evaluate and predict the dispersion of hazardous substances in the environment and the potential for exposure of human populations and to assess and quantify both the individual and population-wide health risks associated with those levels of exposure.*" *(California Health and Safety Code, 1987)*

The methodology used to estimate health risks and hazards that could potentially affect nearby sensitive receptors from the emissions of TACs is described below. The methodology includes assumptions regarding emission source quantification, configurations and locations, receptor locations, air dispersion modeling, and health risk modeling. As noted above, this HRA focused on DPM emissions that the CARB has identified as the principal airborne carcinogenic substance in California. For purposes of this HRA, DPM was assumed to be comprised of PM_{10} vehicle exhaust emissions, which measure particulate matter with a diameter of 10 microns or less (California Air Resources Board, n.d.)

2.1 SCAQMD Significance Thresholds

Project-Level

Riverside County has not adopted a numerical significance threshold for cancer risk or non-cancer chronic health risk impacts. Therefore, the significance thresholds recommended by the SCAQMD were used for this assessment. The relevant significance thresholds are provided below:

- Cancer Risk: 10 persons per million population as the maximum acceptable incremental cancer risk due to exposure to TACs.
- Non-Cancer Hazard Index (HI): 1.0.

These thresholds are discussed further in Section 2.2, *Health Risk Estimation Methodology*.

Cumulative

The SCAQMD conducted an analysis of the cumulative effects of TACs within the South Coast Air Basin as part of its *Multiple Air Toxics Exposure Study in the South Coast Air Basin* (MATES-V, the draft version of this MATES study series*)* (South Coast Air Quality Management District, 2021a). The MATES-V study expresses cumulative TAC impacts in terms of potential increased cancer risks. Cumulative impact thresholds for this Project are derived from this study, since the Project site is within the MATES-V Study area. The MATES-V Study estimates that the cumulative TAC-source cancer risk for the localized area encompassing the Project site ranges from 300 to 400 in one million. DPM-source cancer risks are reflected in the area's ambient cumulative cancer risk along with all other TAC-source risks, and account for the predominance (68 percent) of the total risk. A cancer risk upper limit of 400 in a million was assumed to comprise the impact from existing TAC emission sources in the region, without the impacts from the Project.

The TAC emissions inventory used in the MATES-V study to estimate health impacts was representative of emissions for the year 2018. In addition to the MATES-V cumulative TAC-source cancer risk noted above, other new or proposed potential TAC-generating projects (related projects) in the Project area not included in the MATES-V study could contribute to cumulative TAC impacts. The SCAQMD has published a white paper addressing cumulative impacts from air pollution (South Coast Air Quality Management District, 2003). The white paper recommends a 1,000-foot distance from a proposed project to identify other development projects that could contribute to cumulative impacts (South Coast Air Quality Management District, 2019). The 1,000-foot evaluation distance is supported by research-based findings concerning TAC emission dispersion rates from roadways and large sources, showing that emissions diminish substantially between 500 and 1,000 feet from emission sources. While the cumulative analysis incorporates future emissions within 1,000 feet of the source, the project-specific and cumulative significance thresholds of 10 in one million for cancer risk and 1 in one million for non-cancer risk remain the same.

2.2 Health Risk Estimation Methodology

Cancer Risk

Cancer risks are estimated as the upper-bound incremental probability that an individual would develop cancer due to exposure to potential carcinogens over a specified exposure duration. The estimated risk is expressed as a probability since there is no level below which some level of impact may occur. The cancer risk attributed to a chemical is calculated by multiplying the chemical intake, or dose, at the human exchange boundaries (e.g., lungs) by the chemical-specific cancer potency factor (CPF). Cancer risk is expressed in terms of expected incremental incidence per million population. The SCAQMD has established an incidence rate of 10 persons per million as the maximum acceptable incremental cancer risk due to DPM exposure. This threshold serves to determine whether a given project has a potentially significant project-level and cumulative-level impact. The threshold of 10 in one million implies a likelihood that up to 10 persons out of one million, equally exposed, would develop cancer if exposed continuously to the levels of toxic air contaminants over a specified duration of time. This risk is an excess cancer risk in addition to any environmental cancer risk borne by a person not exposed to these air toxins.

The exposure dose is the amount of a chemical taken into the body at a given time. In particular, the exposure dose through inhalation ($Dose_{air}$) is a function of the breathing rate, the exposure frequency, and the concentration of exposure. Breathing rates change over time for different age groups and are determined for specific age groups. The $Dose_{air}$ is calculated for each of the following age groups: third trimester to birth, and 0 to 2, 2 to 16, and 16 to 30 years of age. The OEHHA recommends that the 30-year exposure duration be used as the basis for public notification and risk reduction audits and plans (California Office of Environmental Health Hazards Assessment, 2015). The risks for each age group are summed together to provide a total estimate of lifetime cancer risks for sensitive receptors. To estimate the cancer risk, the $Dose_{air}$ is estimated by applying the following equation to the DPM concentration at each receptor as calculated by the air dispersion model:

$$Dose_{air} = C_{DPM} \times DBR_i \times A \times CF_i \qquad \text{(EQ-1)}$$

Where:

$Dose_{air}$ = dose through inhalation (mg/kg/day)

C_{DPM} = period average concentration of DPM as estimated by the air dispersion model ($\mu g/m^3$)

DBR = daily breathing rate for each age group (liters/kg-day) (see Table 2)

A = Inhalation absorption factor (unitless = 1)

CF = construction-source emission frequency (days per year)

i – number of age groups

The dose is multiplied by the cancer potency factor, the age sensitivity factors (ASF), the exposure duration (ED), and the fraction of time spent at home (FAH, for sensitive/residential receptors only) divided by averaging time (AT) to arrive at an estimate of cancer risk:

$$\text{Cancer Risk} = \text{Dose}_{air,i} \times \text{CPF} \times \text{ASF}_i \times \text{ED}_i \times \text{FAH}_i/\text{AT} \quad \text{(EQ-2)}$$

Where:

Cancer Risk = Total individual excess inhalation cancer risk, defined as the cancer risk a hypothetical individual faces if exposed to carcinogenic emissions from a particular source for specified exposure durations; this risk is summed over all age groups; cancer risk is expressed in terms of risk per million exposed individuals.

$\text{Dose}_{air,i}$ = inhalation dose through inhalation (mg/kg-day)

CPF = inhalation cancer potency factor $(\text{mg/kg-day})^{-1}$

ASF_i = age sensitivity factors (see Table 2)

ED_i = exposure duration (years) (see Table 2)

AT = averaging time of lifetime cancer risk (70 years or 25550 days)

FAH_i = fraction of time spent at home (see Table 2)

n = number of age groups

For the purposes of this HRA, the operational 30-year exposure duration for sensitive/residential receptors, consistent with the OEHHA/SCAQMD guidance, was assumed to span the time period of the third trimester pre-birth in 2027 (the Project's opening year) to the year 2057. The OEHHA recommends that the 30-year exposure duration be used as the basis for public notification and risk reduction audits and plans. Estimates of cancer risk were also provided for informational purposes for child exposure (third trimester pre-birth to 9 years), and an adult exposure (30 years) using the maximum operational DPM emissions. A 25-year duration was utilized for the maximally impacted worker receptor using the maximum operational DPM emissions. Analysis of the Project's operation utilizes the OEHHA recommended 30-year exposure. The Project's construction duration is estimated to span 0.99 years. Thus, the construction health risk impact is only calculated across the 0.99 years of construction, utilizing the maximum construction DPM emissions. This encompasses the third trimester pre-birth in 2026 (start of construction) to the year of construction completion in 2027.

The combined construction and operational health risk uses an exposure duration of 30.25 years, consisting of the third trimester pre-birth and the 30-year exposure duration as recommended by OEHHA. The combined construction and operational health risk analyzes the third trimester pre-birth and the first 0.99 years (construction duration) using the maximum construction DPM emissions, with the remaining 29.26 years utilizing the maximum operational DPM emissions.

Table 2, *Exposure Assumptions for Cancer Risk–OEHHA/SCAQMD Guidance*, provides the values for the various cancer risk parameters shown in equations EQ-1 and EQ-2 for the receptor groups examined in

this assessment for both construction and operation of the Project. For DPM, the value of the CPF is 1.1 milligrams per kilogram per day.

Table 2: Exposure Assumptions for Cancer Risk–OEHHA/SCAQMD Guidance

Age Group	Exposure Frequency (EF)				Exposure Duration (ED) (Years)		Age Sensitivity Factors (ASF)	Time at Home (TAH)	Daily Breathing Rate[1] (DBR) (L/kg-day)
	Construction		Operation		Construction	Operation			
	Hours/Day	Days/Year	Hours/Day	Days/Year					
Sensitive/Residential Receptor – Pre-birth to Adult (30-year duration)									
3rd Trimester to Birth	8	260	24	360	0.25	0.25	10	1	361
0 to 2 years	8	260	24	360	1.20	2.00	10	1	1,090
2 to 16 years	8	260	24	360		14	3	1	745
16 to 30 years	8	260	24	360		14	1	0.73	335
Sensitive Receptor/Residential Child (9-year duration)									
3rd Trimester to Birth	8	260	24	360	0.25	0.25	10	1	361
0 to 2 years	8	260	24	360	1.20	2	10	1	1,090
2 to 9 years	8	260	24	360		7	3	1	861
Sensitive Receptor/Residential Receptor – Adult (30-year duration)									
17 years and older	8	260	24	360	1.45	30	1	0.73	335
Worker Receptor (25-years duration)									
17 years and older	8	260	8	360	1.45	25	1		230

Notes:

[1] Daily breathing rates are representative of the 95th percentile for sensitive/residential receptors.

(L/kg-day) = liters per kilogram body weight per day

Source: (South Coast Air Quality Management District, 2017)

Age Group	Exposure Frequency (EF)				Exposure Duration (ED) (Years)		Age Sensitivity Factors (ASF)	Time at Home (TAH)	Daily Breathing Rate[1] (DBR) (L/kg-day)
	Construction		Operation		Construction	Operation			
	Hours/Day	Days/Year	Hours/Day	Days/Year					
Sensitive/Residential Receptor – Pre-birth to Adult (30-year duration)									
3rd Trimester to Birth	8	260	24	360	0.25	0.25	10	1	361
0 to 2 years	8	260	24	360	0.75	2.00	10	1	1,090
2 to 16 years	8	260	24	360		14	3	1	745
16 to 30 years	8	260	24	360		14	1	0.73	335
Sensitive Receptor/Residential Child (9-year duration)									
3rd Trimester to Birth	8	260	24	360	0.25	0.25	10	1	361
0 to 2 years	8	260	24	360	0.75	2	10	1	1,090
2 to 9 years	8	260	24	360		7	3	1	861
Sensitive Receptor/Residential Receptor – Adult (30-year duration)									
17 years and older	8	260	24	360	0.99	30	1	0.73	335
Worker Receptor (25-years duration)									
17 years and older	8	260	8	360	0.99	25	1		230

Notes:
[1] Daily breathing rates are representative of the 95th percentile for sensitive/residential receptors.
(L/kg-day) = liters per kilogram body weight per day
Source: (South Coast Air Quality Management District, 2017)

Chronic Non-Cancer Hazard

TACs can also cause chronic (long-term) effects on non-cancer illnesses such as reproductive effects, birth defects, or adverse environmental effects. Non-cancer health risks are conveyed in terms of the Hazard Index (HI), which is a ratio of the predicted concentration of the facility's reported TAC emissions to a concentration considered acceptable to public health professionals. A significant risk is defined as an HI of 1.0 or greater. An HI of less than 1.0 indicates that no significant health risks are expected from the facility's TAC emissions. The following equation gives the relationship for the non-cancer hazards for TACs:

$$HI = C_{ann}/REL \quad \text{(EQ-3)}$$

Where:

HI = Hazard Index: an expression of the potential for chronic non-cancer health risks

C_{ann} = Annual average TAC concentration ($\mu g/m^3$)

REL = Reference Exposure Level: the DPM concentration at which no adverse health effects are anticipated

Annual concentrations of DPM, which are estimated by the air dispersion model, are used to estimate chronic non-cancer hazards. The OEHHA has defined an REL for DPM of 5 $\mu g/m^3$.

2.3 Estimation of Project DPM Emissions

Construction DPM Emissions

Construction emissions were calculated using CalEEMod Version 2022.1. DPM construction emissions were based on the CalEEMod construction runs for the proposed construction schedule and equipment inventory, using exhaust PM_{10} construction emissions to represent DPM emissions. Construction-related DPM emissions are expected to primarily occur as a function of heavy-duty equipment that would operate on-site during the construction phase. Additional DPM emissions would occur from the operation of construction vehicles that travel to/from the Project during construction, which include vendor trucks, hauling, and worker vehicles. This analysis conservatively assumes that all haul and vendor trucks would use diesel fuel.

Construction Equipment Emission Inventory Development

The first requirement to conduct the HRA involves identifying and quantifying the sources of construction DPM air emissions from the Project, also termed an emissions inventory. Each piece of equipment that emits DPM is identified in terms of its location and physical characteristics (release height, exhaust temperature, etc.) and the chemical nature of the emissions. The predominant sources of DPM emissions resulting from the construction of the Project derive from the heavy-duty diesel trucks that travel to, from, and within the Project site each day, as well as the off-road construction equipment used during the six construction phases: demolition, site preparation, grading, building construction, paving, and architectural

coating. The Project's DPM exhaust emissions were calculated using the PM_{10} exhaust emissions calculated from CalEEMod. Table 3, *Project Construction Equipment Inventory*, shows the Project's proposed construction equipment. Table 4, *Project Construction Vehicle Use*, shows the proposed construction vehicle use for worker, hauling, and vendor trips. Table 5, *Project On-Site and Off-Site Construction Source DPM Daily Emissions*, depicts the maximum daily DPM emissions of the Project's construction. Figure 3, *Locations of the Project's Construction On-Site and Off-Site DPM Emission Sources,* provides the locations of the on-site and off-site construction DPM emission sources, including the off-site sewer extension.

Table 3: Project Construction Equipment Inventory

Activity	Equipment	Number	Hours per day	Horse-power	Load Factor
Demolition	Concrete/Industrial Saws	1	8	33	0.73
	Rubber Tired Dozers	1	8	367	0.4
	Tractors/Loaders/Backhoes	1	8	84	0.37
Site Preparation	Crawler Tractors	1	8	87	0.43
	Graders	1	8	148	0.41
	Rubber Tired Dozers	1	8	367	0.4
Grading	Graders	1	8	148	0.41
	Rubber Tired Dozers	1	8	367	0.4
	Crawler Tractors	1	8	87	0.43
Building Construction	Forklifts	1	8	82	0.2
	Cranes	1	8	367	0.29
	Tractors/Loaders/Backhoes	1	8	84	0.37
	Generator Sets	1	8	14	0.74
	Welders	3	8	46	0.45
Paving	Pavers	1	8	81	0.42
	Rollers	1	8	36	0.38
	Cement and Mortar Mixers	1	8	10	0.56
	Tractors/Loaders/Backhoes	1	8	84	0.37
	Paving Equipment	1	8	89	0.36
Architectural Coating	Air Compressors	1	8	37	0.48

Source: See CalEEMod Output in Appendix A.

Table 4: Project Construction Vehicle Use

Activity	Daily Worker Trips	Daily Vendor Trips	Daily Haul Trips
Demolition	8	0	1
Site Preparation	8	0	0
Grading	8	0	25
Building Construction	75	12	0
Paving	13	0	0
Architectural Coating	15	0	0

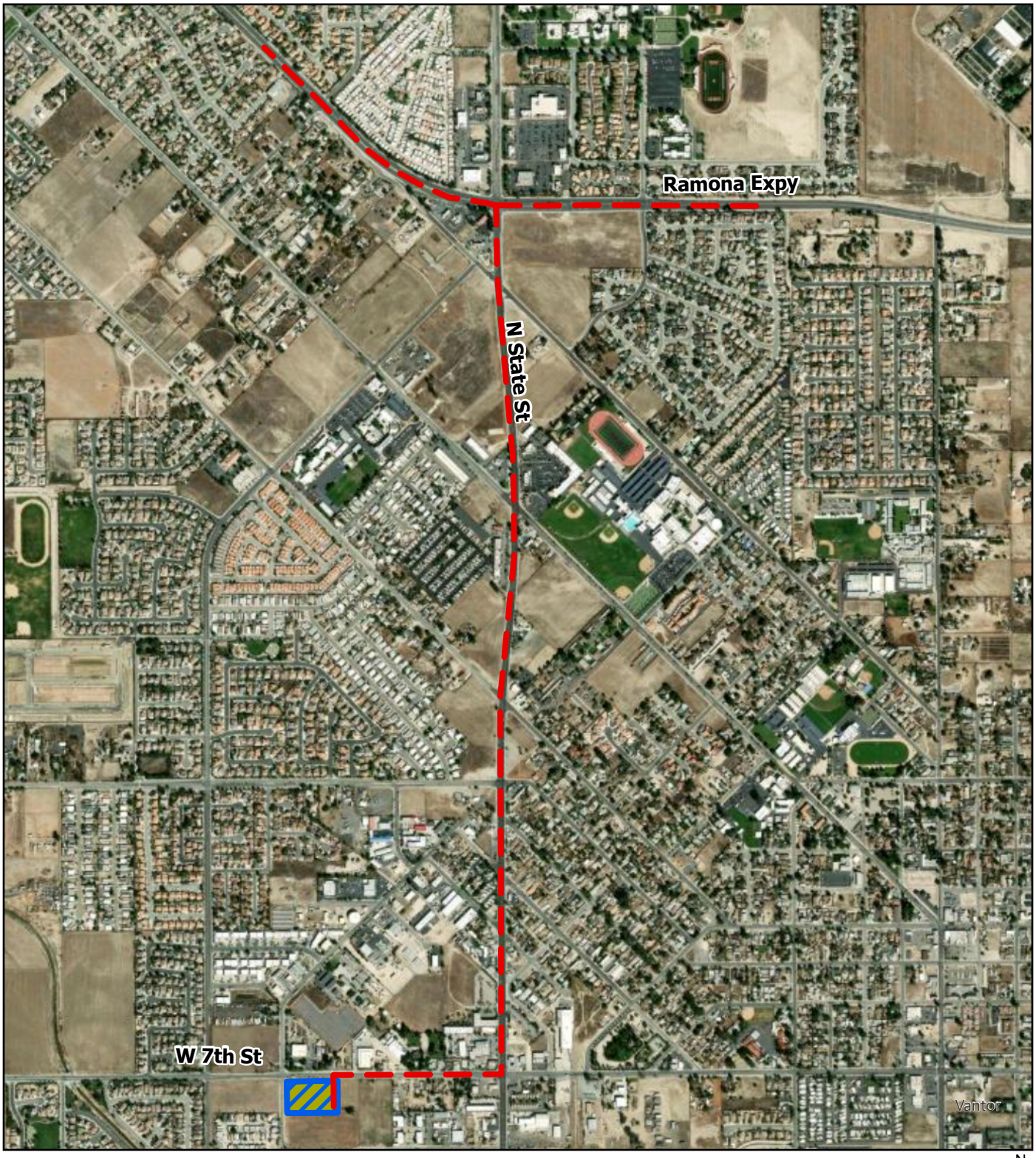
Source: See CalEEMod Output in Appendix A.

Table 5: Project On-Site and Off-Site Construction Source DPM Daily Emissions

Activity	Working Days	Maximum Daily DPM Emissions	(pounds/day)
		On-Site	Off-Site
2026			
Demolition	7	0.44	<0.01
Site Preparation	5	0.68	<0.01
Grading	5	0.68	0.03
Building Construction and Paving	5	0.55	<0.01
Maximum Daily DPM Emissions 2026		**0.68**	**0.03**
2027			
Building Construction and Architectural Coating	244	0.33	<0.01
Maximum Daily DPM Emissions 2027		**0.33**	<0.01
2026-2027 Maximum Daily DPM Emissions (pounds/day)		**0.68**	**0.03**

Source: See Data Attachment in Appendix C.1
Notes: Numbers may vary due to rounding
EMFAC Off-Model Adjustment Factors have been applied to the Off-Site DPM emissions.

Figure 3: Locations of the Project's Construction On-Site and Off-Site DPM Emission Sources



Operational Emission Sources

The operational HRA evaluates DPM emissions from the proposed emergency generator, which represents the single operational emission source included in the analysis. The generator's emissions were estimated based on its rated capacity, assumed operating load, and annual operating hours. The generator was modeled with a load factor of 0.73 and 200 operating hours per year, consistent with the permitted maximum annual operating hours. Under SCAQMD Rule 1470, up to 50 hours per year are allowed for maintenance and testing, with a permit allowing up to 200 total operating hours per year. DPM emissions from the emergency generator were evaluated to estimate potential health risks at nearby sensitive receptors over the applicable exposure duration. Mobile-source emissions from routine vehicle trips were not included in the operational HRA.

Figure 4, *Locations of Project's Operational DPM Emission Source,* provides the location of the proposed emergency generator evaluated in the operational HRA.

Figure 4: Locations of the Project's Operational DPM Emission Sources



2.4 Atmospheric Dispersion Methodology

Atmospheric dispersion modeling is the mathematical simulation of how air pollutants disperse in the ambient atmosphere. The modeling is performed with computer programs that solve algorithms simulating the movement and dispersion of air pollutants. The air dispersion model uses emissions from various emission sources and meteorological data such as wind speed and direction, air temperature, and atmospheric mixing rates to estimate the air pollutant impacts at various geographic locations (referred to as receptor locations).

Table 6, *General Modeling Assumptions*, and Table 7, *Summary of Construction and Operational Emissions Source Configuration,* provide the general assumptions applied in the AERMOD model (Version 26135). The AERMOD output sheets can be found in Appendix B.1.

Table 6: General Modeling Assumptions

Feature	Assumption
Terrain Processing	Complex terrain. Elevations were obtained for the Project site using the USGS NED 1/3 terrain data (USA, 10m). Data set: USGS_NED_13_n34w117.tif.
Land Use	Rural based on land use patterns surrounding the Project site.
Meteorological Data	Perris Meteorological Station (PERI) for the years 2010-2016
Receptor Locations	A uniform receptor grid network was used to include all existing residences and worker locations surrounding the Project site, off-site extensions, and along central off-site truck routes. Discrete receptors were placed at nearby residences, schools, and workplaces. No health care centers were observed in the immediate area. Discrete receptors are placed at ground level.
Population	Riverside County Population: ~2,492,442
Building Profile Heights	The heights of the existing and proposed buildings on the Project site were based on the provided building plans. The SNF was modeled at 16 feet 7 inches, the PHF at 14 feet, and the office building at 14 feet 6 inches.

Source: See Data Attachment in Appendix B.1, B.2 (Table A: County Population to Use in AERMOD, SCAQMD, 2006).

Table 7: Summary of Construction and Operational Emissions Source Configuration

Emission Source Type	Geometric Configuration	Relevant Assumptions
Construction Sources	Polygon Area Source	• Size of the construction area source was the size of the Project area (approximately 2.98 acres) • Construction equipment emission source release height – 5 meters (16.4 feet). • Emissions generated from the Project's CalEEMod model. See Appendix A attachments. • Construction operations: 5 days per week, 8 hours per day.
Construction Diesel Vehicle Traffic	Line Area Source	• Line source: height – 3.11 meters (10.2 feet) and plume height 5.29 meters (17.4 feet) (EPA Haul Roads Calculator); • Construction Travel Routes (Two-way): ○ Route 1: Project Site West *to/from* 7th St *to/from* South and North State Street (100%). ○ Route 2: North State Street *to/from* Ramona Expressway eastbound (50%). ○ Route 3: North State Street *to/from* Ramona Expressway westbound (50%). • All heavy-duty trucks (LHDT1&LHDT2, MHDT, and HHDT) are assumed to be diesel engines. • Construction operations: 5 days per week, 8 hours per day.
Emergency Generator	Point Source	• 236 horsepower (hp). • 73% load factor. • Emissions were estimated assuming 200 hours per year of generator operation, consistent with the permitted maximum annual operating hours under SCAQMD Rule 1470, which allows up to 50 hours per year for maintenance and testing and up to 200 hours per year of total operation. • DPM emission rate: 0.15 g/hp-hr from the CalEEMod model.

Source: See Data Attachment in Appendix B.1, B.2

2.5 Receptors

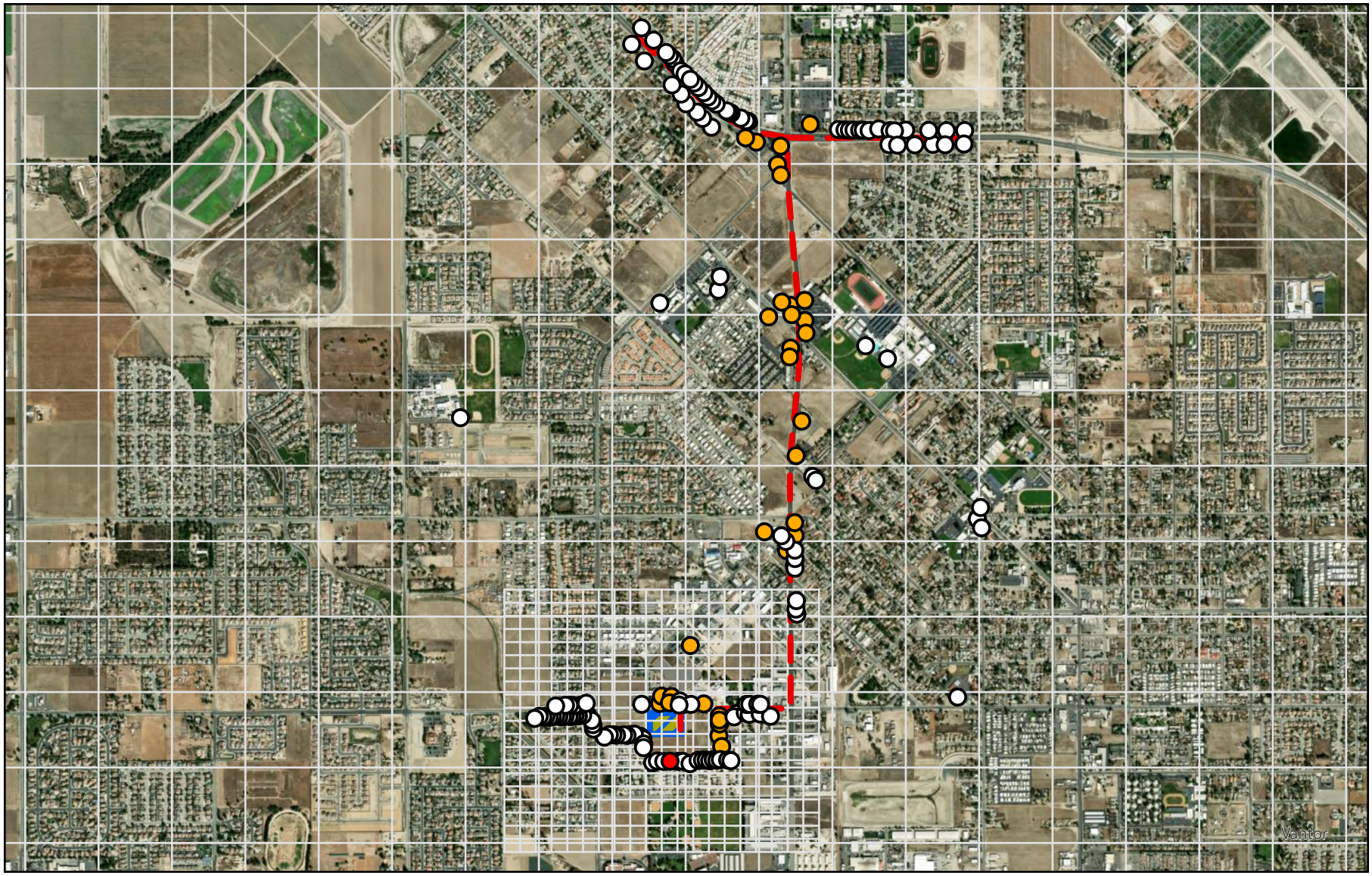
The SCAQMD defines a sensitive receptor as any residence, including private homes, condominiums, apartments, and living quarters, schools, preschools, daycare centers, and health facilities such as hospitals or retirement and nursing homes. A sensitive receptor also includes long-term care hospitals, hospices, prisons, and dormitories, or similar live-in housing (South Coast Air Quality Management District, 2021b). For the purpose of this HRA, sensitive receptors were placed within the air dispersion model at the locations of the closest existing residences and other establishments or residences nearest to the Project site that qualify as sensitive receptors. Receptor points were placed on existing residences and schools along the Project's travel routes, as well as the closest worker receptors to the Project's boundary.

The closest sensitive receptors to the Project site and the Project's on-site and off-site sources were evaluated to identify locations potentially exposed to the highest DPM emissions from Project construction and operational emissions along with the associated cancer risks.

The nearest sensitive receptor is the residence located at 943 W 7th Street, approximately 90 feet (27 meters) north of the Project site boundary. However, the most impacted sensitive receptor is the residence located at 868 W. 9th Street, approximately 377 feet (115 meters) south of the Project site boundary. The nearest worker receptor is located at Talley Metal Fabrication, 989 W. 7th Street, approximately 104 feet (32 meters) north of the Project site boundary.

Figure 5, *Locations of Air Dispersion Model Receptors*, shows the receptor locations included for the construction health risk estimation.

Figure 5: Locations of Air Dispersion Model Receptors



3 RESULTS OF THE HEALTH RISK ASSESSMENT

3.1 Project-Level Risk Results

Tables 8, 9, and 10 present a summary of the cancer risks resulting from the Project's construction, operation, and combined DPM emissions, respectively, along with the SCAQMD health risk significance thresholds. As shown in Table 8, *Summary of Project Construction Health Risk,* and Table 9, *Summary of Project Operational Health Risk,* the estimated maximum cancer risks for construction and operation are 4.76 and 2.21 in one million, respectively, for the maximally impacted sensitive/residential receptors. As shown in Table 10, *Summary of Combined Project Construction and Operational Health Risk,* the combined construction and operational cancer risk is 2.37 in one million, below the SCAQMD cancer risk threshold of 10 in one million. The estimated maximum cancer risks for worker receptors during construction and operation are 0.13 and 0.24 in one million, respectively, also below the 10 in one million threshold. The combined worker cancer risk for combined construction and operation is 0.36 in one million. Therefore, health risk impacts related to cancer would be less than significant.

The Project's estimated non-cancer health risks are 0.01 for the maximally impacted sensitive receptor and 0.01 for the maximally impacted worker receptor during construction, and less than 0.01 for the maximally impacted sensitive receptor and 0.05 for the maximally impacted worker receptor during operation. All results are below the significance threshold of 1.0. As shown in Tables 8 through 10, there are no Project-level health risks during construction and operation that would exceed the SCAQMD significance thresholds; therefore, impacts would be less than significant.

Figure 6, *Construction Model Output,* and Figure 7, *Operational Model Output,* present the respective model outputs.

Table 8 : Summary of Project Construction Health Risk

Receptor	Cancer Risk (per million)		Exceeds Significance Threshold?
	Maximum Lifetime Proposed Project Risk	Significance Threshold	
Maximum Impacted Sensitive Receptor Prebirth to 0.99 years	4.76	10	No
Maximum Impacted Sensitive Receptor Adult (0.99 years)	0.18	10	No
Maximum Impacted Worker Receptor (0.99 years)	0.13	10	No
Receptor	**Chronic Non-Cancer Hazard Index**		**Exceeds Significance Threshold?**
	Maximum Lifetime Proposed Project Risk	**Significance Threshold**	
Maximum Impacted Sensitive Receptor	0.01	1.0	No
Maximum Impacted Worker Receptor	0.01	1.0	No

Source: See Data Attachment in Appendix D.1

Table 9: Summary of Project Operational Health Risk

Receptor	Cancer Risk (per million)		Exceeds Significance Threshold?
	Maximum Lifetime Proposed Project Risk	Significance Threshold	
Maximum Impacted Sensitive Receptor – Infant to Adult (30 years)	2.21	10	No
Maximum Impacted Sensitive Receptor – Adult (30 years)	1.44	10	No
Maximum Impacted Worker Receptor (25 years)	0.24	10	No
Receptor	**Chronic Non-Cancer Hazard Index**		**Exceeds Significance Threshold?**
	Maximum Lifetime Proposed Project Risk	**Significance Threshold**	
Maximum Impacted Sensitive Receptor	<0.01	1.0	No
Maximum Impacted Worker Receptor	0.05	1.0	No

Source: See Data Attachment in Appendix D.2.

Table 10: Summary of Combined Project Construction and Operational Health Risk

Receptor	Cancer Risk (per million)		Exceeds Significance Threshold?
	Maximum Lifetime Proposed Project Risk	Significance Threshold	
Maximum Impacted Sensitive Receptor Prebirth to 30 years	2.37	10	No
Maximum Impacted Worker (25 years)	0.36	10	No

Source: See Data Attachment in Appendix D.3.

Figure 6: Construction Model Output

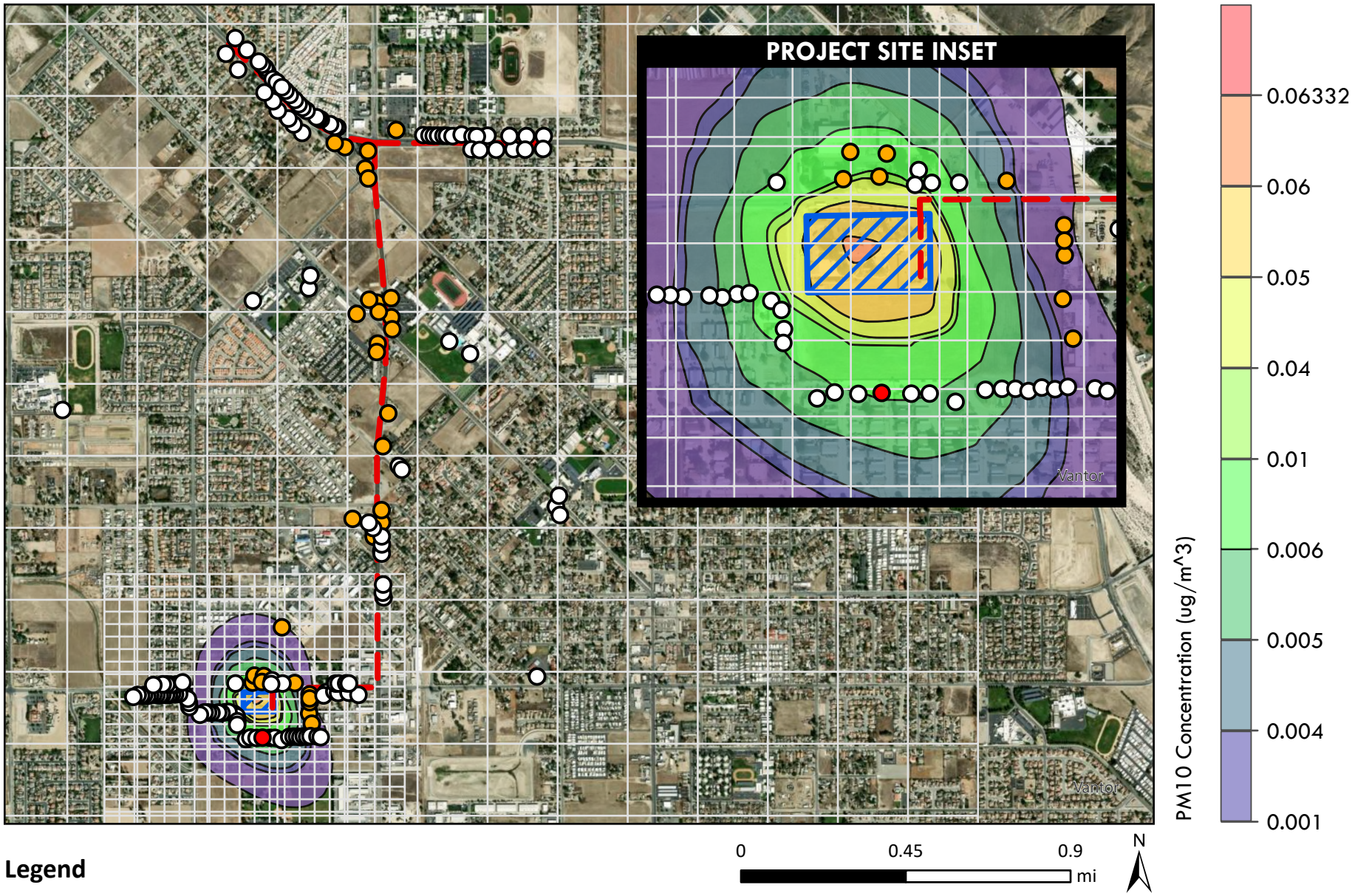
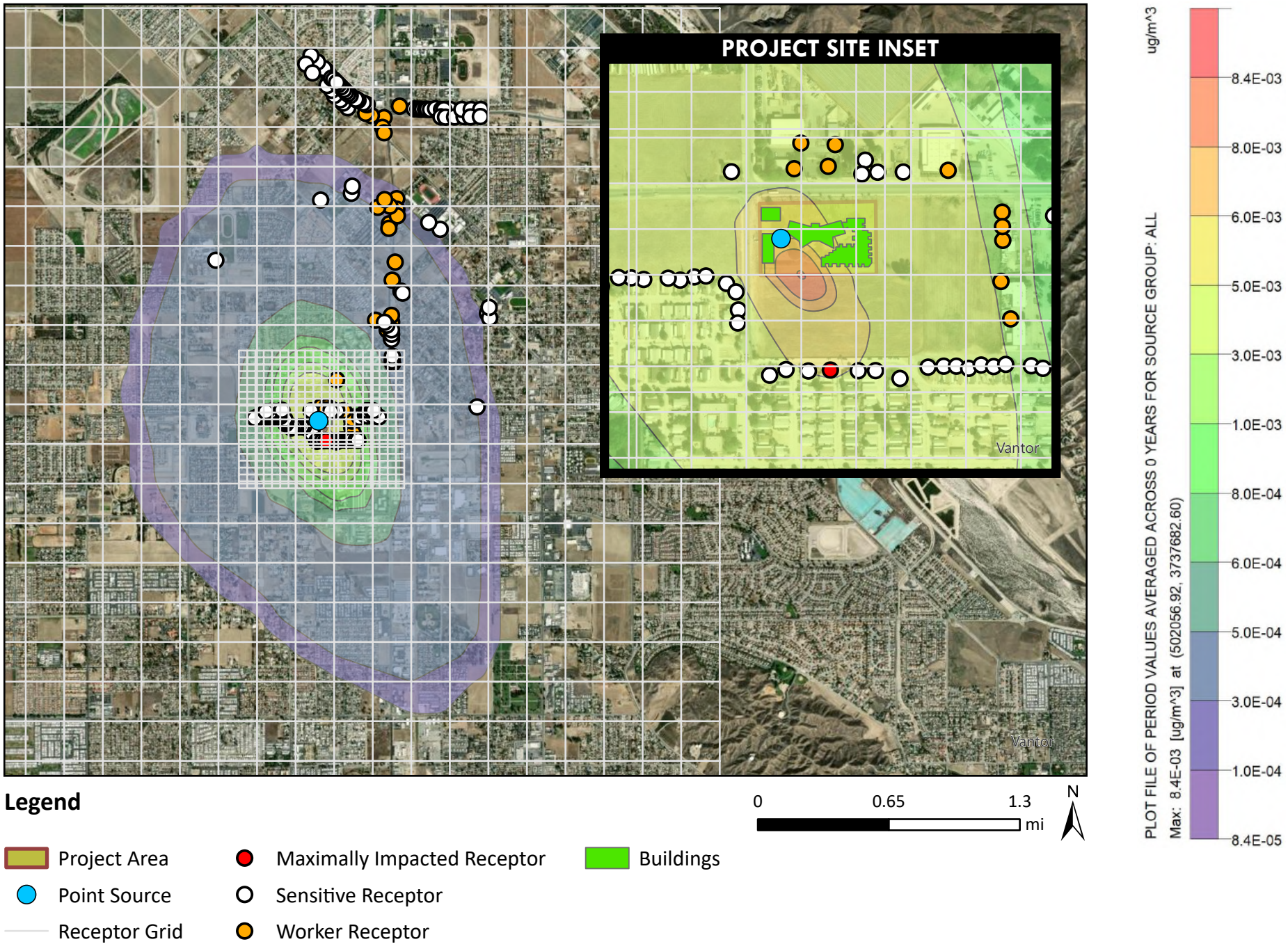


Figure 7: Operational Model Output



3.2 Cumulative Analysis

The SCAQMD has applied a 1,000-foot distance from a proposed project to identify other development projects that could contribute to cumulative impacts. The search radius for this Project was extended to 0.25 miles (1,320 feet) to identify potential cumulative sources. The proposed Project is within an urban area with existing residential and commercial-source emissions, and no significant sources in development were identified in the 0.25-mile radius. As described in Section 2.1, *SCAQMD Significance Thresholds*, project-specific thresholds were established at levels intended to reduce cumulative health risk impacts. Therefore, project-specific thresholds are the same as cumulative thresholds. The Project's maximum cancer risk is less than the 10 in one million project-level SCAQMD threshold. In addition, the Project's maximum non-cancer risk is less than the 1 in one million threshold. Since the Project would not exceed the project-level thresholds, the Project would also have a less-than-significant cumulative impact on cancer and non-cancer risks.

4 CONCLUSION

The emissions from Project construction and operation, including emissions from the emergency generator during operation, would not result in cancer health risk results that exceed the lifetime cancer risk threshold of 10 in one million at the maximum impacted sensitive receptor. The Project's emissions for construction and operation impacts would also not result in a non-cancer risk greater than the 1.0 non-cancer hazard index threshold. The Project's maximum construction, operational, and combined health risk impacts would result in the following:

Maximum Project Construction Health Risk Results:

- Sensitive/residential receptor: 4.76 in one million
- Worker receptor: 0.13 in one million
- Sensitive receptor chronic non-cancer HI: 0.01
- Worker receptor chronic non-cancer HI: 0.01

Maximum Project Operational Health Risk Results:

- Sensitive/residential receptor for the 30-year lifetime exposure duration: 2.21 in one million
- Worker receptor: 0.24 in one million
- Sensitive receptor chronic non-cancer HI: <0.01
- Worker receptor chronic non-cancer HI: 0.05

Combined Project Construction and Operational Cancer Risk Results:

- Sensitive/residential receptor for the 30-year exposure duration: 2.37 in one million
- Worker receptor: 0.36 in one million

The Project construction and operational health risk results, including emissions from the emergency generator in the operational analysis, would not exceed the SCAQMD significance threshold of 10 in one million or the HI threshold of 1.0. Therefore, the construction and operation of the proposed Project would result in a less-than-significant project-level and cumulative impact for cancer and non-cancer health risk.

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APPENDIX A – CALEEMOD OUTPUT FOR PROJECT CONSTRUCTION AND OPERATION

26-017 Bradley Gardens San Jacinto-Proposed Project -10-19 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	26-017 Bradley Gardens San Jacinto-Proposed Project -10-19
Construction Start Date	12/1/2026
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50000
Precipitation (days)	22.4000
Location	980 W 7th St, San Jacinto, CA 92582, USA
County	Riverside-South Coast
City	San Jacinto
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5571
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

Data Field	Value
App Version	2022.1.1.46

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Congregate Care (Assisted Living)	103.000	Dwelling Unit	0.75000	32,741.0	40,362.0	—	333.000	Congregate Facility Units
Other Non-Asphalt Surfaces	1.70000	Acre	1.70000	0.02000	0.00000	—	1,040.00	—
Parking Lot	52.0000	Space	0.47000	0.00000	0.00000	—	—	Parking Space
General Office Building	2.60900	1000sqft	0.06000	2,609.00	0.00000	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Unmit.	1.41121	10.0908	16.4997	0.02530	0.31429	1.39241	0.54637	3,549.85

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Unmit.	52.6852	15.6315	23.5403	0.03580	0.71654	4.07632	1.80679	4,756.01
Average Daily (Max)	—	—	—	—	—	—	—	—
Unmit.	1.63587	6.82289	10.3866	0.01697	0.21069	0.92467	0.36405	2,332.83
Annual (Max)	—	—	—	—	—	—	—	—
Unmit.	0.29855	1.24518	1.89556	0.00310	0.03845	0.16875	0.06644	386.226
Exceeds (Daily Max)	—	—	—	—	—	—	—	—
Threshold	75.0000	100.0000	550.000	150.000	150.000	150.000	55.0000	—
Unmit.	No	No	No	No	No	No	No	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—
Threshold	75.0000	100.0000	550.000	150.000	150.000	150.000	55.0000	—
Unmit.	No	No	No	No	No	No	No	—

2.2. Construction Emissions by Year

2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—

Year	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
2027	1.41121	10.0908	16.4997	0.02530	0.31429	1.39241	0.54637	3,549.85
Daily - Winter (Max)	—	—	—	—	—	—	—	—
2026	2.28866	15.6315	23.5403	0.03580	0.71654	4.07632	1.80679	4,756.01
2027	52.6852	11.3076	17.5406	0.02760	0.33969	1.61386	0.61569	3,832.27
Average Daily	—	—	—	—	—	—	—	—
2026	0.10043	0.84111	0.95022	0.00164	0.03597	0.13699	0.06709	201.424
2027	1.63587	6.82289	10.3866	0.01697	0.21069	0.92467	0.36405	2,332.83
Annual	—	—	—	—	—	—	—	—
2026	0.01833	0.15350	0.17342	0.00030	0.00656	0.02500	0.01224	33.3480
2027	0.29855	1.24518	1.89556	0.00310	0.03845	0.16875	0.06644	386.226

2.2.2. Onsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—
2027	1.10319	9.47687	11.4072	0.02273	0.30915	0.30915	0.28441	2,166.54
Daily - Winter (Max)	—	—	—	—	—	—	—	—
2026	1.93267	14.8651	18.6587	0.03323	0.68347	3.49274	1.62384	3,272.35
2027	52.3373	10.5851	12.9077	0.02503	0.33454	0.33454	0.30778	2,345.16
Average Daily	—	—	—	—	—	—	—	—
2026	0.09322	0.79983	0.84548	0.00144	0.03543	0.10688	0.05926	148.996

Year	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
2027	1.44017	6.35782	7.65514	0.01524	0.20725	0.20725	0.19067	1,452.46
Annual	—	—	—	—	—	—	—	—
2026	0.01701	0.14597	0.15430	0.00026	0.00647	0.01951	0.01082	24.6680
2027	0.26283	1.16030	1.39706	0.00278	0.03782	0.03782	0.03480	240.471

2.2.3. Offsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—
2027	0.30802	0.61395	5.09251	0.00257	0.00514	1.08326	0.26195	1,383.32
Daily - Winter (Max)	—	—	—	—	—	—	—	—
2026	0.35600	1.97289	4.88152	0.01157	0.03307	1.24665	0.30025	1,871.69
2027	0.34786	0.72254	4.63285	0.00257	0.00514	1.27931	0.30791	1,487.11
Average Daily	—	—	—	—	—	—	—	—
2026	0.00721	0.04129	0.10475	0.00020	0.00054	0.03011	0.00782	52.4276
2027	0.19570	0.46507	2.73148	0.00172	0.00344	0.71742	0.17338	880.370
Annual	—	—	—	—	—	—	—	—
2026	0.00132	0.00753	0.01912	0.00004	0.00010	0.00550	0.00143	8.67999
2027	0.03571	0.08488	0.49849	0.00031	0.00063	0.13093	0.03164	145.755

2.3. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Unmit.	3.00253	2.74958	19.3798	0.03779	0.11135	3.15062	0.88055	5,404.24
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Unmit.	2.40298	2.78383	11.3285	0.03547	0.10842	3.14770	0.87834	5,171.97
Average Daily (Max)	—	—	—	—	—	—	—	—
Unmit.	2.50531	2.26949	14.6624	0.03305	0.08319	2.88444	0.79245	4,914.12
Annual (Max)	—	—	—	—	—	—	—	—
Unmit.	0.45722	0.41418	2.67589	0.00603	0.01518	0.52641	0.14462	813.588
Exceeds (Daily Max)	—	—	—	—	—	—	—	—
Threshold	55.0000	55.0000	550.000	150.000	150.000	150.000	55.0000	—
Unmit.	No	No	No	No	No	No	No	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—
Threshold	55.0000	55.0000	550.000	150.000	150.000	150.000	55.0000	—
Unmit.	No	No	No	No	No	No	No	—
Exceeds (Annual)	—	—	—	—	—	—	—	—
Threshold	—	—	—	—	—	—	—	3,000.00
Unmit.	—	—	—	—	—	—	—	No

2.4. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Mobile	1.23277	1.25620	12.2661	0.03341	0.02286	3.06214	0.79278	3,472.03
Area	1.36184	0.05629	5.96728	0.00026	0.00294	0.00294	0.00221	16.1470
Energy	0.02068	0.35462	0.15892	0.00226	0.02858	0.02858	0.02858	1,066.51
Water	—	—	—	—	—	—	—	72.4253
Waste	—	—	—	—	—	—	—	577.920
Refrig.	—	—	—	—	—	—	—	0.42211
Stationary	0.38724	1.08247	0.98751	0.00186	0.05697	0.05697	0.05697	198.787
Total	3.00253	2.74958	19.3798	0.03779	0.11135	3.15062	0.88055	5,404.24
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Mobile	1.16116	1.34674	10.1821	0.03135	0.02287	3.06215	0.79279	3,255.90
Area	0.83390	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Energy	0.02068	0.35462	0.15892	0.00226	0.02858	0.02858	0.02858	1,066.51
Water	—	—	—	—	—	—	—	72.4253
Waste	—	—	—	—	—	—	—	577.920
Refrig.	—	—	—	—	—	—	—	0.42211
Stationary	0.38724	1.08247	0.98751	0.00186	0.05697	0.05697	0.05697	198.787
Total	2.40298	2.78383	11.3285	0.03547	0.10842	3.14770	0.87834	5,171.97
Average Daily	—	—	—	—	—	—	—	—
Mobile	1.07694	1.28318	9.87520	0.02960	0.02138	2.82263	0.73114	3,076.85

Sector	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Area	1.19550	0.03856	4.08718	0.00018	0.00201	0.00201	0.00152	11.0596
Energy	0.02068	0.35462	0.15892	0.00226	0.02858	0.02858	0.02858	1,066.51
Water	—	—	—	—	—	—	—	72.4253
Waste	—	—	—	—	—	—	—	577.920
Refrig.	—	—	—	—	—	—	—	0.42211
Stationary	0.21219	0.59313	0.54110	0.00102	0.03122	0.03122	0.03122	108.924
Total	2.50531	2.26949	14.6624	0.03305	0.08319	2.88444	0.79245	4,914.12
Annual	—	—	—	—	—	—	—	—
Mobile	0.19654	0.23418	1.80222	0.00540	0.00390	0.51513	0.13343	509.408
Area	0.21818	0.00704	0.74591	0.00003	0.00037	0.00037	0.00028	1.83105
Energy	0.00377	0.06472	0.02900	0.00041	0.00522	0.00522	0.00522	176.573
Water	—	—	—	—	—	—	—	11.9908
Waste	—	—	—	—	—	—	—	95.6812
Refrig.	—	—	—	—	—	—	—	0.06989
Stationary	0.03872	0.10825	0.09875	0.00019	0.00570	0.00570	0.00570	18.0337
Total	0.45722	0.41418	2.67589	0.00603	0.01518	0.52641	0.14462	813.588

3. Construction Emissions Details

3.1. Demolition (2026)

3.1.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18962	10.8750	10.8001	0.01856	0.43873	0.43873	0.40363	1,919.79
Demolition	—	—	—	—	—	0.00987	0.00149	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02281	0.20856	0.20712	0.00036	0.00841	0.00841	0.00774	36.8179
Demolition	—	—	—	—	—	0.00019	0.00003	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00416	0.03806	0.03780	0.00006	0.00154	0.00154	0.00141	6.09562
Demolition	—	—	—	—	—	0.00003	0.00001	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	0.02993	0.03282	0.40841	0.00000	0.00000	0.09803	0.02298	96.2644
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00029	0.02217	0.00531	0.00013	0.00038	0.00555	0.00183	20.2906
Average Daily	—	—	—	—	—	—	—	—
Worker	0.00057	0.00069	0.00819	0.00000	0.00000	0.00185	0.00043	1.87202
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00001	0.00043	0.00010	< 0.000005	0.00001	0.00011	0.00003	0.38933
Annual	—	—	—	—	—	—	—	—
Worker	0.00010	0.00013	0.00150	0.00000	0.00000	0.00034	0.00008	0.30994
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	< 0.000005	0.00008	0.00002	< 0.000005	< 0.000005	0.00002	0.00001	0.06446

3.2. Site Preparation (2026)

3.2.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Off-Road Equipment	1.52120	13.4444	13.1519	0.02119	0.68347	0.68347	0.62879	2,303.58
Dust From Material Movement	—	—	—	—	—	2.39293	0.94998	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02084	0.18417	0.18016	0.00029	0.00936	0.00936	0.00861	31.5559
Dust From Material Movement	—	—	—	—	—	0.03278	0.01301	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00380	0.03361	0.03288	0.00005	0.00171	0.00171	0.00157	5.22444
Dust From Material Movement	—	—	—	—	—	0.00598	0.00237	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	0.02993	0.03282	0.40841	0.00000	0.00000	0.09803	0.02298	96.2644

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—
Worker	0.00041	0.00049	0.00585	0.00000	0.00000	0.00132	0.00031	1.33716
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Worker	0.00007	0.00009	0.00107	0.00000	0.00000	0.00024	0.00006	0.22138
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3. Grading (2026)

3.3.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	1.52120	13.4444	13.1519	0.02119	0.68347	0.68347	0.62879	2,303.58
Dust From Material Movement	—	—	—	—	—	2.80927	0.99505	—

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02084	0.18417	0.18016	0.00029	0.00936	0.00936	0.00861	31.5559
Dust From Material Movement	—	—	—	—	—	0.03848	0.01363	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00380	0.03361	0.03288	0.00005	0.00171	0.00171	0.00157	5.22444
Dust From Material Movement	—	—	—	—	—	0.00702	0.00249	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	0.02993	0.03282	0.40841	0.00000	0.00000	0.09803	0.02298	96.2644
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.02535	1.94007	0.46462	0.01157	0.03307	0.48555	0.15997	1,775.43
Average Daily	—	—	—	—	—	—	—	—

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Worker	0.00041	0.00049	0.00585	0.00000	0.00000	0.00132	0.00031	1.33716
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00037	0.02672	0.00630	0.00016	0.00045	0.00658	0.00217	24.3329
Annual	—	—	—	—	—	—	—	—
Worker	0.00007	0.00009	0.00107	0.00000	0.00000	0.00024	0.00006	0.22138
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00007	0.00488	0.00115	0.00003	0.00008	0.00120	0.00040	4.02859

3.4. Building Construction (2026)

3.4.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15048	9.85821	11.4601	0.02273	0.34482	0.34482	0.31724	2,166.60
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01801	0.15434	0.17941	0.00036	0.00540	0.00540	0.00497	33.9194
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00329	0.02817	0.03274	0.00006	0.00099	0.00099	0.00091	5.61574
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	0.29926	0.32819	4.08379	0.00000	0.00000	0.98025	0.22977	962.579
Vendor	0.00686	0.38350	0.11706	0.00257	0.00514	0.10301	0.03218	360.639
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—
Worker	0.00466	0.00562	0.06688	0.00000	0.00000	0.01513	0.00354	15.2808
Vendor	0.00011	0.00603	0.00181	0.00004	0.00008	0.00159	0.00050	5.64968
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Worker	0.00085	0.00103	0.01221	0.00000	0.00000	0.00276	0.00065	2.52991
Vendor	0.00002	0.00110	0.00033	0.00001	0.00001	0.00029	0.00009	0.93537
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5. Building Construction (2027)

3.5.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10319	9.47687	11.4072	0.02273	0.30915	0.30915	0.28441	2,166.54
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10319	9.47687	11.4072	0.02273	0.30915	0.30915	0.28441	2,166.54
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73834	6.34264	7.63458	0.01521	0.20690	0.20690	0.19035	1,450.01
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13475	1.15753	1.39331	0.00278	0.03776	0.03776	0.03474	240.066
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Worker	0.30091	0.26040	4.98156	0.00000	0.00000	0.98025	0.22977	1,029.15
Vendor	0.00711	0.35354	0.11096	0.00257	0.00514	0.10301	0.03218	354.166
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	0.28438	0.29430	3.76551	0.00000	0.00000	0.98025	0.22977	944.609
Vendor	0.00661	0.36938	0.11423	0.00257	0.00514	0.10301	0.03218	353.579
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—
Worker	0.19033	0.21744	2.64521	0.00000	0.00000	0.64662	0.15142	640.966
Vendor	0.00459	0.24675	0.07544	0.00172	0.00344	0.06815	0.02134	236.780
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Worker	0.03473	0.03968	0.48275	0.00000	0.00000	0.11801	0.02763	106.119
Vendor	0.00084	0.04503	0.01377	0.00031	0.00063	0.01244	0.00389	39.2017
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6. Paving (2026)

3.6.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53591	5.00686	7.19863	0.01050	0.21085	0.21085	0.19398	1,105.75
Paving	0.24628	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00734	0.06859	0.09861	0.00014	0.00289	0.00289	0.00266	15.1473
Paving	0.00337	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00134	0.01252	0.01800	0.00003	0.00053	0.00053	0.00048	2.50781
Paving	0.00062	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Worker	0.04988	0.05470	0.68068	0.00000	0.00000	0.16339	0.03830	160.441
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—
Worker	0.00068	0.00082	0.00975	0.00000	0.00000	0.00221	0.00052	2.22860
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Worker	0.00012	0.00015	0.00178	0.00000	0.00000	0.00040	0.00009	0.36897
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7. Architectural Coating (2027)

3.7.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15113	1.10822	1.50052	0.00230	0.02540	0.02540	0.02337	178.628

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Architectural Coatings	51.0830	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00207	0.01518	0.02056	0.00003	0.00035	0.00035	0.00032	2.44696
Architectural Coatings	0.69977	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00038	0.00277	0.00375	0.00001	0.00006	0.00006	0.00006	0.40512
Architectural Coatings	0.12771	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	0.05688	0.05886	0.75310	0.00000	0.00000	0.19605	0.04595	188.922
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Location	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Average Daily	—	—	—	—	—	—	—	—
Worker	0.00078	0.00089	0.01083	0.00000	0.00000	0.00265	0.00062	2.62384
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Worker	0.00014	0.00016	0.00198	0.00000	0.00000	0.00048	0.00011	0.43441
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	1.23277	1.25620	12.2661	0.03341	0.02286	3.06214	0.79278	3,472.03
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
General Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	1.23277	1.25620	12.2661	0.03341	0.02286	3.06214	0.79278	3,472.03
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	1.16116	1.34674	10.1821	0.03135	0.02287	3.06215	0.79279	3,255.90
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
General Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	1.16116	1.34674	10.1821	0.03135	0.02287	3.06215	0.79279	3,255.90
Annual	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	0.19654	0.23418	1.80222	0.00540	0.00390	0.51513	0.13343	509.408
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
General Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.19654	0.23418	1.80222	0.00540	0.00390	0.51513	0.13343	509.408

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	556.085
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	0.00000
Parking Lot	—	—	—	—	—	—	—	17.1097
General Office Building	—	—	—	—	—	—	—	43.4162
Total	—	—	—	—	—	—	—	616.611
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	556.085
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	0.00000
Parking Lot	—	—	—	—	—	—	—	17.1097
General Office Building	—	—	—	—	—	—	—	43.4162
Total	—	—	—	—	—	—	—	616.611
Annual	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	92.0662
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	0.00000
Parking Lot	—	—	—	—	—	—	—	2.83270

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
General Office Building	—	—	—	—	—	—	—	7.18805
Total	—	—	—	—	—	—	—	102.087

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	0.01962	0.33529	0.14268	0.00214	0.02711	0.02711	0.02711	426.772
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
General Office Building	0.00106	0.01933	0.01624	0.00012	0.00147	0.00147	0.00147	23.1305
Total	0.02068	0.35462	0.15892	0.00226	0.02858	0.02858	0.02858	449.902
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	0.01962	0.33529	0.14268	0.00214	0.02711	0.02711	0.02711	426.772
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
General Office Building	0.00106	0.01933	0.01624	0.00012	0.00147	0.00147	0.00147	23.1305
Total	0.02068	0.35462	0.15892	0.00226	0.02858	0.02858	0.02858	449.902

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Annual	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	0.00358	0.06119	0.02604	0.00039	0.00495	0.00495	0.00495	70.6570
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
General Office Building	0.00019	0.00353	0.00296	0.00002	0.00027	0.00027	0.00027	3.82951
Total	0.00377	0.06472	0.02900	0.00041	0.00522	0.00522	0.00522	74.4865

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Hearths	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Consumer Products	0.76392	—	—	—	—	—	—	—
Architectural Coatings	0.06998	—	—	—	—	—	—	—
Landscape Equipment	0.52794	0.05629	5.96728	0.00026	0.00294	0.00294	0.00221	16.1470
Total	1.36184	0.05629	5.96728	0.00026	0.00294	0.00294	0.00221	16.1470
Daily, Winter (Max)	—	—	—	—	—	—	—	—

Source	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Hearths	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Consumer Products	0.76392	—	—	—	—	—	—	—
Architectural Coatings	0.06998	—	—	—	—	—	—	—
Total	0.83390	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—
Hearths	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Consumer Products	0.13942	—	—	—	—	—	—	—
Architectural Coatings	0.01277	—	—	—	—	—	—	—
Landscape Equipment	0.06599	0.00704	0.74591	0.00003	0.00037	0.00037	0.00028	1.83105
Total	0.21818	0.00704	0.74591	0.00003	0.00037	0.00037	0.00028	1.83105

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	65.6023
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	0.00000

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Parking Lot	—	—	—	—	—	—	—	0.00000
General Office Building	—	—	—	—	—	—	—	6.82294
Total	—	—	—	—	—	—	—	72.4253
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	65.6023
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	0.00000
Parking Lot	—	—	—	—	—	—	—	0.00000
General Office Building	—	—	—	—	—	—	—	6.82294
Total	—	—	—	—	—	—	—	72.4253
Annual	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	10.8612
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	0.00000
Parking Lot	—	—	—	—	—	—	—	0.00000
General Office Building	—	—	—	—	—	—	—	1.12962
Total	—	—	—	—	—	—	—	11.9908

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	573.345
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	0.00000
Parking Lot	—	—	—	—	—	—	—	0.00000
General Office Building	—	—	—	—	—	—	—	4.57508
Total	—	—	—	—	—	—	—	577.920
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	573.345
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	0.00000
Parking Lot	—	—	—	—	—	—	—	0.00000
General Office Building	—	—	—	—	—	—	—	4.57508
Total	—	—	—	—	—	—	—	577.920
Annual	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	94.9237
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	0.00000

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Parking Lot	—	—	—	—	—	—	—	0.00000
General Office Building	—	—	—	—	—	—	—	0.75746
Total	—	—	—	—	—	—	—	95.6812

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	0.41577
General Office Building	—	—	—	—	—	—	—	0.00635
Total	—	—	—	—	—	—	—	0.42211
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	0.41577
General Office Building	—	—	—	—	—	—	—	0.00635
Total	—	—	—	—	—	—	—	0.42211
Annual	—	—	—	—	—	—	—	—

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Congregate Care (Assisted Living)	—	—	—	—	—	—	—	0.06884
General Office Building	—	—	—	—	—	—	—	0.00105
Total	—	—	—	—	—	—	—	0.06989

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Emergency Generator	0.38724	1.08247	0.98751	0.00186	0.05697	0.05697	0.05697	198.787
Total	0.38724	1.08247	0.98751	0.00186	0.05697	0.05697	0.05697	198.787
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Emergency Generator	0.38724	1.08247	0.98751	0.00186	0.05697	0.05697	0.05697	198.787
Total	0.38724	1.08247	0.98751	0.00186	0.05697	0.05697	0.05697	198.787
Annual	—	—	—	—	—	—	—	—
Emergency Generator	0.03872	0.10825	0.09875	0.00019	0.00570	0.00570	0.00570	18.0337
Total	0.03872	0.10825	0.09875	0.00019	0.00570	0.00570	0.00570	18.0337

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Annual	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—

Land Use	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Total	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—

Species	ROG	NOx	CO	SO2	PM10E	PM10T	PM2.5T	CO2e
Subtotal	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	12/1/2026	12/9/2026	5.00000	7.00000	—
Site Preparation	Site Preparation	12/10/2026	12/16/2026	5.00000	5.00000	—
Grading	Grading	12/17/2026	12/23/2026	5.00000	5.00000	—
Building Construction	Building Construction	12/24/2026	12/8/2027	5.00000	250.000	—
Paving	Paving	12/24/2026	12/30/2026	5.00000	5.00000	—
Architectural Coating	Architectural Coating	11/24/2027	11/30/2027	5.00000	5.00000	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.000000	8.00000	33.0000	0.73000
Demolition	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Demolition	Tractors/Loaders/ Backhoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000
Site Preparation	Tractors/Loaders/ Backhoes	Diesel	Average	0.00000	8.00000	84.0000	0.37000
Site Preparation	Crawler Tractors	Diesel	Average	1.000000	8.00000	87.0000	0.43000
Site Preparation	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Site Preparation	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Grading	Tractors/Loaders/ Backhoes	Diesel	Average	0.00000	8.00000	84.0000	0.37000
Grading	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Grading	Crawler Tractors	Diesel	Average	1.000000	8.00000	87.0000	0.43000
Building Construction	Forklifts	Diesel	Average	1.000000	8.00000	82.0000	0.20000
Building Construction	Cranes	Diesel	Average	1.000000	8.00000	367.000	0.29000
Building Construction	Tractors/Loaders/ Backhoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000
Building Construction	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Building Construction	Welders	Diesel	Average	3.00000	8.00000	46.0000	0.45000

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Paving	Pavers	Diesel	Average	1.000000	8.00000	81.0000	0.42000
Paving	Rollers	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Paving	Cement and Mortar Mixers	Diesel	Average	1.000000	8.00000	10.00000	0.56000
Paving	Tractors/Loaders/ Backhoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000
Paving	Paving Equipment	Diesel	Average	1.000000	8.00000	89.0000	0.36000
Architectural Coating	Air Compressors	Diesel	Average	1.000000	8.00000	37.0000	0.48000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	Worker	7.50000	18.5000	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2000	HHDT,MHDT
Demolition	Hauling	0.28571	20.0000	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	Worker	7.50000	18.5000	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2000	HHDT,MHDT
Site Preparation	Hauling	0.00000	20.0000	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	7.50000	18.5000	LDA,LDT1,LDT2

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	Vendor	—	10.2000	HHDT,MHDT
Grading	Hauling	25.0000	20.0000	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	74.9949	18.5000	LDA,LDT1,LDT2
Building Construction	Vendor	11.4383	10.2000	HHDT,MHDT
Building Construction	Hauling	0.00000	20.0000	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	12.5000	18.5000	LDA,LDT1,LDT2
Paving	Vendor	—	10.2000	HHDT,MHDT
Paving	Hauling	0.00000	20.0000	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	14.9990	18.5000	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2000	HHDT,MHDT
Architectural Coating	Hauling	0.00000	20.0000	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	66,300.5	22,100.2	3,913.50	1,304.50	5,671.51

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00000	0.00000	0.00000	5.00000	0.00000
Site Preparation	0.00000	0.00000	5.00000	0.00000	0.00000
Grading	0.00000	1,000.000	7.50000	0.00000	0.00000
Paving	0.00000	0.00000	0.00000	0.00000	2.17000

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Congregate Care (Assisted Living)	—	0%
Paving	Other Non-Asphalt Surfaces	1.70000	0%

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Parking Lot	0.47000	100%
Paving	General Office Building	0.00000	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00000	346.196	0.03300	0.00400
2026	0.00000	346.196	0.03300	0.00400

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Congregate Care (Assisted Living)	315.180	238.960	248.230	107,575	4,292.54	3,254.48	3,380.73	1,465,106
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
General Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Congregate Care (Assisted Living)	Wood Fireplaces	0	0
Congregate Care (Assisted Living)	Gas Fireplaces	0	0
Congregate Care (Assisted Living)	Propane Fireplaces	0	0
Congregate Care (Assisted Living)	Electric Fireplaces	0	0
Congregate Care (Assisted Living)	No Fireplaces	103	103
Congregate Care (Assisted Living)	Conventional Wood Stoves	0	0
Congregate Care (Assisted Living)	Catalytic Wood Stoves	0	0
Congregate Care (Assisted Living)	Non-Catalytic Wood Stoves	0	0
Congregate Care (Assisted Living)	Pellet Wood Stoves	0	0
Other Non-Asphalt Surfaces	Wood Fireplaces	0	0
Other Non-Asphalt Surfaces	Gas Fireplaces	0	0
Other Non-Asphalt Surfaces	Propane Fireplaces	0	0
Other Non-Asphalt Surfaces	Electric Fireplaces	0	0
Other Non-Asphalt Surfaces	No Fireplaces	0	0
Other Non-Asphalt Surfaces	Conventional Wood Stoves	0	0
Other Non-Asphalt Surfaces	Catalytic Wood Stoves	0	0
Other Non-Asphalt Surfaces	Non-Catalytic Wood Stoves	0	0
Other Non-Asphalt Surfaces	Pellet Wood Stoves	0	0
Parking Lot	Wood Fireplaces	0	0
Parking Lot	Gas Fireplaces	0	0

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Parking Lot	Propane Fireplaces	0	0
Parking Lot	Electric Fireplaces	0	0
Parking Lot	No Fireplaces	0	0
Parking Lot	Conventional Wood Stoves	0	0
Parking Lot	Catalytic Wood Stoves	0	0
Parking Lot	Non-Catalytic Wood Stoves	0	0
Parking Lot	Pellet Wood Stoves	0	0
General Office Building	Wood Fireplaces	0	0
General Office Building	Gas Fireplaces	0	0
General Office Building	Propane Fireplaces	0	0
General Office Building	Electric Fireplaces	0	0
General Office Building	No Fireplaces	0	0
General Office Building	Conventional Wood Stoves	0	0
General Office Building	Catalytic Wood Stoves	0	0
General Office Building	Non-Catalytic Wood Stoves	0	0
General Office Building	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
66,300.5	22,100.2	3,913.50	1,304.50	5,671.51

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	250.000

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Congregate Care (Assisted Living)	582,893	346.196	0.0330	0.0040	1,327,960
Other Non-Asphalt Surfaces	0.00000	346.196	0.0330	0.0040	0.00000
Parking Lot	17,934.5	346.196	0.0330	0.0040	0.00000
General Office Building	45,509.2	346.196	0.0330	0.0040	71,973.6

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Congregate Care (Assisted Living)	4,189,399	782,183
Other Non-Asphalt Surfaces	0.00000	0.00000
Parking Lot	0.00000	0.00000

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	463,707	0.00000

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Congregate Care (Assisted Living)	304.071	0.00000
Other Non-Asphalt Surfaces	0.00000	0.00000
Parking Lot	0.00000	0.00000
General Office Building	2.42637	0.00000

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Congregate Care (Assisted Living)	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088.00	0.00225	2.50000	2.50000	10.00000
Congregate Care (Assisted Living)	Household refrigerators and/or freezers	R-134a	1,430.00	0.22222	0.60000	0.00000	1.000000
General Office Building	Household refrigerators and/or freezers	R-134a	1,430.00	0.01679	0.60000	0.00000	1.000000

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.000000	1.000000	200.000	236.000	0.73000

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	23.2500	annual days of extreme heat
Extreme Precipitation	3.30000	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	8.49000	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—

Indicator	Result for Project Census Tract
AQ-Ozone	93.6279
AQ-PM	39.6017
AQ-DPM	17.7100
Drinking Water	10.7531
Lead Risk Housing	42.7599
Pesticides	39.2069
Toxic Releases	19.5299
Traffic	19.2750
Effect Indicators	—
CleanUp Sites	40.8361
Groundwater	2.72290
Haz Waste Facilities/Generators	83.8120
Impaired Water Bodies	0.00000
Solid Waste	70.4238
Sensitive Population	—
Asthma	49.1152
Cardio-vascular	47.7567
Low Birth Weights	62.1119
Socioeconomic Factor Indicators	—
Education	73.6269
Housing	79.5691

Indicator	Result for Project Census Tract
Linguistic	40.4385
Poverty	94.3342
Unemployment	95.7184

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	3.156679071
Employed	9.713845759
Median HI	7.108943924
Education	—
Bachelor's or higher	11.36917747
High school enrollment	100
Preschool enrollment	95.7141024
Transportation	—
Auto Access	7.878865649
Active commuting	49.74977544
Social	—
2-parent households	10.26562299
Voting	6.300526113

Indicator	Result for Project Census Tract
Neighborhood	—
Alcohol availability	82.20197613
Park access	32.13139997
Retail density	46.36211985
Supermarket access	31.09200565
Tree canopy	1.488515334
Housing	—
Homeownership	23.90606955
Housing habitability	15.01347363
Low-inc homeowner severe housing cost burden	17.3232388
Low-inc renter severe housing cost burden	9.611189529
Uncrowded housing	62.10701912
Health Outcomes	—
Insured adults	10.45810343
Arthritis	5.1
Asthma ER Admissions	39.8
High Blood Pressure	6.7
Cancer (excluding skin)	27.6
Asthma	7.7
Coronary Heart Disease	4.3
Chronic Obstructive Pulmonary Disease	2.1

Indicator	Result for Project Census Tract
Diagnosed Diabetes	16.2
Life Expectancy at Birth	2.3
Cognitively Disabled	1.7
Physically Disabled	2.2
Heart Attack ER Admissions	28.8
Mental Health Not Good	11.5
Chronic Kidney Disease	7.4
Obesity	8.3
Pedestrian Injuries	60.0
Physical Health Not Good	8.6
Stroke	5.6
Health Risk Behaviors	—
Binge Drinking	78.7
Current Smoker	7.4
No Leisure Time for Physical Activity	9.9
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	51.6
Elderly	34.9
English Speaking	65.2

Indicator	Result for Project Census Tract
Foreign-born	31.0
Outdoor Workers	17.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	79.2
Traffic Density	34.1
Traffic Access	23.0
Other Indices	—
Hardship	84.7
Other Decision Support	—
2016 Voting	12.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	59.0000
Healthy Places Index Score for Project Location (b)	7.00000
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	Adjusted based on information provided on the Site Plan.
Construction: Construction Phases	The construction start date and operational date were provided by the client, along with the number of days for each construction phase. The paving phase was set to begin concurrently with the building construction phase, and would be completed after the default amount of days. Architectural coating was set to begin approximately 2 weeks before building construction was completed, and would span the CalEEMod default amount of days.
Construction: Off-Road Equipment	Assumed all construction will be utilized 8 hours per work day. Replaced Tractors/Loaders/Backhoes with Crawler Tractors in the Site Preparation and Grading Phases.
Construction: Dust From Material Movement	Adjusted per the client's grading information to balance the site.
Operations: Vehicle Data	Adjusted rates for Weekday Trips (based on ITE 12th Edition), Saturday Trips, and Sunday Trips to match ITE trip rates for 620 – Nursing Home.
Operations: Hearths	Fireplaces and Wood Stoves are removed in accordance with SCAQMD Rule 445.

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	6.43750	0.75000
Building Area	sq. ft	109,180	32,741.0
Landscape Area	sq. ft	—	40,362.0
Building Area	sq. ft	0.00000	0.02000
Landscape Area	sq. ft	—	0.00000
Lot Area	acre	0.46800	0.47000
Landscape Area	sq. ft	—	0.00000
Lot Area	acre	0.05989	0.06000
Landscape Area	sq. ft	—	0.00000

8.4. Construction

8.4.1. Construction Phases

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Demolition	Demolition	End Date	12/29/2026	12/9/2026
Demolition	Demolition	Work Days per Phase	20.0000	7.00000
Site Preparation	Site Preparation	Start Date	12/30/2026	12/10/2026
Site Preparation	Site Preparation	End Date	1/3/2027	12/16/2026
Site Preparation	Site Preparation	Work Days per Phase	3.00000	5.00000
Grading	Grading	Start Date	1/4/2027	12/17/2026
Grading	Grading	End Date	1/12/2027	12/23/2026

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Grading	Grading	Work Days per Phase	6.00000	5.00000
Building Construction	Building Construction	Start Date	1/13/2027	12/24/2026
Building Construction	Building Construction	End Date	11/17/2027	12/8/2027
Building Construction	Building Construction	Work Days per Phase	220.000	250.000
Paving	Paving	Start Date	11/18/2027	12/24/2026
Paving	Paving	End Date	12/2/2027	12/30/2026
Paving	Paving	Work Days per Phase	10.00000	5.00000
Architectural Coating	Architectural Coating	Start Date	12/3/2027	11/24/2027
Architectural Coating	Architectural Coating	End Date	12/17/2027	11/30/2027
Architectural Coating	Architectural Coating	Work Days per Phase	10.00000	5.00000

8.4.2. Off-Road Equipment

Phase Name	Equipment Type	Model Parameter	Default Value	New Value
Demolition	Tractors/Loaders/Backhoes	Number per Day	3.00000	1.000000
Site Preparation	Tractors/Loaders/Backhoes	Number per Day	1.000000	0.00000
Site Preparation	Tractors/Loaders/Backhoes	Hours Per Day	7.00000	8.00000
Site Preparation	Rubber Tired Dozers	Number per Day	3.00000	1.000000
Grading	Tractors/Loaders/Backhoes	Number per Day	2.00000	0.00000
Grading	Tractors/Loaders/Backhoes	Hours Per Day	7.00000	8.00000
Building Construction	Forklifts	Number per Day	2.00000	1.000000
Building Construction	Forklifts	Hours Per Day	7.00000	8.00000

Phase Name	Equipment Type	Model Parameter	Default Value	New Value
Building Construction	Tractors/Loaders/Backhoes	Hours Per Day	6.00000	8.00000
Paving	Rollers	Number per Day	2.00000	1.000000
Architectural Coating	Air Compressors	Hours Per Day	6.00000	8.00000

8.4.4. Dust from Material Movement

Phase Name	Model Parameter	Units	Default Value	New Value
Site Preparation	Material Imported	Cubic Yards	—	0.00000
Site Preparation	Material Exported	Cubic Yards	—	0.00000
Site Preparation	Total Acres Graded	acres	7.50000	5.00000

8.5. Operations

8.5.1. Mobile Sources

8.5.1.1. Vehicle Data

Land Use	Model Parameter	Units	Default Value	New Value
Congregate Care (Assisted Living)	Weekday Trip Rate	size/day	2.60000	3.06000
Congregate Care (Assisted Living)	Saturday Trip Rate	size/day	2.93000	2.32000
Congregate Care (Assisted Living)	Sunday Trip Rate	size/day	3.15000	2.41000
Congregate Care (Assisted Living)	Res H-W Trip Length	miles	17.7130	17.4561
Congregate Care (Assisted Living)	Res H-S Trip Length	miles	8.99125	9.25967
Congregate Care (Assisted Living)	Res H-O Trip Length	miles	5.46927	9.27228

Land Use	Model Parameter	Units	Default Value	New Value
Congregate Care (Assisted Living)	Res H-W Trip	%	18.0154	53.1247
Congregate Care (Assisted Living)	Res H-S Trip	%	7.46354	4.44535
Congregate Care (Assisted Living)	Res H-O Trip	%	74.5210	42.4299
General Office Building	Weekday Trip Rate	size/day	9.74000	0.00000
General Office Building	Saturday Trip Rate	size/day	2.21000	0.00000
General Office Building	Sunday Trip Rate	size/day	0.70000	0.00000

8.5.2. Area Sources

8.5.2.1. Hearths

Land Use	Model Parameter	Units	Default Value	New Value
Congregate Care (Assisted Living)	Wood Fireplaces	—	5	0
Congregate Care (Assisted Living)	Gas Fireplaces	—	88	0
Congregate Care (Assisted Living)	No Fireplaces	—	10	103
Congregate Care (Assisted Living)	Hours/Day	—	3	0
Congregate Care (Assisted Living)	Days/Year	—	25	0
Congregate Care (Assisted Living)	Wood Mass	lb/year	1,019	0
Congregate Care (Assisted Living)	Catalytic Wood Stoves	—	5	0
Congregate Care (Assisted Living)	Non-Catalytic Wood Stoves	—	5	0
Congregate Care (Assisted Living)	Days/Year	—	25	0
Congregate Care (Assisted Living)	Wood Mass	lb/year	1,000	0

APPENDIX B.1 – AERMOD CONSTRUCTION MODEL OUTPUT

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 6/8/2026
** File: C:\Lakes\AERMOD View\Projects\26-017 Bradley Gardens San Jacinto CON
HRA\26-017 Bradley Gardens San Jacinto.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Lakes\AERMOD View\26-017 Bradley Gardens San Jacinto\26-017 Bradl
   MODELOPT DFAULT CONC
   AVERTIME 1 PERIOD
   URBANOPT 2492442 Riverside_County_Population_SCAQMD
   POLLUTID PM_10
   RUNORNOT RUN
   ERRORFIL "26-017 Bradley Gardens San Jacinto.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION PAREA1       AREAPOLY   502006.521  3737768.359      464.980
** DESCRSRC Project Site Area Source
** ------------------------------------------------------------------
** Line Source Represented by Area Sources
** LINE AREA Source ID = ARLN1
** DESCRSRC OnSite
** PREFIX
** Length of Side = 9.00
** Ratio = 10
** Vertical Dimension = 2.46
** Emission Rate = 5.7169E-10
** Nodes = 2
** 502136.025, 3737700.098, 465.09, 2.64
** 502135.844, 3737770.707, 464.92, 2.64
```

```
** ----------------------------------------------------------------------
   LOCATION A0000001     AREA     502140.525 3737700.110 465.09
** End of LINE AREA Source ID = ARLN1
** ----------------------------------------------------------------------
** Line Source Represented by Area Sources
** LINE AREA Source ID = ARLN4
** DESCRSRC Off Site 2: N State St > Ramona Expy EB
** PREFIX
** Length of Side = 26.00
** Ratio = 10
** Vertical Dimension = 2.46
** Emission Rate = 9.8922E-11
** Nodes = 4
** 502583.698, 3740183.098, 463.23, 2.64
** 502708.510, 3740181.004, 463.72, 2.64
** 502846.723, 3740183.517, 464.51, 2.64
** 503342.985, 3740180.378, 467.20, 2.64
** ----------------------------------------------------------------------
   LOCATION A0000036     AREA     502583.480 3740170.100 463.27
   LOCATION A0000037     AREA     502708.746 3740168.006 463.62
   LOCATION A0000038     AREA     502846.641 3740170.517 464.42
   LOCATION A0000039     AREA     503094.772 3740168.948 465.82
** End of LINE AREA Source ID = ARLN4
** ----------------------------------------------------------------------
** Line Source Represented by Area Sources
** LINE AREA Source ID = ARLN5
** DESCRSRC Off Site 3: N State St > Ramona Expy WB
** PREFIX
** Length of Side = 26.00
** Ratio = 10
** Vertical Dimension = 2.46
** Emission Rate = 9.8923E-11
** Nodes = 8
** 502583.711, 3740183.093, 463.23, 2.64
** 502517.398, 3740195.896, 462.91, 2.64
** 502454.766, 3740203.891, 462.79, 2.64
** 502380.142, 3740235.873, 462.56, 2.64
** 502304.184, 3740278.516, 462.30, 2.64
** 502222.897, 3740338.482, 461.58, 2.64
** 502090.971, 3740475.739, 460.12, 2.64
** 501944.386, 3740616.993, 459.07, 2.64
** ----------------------------------------------------------------------
   LOCATION A0000029     AREA     502586.175 3740195.858 463.19
   LOCATION A0000030     AREA     502519.044 3740208.791 462.58
   LOCATION A0000031     AREA     502459.887 3740215.840 462.37
   LOCATION A0000032     AREA     502386.506 3740247.209 462.12
   LOCATION A0000033     AREA     502311.902 3740288.977 461.87
   LOCATION A0000034     AREA     502232.269 3740347.491 461.30
   LOCATION A0000035     AREA     502099.991 3740485.100 460.03
** End of LINE AREA Source ID = ARLN5
```

```
** ----------------------------------------------------------------
** Line Source Represented by Area Sources
** LINE AREA Source ID = ARLN6
** DESCRSRC Off Site Route 1: Project Site West to/from 7th St to/from S and N S
** PREFIX
** Length of Side = 16.00
** Ratio = 10
** Vertical Dimension = 2.46
** Emission Rate = 3.2151E-10
** Nodes = 10
** 502135.247, 3737770.814, 464.91, 2.64
** 502135.066, 3737786.980, 465.07, 2.64
** 502597.957, 3737788.950, 467.02, 2.64
** 502594.606, 3738828.349, 466.77, 2.64
** 502632.611, 3739209.108, 466.97, 2.64
** 502632.611, 3739364.890, 466.58, 2.64
** 502629.576, 3739488.031, 466.02, 2.64
** 502609.858, 3739706.574, 465.02, 2.64
** 502586.506, 3739986.705, 463.90, 2.64
** 502583.687, 3740183.093, 463.23, 2.64
** ----------------------------------------------------------------
   LOCATION A0000040     AREA     502143.247 3737770.904 464.99
   LOCATION A0000041     AREA     502135.100 3737778.981 465.02
   LOCATION A0000042     AREA     502289.397 3737779.637 465.50
   LOCATION A0000043     AREA     502443.694 3737780.293 465.98
   LOCATION A0000044     AREA     502605.957 3737788.976 467.02
   LOCATION A0000045     AREA     502605.479 3737937.461 467.32
   LOCATION A0000046     AREA     502605.000 3738085.947 467.79
   LOCATION A0000047     AREA     502604.521 3738234.433 468.19
   LOCATION A0000048     AREA     502604.042 3738382.918 467.86
   LOCATION A0000049     AREA     502603.563 3738531.404 467.50
   LOCATION A0000050     AREA     502603.084 3738679.890 467.14
   LOCATION A0000051     AREA     502602.566 3738827.555 466.91
   LOCATION A0000052     AREA     502615.235 3738954.474 467.13
   LOCATION A0000053     AREA     502627.903 3739081.394 467.25
   LOCATION A0000054     AREA     502640.611 3739209.108 466.94
   LOCATION A0000055     AREA     502640.609 3739365.088 466.59
   LOCATION A0000056     AREA     502637.544 3739488.749 465.99
   LOCATION A0000057     AREA     502627.684 3739598.021 465.45
   LOCATION A0000058     AREA     502617.830 3739707.239 464.97
   LOCATION A0000059     AREA     502606.154 3739847.304 464.46
   LOCATION A0000060     AREA     502594.505 3739986.820 463.94
   LOCATION A0000061     AREA     502593.096 3740085.014 463.56
** End of LINE AREA Source ID = ARLN6
** Source Parameters **
   SRCPARAM PAREA1        4.12E-07     5.000         4     1.000
   AREAVERT PAREA1       502006.521 3737768.359 502146.232 3737770.911
   AREAVERT PAREA1       502147.189 3737683.193 502008.116 3737681.917
** LINE AREA Source ID = ARLN1
   SRCPARAM A0000001     5.7169E-10     2.643    70.609     9.000   -90.147
```

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2.459
** ------------------------------------------------------------------
** LINE AREA Source ID = ARLN4
   SRCPARAM A0000036     9.8922E-11     2.643   124.829    26.000     0.961
2.459
   SRCPARAM A0000037     9.8922E-11     2.643   138.237    26.000    -1.042
2.459
   SRCPARAM A0000038     9.8922E-11     2.643   248.136    26.000     0.362
2.459
   SRCPARAM A0000039     9.8922E-11     2.643   248.136    26.000     0.362
2.459
** ------------------------------------------------------------------
** LINE AREA Source ID = ARLN5
   SRCPARAM A0000029     9.8923E-11     2.643    67.538    26.000  -169.073
2.459
   SRCPARAM A0000030     9.8923E-11     2.643    63.140    26.000  -172.725
2.459
   SRCPARAM A0000031     9.8923E-11     2.643    81.189    26.000  -156.801
2.459
   SRCPARAM A0000032     9.8923E-11     2.643    87.109    26.000  -150.690
2.459
   SRCPARAM A0000033     9.8923E-11     2.643   101.013    26.000  -143.584
2.459
   SRCPARAM A0000034     9.8923E-11     2.643   190.378    26.000  -133.866
2.459
   SRCPARAM A0000035     9.8923E-11     2.643   203.567    26.000  -136.061
2.459
** ------------------------------------------------------------------
** LINE AREA Source ID = ARLN6
   SRCPARAM A0000040     3.2151E-10     2.643    16.168    16.000   -90.644
2.459
   SRCPARAM A0000041     3.2151E-10     2.643   154.299    16.000    -0.244
2.459
   SRCPARAM A0000042     3.2151E-10     2.643   154.299    16.000    -0.244
2.459
   SRCPARAM A0000043     3.2151E-10     2.643   154.299    16.000    -0.244
2.459
   SRCPARAM A0000044     3.2151E-10     2.643   148.486    16.000   -90.185
2.459
   SRCPARAM A0000045     3.2151E-10     2.643   148.486    16.000   -90.185
2.459
   SRCPARAM A0000046     3.2151E-10     2.643   148.486    16.000   -90.185
2.459
   SRCPARAM A0000047     3.2151E-10     2.643   148.486    16.000   -90.185
2.459
   SRCPARAM A0000048     3.2151E-10     2.643   148.486    16.000   -90.185
2.459
   SRCPARAM A0000049     3.2151E-10     2.643   148.486    16.000   -90.185
2.459
   SRCPARAM A0000050     3.2151E-10     2.643   148.486    16.000   -90.185
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2.459
   SRCPARAM A0000051     3.2151E-10     2.643   127.550    16.000   -84.300
2.459
   SRCPARAM A0000052     3.2151E-10     2.643   127.550    16.000   -84.300
2.459
   SRCPARAM A0000053     3.2151E-10     2.643   127.550    16.000   -84.300
2.459
   SRCPARAM A0000054     3.2151E-10     2.643   155.782    16.000   -90.000
2.459
   SRCPARAM A0000055     3.2151E-10     2.643   123.178    16.000   -91.412
2.459
   SRCPARAM A0000056     3.2151E-10     2.643   109.716    16.000   -95.156
2.459
   SRCPARAM A0000057     3.2151E-10     2.643   109.716    16.000   -95.156
2.459
   SRCPARAM A0000058     3.2151E-10     2.643   140.551    16.000   -94.765
2.459
   SRCPARAM A0000059     3.2151E-10     2.643   140.551    16.000   -94.765
2.459
   SRCPARAM A0000060     3.2151E-10     2.643    98.204    16.000   -90.822
2.459
   SRCPARAM A0000061     3.2151E-10     2.643    98.204    16.000   -90.822
2.459
** ------------------------------------------------------------------
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Seven Days (HRDOW7)"
** Variable Emission Scenario: "Scenario 1"
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT A0000001     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000001     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000001     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000001     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000001     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000001     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000001     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000001     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000001     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000001     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000001     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000001     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000001     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000001     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000001     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000001     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000001     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000001     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000001     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000001     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000001     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000001     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000036     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000036     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000036     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000037     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000037     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000037     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000038     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000038     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000038     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000039     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000039     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000039     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000036     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000036     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000036     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000037     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000037     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000037     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000038     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000038     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000038     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000039     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000039     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000039     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000036     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000036     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000036     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000037     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000037     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000037     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000038     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000038     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000038     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000039     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000039     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000039     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000036     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000036     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000036     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000037     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000037     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000037     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000038     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000038     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000038     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000039     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000039     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000039     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000036     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000036     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000036     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000037     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000037     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000037     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000038     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000038     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000038     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000039     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000039     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000039     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000036     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000036     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000036     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000037     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000037     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000037     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000038     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000038     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000038     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000039     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000039     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000039     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000036     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000036     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000036     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000037     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000037     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000037     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000038     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000038     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
```

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EMISFACT A0000038     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000039     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000039     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000039     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000029     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000029     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000029     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000030     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000030     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000030     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000031     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000031     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000031     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000032     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000032     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000032     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000033     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000033     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000033     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000034     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000034     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000034     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000035     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000035     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000035     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000029     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000029     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000029     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000030     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000030     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000030     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000031     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000031     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000031     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000032     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000032     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000032     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000033     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000033     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000033     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000034     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000034     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000034     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000035     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000035     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000035     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000029     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000029     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000029     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000030     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000030     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000030     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000031     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000031     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000031     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000032     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000032     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000033     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000033     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000033     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000034     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000034     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000034     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000035     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000035     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000035     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000029     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000029     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000029     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000030     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000030     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000030     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000031     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000031     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000031     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000032     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000032     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000032     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000033     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000033     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000033     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000034     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000034     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
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EMISFACT A0000035     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000035     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000029     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000029     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000030     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000030     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000031     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000032     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000032     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000034     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
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EMISFACT A0000035     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
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EMISFACT A0000029     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000030     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000031     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000031     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000032     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000032     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000029     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000034     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000034     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000035     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000035     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000040     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000041     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000042     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000042     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000043     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000044     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000044     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
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EMISFACT A0000045     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000045     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000046     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000046     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
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EMISFACT A0000047     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000047     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
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EMISFACT A0000049     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000049     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000049     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000050     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
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EMISFACT A0000051     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000053     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000053     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000054     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000054     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
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EMISFACT A0000055     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000055     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000055     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000056     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000057     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000057     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
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EMISFACT A0000058     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000059     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000059     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000059     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000060     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000060     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
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EMISFACT A0000061     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000061     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000040     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000040     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000040     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000041     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000041     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000041     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000042     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000042     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000042     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000043     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000043     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000044     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000044     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000045     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000045     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000046     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000046     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000047     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000047     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000047     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000048     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000048     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000049     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000049     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000049     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000050     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000050     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000050     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000052     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000061     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000045     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
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EMISFACT A0000047     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000052     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000040     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000056     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000057     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000057     HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT A0000057     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000058     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000040     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000041     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000046     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000046     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT A0000057     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT A0000057     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT A0000057     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT A0000058     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT A0000059     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT A0000060     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT A0000061     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT A0000061     HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "26-017 Bradley Gardens San Jacinto.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE "..\..\Met Data\PERI_V9_ADJU\PERI_v9.SFC"
   PROFFILE "..\..\Met Data\PERI_V9_ADJU\PERI_v9.PFL"
   SURFDATA 3171 2010 Perris_Meteorological_Station
   UAIRDATA 3190 2010
   SITEDATA 99999 2010
   PROFBASE 442.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "26-017 Bradley Gardens San Jacinto.AD\01H1GALL.PLT" 31
   PLOTFILE PERIOD ALL "26-017 Bradley Gardens San Jacinto.AD\PE00GALL.PLT" 32
```

```
   SUMMFILE "26-017 Bradley Gardens San Jacinto.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186     953       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
     0.50
 ME W187     953       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

 *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                       ***        22:41:45

                                  PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                             ***     MODEL SETUP OPTIONS SUMMARY
 ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
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      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for    35 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =   2492442.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Assumes No FLAGPOLE Receptor Heights.
      * The User Specified a Pollutant Type of: PM_10

 **Model Calculates  1 Short Term Average(s) of:   1-HR
     and Calculates PERIOD Averages

 **This Run Includes:     35 Source(s);       1 Source Group(s); and    1051
Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                 and:      0 VOLUME source(s)
                 and:     35 AREA type source(s)
                 and:      0 LINE source(s)
                 and:      0 RLINE/RLINEXT source(s)
                 and:      0 OPENPIT source(s)
                 and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                 and:      0 SWPOINT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  16216

 **Output Options Selected:
          Model Outputs Tables of PERIOD Averages by Receptor
          Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and
Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   442.00 ;  Decay
Coef. =    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                                ;
```

Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.7 MB of RAM.

**Input Runstream File: aermod.inp

**Output Print File: aermod.out

**Detailed Error/Message File: 26-017 Bradley Gardens San Jacinto.err

**File for Summary of Results: 26-017 Bradley Gardens San Jacinto.sum

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** AREA SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	COORD (SW CORNER) X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	X-DIM OF AREA (METERS)	Y-DIM OF AREA (METERS)	ORIENT. (DEG.)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
A0000001	0	0.57169E-09	502140.5	3737700.1	465.1	2.64	70.61	9.00	-90.15	2.46	YES	HRDOW7	NO
A0000036	0	0.98922E-10	502583.5	3740170.1	463.3	2.64	124.83	26.00	0.96	2.46	YES	HRDOW7	NO
A0000037	0	0.98922E-10	502708.7	3740168.0	463.6	2.64	138.24	26.00	-1.04	2.46	YES	HRDOW7	NO
A0000038	0	0.98922E-10	502846.6	3740170.5	464.4	2.64	248.14	26.00	0.36	2.46	YES	HRDOW7	NO
A0000039	0	0.98922E-10	503094.8	3740168.9	465.8	2.64	248.14	26.00	0.36	2.46	YES	HRDOW7	NO
A0000029	0	0.98923E-10	502586.2	3740195.9	463.2	2.64	67.54	26.00	-169.07	2.46	YES	HRDOW7	NO
A0000030	0	0.98923E-10	502519.0	3740208.8	462.6	2.64	63.14	26.00	-172.72	2.46	YES	HRDOW7	NO
A0000031	0	0.98923E-10	502459.9	3740215.8	462.4	2.64	81.19	26.00	-156.80	2.46	YES	HRDOW7	NO

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 A0000032         0   0.98923E-10  502386.5 3740247.2   462.1     2.64     87.11
26.00   -150.69     2.46     YES   HRDOW7           NO
 A0000033         0   0.98923E-10  502311.9 3740289.0   461.9     2.64    101.01
26.00   -143.58     2.46     YES   HRDOW7           NO
 A0000034         0   0.98923E-10  502232.3 3740347.5   461.3     2.64    190.38
26.00   -133.87     2.46     YES   HRDOW7           NO
 A0000035         0   0.98923E-10  502100.0 3740485.1   460.0     2.64    203.57
26.00   -136.06     2.46     YES   HRDOW7           NO
 A0000040         0   0.32151E-09  502143.2 3737770.9   465.0     2.64     16.17
16.00    -90.64     2.46     YES   HRDOW7           NO
 A0000041         0   0.32151E-09  502135.1 3737779.0   465.0     2.64    154.30
16.00     -0.24     2.46     YES   HRDOW7           NO
 A0000042         0   0.32151E-09  502289.4 3737779.6   465.5     2.64    154.30
16.00     -0.24     2.46     YES   HRDOW7           NO
 A0000043         0   0.32151E-09  502443.7 3737780.3   466.0     2.64    154.30
16.00     -0.24     2.46     YES   HRDOW7           NO
 A0000044         0   0.32151E-09  502606.0 3737789.0   467.0     2.64    148.49
16.00    -90.18     2.46     YES   HRDOW7           NO
 A0000045         0   0.32151E-09  502605.5 3737937.5   467.3     2.64    148.49
16.00    -90.18     2.46     YES   HRDOW7           NO
 A0000046         0   0.32151E-09  502605.0 3738085.9   467.8     2.64    148.49
16.00    -90.18     2.46     YES   HRDOW7           NO
 A0000047         0   0.32151E-09  502604.5 3738234.4   468.2     2.64    148.49
16.00    -90.18     2.46     YES   HRDOW7           NO
 A0000048         0   0.32151E-09  502604.0 3738382.9   467.9     2.64    148.49
16.00    -90.18     2.46     YES   HRDOW7           NO
 A0000049         0   0.32151E-09  502603.6 3738531.4   467.5     2.64    148.49
16.00    -90.18     2.46     YES   HRDOW7           NO
 A0000050         0   0.32151E-09  502603.1 3738679.9   467.1     2.64    148.49
16.00    -90.18     2.46     YES   HRDOW7           NO
 A0000051         0   0.32151E-09  502602.6 3738827.6   466.9     2.64    127.55
16.00    -84.30     2.46     YES   HRDOW7           NO
 A0000052         0   0.32151E-09  502615.2 3738954.5   467.1     2.64    127.55
16.00    -84.30     2.46     YES   HRDOW7           NO
 A0000053         0   0.32151E-09  502627.9 3739081.4   467.2     2.64    127.55
16.00    -84.30     2.46     YES   HRDOW7           NO
 A0000054         0   0.32151E-09  502640.6 3739209.1   466.9     2.64    155.78
16.00    -90.00     2.46     YES   HRDOW7           NO
 A0000055         0   0.32151E-09  502640.6 3739365.1   466.6     2.64    123.18
16.00    -91.41     2.46     YES   HRDOW7           NO
 A0000056         0   0.32151E-09  502637.5 3739488.7   466.0     2.64    109.72
16.00    -95.16     2.46     YES   HRDOW7           NO
 A0000057         0   0.32151E-09  502627.7 3739598.0   465.4     2.64    109.72
16.00    -95.16     2.46     YES   HRDOW7           NO
 A0000058         0   0.32151E-09  502617.8 3739707.2   465.0     2.64    140.55
16.00    -94.77     2.46     YES   HRDOW7           NO
 A0000059         0   0.32151E-09  502606.2 3739847.3   464.5     2.64    140.55
16.00    -94.77     2.46     YES   HRDOW7           NO
 A0000060         0   0.32151E-09  502594.5 3739986.8   463.9     2.64     98.20
16.00    -90.82     2.46     YES   HRDOW7           NO
```

```
 A0000061         0   0.32151E-09  502593.1 3740085.0   463.6     2.64     98.20
16.00    -90.82     2.46     YES   HRDOW7           NO
↑ *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                       ***        22:41:45

                                  PAGE   3
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                                *** AREAPOLY SOURCE DATA ***

              NUMBER EMISSION RATE   LOCATION OF AREA  BASE     RELEASE  NUMBER
 INIT.   URBAN  EMISSION RATE    AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC       X        Y      ELEV.    HEIGHT  OF VERTS.
  SZ     SOURCE  SCALAR VARY
     ID         CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - -

 PAREA1           0   0.41200E-06  502006.5 3737768.4   465.0     5.00       4
  1.00     YES   HRDOW7           NO
↑ *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                       ***        22:41:45

                                  PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                             *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                          SOURCE IDs
 -----------                                          ----------


  ALL        PAREA1      , A0000001    , A0000036    , A0000037    , A0000038    ,
A0000039    , A0000029    , A0000030    ,

             A0000031    , A0000032    , A0000033    , A0000034    , A0000035    ,
A0000040    , A0000041    , A0000042    ,

             A0000043    , A0000044    , A0000045    , A0000046    , A0000047    ,
A0000048    , A0000049    , A0000050    ,

             A0000051    , A0000052    , A0000053    , A0000054    , A0000055    ,
A0000056    , A0000057    , A0000058    ,
```

                                          *** SOURCE IDs DEFINED AS URBAN SOURCES ***

  URBAN ID   URBAN POP   SOURCE IDs
  --------   ---------   ----------

              2492442.   PAREA1   , A0000001   , A0000036   , A0000037   , A0000038   , A0000039   , A0000029   ,
 A0000030   ,

              A0000031   , A0000032   , A0000033   , A0000034   , A0000035   , A0000040   , A0000041   , A0000042   ,

              A0000043   , A0000044   , A0000045   , A0000046   , A0000047   , A0000048   , A0000049   , A0000050   ,

              A0000051   , A0000052   , A0000053   , A0000054   , A0000055   , A0000056   , A0000057   , A0000058   ,

              A0000059   , A0000060   , A0000061   ,

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

 SOURCE ID = PAREA1   ; SOURCE TYPE = AREAPOLY :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
                                                    DAY OF WEEK = MONDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = TUESDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = WEDNESDY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = THURSDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = FRIDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = A0000001 ; SOURCE TYPE = AREA :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = MONDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = TUESDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = WEDNESDY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = THURSDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = FRIDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00						

6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

 SOURCE ID = A0000036   ; SOURCE TYPE = AREA   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
                                                DAY OF WEEK = MONDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = TUESDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = WEDNESDY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = THURSDAY

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = FRIDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                      ***        22:41:45

                                  PAGE   9
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW7) *

 SOURCE ID = A0000037     ; SOURCE TYPE = AREA     :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = MONDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

DAY OF WEEK = TUESDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00								
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01								
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00								

DAY OF WEEK = WEDNESDY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00								
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01								
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00								

DAY OF WEEK = THURSDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00								
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01								
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00								

DAY OF WEEK = FRIDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00								
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01								
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00								

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00								
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00								
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00								

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00								
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00								
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00								

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

```
                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW7) *

 SOURCE ID = A0000038     ; SOURCE TYPE = AREA     :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = MONDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = TUESDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = WEDNESDY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = THURSDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = FRIDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00								
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00								
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00								

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = A0000039 ; SOURCE TYPE = AREA :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = MONDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00								
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01								
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00								

DAY OF WEEK = TUESDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00								
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01								
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00								

DAY OF WEEK = WEDNESDY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00								
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01								
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00								

DAY OF WEEK = THURSDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00								
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01								
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00														

22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = FRIDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = A0000029 ; SOURCE TYPE = AREA :

HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR

- - - -

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   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = WEDNESDY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = THURSDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = FRIDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW7) *

 SOURCE ID = A0000030     ; SOURCE TYPE = AREA     :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
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HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW7) *

 SOURCE ID = A0000031   ; SOURCE TYPE = AREA   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = MONDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = TUESDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = WEDNESDY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = THURSDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = FRIDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01

14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                          DAY OF WEEK = SATURDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                          DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

 SOURCE ID = A0000032   ; SOURCE TYPE = AREA   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
                                          DAY OF WEEK = MONDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                          DAY OF WEEK = TUESDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                          DAY OF WEEK = WEDNESDY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00

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    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = THURSDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = FRIDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                      ***        22:41:45

                                  PAGE  16
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW7) *

 SOURCE ID = A0000033     ; SOURCE TYPE = AREA     :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = MONDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
```

```
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = TUESDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = WEDNESDY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = THURSDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = FRIDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = A0000034 ; SOURCE TYPE = AREA :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = MONDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = TUESDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = WEDNESDY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = THURSDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = FRIDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00						

6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

 SOURCE ID = A0000035   ; SOURCE TYPE = AREA   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
                                                DAY OF WEEK = MONDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = TUESDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = WEDNESDY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = THURSDAY

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = FRIDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                      ***        22:41:45

                                  PAGE  19
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW7) *

 SOURCE ID = A0000040     ; SOURCE TYPE = AREA     :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = MONDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

DAY OF WEEK = TUESDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = WEDNESDY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = THURSDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = FRIDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

```
                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW7) *

 SOURCE ID = A0000041     ; SOURCE TYPE = AREA     :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = MONDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = TUESDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = WEDNESDY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = THURSDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = FRIDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = A0000042 ; SOURCE TYPE = AREA :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = MONDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = TUESDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = WEDNESDY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = THURSDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00						

22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = FRIDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = A0000043 ; SOURCE TYPE = AREA :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = MONDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = TUESDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01

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   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = WEDNESDY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = THURSDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = FRIDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW7) *

 SOURCE ID = A0000044     ; SOURCE TYPE = AREA     :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
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HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -
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                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW7) *

 SOURCE ID = A0000045   ; SOURCE TYPE = AREA   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = MONDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = TUESDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = WEDNESDY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = THURSDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = FRIDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01

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14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                      ***       22:41:45

                                PAGE  25
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW7) *

 SOURCE ID = A0000046     ; SOURCE TYPE = AREA     :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = MONDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = TUESDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = WEDNESDY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
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    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = THURSDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = FRIDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
 *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                      ***        22:41:45

                                  PAGE  26
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW7) *

 SOURCE ID = A0000047     ; SOURCE TYPE = AREA     :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = MONDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
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6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = TUESDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = WEDNESDY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = THURSDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = FRIDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = A0000048 ; SOURCE TYPE = AREA :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = MONDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = TUESDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = WEDNESDY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = THURSDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = FRIDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00						

6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

 SOURCE ID = A0000049   ; SOURCE TYPE = AREA   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
                                                DAY OF WEEK = MONDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = TUESDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = WEDNESDY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = THURSDAY

```
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = FRIDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                      ***        22:41:45

                                  PAGE  29
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW7) *

 SOURCE ID = A0000050     ; SOURCE TYPE = AREA     :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = MONDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

DAY OF WEEK = TUESDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00								
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01								
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00								

DAY OF WEEK = WEDNESDY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00								
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01								
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00								

DAY OF WEEK = THURSDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00								
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01								
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00								

DAY OF WEEK = FRIDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00								
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01								
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00								

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00								
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00								
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00								

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00								
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00								
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00								

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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW7) *

 SOURCE ID = A0000051     ; SOURCE TYPE = AREA     :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = MONDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = TUESDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = WEDNESDY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = THURSDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = FRIDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = A0000052 ; SOURCE TYPE = AREA :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = MONDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = TUESDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = WEDNESDY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = THURSDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00						

22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = FRIDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SATURDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

DAY OF WEEK = SUNDAY

1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = A0000053 ; SOURCE TYPE = AREA :

HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR

- - - -

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   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = WEDNESDY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = THURSDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = FRIDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW7) *

 SOURCE ID = A0000054     ; SOURCE TYPE = AREA     :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
```

```
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - -
```

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW7) *

 SOURCE ID = A0000055   ; SOURCE TYPE = AREA   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
- -
                                                DAY OF WEEK = MONDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = TUESDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = WEDNESDY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = THURSDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = FRIDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01

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14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                      ***       22:41:45

                                PAGE  35
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW7) *

 SOURCE ID = A0000056     ; SOURCE TYPE = AREA     :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = MONDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = TUESDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = WEDNESDY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
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    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = THURSDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = FRIDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
*** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                      ***        22:41:45

                                  PAGE  36
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW7) *

 SOURCE ID = A0000057     ; SOURCE TYPE = AREA     :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = MONDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
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6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = TUESDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = WEDNESDY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = THURSDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = FRIDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↑ *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

SOURCE ID = A0000058 ; SOURCE TYPE = AREA :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = MONDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = TUESDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = WEDNESDY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = THURSDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = FRIDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00						

6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = SUNDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .0000E+00   10 .0000E+00   11 .0000E+00   12 .0000E+00   13 .0000E+00
14 .0000E+00   15 .0000E+00   16 .0000E+00
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

 SOURCE ID = A0000059   ; SOURCE TYPE = AREA   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 -
                                                DAY OF WEEK = MONDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = TUESDAY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = WEDNESDY
    1 .0000E+00   2 .0000E+00   3 .0000E+00   4 .0000E+00   5 .0000E+00
6 .0000E+00   7 .0000E+00   8 .0000E+00
    9 .1000E+01   10 .1000E+01   11 .1000E+01   12 .1000E+01   13 .1000E+01
14 .1000E+01   15 .1000E+01   16 .1000E+01
   17 .0000E+00   18 .0000E+00   19 .0000E+00   20 .0000E+00   21 .0000E+00
22 .0000E+00   23 .0000E+00   24 .0000E+00
                                                DAY OF WEEK = THURSDAY

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    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = FRIDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                      ***        22:41:45

                                  PAGE  39
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW7) *

 SOURCE ID = A0000060     ; SOURCE TYPE = AREA     :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = MONDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
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                                                DAY OF WEEK = TUESDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = WEDNESDY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = THURSDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = FRIDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
↟ *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                      ***        22:41:45

                                  PAGE  40
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
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                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
WEEK (HRDOW7) *

 SOURCE ID = A0000061     ; SOURCE TYPE = AREA     :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
                                                  DAY OF WEEK = MONDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = TUESDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = WEDNESDY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = THURSDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = FRIDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01
14  .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
                                                  DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00
6  .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00
14  .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00
22  .0000E+00   23  .0000E+00   24  .0000E+00
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DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00
6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00 13 .0000E+00
14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00
22 .0000E+00 23 .0000E+00 24 .0000E+00

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

*** X-COORDINATES OF GRID ***
(METERS)

501396.9, 501462.9, 501528.9, 501594.9, 501660.9, 501726.9, 501792.9, 501858.9, 501924.9, 501990.9,
502056.9, 502122.9, 502188.9, 502254.9, 502320.9, 502386.9, 502452.9, 502518.9, 502584.9, 502650.9,
502716.9,

*** Y-COORDINATES OF GRID ***
(METERS)

3737187.6, 3737242.6, 3737297.6, 3737352.6, 3737407.6, 3737462.6, 3737517.6, 3737572.6, 3737627.6, 3737682.6,
3737737.6, 3737792.6, 3737847.6, 3737902.6, 3737957.6, 3738012.6, 3738067.6, 3738122.6, 3738177.6, 3738232.6,
3738287.6,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

| Y-COORD (METERS) | X-COORD (METERS) | | |

                                 *** NETWORK ID: UCART1   ; NETWORK TYPE: GRIDCART ***

                                                 * ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	X-COORD (METERS)									
	501990.92	502056.92	502122.92	502188.92	502254.92	502320.92	502386.92	502452.92	502518.92	
3738287.60	464.90	465.40	465.50	465.90	466.10	466.30	466.50	467.40	467.60	
3738232.60	465.40	465.30	465.50	465.60	465.80	466.20	466.80	467.50	467.90	
3738177.60	464.50	464.50	465.10	464.80	465.60	466.40	466.50	466.90	467.60	
3738122.60	464.00	464.20	464.50	464.90	465.40	465.80	466.30	467.40	467.50	
3738067.60	464.60	464.50	464.60	464.90	465.10	465.50	466.20	467.20	467.70	
3738012.60	464.30	464.00	464.30	465.10	465.60	465.40	465.70	466.70	467.40	
3737957.60	464.10	464.10	464.30	464.70	464.90	465.10	465.50	466.10	467.30	
3737902.60	464.30	464.30	464.30	464.70	463.20	465.30	465.20	466.80	466.80	
3737847.60	464.60	464.60	464.60	465.30	465.20	465.90	465.30	465.80	466.60	
3737792.60	465.00	465.00	465.00	465.20	465.40	465.70	465.80	466.00	466.50	
3737737.60	465.00	465.10	465.00	465.10	465.30	465.50	465.80	465.80	466.90	
3737682.60	465.10	465.00	465.10	465.20	465.30	466.00	465.90	466.20	466.60	
3737627.60	465.30	465.00	465.20	465.30	465.50	466.50	466.20	466.40	466.40	
3737572.60	465.10	465.20	465.40	465.50	466.10	466.30	466.50	466.20	466.50	
3737517.60	465.00	465.70	466.10	466.20	466.30	466.50	467.00	466.20	466.70	
3737462.60	465.40	465.70	466.00	466.20	466.30	466.50	466.70	466.60	467.20	
3737407.60	464.60	464.70	464.90	465.10	465.30					

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  3738287.60 |        468.20       468.50       468.60
  3738232.60 |        468.20       468.60       469.00
  3738177.60 |        468.00       468.50       468.80
  3738122.60 |        467.90       468.40       469.00
  3738067.60 |        467.60       468.10       468.60
  3738012.60 |        467.60       468.10       468.40
  3737957.60 |        467.50       467.90       468.20
  3737902.60 |        467.30       467.80       468.00
  3737847.60 |        466.90       467.50       467.90
  3737792.60 |        466.90       467.20       467.60
  3737737.60 |        467.00       467.40       467.60
  3737682.60 |        466.90       467.20       467.50
  3737627.60 |        466.90       467.10       467.50
  3737572.60 |        466.90       467.20       467.50
  3737517.60 |        467.00       467.20       467.40
  3737462.60 |        467.30       467.40       467.50
  3737407.60 |        466.80       467.10       467.30
  3737352.60 |        467.40       467.50       467.70
  3737297.60 |        467.50       467.70       467.90
  3737242.60 |        468.00       467.90       468.10
  3737187.60 |        468.20       468.10       468.30
```

                                 *** NETWORK ID: UCART1   ; NETWORK TYPE: GRIDCART ***

                                                 * HILL HEIGHT SCALES IN METERS *

Y-COORD (METERS)	X-COORD (METERS)									
	501396.92	501462.92	501528.92	501594.92	501660.92	501726.92	501792.92	501858.92	501924.92	
3738287.60	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	3291.50	
3738232.60	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	3291.50	
3738177.60	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	3291.50	
3738122.60	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	3291.50	
3738067.60	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	3291.50	
3738012.60	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	
3737957.60	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	
3737902.60	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	
3737847.60	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	
3737792.60	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	
3737737.60	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	
3737682.60	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	
3737627.60	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	
3737572.60	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	
3737517.60	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	
3737462.60	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	
3737407.60	1232.30	1232.30	1232.30	1232.30	1232.30					

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* HILL HEIGHT SCALES IN METERS *

Y-COORD (METERS)	X-COORD (METERS)									
	501990.92	502056.92	502122.92	502188.92	502254.92	502320.92	502386.92	502452.92	502518.92	
3738287.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3738232.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3738177.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3738122.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3738067.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3738012.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3737957.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3737902.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3737847.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3737792.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3737737.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	

 3737682.60 | 3291.50   3291.50   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3737627.60 | 3291.50   3291.50   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3737572.60 | 3291.50   3291.50   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3737517.60 | 3291.50   3291.50   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3737462.60 | 3291.50   3291.50   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3737407.60 | 3291.50   3291.50   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3737352.60 | 3291.50   3291.50   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3737297.60 | 3291.50   3291.50   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3737242.60 | 3291.50   3291.50   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3737187.60 | 3291.50   3291.50   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                  *** NETWORK ID: UCART1   ; NETWORK TYPE: GRIDCART
***

                                              * HILL HEIGHT SCALES IN METERS *

    Y-COORD | X-COORD (METERS)
    (METERS) | 502584.92   502650.92   502716.92
 -
- -

  3738287.60 | 3291.50   3291.50   3291.50
  3738232.60 | 3291.50   3291.50   3291.50
  3738177.60 | 3291.50   3291.50   3291.50
  3738122.60 | 3291.50   3291.50   3291.50
  3738067.60 | 3291.50   3291.50   3291.50
  3738012.60 | 3291.50   3291.50   3291.50
  3737957.60 | 3291.50   3291.50   3291.50
  3737902.60 | 3291.50   3291.50   3291.50
  3737847.60 | 3291.50   3291.50   3291.50
  3737792.60 | 3291.50   3291.50   3291.50
  3737737.60 | 3291.50   3291.50   3291.50
  3737682.60 | 3291.50   3291.50   3291.50

```
  3737627.60 |       3291.50      3291.50      3291.50
  3737572.60 |       3291.50      3291.50      3291.50
  3737517.60 |       3291.50      3291.50      3291.50
  3737462.60 |       3291.50      3291.50      3291.50
  3737407.60 |       3291.50      3291.50      3291.50
  3737352.60 |       3291.50      3291.50      3291.50
  3737297.60 |       3291.50      3291.50      3291.50
  3737242.60 |       3291.50      3291.50      3291.50
  3737187.60 |       3291.50      3291.50      3291.50
```


*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: UCART2   ; NETWORK TYPE: GRIDCART ***

*** X-COORDINATES OF GRID ***
(METERS)

```
       499078.4,  499386.3,  499694.2,  500002.1,  500310.0,  500617.9,  500925.7,
501233.6,  501541.5,  501849.4,
       502157.3,  502465.2,  502773.1,  503081.0,  503388.9,  503696.8,  504004.6,
504312.5,  504620.4,  504928.3,
       505236.2,
```

*** Y-COORDINATES OF GRID ***
(METERS)

```
      3734693.9, 3735010.3, 3735326.7, 3735643.1, 3735959.5, 3736275.9, 3736592.4,
3736908.8, 3737225.2, 3737541.6,
      3737858.0, 3738174.4, 3738490.8, 3738807.2, 3739123.6, 3739440.0, 3739756.5,
3740072.9, 3740389.3, 3740705.7,
      3741022.1,
```


*** NETWORK ID: UCART2   ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	X-COORD (METERS)									
	499078.40	499386.29	499694.18	500002.07	500309.96	500617.85	500925.74	501233.63	501541.52	
3741022.10	447.70	448.00	448.30	449.70	450.40	452.10	452.80	454.50	456.50	
3740705.69	449.50	449.70	449.40	450.70	452.40	453.30	454.90	454.30	456.80	
3740389.28	452.70	451.40	450.60	451.10	453.00	454.10	455.80	456.30	457.70	
3740072.87	455.40	455.90	452.20	452.00	451.50	455.00	456.40	457.80	458.90	
3739756.46	457.60	457.30	455.30	451.50	453.70	453.30	456.80	458.60	459.80	
3739440.05	458.30	458.30	459.10	456.60	455.30	455.00	457.00	458.90	460.40	
3739123.64	458.70	458.90	460.10	460.80	458.50	458.50	458.10	458.90	460.60	
3738807.23	459.60	460.10	460.40	461.00	463.60	460.70	460.40	460.00	460.70	
3738490.82	460.00	461.00	461.80	462.50	462.60	461.60	461.80	463.20	462.40	
3738174.41	460.80	461.80	461.40	463.80	464.60	464.90	463.80	463.10	464.30	
3737858.00	461.60	462.40	462.90	464.50	466.30	466.80	464.90	463.30	463.90	
3737541.59	461.80	462.90	464.40	465.40	466.20	467.00	467.70	468.10	464.60	
3737225.18	462.10	463.20	464.80	465.60	466.30	467.10	468.00	469.20	470.80	
3736908.77	462.00	463.30	464.20	465.40	467.50	468.00	468.80	469.70	471.00	
3736592.36	462.50	463.60	464.40	466.00	466.70	467.70	469.30	471.20	472.40	
3736275.95	463.90	464.10	465.80	466.30	467.40	468.70	469.90	471.60	473.30	
3735959.54	463.50	464.50	465.70	466.40	467.60	470.00	470.90	472.50	473.80	
3735643.13	463.60	464.30	465.90	467.40	469.60	470.60	471.40	472.50	475.60	
3735326.72	464.00	464.60	466.20	467.90	470.10	467.20	472.90	474.20	475.30	
3735010.31	463.30	464.90	466.00	468.00	470.50	472.10	474.10	474.90	476.20	
3734693.90	463.40	465.10	466.60	468.80	470.70	472.50	474.60	475.80	478.10	

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** NETWORK ID: UCART2 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	X-COORD (METERS)								
	501849.41	502157.30	502465.19	502773.08	503080.97	503388.86	503696.75	504004.64	504312.53
3741022.10	457.90	458.20	459.80	462.30	463.20	463.70	465.20	466.20	466.10
3740705.69	458.30	459.70	461.00	463.60	464.80	465.80	467.00	468.20	468.90
3740389.28	458.40	460.80	461.80	463.80	465.60	466.30	468.40	470.00	470.20
3740072.87	460.40	461.90	463.50	464.20	466.80	467.20	469.20	471.30	472.40
3739756.46	461.40	463.20	464.20	465.50	467.10	467.50	470.00	472.10	473.60
3739440.05	462.20	463.20	465.20	467.20	468.70	469.80	471.00	473.40	474.30
3739123.64	462.60	464.20	465.60	467.60	469.20	471.00	472.20	474.20	475.70
3738807.23	462.50	464.40	465.80	468.00	469.70	472.20	473.80	475.50	476.10
3738490.82	463.40	464.90	466.50	468.10	470.10	471.90	473.90	476.30	478.00
3738174.41	464.00	465.20	467.10	469.40	472.30	474.50	476.10	478.00	479.50
3737858.00	464.90	464.50	466.00	468.70	470.20	472.50	474.70	476.00	478.20
3737541.59	464.80	465.80	466.30	467.90	471.30	471.20	473.70	476.00	478.30
3737225.18	465.60	466.30	467.30	468.90	469.80	472.70	474.60	476.90	478.40
3736908.77	472.40	467.00	468.40	469.70	471.10	473.30	476.20	478.70	480.80
3736592.36	473.00	472.20	469.50	472.00	472.70	474.60	478.00	480.90	483.10
3736275.95	474.50	476.10	474.10	474.00	475.00				

Y-COORD (METERS)	X-COORD (METERS)		
	504620.42	504928.31	505236.20
3741022.10	467.80	468.70	517.30
3740705.69	469.00	469.70	470.80
3740389.28	471.10	471.70	472.20
3740072.87	473.10	473.60	473.70
3739756.46	474.70	475.10	476.40
3739440.05	476.40	476.90	478.00
3739123.64	477.70	478.70	479.50
3738807.23	477.60	479.80	481.40
3738490.82	479.70	481.00	482.70
3738174.41	480.80	482.10	481.50
3737858.00	481.10	483.40	485.40
3737541.59	481.90	483.30	486.20
3737225.18	480.00	484.40	487.20
3736908.77	483.30	484.90	486.80
3736592.36	485.20	487.40	490.00
3736275.95	487.80	490.40	490.50
3735959.54	491.40	501.50	498.00
3735643.13	516.20	542.10	532.40
3735326.72	501.10	526.40	561.50
3735010.31	498.60	511.30	534.40
3734693.90	498.40	504.40	512.50

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** NETWORK ID: UCART2 ; NETWORK TYPE: GRIDCART ***

* HILL HEIGHT SCALES IN METERS *

Y-COORD (METERS)	X-COORD (METERS)								
	499078.40	499386.29	499694.18	500002.07	500309.96	500617.85	500925.74	501233.63	501541.52
3741022.10	1179.50	1232.30	1232.30	1232.30	1232.30	1232.30	1232.30	1250.00	3291.50
3740705.69	1179.50	1232.30	1232.30	1232.30	1232.30	1232.30	1232.30	1250.00	3291.50
3740389.28	1179.50	1232.30	1232.30	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50
3740072.87	1179.50	1179.50	1232.30	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50
3739756.46	1179.50	1179.50	1232.30	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50
3739440.05	1179.50	1179.50	1179.50	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50
3739123.64	1138.30	1179.50	1179.50	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50
3738807.23	459.60	1138.30	1179.50	1179.50	1232.30	1232.30	1232.30	1232.30	3291.50
3738490.82	460.00	461.00	1179.50	1179.50	1179.50	1232.30	1232.30	1232.30	1232.30
3738174.41	460.80	461.80	461.40	1179.50	1179.50	1232.30	1232.30	1232.30	1232.30
3737858.00	461.60	462.40	462.90	464.50	1179.50	1179.50	1232.30	1232.30	1232.30
3737541.59	461.80	462.90	464.40	465.40	466.20	1179.50	1179.50	1232.30	1232.30
3737225.18	462.10	463.20	464.80	465.60	466.30	467.10	1179.50	1179.50	1232.30
3736908.77	462.00	463.30	464.20	465.40	467.50	468.00	468.80	1172.00	1179.50
3736592.36	462.50	463.60	464.40	466.00	466.70	467.70	469.30	471.20	472.40
3736275.95	601.50	464.10	465.80	466.30	467.40				

 468.70   469.90   471.60   473.30
 3735959.54 | 601.50   464.50   465.70   466.40   467.60
 470.00   470.90   472.50   473.80
 3735643.13 | 601.50   464.30   465.90   467.40   469.60
 470.60   471.40   472.50   475.60
 3735326.72 | 601.50   464.60   466.20   467.90   470.10
 471.70   472.90   474.20   475.30
 3735010.31 | 463.30   464.90   466.00   468.00   470.50
 472.10   474.10   474.90   476.20
 3734693.90 | 463.40   465.10   466.60   468.80   470.70
 472.50   474.60   475.80   478.10
↟ *** AERMOD - VERSION 24142 ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens San Jacinto\26-017 Bradl ***   06/08/26
 *** AERMET - VERSION 16216 ***   ***
                      ***   22:41:45

                                 PAGE 53
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                 *** NETWORK ID: UCART2   ; NETWORK TYPE: GRIDCART ***

                                          * HILL HEIGHT SCALES IN METERS *

    Y-COORD | X-COORD (METERS)
    (METERS) | 501849.41   502157.30   502465.19   502773.08   503080.97   503388.86   503696.75   504004.64   504312.53
 - - -

 3737858.00 | 3291.50   3291.50   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3737541.59 | 3291.50   3291.50   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3737225.18 | 3291.50   3291.50   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3736908.77 | 1232.30   3291.50   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3736592.36 | 1179.50   3291.50   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3736275.95 | 474.50   3291.50   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3735959.54 | 476.30   3291.50   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3735643.13 | 477.30   478.80   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3735326.72 | 478.10   480.10   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3735010.31 | 479.50   480.60   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3734693.90 | 479.30   481.10   483.00   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                 *** NETWORK ID: UCART2   ; NETWORK TYPE: GRIDCART
***

                                              * HILL HEIGHT SCALES IN METERS *

    Y-COORD | X-COORD (METERS)
    (METERS) | 504620.42   504928.31   505236.20
 -
- -

  3741022.10 | 3291.50   3291.50   3291.50
  3740705.69 | 3291.50   3291.50   3291.50
  3740389.28 | 3291.50   3291.50   3291.50
  3740072.87 | 3291.50   3291.50   3291.50
  3739756.46 | 3291.50   3291.50   3291.50
  3739440.05 | 3291.50   3291.50   3291.50
  3739123.64 | 3291.50   3291.50   3291.50
  3738807.23 | 3291.50   3291.50   3291.50
  3738490.82 | 3291.50   3291.50   3291.50
  3738174.41 | 3291.50   3291.50   3291.50

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(501966.9, 3737672.4, 465.3, 3291.5, 0.0); (501978.3, 3737662.1, 465.4, 3291.5, 0.0);
(501928.2, 3737680.1, 465.1, 3291.5, 0.0); (501942.3, 3737681.3, 465.1, 3291.5, 0.0);
(501981.2, 3737640.4, 465.4, 3291.5, 0.0); (501980.5, 3737624.8, 465.4, 3291.5, 0.0);
(501911.4, 3737676.3, 465.2, 3291.5, 0.0); (501896.9, 3737678.6, 465.0, 3291.5, 0.0);
(501867.5, 3737677.1, 465.1, 3291.5, 0.0); (501852.6, 3737679.0, 464.9, 3291.5, 0.0);
(501837.3, 3737679.4, 464.9, 3291.5, 0.0); (502018.8, 3737562.0, 465.8, 3291.5, 0.0);
(502038.5, 3737568.8, 465.3, 3291.5, 0.0); (502065.5, 3737567.0, 465.5, 3291.5, 0.0);
(502091.8, 3737568.2, 465.5, 3291.5, 0.0); (502125.4, 3737567.3, 465.7, 3291.5, 0.0);
(502146.1, 3737567.5, 465.6, 3291.5, 0.0); (502175.5, 3737558.0, 466.0, 3291.5, 0.0);
(502209.3, 3737571.6, 465.9, 3291.5, 0.0); (502228.0, 3737572.8, 466.0, 3291.5, 0.0);
(502243.3, 3737572.8, 466.1, 3291.5, 0.0); (502258.1, 3737570.2, 466.2, 3291.5, 0.0);
(502273.1, 3737574.2, 466.1, 3291.5, 0.0); (502288.1, 3737572.4, 466.2, 3291.5, 0.0);
(502302.6, 3737574.9, 466.2, 3291.5, 0.0); (502333.3, 3737573.3, 466.3, 3291.5, 0.0);
(502347.4, 3737570.2, 466.4, 3291.5, 0.0); (501816.6,

3737669.1,   465.0,   3291.5,   0.0);
     (501770.4, 3737703.1,   465.5,   3291.5,   0.0);   (501768.1,
3737721.4,   465.5,   3291.5,   0.0);
     (501746.3, 3737760.0,   465.2,   3291.5,   0.0);   (501763.5,
3737739.0,   465.5,   3291.5,   0.0);
     (501725.3, 3737760.7,   465.1,   3291.5,   0.0);   (501707.4,
3737758.4,   465.2,   3291.5,   0.0);
     (501694.4, 3737761.1,   465.0,   3291.5,   0.0);   (501680.6,
3737755.8,   465.2,   1232.3,   0.0);
     (501668.0, 3737756.1,   465.1,   1232.3,   0.0);   (501652.0,
3737757.3,   465.0,   1232.3,   0.0);
     (501640.2, 3737754.2,   465.0,   1232.3,   0.0);   (501625.6,
3737756.1,   465.0,   1232.3,   0.0);
     (501612.3, 3737757.7,   465.0,   1232.3,   0.0);   (501598.1,
3737755.8,   465.0,   1232.3,   0.0);
     (501585.2, 3737751.9,   464.9,   1232.3,   0.0);   (501571.4,
3737756.1,   464.8,   1232.3,   0.0);
     (501558.0, 3737753.1,   464.8,   1232.3,   0.0);   (501543.1,
3737756.1,   464.8,   1232.3,   0.0);
     (501524.0, 3737747.4,   464.6,   1232.3,   0.0);   (502624.0,
3738184.9,   468.2,   3291.5,   0.0);
     (502296.9, 3737674.7,   465.7,   3291.5,   0.0);   (502308.5,
3737629.7,   466.3,   3291.5,   0.0);
     (502299.1, 3737724.1,   465.5,   3291.5,   0.0);   (502298.4,
3737758.0,   465.5,   3291.5,   0.0);
     (502298.7, 3737740.6,   465.5,   3291.5,   0.0);   (502372.5,
3737767.8,   465.7,   3291.5,   0.0);
     (502360.2, 3737753.7,   465.7,   3291.5,   0.0);   (502407.5,
3737771.4,   465.7,   3291.5,   0.0);
     (502424.0, 3737764.8,   465.8,   3291.5,   0.0);   (502469.9,
3737766.1,   466.0,   3291.5,   0.0);
     (502513.4, 3737756.5,   466.5,   3291.5,   0.0);   (502412.7,
3737806.0,   465.6,   3291.5,   0.0);
     (502426.3, 3737806.4,   465.7,   3291.5,   0.0);   (502459.6,
3737807.1,   465.9,   3291.5,   0.0);
     (502471.4, 3737806.4,   466.2,   3291.5,   0.0);   (502048.3,
3737810.2,   464.8,   3291.5,   0.0);
     (502056.3, 3737841.1,   464.6,   3291.5,   0.0);   (502097.6,
3737839.2,   464.8,   3291.5,   0.0);
     (502233.4, 3737808.3,   465.6,   3291.5,   0.0);   (502148.6,
3737806.0,   464.9,   3291.5,   0.0);
     (502130.0, 3737803.7,   464.9,   3291.5,   0.0);   (502133.8,
3737820.5,   464.8,   3291.5,   0.0);
     (502179.5, 3737806.2,   465.1,   3291.5,   0.0);   (501972.9,
3737806.5,   464.9,   3291.5,   0.0);
     (501710.0, 3737800.9,   465.4,   3291.5,   0.0);   (501689.6,
3737800.9,   465.3,   3291.5,   0.0);
     (501670.2, 3737802.3,   465.3,   1232.3,   0.0);   (501653.2,
3737802.8,   465.3,   1232.3,   0.0);
     (501612.0, 3737799.5,   465.1,   1232.3,   0.0);   (502620.1,

3738205.6,   468.1,   3291.5,   0.0);
     (502621.8, 3738241.4,   468.3,   3291.5,   0.0);   (502613.6,
3738389.0,   467.9,   3291.5,   0.0);
     (502615.6, 3738377.4,   468.0,   3291.5,   0.0);   (502616.1,
3738417.7,   468.0,   3291.5,   0.0);
     (502615.3, 3738453.0,   467.8,   3291.5,   0.0);   (502577.6,
3738489.8,   467.4,   3291.5,   0.0);
     (502559.2, 3738513.2,   467.1,   3291.5,   0.0);   (502597.9,
3739300.5,   467.0,   3291.5,   0.0);
     (502593.8, 3739263.5,   467.2,   3291.5,   0.0);   (502580.6,
3738451.4,   467.7,   3291.5,   0.0);
     (502616.5, 3738514.4,   467.7,   3291.5,   0.0);   (502614.9,
3738568.4,   467.5,   3291.5,   0.0);

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                       (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                (METERS)

     (502487.9, 3738530.0,   466.6,   3291.5,   0.0);   (502644.5,
3738994.0,   467.1,   3291.5,   0.0);
     (502620.8, 3738849.4,   466.9,   3291.5,   0.0);   (502690.4,
3738762.1,   467.4,   3291.5,   0.0);
     (502704.0, 3738745.9,   467.5,   3291.5,   0.0);   (502595.2,
3739480.0,   466.8,   3291.5,   0.0);
     (502657.0, 3739500.6,   466.6,   3291.5,   0.0);   (502658.0,
3739416.2,   466.6,   3291.5,   0.0);
     (502662.0, 3739363.4,   466.8,   3291.5,   0.0);   (502602.5,
3739440.6,   466.4,   3291.5,   0.0);
     (502555.4, 3740147.5,   464.1,   3291.5,   0.0);   (502543.2,
3740070.0,   464.2,   3291.5,   0.0);
     (502556.6, 3740026.5,   464.4,   3291.5,   0.0);   (502454.3,
3740164.2,   463.3,   3291.5,   0.0);
     (502409.0, 3740182.2,   463.1,   3291.5,   0.0);   (502265.9,
3740226.6,   462.1,   3291.5,   0.0);
     (502228.3, 3740263.8,   461.8,   3291.5,   0.0);   (502205.6,
3740289.8,   461.3,   3291.5,   0.0);
     (502159.0, 3740324.8,   460.9,   3291.5,   0.0);   (502138.4,
3740365.8,   460.7,   3291.5,   0.0);
     (502100.4, 3740404.3,   460.4,   3291.5,   0.0);   (502111.8,
3740496.4,   459.6,   3291.5,   0.0);
     (502103.2, 3740513.4,   459.4,   3291.5,   0.0);   (502089.3,
3740526.7,   459.4,   3291.5,   0.0);
     (502075.4, 3740539.9,   459.3,   3291.5,   0.0);   (502023.2,

3740591.8,   459.1,   3291.5,   0.0);
     (501972.0, 3740643.3,   458.9,   3291.5,   0.0);   (501930.9,
3740574.5,   458.7,   3291.5,   0.0);
     (501984.3, 3740504.4,   459.3,   3291.5,   0.0);   (502421.0,
3740250.8,   461.9,   3291.5,   0.0);
     (502410.0, 3740253.8,   461.9,   3291.5,   0.0);   (502388.8,
3740264.9,   461.8,   3291.5,   0.0);
     (502348.0, 3740285.2,   461.7,   3291.5,   0.0);   (502338.2,
3740289.9,   461.7,   3291.5,   0.0);
     (502329.1, 3740295.5,   461.7,   3291.5,   0.0);   (502285.4,
3740324.0,   461.5,   3291.5,   0.0);
     (502267.3, 3740337.4,   461.4,   3291.5,   0.0);   (502250.6,
3740353.0,   461.3,   3291.5,   0.0);
     (502233.8, 3740371.5,   461.2,   3291.5,   0.0);   (502211.5,
3740393.2,   461.1,   3291.5,   0.0);
     (502192.6, 3740412.1,   461.1,   3291.5,   0.0);   (502136.8,
3740462.9,   460.8,   3291.5,   0.0);
     (502154.7, 3740450.0,   460.8,   3291.5,   0.0);   (502176.9,
3740427.4,   461.0,   3291.5,   0.0);
     (502798.3, 3740217.1,   465.1,   3291.5,   0.0);   (502825.7,
3740215.6,   465.1,   3291.5,   0.0);
     (502844.2, 3740214.5,   465.1,   3291.5,   0.0);   (502863.3,
3740214.8,   465.0,   3291.5,   0.0);
     (502887.1, 3740214.5,   465.0,   3291.5,   0.0);   (502902.4,
3740214.2,   465.0,   3291.5,   0.0);
     (502926.9, 3740212.6,   464.9,   3291.5,   0.0);   (502967.1,
3740219.4,   465.0,   3291.5,   0.0);
     (503014.8, 3740212.3,   465.9,   3291.5,   0.0);   (503080.3,
3740214.5,   466.1,   3291.5,   0.0);
     (503033.7, 3740211.5,   465.9,   3291.5,   0.0);   (503010.1,
3740154.1,   465.8,   3291.5,   0.0);
     (503046.4, 3740151.5,   466.8,   3291.5,   0.0);   (503119.0,
3740152.8,   466.5,   3291.5,   0.0);
     (503194.8, 3740154.7,   466.7,   3291.5,   0.0);   (503177.1,
3740213.1,   466.2,   3291.5,   0.0);
     (503251.6, 3740212.5,   466.6,   3291.5,   0.0);   (503327.7,
3740212.8,   466.9,   3291.5,   0.0);
     (503245.8, 3740153.1,   466.9,   3291.5,   0.0);   (503324.8,
3740156.3,   467.1,   3291.5,   0.0);
     (502679.8, 3740239.4,   463.7,   3291.5,   0.0);   (503004.1,
3739255.5,   469.2,   3291.5,   0.0);
     (502912.6, 3739310.2,   468.5,   3291.5,   0.0);   (502294.6,
3739543.4,   464.7,   3291.5,   0.0);
     (502049.3, 3739489.2,   464.0,   3291.5,   0.0);   (502302.0,
3739600.0,   464.6,   3291.5,   0.0);
     (502505.6, 3739431.2,   465.5,   3291.5,   0.0);   (502560.5,
3739493.4,   466.0,   3291.5,   0.0);
     (502177.0, 3738053.4,   465.1,   3291.5,   0.0);   (503298.4,
3737837.0,   471.9,   3291.5,   0.0);
     (503381.2, 3738583.9,   471.9,   3291.5,   0.0);   (503398.8,

3738546.9,   471.8,   3291.5,   0.0);
     (503394.5, 3738631.9,   472.3,   3291.5,   0.0);   (501212.6,
3739008.6,   459.2,   1232.3,   0.0);
     (501740.2, 3737811.0,   464.7,   3291.5,   0.0);

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                              *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                                                    (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1

               NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

                                   *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
                                                          (METERS/SEC)

                                                  1.54,   3.09,   5.14,   8.23,
10.80,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: ..\..\Met Data\PERI_V9_ADJU\PERI_v9.SFC
Met Version: 16216
Profile file: ..\..\Met Data\PERI_V9_ADJU\PERI_v9.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 3171 Upper air station no.: 3190
Name: PERRIS_METEOROLOGICAL_STATION Name: UNKNOWN

Year: 2010 Year: 2010

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
10	01	01	1	01	-7.9	0.125	-9.000	-9.000	-999.	106.	21.2	0.19	0.61	1.00	1.30	335.	9.1	282.5	5.5
10	01	01	1	02	-3.9	0.088	-9.000	-9.000	-999.	62.	15.1	0.19	0.61	1.00	0.90	142.	9.1	280.9	5.5
10	01	01	1	03	-3.9	0.088	-9.000	-9.000	-999.	62.	15.1	0.19	0.61	1.00	0.90	324.	9.1	280.4	5.5
10	01	01	1	04	-1.3	0.064	-9.000	-9.000	-999.	39.	18.3	0.19	0.61	1.00	0.40	294.	9.1	278.8	5.5
10	01	01	1	05	-3.9	0.088	-9.000	-9.000	-999.	62.	15.0	0.19	0.61	1.00	0.90	205.	9.1	278.1	5.5
10	01	01	1	06	-1.3	0.065	-9.000	-9.000	-999.	39.	18.3	0.19	0.61	1.00	0.40	3.	9.1	277.0	5.5
10	01	01	1	07	-8.0	0.125	-9.000	-9.000	-999.	106.	21.0	0.19	0.61	1.00	1.30	99.	9.1	277.0	5.5
10	01	01	1	08	-3.3	0.086	-9.000	-9.000	-999.	61.	16.8	0.19	0.61	0.54	0.90	319.	9.1	278.8	5.5
10	01	01	1	09	20.1	0.128	0.307	0.010	49.	110.	-9.0	0.19	0.61	0.33	0.90	239.	9.1	284.2	5.5
10	01	01	1	10	56.7	0.087	0.560	0.010	107.	62.	-1.0	0.19	0.61	0.26	0.40	188.	9.1	289.2	5.5
10	01	01	1	11	81.5	0.323	0.867	0.008	277.	441.	-35.9	0.19	0.61	0.23	2.70	310.	9.1	290.9	5.5
10	01	01	1	12	97.1	0.281	1.058	0.008	421.	357.	-19.7	0.19	0.61	0.22	2.20	357.	9.1	293.1	5.5
10	01	01	1	13	92.2	0.279	1.117	0.008	523.	354.	-20.4	0.19	0.61	0.22	2.20	356.	9.1	293.8	5.5
10	01	01	1	14	77.6	0.275	1.102	0.008	595.	347.	-23.2	0.19	0.61						

```
0.23    2.20   50.    9.1  294.2    5.5
 10 01 01   1 15   54.9  0.230  1.006  0.008  640.  266.    -19.2  0.19   0.61
0.27    1.80   53.    9.1  293.8    5.5
 10 01 01   1 16   12.3  0.206  0.613  0.008  648.  225.    -61.5  0.19   0.61
0.36    1.80   11.    9.1  292.5    5.5
 10 01 01   1 17   -3.6  0.087 -9.000 -9.000 -999.   71.     15.6  0.19   0.61
0.64    0.90  351.    9.1  290.4    5.5
 10 01 01   1 18   -3.8  0.087 -9.000 -9.000 -999.   62.     15.2  0.19   0.61
1.00    0.90  186.    9.1  287.5    5.5
 10 01 01   1 19   -3.8  0.087 -9.000 -9.000 -999.   62.     15.2  0.19   0.61
1.00    0.90  275.    9.1  285.9    5.5
 10 01 01   1 20   -1.2  0.064 -9.000 -9.000 -999.   39.     18.1  0.19   0.61
1.00    0.40  181.    9.1  285.4    5.5
 10 01 01   1 21   -7.8  0.125 -9.000 -9.000 -999.  106.     21.3  0.19   0.61
1.00    1.30  318.    9.1  284.9    5.5
 10 01 01   1 22   -3.8  0.088 -9.000 -9.000 -999.   62.     15.1  0.19   0.61
1.00    0.90  196.    9.1  283.1    5.5
 10 01 01   1 23   -3.8  0.088 -9.000 -9.000 -999.   62.     15.1  0.19   0.61
1.00    0.90  330.    9.1  281.4    5.5
 10 01 01   1 24   -7.9  0.125 -9.000 -9.000 -999.  106.     21.2  0.19   0.61
1.00    1.30  332.    9.1  280.9    5.5


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 10 01 01 01    5.5 0 -999.  -99.00   282.6   99.0  -99.00  -99.00
 10 01 01 01    9.1 1  335.    1.30  -999.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
 *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                       ***        22:41:45

                                  PAGE  59
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL       ***
                                   INCLUDING SOURCE(S):     PAREA1      , A0000001
, A0000036    , A0000037    , A0000038    ,
                A0000039    , A0000029    , A0000030    , A0000031    , A0000032
, A0000033    , A0000034    , A0000035    ,
                A0000040    , A0000041    , A0000042    , A0000043    , A0000044
, A0000045    , A0000046    , A0000047    ,
                A0000048    , A0000049    , A0000050    , A0000051    , A0000052
, A0000053    , A0000054    ,  . . .      ,

                                    *** NETWORK ID: UCART1   ;  NETWORK TYPE:
GRIDCART ***
```

** CONC OF PM_10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS)								
	501396.92	501462.92	501528.92	501594.92	501660.92	501726.92	501792.92	501858.92	501924.92
3738287.60	0.00033	0.00037	0.00042	0.00049	0.00056	0.00066	0.00076	0.00087	0.00096
3738232.60	0.00034	0.00038	0.00044	0.00052	0.00061	0.00073	0.00086	0.00101	0.00115
3738177.60	0.00034	0.00040	0.00046	0.00055	0.00066	0.00081	0.00099	0.00119	0.00140
3738122.60	0.00035	0.00041	0.00048	0.00058	0.00071	0.00089	0.00113	0.00143	0.00174
3738067.60	0.00036	0.00042	0.00050	0.00061	0.00077	0.00099	0.00131	0.00173	0.00223
3738012.60	0.00037	0.00043	0.00052	0.00064	0.00082	0.00109	0.00151	0.00212	0.00294
3737957.60	0.00038	0.00044	0.00054	0.00067	0.00087	0.00119	0.00173	0.00261	0.00397
3737902.60	0.00038	0.00045	0.00055	0.00070	0.00092	0.00129	0.00195	0.00320	0.00552
3737847.60	0.00039	0.00046	0.00057	0.00072	0.00097	0.00138	0.00216	0.00382	0.00777
3737792.60	0.00039	0.00047	0.00058	0.00074	0.00101	0.00146	0.00235	0.00439	0.01047
3737737.60	0.00040	0.00048	0.00060	0.00077	0.00105	0.00154	0.00253	0.00487	0.01276
3737682.60	0.00041	0.00049	0.00061	0.00080	0.00109	0.00162	0.00268	0.00517	0.01309
3737627.60	0.00042	0.00050	0.00063	0.00082	0.00114	0.00168	0.00273	0.00500	0.01058
3737572.60	0.00043	0.00052	0.00065	0.00085	0.00116	0.00168	0.00261	0.00429	0.00737
3737517.60	0.00043	0.00053	0.00066	0.00085	0.00115	0.00160	0.00231	0.00340	0.00500
3737462.60	0.00043	0.00053	0.00066	0.00084	0.00109	0.00145	0.00194	0.00261	0.00348
3737407.60	0.00043	0.00052	0.00064	0.00080	0.00100	0.00126	0.00159	0.00201	0.00252
3737352.60	0.00043	0.00050	0.00061	0.00074	0.00089	0.00108	0.00130	0.00157	0.00189
3737297.60	0.00042	0.00048	0.00056	0.00067	0.00078	0.00092	0.00107	0.00125	0.00146
3737242.60	0.00040	0.00045	0.00052	0.00060	0.00069	0.00078	0.00089	0.00102	0.00116

                                *** THE PERIOD (43824 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                                  INCLUDING SOURCE(S):   PAREA1   , A0000001
, A0000036   , A0000037   , A0000038   ,
                   A0000039   , A0000029   , A0000030   , A0000031   , A0000032
, A0000033   , A0000034   , A0000035   ,
                   A0000040   , A0000041   , A0000042   , A0000043   , A0000044
, A0000045   , A0000046   , A0000047   ,
                   A0000048   , A0000049   , A0000050   , A0000051   , A0000052
, A0000053   , A0000054   , . . .   ,

                                   *** NETWORK ID: UCART1   ; NETWORK TYPE:
GRIDCART ***

                                        ** CONC OF PM_10   IN MICROGRAMS/M**3
                  **

    Y-COORD | X-COORD (METERS)
    (METERS) | 501990.92   502056.92   502122.92   502188.92   502254.92
502320.92   502386.92   502452.92   502518.92
 -
- -

  3738287.60 | 0.00102   0.00102   0.00097   0.00087   0.00076
 0.00064   0.00053   0.00043   0.00036
  3738232.60 | 0.00124   0.00125   0.00119   0.00106   0.00090
 0.00074   0.00059   0.00047   0.00037
  3738177.60 | 0.00155   0.00159   0.00149   0.00131   0.00108
 0.00085   0.00066   0.00050   0.00039
  3738122.60 | 0.00199   0.00208   0.00194   0.00165   0.00131
 0.00099   0.00073   0.00053   0.00040
  3738067.60 | 0.00267   0.00284   0.00264   0.00216   0.00162
 0.00116   0.00081   0.00056   0.00041
  3738012.60 | 0.00375   0.00414   0.00379   0.00294   0.00204
 0.00134   0.00087   0.00058   0.00041
  3737957.60 | 0.00559   0.00652   0.00587   0.00417   0.00257
 0.00152   0.00092   0.00059   0.00041
  3737902.60 | 0.00906   0.01156   0.01013   0.00621   0.00321
 0.00167   0.00095   0.00059   0.00041
  3737847.60 | 0.01660   0.02499   0.02096   0.00964   0.00378

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE PERIOD (43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 , A0000001 , A0000036 , A0000037 , A0000038 ,
A0000039 , A0000029 , A0000030 , A0000031 , A0000032 , A0000033 , A0000034 , A0000035 ,
A0000040 , A0000041 , A0000042 , A0000043 , A0000044 , A0000045 , A0000046 , A0000047 ,
A0000048 , A0000049 , A0000050 , A0000051 , A0000052 , A0000053 , A0000054 , . . . ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS/M**3
**

```
    Y-COORD  |                                                X-COORD (METERS)
    (METERS) |     502584.92    502650.92    502716.92
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -

  3738287.60 |       0.00038      0.00024      0.00019
  3738232.60 |       0.00039      0.00025      0.00019
  3738177.60 |       0.00039      0.00024      0.00019
  3738122.60 |       0.00039      0.00024      0.00018
  3738067.60 |       0.00039      0.00024      0.00018
  3738012.60 |       0.00039      0.00024      0.00018
  3737957.60 |       0.00038      0.00023      0.00017
  3737902.60 |       0.00038      0.00023      0.00017
  3737847.60 |       0.00038      0.00023      0.00017
  3737792.60 |       0.00045      0.00023      0.00018
  3737737.60 |       0.00033      0.00024      0.00018
  3737682.60 |       0.00035      0.00026      0.00020
  3737627.60 |       0.00039      0.00028      0.00021
  3737572.60 |       0.00045      0.00032      0.00024
  3737517.60 |       0.00052      0.00037      0.00027
  3737462.60 |       0.00060      0.00042      0.00030
  3737407.60 |       0.00068      0.00047      0.00034
  3737352.60 |       0.00073      0.00052      0.00038
  3737297.60 |       0.00077      0.00056      0.00041
  3737242.60 |       0.00077      0.00058      0.00044
  3737187.60 |       0.00076      0.00059      0.00046
 *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                       ***        22:41:45

                                  PAGE  62
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL       ***
                                   INCLUDING SOURCE(S):     PAREA1      , A0000001
, A0000036    , A0000037    , A0000038    ,
                  A0000039    , A0000029    , A0000030    , A0000031    , A0000032
, A0000033    , A0000034    , A0000035    ,
                  A0000040    , A0000041    , A0000042    , A0000043    , A0000044
, A0000045    , A0000046    , A0000047    ,
                  A0000048    , A0000049    , A0000050    , A0000051    , A0000052
, A0000053    , A0000054    ,  . . .      ,

                                    *** NETWORK ID: UCART2   ;  NETWORK TYPE:
GRIDCART ***

                                        ** CONC OF PM_10    IN MICROGRAMS/M**3
                    **
```

Y-COORD (METERS)	X-COORD (METERS)									
	499078.40	499386.29	499694.18	500002.07	500309.96	500617.85	500925.74	501233.63	501541.52	
3741022.10	0.00005	0.00006	0.00006	0.00007	0.00008	0.00008	0.00009	0.00009	0.00009	
3740705.69	0.00006	0.00006	0.00007	0.00007	0.00008	0.00009	0.00009	0.00010	0.00010	
3740389.28	0.00006	0.00006	0.00007	0.00008	0.00008	0.00009	0.00010	0.00011	0.00011	
3740072.87	0.00006	0.00006	0.00007	0.00008	0.00009	0.00010	0.00011	0.00012	0.00013	
3739756.46	0.00006	0.00007	0.00007	0.00008	0.00009	0.00011	0.00012	0.00014	0.00015	
3739440.05	0.00006	0.00007	0.00007	0.00008	0.00010	0.00011	0.00013	0.00015	0.00017	
3739123.64	0.00006	0.00007	0.00008	0.00009	0.00010	0.00012	0.00014	0.00018	0.00021	
3738807.23	0.00006	0.00007	0.00008	0.00009	0.00010	0.00013	0.00016	0.00020	0.00027	
3738490.82	0.00006	0.00007	0.00008	0.00009	0.00011	0.00013	0.00017	0.00023	0.00036	
3738174.41	0.00006	0.00007	0.00008	0.00009	0.00011	0.00013	0.00018	0.00026	0.00048	
3737858.00	0.00006	0.00007	0.00008	0.00009	0.00011	0.00014	0.00018	0.00028	0.00059	
3737541.59	0.00006	0.00007	0.00008	0.00009	0.00011	0.00014	0.00018	0.00029	0.00069	
3737225.18	0.00006	0.00007	0.00008	0.00009	0.00011	0.00014	0.00019	0.00029	0.00051	
3736908.77	0.00006	0.00007	0.00008	0.00009	0.00011	0.00013	0.00017	0.00023	0.00030	
3736592.36	0.00006	0.00007	0.00008	0.00009	0.00010	0.00012	0.00014	0.00017	0.00019	
3736275.95	0.00006	0.00007	0.00007	0.00008	0.00009	0.00010	0.00011	0.00013	0.00014	
3735959.54	0.00006	0.00006	0.00007	0.00008	0.00008	0.00009	0.00010	0.00010	0.00011	
3735643.13	0.00005	0.00006	0.00006	0.00007	0.00007	0.00008	0.00008	0.00008	0.00009	
3735326.72	0.00005	0.00005	0.00006	0.00006	0.00006	0.00007	0.00007	0.00007	0.00007	
3735010.31	0.00005	0.00005	0.00005	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	
3734693.90	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00006	0.00006	0.00006	

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                             *** THE PERIOD (43824 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                                INCLUDING SOURCE(S):   PAREA1   , A0000001
, A0000036   , A0000037   , A0000038   ,
                  A0000039   , A0000029   , A0000030   , A0000031   , A0000032
, A0000033   , A0000034   , A0000035   ,
                  A0000040   , A0000041   , A0000042   , A0000043   , A0000044
, A0000045   , A0000046   , A0000047   ,
                  A0000048   , A0000049   , A0000050   , A0000051   , A0000052
, A0000053   , A0000054   , . . .   ,

                                 *** NETWORK ID: UCART2   ; NETWORK TYPE:
GRIDCART ***

                                      ** CONC OF PM_10   IN MICROGRAMS/M**3
                  **

    Y-COORD | X-COORD (METERS)
    (METERS) | 501849.41   502157.30   502465.19   502773.08   503080.97
503388.86   503696.75   504004.64   504312.53
 -
- -

  3741022.10 | 0.00009   0.00008   0.00007   0.00007   0.00006
 0.00005   0.00004   0.00004   0.00003
  3740705.69 | 0.00010   0.00009   0.00008   0.00007   0.00006
 0.00005   0.00004   0.00004   0.00003
  3740389.28 | 0.00011   0.00016   0.00009   0.00008   0.00007
 0.00006   0.00005   0.00004   0.00003
  3740072.87 | 0.00013   0.00012   0.00011   0.00009   0.00008
 0.00006   0.00005   0.00004   0.00003
  3739756.46 | 0.00015   0.00014   0.00012   0.00010   0.00008
 0.00006   0.00005   0.00004   0.00003
  3739440.05 | 0.00018   0.00017   0.00014   0.00011   0.00008
 0.00006   0.00004   0.00003   0.00003
  3739123.64 | 0.00023   0.00022   0.00017   0.00013   0.00009
 0.00006   0.00004   0.00003   0.00002
  3738807.23 | 0.00033   0.00031   0.00023   0.00014   0.00009
 0.00005   0.00004   0.00003   0.00002
  3738490.82 | 0.00054   0.00053   0.00032   0.00016   0.00008
 0.00005   0.00003   0.00003   0.00002
  3738174.41 | 0.00117   0.00142   0.00048   0.00015   0.00007
 0.00004   0.00003   0.00002   0.00002

```
  3737858.00 |       0.00339      0.01308      0.00055      0.00014      0.00007
 0.00004      0.00003      0.00002      0.00002
  3737541.59 |       0.00355      0.01494      0.00111      0.00020      0.00008
 0.00005      0.00003      0.00002      0.00002
  3737225.18 |       0.00094      0.00174      0.00123      0.00035      0.00012
 0.00006      0.00004      0.00003      0.00002
  3736908.77 |       0.00038      0.00056      0.00063      0.00037      0.00017
 0.00008      0.00005      0.00003      0.00003
  3736592.36 |       0.00022      0.00027      0.00033      0.00028      0.00018
 0.00010      0.00006      0.00004      0.00003
  3736275.95 |       0.00015      0.00017      0.00020      0.00020      0.00016
 0.00011      0.00007      0.00005      0.00003
  3735959.54 |       0.00011      0.00012      0.00014      0.00014      0.00013
 0.00010      0.00007      0.00005      0.00004
  3735643.13 |       0.00009      0.00010      0.00010      0.00011      0.00010
 0.00009      0.00007      0.00006      0.00004
  3735326.72 |       0.00007      0.00008      0.00008      0.00009      0.00009
 0.00008      0.00007      0.00006      0.00004
  3735010.31 |       0.00006      0.00007      0.00007      0.00007      0.00007
 0.00007      0.00006      0.00005      0.00005
  3734693.90 |       0.00006      0.00006      0.00006      0.00006      0.00006
 0.00006      0.00006      0.00005      0.00004
 *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                      ***        22:41:45

                                 PAGE  64
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL       ***
                                   INCLUDING SOURCE(S):     PAREA1      , A0000001
, A0000036    , A0000037    , A0000038    ,
                A0000039    , A0000029    , A0000030    , A0000031    , A0000032
, A0000033    , A0000034    , A0000035    ,
                A0000040    , A0000041    , A0000042    , A0000043    , A0000044
, A0000045    , A0000046    , A0000047    ,
                A0000048    , A0000049    , A0000050    , A0000051    , A0000052
, A0000053    , A0000054    ,  . . .      ,

                                  *** NETWORK ID: UCART2   ;  NETWORK TYPE:
GRIDCART ***

                                       ** CONC OF PM_10    IN MICROGRAMS/M**3
                **

    Y-COORD  |                                                 X-COORD (METERS)
    (METERS) |     504620.42    504928.31    505236.20
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

```
- - - - - - - - - - - - - - - - - - - - - - -

  3741022.10 |       0.00003      0.00002      0.00002
  3740705.69 |       0.00003      0.00002      0.00002
  3740389.28 |       0.00003      0.00002      0.00002
  3740072.87 |       0.00002      0.00002      0.00002
  3739756.46 |       0.00002      0.00002      0.00002
  3739440.05 |       0.00002      0.00002      0.00002
  3739123.64 |       0.00002      0.00002      0.00001
  3738807.23 |       0.00002      0.00002      0.00001
  3738490.82 |       0.00002      0.00001      0.00001
  3738174.41 |       0.00002      0.00001      0.00001
  3737858.00 |       0.00002      0.00001      0.00001
  3737541.59 |       0.00002      0.00001      0.00001
  3737225.18 |       0.00002      0.00002      0.00001
  3736908.77 |       0.00002      0.00002      0.00001
  3736592.36 |       0.00002      0.00002      0.00002
  3736275.95 |       0.00003      0.00002      0.00002
  3735959.54 |       0.00003      0.00002      0.00002
  3735643.13 |       0.00003      0.00003      0.00002
  3735326.72 |       0.00004      0.00003      0.00002
  3735010.31 |       0.00004      0.00003      0.00002
  3734693.90 |       0.00004      0.00003      0.00003
 *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                        ***        22:41:45

                                   PAGE  65
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                *** THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL       ***
                                   INCLUDING SOURCE(S):     PAREA1      , A0000001
, A0000036    , A0000037    , A0000038    ,
                 A0000039    , A0000029    , A0000030    , A0000031    , A0000032
, A0000033    , A0000034    , A0000035    ,
                 A0000040    , A0000041    , A0000042    , A0000043    , A0000044
, A0000045    , A0000046    , A0000047    ,
                 A0000048    , A0000049    , A0000050    , A0000051    , A0000052
, A0000053    , A0000054    ,  . . .      ,

                                              *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                        X-COORD (M)
Y-COORD (M)        CONC
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- - - -

```
         502296.89    3737674.67        0.00360                      502308.54
3737629.67        0.00385
         502299.09    3737724.11        0.00269                      502298.37
3737758.04        0.00245
         502298.70    3737740.63        0.00254                      502372.55
3737767.84        0.00118
         502360.18    3737753.72        0.00131                      502407.50
3737771.36        0.00091
         502424.01    3737764.79        0.00081                      502469.88
3737766.08        0.00061
         502513.44    3737756.55        0.00047                      502412.67
3737806.03        0.00084
         502426.33    3737806.41        0.00077                      502459.57
3737807.06        0.00062
         502471.43    3737806.41        0.00058                      502048.34
3737810.24        0.05144
         502056.32    3737841.08        0.02794                      502097.65
3737839.19        0.02788
         502233.42    3737808.35        0.00569                      502148.64
3737806.04        0.03283
         502129.97    3737803.73        0.04700                      502133.75
3737820.52        0.03066
         502179.49    3737806.25        0.01663                      501972.93
3737806.54        0.02183
         501709.97    3737800.87        0.00131                      501689.63
3737800.87        0.00116
         501670.24    3737802.29        0.00105                      501653.21
3737802.76        0.00096
         501611.95    3737799.54        0.00080                      502620.08
3738205.61        0.00030
         502621.84    3738241.36        0.00030                      502613.59
3738389.03        0.00031
 *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                      ***        22:41:45

                                 PAGE  66
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                 *** THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL     ***
                                 INCLUDING SOURCE(S):     PAREA1      , A0000001
, A0000036    , A0000037    , A0000038    ,
                A0000039    , A0000029    , A0000030    , A0000031    , A0000032
, A0000033    , A0000034    , A0000035    ,
                A0000040    , A0000041    , A0000042    , A0000043    , A0000044
, A0000045    , A0000046    , A0000047    ,
                A0000048    , A0000049    , A0000050    , A0000051    , A0000052
, A0000053    , A0000054    ,  . . .      ,
```

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
502615.60	3738377.45	0.00030	502616.10	3738417.74	0.00029
502615.35	3738453.01	0.00029	502577.57	3738489.78	0.00031
502559.18	3738513.20	0.00028	502597.87	3739300.48	0.00017
502593.76	3739263.48	0.00017	502580.58	3738451.45	0.00033
502616.54	3738514.45	0.00028	502614.93	3738568.39	0.00027
502487.86	3738530.01	0.00029	502644.45	3738994.05	0.00019
502620.84	3738849.39	0.00022	502690.40	3738762.11	0.00017
502704.01	3738745.94	0.00017	502595.20	3739479.97	0.00016
502657.00	3739500.57	0.00016	502658.01	3739416.16	0.00016
502662.03	3739363.40	0.00016	502602.55	3739440.56	0.00017
502555.43	3740147.49	0.00014	502543.24	3740069.97	0.00013
502556.61	3740026.47	0.00014	502454.27	3740164.23	0.00012
502408.98	3740182.17	0.00012	502265.86	3740226.60	0.00011
502228.26	3740263.77	0.00012	502205.60	3740289.84	0.00012
502159.01	3740324.75	0.00012	502138.38	3740365.84	0.00012
502100.36	3740404.35	0.00012	502111.82	3740496.41	0.00012
502103.18	3740513.38	0.00011	502089.28	3740526.66	0.00011
502075.39	3740539.93	0.00011	502023.22	3740591.79	0.00011
501971.98	3740643.35	0.00010	501930.92	3740574.51	0.00011
501984.33	3740504.43	0.00011	502421.03		

3740250.75   0.00012
         502410.04   3740253.75   0.00012   502388.85
3740264.90   0.00012
         502348.03   3740285.20   0.00012   502338.22
3740289.88   0.00012
         502329.07   3740295.46   0.00012   502285.36
3740324.01   0.00012
         502267.29   3740337.39   0.00012   502250.56
3740353.01   0.00012
         502233.83   3740371.52   0.00012   502211.52
3740393.16   0.00012
         502192.56   3740412.11   0.00012   502136.81
3740462.93   0.00012
         502154.71   3740449.97   0.00012   502176.94
3740427.43   0.00012
         502798.31   3740217.10   0.00010   502825.66
3740215.57   0.00010
         502844.23   3740214.47   0.00010   502863.33
3740214.75   0.00010
         502887.08   3740214.47   0.00009   502902.37
3740214.20   0.00009
         502926.93   3740212.56   0.00009   502967.06
3740219.39   0.00009
         503014.83   3740212.29   0.00009   503080.34
3740214.47   0.00008
         503033.66   3740211.47   0.00009   503010.09
3740154.06   0.00010
         503046.39   3740151.49   0.00009   503118.97
3740152.77   0.00009
         503194.76   3740154.70   0.00009   503177.10
3740213.15   0.00008
         503251.61   3740212.51   0.00008   503327.73
3740212.83   0.00007
         503245.83   3740153.09   0.00009   503324.84
3740156.30   0.00008
         502679.76   3740239.37   0.00010   503004.07
3739255.46   0.00009
         502912.56   3739310.17   0.00010   502294.65
3739543.41   0.00015
         502049.31   3739489.20   0.00017   502301.95
3739600.05   0.00014

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                              *** THE PERIOD (43824 HRS) AVERAGE CONCENTRATION

```
VALUES FOR SOURCE GROUP: ALL      ***
                                  INCLUDING SOURCE(S):     PAREA1      , A0000001
, A0000036    , A0000037    , A0000038    ,
                A0000039    , A0000029    , A0000030    , A0000031    , A0000032
, A0000033    , A0000034    , A0000035    ,
                A0000040    , A0000041    , A0000042    , A0000043    , A0000044
, A0000045    , A0000046    , A0000047    ,
                A0000048    , A0000049    , A0000050    , A0000051    , A0000052
, A0000053    , A0000054    ,  . . .      ,

                                             *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                        ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                        X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
         502505.59    3739431.16        0.00014                       502560.50
3739493.37        0.00014
         502177.02    3738053.36        0.00244                       503298.41
3737837.04        0.00005
         503381.22    3738583.90        0.00005                       503398.85
3738546.92        0.00005
         503394.51    3738631.89        0.00005                       501212.60
3739008.56        0.00018
         501740.25    3737811.03        0.00157

 *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                       ***        22:41:45

                                  PAGE  68
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     PAREA1      , A0000001
, A0000036    , A0000037    , A0000038    ,
                A0000039    , A0000029    , A0000030    , A0000031    , A0000032
, A0000033    , A0000034    , A0000035    ,
                A0000040    , A0000041    , A0000042    , A0000043    , A0000044
, A0000045    , A0000046    , A0000047    ,
                A0000048    , A0000049    , A0000050    , A0000051    , A0000052
, A0000053    , A0000054    ,  . . .      ,

                                   *** NETWORK ID: UCART1   ;  NETWORK TYPE:
```

GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS/M**3
**

Y-COORD (METERS)	X-COORD (METERS) 501396.92	501462.92	501528.92	501594.92	501660.92
3738287.6	0.10228 (10121516)	0.08903 (10121516)	0.07282 (10121516)	0.06882 (16010516)	0.09896 (16010516)
3738232.6	0.13460 (10121516)	0.12336 (10121516)	0.10717 (10121516)	0.08662 (10121516)	0.09718 (16010516)
3738177.6	0.17024 (10121516)	0.16411 (10121516)	0.15149 (10121516)	0.13148 (10121516)	0.10459 (10121516)
3738122.6	0.20604 (10121516)	0.20846 (10121516)	0.20410 (10121516)	0.19023 (10121516)	0.16502 (10121516)
3738067.6	0.23733 (10121516)	0.25150 (10121516)	0.26031 (10121516)	0.26012 (10121516)	0.24595 (10121516)
3738012.6	0.25817 (10121516)	0.28579 (10121516)	0.31203 (10121516)	0.33304 (10121516)	0.34232 (10121516)
3737957.6	0.26362 (10121516)	0.30314 (10121516)	0.34731 (10121516)	0.39426 (10121516)	0.43880 (10121516)
3737902.6	0.25039 (10121516)	0.29739 (10121516)	0.35491 (10121516)	0.42493 (10121516)	0.50785 (10121516)
3737847.6	0.21922 (10121516)	0.26654 (10121516)	0.32808 (10121516)	0.40967 (10121516)	0.51887 (10121516)
3737792.6	0.17542 (10121516)	0.21593 (10121516)	0.27029 (10121516)	0.34603 (10121516)	0.45494 (10121516)
3737737.6	0.12641 (10121516)	0.15534 (10121516)	0.19470 (10121516)	0.24996 (10121516)	0.33126 (10121516)
3737682.6	0.08232 (16010616)	0.10231 (16010616)	0.13057 (16010616)	0.17018 (16010616)	0.22757 (16010616)
3737627.6	0.07041 (16010616)	0.08602 (16010616)	0.10749 (16010616)	0.14086 (10122116)	0.20170 (10122116)
3737572.6	0.07938 (10122116)	0.10421 (10122116)	0.13844 (10122116)	0.18608 (10122116)	0.25324 (10122116)
3737517.6	0.10239 (10122116)	0.13052 (10122116)	0.16702 (10122116)	0.21393 (10122116)	0.27209 (10122116)
3737462.6	0.12058 (10122116)	0.14848 (10122116)	0.18182 (10122116)	0.21998 (10122116)	0.26024 (10122116)
3737407.6	0.13183 (10122116)	0.15594 (10122116)	0.18184 (10122116)	0.20707 (10122116)	0.22725 (10122116)
3737352.6	0.13512 (10122116)	0.15309 (10122116)	0.16969 (10122116)	0.18170 (10122116)	0.19162 (11010316)
3737297.6	0.13103 (10122116)	0.17426 (10122116)	0.14953 (10122116)	0.15140 (11010316)	0.14271 (10122116)
3737242.6	0.12130 (10122116)	0.14873 (10122116)	0.14087 (10122116)		

*** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
INCLUDING SOURCE(S):   PAREA1   , A0000001 , A0000036   , A0000037   , A0000038   ,
A0000039   , A0000029   , A0000030   , A0000031   , A0000032 , A0000033   , A0000034   , A0000035   ,
A0000040   , A0000041   , A0000042   , A0000043   , A0000044 , A0000045   , A0000046   , A0000047   ,
A0000048   , A0000049   , A0000050   , A0000051   , A0000052 , A0000053   , A0000054   , . . .   ,

*** NETWORK ID: UCART1   ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10   IN MICROGRAMS/M**3
**

Y-COORD (METERS)	X-COORD (METERS)				
	501726.92	501792.92	501858.92	501924.92	501990.92
3738287.6	0.11534 (16010516)	0.10452 (16010516)	0.08047 (10121716)	0.13263 (10121716)	0.18642 (10121716)
3738232.6	0.13128 (16010516)	0.13712 (16010516)	0.10481 (16010516)	0.14316 (10121716)	0.21021 (10121716)
3738177.6	0.13822 (16010516)	0.17055 (16010516)	0.15227 (16010516)	0.15442 (10121716)	0.23944 (10121716)
3738122.6	0.13119 (16010516)	0.19697 (16010516)	0.21182 (16010516)	0.16547 (10121716)	0.27597 (10121716)
3738067.6	0.21338 (10121516)	0.20476 (16010516)	0.27628 (16010516)	0.24002 (16010516)	0.32284 (10121716)
3738012.6	0.33071 (10121516)	0.28678 (10121516)	0.32660 (16010516)	0.36643 (16010516)	0.38347 (10121716)
3737957.6	0.47038 (10121516)	0.46958 (10121516)	0.40713 (10121516)	0.52238 (16010516)	0.46389 (10121716)
3737902.6	0.60024 (10121516)	0.68692 (10121516)	0.72521 (10121516)	0.65243 (16010516)	0.78106 (16010516)

```
 3737847.6 |      0.66621 (10121516)      0.86223 (10121516)      1.10272 (10121516)
     1.29845 (10121516)      1.36821 (16010516)
 3737792.6 |      0.61832 (10121516)      0.87714 (10121516)      1.31489 (10121516)
     2.10502 (10121516)      3.36256 (10121516)
 3737737.6 |      0.45781 (10121516)      0.67173 (10121516)      1.08281 (10121516)
     2.16880 (16010616)      7.57016 (16010616)
 3737682.6 |      0.31783 (16010616)      0.47626 (16010616)      0.79419 (16010616)
     1.57436 (16010616)      4.06824 (16010616)
 3737627.6 |      0.29748 (10122116)      0.45300 (10122116)      0.70971 (10122116)
     1.27402 (11010316)      1.61993 (11010316)
 3737572.6 |      0.34638 (10122116)      0.47075 (10122116)      0.67570 (11010316)
     0.84144 (11010316)      0.57462 (10122116)
 3737517.6 |      0.34039 (10122116)      0.42811 (11010316)      0.51173 (11010316)
     0.39864 (10122116)      0.40933 (14111116)
 3737462.6 |      0.29884 (11010316)      0.34646 (11010316)      0.29057 (11010316)
     0.23265 (16112816)      0.30961 (14111116)
 3737407.6 |      0.25128 (11010316)      0.22317 (11010316)      0.17583 (10122116)
     0.16944 (16112816)      0.23953 (14111116)
 3737352.6 |      0.17551 (11010316)      0.14681 (10122116)      0.13017 (16112816)
     0.12626 (10113016)      0.18870 (14111116)
 3737297.6 |      0.12369 (10122116)      0.10003 (16112816)      0.10360 (16112816)
     0.10755 (14111116)      0.15166 (14111116)
 3737242.6 |      0.08444 (10122116)      0.08483 (16112816)      0.08314 (10113016)
     0.09459 (14111116)      0.12410 (14111116)
 3737187.6 |      0.06930 (16112816)      0.07089 (16112816)      0.06640 (11120516)
     0.08299 (14111116)      0.10293 (14111116)
 *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                       ***        22:41:45

                                   PAGE  70
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                   INCLUDING SOURCE(S):     PAREA1      , A0000001
, A0000036    , A0000037    , A0000038    ,
                A0000039    , A0000029    , A0000030    , A0000031    , A0000032
, A0000033    , A0000034    , A0000035    ,
                A0000040    , A0000041    , A0000042    , A0000043    , A0000044
, A0000045    , A0000046    , A0000047    ,
                A0000048    , A0000049    , A0000050    , A0000051    , A0000052
, A0000053    , A0000054    ,  . . .      ,

                                    *** NETWORK ID: UCART1   ;  NETWORK TYPE:
GRIDCART ***

                                        ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **
```

Y-COORD (METERS)	X-COORD (METERS)				
	502056.92	502122.92	502188.92	502254.92	502320.92
3738287.6	0.22403 (10121716)	0.23112 (10121716)	0.20519 (10121716)	0.15744 (10121716)	0.10489 (10121716)
3738232.6	0.25772 (10121716)	0.26520 (10121716)	0.22979 (10121716)	0.16855 (10121716)	0.10519 (10121716)
3738177.6	0.30120 (10121716)	0.30879 (10121716)	0.25932 (10121716)	0.17954 (10121716)	0.10480 (15112616)
3738122.6	0.35880 (10121716)	0.36596 (10121716)	0.29501 (10121716)	0.18936 (10121716)	0.12754 (15112616)
3738067.6	0.43858 (10121716)	0.44396 (10121716)	0.33822 (10121716)	0.19592 (10121716)	0.15614 (10020516)
3738012.6	0.55383 (10121716)	0.55473 (10121716)	0.39021 (10121716)	0.22933 (10020516)	0.18440 (10020516)
3737957.6	0.73320 (10121716)	0.72191 (10121716)	0.45030 (10121716)	0.30943 (10020516)	0.19438 (10020516)
3737902.6	1.04048 (10121716)	0.99642 (10121716)	0.55420 (10020516)	0.37466 (10020516)	0.21169 (10012115)
3737847.6	1.65628 (10121716)	1.52310 (10121716)	0.88323 (10020516)	0.39175 (10012115)	0.25742 (10012115)
3737792.6	3.34293 (10121716)	3.06295 (10121716)	1.07910 (10121616)	0.53860 (10121616)	0.30407 (10121616)
3737737.6	6.69238 (16010616)	4.20005 (14030409)	1.95263 (10121616)	0.66249 (10122916)	0.37580 (10122916)
3737682.6	4.78952 (11121416)	4.48327 (11121416)	1.56245 (10101916)	0.61270 (16010716)	0.34802 (16010716)
3737627.6	1.74014 (14111116)	1.84952 (16122216)	1.05298 (10101916)	0.49734 (10101916)	0.30323 (16010716)
3737572.6	0.93764 (14111116)	1.07604 (16122216)	0.63099 (16122216)	0.40292 (10101916)	0.25960 (14123016)
3737517.6	0.57608 (14111116)	0.71933 (16122216)	0.53027 (16122216)	0.30793 (10121016)	0.22537 (15122816)
3737462.6	0.39902 (16122216)	0.51846 (16122216)	0.43885 (16122216)	0.25845 (16122216)	0.19940 (15122816)
3737407.6	0.29960 (16122216)	0.39300 (16122216)	0.36395 (16122216)	0.24982 (16122216)	0.16361 (15122816)
3737352.6	0.23486 (16122216)	0.30901 (16122216)	0.30438 (16122216)	0.23267 (16122216)	0.14279 (16122216)
3737297.6	0.18990 (16122216)	0.24991 (16122216)	0.25721 (16122216)	0.21269 (16122216)	0.14512 (16122216)
3737242.6	0.15727 (16122216)	0.20666 (16122216)	0.21961 (16122216)	0.19269 (16122216)	0.14264 (16122216)
3737187.6	0.13269 (16122216)	0.17404 (16122216)	0.18932 (16122216)	0.17393 (16122216)	0.13730 (16122216)

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                             *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                                INCLUDING SOURCE(S):   PAREA1   , A0000001
, A0000036   , A0000037   , A0000038   ,
                A0000039   , A0000029   , A0000030   , A0000031   , A0000032
, A0000033   , A0000034   , A0000035   ,
                A0000040   , A0000041   , A0000042   , A0000043   , A0000044
, A0000045   , A0000046   , A0000047   ,
                A0000048   , A0000049   , A0000050   , A0000051   , A0000052
, A0000053   , A0000054   , . . .   ,

                                 *** NETWORK ID: UCART1   ; NETWORK TYPE:
GRIDCART ***

                                      ** CONC OF PM_10   IN MICROGRAMS/M**3
                **

  Y-COORD | X-COORD (METERS)
  (METERS) | 502386.92   502452.92   502518.92
      502584.92   502650.92
 -
- -

 3738287.6 | 0.07411 (15112616)   0.07170 (15112616)   0.06384 (15112616)
     0.05329 (15112616)   0.04244 (15112616)
 3738232.6 | 0.08669 (15112616)   0.07915 (15112616)   0.06650 (15112616)
     0.05247 (15112616)   0.03964 (15112616)
 3738177.6 | 0.09974 (15112616)   0.08506 (15112616)   0.06684 (15112616)
     0.04949 (15112616)   0.03842 (10112316)
 3738122.6 | 0.11186 (15112616)   0.08797 (15112616)   0.06400 (15112616)
     0.04742 (10112316)   0.04766 (10012115)
 3738067.6 | 0.12059 (15112616)   0.08611 (15112616)   0.06343 (10012115)
     0.06197 (10012115)   0.05383 (10012115)
 3738012.6 | 0.12219 (15112616)   0.08914 (10012115)   0.08341 (10012115)
     0.06769 (10012115)   0.05030 (10012115)
 3737957.6 | 0.13127 (10012115)   0.11497 (10012115)   0.08644 (10012115)
     0.05845 (10012115)   0.04323 (15122216)
 3737902.6 | 0.16567 (10012115)   0.11075 (10012115)   0.07453 (15122216)
     0.05982 (10121616)   0.04927 (10121616)
 3737847.6 | 0.15809 (15122216)   0.11623 (10121616)   0.08826 (10121616)
     0.06859 (10121616)   0.05436 (10121616)
 3737792.6 | 0.19252 (10121616)   0.14498 (10122916)   0.11372 (10122916)
     0.09111 (10122916)   0.07348 (10122916)

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 3737737.6 |      0.24375 (10122916)      0.17023 (10122916)      0.12689 (10122916)
     0.09732 (10122916)      0.07704 (10122916)
 3737682.6 |      0.21058 (16010716)      0.14105 (11021616)      0.10610 (11021616)
     0.08234 (11021616)      0.06558 (11021616)
 3737627.6 |      0.22979 (16010716)      0.17071 (16010716)      0.12630 (16010716)
     0.09518 (16010716)      0.07233 (16010716)
 3737572.6 |      0.17884 (14123016)      0.13706 (16010716)      0.11879 (16010716)
     0.09956 (16010716)      0.08192 (16010716)
 3737517.6 |      0.16866 (14123016)      0.12885 (14123016)      0.09603 (14123016)
     0.07906 (16010716)      0.07258 (16010716)
 3737462.6 |      0.15096 (15122816)      0.12016 (14123016)      0.09778 (14123016)
     0.07748 (14123016)      0.06063 (14123016)
 3737407.6 |      0.14091 (15122816)      0.10949 (15122816)      0.09089 (14123016)
     0.07719 (14123016)      0.06388 (14123016)
 3737352.6 |      0.12327 (15122816)      0.10553 (15122816)      0.08374 (15122816)
     0.07169 (14123016)      0.06278 (14123016)
 3737297.6 |      0.10341 (15122816)      0.09624 (15122816)      0.08243 (15122816)
     0.06654 (15122816)      0.05836 (14123016)
 3737242.6 |      0.09081 (16122216)      0.08442 (15122816)      0.07736 (15122816)
     0.06645 (15122816)      0.05441 (15122816)
 3737187.6 |      0.09457 (16122216)      0.07206 (15122816)      0.07008 (15122816)
     0.06367 (15122816)      0.05492 (15122816)
 *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                       ***        22:41:45

                                  PAGE  72
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     PAREA1      , A0000001
, A0000036    , A0000037    , A0000038    ,
                A0000039    , A0000029    , A0000030    , A0000031    , A0000032
, A0000033    , A0000034    , A0000035    ,
                A0000040    , A0000041    , A0000042    , A0000043    , A0000044
, A0000045    , A0000046    , A0000047    ,
                A0000048    , A0000049    , A0000050    , A0000051    , A0000052
, A0000053    , A0000054    ,  . . .      ,

                                   *** NETWORK ID: UCART1   ;  NETWORK TYPE:
GRIDCART ***

                                        ** CONC OF PM_10    IN MICROGRAMS/M**3
                **

  Y-COORD  |                                                  X-COORD (METERS)
  (METERS) |       502716.92
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
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```
- - - - - - - - - - - - - - - - - - - - - - -

 3738287.6 |      0.03215 (15112616)
 3738232.6 |      0.03159 (10112316)
 3738177.6 |      0.03714 (10012115)
 3738122.6 |      0.04307 (10012115)
 3738067.6 |      0.04250 (10012115)
 3738012.6 |      0.03483 (10012115)
 3737957.6 |      0.03670 (15122216)
 3737902.6 |      0.04013 (10121616)
 3737847.6 |      0.04714 (10122916)
 3737792.6 |      0.06058 (10122916)
 3737737.6 |      0.06237 (10122916)
 3737682.6 |      0.05335 (11021616)
 3737627.6 |      0.05580 (16010716)
 3737572.6 |      0.06697 (16010716)
 3737517.6 |      0.06456 (16010716)
 3737462.6 |      0.05121 (16010716)
 3737407.6 |      0.05206 (14123016)
 3737352.6 |      0.05364 (14123016)
 3737297.6 |      0.05227 (14123016)
 3737242.6 |      0.04867 (14123016)
 3737187.6 |      0.04550 (15122816)
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```
                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     PAREA1      , A0000001
, A0000036    , A0000037    , A0000038    ,
                A0000039    , A0000029    , A0000030    , A0000031    , A0000032
, A0000033    , A0000034    , A0000035    ,
                A0000040    , A0000041    , A0000042    , A0000043    , A0000044
, A0000045    , A0000046    , A0000047    ,
                A0000048    , A0000049    , A0000050    , A0000051    , A0000052
, A0000053    , A0000054    ,  . . .      ,

                                  *** NETWORK ID: UCART2   ;  NETWORK TYPE:
GRIDCART ***

                                       ** CONC OF PM_10    IN MICROGRAMS/M**3
                **

  Y-COORD  |                                                  X-COORD (METERS)
  (METERS) |       499078.40              499386.29              499694.18
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      500002.07              500309.96
 - - -
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 , A0000001 , A0000036 , A0000037 , A0000038 , A0000039 , A0000029 , A0000030 , A0000031 , A0000032 , A0000033 , A0000034 , A0000035 , A0000040 , A0000041 , A0000042 , A0000043 , A0000044 , A0000045 , A0000046 , A0000047 , A0000048 , A0000049 , A0000050 , A0000051 , A0000052 , A0000053 , A0000054 , . . . ,

*** NETWORK ID: UCART2 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS) 500617.85	500925.74	501233.63	501541.52	501849.41
3741022.1	0.00873 (14013009)	0.00869 (10122709)	0.00903 (11121912)	0.00987 (14012409)	0.01644 (10121716)
3740705.7	0.00951 (14013009)	0.00912 (14013009)	0.00956 (16030309)	0.01038 (14012409)	0.01846 (10121716)
3740389.3	0.01078 (10122909)	0.01018 (14013009)	0.01026 (10122709)	0.01102 (14012409)	0.02111 (10121716)
3740072.9	0.01203 (10122909)	0.01135 (10122909)	0.01104 (10122709)	0.01188 (11121912)	0.02449 (10121716)
3739756.5	0.01291 (10122909)	0.01325 (10122909)	0.01237 (14013009)	0.01285 (11121912)	0.02899 (10121716)
3739440.0	0.01314 (10122909)	0.01537 (16010516)	0.01452 (10122909)	0.01408 (16030309)	0.03479 (10121716)
3739123.6	0.01488 (10012709)	0.01574 (10122909)	0.02209 (16010516)	0.01606 (14013009)	0.04291 (10121716)
3738807.2	0.03591 (10121516)	0.02082 (10121516)	0.02462 (16010516)	0.02635 (16010516)	0.05383 (10121716)
3738490.8	0.07742 (10121516)	0.07379 (10121516)	0.04842 (10121516)	0.05956 (16010516)	0.06763 (10121716)
3738174.4	0.08862 (10121516)	0.12725 (10121516)	0.16702 (10121516)	0.15113 (10121516)	0.16137 (16010516)
3737858.0	0.04228 (10121516)	0.07446 (10121516)	0.14724 (10121516)	0.34952 (10121516)	1.00718 (10121516)
3737541.6	0.01646 (10120209)	0.02111 (16010616)	0.05090 (10122116)		

```
     0.16426 (10122116)      0.58610 (11010316)
 3737225.2 |      0.03112 (10122116)      0.05808 (10122116)      0.09905 (10122116)
     0.12577 (10122116)      0.07823 (10113016)
 3736908.8 |      0.04639 (10122116)      0.05804 (10122116)      0.05256 (10122116)
     0.04333 (16112816)      0.03847 (16011116)
 3736592.4 |      0.03673 (10122116)      0.02985 (10122116)      0.02348 (16112816)
     0.02133 (16112816)      0.02366 (16011116)
 3736275.9 |      0.01917 (10122116)      0.01429 (14010109)      0.01726 (16112816)
     0.01537 (11011709)      0.01649 (11011709)
 3735959.5 |      0.01218 (14010109)      0.01299 (14010109)      0.01264 (14012209)
     0.01401 (11011709)      0.01413 (11011709)
 3735643.1 |      0.01146 (14010109)      0.01136 (14012209)      0.01127 (11011709)
     0.01273 (11011709)      0.01250 (14011009)
 3735326.7 |      0.01041 (14010109)      0.01012 (14012209)      0.01082 (11011709)
     0.01161 (11011709)      0.01141 (14011009)
 3735010.3 |      0.00939 (14012209)      0.00893 (11011709)      0.01025 (11011709)
     0.01064 (11011709)      0.01051 (14011009)
 3734693.9 |      0.00852 (14012209)      0.00877 (11011709)      0.00969 (11011709)
     0.00978 (11011709)      0.00976 (14011009)
 *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                      ***        22:41:45

                                 PAGE  75
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                 INCLUDING SOURCE(S):     PAREA1      , A0000001
, A0000036    , A0000037    , A0000038    ,
                A0000039    , A0000029    , A0000030    , A0000031    , A0000032
, A0000033    , A0000034    , A0000035    ,
                A0000040    , A0000041    , A0000042    , A0000043    , A0000044
, A0000045    , A0000046    , A0000047    ,
                A0000048    , A0000049    , A0000050    , A0000051    , A0000052
, A0000053    , A0000054    ,  . . .      ,

                                  *** NETWORK ID: UCART2   ;  NETWORK TYPE:
GRIDCART ***

                                       ** CONC OF PM_10    IN MICROGRAMS/M**3
                **

  Y-COORD  |                                                 X-COORD (METERS)
  (METERS) |       502157.30              502465.19              502773.08
      503080.97              503388.86
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
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 3741022.1 |      0.02069 (10121716)      0.01954 (10121716)      0.01388 (10121716)
     0.00930 (10120809)      0.00873 (11010609)
 3740705.7 |      0.02370 (10121716)      0.02174 (10121716)      0.01450 (10121716)
     0.00980 (10120809)      0.00954 (11010609)
 3740389.3 |      0.02757 (10121716)      0.02453 (10121716)      0.01498 (10121716)
     0.01028 (10120809)      0.01031 (11010609)
 3740072.9 |      0.03269 (10121716)      0.02763 (10121716)      0.01500 (10121716)
     0.01127 (11010609)      0.01099 (11010609)
 3739756.5 |      0.03994 (10121716)      0.03148 (10121716)      0.01458 (10121716)
     0.01246 (11010609)      0.01228 (15021709)
 3739440.0 |      0.05044 (10121716)      0.03602 (10121716)      0.01406 (11010609)
     0.01359 (11122309)      0.01372 (15021709)
 3739123.6 |      0.06669 (10121716)      0.04063 (10121716)      0.01689 (15112616)
     0.01718 (15112616)      0.01403 (15021709)
 3738807.2 |      0.09433 (10121716)      0.04356 (10121716)      0.02673 (15112616)
     0.01729 (15112616)      0.01577 (14030409)
 3738490.8 |      0.14916 (10121716)      0.04448 (15112616)      0.03185 (15112616)
     0.02014 (14030409)      0.01753 (14030409)
 3738174.4 |      0.29136 (10121716)      0.08198 (15112616)      0.03561 (10012115)
     0.02014 (14030409)      0.01500 (10010610)
 3737858.0 |      0.95684 (10121716)      0.10630 (10121616)      0.03945 (10122916)
     0.02285 (10122916)      0.01475 (10120810)
 3737541.6 |      0.74313 (16122216)      0.12036 (14123016)      0.05854 (16010716)
     0.02629 (16010716)      0.01614 (10120810)
 3737225.2 |      0.20741 (16122216)      0.07997 (15122816)      0.04414 (14123016)
     0.02464 (14123016)      0.01481 (16010716)
 3736908.8 |      0.09548 (16122216)      0.06544 (16122216)      0.03644 (15122816)
     0.02710 (14123016)      0.02214 (14123016)
 3736592.4 |      0.05995 (16122216)      0.05769 (16122216)      0.02419 (11112416)
     0.02797 (15122816)      0.01637 (14123016)
 3736275.9 |      0.03596 (16122216)      0.06022 (16122216)      0.02032 (16122216)
     0.01820 (15122816)      0.02004 (15122816)
 3735959.5 |      0.02295 (16122216)      0.05047 (16122216)      0.02646 (16122216)
     0.01375 (11112416)      0.01506 (15122816)
 3735643.1 |      0.01536 (16122216)      0.03947 (16122216)      0.03038 (16122216)
     0.01127 (16122116)      0.01079 (10111809)
 3735326.7 |      0.01183 (11011309)      0.03000 (16122216)      0.03054 (16122216)
     0.01141 (16122216)      0.00989 (10111809)
 3735010.3 |      0.01084 (11011309)      0.02279 (16122216)      0.02869 (16122216)
     0.01497 (16122216)      0.00892 (10111809)
 3734693.9 |      0.01003 (11011309)      0.01745 (16122216)      0.02558 (16122216)
     0.01733 (16122216)      0.00790 (10111809)
 *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                        ***        22:41:45

                                   PAGE  76
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 , A0000001 , A0000036 , A0000037 , A0000038 , A0000039 , A0000029 , A0000030 , A0000031 , A0000032 , A0000033 , A0000034 , A0000035 , A0000040 , A0000041 , A0000042 , A0000043 , A0000044 , A0000045 , A0000046 , A0000047 , A0000048 , A0000049 , A0000050 , A0000051 , A0000052 , A0000053 , A0000054 , . . . ,

*** NETWORK ID: UCART2 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS)				
	503696.75	504004.64	504312.53	504620.42	504928.31
3741022.1	0.00888 (11010609)	0.00860 (11122309)	0.00875 (15021709)	0.00863 (15021709)	0.00803 (15021709)
3740705.7	0.00936 (11010609)	0.00929 (15021709)	0.00933 (15021709)	0.00874 (15021709)	0.00771 (15021709)
3740389.3	0.00990 (11122309)	0.01017 (15021709)	0.00959 (15021709)	0.00842 (15021709)	0.00748 (14030409)
3740072.9	0.01115 (15021709)	0.01065 (15021709)	0.00931 (15021709)	0.00838 (14030409)	0.00889 (14030409)
3739756.5	0.01199 (15021709)	0.01046 (15021709)	0.00951 (14030409)	0.00994 (14030409)	0.00983 (14030409)
3739440.0	0.01196 (15021709)	0.01097 (14030409)	0.01124 (14030409)	0.01083 (14030409)	0.01003 (14030409)
3739123.6	0.01296 (14030409)	0.01289 (14030409)	0.01198 (14030409)	0.01067 (14030409)	0.00922 (14030409)
3738807.2	0.01495 (14030409)	0.01316 (14030409)	0.01110 (14030409)	0.00946 (10010610)	0.00857 (10010610)
3738490.8	0.01413 (14030409)	0.01148 (10010610)	0.01007 (10010610)	0.00880 (10010610)	0.00772 (10010610)
3738174.4	0.01227 (10010610)	0.01065 (14122210)	0.00976 (14122210)	0.00904 (14122210)	0.00840 (14122210)
3737858.0	0.01280 (10120810)	0.01138 (10120810)	0.01024 (10120810)	0.00934 (10120810)	0.00860 (10120810)
3737541.6	0.01395 (10120810)	0.01234 (10120810)	0.01111 (10120810)	0.01012 (10120810)	0.00932 (10120810)
3737225.2	0.01273 (10012510)	0.01134 (10120810)	0.01050 (10120810)	0.00975 (10120810)	0.00911 (10120810)
3736908.8	0.01265 (14123016)	0.01093 (10012510)	0.01003 (10012510)		

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 , A0000001 , A0000036 , A0000037 , A0000038 , A0000039 , A0000029 , A0000030 , A0000031 , A0000032 , A0000033 , A0000034 , A0000035 , A0000040 , A0000041 , A0000042 , A0000043 , A0000044 , A0000045 , A0000046 , A0000047 , A0000048 , A0000049 , A0000050 , A0000051 , A0000052 , A0000053 , A0000054 , . . . ,

*** NETWORK ID: UCART2 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS) 505236.20
3741022.1	0.00701 (15021709)
3740705.7	0.00677 (14030409)
3740389.3	0.00800 (14030409)
3740072.9	0.00896 (14030409)
3739756.5	0.00936 (14030409)

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                              *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                 INCLUDING SOURCE(S):   PAREA1   , A0000001 , A0000036   , A0000037   , A0000038   ,
                  A0000039   , A0000029   , A0000030   , A0000031   , A0000032 , A0000033   , A0000034   , A0000035   ,
                  A0000040   , A0000041   , A0000042   , A0000043   , A0000044 , A0000045   , A0000046   , A0000047   ,
                  A0000048   , A0000049   , A0000050   , A0000051   , A0000052 , A0000053   , A0000054   , . . .   ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                          ** CONC OF PM_10   IN MICROGRAMS/M**3
                  **

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)
 -
        501966.86   3737672.40   2.26155 (11010316)   501978.35   3737662.09   2.70512 (11010316)
        501928.17   3737680.14   1.58278 (16010616)   501942.30   3737681.27   1.92644 (16010616)
        501981.25   3737640.41   2.08059 (11010316)   501980.48

3737624.76 1.59886 (11010316)
501911.37 3737676.31 1.24201 (16010616) 501896.86
3737678.60 1.09722 (16010616)
501867.46 3737677.07 0.81728 (16010616) 501852.57
3737678.98 0.73042 (16010616)
501837.29 3737679.36 0.64635 (16010616) 502018.80
3737562.00 0.72197 (14111116)
502038.53 3737568.77 0.86551 (14111116) 502065.46
3737567.04 0.89775 (16122216)
502091.82 3737568.19 1.03518 (16122216) 502125.38
3737567.33 1.02394 (16122216)
502146.12 3737567.47 0.93269 (16122216) 502175.50
3737558.05 0.69794 (16122216)
502209.28 3737571.65 0.52368 (10121016) 502228.04
3737572.83 0.47685 (10101916)
502243.28 3737572.83 0.43565 (10101916) 502258.06
3737570.25 0.38931 (10101916)
502273.07 3737574.23 0.35631 (10101916) 502288.08
3737572.36 0.31542 (10101916)
502302.62 3737574.94 0.28769 (14123016) 502333.35
3737573.30 0.24304 (14123016)
502347.42 3737570.25 0.22377 (14123016) 501816.61
3737669.07 0.51362 (16010616)
501770.40 3737703.06 0.44611 (16010616) 501768.11
3737721.39 0.49912 (10121516)
501746.34 3737759.97 0.59259 (10121516) 501763.52
3737738.96 0.56719 (10121516)
501725.33 3737760.73 0.53154 (10121516) 501707.38
3737758.44 0.47808 (10121516)
501694.39 3737761.11 0.45552 (10121516) 501680.64
3737755.76 0.41260 (10121516)
501668.04 3737756.15 0.38993 (10121516) 501652.00
3737757.29 0.36511 (10121516)
501640.16 3737754.24 0.33961 (10121516) 501625.64
3737756.15 0.32297 (10121516)
501612.28 3737757.67 0.30833 (10121516) 501598.14
3737755.76 0.28742 (10121516)
501585.16 3737751.94 0.26614 (10121516) 501571.41
3737756.15 0.25918 (10121516)
501558.04 3737753.09 0.24144 (10121516) 501543.15
3737756.15 0.23293 (10121516)
501524.05 3737747.36 0.20502 (10121516) 502623.99
3738184.89 0.04183 (10112316)
502296.89 3737674.67 0.42728 (16010716) 502308.54
3737629.67 0.32187 (16010716)
502299.09 3737724.11 0.43655 (10122916) 502298.37
3737758.04 0.41736 (10122916)
502298.70 3737740.63 0.44538 (10122916) 502372.55
3737767.84 0.24529 (10122916)
502360.18 3737753.72 0.28072 (10122916) 502407.50

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3737771.36        0.20060  (10122916)
        502424.01   3737764.79        0.19021  (10122916)                502469.88
3737766.08        0.15291  (10122916)
        502513.44   3737756.55        0.12965  (10122916)                502412.67
3737806.03        0.16020  (10121616)
        502426.33   3737806.41        0.14853  (10121616)                502459.57
3737807.06        0.12519  (10122916)
        502471.43   3737806.41        0.12108  (10122916)                502048.34
3737810.24        2.43312  (10121716)
        502056.32   3737841.08        1.76492  (10121716)                502097.65
3737839.19        1.89914  (10121716)
        502233.42   3737808.35        0.56964  (10012115)                502148.64
3737806.04        1.94690  (10020516)
        502129.97   3737803.73        2.34481  (10121716)                502133.75
3737820.52        1.79425  (10121716)
        502179.49   3737806.25        1.31596  (10020516)                501972.93
3737806.54        2.45576  (10121516)
        501709.97   3737800.87        0.58469  (10121516)                501689.63
3737800.87        0.53242  (10121516)
        501670.24   3737802.29        0.49083  (10121516)                501653.21
3737802.76        0.45696  (10121516)
        501611.95   3737799.54        0.38116  (10121516)                502620.08
3738205.61        0.04416  (15112616)
        502621.84   3738241.36        0.04591  (15112616)                502613.59
3738389.03        0.04839  (15112616)
 *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                       ***        22:41:45

                                   PAGE  79
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                   INCLUDING SOURCE(S):     PAREA1      , A0000001
, A0000036    , A0000037    , A0000038    ,
                A0000039    , A0000029    , A0000030    , A0000031    , A0000032
, A0000033    , A0000034    , A0000035    ,
                A0000040    , A0000041    , A0000042    , A0000043    , A0000044
, A0000045    , A0000046    , A0000047    ,
                A0000048    , A0000049    , A0000050    , A0000051    , A0000052
, A0000053    , A0000054    ,  . . .      ,

                                              *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                           ** CONC OF PM_10    IN MICROGRAMS/M**3
                    **
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X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
502615.60	3738377.45	0.04841	(15112616)	502616.10	3738417.74	0.04718	(15112616)
502615.35	3738453.01	0.04583	(15112616)	502577.57	3738489.78	0.04496	(15112616)
502559.18	3738513.20	0.04362	(15112616)	502597.87	3739300.48	0.02589	(10121716)
502593.76	3739263.48	0.02620	(10121716)	502580.58	3738451.45	0.04739	(15112616)
502616.54	3738514.45	0.04268	(15112616)	502614.93	3738568.39	0.03971	(15112616)
502487.86	3738530.01	0.04116	(15112616)	502644.45	3738994.05	0.01930	(10121716)
502620.84	3738849.39	0.02398	(15112616)	502690.40	3738762.11	0.02885	(15112616)
502704.01	3738745.94	0.02949	(15112616)	502595.20	3739479.97	0.02587	(10121716)
502657.00	3739500.57	0.02161	(10121716)	502658.01	3739416.16	0.02141	(10121716)
502662.03	3739363.40	0.02082	(10121716)	502602.55	3739440.56	0.02546	(10121716)
502555.43	3740147.49	0.02422	(10121716)	502543.24	3740069.97	0.02504	(10121716)
502556.61	3740026.47	0.02502	(10121716)	502454.27	3740164.23	0.02698	(10121716)
502408.98	3740182.17	0.02805	(10121716)	502265.86	3740226.60	0.02985	(10121716)
502228.26	3740263.77	0.02949	(10121716)	502205.60	3740289.84	0.02910	(10121716)
502159.01	3740324.75	0.02842	(10121716)	502138.38	3740365.84	0.02770	(10121716)
502100.36	3740404.35	0.02677	(10121716)	502111.82	3740496.41	0.02614	(10121716)
502103.18	3740513.38	0.02579	(10121716)	502089.28	3740526.66	0.02551	(10121716)
502075.39	3740539.93	0.02513	(10121716)	502023.22	3740591.79	0.02372	(10121716)
501971.98	3740643.35	0.02220	(10121716)	501930.92	3740574.51	0.02161	(10121716)
501984.33	3740504.43	0.02356	(10121716)	502421.03	3740250.75	0.02740	(10121716)
502410.04	3740253.75	0.02763	(10121716)	502388.85	3740264.90	0.02796	(10121716)
502348.03	3740285.20	0.02850	(10121716)	502338.22	3740289.88	0.02863	(10121716)
502329.07	3740295.46	0.02867	(10121716)	502285.36	3740324.01	0.02879	(10121716)

```
        502267.29   3740337.39        0.02873  (10121716)               502250.56
3740353.01        0.02858  (10121716)
        502233.83   3740371.52        0.02834  (10121716)               502211.52
3740393.16        0.02806  (10121716)
        502192.56   3740412.11        0.02782  (10121716)               502136.81
3740462.93        0.02692  (10121716)
        502154.71   3740449.97        0.02714  (10121716)               502176.94
3740427.43        0.02755  (10121716)
        502798.31   3740217.10        0.01447  (10121716)               502825.66
3740215.57        0.01352  (10121716)
        502844.23   3740214.47        0.01286  (10121716)               502863.33
3740214.75        0.01223  (10121716)
        502887.08   3740214.47        0.01140  (10121716)               502902.37
3740214.20        0.01126  (10120809)
        502926.93   3740212.56        0.01120  (10120809)               502967.06
3740219.39        0.01102  (10120809)
        503014.83   3740212.29        0.01087  (10120809)               503080.34
3740214.47        0.01080  (11010609)
        503033.66   3740211.47        0.01082  (10120809)               503010.09
3740154.06        0.01091  (10120809)
        503046.39   3740151.49        0.01089  (11010609)               503118.97
3740152.77        0.01100  (11010609)
        503194.76   3740154.70        0.01104  (11010609)               503177.10
3740213.15        0.01092  (11010609)
        503251.61   3740212.51        0.01093  (11010609)               503327.73
3740212.83        0.01084  (11010609)
        503245.83   3740153.09        0.01101  (11010609)               503324.84
3740156.30        0.01092  (11010609)
        502679.76   3740239.37        0.01893  (10121716)               503004.07
3739255.46        0.01597  (15112616)
        502912.56   3739310.17        0.01469  (11010609)               502294.65
3739543.41        0.04408  (10121716)
        502049.31   3739489.20        0.04628  (10121716)               502301.95
3739600.05        0.04221  (10121716)
↟ *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                      ***        22:41:45

                                   PAGE  80
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                   INCLUDING SOURCE(S):     PAREA1      , A0000001
, A0000036    , A0000037    , A0000038    ,
                A0000039    , A0000029    , A0000030    , A0000031    , A0000032
, A0000033    , A0000034    , A0000035    ,
                A0000040    , A0000041    , A0000042    , A0000043    , A0000044
, A0000045    , A0000046    , A0000047    ,
```

A0000048 , A0000049 , A0000050 , A0000051 , A0000052
, A0000053 , A0000054 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS
***

** CONC OF PM_10 IN MICROGRAMS/M**3
**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
502505.59	3739431.16	0.03291	(10121716)	502560.50	3739493.37	0.02817	(10121716)
502177.02	3738053.36	0.37783	(10121716)	503298.41	3737837.04	0.01708	(10122916)
503381.22	3738583.90	0.01750	(14030409)	503398.85	3738546.92	0.01745	(14030409)
503394.51	3738631.89	0.01721	(14030409)	501212.60	3739008.56	0.02490	(16010516)
501740.25	3737811.03	0.69035	(10121516)				

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (43824
HRS) RESULTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3
**

NETWORK GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	GRID-ID
ALL	1ST HIGHEST VALUE IS	0.22183 AT (502056.92, 3737737.60, 465.10, 3291.50, 0.00)	GC	UCART1
	2ND HIGHEST VALUE IS	0.18566 AT (502122.92, 3737737.60, 465.00, 3291.50, 0.00)	GC	UCART1
	3RD HIGHEST VALUE IS	0.17390 AT (502056.92, 3737682.60, 465.00,		

```
 3291.50,    0.00)  GC  UCART1
          4TH HIGHEST VALUE IS       0.15290 AT (  502122.92,  3737682.60,   465.10,
 3291.50,    0.00)  GC  UCART1
          5TH HIGHEST VALUE IS       0.08382 AT (  502056.92,  3737792.60,   465.00,
 3291.50,    0.00)  GC  UCART1
          6TH HIGHEST VALUE IS       0.07957 AT (  501990.92,  3737737.60,   465.00,
 3291.50,    0.00)  GC  UCART1
          7TH HIGHEST VALUE IS       0.06957 AT (  502122.92,  3737792.60,   465.00,
 3291.50,    0.00)  GC  UCART1
          8TH HIGHEST VALUE IS       0.06213 AT (  501990.92,  3737682.60,   465.10,
 3291.50,    0.00)  GC  UCART1
          9TH HIGHEST VALUE IS       0.05316 AT (  502122.92,  3737627.60,   465.20,
 3291.50,    0.00)  GC  UCART1
         10TH HIGHEST VALUE IS       0.05264 AT (  502056.92,  3737627.60,   465.00,
 3291.50,    0.00)  GC  UCART1


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
 *** AERMOD - VERSION 24142  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        06/08/26
 *** AERMET - VERSION  16216 ***   ***
                       ***        22:41:45

                                  PAGE  82
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                                *** THE SUMMARY OF HIGHEST  1-HR
RESULTS ***


                                    ** CONC OF PM_10    IN MICROGRAMS/M**3
              **

                                                      DATE
                                          NETWORK
GROUP ID                             AVERAGE CONC     (YYMMDDHH)             RECEPTOR
(XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       7.57016  ON 16010616: AT (  501990.92,
3737737.60,   465.00,  3291.50,    0.00)  GC  UCART1


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
```

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of   0 Fatal Error Message(s)
 A Total of   4 Warning Message(s)
 A Total of   2028 Informational Message(s)

 A Total of   43824 Hours Were Processed

 A Total of   978 Calm Hours Identified

 A Total of   1050 Missing Hours Identified (2.40 Percent)

    ******** FATAL ERROR MESSAGES ********
               *** NONE ***

    ********   WARNING MESSAGES   ********
 ME W186   953   MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
     0.50
 ME W187   953   MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

 MX W450   17521   CHKDAT: Record Out of Sequence in Meteorological File at:
 14010101
 MX W450   17521   CHKDAT: Record Out of Sequence in Meteorological File at:
2 year gap

    ****
    *** AERMOD Finishes Successfully ***
    ****

APPENDIX B.2 – AERMOD OPERATIONAL MODEL OUTPUT

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 14.0.0
** Lakes Environmental Software Inc.
** Date: 10/20/2026
** File: C:\Lakes\AERMOD View\Projects\26-017 Bradley Garden OPR HRA\26-017 Bradley
Garden OPR HRA.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Lakes\AERMOD View\26-017 Bradley Gardens San Jacinto\26-017 Bradl
   MODELOPT DFAULT CONC
   AVERTIME 1 PERIOD
   URBANOPT 2492442 Riverside_County_Population_SCAQMD
   POLLUTID PM_10
   RUNORNOT RUN
   ERRORFIL "26-017 Bradley Garden OPR HRA.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION STCK1        POINT      502032.500  3737726.209      465.060
** DESCRSRC Emergency Generator
** Source Parameters **
   SRCPARAM STCK1         0.000164     2.256   789.000    43.273     0.104
   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
```

```
   INCLUDED "26-017 Bradley Garden OPR HRA.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE "..\..\Met Data\PERI_V9_ADJU\PERI_v9.SFC"
   PROFFILE "..\..\Met Data\PERI_V9_ADJU\PERI_v9.PFL"
   SURFDATA 3171 2010 Perris_Meteorological_Station
   UAIRDATA 3190 2010
   SITEDATA 99999 2010
   PROFBASE 442.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "26-017 BRADLEY GARDEN OPR HRA.AD\01H1GALL.PLT" 31
   PLOTFILE PERIOD ALL "26-017 BRADLEY GARDEN OPR HRA.AD\PE00GALL.PLT" 32
   SUMMFILE "26-017 Bradley Garden OPR HRA.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186      65       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
     0.50
 ME W187      65       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET
```

```
 **********************************
 *** SETUP Finishes Successfully ***
 **********************************

↟ *** AERMOD - VERSION 26135  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        10/20/26
 *** AERMET - VERSION  16216 ***   ***
                       ***        18:05:56

                                   PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                            ***     MODEL SETUP OPTIONS SUMMARY
 ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for     1 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =   2492442.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Assumes No FLAGPOLE Receptor Heights.
      * The User Specified a Pollutant Type of: PM_10

 **Model Calculates  1 Short Term Average(s) of:   1-HR
     and Calculates PERIOD Averages

 **This Run Includes:      1 Source(s);       1 Source Group(s); and    1051
Receptor(s)

                with:      1 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                 and:      0 VOLUME source(s)
                 and:      0 AREA type source(s)
```

```
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  16216

 **Output Options Selected:
         Model Outputs Tables of PERIOD Averages by Receptor
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and
Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   442.00 ;  Decay
Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                                 ;
Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.6 MB of RAM.

 **Input Runstream File:          aermod.inp

 **Output Print File:             aermod.out


 **Detailed Error/Message File:   26-017 Bradley Garden OPR HRA.err

 **File for Summary of Results:   26-017 Bradley Garden OPR HRA.sum

↟ *** AERMOD - VERSION 26135  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        10/20/26
 *** AERMET - VERSION  16216 ***   ***
                       ***        18:05:56

                                  PAGE   2
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
```

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR VARY BY	EMIS RATE SCALAR
STCK1	0	0.16400E-03	465.1	2.26	789.00	43.27	0.10	NO	YES	NO	

SOURCE ID	X (METERS)	Y (METERS)
STCK1	502032.5	3737726.2

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
ALL	STCK1 ,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs
2492442.	STCK1 ,	

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

*** X-COORDINATES OF GRID ***
(METERS)

501396.9, 501462.9, 501528.9, 501594.9, 501660.9, 501726.9, 501792.9, 501858.9, 501924.9, 501990.9,
502056.9, 502122.9, 502188.9, 502254.9, 502320.9, 502386.9, 502452.9, 502518.9, 502584.9, 502650.9,
502716.9,

*** Y-COORDINATES OF GRID ***
(METERS)

3737187.6, 3737242.6, 3737297.6, 3737352.6, 3737407.6, 3737462.6, 3737517.6, 3737572.6, 3737627.6, 3737682.6,
3737737.6, 3737792.6, 3737847.6, 3737902.6, 3737957.6, 3738012.6, 3738067.6, 3738122.6, 3738177.6, 3738232.6,
3738287.6,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	X-COORD (METERS)								
	501396.92	501462.92	501528.92	501594.92	501660.92	501726.92	501792.92	501858.92	501924.92
3738287.60	463.60	463.40	463.10	463.80	463.70	463.80	463.40	463.90	464.00
3738232.60	463.80	463.60	463.40	464.10	463.60	463.90	463.60	464.00	464.10

```
  3738177.60 |        464.20       464.40       464.40       464.60       464.50
  465.00       463.80       464.00       464.30
  3738122.60 |        464.00       464.40       464.50       464.70       464.70
  465.00       464.00       463.70       463.80
  3738067.60 |        464.00       464.00       464.10       464.80       464.60
  464.70       464.20       464.30       464.40
  3738012.60 |        463.90       464.00       464.00       465.50       465.80
  465.40       464.30       463.00       461.50
  3737957.60 |        463.70       463.70       464.10       465.60       466.00
  465.60       464.50       464.00       464.20
  3737902.60 |        463.60       463.80       463.90       465.00       465.30
  465.40       464.90       464.70       464.70
  3737847.60 |        463.20       463.80       463.90       464.90       465.00
  465.10       465.00       464.90       464.70
  3737792.60 |        463.60       464.10       464.00       464.50       464.80
  464.70       464.70       464.80       465.00
  3737737.60 |        464.20       464.10       464.70       464.80       465.00
  465.10       464.70       464.80       464.90
  3737682.60 |        464.30       464.10       464.30       465.10       465.20
  465.10       464.70       464.80       465.00
  3737627.60 |        464.50       464.60       463.90       464.70       464.80
  465.20       464.80       465.20       465.30
  3737572.60 |        464.90       464.70       464.60       463.50       465.10
  465.20       464.90       465.30       465.40
  3737517.60 |        466.70       464.80       464.50       464.40       463.20
  465.30       464.90       464.60       465.50
  3737462.60 |        469.10       464.70       464.40       464.30       464.40
  464.20       465.10       462.90       465.30
  3737407.60 |        469.40       469.50       464.50       464.40       465.00
  464.30       465.20       464.30       464.50
  3737352.60 |        469.60       469.90       466.30       464.60       465.40
  465.00       464.70       465.10       465.20
  3737297.60 |        469.70       470.20       469.70       464.80       465.40
  465.20       464.70       465.20       465.70
  3737242.60 |        469.90       470.20       470.60       465.40       465.20
  465.20       465.00       465.60       465.70
  3737187.60 |        469.90       470.30       470.80       468.50       465.50
  465.50       465.40       465.80       465.70
 *** AERMOD - VERSION 26135  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        10/20/26
 *** AERMET - VERSION  16216 ***   ***
                      ***        18:05:56

                                  PAGE   7
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                  *** NETWORK ID: UCART1   ;  NETWORK TYPE: GRIDCART
***

                                             * ELEVATION HEIGHTS IN METERS *
```

Y-COORD (METERS)	X-COORD (METERS)									
	501990.92	502056.92	502122.92	502188.92	502254.92	502320.92	502386.92	502452.92	502518.92	
3738287.60	464.90	465.40	465.50	465.90	466.10	466.30	466.50	467.40	467.60	
3738232.60	465.40	465.30	465.50	465.60	465.80	466.20	466.80	467.50	467.90	
3738177.60	464.50	464.50	465.10	464.80	465.60	466.40	466.50	466.90	467.60	
3738122.60	464.00	464.20	464.50	464.90	465.40	465.80	466.30	467.40	467.50	
3738067.60	464.60	464.50	464.60	464.90	465.10	465.50	466.20	467.20	467.70	
3738012.60	464.30	464.00	464.30	465.10	465.60	465.40	465.70	466.70	467.40	
3737957.60	464.10	464.10	464.30	464.70	464.90	465.10	465.50	466.10	467.30	
3737902.60	464.30	464.30	464.30	464.70	463.20	465.30	465.20	466.80	466.80	
3737847.60	464.60	464.60	464.60	465.30	465.20	465.90	465.30	465.80	466.60	
3737792.60	465.00	465.00	465.00	465.20	465.40	465.70	465.80	466.00	466.50	
3737737.60	465.00	465.10	465.00	465.10	465.30	465.50	465.80	465.80	466.90	
3737682.60	465.10	465.00	465.10	465.20	465.30	466.00	465.90	466.20	466.60	
3737627.60	465.30	465.00	465.20	465.30	465.50	466.50	466.20	466.40	466.40	
3737572.60	465.10	465.20	465.40	465.50	466.10	466.30	466.50	466.20	466.50	
3737517.60	465.00	465.70	466.10	466.20	466.30	466.50	467.00	466.20	466.70	
3737462.60	465.40	465.70	466.00	466.20	466.30	466.50	466.70	466.60	467.20	
3737407.60	464.60	464.70	464.90	465.10	465.30	465.40	465.60	466.00	466.20	
3737352.60	465.40	465.50	465.70	465.90	466.00	466.30	466.50	466.90	467.20	
3737297.60	465.60	465.70	466.00	466.10	466.30	466.60	466.70	467.20	467.20	
3737242.60	466.00	466.00	466.20	466.40	466.60	466.90	467.00	467.30	467.50	
3737187.60	466.30	466.20	466.40	466.60	466.90	467.10	467.40	467.70	468.00	

                                          * ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	X-COORD (METERS)		
	502584.92	502650.92	502716.92
3738287.60	468.20	468.50	468.60
3738232.60	468.20	468.60	469.00
3738177.60	468.00	468.50	468.80
3738122.60	467.90	468.40	469.00
3738067.60	467.60	468.10	468.60
3738012.60	467.60	468.10	468.40
3737957.60	467.50	467.90	468.20
3737902.60	467.30	467.80	468.00
3737847.60	466.90	467.50	467.90
3737792.60	466.90	467.20	467.60
3737737.60	467.00	467.40	467.60
3737682.60	466.90	467.20	467.50
3737627.60	466.90	467.10	467.50
3737572.60	466.90	467.20	467.50
3737517.60	467.00	467.20	467.40
3737462.60	467.30	467.40	467.50
3737407.60	466.80	467.10	467.30
3737352.60	467.40	467.50	467.70
3737297.60	467.50	467.70	467.90
3737242.60	468.00	467.90	468.10
3737187.60	468.20	468.10	468.30

                                          * HILL HEIGHT SCALES IN METERS *

Y-COORD (METERS)	X-COORD (METERS)									
	501396.92	501462.92	501528.92	501594.92	501660.92	501726.92	501792.92	501858.92	501924.92	
3738287.60	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	3291.50	
3738232.60	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	3291.50	
3738177.60	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	3291.50	
3738122.60	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	3291.50	
3738067.60	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	3291.50	
3738012.60	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	
3737957.60	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	
3737902.60	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	
3737847.60	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	
3737792.60	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	
3737737.60	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	
3737682.60	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	
3737627.60	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	
3737572.60	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	
3737517.60	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	
3737462.60	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	3291.50	
3737407.60	1232.30	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	
3737352.60	1232.30	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	
3737297.60	1232.30	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	
3737242.60	1179.50	1232.30	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	
3737187.60	1179.50	1179.50	1232.30	1232.30	1232.30	1232.30	3291.50	3291.50	3291.50	

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                *** NETWORK ID: UCART1   ; NETWORK TYPE: GRIDCART ***

                                                * HILL HEIGHT SCALES IN METERS *

Y-COORD (METERS)	X-COORD (METERS)									
	501990.92	502056.92	502122.92	502188.92	502254.92	502320.92	502386.92	502452.92	502518.92	
3738287.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3738232.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3738177.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3738122.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3738067.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3738012.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3737957.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3737902.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3737847.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3737792.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3737737.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3737682.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3737627.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3737572.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3737517.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	
3737462.60	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	

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  3737407.60 |       3291.50      3291.50      3291.50      3291.50      3291.50
 3291.50      3291.50      3291.50      3291.50
  3737352.60 |       3291.50      3291.50      3291.50      3291.50      3291.50
 3291.50      3291.50      3291.50      3291.50
  3737297.60 |       3291.50      3291.50      3291.50      3291.50      3291.50
 3291.50      3291.50      3291.50      3291.50
  3737242.60 |       3291.50      3291.50      3291.50      3291.50      3291.50
 3291.50      3291.50      3291.50      3291.50
  3737187.60 |       3291.50      3291.50      3291.50      3291.50      3291.50
 3291.50      3291.50      3291.50      3291.50
```

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: UCART2   ; NETWORK TYPE: GRIDCART ***

*** X-COORDINATES OF GRID ***
(METERS)

499078.4, 499386.3, 499694.2, 500002.1, 500310.0, 500617.9, 500925.7, 501233.6, 501541.5, 501849.4,
502157.3, 502465.2, 502773.1, 503081.0, 503388.9, 503696.8, 504004.6, 504312.5, 504620.4, 504928.3,
505236.2,

*** Y-COORDINATES OF GRID ***
(METERS)

3734693.9, 3735010.3, 3735326.7, 3735643.1, 3735959.5, 3736275.9, 3736592.4, 3736908.8, 3737225.2, 3737541.6,
3737858.0, 3738174.4, 3738490.8, 3738807.2, 3739123.6, 3739440.0, 3739756.5, 3740072.9, 3740389.3, 3740705.7,
3741022.1,

*** NETWORK ID: UCART2   ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	X-COORD (METERS)							
	499078.40	499386.29	499694.18	500002.07	500309.96	500617.85	500925.74	501233.63	501541.52
3741022.10	447.70	448.00	448.30	449.70	450.40	452.10	452.80	454.50	456.50

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  3740705.69 |        449.50       449.70       449.40       450.70       452.40
  453.30       454.90       454.30       456.80
  3740389.28 |        452.70       451.40       450.60       451.10       453.00
  454.10       455.80       456.30       457.70
  3740072.87 |        455.40       455.90       452.20       452.00       451.50
  455.00       456.40       457.80       458.90
  3739756.46 |        457.60       457.30       455.30       451.50       453.70
  453.30       456.80       458.60       459.80
  3739440.05 |        458.30       458.30       459.10       456.60       455.30
  455.00       457.00       458.90       460.40
  3739123.64 |        458.70       458.90       460.10       460.80       458.50
  458.50       458.10       458.90       460.60
  3738807.23 |        459.60       460.10       460.40       461.00       463.60
  460.70       460.40       460.00       460.70
  3738490.82 |        460.00       461.00       461.80       462.50       462.60
  461.60       461.80       463.20       462.40
  3738174.41 |        460.80       461.80       461.40       463.80       464.60
  464.90       463.80       463.10       464.30
  3737858.00 |        461.60       462.40       462.90       464.50       466.30
  466.80       464.90       463.30       463.90
  3737541.59 |        461.80       462.90       464.40       465.40       466.20
  467.00       467.70       468.10       464.60
  3737225.18 |        462.10       463.20       464.80       465.60       466.30
  467.10       468.00       469.20       470.80
  3736908.77 |        462.00       463.30       464.20       465.40       467.50
  468.00       468.80       469.70       471.00
  3736592.36 |        462.50       463.60       464.40       466.00       466.70
  467.70       469.30       471.20       472.40
  3736275.95 |        463.90       464.10       465.80       466.30       467.40
  468.70       469.90       471.60       473.30
  3735959.54 |        463.50       464.50       465.70       466.40       467.60
  470.00       470.90       472.50       473.80
  3735643.13 |        463.60       464.30       465.90       467.40       469.60
  470.60       471.40       472.50       475.60
  3735326.72 |        464.00       464.60       466.20       467.90       470.10
  467.20       472.90       474.20       475.30
  3735010.31 |        463.30       464.90       466.00       468.00       470.50
  472.10       474.10       474.90       476.20
  3734693.90 |        463.40       465.10       466.60       468.80       470.70
  472.50       474.60       475.80       478.10
 *** AERMOD - VERSION 26135  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        10/20/26
 *** AERMET - VERSION  16216 ***   ***
                      ***        18:05:56

                                  PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                  *** NETWORK ID: UCART2   ;  NETWORK TYPE: GRIDCART
***
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* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	X-COORD (METERS)								
	501849.41	502157.30	502465.19	502773.08	503080.97	503388.86	503696.75	504004.64	504312.53
3741022.10	457.90	458.20	459.80	462.30	463.20	463.70	465.20	466.20	466.10
3740705.69	458.30	459.70	461.00	463.60	464.80	465.80	467.00	468.20	468.90
3740389.28	458.40	460.80	461.80	463.80	465.60	466.30	468.40	470.00	470.20
3740072.87	460.40	461.90	463.50	464.20	466.80	467.20	469.20	471.30	472.40
3739756.46	461.40	463.20	464.20	465.50	467.10	467.50	470.00	472.10	473.60
3739440.05	462.20	463.20	465.20	467.20	468.70	469.80	471.00	473.40	474.30
3739123.64	462.60	464.20	465.60	467.60	469.20	471.00	472.20	474.20	475.70
3738807.23	462.50	464.40	465.80	468.00	469.70	472.20	473.80	475.50	476.10
3738490.82	463.40	464.90	466.50	468.10	470.10	471.90	473.90	476.30	478.00
3738174.41	464.00	465.20	467.10	469.40	472.30	474.50	476.10	478.00	479.50
3737858.00	464.90	464.50	466.00	468.70	470.20	472.50	474.70	476.00	478.20
3737541.59	464.80	465.80	466.30	467.90	471.30	471.20	473.70	476.00	478.30
3737225.18	465.60	466.30	467.30	468.90	469.80	472.70	474.60	476.90	478.40
3736908.77	472.40	467.00	468.40	469.70	471.10	473.30	476.20	478.70	480.80
3736592.36	473.00	472.20	469.50	472.00	472.70	474.60	478.00	480.90	483.10
3736275.95	474.50	476.10	474.10	474.00	475.00	476.20	480.10	483.30	485.10
3735959.54	476.30	477.70	478.90	480.50	480.50	478.50	481.00	493.10	487.30
3735643.13	477.30	478.80	481.10	483.50	485.00	486.10	486.70	488.10	492.90
3735326.72	478.10	480.10	481.70	483.30	485.70	487.50	490.20	490.30	492.60
3735010.31	479.50	480.60	482.30	484.80	486.60	488.80	491.80	493.20	495.60
3734693.90	479.30	481.10	483.00	485.60	488.00

                                                * ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	X-COORD (METERS) 504620.42	504928.31	505236.20
3741022.10	467.80	468.70	517.30
3740705.69	469.00	469.70	470.80
3740389.28	471.10	471.70	472.20
3740072.87	473.10	473.60	473.70
3739756.46	474.70	475.10	476.40
3739440.05	476.40	476.90	478.00
3739123.64	477.70	478.70	479.50
3738807.23	477.60	479.80	481.40
3738490.82	479.70	481.00	482.70
3738174.41	480.80	482.10	481.50
3737858.00	481.10	483.40	485.40
3737541.59	481.90	483.30	486.20
3737225.18	480.00	484.40	487.20
3736908.77	483.30	484.90	486.80
3736592.36	485.20	487.40	490.00
3736275.95	487.80	490.40	490.50
3735959.54	491.40	501.50	498.00
3735643.13	516.20	542.10	532.40
3735326.72	501.10	526.40	561.50
3735010.31	498.60	511.30	534.40
3734693.90	498.40	504.40	512.50

* HILL HEIGHT SCALES IN METERS *

| Y-COORD (METERS) | X-COORD (METERS) | | |

                                 *** NETWORK ID: UCART2   ; NETWORK TYPE: GRIDCART ***

                                                * HILL HEIGHT SCALES IN METERS *

Y-COORD (METERS)	X-COORD (METERS)								
	501849.41	502157.30	502465.19	502773.08	503080.97	503388.86	503696.75	504004.64	504312.53
3741022.10	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50
3740705.69	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50
3740389.28	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50
3740072.87	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50
3739756.46	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50
3739440.05	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50
3739123.64	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50
3738807.23	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50
3738490.82	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50
3738174.41	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50
3737858.00	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50
3737541.59	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50
3737225.18	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50
3736908.77	1232.30	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50
3736592.36	1179.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50	3291.50

 3736275.95 | 474.50   3291.50   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3735959.54 | 476.30   3291.50   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3735643.13 | 477.30   478.80   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3735326.72 | 478.10   480.10   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3735010.31 | 479.50   480.60   3291.50   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50
 3734693.90 | 479.30   481.10   483.00   3291.50   3291.50
3291.50   3291.50   3291.50   3291.50

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                  *** NETWORK ID: UCART2   ; NETWORK TYPE: GRIDCART
***

                                              * HILL HEIGHT SCALES IN METERS *

    Y-COORD | X-COORD (METERS)
    (METERS) | 504620.42   504928.31   505236.20
 -
- -

  3741022.10 | 3291.50   3291.50   3291.50
  3740705.69 | 3291.50   3291.50   3291.50
  3740389.28 | 3291.50   3291.50   3291.50
  3740072.87 | 3291.50   3291.50   3291.50
  3739756.46 | 3291.50   3291.50   3291.50
  3739440.05 | 3291.50   3291.50   3291.50
  3739123.64 | 3291.50   3291.50   3291.50
  3738807.23 | 3291.50   3291.50   3291.50
  3738490.82 | 3291.50   3291.50   3291.50
  3738174.41 | 3291.50   3291.50   3291.50
  3737858.00 | 3291.50   3291.50   3291.50
  3737541.59 | 3291.50   3291.50   3291.50
  3737225.18 | 3291.50   3291.50   3291.50
  3736908.77 | 3291.50   3291.50   3291.50
  3736592.36 | 3291.50   3291.50   3291.50
  3736275.95 | 3291.50   3291.50   3291.50
  3735959.54 | 3291.50   3291.50   3291.50
  3735643.13 | 3291.50   3291.50   3291.50
  3735326.72 | 3291.50   3291.50   3291.50
  3735010.31 | 3291.50   3291.50   3291.50

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

     (501966.9, 3737672.4,   465.3,   3291.5,   0.0);   (501978.3, 3737662.1,   465.4,   3291.5,   0.0);
     (501928.2, 3737680.1,   465.1,   3291.5,   0.0);   (501942.3, 3737681.3,   465.1,   3291.5,   0.0);
     (501981.2, 3737640.4,   465.4,   3291.5,   0.0);   (501980.5, 3737624.8,   465.4,   3291.5,   0.0);
     (501911.4, 3737676.3,   465.2,   3291.5,   0.0);   (501896.9, 3737678.6,   465.0,   3291.5,   0.0);
     (501867.5, 3737677.1,   465.1,   3291.5,   0.0);   (501852.6, 3737679.0,   464.9,   3291.5,   0.0);
     (501837.3, 3737679.4,   464.9,   3291.5,   0.0);   (502018.8, 3737562.0,   465.8,   3291.5,   0.0);
     (502038.5, 3737568.8,   465.3,   3291.5,   0.0);   (502065.5, 3737567.0,   465.5,   3291.5,   0.0);
     (502091.8, 3737568.2,   465.5,   3291.5,   0.0);   (502125.4, 3737567.3,   465.7,   3291.5,   0.0);
     (502146.1, 3737567.5,   465.6,   3291.5,   0.0);   (502175.5, 3737558.0,   466.0,   3291.5,   0.0);
     (502209.3, 3737571.6,   465.9,   3291.5,   0.0);   (502228.0, 3737572.8,   466.0,   3291.5,   0.0);
     (502243.3, 3737572.8,   466.1,   3291.5,   0.0);   (502258.1, 3737570.2,   466.2,   3291.5,   0.0);
     (502273.1, 3737574.2,   466.1,   3291.5,   0.0);   (502288.1, 3737572.4,   466.2,   3291.5,   0.0);
     (502302.6, 3737574.9,   466.2,   3291.5,   0.0);   (502333.3, 3737573.3,   466.3,   3291.5,   0.0);
     (502347.4, 3737570.2,   466.4,   3291.5,   0.0);   (501816.6, 3737669.1,   465.0,   3291.5,   0.0);
     (501770.4, 3737703.1,   465.5,   3291.5,   0.0);   (501768.1, 3737721.4,   465.5,   3291.5,   0.0);
     (501746.3, 3737760.0,   465.2,   3291.5,   0.0);   (501763.5, 3737739.0,   465.5,   3291.5,   0.0);
     (501725.3, 3737760.7,   465.1,   3291.5,   0.0);   (501707.4, 3737758.4,   465.2,   3291.5,   0.0);
     (501694.4, 3737761.1,   465.0,   3291.5,   0.0);   (501680.6, 3737755.8,   465.2,   1232.3,   0.0);
     (501668.0, 3737756.1,   465.1,   1232.3,   0.0);   (501652.0,

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3737757.3,     465.0,    1232.3,       0.0);
     ( 501640.2, 3737754.2,     465.0,    1232.3,       0.0);         ( 501625.6,
3737756.1,     465.0,    1232.3,       0.0);
     ( 501612.3, 3737757.7,     465.0,    1232.3,       0.0);         ( 501598.1,
3737755.8,     465.0,    1232.3,       0.0);
     ( 501585.2, 3737751.9,     464.9,    1232.3,       0.0);         ( 501571.4,
3737756.1,     464.8,    1232.3,       0.0);
     ( 501558.0, 3737753.1,     464.8,    1232.3,       0.0);         ( 501543.1,
3737756.1,     464.8,    1232.3,       0.0);
     ( 501524.0, 3737747.4,     464.6,    1232.3,       0.0);         ( 502624.0,
3738184.9,     468.2,    3291.5,       0.0);
     ( 502296.9, 3737674.7,     465.7,    3291.5,       0.0);         ( 502308.5,
3737629.7,     466.3,    3291.5,       0.0);
     ( 502299.1, 3737724.1,     465.5,    3291.5,       0.0);         ( 502298.4,
3737758.0,     465.5,    3291.5,       0.0);
     ( 502298.7, 3737740.6,     465.5,    3291.5,       0.0);         ( 502372.5,
3737767.8,     465.7,    3291.5,       0.0);
     ( 502360.2, 3737753.7,     465.7,    3291.5,       0.0);         ( 502407.5,
3737771.4,     465.7,    3291.5,       0.0);
     ( 502424.0, 3737764.8,     465.8,    3291.5,       0.0);         ( 502469.9,
3737766.1,     466.0,    3291.5,       0.0);
     ( 502513.4, 3737756.5,     466.5,    3291.5,       0.0);         ( 502412.7,
3737806.0,     465.6,    3291.5,       0.0);
     ( 502426.3, 3737806.4,     465.7,    3291.5,       0.0);         ( 502459.6,
3737807.1,     465.9,    3291.5,       0.0);
     ( 502471.4, 3737806.4,     466.2,    3291.5,       0.0);         ( 502048.3,
3737810.2,     464.8,    3291.5,       0.0);
     ( 502056.3, 3737841.1,     464.6,    3291.5,       0.0);         ( 502097.6,
3737839.2,     464.8,    3291.5,       0.0);
     ( 502233.4, 3737808.3,     465.6,    3291.5,       0.0);         ( 502148.6,
3737806.0,     464.9,    3291.5,       0.0);
     ( 502133.8, 3737820.5,     464.8,    3291.5,       0.0);         ( 502179.5,
3737806.2,     465.1,    3291.5,       0.0);
     ( 501972.9, 3737806.5,     464.9,    3291.5,       0.0);         ( 501710.0,
3737800.9,     465.4,    3291.5,       0.0);
     ( 501689.6, 3737800.9,     465.3,    3291.5,       0.0);         ( 501670.2,
3737802.3,     465.3,    1232.3,       0.0);
     ( 501653.2, 3737802.8,     465.3,    1232.3,       0.0);         ( 501612.0,
3737799.5,     465.1,    1232.3,       0.0);
     ( 502620.1, 3738205.6,     468.1,    3291.5,       0.0);         ( 502621.8,
3738241.4,     468.3,    3291.5,       0.0);
     ( 502613.6, 3738389.0,     467.9,    3291.5,       0.0);         ( 502615.6,
3738377.4,     468.0,    3291.5,       0.0);
     ( 502616.1, 3738417.7,     468.0,    3291.5,       0.0);         ( 502615.3,
3738453.0,     467.8,    3291.5,       0.0);
     ( 502577.6, 3738489.8,     467.4,    3291.5,       0.0);         ( 502559.2,
3738513.2,     467.1,    3291.5,       0.0);
     ( 502597.9, 3739300.5,     467.0,    3291.5,       0.0);         ( 502593.8,
3739263.5,     467.2,    3291.5,       0.0);
     ( 502580.6, 3738451.4,     467.7,    3291.5,       0.0);         ( 502616.5,
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3738514.4,   467.7,   3291.5,   0.0);
     (502614.9, 3738568.4,   467.5,   3291.5,   0.0);   (502487.9,
3738530.0,   466.6,   3291.5,   0.0);

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                      (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                (METERS)

     (502644.5, 3738994.0,   467.1,   3291.5,   0.0);   (502620.8,
3738849.4,   466.9,   3291.5,   0.0);
     (502690.4, 3738762.1,   467.4,   3291.5,   0.0);   (502704.0,
3738745.9,   467.5,   3291.5,   0.0);
     (502595.2, 3739480.0,   466.8,   3291.5,   0.0);   (502657.0,
3739500.6,   466.6,   3291.5,   0.0);
     (502658.0, 3739416.2,   466.6,   3291.5,   0.0);   (502662.0,
3739363.4,   466.8,   3291.5,   0.0);
     (502602.5, 3739440.6,   466.4,   3291.5,   0.0);   (502555.4,
3740147.5,   464.1,   3291.5,   0.0);
     (502543.2, 3740070.0,   464.2,   3291.5,   0.0);   (502556.6,
3740026.5,   464.4,   3291.5,   0.0);
     (502454.3, 3740164.2,   463.3,   3291.5,   0.0);   (502409.0,
3740182.2,   463.1,   3291.5,   0.0);
     (502265.9, 3740226.6,   462.1,   3291.5,   0.0);   (502228.3,
3740263.8,   461.8,   3291.5,   0.0);
     (502205.6, 3740289.8,   461.3,   3291.5,   0.0);   (502159.0,
3740324.8,   460.9,   3291.5,   0.0);
     (502138.4, 3740365.8,   460.7,   3291.5,   0.0);   (502100.4,
3740404.3,   460.4,   3291.5,   0.0);
     (502111.8, 3740496.4,   459.6,   3291.5,   0.0);   (502103.2,
3740513.4,   459.4,   3291.5,   0.0);
     (502089.3, 3740526.7,   459.4,   3291.5,   0.0);   (502075.4,
3740539.9,   459.3,   3291.5,   0.0);
     (502023.2, 3740591.8,   459.1,   3291.5,   0.0);   (501972.0,
3740643.3,   458.9,   3291.5,   0.0);
     (501930.9, 3740574.5,   458.7,   3291.5,   0.0);   (501984.3,
3740504.4,   459.3,   3291.5,   0.0);
     (502421.0, 3740250.8,   461.9,   3291.5,   0.0);   (502410.0,
3740253.8,   461.9,   3291.5,   0.0);
     (502388.8, 3740264.9,   461.8,   3291.5,   0.0);   (502348.0,
3740285.2,   461.7,   3291.5,   0.0);
     (502338.2, 3740289.9,   461.7,   3291.5,   0.0);   (502329.1,
3740295.5,   461.7,   3291.5,   0.0);
     (502285.4, 3740324.0,   461.5,   3291.5,   0.0);   (502267.3,

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3740337.4,     461.4,    3291.5,       0.0);
     ( 502250.6, 3740353.0,     461.3,    3291.5,       0.0);         ( 502233.8,
3740371.5,     461.2,    3291.5,       0.0);
     ( 502211.5, 3740393.2,     461.1,    3291.5,       0.0);         ( 502192.6,
3740412.1,     461.1,    3291.5,       0.0);
     ( 502136.8, 3740462.9,     460.8,    3291.5,       0.0);         ( 502154.7,
3740450.0,     460.8,    3291.5,       0.0);
     ( 502176.9, 3740427.4,     461.0,    3291.5,       0.0);         ( 502798.3,
3740217.1,     465.1,    3291.5,       0.0);
     ( 502825.7, 3740215.6,     465.1,    3291.5,       0.0);         ( 502844.2,
3740214.5,     465.1,    3291.5,       0.0);
     ( 502863.3, 3740214.8,     465.0,    3291.5,       0.0);         ( 502887.1,
3740214.5,     465.0,    3291.5,       0.0);
     ( 502902.4, 3740214.2,     465.0,    3291.5,       0.0);         ( 502926.9,
3740212.6,     464.9,    3291.5,       0.0);
     ( 502967.1, 3740219.4,     465.0,    3291.5,       0.0);         ( 503014.8,
3740212.3,     465.9,    3291.5,       0.0);
     ( 503080.3, 3740214.5,     466.1,    3291.5,       0.0);         ( 503033.7,
3740211.5,     465.9,    3291.5,       0.0);
     ( 503010.1, 3740154.1,     465.8,    3291.5,       0.0);         ( 503046.4,
3740151.5,     466.8,    3291.5,       0.0);
     ( 503119.0, 3740152.8,     466.5,    3291.5,       0.0);         ( 503194.8,
3740154.7,     466.7,    3291.5,       0.0);
     ( 503177.1, 3740213.1,     466.2,    3291.5,       0.0);         ( 503251.6,
3740212.5,     466.6,    3291.5,       0.0);
     ( 503327.7, 3740212.8,     466.9,    3291.5,       0.0);         ( 503245.8,
3740153.1,     466.9,    3291.5,       0.0);
     ( 503324.8, 3740156.3,     467.1,    3291.5,       0.0);         ( 502679.8,
3740239.4,     463.7,    3291.5,       0.0);
     ( 503004.1, 3739255.5,     469.2,    3291.5,       0.0);         ( 502912.6,
3739310.2,     468.5,    3291.5,       0.0);
     ( 502294.6, 3739543.4,     464.7,    3291.5,       0.0);         ( 502049.3,
3739489.2,     464.0,    3291.5,       0.0);
     ( 502302.0, 3739600.0,     464.6,    3291.5,       0.0);         ( 502505.6,
3739431.2,     465.5,    3291.5,       0.0);
     ( 502560.5, 3739493.4,     466.0,    3291.5,       0.0);         ( 502177.0,
3738053.4,     465.1,    3291.5,       0.0);
     ( 503298.4, 3737837.0,     471.9,    3291.5,       0.0);         ( 503381.2,
3738583.9,     471.9,    3291.5,       0.0);
     ( 503398.8, 3738546.9,     471.8,    3291.5,       0.0);         ( 503394.5,
3738631.9,     472.3,    3291.5,       0.0);
     ( 501212.6, 3739008.6,     459.2,    1232.3,       0.0);         ( 501740.2,
3737811.0,     464.7,    3291.5,       0.0);
     ( 502129.6, 3737803.9,     464.9,    3291.5,       0.0);

 *** AERMOD - VERSION 26135  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        10/20/26
 *** AERMET - VERSION  16216 ***   ***
                       ***        18:05:56
```

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***

(1=YES; 0=NO)

```
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***

(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: ..\..\Met Data\PERI_V9_ADJU\PERI_v9.SFC
Met Version: 16216
Profile file: ..\..\Met Data\PERI_V9_ADJU\PERI_v9.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 3171 Upper air station no.: 3190
Name: PERRIS_METEOROLOGICAL_STATION Name: UNKNOWN

Year: 2010 Year: 2010

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
10	01	01	1	01	-7.9	0.125	-9.000	-9.000	-999.	106.	21.2	0.19	0.61	1.00	1.30	335.	9.1	282.5	5.5
10	01	01	1	02	-3.9	0.088	-9.000	-9.000	-999.	62.	15.1	0.19	0.61	1.00	0.90	142.	9.1	280.9	5.5
10	01	01	1	03	-3.9	0.088	-9.000	-9.000	-999.	62.	15.1	0.19	0.61	1.00	0.90	324.	9.1	280.4	5.5
10	01	01	1	04	-1.3	0.064	-9.000	-9.000	-999.	39.	18.3	0.19	0.61	1.00	0.40	294.	9.1	278.8	5.5
10	01	01	1	05	-3.9	0.088	-9.000	-9.000	-999.	62.	15.0	0.19	0.61	1.00	0.90	205.	9.1	278.1	5.5
10	01	01	1	06	-1.3	0.065	-9.000	-9.000	-999.	39.	18.3	0.19	0.61	1.00	0.40	3.	9.1	277.0	5.5
10	01	01	1	07	-8.0	0.125	-9.000	-9.000	-999.	106.	21.0	0.19	0.61	1.00	1.30	99.	9.1	277.0	5.5
10	01	01	1	08	-3.3	0.086	-9.000	-9.000	-999.	61.	16.8	0.19	0.61	0.54	0.90	319.	9.1	278.8	5.5
10	01	01	1	09	20.1	0.128	0.307	0.010	49.	110.	-9.0	0.19	0.61	0.33	0.90	239.	9.1	284.2	5.5
10	01	01	1	10	56.7	0.087	0.560	0.010	107.	62.	-1.0	0.19	0.61	0.26	0.40	188.	9.1	289.2	5.5
10	01	01	1	11	81.5	0.323	0.867	0.008	277.	441.	-35.9	0.19	0.61	0.23	2.70	310.	9.1	290.9	5.5
10	01	01	1	12	97.1	0.281	1.058	0.008	421.	357.	-19.7	0.19	0.61	0.22	2.20	357.	9.1	293.1	5.5
10	01	01	1	13	92.2	0.279	1.117	0.008	523.	354.	-20.4	0.19	0.61	0.22	2.20	356.	9.1	293.8	5.5
10	01	01	1	14	77.6	0.275	1.102	0.008	595.	347.	-23.2	0.19	0.61	0.23	2.20	50.	9.1	294.2	5.5
10	01	01	1	15	54.9	0.230	1.006	0.008	640.	266.	-19.2	0.19	0.61	0.27	1.80	53.	9.1	293.8	5.5
10	01	01	1	16	12.3	0.206	0.613	0.008	648.	225.	-61.5	0.19	0.61	0.36	1.80	11.	9.1	292.5	5.5
10	01	01	1	17	-3.6	0.087	-9.000	-9.000	-999.	71.	15.6	0.19	0.61	0.64	0.90	351.	9.1	290.4	5.5
10	01	01	1	18	-3.8	0.087	-9.000	-9.000	-999.	62.	15.2	0.19	0.61	1.00	0.90	186.	9.1	287.5	5.5
10	01	01	1	19	-3.8	0.087	-9.000	-9.000	-999.	62.	15.2	0.19	0.61						

```
1.00    0.90  275.    9.1  285.9    5.5
 10 01 01   1 20   -1.2  0.064 -9.000 -9.000 -999.   39.     18.1  0.19   0.61
1.00    0.40  181.    9.1  285.4    5.5
 10 01 01   1 21   -7.8  0.125 -9.000 -9.000 -999.  106.     21.3  0.19   0.61
1.00    1.30  318.    9.1  284.9    5.5
 10 01 01   1 22   -3.8  0.088 -9.000 -9.000 -999.   62.     15.1  0.19   0.61
1.00    0.90  196.    9.1  283.1    5.5
 10 01 01   1 23   -3.8  0.088 -9.000 -9.000 -999.   62.     15.1  0.19   0.61
1.00    0.90  330.    9.1  281.4    5.5
 10 01 01   1 24   -7.9  0.125 -9.000 -9.000 -999.  106.     21.2  0.19   0.61
1.00    1.30  332.    9.1  280.9    5.5


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 10 01 01 01    5.5 0 -999.  -99.00   282.6   99.0  -99.00  -99.00
 10 01 01 01    9.1 1  335.    1.30  -999.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
 *** AERMOD - VERSION 26135  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        10/20/26
 *** AERMET - VERSION  16216 ***   ***
                       ***        18:05:56

                                  PAGE  23
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL       ***
                                   INCLUDING SOURCE(S):     STCK1       ,

                                    *** NETWORK ID: UCART1   ;  NETWORK TYPE:
GRIDCART ***

                                        ** CONC OF PM_10    IN MICROGRAMS/M**3
                   **

    Y-COORD  |                                              X-COORD (METERS)
    (METERS) |     501396.92    501462.92    501528.92    501594.92    501660.92
501726.92    501792.92    501858.92    501924.92
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -

  3738287.60 |       0.00026      0.00030      0.00034      0.00039      0.00044
 0.00050      0.00056      0.00060      0.00063
  3738232.60 |       0.00027      0.00031      0.00035      0.00041      0.00047
 0.00054      0.00061      0.00068      0.00071
  3738177.60 |       0.00028      0.00032      0.00037      0.00043      0.00050
 0.00059      0.00068      0.00076      0.00082
  3738122.60 |       0.00028      0.00033      0.00038      0.00044      0.00053
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 0.00063      0.00075      0.00086      0.00095
  3738067.60 |       0.00029      0.00033      0.00039      0.00046      0.00055
 0.00067      0.00081      0.00098      0.00111
  3738012.60 |       0.00030      0.00034      0.00040      0.00048      0.00057
 0.00071      0.00088      0.00107      0.00123
  3737957.60 |       0.00030      0.00035      0.00041      0.00049      0.00058
 0.00073      0.00093      0.00119      0.00150
  3737902.60 |       0.00031      0.00036      0.00042      0.00050      0.00061
 0.00075      0.00096      0.00128      0.00172
  3737847.60 |       0.00031      0.00036      0.00042      0.00051      0.00062
 0.00077      0.00099      0.00131      0.00180
  3737792.60 |       0.00031      0.00037      0.00043      0.00052      0.00063
 0.00078      0.00099      0.00130      0.00168
  3737737.60 |       0.00032      0.00037      0.00043      0.00052      0.00064
 0.00079      0.00100      0.00131      0.00162
  3737682.60 |       0.00031      0.00036      0.00043      0.00052      0.00063
 0.00079      0.00100      0.00132      0.00173
  3737627.60 |       0.00031      0.00036      0.00042      0.00051      0.00061
 0.00076      0.00097      0.00128      0.00170
  3737572.60 |       0.00031      0.00035      0.00041      0.00048      0.00059
 0.00073      0.00091      0.00115      0.00149
  3737517.60 |       0.00029      0.00034      0.00040      0.00047      0.00055
 0.00067      0.00082      0.00100      0.00127
  3737462.60 |       0.00026      0.00033      0.00038      0.00044      0.00052
 0.00061      0.00073      0.00085      0.00108
  3737407.60 |       0.00025      0.00029      0.00036      0.00041      0.00048
 0.00055      0.00065      0.00076      0.00091
  3737352.60 |       0.00024      0.00027      0.00033      0.00038      0.00044
 0.00050      0.00058      0.00067      0.00079
  3737297.60 |       0.00023      0.00025      0.00029      0.00036      0.00040
 0.00045      0.00051      0.00059      0.00068
  3737242.60 |       0.00022      0.00024      0.00026      0.00033      0.00037
 0.00041      0.00046      0.00052      0.00059
  3737187.60 |       0.00021      0.00023      0.00025      0.00029      0.00034
 0.00037      0.00042      0.00046      0.00052
 *** AERMOD - VERSION 26135  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        10/20/26
 *** AERMET - VERSION  16216 ***   ***
                      ***        18:05:56

                                 PAGE  24
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL       ***
                                   INCLUDING SOURCE(S):     STCK1       ,

                                    *** NETWORK ID: UCART1   ;  NETWORK TYPE:
GRIDCART ***
```

** CONC OF PM_10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS) 501990.92	502056.92	502122.92	502188.92	502254.92	502320.92	502386.92	502452.92	502518.92
3738287.60	0.00063	0.00060	0.00056	0.00051	0.00046	0.00041	0.00037	0.00032	0.00029
3738232.60	0.00072	0.00069	0.00064	0.00057	0.00051	0.00045	0.00040	0.00034	0.00030
3738177.60	0.00083	0.00079	0.00073	0.00065	0.00057	0.00049	0.00043	0.00037	0.00032
3738122.60	0.00097	0.00092	0.00083	0.00073	0.00064	0.00054	0.00046	0.00039	0.00034
3738067.60	0.00116	0.00110	0.00097	0.00083	0.00071	0.00060	0.00050	0.00041	0.00035
3738012.60	0.00139	0.00130	0.00112	0.00095	0.00078	0.00065	0.00054	0.00044	0.00037
3737957.60	0.00168	0.00157	0.00131	0.00107	0.00086	0.00070	0.00057	0.00047	0.00038
3737902.60	0.00206	0.00192	0.00152	0.00119	0.00090	0.00074	0.00060	0.00047	0.00040
3737847.60	0.00239	0.00223	0.00170	0.00130	0.00099	0.00076	0.00062	0.00051	0.00041
3737792.60	0.00271	0.00292	0.00175	0.00135	0.00103	0.00080	0.00064	0.00052	0.00042
3737737.60	0.00336	0.00455	0.00181	0.00139	0.00107	0.00083	0.00065	0.00053	0.00043
3737682.60	0.00332	0.00838	0.00260	0.00158	0.00113	0.00084	0.00067	0.00054	0.00044
3737627.60	0.00241	0.00450	0.00342	0.00192	0.00125	0.00087	0.00068	0.00054	0.00045
3737572.60	0.00207	0.00306	0.00302	0.00206	0.00133	0.00093	0.00070	0.00056	0.00045
3737517.60	0.00168	0.00222	0.00235	0.00191	0.00136	0.00097	0.00072	0.00057	0.00046
3737462.60	0.00136	0.00169	0.00184	0.00166	0.00131	0.00098	0.00074	0.00058	0.00046
3737407.60	0.00111	0.00133	0.00145	0.00140	0.00119	0.00096	0.00075	0.00059	0.00048
3737352.60	0.00093	0.00108	0.00118	0.00117	0.00106	0.00089	0.00073	0.00059	0.00048
3737297.60	0.00079	0.00090	0.00097	0.00099	0.00093	0.00082	0.00069	0.00057	0.00047
3737242.60	0.00067	0.00076	0.00082	0.00084	0.00082	0.00075	0.00065	0.00055	0.00047
3737187.60	0.00058	0.00065	0.00070	0.00072	0.00072

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE PERIOD (43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): STCK1 ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS) 502584.92	502650.92	502716.92
3738287.60	0.00025	0.00023	0.00020
3738232.60	0.00027	0.00024	0.00021
3738177.60	0.00028	0.00025	0.00022
3738122.60	0.00029	0.00025	0.00022
3738067.60	0.00031	0.00026	0.00023
3738012.60	0.00032	0.00027	0.00024
3737957.60	0.00033	0.00028	0.00025
3737902.60	0.00034	0.00029	0.00025
3737847.60	0.00035	0.00030	0.00026
3737792.60	0.00036	0.00030	0.00026
3737737.60	0.00036	0.00031	0.00027
3737682.60	0.00037	0.00031	0.00027
3737627.60	0.00037	0.00032	0.00027
3737572.60	0.00038	0.00032	0.00027
3737517.60	0.00038	0.00032	0.00028
3737462.60	0.00038	0.00032	0.00028
3737407.60	0.00039	0.00033	0.00028
3737352.60	0.00039	0.00033	0.00028
3737297.60	0.00039	0.00033	0.00028
3737242.60	0.00039	0.00033	0.00028
3737187.60	0.00039	0.00033	0.00028

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE PERIOD (43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): STCK1 ,

*** NETWORK ID: UCART2 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS)								
	499078.40	499386.29	499694.18	500002.07	500309.96	500617.85	500925.74	501233.63	501541.52
3741022.10	0.00002	0.00002	0.00003	0.00003	0.00004	0.00004	0.00004	0.00004	0.00004
3740705.69	0.00002	0.00003	0.00003	0.00003	0.00004	0.00004	0.00005	0.00005	0.00005
3740389.28	0.00002	0.00003	0.00003	0.00004	0.00004	0.00005	0.00006	0.00006	0.00006
3740072.87	0.00003	0.00003	0.00003	0.00004	0.00005	0.00005	0.00006	0.00007	0.00008
3739756.46	0.00003	0.00003	0.00004	0.00004	0.00005	0.00006	0.00007	0.00009	0.00009
3739440.05	0.00003	0.00003	0.00004	0.00004	0.00005	0.00007	0.00008	0.00010	0.00012
3739123.64	0.00003	0.00003	0.00004	0.00005	0.00006	0.00007	0.00010	0.00013	0.00016
3738807.23	0.00003	0.00003	0.00004	0.00005	0.00006	0.00008	0.00011	0.00015	0.00021
3738490.82	0.00003	0.00004	0.00004	0.00005	0.00007	0.00009	0.00012	0.00018	0.00029
3738174.41	0.00003	0.00004	0.00004	0.00006	0.00007	0.00009	0.00013	0.00021	0.00038
3737858.00	0.00003	0.00004	0.00005	0.00006	0.00007	0.00010	0.00014	0.00023	0.00044
3737541.59	0.00003	0.00004	0.00005	0.00006	0.00007	0.00009	0.00013	0.00021	0.00042
3737225.18	0.00003	0.00004	0.00004	0.00005	0.00007	0.00009	0.00012	0.00017	0.00026
3736908.77	0.00003	0.00004	0.00004	0.00005	0.00006	0.00008	0.00010	0.00013	0.00018
3736592.36	0.00003	0.00003	0.00004	0.00005	0.00006	0.00007	0.00008	0.00010	0.00012
3736275.95	0.00003	0.00003	0.00004	0.00004	0.00005				

Y-COORD (METERS)	X-COORD (METERS)									
	501849.41	502157.30	502465.19	502773.08	503080.97	503388.86	503696.75	504004.64	504312.53
3741022.10	0.00004	0.00004	0.00004	0.00004	0.00003	0.00003	0.00003	0.00003	0.00002
3740705.69	0.00005	0.00005	0.00004	0.00004	0.00004	0.00004	0.00003	0.00003	0.00003
3740389.28	0.00006	0.00006	0.00005	0.00005	0.00004	0.00004	0.00004	0.00003	0.00003
3740072.87	0.00007	0.00007	0.00006	0.00006	0.00005	0.00005	0.00004	0.00003	0.00003
3739756.46	0.00009	0.00009	0.00008	0.00007	0.00006	0.00005	0.00004	0.00004	0.00003
3739440.05	0.00012	0.00011	0.00010	0.00008	0.00007	0.00006	0.00005	0.00004	0.00003
3739123.64	0.00017	0.00015	0.00013	0.00011	0.00008	0.00006	0.00005	0.00004	0.00003
3738807.23	0.00025	0.00022	0.00018	0.00013	0.00010				

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE PERIOD (43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): STCK1 ,

*** NETWORK ID: UCART2 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS)		
	504620.42	504928.31	505236.20

- - - -

*** THE PERIOD (43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): STCK1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
501966.86	3737672.40	0.00237	501978.35	3737662.09	0.00251
501928.17	3737680.14	0.00177	501942.30	3737681.27	0.00194
501981.25	3737640.41	0.00233	501980.48	3737624.76	0.00220
501911.37	3737676.31	0.00165	501896.86		

3737678.60 0.00156
501867.46 3737677.07 0.00138 501852.57
3737678.98 0.00129
501837.29 3737679.36 0.00120 502018.80
3737562.00 0.00235
502038.53 3737568.77 0.00274 502065.46
3737567.04 0.00304
502091.82 3737568.19 0.00316 502125.38
3737567.33 0.00292
502146.12 3737567.47 0.00266 502175.50
3737558.05 0.00220
502209.28 3737571.65 0.00178 502228.04
3737572.83 0.00157
502243.28 3737572.83 0.00143 502258.06
3737570.25 0.00131
502273.07 3737574.23 0.00120 502288.08
3737572.36 0.00110
502302.62 3737574.94 0.00102 502333.35
3737573.30 0.00088
502347.42 3737570.25 0.00083 501816.61
3737669.07 0.00110
501770.40 3737703.06 0.00093 501768.11
3737721.39 0.00092
501746.34 3737759.97 0.00085 501763.52
3737738.96 0.00091
501725.33 3737760.73 0.00079 501707.38
3737758.44 0.00074
501694.39 3737761.11 0.00071 501680.64
3737755.76 0.00068
501668.04 3737756.15 0.00065 501652.00
3737757.29 0.00062
501640.16 3737754.24 0.00060 501625.64
3737756.15 0.00057
501612.28 3737757.67 0.00055 501598.14
3737755.76 0.00053
501585.16 3737751.94 0.00051 501571.41
3737756.15 0.00049
501558.04 3737753.09 0.00047 501543.15
3737756.15 0.00045
501524.05 3737747.36 0.00043 502623.99
3738184.89 0.00026
502296.89 3737674.67 0.00095 502308.54
3737629.67 0.00092
502299.09 3737724.11 0.00091 502298.37
3737758.04 0.00089
502298.70 3737740.63 0.00090 502372.55
3737767.84 0.00068
502360.18 3737753.72 0.00071 502407.50
3737771.36 0.00061
502424.01 3737764.79 0.00058 502469.88

3737766.08   0.00050
         502513.44   3737756.55   0.00044   502412.67
3737806.03   0.00059
         502426.33   3737806.41   0.00056   502459.57
3737807.06   0.00051
         502471.43   3737806.41   0.00048   502048.34
3737810.24   0.00272
         502056.32   3737841.08   0.00228   502097.65
3737839.19   0.00191
         502233.42   3737808.35   0.00111   502148.64
3737806.04   0.00157
         502133.75   3737820.52   0.00166   502179.49
3737806.25   0.00140
         501972.93   3737806.54   0.00229   501709.97
3737800.87   0.00074
         501689.63   3737800.87   0.00069   501670.24
3737802.29   0.00065
         501653.21   3737802.76   0.00062   501611.95
3737799.54   0.00054
         502620.08   3738205.61   0.00026   502621.84
3738241.36   0.00025
         502613.59   3738389.03   0.00022   502615.60
3738377.45   0.00023

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                *** THE PERIOD (43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                INCLUDING SOURCE(S):   STCK1   ,

                                                    *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                                    ** CONC OF PM_10   IN MICROGRAMS/M**3   **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)   Y-COORD (M)   CONC
 - - -

3739263.48 0.00011
502580.58 3738451.45 0.00022 502616.54
3738514.45 0.00020
502614.93 3738568.39 0.00019 502487.86
3738530.01 0.00023
502644.45 3738994.05 0.00013 502620.84
3738849.39 0.00015
502690.40 3738762.11 0.00015 502704.01
3738745.94 0.00015
502595.20 3739479.97 0.00009 502657.00
3739500.57 0.00009
502658.01 3739416.16 0.00009 502662.03
3739363.40 0.00010
502602.55 3739440.56 0.00009 502555.43
3740147.49 0.00006
502543.24 3740069.97 0.00006 502556.61
3740026.47 0.00006
502454.27 3740164.23 0.00006 502408.98
3740182.17 0.00006
502265.86 3740226.60 0.00006 502228.26
3740263.77 0.00006
502205.60 3740289.84 0.00006 502159.01
3740324.75 0.00006
502138.38 3740365.84 0.00006 502100.36
3740404.35 0.00006
502111.82 3740496.41 0.00005 502103.18
3740513.38 0.00005
502089.28 3740526.66 0.00005 502075.39
3740539.93 0.00005
502023.22 3740591.79 0.00005 501971.98
3740643.35 0.00005
501930.92 3740574.51 0.00005 501984.33
3740504.43 0.00006
502421.03 3740250.75 0.00006 502410.04
3740253.75 0.00006
502388.85 3740264.90 0.00006 502348.03
3740285.20 0.00006
502338.22 3740289.88 0.00006 502329.07
3740295.46 0.00006
502285.36 3740324.01 0.00006 502267.29
3740337.39 0.00006
502250.56 3740353.01 0.00006 502233.83
3740371.52 0.00006
502211.52 3740393.16 0.00006 502192.56
3740412.11 0.00006
502136.81 3740462.93 0.00006 502154.71
3740449.97 0.00006
502176.94 3740427.43 0.00006 502798.31
3740217.10 0.00005
502825.66 3740215.57 0.00005 502844.23

3740214.47   0.00005
         502863.33   3740214.75   0.00005   502887.08
3740214.47   0.00005
         502902.37   3740214.20   0.00005   502926.93
3740212.56   0.00005
         502967.06   3740219.39   0.00005   503014.83
3740212.29   0.00005
         503080.34   3740214.47   0.00005   503033.66
3740211.47   0.00005
         503010.09   3740154.06   0.00005   503046.39
3740151.49   0.00005
         503118.97   3740152.77   0.00005   503194.76
3740154.70   0.00005
         503177.10   3740213.15   0.00005   503251.61
3740212.51   0.00005
         503327.73   3740212.83   0.00004   503245.83
3740153.09   0.00005
         503324.84   3740156.30   0.00004   502679.76
3740239.37   0.00005
         503004.07   3739255.46   0.00008   502912.56
3739310.17   0.00008
         502294.65   3739543.41   0.00010   502049.31
3739489.20   0.00011
         502301.95   3739600.05   0.00009   502505.59
3739431.16   0.00010

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                               *** THE PERIOD (43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                   INCLUDING SOURCE(S):   STCK1   ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                                ** CONC OF PM_10   IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)   Y-COORD (M)   CONC
 - - -

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                   INCLUDING SOURCE(S):   STCK1   ,

                                    *** NETWORK ID: UCART1   ; NETWORK TYPE: GRIDCART ***

                                         ** CONC OF PM_10   IN MICROGRAMS/M**3
                    **

  Y-COORD | X-COORD (METERS)
  (METERS) | 501396.92   501462.92   501528.92
      501594.92   501660.92
 - - -

0.00634 (14070720) 0.00750 (14070720)
3737737.6 | 0.00424 (15073103) 0.00477 (11080420) 0.00552 (11080420)
0.00642 (11080420) 0.00759 (11080420)
3737682.6 | 0.00422 (15062422) 0.00474 (16090219) 0.00543 (16090219)
0.00638 (10071022) 0.00753 (11082922)
3737627.6 | 0.00425 (15071721) 0.00474 (15071721) 0.00535 (16062321)
0.00624 (10071802) 0.00734 (11081820)
3737572.6 | 0.00414 (15101321) 0.00467 (14090720) 0.00525 (14090720)
0.00592 (15101319) 0.00696 (11090301)
3737517.6 | 0.00434 (14090720) 0.00449 (14090720) 0.00499 (11090301)
0.00562 (11081922) 0.00639 (16071821)
3737462.6 | 0.00442 (11080103) 0.00435 (16072820) 0.00478 (10082324)
0.00536 (16071821) 0.00611 (16110820)
3737407.6 | 0.00435 (11082802) 0.00477 (14091624) 0.00460 (14091624)
0.00505 (16110820) 0.00573 (15090905)
3737352.6 | 0.00425 (14091624) 0.00458 (14091624) 0.00450 (10092621)
0.00477 (10092621) 0.00529 (15070120)
3737297.6 | 0.00399 (14091624) 0.00441 (10092621) 0.00474 (10092621)
0.00445 (15080306) 0.00489 (15090820)
3737242.6 | 0.00390 (10092621) 0.00423 (10092621) 0.00453 (16071823)
0.00418 (15090824) 0.00448 (15090824)
3737187.6 | 0.00374 (10092621) 0.00399 (16071823) 0.00429 (10080224)
0.00439 (15090824) 0.00415 (11101221)
*** AERMOD - VERSION 26135 *** *** C:\Lakes\AERMOD View\26-017 Bradley Gardens San Jacinto\26-017 Bradl *** 10/20/26
*** AERMET - VERSION 16216 *** *** *** 18:05:56

PAGE 33
*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): STCK1 ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

Y-COORD (METERS) | X-COORD (METERS)
501726.92 501792.92 501858.92 501924.92 501990.92
- - - -

```
    0.00531 (10071720)      0.00553 (15100919)
 3738177.6 |      0.00510 (10092720)      0.00537 (15081720)      0.00570 (14091020)
    0.00602 (16073022)      0.00622 (15100919)
 3738122.6 |      0.00563 (10092720)      0.00599 (16072320)      0.00641 (16072520)
    0.00676 (16073022)      0.00704 (15100919)
 3738067.6 |      0.00612 (15083119)      0.00677 (10092720)      0.00732 (10071721)
    0.00778 (10092822)      0.00817 (15100919)
 3738012.6 |      0.00676 (16080220)      0.00747 (15083119)      0.00802 (16072320)
    0.00847 (11082720)      0.00947 (16062023)
 3737957.6 |      0.00741 (15082119)      0.00834 (14072520)      0.00937 (10092818)
    0.01072 (14071321)      0.01170 (16073023)
 3737902.6 |      0.00799 (15083019)      0.00924 (15082119)      0.01122 (10081623)
    0.01366 (16040619)      0.01598 (15072920)
 3737847.6 |      0.00848 (15091919)      0.01031 (11072322)      0.01344 (10071824)
    0.01801 (11040221)      0.02426 (11092318)
 3737792.6 |      0.00888 (11070820)      0.01107 (10052120)      0.01569 (11071020)
    0.02474 (10092718)      0.04419 (10060923)
 3737737.6 |      0.00908 (14090721)      0.01150 (10093021)      0.01681 (10093021)
    0.02970 (16110919)      0.09364 (10112921)
 3737682.6 |      0.00899 (11082922)      0.01129 (10070121)      0.01610 (10062901)
    0.02763 (16110818)      0.06298 (16022318)
 3737627.6 |      0.00869 (15101319)      0.01063 (11071421)      0.01462 (16092519)
    0.02102 (11082022)      0.03069 (11123117)
 3737572.6 |      0.00813 (11081922)      0.00974 (10110219)      0.01211 (16080820)
    0.01555 (10120717)      0.01901 (16100719)
 3737517.6 |      0.00762 (16110820)      0.00877 (15090905)      0.01027 (16092520)
    0.01201 (14090219)      0.01353 (16081420)
 3737462.6 |      0.00693 (15090905)      0.00801 (15090820)      0.00835 (14081419)
    0.00971 (11072721)      0.01062 (14091520)
 3737407.6 |      0.00635 (15090820)      0.00712 (15090904)      0.00768 (15090823)
    0.00829 (11080220)      0.00859 (16100819)
 3737352.6 |      0.00579 (15090820)      0.00627 (15102819)      0.00692 (15090720)
    0.00729 (11070223)      0.00752 (11062520)
 3737297.6 |      0.00529 (15090904)      0.00566 (15090823)      0.00604 (15090720)
    0.00649 (10082521)      0.00657 (11062520)
 3737242.6 |      0.00476 (15102819)      0.00516 (15090823)      0.00546 (11080220)
    0.00575 (10082521)      0.00592 (16083020)
 3737187.6 |      0.00443 (11081821)      0.00466 (15090720)      0.00494 (11080220)
    0.00510 (10082521)      0.00534 (16083020)
 *** AERMOD - VERSION 26135  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        10/20/26
 *** AERMET - VERSION  16216 ***   ***
                       ***        18:05:56

                                  PAGE  34
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     STCK1       ,
```

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS) 502056.92	502122.92	502188.92	502254.92	502320.92
3738287.6	0.00490 (11082706)	0.00483 (10081923)	0.00482 (16062723)	0.00468 (16021618)	0.00449 (14091620)
3738232.6	0.00545 (11033121)	0.00538 (16031519)	0.00526 (11082722)	0.00506 (14091620)	0.00489 (10081806)
3738177.6	0.00613 (11033121)	0.00608 (16031519)	0.00589 (10071523)	0.00552 (10082204)	0.00535 (10071504)
3738122.6	0.00699 (16092719)	0.00683 (11082722)	0.00659 (10071523)	0.00615 (10071504)	0.00575 (16102719)
3738067.6	0.00813 (16092719)	0.00794 (11082722)	0.00742 (10082204)	0.00688 (10071504)	0.00625 (16092718)
3738012.6	0.00955 (14051619)	0.00906 (10071523)	0.00849 (10071504)	0.00780 (16092718)	0.00693 (11090601)
3737957.6	0.01182 (14051619)	0.01105 (10063022)	0.00981 (16092918)	0.00862 (10092901)	0.00759 (11093022)
3737902.6	0.01608 (15051719)	0.01413 (15122317)	0.01161 (10032001)	0.00931 (10101301)	0.00829 (11082120)
3737847.6	0.02514 (10093006)	0.01997 (11091320)	0.01455 (15012519)	0.01087 (15101918)	0.00892 (16110922)
3737792.6	0.05070 (16112020)	0.02849 (14042619)	0.01718 (10051722)	0.01215 (15090619)	0.00953 (10082519)
3737737.6	0.17263 (16013121)	0.03785 (11062120)	0.01858 (15121924)	0.01242 (14111519)	0.00946 (14111519)
3737682.6	0.08007 (15080319)	0.03368 (11080319)	0.01820 (15100118)	0.01253 (15100118)	0.00961 (11090722)
3737627.6	0.03309 (16061920)	0.02366 (11090619)	0.01587 (10082124)	0.01157 (16081719)	0.00951 (10082522)
3737572.6	0.01968 (11062720)	0.01673 (11082621)	0.01313 (10071421)	0.01069 (11082620)	0.00881 (16081719)
3737517.6	0.01393 (15062920)	0.01305 (10071620)	0.01110 (15082921)	0.00943 (15101218)	0.00821 (14072720)
3737462.6	0.01075 (16092619)	0.01031 (16081621)	0.00936 (15090721)	0.00833 (11071823)	0.00758 (16062021)
3737407.6	0.00869 (10082320)	0.00849 (16062720)	0.00800 (14091421)	0.00733 (15081321)	0.00661 (16072622)
3737352.6	0.00760 (10082320)	0.00741 (14070222)	0.00714 (14091422)	0.00666 (10090120)	0.00619 (16081423)
3737297.6	0.00668 (10082320)	0.00658 (10082222)	0.00639 (14091422)		

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): STCK1 ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS)				
	502386.92	502452.92	502518.92	502584.92	502650.92
3738287.6	0.00428 (14091504)	0.00417 (11090520)	0.00397 (15062723)	0.00382 (16062722)	0.00361 (10082422)
3738232.6	0.00465 (10082705)	0.00451 (11090520)	0.00427 (16062722)	0.00403 (10082422)	0.00376 (10090323)
3738177.6	0.00501 (11090520)	0.00470 (16062722)	0.00449 (10082422)	0.00417 (10090323)	0.00394 (15101019)
3738122.6	0.00533 (10092901)	0.00512 (10082422)	0.00468 (10090323)	0.00442 (15101019)	0.00414 (15101019)
3738067.6	0.00585 (11090601)	0.00544 (11093022)	0.00505 (15101019)	0.00458 (15090919)	0.00422 (15090919)
3738012.6	0.00618 (11093022)	0.00572 (10092920)	0.00524 (15090919)	0.00476 (14091123)	0.00440 (10092821)
3737957.6	0.00665 (11082120)	0.00591 (10082604)	0.00553 (10082604)	0.00491 (16110922)	0.00451 (15080523)
3737902.6	0.00715 (10082604)	0.00645 (16110922)	0.00564 (16081603)	0.00507 (10082602)	0.00464 (10082602)
3737847.6	0.00747 (16081603)	0.00645 (10082519)	0.00589 (10082519)	0.00525 (10082519)	0.00473 (10082519)
3737792.6	0.00803 (10082519)	0.00679 (10082519)	0.00587 (11071003)	0.00518 (10100120)	0.00468 (10100120)
3737737.6	0.00793 (16110419)	0.00673 (16110419)	0.00603 (16110419)		

3738287.6 | 0.00335 (10090323)
3738232.6 | 0.00354 (15101019)
3738177.6 | 0.00373 (15101019)
3738122.6 | 0.00387 (15090919)
3738067.6 | 0.00396 (10092821)
3738012.6 | 0.00401 (14051424)

 3737957.6 | 0.00416 (15080523)
 3737902.6 | 0.00423 (10071603)
 3737847.6 | 0.00425 (10082519)
 3737792.6 | 0.00426 (10100120)
 3737737.6 | 0.00430 (15063019)
 3737682.6 | 0.00428 (16062702)
 3737627.6 | 0.00430 (16082921)
 3737572.6 | 0.00416 (11081421)
 3737517.6 | 0.00409 (16081922)
 3737462.6 | 0.00402 (14090622)
 3737407.6 | 0.00387 (10092622)
 3737352.6 | 0.00378 (16083021)
 3737297.6 | 0.00364 (16083021)
 3737242.6 | 0.00356 (15081423)
 3737187.6 | 0.00342 (14091221)

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                               *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                   INCLUDING SOURCE(S):   STCK1   ,

                                    *** NETWORK ID: UCART2   ; NETWORK TYPE: GRIDCART ***

                                        ** CONC OF PM_10   IN MICROGRAMS/M**3   **

  Y-COORD | X-COORD (METERS)
  (METERS) | 499078.40   499386.29   499694.18
      500002.07   500309.96
 - - -

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  (METERS) |       500617.85               500925.74               501233.63
      501541.52               501849.41
 - - -
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): STCK1 ,

*** NETWORK ID: UCART2 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS)				
	502157.30	502465.19	502773.08	503080.97	503388.86
3741022.1	0.00054 (11082706)	0.00053 (14050222)	0.00053 (14090803)	0.00051 (10092801)	0.00049 (16021618)
3740705.7	0.00062 (11082706)	0.00061 (10081923)	0.00060 (15082722)	0.00058 (15090921)	0.00056 (14091620)
3740389.3	0.00072 (11082706)	0.00071 (10081923)	0.00069 (16062723)	0.00066 (16021618)	0.00065 (15062724)
3740072.9	0.00086 (15082622)	0.00084 (11070823)	0.00081 (10092801)	0.00083 (14091620)	0.00079 (10081806)
3739756.5	0.00104 (15082622)	0.00101 (14090803)	0.00097 (15090921)	0.00097 (15062724)	0.00091 (10082705)
3739440.0	0.00130 (15082622)	0.00126 (15082722)	0.00128 (15063022)	0.00124 (14091504)	0.00116 (11090520)
3739123.6	0.00169 (15082622)	0.00161 (16062723)	0.00161 (15062724)	0.00150 (11070702)	0.00140 (16062722)
3738807.2	0.00232 (15090922)	0.00218 (16021618)	0.00207 (10082705)	0.00186 (16062722)	0.00164 (10090323)
3738490.8	0.00346 (10081923)	0.00318 (10081806)	0.00270 (16062722)	0.00224 (15101019)	0.00187 (15090919)
3738174.4	0.00608 (11082722)	0.00472 (16062722)	0.00355 (15090919)	0.00273 (14051424)	0.00221 (15080523)
3737858.0	0.01578 (15050620)	0.00624 (10070603)	0.00397 (14100705)	0.00287 (10100120)	0.00222 (10110421)
3737541.6	0.01307 (11082621)	0.00621 (15080522)	0.00385 (15042821)	0.00291 (11081421)	0.00219 (16082921)
3737225.2	0.00559 (14070222)	0.00444 (11082724)	0.00338 (15081423)	0.00255 (10092622)	0.00211 (14082921)
3736908.8	0.00343 (10080323)	0.00319 (15091222)	0.00270 (11081722)	0.00225 (14091221)	0.00191 (16083021)
3736592.4	0.00274 (14060822)	0.00240 (15101221)	0.00224 (15101222)		

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    0.00093 (14091123)      0.00086 (10092821)
 3738807.2 |      0.00146 (15101019)      0.00126 (16110520)      0.00112 (10092821)
    0.00099 (14051424)      0.00091 (11083022)
 3738490.8 |      0.00160 (10092821)      0.00140 (11083022)      0.00123 (15080523)
    0.00109 (10082602)      0.00097 (10071603)
 3738174.4 |      0.00181 (10071603)      0.00150 (10090405)      0.00129 (10081501)
    0.00113 (14100705)      0.00100 (10072522)
 3737858.0 |      0.00181 (11090606)      0.00150 (10102407)      0.00129 (11081106)
    0.00115 (11081106)      0.00103 (11081106)
 3737541.6 |      0.00178 (16082921)      0.00150 (11090502)      0.00129 (10101303)
    0.00117 (16062702)      0.00103 (16062702)
 3737225.2 |      0.00174 (16081922)      0.00148 (15042821)      0.00127 (10090222)
    0.00113 (11081421)      0.00103 (15092922)
 3736908.8 |      0.00165 (10092622)      0.00145 (14090622)      0.00127 (14082921)
    0.00113 (16081922)      0.00099 (16081922)
 3736592.4 |      0.00155 (15081423)      0.00139 (16083021)      0.00121 (16080724)
    0.00110 (10071424)      0.00099 (14090622)
 3736275.9 |      0.00141 (14072624)      0.00128 (10082024)      0.00115 (11070301)
    0.00106 (16083021)      0.00096 (16080724)
 3735959.5 |      0.00127 (11081722)      0.00126 (15090906)      0.00108 (16102920)
    0.00101 (15081423)      0.00095 (11080301)
 3735643.1 |      0.00120 (11082522)      0.00110 (11081722)      0.00104 (14091623)
    0.00099 (14091221)      0.00080 (15081423)
 3735326.7 |      0.00110 (16072724)      0.00102 (11082522)      0.00095 (14091604)
    0.00092 (14091623)      0.00083 (14091221)
 3735010.3 |      0.00100 (15092023)      0.00094 (15090920)      0.00089 (10081802)
    0.00084 (14091604)      0.00081 (14091623)
 3734693.9 |      0.00091 (15091222)      0.00086 (16061824)      0.00082 (14092523)
    0.00078 (11082724)      0.00075 (14091604)
↑ *** AERMOD - VERSION 26135  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        10/20/26
 *** AERMET - VERSION  16216 ***   ***
                       ***        18:05:56

                                  PAGE  41
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     STCK1       ,

                                   *** NETWORK ID: UCART2   ;  NETWORK TYPE:
GRIDCART ***

                                        ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

  Y-COORD  |                                                  X-COORD (METERS)
  (METERS) |       505236.20
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
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- - - - - - - - - - - - - - - - - - - - - - -

 3741022.1 |      0.00068 (15082924)
 3740705.7 |      0.00047 (10082422)
 3740389.3 |      0.00052 (10090323)
 3740072.9 |      0.00058 (11080422)
 3739756.5 |      0.00065 (15070104)
 3739440.0 |      0.00071 (14091123)
 3739123.6 |      0.00076 (14051424)
 3738807.2 |      0.00083 (15080523)
 3738490.8 |      0.00086 (10071603)
 3738174.4 |      0.00088 (10072522)
 3737858.0 |      0.00093 (11081106)
 3737541.6 |      0.00094 (16062702)
 3737225.2 |      0.00094 (16082921)
 3736908.8 |      0.00090 (15042821)
 3736592.4 |      0.00090 (14082921)
 3736275.9 |      0.00087 (10092622)
 3735959.5 |      0.00086 (10071805)
 3735643.1 |      0.00079 (10080206)
 3735326.7 |      0.00064 (16062003)
 3735010.3 |      0.00070 (14072624)
 3734693.9 |      0.00071 (14091623)
 *** AERMOD - VERSION 26135  ***   *** C:\Lakes\AERMOD View\26-017 Bradley Gardens
San Jacinto\26-017 Bradl ***        10/20/26
 *** AERMET - VERSION  16216 ***   ***
                       ***        18:05:56

                                  PAGE  42
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     STCK1       ,

                                            *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                         ** CONC OF PM_10    IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -
        501966.86   3737672.40        0.04080  (14111817)               501978.35
3737662.09        0.04141  (14022019)
        501928.17   3737680.14        0.02823  (16110818)               501942.30
3737681.27        0.03308  (11030918)
        501981.25   3737640.41        0.03367  (14011818)               501980.48
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3737624.76 0.02821 (10081521)
501911.37 3737676.31 0.02421 (16110818) 501896.86
3737678.60 0.02153 (14100722)
501867.46 3737677.07 0.01699 (14100722) 501852.57
3737678.98 0.01549 (10062901)
501837.29 3737679.36 0.01410 (10062901) 502018.80
3737562.00 0.01854 (10092420)
502038.53 3737568.77 0.01939 (11090621) 502065.46
3737567.04 0.01855 (10071320)
502091.82 3737568.19 0.01778 (10071620) 502125.38
3737567.33 0.01625 (11082621)
502146.12 3737567.47 0.01512 (10082622) 502175.50
3737558.05 0.01331 (16072720)
502209.28 3737571.65 0.01230 (10071421) 502228.04
3737572.83 0.01169 (11082620)
502243.28 3737572.83 0.01115 (11082620) 502258.06
3737570.25 0.01057 (11082620)
502273.07 3737574.23 0.01008 (16082821) 502288.08
3737572.36 0.00958 (15062922)
502302.62 3737574.94 0.00926 (16081719) 502333.35
3737573.30 0.00852 (16081719)
502347.42 3737570.25 0.00826 (10082022) 501816.61
3737669.07 0.01247 (10062901)
501770.40 3737703.06 0.01066 (16071120) 501768.11
3737721.39 0.01050 (10100820)
501746.34 3737759.97 0.00958 (10080621) 501763.52
3737738.96 0.01026 (11102302)
501725.33 3737760.73 0.00897 (14090721) 501707.38
3737758.44 0.00859 (14090721)
501694.39 3737761.11 0.00827 (14090721) 501680.64
3737755.76 0.00803 (14090721)
501668.04 3737756.15 0.00777 (14090721) 501652.00
3737757.29 0.00745 (14090721)
501640.16 3737754.24 0.00724 (14090721) 501625.64
3737756.15 0.00697 (14090721)
501612.28 3737757.67 0.00674 (14090721) 501598.14
3737755.76 0.00652 (14090721)
501585.16 3737751.94 0.00631 (14090721) 501571.41
3737756.15 0.00611 (14090721)
501558.04 3737753.09 0.00592 (14090721) 501543.15
3737756.15 0.00572 (14090721)
501524.05 3737747.36 0.00545 (14090721) 502623.99
3738184.89 0.00397 (11080422)
502296.89 3737674.67 0.01032 (11060905) 502308.54
3737629.67 0.00989 (10082522)
502299.09 3737724.11 0.01036 (11123018) 502298.37
3737758.04 0.01032 (11061001)
502298.70 3737740.63 0.01032 (14111519) 502372.55
3737767.84 0.00809 (11071003)
502360.18 3737753.72 0.00838 (10101218) 502407.50

3737771.36   0.00740 (11071003)
        502424.01   3737764.79   0.00709 (16111024)   502469.88
3737766.08   0.00640 (16111024)
        502513.44   3737756.55   0.00597 (11092406)   502412.67
3737806.03   0.00744 (10082519)
        502426.33   3737806.41   0.00722 (10082519)   502459.57
3737807.06   0.00669 (10082519)
        502471.43   3737806.41   0.00658 (10082519)   502048.34
3737810.24   0.03970 (15121317)
        502056.32   3737841.08   0.02667 (10093006)   502097.65
3737839.19   0.02371 (10090622)
        502233.42   3737808.35   0.01291 (10051722)   502148.64
3737806.04   0.02162 (10022018)
        502133.75   3737820.52   0.02199 (14032620)   502179.49
3737806.25   0.01748 (10102722)
        501972.93   3737806.54   0.03303 (10052124)   501709.97
3737800.87   0.00851 (11070820)
        501689.63   3737800.87   0.00808 (11070820)   501670.24
3737802.29   0.00768 (11070820)
        501653.21   3737802.76   0.00735 (11070820)   501611.95
3737799.54   0.00666 (14070720)
        502620.08   3738205.61   0.00392 (10090323)   502621.84
3738241.36   0.00385 (10082422)
        502613.59   3738389.03   0.00332 (15062723)   502615.60
3738377.45   0.00335 (15062723)

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                               *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                   INCLUDING SOURCE(S):   STCK1   ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                              ** CONC OF PM_10   IN MICROGRAMS/M**3   **

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)
 - - -

3738513.20 0.00295 (10082705)
502597.87 3739300.48 0.00147 (15090921) 502593.76
3739263.48 0.00152 (15090921)
502580.58 3738451.45 0.00317 (11090520) 502616.54
3738514.45 0.00290 (10082503)
502614.93 3738568.39 0.00273 (10082705) 502487.86
3738530.01 0.00300 (10081806)
502644.45 3738994.05 0.00185 (14091620) 502620.84
3738849.39 0.00206 (15062724)
502690.40 3738762.11 0.00219 (14091504) 502704.01
3738745.94 0.00221 (10082705)
502595.20 3739479.97 0.00127 (10092801) 502657.00
3739500.57 0.00123 (15090921)
502658.01 3739416.16 0.00131 (15090921) 502662.03
3739363.40 0.00136 (16021618)
502602.55 3739440.56 0.00128 (10080406) 502555.43
3740147.49 0.00080 (14090803)
502543.24 3740069.97 0.00084 (14090803) 502556.61
3740026.47 0.00086 (14090803)
502454.27 3740164.23 0.00080 (11070823) 502408.98
3740182.17 0.00080 (10081923)
502265.86 3740226.60 0.00078 (15090922) 502228.26
3740263.77 0.00077 (15082622)
502205.60 3740289.84 0.00076 (15082622) 502159.01
3740324.75 0.00074 (11082706)
502138.38 3740365.84 0.00073 (11082706) 502100.36
3740404.35 0.00072 (11082706)
502111.82 3740496.41 0.00068 (11082706) 502103.18
3740513.38 0.00068 (11082706)
502089.28 3740526.66 0.00067 (15082721) 502075.39
3740539.93 0.00067 (15082721)
502023.22 3740591.79 0.00066 (15082721) 501971.98
3740643.35 0.00064 (15082519)
501930.92 3740574.51 0.00066 (15082519) 501984.33
3740504.43 0.00069 (15082519)
502421.03 3740250.75 0.00076 (10081923) 502410.04
3740253.75 0.00076 (10081923)
502388.85 3740264.90 0.00076 (10081923) 502348.03
3740285.20 0.00075 (15090922)
502338.22 3740289.88 0.00075 (15090922) 502329.07
3740295.46 0.00075 (15090922)
502285.36 3740324.01 0.00074 (15090922) 502267.29
3740337.39 0.00074 (15090922)
502250.56 3740353.01 0.00073 (15082622) 502233.83
3740371.52 0.00073 (15082622)
502211.52 3740393.16 0.00072 (15082622) 502192.56
3740412.11 0.00071 (15082622)
502136.81 3740462.93 0.00070 (11082706) 502154.71
3740449.97 0.00070 (11082706)
502176.94 3740427.43 0.00071 (15082622) 502798.31

3740217.10   0.00075 (10092801)
        502825.66   3740215.57   0.00075 (10092801)   502844.23
3740214.47   0.00074 (15082804)
        502863.33   3740214.75   0.00074 (15082804)   502887.08
3740214.47   0.00074 (15090921)
        502902.37   3740214.20   0.00074 (15090921)   502926.93
3740212.56   0.00074 (15090921)
        502967.06   3740219.39   0.00073 (15090921)   503014.83
3740212.29   0.00074 (16021618)
        503080.34   3740214.47   0.00074 (15063022)   503033.66
3740211.47   0.00074 (16021618)
        503010.09   3740154.06   0.00076 (16021618)   503046.39
3740151.49   0.00080 (16021618)
        503118.97   3740152.77   0.00078 (14091620)   503194.76
3740154.70   0.00078 (14091620)
        503177.10   3740213.15   0.00074 (14091620)   503251.61
3740212.51   0.00074 (14091620)
        503327.73   3740212.83   0.00074 (15062724)   503245.83
3740153.09   0.00077 (14091620)
        503324.84   3740156.30   0.00076 (15062724)   502679.76
3740239.37   0.00076 (15082722)
        503004.07   3739255.46   0.00144 (14091504)   502912.56
3739310.17   0.00141 (10081806)
        502294.65   3739543.41   0.00119 (10081923)   502049.31
3739489.20   0.00126 (15082721)
        502301.95   3739600.05   0.00114 (10081923)   502505.59
3739431.16   0.00126 (16062723)

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL   ***
                                   INCLUDING SOURCE(S):   STCK1   ,

                                            *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                         ** CONC OF PM_10   IN MICROGRAMS/M**3   **

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)
 - - -

3738053.36   0.00777 (10082204)
        503298.41   3737837.04   0.00239 (11090606)   503381.22
3738583.90   0.00182 (15101019)
        503398.85   3738546.92   0.00184 (15090919)   503394.51
3738631.89   0.00181 (15101019)
        501212.60   3739008.56   0.00149 (16062923)   501740.25
3737811.03   0.00905 (14083119)
        502129.64   3737803.87   0.02493 (11050821)

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                       *** THE SUMMARY OF MAXIMUM PERIOD (43824 HRS) RESULTS ***

                                    ** CONC OF PM_10   IN MICROGRAMS/M**3
             **

                        NETWORK
GROUP ID   AVERAGE CONC   RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID
- - - -

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF PM_10   IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE	CONC	DATE (YYMMDDHH)	NETWORK OF TYPE	GRID-ID	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)
ALL	HIGH 1ST	HIGH VALUE IS	0.17263	ON 16013121		AT (502056.92, 3737737.60, 465.10, 3291.50, 0.00)
					GC UCART1	

*** Message Summary : AERMOD Model Execution ***

--------- Summary of Total Messages --------

A Total of   0 Fatal Error Message(s)

```
 A Total of            4 Warning Message(s)
 A Total of         2028 Informational Message(s)

 A Total of        43824 Hours Were Processed

 A Total of          978 Calm Hours Identified

 A Total of         1050 Missing Hours Identified (  2.40 Percent)


    ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186      65       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
     0.50
 ME W187      65       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

 MX W450   17521       CHKDAT: Record Out of Sequence in Meteorological File at:
 14010101
 MX W450   17521       CHKDAT: Record Out of Sequence in Meteorological File at:
2 year gap

    ***********************************
    *** AERMOD Finishes Successfully ***
    ***********************************
```

APPENDIX C.1 – ESTIMATION OF PROJECT CONSTRUCTION DPM EMISSIONS

Basic Construction HRA Setup

Information Needed to Generate Emissions

Site Plan showing onsite trip distribution for trucks and cars
Trip generation Table with offsite trip distribution for trucks and cars
Operational Year
Land Use - refrigerated vs non-refrigerated
TRU usage (number of trucks and TRU size using TRUs and number of hours in opertion while at loading docks)
Use of fire pumps, standby emergency generator, forklifts, and yard trucks (number, size, and hours of operation)
Emission factors: EMFAC2021, OFFROAD2021 (2017), CalEEMod
Idle time assumed to be 15 minutes

AERMOD Setup to Generate Ground-level Concentrations

Use site plan to delineate the locations of the onsite truck routes, offsite truck routesm fire pump, generators, fork lifts, and yard trucks
Obtain the necessary meteorological data
Overlay site plan onto Google Earth and screen capture the site plan noting the Google x and y corners of the screen capture bottom left and upper right coordinates
Import the Google site plan into AERMOD
Layout the onsite and offsite truck routes on the imported site plan as line area sources
Locate the truck idling locations at the loading docks and define as a series of point sources to extend over the entire length of the loading docks
Locate the fire pumps and generators as point sources
Locate the forklifts and yard trucks as area or volume sources
Set the AERMOD averaging times as 1-hour and Period
Enter the annual average DPM emissions for each source
Deploy a gridded network of receptors to cover the receptor locations that could be impacted by the project along the offsite travel routes, locations of nearest sensitive receptors, locations of the nearest worker receptors

Area Sources:			
Project Site:			
	Release:	5 meters	16.4042
	Release Heights:		
Line Sources		3.11 meters	10.2034
	Vehicle Height	3.11 meters	10.2034
	Vehicle Width	3.5? meters	
	Emission Rate:		

Calendar Year	EMFAC2021 Vehicle Category	Fuel Type	Total PM10 (exhaust, brake wear, and tire wear) Adjustment Factor
2022	LHD1	DSL	1.000000
2022	LHD2	DSL	1.000000
2022	MHDT	DSL	1.000000
2022	HHDT	DSL	1.000002
2023	LHD1	DSL	1.000000
2023	LHD2	DSL	1.000000
2023	MHDT	DSL	1.000224
2023	HHDT	DSL	1.000401
2024	LHD1	DSL	1.002434
2024	LHD2	DSL	1.002882
2024	MHDT	DSL	1.002341
2024	HHDT	DSL	1.002622
2025	LHD1	DSL	1.006363
2025	LHD2	DSL	1.007360
2025	MHDT	DSL	1.007494
2025	HHDT	DSL	1.006161
2026	LHD1	DSL	1.011956
2026	LHD2	DSL	1.013583
2026	MHDT	DSL	1.014275
2026	HHDT	DSL	1.010902
2027	LHD1	DSL	1.020519
2027	LHD2	DSL	1.022935
2027	MHDT	DSL	1.024582
2027	HHDT	DSL	1.017700
2028	LHD1	DSL	1.032421
2028	LHD2	DSL	1.035677
2028	MHDT	DSL	1.040693
2028	HHDT	DSL	1.027092
2029	LHD1	DSL	1.047839
2029	LHD2	DSL	1.051879
2029	MHDT	DSL	1.063750
2029	HHDT	DSL	1.039044
2030	LHD1	DSL	1.067028
2030	LHD2	DSL	1.071698
2030	MHDT	DSL	1.094434
2030	HHDT	DSL	1.053549
2031	LHD1	DSL	1.090289
2031	LHD2	DSL	1.095350
2031	MHDT	DSL	1.133845
2031	HHDT	DSL	1.070192
2032	LHD1	DSL	1.117741
2032	LHD2	DSL	1.123102
2032	MHDT	DSL	1.178180
2032	HHDT	DSL	1.088662
2033	LHD1	DSL	1.149985
2033	LHD2	DSL	1.155212
2033	MHDT	DSL	1.228064
2033	HHDT	DSL	1.108070
2034	LHD1	DSL	1.187282
2034	LHD2	DSL	1.192102
2034	MHDT	DSL	1.284358
2034	HHDT	DSL	1.128283
2035	LHD1	DSL	1.233015
2035	LHD2	DSL	1.234843
2035	MHDT	DSL	1.346650
2035	HHDT	DSL	1.149143
2036	LHD1	DSL	1.276464
2036	LHD2	DSL	1.278514
2036	MHDT	DSL	1.410901
2036	HHDT	DSL	1.169744
2037	LHD1	DSL	1.321206
2037	LHD2	DSL	1.322886
2037	MHDT	DSL	1.475712
2037	HHDT	DSL	1.189735
2038	LHD1	DSL	1.370871
2038	LHD2	DSL	1.367981
2038	MHDT	DSL	1.541241
2038	HHDT	DSL	1.209265
2039	LHD1	DSL	1.419067
2039	LHD2	DSL	1.413395
2039	MHDT	DSL	1.606269
2039	HHDT	DSL	1.228522
2040	LHD1	DSL	1.467965
2040	LHD2	DSL	1.458084
2040	MHDT	DSL	1.671764
2040	HHDT	DSL	1.247462
2041	LHD1	DSL	1.516708
2041	LHD2	DSL	1.501964
2041	MHDT	DSL	1.737465
2041	HHDT	DSL	1.265803
2042	LHD1	DSL	1.566018
2042	LHD2	DSL	1.544880
2042	MHDT	DSL	1.803055
2042	HHDT	DSL	1.283208
2043	LHD1	DSL	1.617725
2043	LHD2	DSL	1.585857
2043	MHDT	DSL	1.866089
2043	HHDT	DSL	1.299485
2044	LHD1	DSL	1.661536
2044	LHD2	DSL	1.627764
2044	MHDT	DSL	1.926727
2044	HHDT	DSL	1.314774
2045	LHD1	DSL	1.707425
2045	LHD2	DSL	1.667857
2045	MHDT	DSL	1.982500
2045	HHDT	DSL	1.328897
2046	LHD1	DSL	1.752655
2046	LHD2	DSL	1.707697
2046	MHDT	DSL	2.033886
2046	HHDT	DSL	1.342115
2047	LHD1	DSL	1.795957
2047	LHD2	DSL	1.745460
2047	MHDT	DSL	2.080479
2047	HHDT	DSL	1.354450
2048	LHD1	DSL	1.837837
2048	LHD2	DSL	1.782317
2048	MHDT	DSL	2.122200
2048	HHDT	DSL	1.365899
2049	LHD1	DSL	1.879431
2049	LHD2	DSL	1.820472
2049	MHDT	DSL	2.159058
2049	HHDT	DSL	1.376472
2050	LHD1	DSL	1.917889
2050	LHD2	DSL	1.861832
2050	MHDT	DSL	2.191601
2050	HHDT	DSL	1.386742
2051	LHD1	DSL	1.917889
2051	LHD2	DSL	1.861832
2051	MHDT	DSL	2.204472
2051	HHDT	DSL	1.279176
2052	LHD1	DSL	1.917889
2052	LHD2	DSL	1.861832
2052	MHDT	DSL	2.204472
2052	HHDT	DSL	1.279176
2053	LHD1	DSL	1.917889
2053	LHD2	DSL	1.861832
2053	MHDT	DSL	2.204472
2053	HHDT	DSL	1.279176
2054	LHD1	DSL	1.917889
2054	LHD2	DSL	1.861832
2054	MHDT	DSL	2.204472
2054	HHDT	DSL	1.279176
2055	LHD1	DSL	1.917889
2055	LHD2	DSL	1.861832
2055	MHDT	DSL	2.204472
2055	HHDT	DSL	1.279176
2056	LHD1	DSL	1.917889
2056	LHD2	DSL	1.861832
2056	MHDT	DSL	2.204472
2056	HHDT	DSL	1.279176
2057	LHD1	DSL	1.917889
2057	LHD2	DSL	1.861832
2057	MHDT	DSL	2.204472
2057	HHDT	DSL	1.279176
2058	LHD1	DSL	1.917889
2058	LHD2	DSL	1.861832
2058	MHDT	DSL	2.204472
2058	HHDT	DSL	1.279176
2059	LHD1	DSL	1.917889
2059	LHD2	DSL	1.861832
2059	MHDT	DSL	2.204472
2059	HHDT	DSL	1.279176
2060	LHD1	DSL	1.917889
2060	LHD2	DSL	1.861832
2060	LHD4	DSL	2.204472
2060	LHD3	DSL	1.279176

** was revised 1/19 to weighted average of vehicle population

T6		T7	
T6 CAIRP CI	0.08%	T7 CAIRP C	17.09%
T6 CAIRP CI	0.10%	T7 NNOOS	15.57%
T6 CAIRP CI	0.36%	T7 NOOS C	6.67%
T6 CAIRP CI	0.59%	T7 POLA CI	6.05%
T6 Instate C	5.26%	T7 Public C	6.85%
T6 Instate C	4.58%	T7 Single C	1.61%
T6 Instate C	14.02%	T7 Single D	4.48%
T6 Instate C	3.00%	T7 Single CI	10.81%
T6 Instate C	9.13%	T7 SWCV C	1.67%
T6 Instate C	21.11%	T7 Tractor	28.61%
T6 Instate C	16.94%	T7 Utility C	0.60%
T6 Instate C	9.99%		
T6 Instate T	0.18%		
T6 Instate T	4.60%		
T6 OOS Clas	0.05%		
T6 OOS Clas	0.06%		
T6 OOS Clas	0.22%		
T6 OOS Clas	0.32%		
T6 Public CI	1.08%		
T6 Public CI	1.69%		
T6 Public CI	1.47%		
T6 Public CI	3.95%		
T6 Utility CI	0.88%		
T6 Utility CI	0.17%		
T6 Utility CI	0.19%		

26-017 **Bradley Gardens San Jacinto**
Emission Assumptions

2027 Construction Start Year
DPM Emissions

1) Basic Assumptions

1- EMFAC Area:	San Bernadino (SC)
2- Emission factors for:	2027
3- AQ Jurisdiction:	SCAQMD EMFAC2021
4- Construction hours of operation	8 hrs
5- Construction days per week	5 days

4) Emission Source Configuration

1) All vehicle traffic represented by a line source

5) Vehicle Trip Lengths

Construction Travel Links	*AERMOD INPUT*		
	Travel Distance (m)	**Travel Distance (mi)**	**% of Truck Travel**
On-Site	70.6	0.043868806	100%
1: Project Site West to/from 7th St to/from S and N State St	2877	1.79	100%
2: N State St > Ramona Expy EB	759.3	0.47	50%
3: N State St > Ramona Expy WB	793.9	0.49	50%

26-057 University Village Loma Linda

Data Source: CalEEMod Project Output

Work Schedule:
8 hrs/day
5 days per week

Construction Area
Onsite:
2.98 acres
Offsites:
0 acres

Totals

Total Area (SF):	129809.3192	SF
Total Area (m2):	12,060	m2
Building Area:	522,200.000	SF

EMFAC ADJUSTMENT FACTORS

Year	Vehicle Category	Adjustment Factor
2026	MHDT	1.014291208
2026	HHDT	1.01086751
2027	MHDT	1.024582413
2027	HHDT	1.017656733
		1.009809825
		1.007051857

Onsite DPM Construction Emissions

Daily Max Onsite PM10E

Activity	Start Date	End Date	DPM Emissions lb/day	Work Days days	DPM Emissions (lbs)	DPM Emissions (tons)
Demolition- 2026	12/1/2026	12/9/2026	**0.438725928**	**7**	3.07	0.001536
Site Preparation - 2026	12/10/2026	12/16/2026	**0.683470889**	**5**	3.42	0.001709
Grading -2026	12/17/2026	12/23/2026	**0.683470889**	**5**	3.42	0.001709
Building Construction - 2026	12/24/2026	12/31/2026	**0.344824279**	**5**	1.72	0.000862
Paving - 2026	12/24/2026	12/30/2026	**0.210853183**	**0**	0.00	0.000000
Building Construction - 2027	1/1/2027	12/8/2027	**0.309145007**	**244**	75.43	0.037716
Architectural Coating - 2027	11/24/2027	11/30/2027	**0.025398243**	**0**	0.00	0.000000
	266	**TOTAL**	2.6959	266	87.061	0.327

Demolition	7
Site Preparation	5
Grading	5
Building Construct	250
Paving	5
Architectural Coating	5

f

0.33454325

Year	Annual DPM Emissions (tons/year)	# Construction Work Days	Average Daily DPM Emissions (lb)	Average Hourly DPM Emissions (g/sec)	Average Hourly DPM Area Emission (g/m2-sec)
2026	0.004279	22	0.3890	0.0061	5.081E-07
2027	0.037716	244	0.3091	0.0049	4.037E-07
			453.59	28800	0.011

→

Area Source Emission:	
g/sec	g/m2-sec
5.0E-03	**4.12E-07**

a

Offsite DPM Construction Emissions

Daily Max Offsite PM10E

Daily Max Offsite PM10E

Daily Max Offsite PM10E

Activity	Start Date	End Date	Work Days	Offsite DPM Haul Truck (lb/day)	Offsite DPM ADJUSTED Haul Truck (lb/day)	Offsite DPM Haul Truck (pounds)	Offsite DPM Haul Truck tons	Offsite DPM Vendor Truck (lb/day)	Offsite DPM ADJUSTED Vendor Truck (lb/day)	Offsite DPM Vendor Truck (pounds)	Offsite DPM Vendor Trucks (tons)	Offsite DPM Worker Vehicles (lb/day)	Offsite DPM Worker Vehicles (pounds)	Offsite DPM Worker Vehicles (tons)	lbs/year
Demolition- 2026	12/1/2026	12/9/2026	**7**	0.0004	0.0004	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	**0.0004**
Site Preparation - 2026	12/10/2026	12/16/2026	**5**	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	**0.0000**
Grading -2026	12/17/2026	12/23/2026	**5**	0.0331	0.0334	0.1653	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	**0.0334**
Building Construction - 2026	12/24/2026	12/31/2026	**5**	0.0000	0.0000	0.0000	0.0000	0.0054	0.0055	0.0269	0.0000	0.0000	0	0	**0.0055**
Paving - 2026	12/24/2026	12/30/2026	**0**	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	**0.0000**
Building Construction - 2027	1/1/2027	12/8/2027	**244**	0.0000	0.0000	0	0	0.0054	0.0055	1.3139	0.0007	0.0000	0	0	**0.0055**
Architectural Coating - 2027	11/24/2027	11/30/2027	**0**	0.0000	0.0000	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	**0.0000**
				0.0334		0.1680	0.0001	0.0108		1.3408	0.0007	0.0000	0.0000	0.0000	0.0448

Offsite DPM Emissions (at the CalEEMOd Default Trip Distances)

Year	# of Construction Days	Haul Trucks AnnualEmissions (tons/year)	Haul Trucks Average Daily (lb/day)	Haul Trucks Average Hourly (lb/hr)	Haul Trucks Average Hourly (g/sec)	Vendor Trucks AnnualEmissions (tons/year)	Vendor Trucks Average Daily (lb/day)	Vendor Trucks Average Hourly (lb/hr)	Vendor Trucks Average Hourly (g/sec)	Worker Vehicles Annual Emissions (tons/year)	Worker Vehicles Average Daily (lb/day)	Worker Vehicles Average Hourly (lb/hr)	Worker Vehicles Average Hourly (g/sec)	7.43E-05
2026	22	0.0001	0.007636011	0.000954501	0.000120265	0.000013	0.001223794	0.000152974	1.92743E-05	0	0	0	0	
2027	244	0.0000	0	0	0	0.000657	0.005384691	0.000673086	8.4807E-05	0	0	0	0	

CalEEMod Construction Vehicle Trip Length

Vehicle	Distance (miles)
Haul Truck	20
Vendor Truck	10.2
Worker	18.5

Construction Travel Links <change assumptions tab NOT this directly

	Travel Distance (m)	Travel Distance (mi)	% of Truck Travel
On-Site	70.6	0.043868806	100%
1: Project Site West to/from 7th St to/from S and N State St	2877	1.787684892	100%
2: N State St > Ramona Expy EB	759.3	0.471807146	50%
3: N State St > Ramona Expy WB	793.9	0.49330659	50%

Year 2026(From CalEEMOd)	Haul Trucks (g/sec)	Vendor Trucks (g/sec)	Worker Vehicles (g/sec)	Total (g/sec)	Total (lb/hr)	Total (lb/day)
	1.203E-04	1.927E-05	0.000E+00	1.395E-04	1.106E-03	8.852E-03
On-Site	2.638E-07	8.290E-08	0.000E+00	3.467E-07	2.749E-06	2.199E-05
1: Project Site West to/from 7th St to/from S and N State St	1.075E-05	3.378E-06	0.000E+00	1.413E-05	1.120E-04	8.962E-04
2: N State St > Ramona Expy EB	1.419E-06	4.458E-07	0.000E+00	1.864E-06	1.478E-05	1.183E-04
3: N State St > Ramona Expy WB	1.483E-06	4.661E-07	0.000E+00	1.949E-06	1.546E-05	1.237E-04
2027(from CalEEMod)	**Haul Trucks**	**Vendor Trucks**	**Worker Vehicles**			
	0.000E+00	8.481E-05	0.000E+00	8.481E-05	6.725E-04	5.380E-03
Onsite	0.000E+00	3.647E-07	0.000E+00	3.647E-07	2.892E-06	2.314E-05
1: Project Site West to/from 7th St to/from S and N State St	0.000E+00	1.486E-05	0.000E+00	1.486E-05	1.179E-04	9.429E-04
2: N State St > Ramona Expy EB	0.000E+00	1.961E-06	0.000E+00	1.961E-06	1.555E-05	1.244E-04
3: N State St > Ramona Expy WB	0.000E+00	2.051E-06	0.000E+00	2.051E-06	1.626E-05	1.301E-04

→

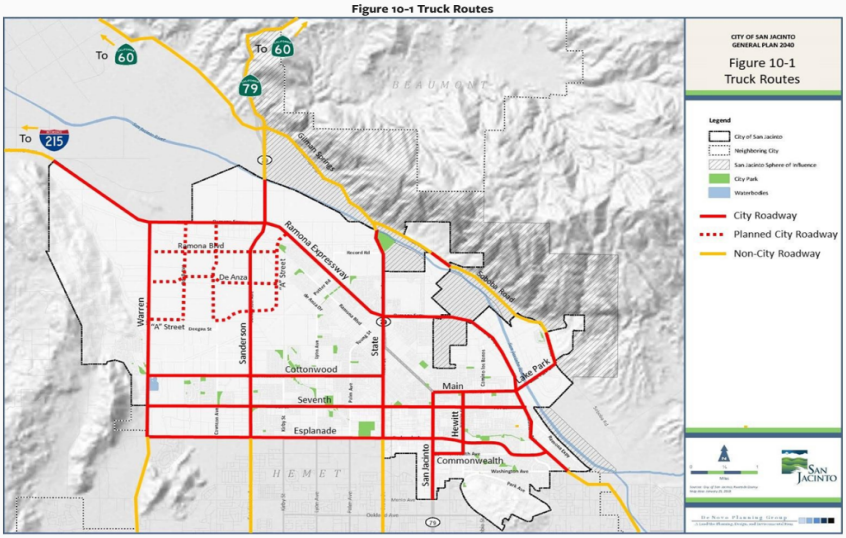
Weighted Average Emissions
Onsite

Routes		
Onsite	**3.633E-07**	g/sec
1: Project Site West to/from 7th St to/from	**1.480E-05**	g/sec
2: N State St > Ramona Expy EB	**1.953E-06**	g/sec
3: N State St > Ramona Expy WB	**2.042E-06**	g/sec

			AM Peak Hour			PM Peak Hour			
Land Use		**Units**	**Daily**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Trip Rates									
620 Nursing Home[1]		Beds	3.06	0.1	0.04	0.14	0.07	0.15	0.22
Existing Trip Generation									
Nursing Home[1]	44	Beds	135	4	2	6	3	7	10
Proposed Project Total Trip Generation									
Nursing Home[1]	103	Beds	315	10	4	14	7	15	23
Total Project Trip Generation			**315**	**10**	**4**	**14**	**7**	**15**	**23**
Net Project Trip Generation			**180**	**6**	**2**	**8**	**4**	**8**	**13**

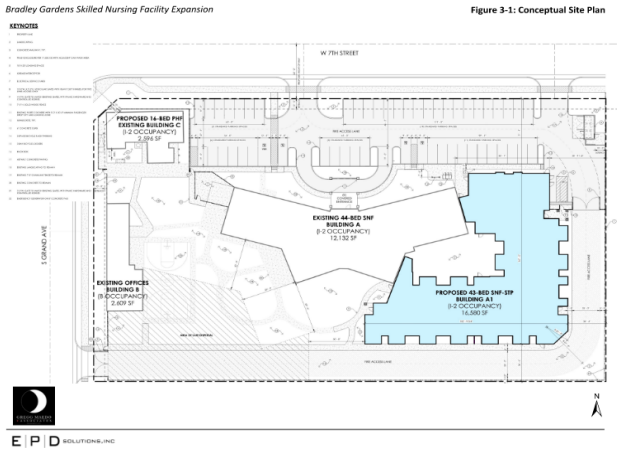
[1]Institute of Transportation Engineers, Trip Generation Manual, 12th Edition, 2025. Land Use Code 620 - Nursing Home (Average Rate)

Figure 10-1 Truck Routes

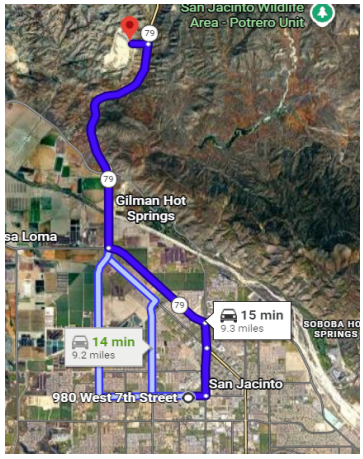


https://ecode360.com/47020647?utm_source

Site Plan [Figure 3-1 Conceptual Site Plan.pdf]



Landfill Lamb Canyon Landfill, 16411 Lamb Canyon Rd, Beaumont, CA 92223



APPENDIX C.2 – ESTIMATION OF PROJECT OPERATIONAL DPM EMISSIONS

Basic Operational HRA Setup

Information Needed to Generate Emissions

Site Plan showing onsite trip distribution for trucks and cars
Trip generation Table with offsite trip distribution for trucks and cars
Operational Year
Land Use - refrigerated vs non-refrigerated
TRU usage (number of trucks and TRU size using TRUs and number of hours in opertion while at loading docks)
Use of fire pumps, standby emergency generator, forklifts, and yard trucks (number, size, and hours of operation)
Emission factors: EMFAC2021, OFFROAD2021 (2017), CalEEMod
Idle time assumed to be 15 minutes

AERMOD Setup to Generate Ground-level Concentrations

Use site plan to delineate the locations of the onsite truck routes, offsite truck routesm fire pump, generators, fork lifts, and yard trucks
Obtain the necessary meteorological data
Overlay site plan onto Google Earth and screen capture the site plan noting the Google x and y corners of the screen capture bottom left and upper right coordinates
Import the Google site plan into AERMOD
Layout the onsite and offsite truck routes on the imported site plan as line area sources
Locate the truck idling locations at the loading docks and define as a series of point sources to extend over the entire length of the loading docks
Locate the fire pumps and generators as point sources
Locate the forklifts and yard trucks as area or volume sources
Set the AERMOD averaging times as 1-hour and Period
Enter the annual average DPM emissions for each source
Deploy a gridded network of receptors to cover the receptor locations that could be impacted by the project along the offsite travel routes, locations of nearest sensitive receptors, locations of the nearest worker receptors

Area Sources:
Project Site:
Release: 5 meters 16.4042

Release Heights: Idling Source
Line Sources 3.11 meters 10.2034
Vehicle Height 3.11 meters 10.2034
Vehicle Width 3.5? meters
Emission Rate:
Idling Truck Source

FirePump/Generator 2.256 meters 7.40157
Emission Rate: 1.64E-04
Gas Exit Temp 789
Stack Diam 0.104
Gas Exit Velocity 43.273
Flow Rate 0.3676

Vehicle Height 3.11 meters
choose single or two lanes

for single I usually do 5 meters,=
for two lanes (like on main roads) I do 10 meters, two lanes on site can be 7.5 meter

26-017

Emergency Generator Operatinal DPM Emissions

Emissions derived from CalEEMod

Fuel	Diesel		
Horsepower	236		
Load Factor	0.73		
Hours per Year	200		max allowed for testing and maintenance under SCAQMD Rule 1110.2
PM10E EF	0.15	g/hp-hr	(from CalEEMod)
Number of Units	1		
PM10 Annual Average Emissions	1.64E-04	grams/sec	averaged over the entire year
	3.12E-02	lbs/day	averaged over the entire year
Stack Parameters			
Stack Temp	789	K	
Stack Dia	0.13	m	
Release Ht	3	m	
Exhaust Flow	57.4	m/3	

Source: SBAPCD 2020. Modeling Guidelines for
Health Risk Assessments

Base elevation

APPENDIX D.1 – ESTIMATION OF CONSTRUCTION HEALTH RISK

25-017-Con Bradley Gardens San Jacinto

Exposure Durations During Construction

	Start	End	Days	% Year
Calendar Construction Days	12/1/2026	11/30/2027	364	1.00
3rd Trimester (2026)	12/1/2026	12/31/2026	30	0.08
3rd Trimester (2027)	1/1/2027	3/2/2027	60	0.16
0-2 year (2027)	3/2/2027	11/30/2027	273	0.75

0.99 years

0.91 years w/o pre-birth

11.93 months

[redacted]

Operational 2027	11/30/2027	12/31/2027	31	0.08

0.08 total years

Age Group	Exposure Frequency, EF				Construction Exposure Duration, (ED) (Years)	Age Sensitivity Factors (ASF)	Fraction Time at Home (FAH)	Daily Breathing Rate[a] (DBR) (l/kg-day)
	Construction		Operation					
	Hours/Day	Days/Year	Hours/Day	Days/Year				
Sensitive/Residential Receptor – Pre-birth to Adult (30-year duration)								
3rd Trimester to Birth	8	260	24	360	0.25	10	0.85	361
0 to 2 years	8	260	24	360	0.75	10	0.85	1,090
2 to 16 years	8	260	24	360		3	0.72	745
16 to 30 years	8	260	24	360		1	0.73	335
Sensitive Receptor/Residential Child (9-year duration)								
3rd Trimester to Birth	8	260	24	360	0.25	10	1	361
0 to 2 years	8	260	24	360	0.75	10	1	1,090
2 to 9 years	8	260	24	360	0.00	3	0.73	861
Sensitive Receptor/Residential Receptor – Adult (30-year duration)								
17 years and older	8	260	24	360	0.99	1	0.73	335
Worker Receptor (25-years duration)								
17 years and older	8	260	8	360	0.99	1	[redacted]	230

25-017-Con Bradley Gardens San Jacinto

Annual DPM Concentrations at Maximum Impacted Sensitive and Worker Receptor

Onsite Unit Emission Source Rate

Results:

Max School=	0.00157
Max Residential=	0.047
Max Sensitive Receptor=	0.047
Max Worker=	0.05144

Receptor	Cancer Risk (per million)		Exceeds Significance Threshold?
	Maximum Lifetime Proposed Project Risk	Significance Threshold	
Maximum Impacted Sensitive Receptor – Infant to 1 years	4.76	10	No
Maximum Impacted Sensitive Receptor – Adult	0.18	10	No
Maximum Impacted Worker Receptor	0.13	10	No
Receptor	**Chronic Non-Cancer Hazard Index**		**Exceeds Significance Threshold?**
	Maximum Lifetime Proposed Project Risk	**Significance Threshold**	
Maximum Impacted Sensitive Receptor – Infant to 1 years	0.01	1	No
Maximum Impacted Sensitive Receptor – Adult	0.01	1	No
Maximum Impacted Worker Receptor	0.01	1	No

25-017-Con No Mitigation

Cancer Risk Calculation - Location of Max Risk

SCAQMD Guidance	**Residential**	**30-year Exposure**	**Total Cancer risk**	**HI**
			4.7574	0.0094

Maximum Period DPM Concentration **4.70E-02** ug/m3

Year	Year	Maximum DPM (ug/m3)	CPF (mg/kg-day)^-1	DBR (l/kg-day)	ED (years)	EF (days)	AT (years)	TAH (%)	ASF	Operational Risk (risk/million)
3rd Trimester	2026	0.04700	1.1	361	0.08	260	25550	1.00	10	0.156102
3rd Trimester	2027	0.04700	1.1	361	0.16	260	25550	1.00	10	0.312204
1	2027	0.04700	1.1	1090	0.75	260	25550	1.00	10	4.289131

25-017-Con No Mitigation

Cancer Risk Calculation - Location of Max Risk

SCAQMD Guidance	**Residential**	**30-year Exposure**	**Adult**	**Total Cancer risk**	**HI**
				0.175280	0.0094

Maximum Period DPM Concentration **0.047** ug/m3

Year	**Year**	**Maximum DPM (ug/m3)**	**CPF (mg/kg-day)^-1**	**DBR (l/kg-day)**	**ED (years)**	**EF (days)**	**AT (years)**	**TAH (%)**	**ASF**	**Operational Risk (risk/million)**
0-1	2026	0.04700	1.1	335	0.08	260	25550	1.00	1	0.01
1	2027	0.04700	1.1	335	0.91	260	25550	1.00	1	0.16

25-017-Con No Mitigation

Cancer Risk Calculation - Location of Max Risk

SCAQMD Guidance	**Worker**	**25-year Exposure**						**Total Cancer risk**	
								0.13	0.010

Maximum Period DPM Concentration **0.05144** ug/m3

Year	**Year**	**Maximum DPM (ug/m3)**	**CPF (mg/kg-day)^-1**	**DBR (l/kg-day)**	**ED (years)**	**EF (days)**	**AT (years)**	**ASF**	**Operational Risk (risk/million)**
0	2026	0.05144	1.1	230	0.08	260	25550	1	0.01
1	2027	0.05144	1.1	230	0.91	260	25550	1	0.12

APPENDIX D.2 – ESTIMATION OF OPERATIONAL HEALTH RISK

26-017-OPR

Pollutant: DPM
Year:

Emission Summary

Max Period Concentration

MAX VALUES		
Max Residential=	0.0032	< 4/16 updated
Max School=	0.0001	
Max Sensitive Receptor =	0.0032	
Max Worker=	0.0027	

Operational HR:

Receptor	Cancer Risk (per million)		Exceeds Significance Threshold?
	Maximum Lifetime Proposed Project Risk	Significance Threshold	
Maximum Impacted Sensitive Receptor – Infant to Adult (30 years)	2.21	10	No
Maximum Impacted Sensitive Receptor – Adult	1.44	10	No
Maximum Impacted Worker Receptor	0.24	10	No
Receptor	**Chronic Non-Cancer Hazard Index**		**Exceeds Significance Threshold?**
	Maximum Lifetime Proposed Project Risk	**Significance Threshold**	
Maximum Impacted Sensitive Receptor – Infant to Adult (30 years)	0.00	1	No
Maximum Impacted Sensitive Receptor – Adult	0.00	1	No
Maximum Impacted Worker Receptor	0.05	1	No

26-017-OPR

Cancer Risk Calculation - Location of Max Risk

SCAQMD Guidance		**30-year Exposure**								**Total Cancer risk**	**Chronic Non-cancer Hazard**		
										2.206	0.000632		
Annual DPM Concentration at Max Impacted Sensiive Receptor			**0.003160 ug/m3**										
Year	**Year**	**Maximum DPM (ug/m3)**	**CPF (mg/kg-day)^-1**	**DBR (L/kg-day)**	**ED (years)**	**EF (days)**	**AT (years)**	**TAH (%)**	**ASF**	**Operational Risk (risk/million)**			
3rd Trimester	2027	0.00316	1.1	361	0.08	360	25550	0.85	10	0.01		11/30/2027	
3rd Trimester	2028	0.00316	1.1	361	0.17	360	25550	0.85	10	0.02	pre	2/28/2028	
0	2028	0.00316	1.1	1,090	0.83	360	25550	0.85	10	0.38			
1	2029	0.00316	1.1	1,090	1.0	360	25550	0.85	10	0.45	0-2 years	2/17/2030	
2	2030	0.00316	1.1	1,090	0.17	360	25550	0.85	10	0.07		2/17/2030	- 47848.00
3	2030	0.00316	1.1	745	0.83	360	25550	0.72	3	0.07			
4	2031	0.00316	1.1	745	1.0	360	25550	0.72	3	0.08			
5	2032	0.00316	1.1	745	1.0	360	25550	0.72	3	0.08			
6	2033	0.00316	1.1	745	1.0	360	25550	0.72	3	0.08			
7	2034	0.00316	1.1	745	1.0	360	25550	0.72	3	0.08			
8	2035	0.00316	1.1	745	1.0	360	25550	0.72	3	0.08			
9	2036	0.00316	1.1	745	1.0	360	25550	0.72	3	0.08			
10	2037	0.00316	1.1	745	1.0	360	25550	0.72	3	0.08	2 to 16		
11	2038	0.00316	1.1	745	1.0	360	25550	0.72	3	0.08			
12	2039	0.00316	1.1	745	1.0	360	25550	0.72	3	0.08			
13	2040	0.00316	1.1	745	1.0	360	25550	0.72	3	0.08			
14	2041	0.00316	1.1	745	1.0	360	25550	0.72	3	0.08			
15	2042	0.00316	1.1	745	1.0	360	25550	0.72	3	0.08			
16	2043	0.00316	1.1	745	1.0	360	25550	0.72	3	0.08			
17	2044	0.00316	1.1	745	0.17	360	25550	0.72	1	0.00			
17	2044	0.00316	1.1	335	0.8	360	25550	0.73	1	0.01			
18	2045	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01			
19	2046	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01			
20	2047	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01			
21	2048	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01			
22	2049	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01			
23	2050	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01			
24	2051	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01	16 to 30		
25	2052	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01			
26	2053	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01			
27	2054	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01			
28	2055	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01			
29	2056	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01			
30	2057	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01			
30	2058	0.00316	2.1	335	0.17	360	25550	0.73	1	0.00			

26-017-OPR

Cancer Risk Calculation - Location of Max Risk

SCAQMD Guidance	Worker	25-year Exposure	Total Cancer risk	Chronic Non-cancer Hazard
			0.242	0.0485

Annual DPM Concentration at Max Impacted Sensiive Receptor **0.00272 ug/m3**

Year	Year	Maximum DPM (ug/m3)	CPF (mg/kg-day)^-1	DBR (l/kg-day)	ED (years)	EF (days)	AT (years)	ASF	Operational Risk (risk/million)
1	2027	0.00272	1.1	230	0.08	360	25550	1	0.00
2	2028	0.00272	1.1	230	1.0	360	25550	1	0.01
3	2029	0.00272	1.1	230	1.0	360	25550	1	0.01
4	2030	0.00272	1.1	230	1.0	360	25550	1	0.01
5	2031	0.00272	1.1	230	1.0	360	25550	1	0.01
6	2032	0.00272	1.1	230	1.0	360	25550	1	0.01
7	2033	0.00272	1.1	230	1.0	360	25550	1	0.01
8	2034	0.00272	1.1	230	1.0	360	25550	1	0.01
9	2035	0.00272	1.1	230	1.0	360	25550	1	0.01
10	2036	0.00272	1.1	230	1.0	360	25550	1	0.01
11	2037	0.00272	1.1	230	1.0	360	25550	1	0.01
12	2038	0.00272	1.1	230	1.0	360	25550	1	0.01
13	2039	0.00272	1.1	230	1.0	360	25550	1	0.01
14	2040	0.00272	1.1	230	1.0	360	25550	1	0.01
15	2041	0.00272	1.1	230	1.0	360	25550	1	0.01
16	2042	0.00272	1.1	230	1.0	360	25550	1	0.01
17	2043	0.00272	1.1	230	1.0	360	25550	1	0.01
18	2044	0.00272	1.1	230	1.0	360	25550	1	0.01
19	2045	0.00272	1.1	230	1.0	360	25550	1	0.01
20	2046	0.00272	1.1	230	1.0	360	25550	1	0.01
21	2047	0.00272	1.1	230	1.0	360	25550	1	0.01
22	2048	0.00272	1.1	230	1.0	360	25550	1	0.01
23	2049	0.00272	1.1	230	1.0	360	25550	1	0.01
24	2050	0.00272	1.1	230	1.0	360	25550	1	0.01
25	2051	0.00272	1.1	230	1.0	360	25550	1	0.01
25	2052	0.00272	1.1	230	0.92	360	25550	1	0.01

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Cancer Risk Calculation - Location of Max Risk

SCAQMD Guidance	Residential	30-year Exposure	Adult	Total Cancer risk
				0.359

Annual DPM Concentration at Max Impacted Sensiive Receptor 0.00316 ug/m3

Year	Year	Maximum DPM (ug/m3)	CPF (mg/kg-day)^-1	DBR (l/kg-day)	ED (years)	EF (days)	AT (years)	TAH (%)	ASF	Operational Risk (risk/million)
1	2027	0.00316	1.1	335	0.08	360	25550	0.73	1	0.00
2	2028	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
3	2028	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
4	2029	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
5	2030	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
6	2030	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
7	2031	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
8	2032	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
9	2033	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
10	2034	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
11	2035	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
12	2036	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
13	2037	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
14	2038	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
15	2039	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
16	2040	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
17	2041	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
18	2042	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
19	2043	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
20	2044	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
21	2044	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
22	2045	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
23	2046	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
24	2047	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
25	2048	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
26	2049	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
27	2050	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
28	2051	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
29	2052	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
30	2053	0.00316	1.1	335	1.0	360	25550	0.73	1	0.01
30	2054	0.00316	1.1	335	0.92	360	25550	0.73	1	0.01

APPENDIX D.3 – ESTIMATION OF COMBINED CONSTRUCTION AND OPERATIONAL HEALTH RISK

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Cancer Risk Calculation - Location of Max Risk

SCAQMD Guidance	Worker	25-year Exposure	Total Cancer risk	Chronic Non-cancer Hazard
	Construction:	**0.05144**	0.364	0.010288
	Operational:	**0.00272**		

Year	Year	Maximum DPM (ug/m3)	CPF (mg/kg-day)^-1	95% DBR (l/kg-day)	ED (years)	EF (days)	AT (years)	ASF	Operational Risk (risk/million)	
0	2027	0.05144	1.1	230	0.25	260	25550	1	0.03	Construction
1	2028	0.05144	1.1	230	0.75	260	25550	1	0.10	
2	2028	0.00272	1.1	230	0.25	360	25550	1	0.00	
3	2029	0.00272	1.1	230	1	360	25550	1	0.01	
3	2030	0.00272	1.1	230	1	360	25550	1	0.01	
4	2031	0.00272	1.1	230	1	360	25550	1	0.01	
5	2032	0.00272	1.1	230	1	360	25550	1	0.01	
6	2033	0.00272	1.1	230	1	360	25550	1	0.01	
7	2034	0.00272	1.1	230	1	360	25550	1	0.01	
8	2035	0.00272	1.1	230	1	360	25550	1	0.01	
9	2036	0.00272	1.1	230	1	360	25550	1	0.01	
10	2037	0.00272	1.1	230	1	360	25550	1	0.01	
11	2038	0.00272	1.1	230	1	360	25550	1	0.01	
12	2039	0.00272	1.1	230	1	360	25550	1	0.01	
13	2040	0.00272	1.1	230	1	360	25550	1	0.01	Operation
14	2041	0.00272	1.1	230	1	360	25550	1	0.01	
15	2042	0.00272	1.1	230	1	360	25550	1	0.01	
16	2043	0.00272	1.1	230	1	360	25550	1	0.01	
17	2044	0.00272	1.1	230	1	360	25550	1	0.01	
18	2045	0.00272	1.1	230	1	360	25550	1	0.01	
19	2046	0.00272	1.1	230	1	360	25550	1	0.01	
20	2047	0.00272	1.1	230	1	360	25550	1	0.01	
21	2048	0.00272	1.1	230	1	360	25550	1	0.01	
22	2049	0.00272	1.1	230	1	360	25550	1	0.01	
23	2050	0.00272	1.1	230	1	360	25550	1	0.01	
24	2051	0.00272	1.1	230	1	360	25550	1	0.01	
25	2052	0.00272	1.1	230	0.75	360	25550	1	0.01	

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Cancer Risk Calculation - Location of Max Risk

SCAQMD Guidance	Residential	30-year Exposure
	Construction:	**0.04700**
	Operational:	**0.00316**

Total Cancer risk	Chronic Non-cancer Hazard
2.372	0.009400

Year	Year	Maximum DPM (ug/m3)	CPF (mg/kg-day)^-1	DBR (l/kg-day)	ED (years)	EF (days)	AT (years)	TAH (%)	OP/Day (%)	ASF	Operational Risk (risk/million)				
3rd Trimester	2027	0.04700	1.1	361	0.08	260	25550	0.85	0.3	10	0.04			12/1/2026 through	12/31/2026
3rd Trimester	2027	0.04700	1.1	361	0.16	260	25550	0.85	0.3	10	0.09	Construction	pre-birth		
0	2027	0.04700	1.1	361	0.75	260	25550	0.85	0.3	10	0.40			1/1/2027	
1	2027 (0-2 years op)	0.00316	1.1	1090	0.08	360	25550	0.85	1.0	10	0.04		0-2 years		
1	2028 (0-2 years Op)	0.00316	1.1	1090	1.00	360	25550	0.85	1.0	10	0.45				
2	2029	0.00316	1.1	1090	0.17	360	25550	0.85	1.0	10	0.08			########	
3	2029	0.00316	1.1	745	0.83	360	25550	0.72	1.0	3	0.07			1/1/2029	
5	2030	0.00316	1.1	745	1	360	25550	0.72	1.0	3	0.08				
6	2031	0.00316	1.1	745	1	360	25550	0.72	1.0	3	0.08				
7	2032	0.00316	1.1	745	1	360	25550	0.72	1.0	3	0.08				
8	2033	0.00316	1.1	745	1	360	25550	0.72	1.0	3	0.08				
9	2034	0.00316	1.1	745	1	360	25550	0.72	1.0	3	0.08				
10	2035	0.00316	1.1	745	1	360	25550	0.72	1.0	3	0.08				
11	2036	0.00316	1.1	745	1	360	25550	0.72	1.0	3	0.08		2 -16 years		
12	2037	0.00316	1.1	745	1	360	25550	0.72	1.0	3	0.08				
13	2038	0.00316	1.1	745	1	360	25550	0.72	1.0	3	0.08				
14	2039	0.00316	1.1	745	1	360	25550	0.72	1.0	3	0.08				
15	2040	0.00316	1.1	745	1	360	25550	0.72	1.0	3	0.08				
16	2041	0.00316	1.1	745	1	360	25550	0.72	1.0	3	0.08				
16	2042	0.00316	1.1	745	1	360	25550	0.72	1.0	3	0.08	Operation			
17	2043	0.00316	1.1	745	0.17	360	25550	0.72	1.0	3	0.01			1/1/2043	1.17
17	2043	0.00316	1.1	335	0.83	360	25550	0.73	1.0	1	0.01			1/1/2043	
18	2044	0.00316	1.1	335	1	360	25550	0.73	1.0	1	0.01				
19	2045	0.00316	1.1	335	1	360	25550	0.73	1.0	1	0.01				
20	2046	0.00316	1.1	335	1	360	25550	0.73	1.0	1	0.01				
21	2047	0.00316	1.1	335	1	360	25550	0.73	1.0	1	0.01				
22	2048	0.00316	1.1	335	1	360	25550	0.73	1.0	1	0.01				
23	2049	0.00316	1.1	335	1	360	25550	0.73	1.0	1	0.01				
24	2050	0.00316	1.1	335	1	360	25550	0.73	1.0	1	0.01		16-30 years		
25	2051	0.00316	1.1	335	1	360	25550	0.73	1.0	1	0.01				
26	2052	0.00316	1.1	335	1	360	25550	0.73	1.0	1	0.01				
27	2053	0.00316	1.1	335	1	360	25550	0.73	1.0	1	0.01				
28	2054	0.00316	1.1	335	1	360	25550	0.73	1.0	1	0.01				
29	2055	0.00316	1.1	335	1	360	25550	0.73	1.0	1	0.01				
30	2056	0.00316	1.1	335	1	360	25550	0.73	1.0	1	0.01				
30	2057	0.00316	1.1	335	0.17	360	25550	0.73	1.0	1	0.00			1/1/2057	

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Pollutant: DPM
Year:

Emission Summary

Max Period Concentration

MAX VALUES		
Max Residential=	0.0032	< 4/16 updated
Max School=	0.0001	
Max Sensitive Receptor =	0.0032	
Max Worker=	0.0027	

Combined:

Receptor	Cancer Risk (per million)		Exceeds Significance Threshold?
	Maximum Lifetime Proposed Project Risk	Significance Threshold	
Maximum Impacted Sensitive Receptor – Infant to Adult (30 years)	2.37	10	No
Maximum Impacted Worker Receptor	0.36	10	No
Receptor	**Chronic Non-Cancer Hazard Index**		**Exceeds Significance Threshold?**
	Maximum Lifetime Proposed Project Risk	**Significance Threshold**	
Maximum Impacted Sensitive Receptor – Infant to Adult (30 years)	0.009	1	No

August 20, 2026

EPD SOLUTIONS, INC.
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SUBJECT: **Habitat Assessment and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis for the Proposed Bradley Gardens Project Located Within Assessor Parcel Number (APN) 435-330-003 in the City of San Jacinto, Riverside County, California**

Introduction

This report contains the findings of ELMT Consulting's (ELMT) habitat assessment and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis for the proposed Bradley Gardens Project located within APN 435-330-003 in the City of San Jacinto, Riverside County, California. The habitat assessment was conducted by ELMT biologist Andrew N. Mestas on February 6, 2026, to document baseline conditions and assess the potential for special-status[1] plant and wildlife species to occur within the proposed Project site that could pose a constraint to implementation of the proposed Project. Special attention was given to the suitability of the onsite habitat to support special-status species identified by the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB) and other electronic databases as potentially occurring on or within the general vicinity of the Project site.

The Western Riverside County Regional Conservation Authority (RCA) MSHCP Information Map was queried to determine if the MSHCP identifies any potential survey requirements for the Project. Further, the Project site was reviewed against the MSHCP to determine if the site is located within any MSHCP areas including Criteria Cells (core habitat and wildlife movement corridors) or areas proposed for conservation. Based on the RCA MSHCP Information Map query and review of the MSHCP, it was determined that the Project site is located within the San Jacinto Valley Area Plan of the MSHCP but is not located within any Criteria Cells or MSHCP Conservation Areas. Further, it was determined that the Project site is not located within any designated survey areas.

Project Location

The Project site is generally located east of Interstate 215, north of State Route 74, and south and west of State Route 79 in the City of San Jacinto, Riverside County, California. The Project site is depicted on the San Jacinto quadrangle of the of the United States Geological Survey's (USGS) 7.5-minute topographic

1 As used in this report, "special-status" refers to plant and wildlife species that are federally, State, and MSHCP listed, proposed, or candidates; plant species that have been designated with a California Native Plant Society Rare Plant Rank; wildlife species that are designated by the CDFW as fully protected, species of special concern, or watch list species; and specially protected natural vegetation communities as designated by the CDFW.

map within an unsectioned region of Township 4 South, and Range 1 West. Specifically, the Project site is bordered to the north by West 7th Street and to the west by South Grand Avenue within Assessor's Parcel Number (APN) 435-330-003. Refer to Exhibits 1-3 in Attachment A.

Project Description

The Project proposes the expansion of the existing Bradley Gardens facility on the 2.98-acre site. The Project includes demolition of the existing 1,074 SF maintenance and storage building located in the southeastern corner of the site for construction of an expansion to the existing 44-bed SNF building. The proposed building addition would total approximately 17,372 SF and would provide 43 additional SNF and STP beds, resulting in a total capacity of 87 beds. The Project also proposes the conversion of the existing 2,596 SF vacant office building located in the northwestern corner of the site into a 16-bed PHF. The Project would not modify the existing 2,609 SF administrative office building along the western boundary of the site. Additional improvements would include landscaping, utility connections, implementation of stormwater facilities, lighting, parking lot, and driveways.

Methodology

Literature Review

The first step in determining if a Project is consistent with the above listed sections of the MSHCP is to conduct a literature review and records search for special-status biological resources potentially occurring on or within the vicinity of the Project site. Previously recorded occurrences of special-status plant and wildlife species and their proximity to the Project were determined through a query of the CDFW's CNDDB Rarefind 5, the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California, Calflora Database, compendia of special-status species published by CDFW, United States Fish and Wildlife Service (USFWS) species listings, and species covered within the MSHCP and associated technical documents.

All available reports, survey results, and literature detailing the biological resources previously observed on or within the vicinity of the Project site were reviewed to understand existing site conditions and note the extent of any disturbances that have occurred on the Project site that would otherwise limit the distribution of special-status biological resources. Standard field guides and texts were reviewed for specific habitat requirements of special-status and non-special-status biological resources, as well as the following resources:

- Environmental Protection Agency (EPA) Water Program "My Waters" data layers
- Google Earth Pro historic aerial imagery (1994-2026);
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), Soil Survey[2];
- USFWS Critical Habitat designations for Threatened and Endangered Species;
- USFWS National Wetlands Inventory (NWI);
- Stephen's Kangaroo Rat Habitat Conservation Plan;

2 A soil series is defined as a group of soils with similar profiles developed from similar parent materials under comparable climatic and vegetation conditions. These profiles include major horizons with similar thickness, arrangement, and other important characteristics, which may promote favorable conditions for certain biological resources.

- Western Riverside County Regional Conservation Authority (RCA) MSHCP Information Map; and
- 2006 Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area.

The literature review provided a baseline from which to inventory the biological resources potentially occurring on the Project site. The CNDDB database was used, in conjunction with ArcGIS software, to locate the nearest recorded occurrences of special-status species and determine the distance from the Project.

Field Investigation

Following the literature review, biologist Andrew N. Mestas inventoried and evaluated the condition of the habitat within the Project site on February 6, 2026. Plant communities identified on aerial photographs during the literature review were verified by walking meandering transects through the plant communities and along boundaries between plant communities. In addition, aerial photography was reviewed prior to the site investigation to locate potential natural corridors and linkages that may support the movement of wildlife through the area. These areas identified via aerial photography were then walked during the field survey.

All plant and wildlife species observed, as well as dominant plant species within each plant community, were recorded. Plant species observed during the field survey were identified by visual characteristics and morphology in the field. Unusual and less familiar plant species were photographed during the field survey and identified in the laboratory using taxonomical guides. Wildlife detections were made through observation of scat, trails, tracks, burrows, nests, and/or visual and aural observation. In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, condition of onsite plant communities, and presence of potential jurisdictional drainage and/or wetland features were noted.

Soil Series Assessment

Onsite and adjoining soils were researched prior to the field survey using the USDA NRCS Soil Survey for the Western Riverside area. In addition, a review of the local geological conditions and historical aerial photographs was conducted to assess the ecological changes that the Project site has undergone.

Plant Communities

Plant communities were mapped using 7.5-minute USGS topographic base maps and aerial photography. The plant communities were delineated on an aerial photograph, classified in accordance with those described in the MSHCP, and then digitized into GIS Arcview. The Arcview application was used to compute the area of each plant community in acres.

Plants

Common plant species observed during the field survey were identified by visual characteristics and morphology in the field and recorded in a field notebook. Unusual and less-familiar plants were photographed in the field and identified in the laboratory using taxonomic guides. Taxonomic nomenclature

used in this study follows the 2012 Jepson Manual (Hickman 2012). In this report, scientific names are provided immediately following common names of plant species (first reference only).

Wildlife

Wildlife species detected during field surveys by sight, calls, tracks, scat, or other sign were recorded during surveys in a field notebook. Field guides were used to assist with identification of wildlife species during the survey included The Sibley Field Guide to the Birds of Western North America (Sibley 2003), A Field Guide to Western Reptiles and Amphibians (Stebbins 2003), and A Field Guide to Mammals of North America (Reid 2006). Although common names of wildlife species are fairly well standardized, scientific names are provided immediately following common names in this report (first reference only).

Jurisdictional Drainages and Wetlands

Aerial photography was reviewed prior to conducting a field investigation in order to locate and inspect any potential natural drainage features, ponded areas, or water bodies that may fall under the jurisdiction of the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), or CDFW. In general, surface drainage features indicated as blue-line streams on USGS maps that are observed or expected to exhibit evidence of flow are considered potential riparian/riverine habitat and are also subject to state and federal regulatory jurisdiction. In addition, ELMT reviewed jurisdictional waters information through examining historical aerial photographs to gain an understanding of the impact of land-use on natural drainage patterns in the area. The USFWS National Wetland Inventory (NWI) and Environmental Protection Agency (EPA) Water Program "My Waters" data layers were also reviewed to determine whether any hydrologic features and wetland areas have been documented on or within the vicinity of the Project site.

Topography and Soils

The Project site ranges in elevation from approximately 1,525 to 1,529 feet above mean sea level. Onsite topography is generally flat. Based on the NRCS USDA Web Soil Survey, the Project site is underlain by the following soil units: Grangeville sandy loam (sandy substratum, drained, 0 to 5 percent slopes) and Grangeville fine sandy loam (saline-alkali, 0 to 5 percent slopes). Onsite soils have been heavily disturbed and compacted as a result of historic and ongoing land uses, including grading, weed abatement, vehicular use, and both onsite and surrounding development activities.

Existing Site Condition

The Project site supports entirely developed land that has been subject to a variety of anthropogenic disturbances associated with on-site development, and routine weed abatement activities. Natural plant communities that historically occurred on the Project site have been eliminated.

The Project site is bounded to the east, south, and west by vacant land and residential development; to the north by West 7th Street and commercial development. Historical aerial imagery indicates that development has existed within the site since at least 1966.

Vegetation

The Project site does not support any natural plant communities. In addition, the site supports one (1) land

cover types that would be classified as developed (refer to Exhibit 4, *Vegetation*, in Attachment A). Refer to Attachment B, *Site Photographs*, for representative site photographs.

Developed

Developed land cover is present throughout the entirety of the project site. Developed areas generally encompass all buildings/structures, parks, and paved, impervious surfaces. These areas are largely devoid of natural vegetation and may support ornamental vegetation that may be maintained in association with or without artificial irrigation.

Vegetation observed within the project site included common ornamental species such as: Mexican fan palm (*Washingtonia robusta*), rose (*Rosa spp.*), creeping thyme (*Thymus serpyllum*), bougainvillea (*Bougainvillea glabra*), magnolia (*Magnolia grandiflora*). Other species observed included: Matilija poppy (*Romneya coulterii*), London rocket (*Sisymbrium irio*), common dandelion (*Taraxacum officinale*), stinknet (*Oncosiphon piluliferum*), and red-stemmed filaree (*Erodium cicutarium*).

Wildlife

Plant communities provide foraging habitat, nesting/denning sites, and shelter from adverse weather or predation. This section provides a discussion of those wildlife species that were observed or are expected to occur within the Project site. The discussion is to be used as a general reference and is limited by the season, time of day, and weather conditions in which the field survey was conducted. Wildlife detections were based on calls, songs, scat, tracks, burrows, and direct observation.

Fish

The MSHCP does not identify any covered or special-status fish species as potentially occurring within the Project site. Further, no fish or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for fish were observed on or within the vicinity of the site. Therefore, no fish are expected to occur and are presumed absent.

Amphibians

The MSHCP does not identify any covered or special-status amphibian species as potentially occurring within the Project site. The Project site does not support hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for amphibian species. Further, no amphibians were observed, and all are presumed to be absent from the Project site.

Reptiles

The MSHCP does not identify any covered or special-status reptilian species as potentially occurring within the Project site. The site and surrounding area provide suitable foraging and cover habitat for reptile species adapted to routine anthropogenic disturbance. The only reptilian species observed during the field investigation was common side-blotched lizard (*Uta stansburiana*). Additional reptile species that may be expected to occur onsite include the Great Basin fence lizard (*Sceloporus occidentalis longipes*) and Southern alligator lizard (*Elgaria multicarinata webbii*).

Birds

The Project site and surrounding area provides suitable foraging and nesting habitat for local avian species, especially those adapted to routine anthropogenic disturbance. Bird species detected during the field survey included black phoebe (*Sayornis nigricans*), house sparrow (*Passer domesticus*), American crow (*Corvus branchyrhynchos*), yellow-rumped warbler (*Setophaga coronata*), house finch (*Haemorhous mexicanus*), and common raven (*Corvus corax*).

Mammals

The MSHCP does not identify any covered or special-status mammalian species as potentially occurring within the Project site. The site provides minimal suitable foraging and cover habitat for mammalian species adapted to degraded conditions and routine anthropogenic disturbance. Mammalian species detected included Botta's pocket gopher (*Thomomys bottae*) and domestic goat (*Capra hircus*). Other common mammalian species that could be expected to occur include possum (*Didelphis virginiana*) and raccoon (*Procyon lotor*).

Nesting Birds and Raptors

No active nests or birds displaying nesting behavior were observed during the field survey, which was conducted outside of the breeding season. Although subjected to routine disturbance, the plant communities and land cover types supported onsite have the potential to provide suitable nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that may occur in the area that are adapted to urban environments. Ornamental tree species occur within the project site and have the potential to support nesting birds tolerant to urban conditions.

Nesting birds are protected pursuant to the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or destruction of birds, their nests, or eggs). If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted prior to the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction.

Migratory Corridors and Linkages

Habitat linkages provide connections between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet still inadequate for others. Wildlife corridors are features that allow for the dispersal, seasonal migration, breeding, and foraging of a variety of wildlife species. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The Project site has not been identified as supporting a wildlife migratory corridor or linkage. The nearest RCA-conserved lands are located approximately 2.5 miles east of the Project site, within the San Jacinto River Soboba area, which provides opportunities for wildlife movement through the region. However, the Project site is separated from the RCA conserved lands by existing development and highly trafficked roads. Additionally, areas within the RCA conserved lands are covered under the MSHCP plans for conservation. Further, the project site support existing developed land, and as such, implementation of the proposed

Project is not expected to have any impact to wildlife movement opportunities or prevent local wildlife movement through the area.

Jurisdictional Areas

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates discharge of dredge or fill materials into "waters of the United States" pursuant to Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFW regulates alterations to streambed and bank under Fish and Wildlife Code Sections 1600 et seq., and the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

No jurisdictional drainages and/or wetland features were observed within site boundaries during the field investigation. A roadside ditch is present along the northern boundary of the site, on the southern shoulder of W 7th Street. The roadside ditched receives stormwater runoff from the road. Since this feature is considered a roadside ditch, and was constructed to convey some flows off of the road, it will not be considered jurisdictional. herefore, development of the project will not result in impacts to Corps, Regional Board, or CDFW jurisdiction and regulatory approvals will not be required.

Special-Status Biological Resources

The CNDDB was queried for reported locations of special-status plant and wildlife species as well as natural communities of special concern in the San Jacinto USGS 7.5-minute quadrangle. Only one quadrangle was queried due to the proximity of the Project site to quadrangle boundaries. A search of published records within these quadrangles was conducted using the CNDDB Rarefind 5 online software and the CDFW BIOS database and the CNPS Inventory of Rare and Endangered Plants of California that supplied information regarding the distribution and habitats of vascular plants in the vicinity of the Project site. The habitat assessment evaluated the conditions of the habitat(s) within the boundaries of the Project site to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species.

The literature search identified twelve (12) special-status plant species, sixty-nine (69) special-status wildlife species, and four (4) special-status plant communities as having potential to occur within the San Jacinto quadrangle. Special-status plant and wildlife species were evaluated for their potential to occur within the Project site based on habitat requirements, availability, and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity are presented in *Table C-1: Potentially Occurring Special-Status Biological Resources*, provided in Attachment C. Refer to Table C-1 for a determination regarding the potential occurrence of special-status plant and wildlife species within the Project site.

Special-Status Plants

According to the CNDDB and CNPS, twelve (12) special-status plant species have been recorded in the San Jacinto quadrangle (refer to Attachment C). No special-status plant species were observed onsite during the field investigation. The majority of the Project site has been subject to a variety of anthropogenic disturbances associated with the existing development. These disturbances have diminished the natural plant communities that once occurred which have diminished the ability of the habitat in these areas to

provide suitable habitat for special-status plant species known to occur in the general vicinity. Based on habitat requirements for specific special-status plant species and the availability and quality of habitats, the Project site was determined not to provide suitable habitat for any of the special-status plant species known to occur in the area and all are presumed to be absent. No focused surveys are recommended.

Special-Status Wildlife

According to the CNDDB, sixty-nine (69) special-status wildlife species have been reported in the San Jacinto quadrangle (refer to Attachment C). No special-status wildlife species were observed onsite during the habitat assessment. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the project site has a moderate potential to support Cooper's hawk (*Astur cooperii*) All remaining special-status wildlife species were presumed to be absent from the project site due to existing development.

To ensure impacts to the aforementioned special-status avian species do not occur from implementation of the proposed project, a pre-construction nesting bird clearance survey shall be conducted prior to ground disturbance. With implementation of the pre-construction nesting bird clearance survey, impacts to these species will be less than significant and no mitigation will be required.

Special-Status Plant Communities

According to the CNDDB, four (4) special-status plant communities have been reported in the San Jacinto quadrangle (refer to Attachment C). No special-status plant communities occur onsite.

Critical Habitat

Under the federal Endangered Species Act, "Critical Habitat" is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the United States Fish and Wildlife Service (USFWS) regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that Projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a Project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a CWA Permit from the Corps). If there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The Project site is not located with federally designated Critical Habitat (refer to Exhibit 5, *Critical Habitat*, in Attachment A). The nearest designated Critical Habitat to the site is located approximately 2.5 miles to the east for San Bernardino Merriam's kangaroo rat (*Dipodomys merriami parvus*) and is separated from the Project site by existing development. Therefore, the loss or adverse modification of Critical Habitat will not occur as a result of the proposed Project and consultation with the USFWS will not be required for impacts to Critical Habitat.

Western Riverside County MSHCP

The Project site is located in the San Jacinto Valley Area Plan of the MSHCP but is not located within any Criteria Cells or designated conservation areas (Exhibit 6, *MSHCP Conservation Areas*). Additionally, the Project site is not located within any MSHCP designated survey areas.

Since the City of San Jacinto and Riverside County are permittees under the MSHCP and, while the Project is not specifically identified as a Covered Activity under Section 7.1, *Covered Activities Outside Criteria Area and PQP Lands*, of the MSHCP, public and private development that are outside of Criteria Areas and Public/Quasi-Public (PQP) Lands are permitted under the MSHCP, subject to consistency with MSHCP policies that apply to area outside of Criteria Areas. As such, to achieve coverage, the Project must be consistent with the following policies of the MSHCP:

- The policies for the protection of species associated with Riparian/Riverine areas and vernal pools as set forth in Section 6.1.2 of the MSHCP;
- The policies for the protection of Narrow Endemic Plant Species as set forth in Section 6.1.3;
- The Urban/Wildlands Interface Guidelines as set forth in Section 6.1.4; and
- The requirements for conducting additional surveys as set forth in Section 6.3.2

Riparian/Riverine Areas

As identified in Section 6.1.2 of the MSHCP, *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools,* riparian/riverine areas are defined as areas dominated by trees, shrubs, persistent emergent plants, or emergent mosses and lichens which occur close to or are dependent upon nearby freshwater, or areas with freshwater flowing during all or a portion of the year. Conservation of these areas is intended to protect habitat that is essential to a number of listed or special-status water-dependent fish, amphibian, avian, and plant species. If impacts to riparian/riverine habitat cannot be avoided, a Determination of Biologically Equivalent or Superior Preservation (DBESP) must be developed to address the replacement of lost functions of habitats in regard to the listed species. This assessment is independent from considerations given to "waters of the U.S." and "waters of the State" under the CWA and the California Fish and Game Code.

No jurisdictional drainages, riparian/riverine and/or wetland features were observed within the project site during the field investigation. Development of the proposed project will not result in impacts to riparian/riverine habitats and a DBESP will not be required for the loss of riparian/riverine habitat from development of the proposed project. Therefore, the project is consistent with Section 6.1.2 of the MSHCP.

Vernal Pools and Fairy Shrimp Habitat

One of the factors for determining the suitability of the habitat for fairy shrimp would be demonstrable evidence of seasonal ponding in an area of topographic depression that is not subject to flowing waters. These astatic pools are typically characterized as vernal pools. More specifically, vernal pools are seasonal wetlands that occur in depression areas without a continual source of water. They have wetland indicators of all 3 parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetland indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the

wetter portion of the growing season. The determination that an area exhibits vernal pool characteristics and the definition of the watershed supporting vernal pool hydrology is made on a case-by-case basis. Such determinations should be considered the length of time the areas exhibit upland and wetland characteristics and the manner in which the area fits into the overall ecological system as a wetland. The seasonal hydrology of vernal pools provides for a unique environment, which supports plants and invertebrates specifically adapted to a regime of winter inundation, followed by an extended period when the pool soils are dry.

Vernal pools are seasonally inundated, ponded areas that only form in regions where specialized soil and climatic conditions exist. During fall and winter rains typical of Mediterranean climates, water collects in shallow depressions where downward percolation of water is prevented by the presence of a hard pan or clay pan layer (duripan) below the soil surface. Later in the spring when rains decrease and the weather warms, the water evaporates and the pools generally disappear by May. The shallow depressions remain relatively dry until late fall and early winter with the advent of greater precipitation and cooler temperatures. Vernal pools provide unusual "flood and drought" habitat conditions to which certain plant and wildlife species have specifically adapted as well as invertebrate species such as fairy shrimp.

The MSHCP lists two general classes of soils known to be associated with listed and special-status plant species; clay soils and Traver-Domino Willow association soils. The specific clay soils known to be associated with listed and special-status species within the MSHCP plan area include Bosanko, Auld, Altamont, and Porterville series soils, whereas Traver-Domino Willows association includes saline-alkali soils largely located along floodplain areas of the San Jacinto River and Salt Creek. Without the appropriate soils to create the impermeable restrictive layer, none of the special-status plant or wildlife species associated with vernal pools can occur on the Project site. None of these soils have been documented within the Project site.

A review of recent and historic aerial photographs (1994–2026) of the Project site did not identify visual evidence of astatic or vernal pool conditions. These observations support the conclusion that the project site does not support the hydrologic regimes necessary to support vernal pool conditions.

Based on the analysis of historical aerial photography and findings from recent field surveys, there is no evidence of vernal pools or habitat conditions suitable for fairy shrimp within the boundaries of the proposed Project site. As such, the Project is consistent with the requirements outlined in Section 6.1.2 of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP).

Narrow Endemic Plant Species

Section 6.1.3 of the MSHCP, *Protection of Narrow Endemic Plant Species*, states that the MSHCP database does not provide sufficient detail to determine the extent of the presence/distribution of Narrow Endemic Plant Species within the MSHCP Plan Area. Additional surveys may be needed to gather information to determine the presence/absence of these species to ensure that appropriate conservation of these species occurs. Based on the RCA MSHCP Information Map query and review of the MSHCP, it was determined that the Project site is not located within a Narrow Endemic Plant Species Survey Area. The project site supports existing development and heavily disturbed land that does not provide suitable habitat for Narrow Endemic Plant Species. As such, the Project is consistent with the requirements outlined in Section 6.1.3 of the MSHCP.

Additional Survey Needs and Procedures

In accordance with Section 6.3.2 of the MSHCP, *Additional Survey Needs and Procedures*, additional surveys may be needed for certain species in order to achieve coverage for these species. The query of the RCA MSHCP Information Map and review of the MSHCP determined that the Project site is not located within the any designated species survey area. The project site supports existing development and heavily disturbed land that does not provide suitable habitat for and MSHCP listed species. As such, are result, the Project is consistent with the requirements outlined in Section 6.2.3 of the MSHCP.

Urban/Wildlands Interface Guidelines

Section 6.1.4 of the MSHCP, *Guidelines Pertaining to Urban/Wildlands Interface,* is intended to address indirect effects associated with development in proximity to MSHCP Conservation Areas. The Urban/Wildlife Interface Guidelines are intended to ensure that indirect Project-related impacts to the MSHCP Conservation Area, including drainage, toxics, lighting, noise, invasive plant species, barriers, and grading/land development, are avoided or minimized. The Project site is not located within or immediately adjacent to any Criteria Cells, corridors, or linkages. The urban/Wildlands Interface Guidelines do not apply to this Project, and, therefore, the Project is consistent with Section 6.1.4 of the MSHCP.

Stephen's Kangaroo Rat Habitat Conservation Plan

Separate from the consistency review against the policies of the MSHCP, Riverside County established a boundary in 1996 for protecting the Stephens' kangaroo rat (*Dipodomys stephensi*), a federally endangered and state threatened species. The Stephens' kangaroo rat is protected under the Stephens' Kangaroo Rat Habitat Conservation Plan (County Ordinance No. 663.10; SKR HCP). As described in the MSHCP Implementation Agreement, a Section 10(a) Permit, and California Fish and Game Code Section 2081 Management Authorization were issued to the Riverside County Habitat Conservation Agency (RCHCA) for the Long-Term SKR HCP and was approved by the USFWS and CDFW in August 1990 (RCHCA 1996). Relevant terms of the SKR HCP have been incorporated into the MSHCP and its Implementation Agreement. The SKR HCP will continue to be implemented as a separate HCP; however, to provide the greatest conservation for the largest number of Covered Species, the Core Reserves established by the SKR HCP are managed as part of the MSHCP Conservation Area consistent with the SKR HCP. Actions shall not be taken as part of the implementation of the SKR HCP that will significantly affect other Covered Species. Take of Stephens' kangaroo rat outside of the boundaries but within the MSHCP area is authorized under the MSHCP and the associated permits.

The Project site is not located within the Mitigation Fee Area of the SKR HCP. Therefore, the applicant will not be required to pay the SKR HCP Mitigation Fee.

Conclusion

Based on the literature review and field survey, implementation of the Project will have no significant impacts on federally, State, or MSHCP listed species known to occur in the general vicinity of the Project site. The Project site was determined not to have suitable conditions to support any special-status species known to occur in the vicinity. With completion of the recommendations provided below, no impacts to year-round, seasonal, or special-status avian residents will occur from implementation of the proposed Project.

Additionally, the project will have no effect on designated Critical Habitat, since there is no federal nexus, or regional wildlife corridors/linkage. No riverine/riparian features were identified within the project site, therefore, the proposed project is consistent with Section 6.1.2 of the MSHCP. With implementation of the recommended measures and payment of the MSHCP Local Development Mitigation Fee, development of the Project site would be fully consistent with the MSHCP.

Recommendations

Migratory Bird Treaty Act and Fish and Game Code Compliance

Vegetation within and surrounding the Project site has the potential to provide refuge cover from predators, perching sites and favorable conditions for avian nesting that could be impacted by construction activities associated with the Project. Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.3, 3511, and 3513 of the California Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs). In order to protect migratory bird species, a nesting bird clearance survey should be conducted prior to any ground disturbance or vegetation removal activities that may disrupt the birds during the nesting season. Consequently, if avian nesting behaviors are disrupted, such as nest abandonment and/or loss of reproductive effort, it is considered "take" and is potentially punishable by fines and/or imprisonment.

If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a no-disturbance buffer. The size of the no-disturbance buffer will be determined by the wildlife biologist and will depend on the level of noise and/or surrounding anthropogenic disturbances, line of sight between the nest and the construction activity, type and duration of construction activity, ambient noise, species habituation, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

Please do not hesitate to contact Travis McGill at (909) 816-1646 or travismcgill@elmtconsulting.com should you have any questions regarding this report.

Sincerely,



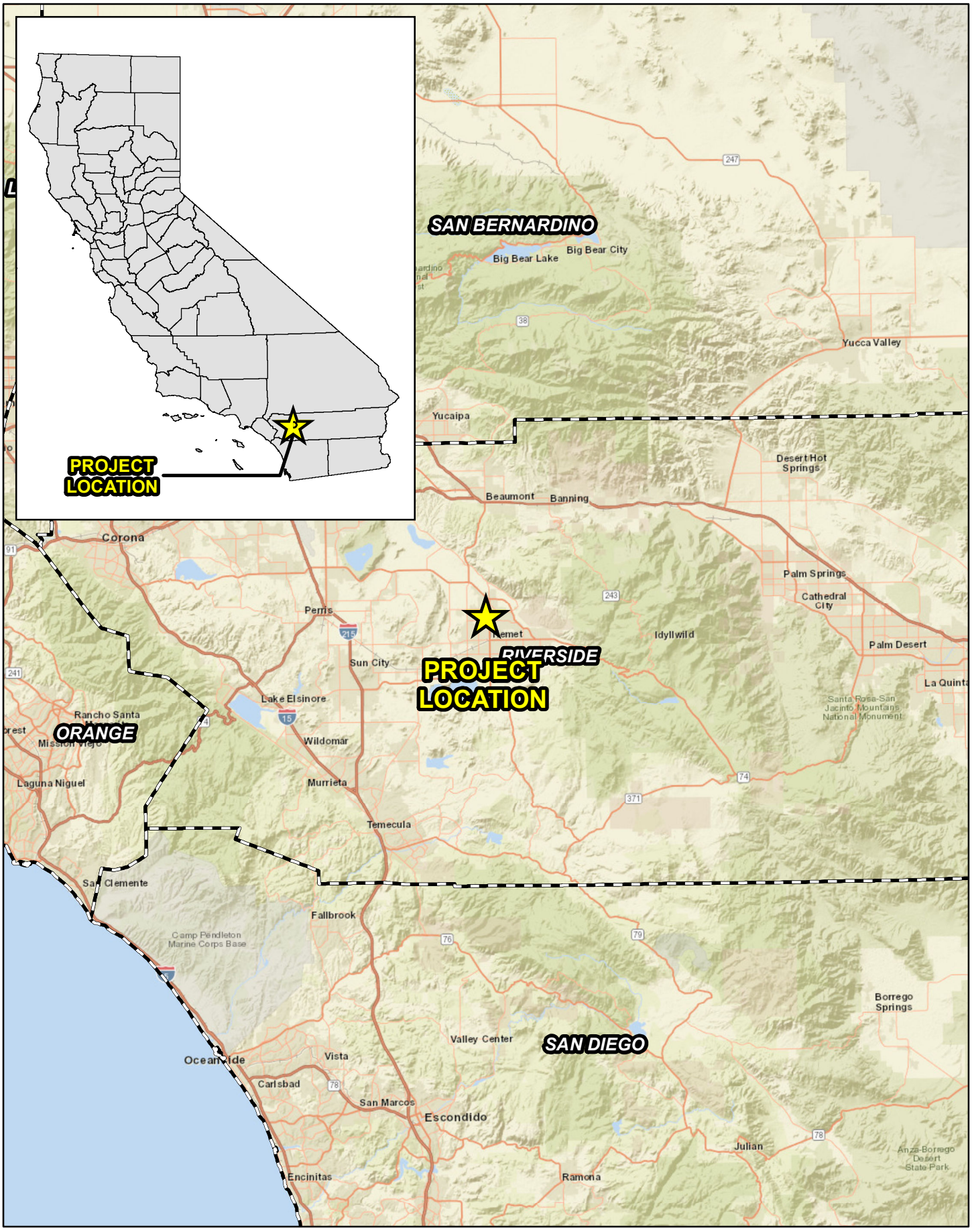
Travis J. McGill
Director

Attachments:

A. *Project Exhibits*
B. *Site Photographs*
C. *Potentially Occurring Special-Status Biological Resources*
D. *Regulations*
E. *Site Plan*
F. *Resumes*

Attachment A

Project Exhibits



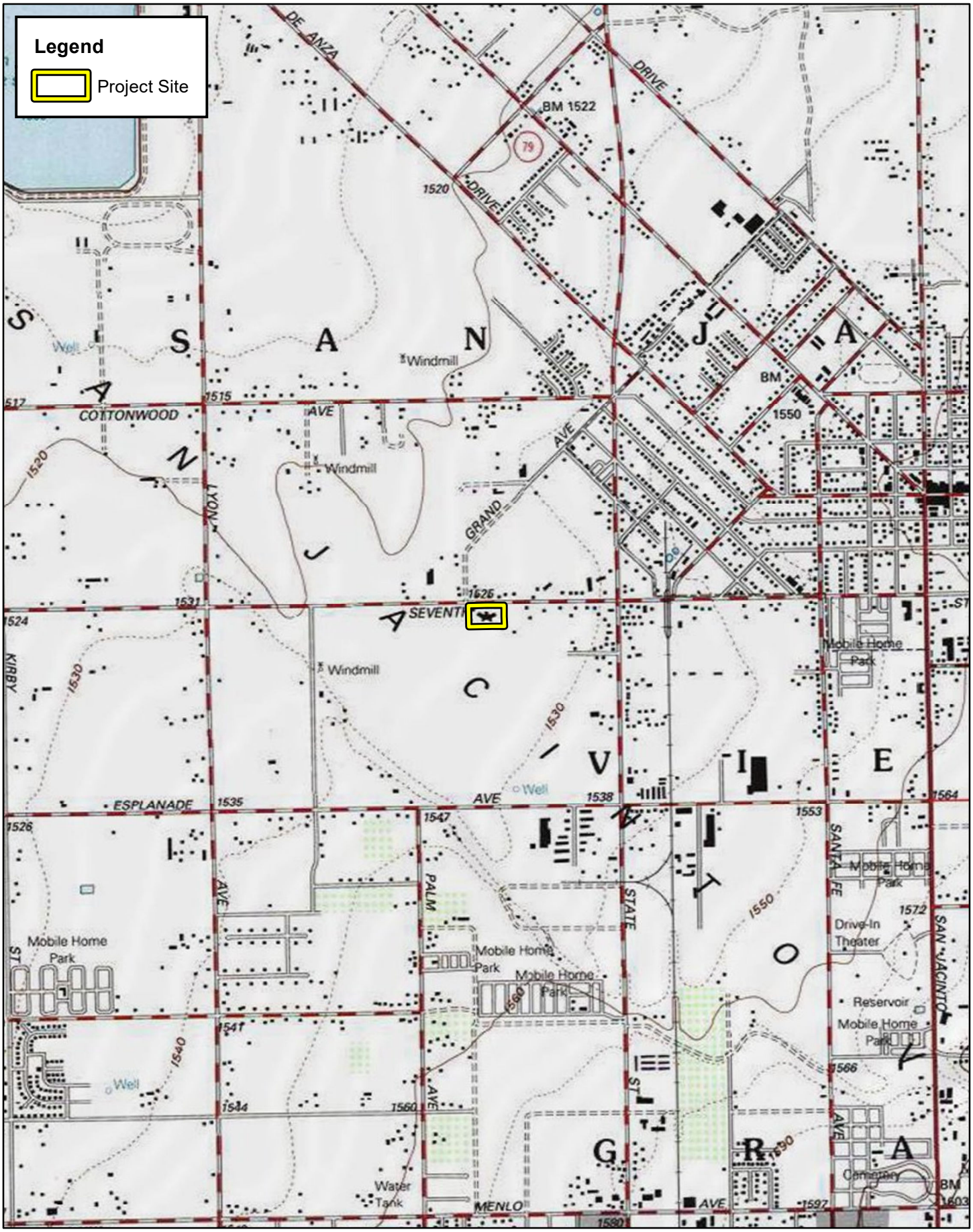
ELMT CONSULTING

Source: World Street Map, Riverside County

BRADLEY GARDENS

Regional Vicinity

Exhibit 1



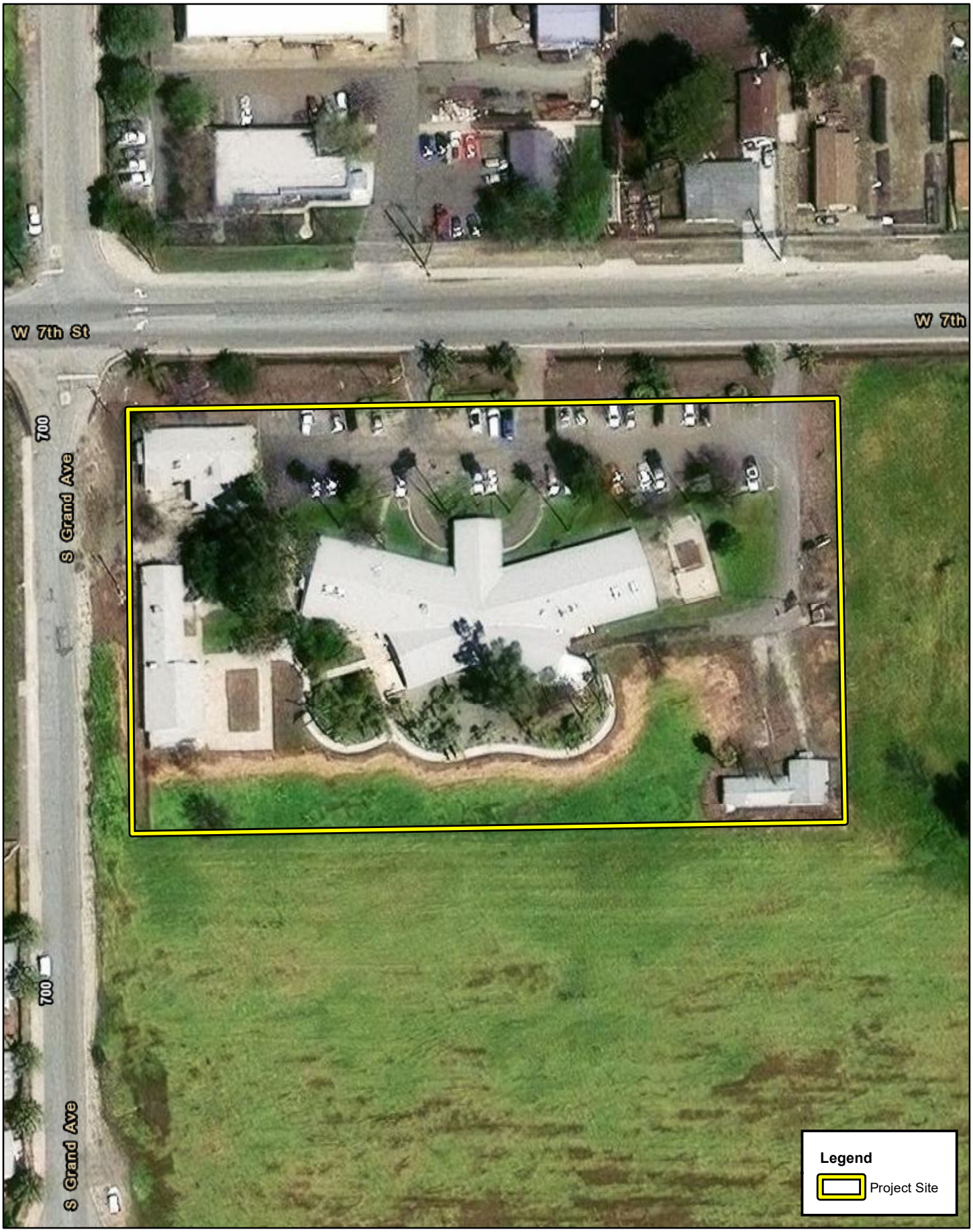
ELMT CONSULTING

Source: USA Topographic Map, Riverside County

BRADLEY GARDENS

Site Vicinity

Exhibit 2



ELMT CONSULTING

0 62.5 125 250 Feet

Source: ESRI Aerial Imagery, Riverside County

BRADLEY GARDENS

Project Site

Exhibit 3



ELMT CONSULTING

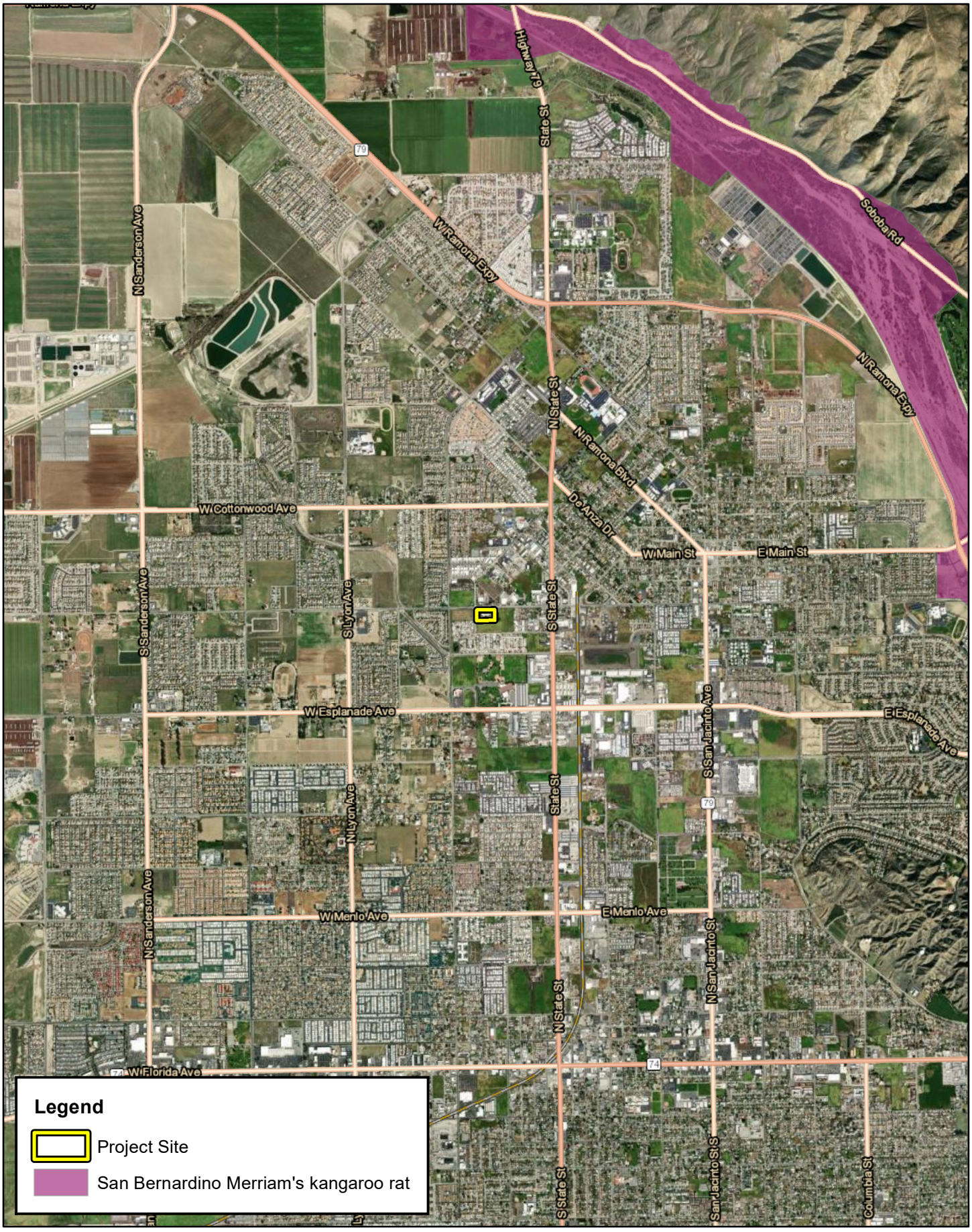
0 62.5 125 250 Feet

Source: ESRI Aerial Imagery, Riverside County

BRADLEY GARDENS

Vegetation

Exhibit 4



ELMT CONSULTING

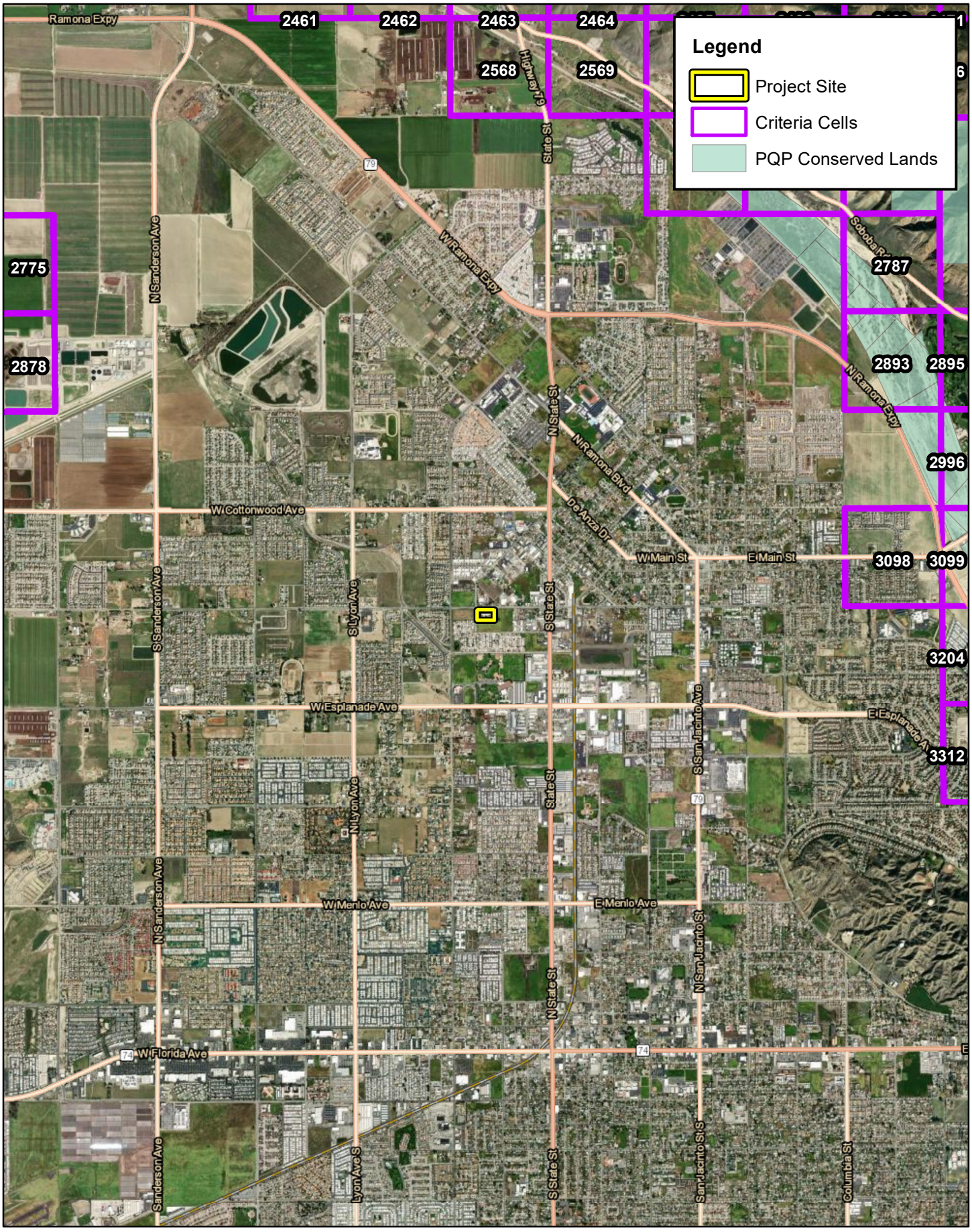
0 2,500 5,000 10,000 Feet

Source: ESRI Aerial Imagery, USFWS Critical Habitat, Riverside County

BRADLEY GARDENS

Critical Habitat

Exhibit 6



ELMT CONSULTING

0 2,500 5,000 10,000 Feet

Source: ESRI Aerial Imagery, Riverside County

BRADLEY GARDENS

MSHCP Criteria Area

Exhibit 6

Attachment B

Site Photographs



Photograph 1: From the east portion of the project site, looking south along the eastern boundary.



Photograph 2: From the east portion of the project site, looking north.



Photograph 3: From the southeast corner of the project site looking west.



Photograph 4: From the southeast corner of the project site looking north.



Photograph 5: From the center of the south boundary of the project site looking west.



Photograph 6: From the center of the south boundary of the project site looking east.



Photograph 7: From the southwest portion of the project site looking north.



Photograph 8: From the southwest portion of the project site looking east.



Photograph 9: From the northern portion of the project site looking east along a roadside ditch.

Attachment C

Potentially Occurring Special-Status Biological Resources

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
WILDLIFE SPECIES					
Accipiter striatus sharp-shinned hawk	**Fed:** None **CA:** WL	Generally found in cismontane woodland, lower montane coniferous forest, riparian forest, and riparian woodland. Associated with ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats, with a preference for riparian areas.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Agelaius tricolor tricolored blackbird	**Fed:** None **CA: THR** | SSC	Range is limited to the coastal areas of the Pacific coast of North America, from Northern California to upper Baja California. Can be found in a wide variety of habitat including annual grasslands, wet and dry vernal pools and other seasonal wetlands, agricultural fields, cattle feedlots, and dairies. Occasionally forage in riparian scrub habitats along marsh borders. Basic habitat requirements for breeding include open accessible water, protected nesting substrate (freshwater marsh dominated by cattails, willows, and bulrushes), and either flooded or thorny or spiny vegetation and suitable foraging space providing adequate insect prey.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Aimophila ruficeps canescens southern California rufous-crowned sparrow	**Fed:** None **CA:** WL	Typically found between 3,000 and 6,000 feet in elevation. Breeds in sparsely vegetated scrubland on hillsides and canyons. Prefers coastal sage scrub dominated by California sagebrush (Artemisia californica), but they can also be found breeding in coastal bluff scrub, low-growing serpentine chaparral, and along the edges of tall chaparral habitats.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Ammodramus savannarum grasshopper sparrow	**Fed:** None **CA:** SSC	Occurs in grassland, upland meadow, pasture, hayfield, and old field habitats. Optimal habitat contains short- to medium-height bunch grasses interspersed with patches of bare ground, a shallow litter layer, scattered forbs, and few shrubs. May inhabit thickets, weedy lawns, vegetated landfills, fence rows, open fields, or grasslands.	Yes (e)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Anniella stebbinsi Southern California legless lizard	**Fed:** None **CA:** SSC	Occurs in sparsely vegetated habitat types including coastal sand dunes, chaparral, pine-oak woodland, desert scrub, open grassland, and riparian areas. Requires sandy or loose loamy substrates conducive to burrowing.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Antrozous pallidus pallid bat	**Fed:** None **CA:** SSC	Locally common species of low elevation in California. Mostly found in desert habitats, but also occur in oak and pine forested areas and open farmland. Prefers rocky outcrops for roosting, but also roost in caves, rock crevices, mines, hollow trees, and buildings. roosts with depth gradients are preferred.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Aquila chrysaetos golden eagle	**Fed:** None **CA:** FP | WL	Occurs in rolling foothill, sage-juniper flats, desert, and mountainous habitats. Requires open terrain for hunting including grasslands, deserts, savannahs, and early successional stages of forest and shrub habitats. Nests on cliffs and escarpments in rugged canyons and in large trees in open areas. Prefers rolling foothills, mountain terrain, cliffs, rock outcrops, and wide arid plateaus deeply cut by streams and canyons.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Ardea alba great egret	**Fed:** None **CA:** None	Generally found in brackish marsh estuary freshwater marsh & swamp riparian forest wetland. Rookery sites located near marshes, tide-flats, irrigated pastures, and margins of rivers and lakes.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Ardea herodias great blue heron	**Fed:** None **CA:** None	Generally found in brackish marsh estuary freshwater marsh & swamp riparian forest wetland. Colonial nester in tall trees, cliffsides, and sequestered spots on marshes. Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Arizona elegans occidentalis California glossy snake	**Fed:** None **CA:** SSC	Inhabits arid scrub, rocky washes, grassland, and chaparral. Appears in microhabitats of open areas and areas with soil loose enough for easy burrowing.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Artemisiospiza belli belli Bells sparrow	**Fed:** None **CA:** WL	Generally prefers semi-open habitats with evenly spaced shrubs 1 – 2 meters in height. Dry chaparral dominated by chamise and/or California sagebrush, coastal sage scrub. Less common in tall, dense, old chaparral.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Asio flammeus short-eared owl	**Fed:** None **CA:** SSC	Generally found in Great Basin grassland, meadow and seep, marsh and swamp, and valley and foothill grassland wetlands. Occurs in lowland meadows.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Aspidoscelis hyperythra orange-throated whiptail	**Fed:** None **CA:** WL	Inhabits low-elevations coastal scrub, chamise-redshank chaparral, mixed chaparral, and valley-foothill hardwood habitats. Semi-arid brushy areas typically with loose soil and rocks, including washes, stream sides, rocky hillsides, and coastal chaparral.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Aspidoscelis tigris stejnegeri coastal whiptail	**Fed:** None **CA:** SSC	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy, or rocky.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Astur cooperii Coopers hawk	**Fed:** None **CA:** WL	Generally found in cismontane woodland riparian forest riparian woodland upper montane coniferous forest. Woodland, chiefly of open, interrupted or marginal type. Nests sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains. Also, live oaks.	No	No	**Low** Marginal foraging and habitat is present within and adjacent to the project site.
Athene cunicularia burrowing owl	**Fed:** None **CA:** Candidate Endangered | SSC	Prefers habitat with short, sparse vegetation with few shrubs and well-drained soils in grassland, shrub steppe, and desert habitats. Primarily a grassland species, but it persists and even thrives in some landscapes highly altered by human activity. Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. The overriding characteristics of suitable habitat appear to be burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Aythya americana redhead	**Fed:** None **CA:** SSC	Occurs year round in California, though status varies regionally. Nests in freshwater emergent wetlands where dense stands of cattails and tules are interspersed with areas of deep, open water.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Bombus crotchii Crotchs bumble bee	**Fed:** None **CA:** Candidate Endangered	Colonial species that lives almost exclusively from coastal California east towards the Sierra-Cascade Crest and can be found uncommonly in western Nevada and south through Baja California. Inhabits grassland and scrub habitats in hotter and drier climates than most other bumblebee species and is only capable of tolerating a narrow range of climatic conditions. This species usually nests underground, often in abandoned rodent dens.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Bombus pensylvanicus American bumble bee	**Fed:** None **CA:** None	Generally found in coastal prairie Great Basin grassland valley & foothill grassland.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Botaurus exilis least bittern	**Fed:** None **CA:** SSC	Generally found in marsh & swamp wetland. Colonial nester in marshlands and borders of ponds and reservoirs which provide ample cover.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Botaurus lentiginosus American bittern	**Fed:** None **CA:** None	Generally found in brackish marsh freshwater marsh salt marsh. Freshwater and slightly brackish marshes. Also in coastal saltmarshes.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Buteo regalis ferruginous hawk	**Fed:** None **CA:** WL	Common winter resident of grasslands and agricultural areas in southwestern California. Frequents open grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys, and fringes of pinyon-juniper habitats. Does not breed in California.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Buteo swainsoni Swainsons hawk	**Fed:** None **CA: THR**	Typical habitat is open desert, grassland, or cropland containing scattered, large trees or small groves. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grassland or suitable grain or alfalfa fields or livestock pastures.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Calypte costae Costas hummingbird	**Fed:** None **CA:** None	Typical habitat is open desert, grassland, or cropland containing scattered, large trees or small groves. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grassland or suitable grain or alfalfa fields or livestock pastures.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Chaetodipus californicus femoralis Dulzura pocket mouse	**Fed:** None **CA:** None	Occurs in desert and coastal habitats in southern California, Mexico, and northern Baja California, from sea level to at least 1,400 meters. Found in a variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Requires low growing vegetation or rocky outcroppings, as well as sandy soils for burrowing.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Chaetodipus fallax fallax northwestern San Diego pocket mouse	**Fed:** None **CA:** None	Occurs in desert and coastal habitats in southern California, Mexico, and northern Baja California, from sea level to at least 4,600 feet in elevation. Found in a variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Requires low growing vegetation or rocky outcroppings, as well as sandy soils for burrowing.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Chlidonias niger black tern	**Fed:** None **CA:** SSC	Found at freshwater marshes and lakes and found along coastal waters in migration. For nesting favors fresh waters with extensive marsh vegetation and open water, also sometimes in smaller marshes and wet meadows. In migration found on larger lakes and along coast. Winters in tropical coastal regions, mostly just offshore or around salt lagoons and estuaries.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Circus hudsonius northern harrier	**Fed:** None **CA:** SSC	Most common in large, undisturbed tracts of wetlands and grasslands with low, thick vegetation. They breed in freshwater and brackish marshes, lightly grazed meadows, old fields, tundra, dry upland prairies, drained marshlands, high-desert shrubsteppe, and riverside woodlands. During winter they use a range of habitats with low vegetation, including deserts, coastal sand dunes, pasturelands, croplands, dry plains, grasslands, old fields, estuaries, open floodplains, and marshes.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Coccyzus americanus occidentalis western yellow-billed cuckoo	**Fed: THR** **CA: END**	In California, the breeding distribution is now thought to be restricted to isolated sites in Sacramento, Amargosa, Kern, Santa Ana, and Colorado River valleys. Obligate riparian species with a primary habitat association of willow-cottonwood riparian forest.	Yes (a)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Coleonyx variegatus abbotti San Diego banded gecko	**Fed:** None **CA:** SSC	Found in southwestern California just inland from the Pacific coast, from Ventura County south into northwestern and central Baja California. It is found in coastal scrub chaparral and desert scrub habitats, preferring granite or rocky outcrops.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Corynorhinus townsendii Townsends big-eared bat	**Fed:** None **CA:** SSC	Occupies a variety of habitats including desert scrub, chaparral, oak woodland, and coniferous forest. Roosts in caves, mines, rock crevices, and abandoned buildings, typically selecting sites with minimal disturbance and stable temperatures. Forages in open habitats and along forest edges, relying on a high degree of roost site fidelity.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Crotalus ruber red-diamond rattlesnake	**Fed:** None **CA:** SSC	Found from desert dense chaparral communities in the foothills (it avoids the mountains above around 4,000 feet), to warm inland mesas and valleys, all the way to the cool ocean shore. Most commonly associated with heavy brush and large rocks or boulders. Dense chaparral in the foothills, cactus or boulder associated coastal sage scrub, oak and pine woodlands, and desert slope scrub associations are known to carry populations of the northern red-diamond rattlesnake. however, chamise and red shank associations may offer better structural habitat for refuges and food resources for this species than other habitats.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Dendrocygna bicolor fulvous whistling-duck	**Fed:** None **CA:** SSC	Generally found in freshwater marsh and swamp habitats, including freshwater and tule/cattail marshes.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Dipodomys merriami parvus San Bernardino kangaroo rat	**Fed: END** **CA: END** | SSC	Primarily found in Riversidean alluvial fan sage scrub (RAFSS) and sandy loam soils, alluvial fans and flood plains, and along washes with nearby sage scrub. May also occur at lower densities in Riversidean upland sage scrub, chaparral and grassland in uplands and tributaries in proximity to RAFSS habitat. Tends to avoid rocky substrates.	Yes (c)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Dipodomys simulans Dulzura kangaroo rat	**Fed:** None **CA:** None	Relatively common in chaparral, coastal sage scrub, Riversidean alluvial fan sage scrub, and peninsular juniper woodland habitats with sandy and gravelly soils. Sometimes found in forests of pine, oak and fir.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Dipodomys stephensi Stephens kangaroo rat	**Fed: THR** **CA: THR**	Generally found in coastal scrub valley & foothill grassland. Primarily annual and perennial grasslands, but also occurs in coastal scrub and sagebrush with sparse canopy cover. Will burrow into firm soil.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Elanus leucurus white-tailed kite	**Fed:** None **CA:** FP	Common in savannahs, open woodlands, marshes, desert grasslands, partially cleared areas, and cultivated fields. Avoids heavily grazed areas. Breeds in lowland grasslands, agricultural wetlands, oak-woodland and savannah habitats, and riparian areas.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Empidonax traillii willow flycatcher	**Fed:** None **CA: END**	A rare to locally uncommon, summer resident in wet meadow and montane riparian habitats (2,000 to 8,000 ft) in the Sierra Nevada and Cascade Range. Most often occurs in broad, open river valleys or large mountain meadows with lush growth of shrubby willows.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Empidonax traillii extimus southwestern willow flycatcher	**Fed: END** **CA: END**	Uncommon summer resident of southern California. Occurs in riparian woodlands in southern California. Typically requires large areas of willow thickets in broad valleys, canyon bottoms, or around ponds and lakes. These areas typically have standing or running water, or are at least moist.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Eremophila alpestris actia California horned lark	**Fed:** None **CA:** WL	Occurs in meadows, grasslands, open fields, prairie, and alkali flats. This subspecies is typically found in coastal regions.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Euphydryas editha quino quino checkerspot butterfly	**Fed: END** **CA:** Candidate Endangered	Can be found in meadows and upland sage scrub/chaparral habitat.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Falco columbarius merlin	**Fed:** None **CA:** WL	Found in treetops, low perches at forest edges, grasslands, and saltmarshes. Also found in fairly open country such as willow or birch scrub, shrubland, taiga forests, parks, grasslands, steppes, and prairies. Winters in open forests, grasslands, and coastal areas.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Falco mexicanus prairie falcon	**Fed:** None **CA:** WL	Distributed from annual grasslands to alpine meadows, but primarily associated with grasslands, savannahs, rangeland, agricultural fields, and desert scrub areas. Requires open terrains for foraging and nests on cliffs, escarpments, and rock outcrops.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Falco peregrinus anatum American peregrine falcon	**Fed:** Delisted **CA:** Delisted	Uncommon winter resident of the inland region of southern California. Active nesting sites are known along the coast north of Santa Barbara, in Orange County, in the Sierra Nevada, and in other mountains of northern California. Breeds mostly in woodland, forest, and coastal habitats. Riparian areas and coastal and inland wetlands are important habitats yearlong, especially in nonbreeding seasons.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Gila orcuttii arroyo chub	**Fed:** None **CA:** SSC	Generally found in aquatic habitats of the south coast's flowing waters. Native to streams from Malibu Creek to the San Luis Rey River basin. Introduced into streams in the Santa Clara, Ventura, Santa Ynez, Mojave, and San Diego River basins. Occurs in slow-moving stream sections with mud or sand bottoms.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Haliaeetus leucocephalus bald eagle	**Fed:** Delisted **CA: END** | FP	Generally found in lower montane coniferous forest Oldgrowth. Ocean shore, lake margins, and rivers for both nesting and wintering. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Icteria virens yellow-breasted chat	**Fed:** None **CA:** SSC	Lives in thickets and along other dense, regrowing areas such as bramble bushes, clearcut areas, powerline corridors, and shrubs along streams. Can sometimes be found in overgrown pastures and in margins of woodlands. Winters in open scrub and woodland edges in lowland areas.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Lanius ludovicianus loggerhead shrike	**Fed:** None **CA:** SSC	Prefers open habitats with bare ground, scattered shrubs, and areas with low or sparse herbaceous cover including open-canopied valley foothill hardwood, riparian, pinyon-juniper, desert riparian, creosote bush scrub, and Joshua tree woodland. Requires suitable perches including trees, posts, fences, utility lines, or other perches.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Lasiurus xanthinus western yellow bat	**Fed:** None **CA:** SSC	Most commonly found in riparian woodland habitats consisting of sycamore, cottonwood and oak. Can also be found in desert environments and are closely associated with palms.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Lepus californicus bennettii San Diego black-tailed jackrabbit	**Fed:** None **CA:** None	Found in diverse habitats, but primarily is found in arid regions supporting shortgrass habitats. Openness of open scrub habitat is preferred over dense chaparral. Known to occur on the coastal side of mountain ranges westward from Los Padres National forest into Baja California.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Melanerpes lewis Lewis woodpecker	**Fed:** None **CA:** None	Breeds in open forest and woodland with an open canopy and brushy understory.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Nannopterum auritum double-crested cormorant	**Fed:** None **CA:** WL	Fairly common, yearlong resident in lowlands and foothills throughout most of California, including the Salton Sea and Colorado River areas, and very common locally in large nesting colonies. Feeds along the margins of lacustrine, large riverine, and fresh and saline emergent habitats and rarely, on kelp beds in marine sub tidal habitats. Nests and roosts in dense-foliaged trees and dense emergent wetlands.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Neotoma lepida intermedia San Diego desert woodrat	**Fed:** None **CA:** SSC	Found in a variety of shrub and desert habitats. Prefers large cactus patches and rock outcroppings. Common in sagebrush scrub areas, chaparral, desert, and within rocky sloped areas. Occurs at elevations up to 9,500 feet.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Nycticorax nycticorax black-crowned night heron	**Fed:** None **CA:** None	Fairly common, yearlong resident in lowlands and foothills throughout most of California, including the Salton Sea and Colorado River areas, and very common locally in large nesting colonies. Feeds along the margins of lacustrine, large riverine, and fresh and saline emergent habitats and rarely, on kelp beds in marine sub tidal habitats. Nests and roosts in dense-foliaged trees and dense emergent wetlands.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Onychomys torridus ramona southern grasshopper mouse	**Fed:** None **CA:** SSC	Inhabits alkali desert scrub and other desert scrub habitats, and to a lesser extent succulent shrubs, desert washes, desert riparian, coastal scrub, mixed chaparral, and sagebrush habitats. Generally rare in valley foothill and montane riparian habitats. Prefers low to moderate shrub cover and requires friable soils. In California, range extends from Los Angeles southward to the Mexican border, generally west of the desert.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Perognathus longimembris brevinasus Los Angeles pocket mouse	**Fed:** None **CA:** SSC	Generally found in coastal scrub. Lower elevation grasslands and coastal sage communities in and around the Los Angeles basin. Open ground with fine, sandy soils.	Yes (c)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Phrynosoma blainvillii coast horned lizard	**Fed:** None **CA:** SSC	Found in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. The key elements of such habitats are loose, fine soils with a high sand fraction. an abundance of native ants or other insects. and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Plegadis chihi white-faced ibis	**Fed:** None **CA:** WL	Prefers to feed in fresh emergent wetland, shallow lacustrine waters, muddy ground of wet meadows, and irrigated or flooded pastures and croplands. Roosts amidst dense, freshwater emergent vegetation such as bulrushes, cattails, reeds or low shrubs over water.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Polioptila californica californica coastal California gnatcatcher	**Fed: THR** **CA:** SSC	Common yearlong resident of southern California in sage scrub habitats that are dominated by California sagebrush (Artemisia californica). Prefers scrub habitat with more low-growing vegetation. Species generally occurs below 750 feet above mean sea level (msl) along the coast and below 1,500 feet above msl within inland regions.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Pyrocephalus rubinus vermilion flycatcher	**Fed:** None **CA:** SSC	Found in any open country in the Southwest, including arid scrublands, farmlands, deserts, parks, and canyon mouths. Sometimes winters along the coastlines. Reliant on stream corridors within scrub ecosystems, in areas where willow, sycamore, cottonwood, mesquite, and other bottomland trees grow. Nests along stream corridors.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Salvadora hexalepis virgultea coast patch-nosed snake	**Fed:** None **CA:** SSC	Found in desert scrub, grassland chaparral, sagebrush plains, and pinyon-juniper woodlands in the southwestern United States south into Baja California and Mexico. Occurs from below sea level to 7,000 feet in elevation.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Setophaga petechia yellow warbler	**Fed:** None **CA:** SSC	Nests over all of California except the Central Valley, the Mojave Desert region, and high altitudes and the eastern side of the Sierra Nevada. Winters along the Colorado River and in parts of Imperial and Riverside Counties. Nests in riparian areas dominated by willows, cottonwoods, sycamores, or alders or in mature chaparral. May also use oaks, conifers, and urban areas near stream courses.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Spea hammondii western spadefoot	**Fed: PTHR** **CA:** SSC	Prefers open areas with sandy or gravelly soils in a variety of habitats, including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rain pools that do not contain bullfrogs, fish, or crayfish are necessary for breeding.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Spinus lawrencei Lawrences goldfinch	**Fed:** None **CA:** None	Typical habitats include valley foothill hardwood, valley foothill hardwood-conifer, and, in southern California, desert riparian, palm oasis, pinyon-juniper, and lower montane habitats. Open woodlands, chaparral, and weedy fields. Closely associated with oaks. Nests in open oak or other arid woodland and chaparral near water.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Spizella breweri Brewers sparrow	**Fed:** None **CA:** None	Live in shrublands year-round. Most often found in sagebrush shrublands with short vegetation in spring and summer. May also occur in openings in pinyon-juniper woodlands or in other mountain shrub communities. Typically nest in taller, denser shrubs with less bare ground. Common in desert shrublands dominated by saltbush shrubs and creosote.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Taxidea taxus American badger	**Fed:** None **CA:** SSC	Primarily occupy grasslands, parklands, farms, tallgrass and shortgrass prairies, meadows, shrub-steppe communities and other treeless areas with sandy loam soils where it can dig more easily for its prey. Occasionally found in open chaparral (with less than 50% plant cover) and riparian zones.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Thamnophis hammondii two-striped gartersnake	**Fed:** None **CA:** SSC	Inhabits streams and ponds in chaparral, oak woodland, and forest habitats up to 8,000 feet elevation. Semi-aquatic in nature, but can occur in a variety of habitats-including urban areas-where there is water present.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Vireo bellii pusillus least Bells vireo	**Fed: END** **CA: END**	Primarily occupy Riverine riparian habitat that typically feature dense cover within 1 -2 meters of the ground and a dense, stratified canopy. Typically it is associated with southern willow scrub, cottonwood-willow forest, mule fat scrub, sycamore alluvial woodlands, coast live oak riparian forest, arroyo willow riparian forest, or mesquite in desert localities. It uses habitat which is limited to the immediate vicinity of water courses, 2,000 feet elevation in the interior.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Xanthocephalus xanthocephalus yellow-headed blackbird	**Fed:** None **CA:** SSC	Summers in the west-central United States and Canada and winters throughout the western United States. Nests primarily in large wetlands, but also in mountain meadows and along pond and river edges. Breeds in freshwater sloughs, marshy lake borders, and tall cattails.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
PLANT SPECIES					

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Abronia villosa var. aurita chaparral sand-verbena	**Fed:** None **CA:** None **CNPS:** 1B.1	Found on the coastal side of the southern California mountains in chaparral, coastal sage scrub, and desert dune plant communities in areas of full sun and sandy soils. Found at elevations ranging from 262 to 5,249 feet. Blooming period is from January to September.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Allium marvinii Yucaipa onion	**Fed:** None **CA:** None **CNPS:** 1B.2	Found in chaparral, cismontane woodland, coastal scrub, pinyon and juniper woodland, valley and foothill grassland. Found at elevations ranging from 974 to 3,510 feet. Blooming period is from March to May.	Yes (b)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Astragalus pachypus var. jaegeri Jaegers milk-vetch	**Fed:** None **CA:** None **CNPS:** 1B.1	Found in only a few places in Riverside County and within the Cleveland and San Bernadino National Forests. Grows in rocky (sometimes), sandy (sometimes) areas within chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland habitats. Found at elevations ranging from 1,200 to 3,200 feet. Blooming period is from December to June.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Calochortus plummerae Plummers mariposa-lily	**Fed:** None **CA:** None **CNPS:** 4.2	Found along the coast and inland hills in chaparral, coastal sage scrub, yellow pine forest, foothill woodland, and valley grassland plant communities. Prefers dry, rocky soils. Grows at elevations of up to 5,580 feet. Blooms from May to July.	Yes (e)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Caulanthus simulans Paysons jewelflower	**Fed:** None **CA:** None **CNPS:** 4.2	Occurs in pinyon-juniper woodland, chaparral, and coastal sage scrub, typically on north-facing slopes and ridgelines on sandy-granitic soils. Grows in elevations ranging from 295 to 7,220 feet above msl. Blooming period is from March to May.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Centromadia pungens ssp. laevis smooth tarplant	**Fed:** None **CA:** None **CNPS:** 1B.1	Occurs in alkaline soils within chenopod scrub, meadows and seeps, playas, riparian woodland, and valley and foothill grassland habitats. Grows in elevation ranging from 0 to 2,100 feet. Blooming period ranges from April to September.	Yes (d)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Chorizanthe leptotheca Peninsular spineflower	**Fed:** None **CA:** None **CNPS:** 4.2	Endemic to southern California, primarily in the Peninsular Ranges including parts of San Bernardino, Riverside, and San Diego counties. Found in chaparral, cismontane woodland, and coastal scrub habitats, typically on granitic or sandy soils. Elevation range is approximately 1,000 to 6,200 feet. Blooms from May to August.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Chorizanthe parryi var. parryi Parrys spineflower	**Fed:** None **CA:** None **CNPS:** 1B.1	Openings within alluvial washes and margins on sandy (sometimes), rocky (sometimes) soils within chaparral, cismontane woodland, coastal scrub, and valley and foothill grasslands. Found at elevations ranging from 951 to 3,773 feet. Blooming period is from April to June.	Yes (e)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Deinandra mohavensis Mojave tarplant	**Fed:** None **CA: END** **CNPS:** 1B.3	Found in the southernmost areas of the Sierra Nevada Mountains, the Mojave Desert, the Peninsular Ranges, and the San Bernadino Mountains. Grows in mesic areas in chaparral, coastal scrub, and riparian scrub habitats. Found at elevations ranging from 2,100 to 5,250 feet. Blooms from June to October.	Yes (e)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Imperata brevifolia California satintail	**Fed:** None **CA:** None **CNPS:** 2B.1	Grows in mesic soils within coastal scrub, Mojavean desert scrub, meadows and seeps (often alkali), and riparian scrub habitats. found at elevations ranging from 0 to 3,986 feet. Blooming period is from September to May.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Pseudognaphalium leucocephalum white rabbit-tobacco	**Fed:** None **CA:** None **CNPS:** 2B.2	Grows in sandy, gravelly soils within chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats. Found at elevations ranging from 0 to 6,890 feet. Blooming period is from July to December.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Quercus engelmannii Engelmann oak	**Fed:** None **CA:** None **CNPS:** 4.2	Occurs in chaparral, cismontane woodland, riparian woodland, and valley and foothill grassland. Found at elevations ranging from 164 to 4,265 feet. Blooming period is from March to June.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
CDFW SENSITIVE HABITATS					
Desert Fan Palm Oasis Woodland	CDFW Sensitive Habitat	Occurs in riparian woodland.	No	No	**Absent**
Southern Coast Live Oak Riparian Forest	CDFW Sensitive Habitat	Open-to-dense canopy woodland dominated by coast live oak (Quercus agrifolia), as well as western sycamore (Platanus racemosa) and willow (Salix spp.). This habitat is found in flood-prone areas near waterways like rivers and creeks. Understory is comprised of moisture-loving plants.	No	No	**Absent**

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Southern Cottonwood Willow Riparian Forest	CDFW Sensitive Habitat	Dominated by winter-deciduous trees, specifically Fremont cottonwood (Populus fremontii) and several species of willow (Salix sp.). These forests are characterized by a tall, multi-layered canopy and often have a dense understory of shrubs and herbaceous plants. They are found along rivers, streams, and other bodies of water, typically in areas with moist, bare mineral soil.	No	No	**Absent**
Southern Mixed Riparian Forest	CDFW Sensitive Habitat	Typically a younger successional stage of riparian forest, due to disturbance or more frequent flooding. Plant species include willow (Salix sp.) species, elderberry (Sambucus sp.), oak species, sycamore (Platanus racemosa), cottonwood (Populus sp.), and smaller shrubs.	No	No	**Absent**

U.S. Fish and Wildlife Service (Fed) - Federal
END- Federal Endangered
THR- Federal Threatened

California Department of Fish and Wildlife (CA) - California
END- California Endangered
THR- California Threatened
Candidate- Candidate for listing under the California Endangered Species Act
FP- California Fully Protected
SSC- Species of Special Concern
WL- Watch List

California Native Plant Society (CNPS)
California Rare Plant Rank
1B Plants Rare, Threatened, or Endangered in California and Elsewhere
2B Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
3 Plants About Which More Information is Needed – A Review List
4 Plants of Limited Distribution – A Watch List

CNPS Threat Ranks
0.1- Seriously threatened in California
0.2- Moderately threatened in California
0.3- Not very threatened in California

Western Riverside County MSHCP
Yes- Fully covered
No- Not covered
Yes (a)- May require surveys under MSHCP Section 6.1.2
Yes (b)- May require surveys under MSHCP Section 6.1.3
Yes (c)- May require surveys under MSHCP Section 6.3.2
Yes (d)- May require surveys under MSHCP Section 6.3.2
Yes (e)- Conditionally covered pending the achievement of species-specific conservation measures

Attachment D

Regulations

Special status species are native species that have been afforded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and state levels, depending on the magnitude of threat to continued existence and existing knowledge of population levels.

Federal Regulations

Endangered Species Act of 1973

Federally listed threatened and endangered species and their habitats are protected under provisions of the Federal Endangered Species Act (ESA). Section 9 of the ESA prohibits "take" of threatened or endangered species. "Take" under the ESA is defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct." The presence of any federally threatened or endangered species that are in a project area generally imposes severe constraints on development, particularly if development would result in "take" of the species or its habitat. Under the regulations of the ESA, the United States Fish and Wildlife Service (USFWS) may authorize "take" when it is incidental to, but not the purpose of, an otherwise lawful act.

Critical Habitat is designated for the survival and recovery of species listed as threatened or endangered under the ESA. Critical Habitat includes those areas occupied by the species, in which are found physical and biological features that are essential to the conservation of an ESA listed species and which may require special management considerations or protection. Critical Habitat may also include unoccupied habitat if it is determined that the unoccupied habitat is essential for the conservation of the species.

Whenever federal agencies authorize, fund, or carry out actions that may adversely modify or destroy Critical Habitat, they must consult with USFWS under Section 7 of the ESA. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highway Administration or a permit from the U.S. Army Corps of Engineers (Corps)).

If USFWS determines that Critical Habitat will be adversely modified or destroyed from a proposed action, the USFWS will develop reasonable and prudent alternatives in cooperation with the federal institution to ensure the purpose of the proposed action can be achieved without loss of Critical Habitat. If the action is not likely to adversely modify or destroy Critical Habitat, USFWS will include a statement in its biological opinion concerning any incidental take that may be authorized and specify terms and conditions to ensure the agency is in compliance with the opinion.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S. Government Code [USC] 703) makes it unlawful to pursue, capture, kill, possess, or attempt to do the same to any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States, Great Britain, Mexico, Japan, and the countries of the former Soviet Union, and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703; 50 CFR 10, 21).

The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. Disturbances causing nest abandonment and/or loss of reproductive effort (i.e., killing or abandonment of eggs or young) may also be considered "take." This regulation seeks to protect migratory birds and active nests.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment: Accipitridae (kites, hawks, and eagles); Cathartidae (New World vultures); Falconidae (falcons and caracaras); Pandionidae (ospreys); Strigidae (typical owls); and Tytonidae (barn owls). The provisions of the 1972 amendment to the MBTA protects all species and subspecies of the families listed above. The MBTA protects over 800 species including geese, ducks, shorebirds, raptors, songbirds and many relatively common species.

State Regulations

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) provides for the protection of the environment within the State of California by establishing State policy to prevent significant, avoidable damage to the environment through the use of alternatives or mitigation measures for projects. It applies to actions directly undertaken, financed, or permitted by State lead agencies. If a project is determined to be subject to CEQA, the lead agency will be required to conduct an Initial Study (IS); if the IS determines that the project may have significant impacts on the environment, the lead agency will subsequently be required to write an Environmental Impact Report (EIR). A finding of non-significant effects will require either a Negative Declaration or a Mitigated Negative Declaration instead of an EIR. Section 15380 of the CEQA Guidelines independently defines "endangered" and "rare" species separately from the definitions of the California Endangered Species Act (CESA). Under CEQA, "endangered" species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while "rare" species are defined as those who are in such low numbers that they could become endangered if their environment worsens.

California Endangered Species Act (CESA)

In addition to federal laws, the state of California implements the CESA which is enforced by CDFW. The CESA program maintains a separate listing of species beyond the FESA, although the provisions of each act are similar.

State-listed threatened and endangered species are protected under provisions of the CESA. Activities that may result in "take" of individuals (defined in CESA as; "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") are regulated by CDFW. Habitat degradation or modification is not included in the definition of "take" under CESA. Nonetheless, CDFW has interpreted "take" to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the

absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

The CDFW has also produced a species of special concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection. At the federal level, USFWS also uses the label species of concern, as an informal term that refers to species which might be in need of concentrated conservation actions. As the Species of Concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species will be proposed for listing as a threatened or endangered species.

Fish and Game Code

Fish and Game Code Sections 3503, 3503.5, 3511, and 3513 are applicable to natural resource management. For example, Section 3503 of the Code makes it unlawful to destroy any birds' nest or any birds' eggs that are protected under the MBTA. Further, any birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks, eagles, and owls) are protected under Section 3503.5 of the Fish and Game Code which makes it unlawful to take, possess, or destroy their nest or eggs. A consultation with CDFW may be required prior to the removal of any bird of prey nest that may occur on a project site. Section 3511 of the Fish and Game Code lists fully protected bird species, where the CDFW is unable to authorize the issuance of permits or licenses to take these species. Pertinent species that are State fully protected by the State include golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*). Section 3513 of the Fish and Game Code makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Native Plant Protection Act

Sections 1900–1913 of the Fish and Game Code were developed to preserve, protect, and enhance Rare and Endangered plants in the state of California. The act requires all state agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use which would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

California Native Plant Society Rare and Endangered Plant Species

Vascular plants listed as rare or endangered by the CNPS, but which have no designated status under FESA or CESA are defined as follows:

California Rare Plant Rank

1A- Plants Presumed Extirpated in California and either Rare or Extinct Elsewhere

1B- Plants Rare, Threatened, or Endangered in California and Elsewhere

2A- Plants Presumed Extirpated in California, But More Common Elsewhere

2B- Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

3- Plants about Which More Information is Needed - A Review List

4- Plants of Limited Distribution - A Watch List

Threat Ranks

.1- Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2- Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

.3- Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

Local Policies

Western Riverside County MSHCP

The MSHCP is a comprehensive, multi-jurisdictional HCP focusing on conservation of species and their associated habitats in western Riverside County. The goal of the MSHCP is to maintain biological and ecological diversity within a rapidly urbanizing region.

The approval of the MSHCP and execution of the Implementing Agreement (IA) by the wildlife agencies allows signatories of the IA to issue "take" authorizations for all species covered by the MSHCP, including state- and federal-listed species as well as other identified sensitive species and/or their habitats. Each city or local jurisdiction will impose a Development Mitigation Fee for projects within their jurisdiction. With payment of the mitigation fee to the County and compliance with the survey requirements of the MSHCP where required, full mitigation in compliance with the California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), CESA, and FESA will be granted. The Development Mitigation Fee varies according to project size and project description. The fee for industrial development is $7,382 per acre (County Ordinance 810.2). Payment of the mitigation fee and compliance with the requirements of Section 6.0 of the MSHCP are intended to provide full mitigation under CEQA, NEPA, CESA, and FESA for impacts to the species and habitats covered by the MSHCP pursuant to agreements with the USFWS, the CDFW, and/or any other appropriate participating regulatory agencies and as set forth in the IA for the MSHCP.

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates activities pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFG regulates activities under the Fish and Game Code Section 1600-1616, and the Regional Board regulates activities pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

Federal Regulations

Section 404 of the Clean Water Act

In accordance with the Revised Definition of "Waters of the United States"; Conforming (September 8, 2023), "waters of the United Sates" are defined as follows:

(a) ***Waters of the United States*** means:

(1) Waters which are:
(i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
(ii) The territorial seas; or
(iii) Interstate waters;

(2) Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;

(3) Tributaries of waters identified in paragraph (a)(1) or (2) of this section that are relatively permanent, standing or continuously flowing bodies of water;

(4) Wetlands adjacent to the following waters:
(i) Waters identified in paragraph (a)(1) of this section; or
(ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3) of this section and with a continuous surface connection to those waters;

(5) Intrastate lakes and ponds not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section

(b) The following are not "waters of the United States" even where they otherwise meet the terms of paragraphs (a)(2) through (5) of this section:

(1) Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act;

(2) Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted

cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA;

(3) Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;

(4) Artificially irrigated areas that would revert to dry land if the irrigation ceased;
(5) Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;
(6) Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;

(7) Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and

(8) Swales and erosional features (*e.g.,* gullies, small washes) characterized by low volume, infrequent, or short duration flow.

(c) In this section, the following definitions apply:

(1) ***Wetlands*** means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

(2) ***Adjacent*** means having a continuous surface connection

(3) ***High tide line*** means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

(4) ***Ordinary high water mark*** means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

(5) ***Tidal waters*** means those waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by hydrologic, wind, or other effects.

Section 401 of the Clean Water Act

Pursuant to Section 401 of the CWA, any applicant for a federal license or permit to conduct any activity which may result in any discharge to waters of the United States must provide certification from the State or Indian tribe in which the discharge originates. This certification provides for the protection of the physical, chemical, and biological integrity of waters, addresses impacts to water quality that may result from issuance of federal permits, and helps insure that federal actions will not violate water quality standards of the State or Indian tribe. In California, there are nine Regional Water Quality Control Boards (Regional Board) that issue or deny certification for discharges to waters of the United States and waters of the State, including wetlands, within their geographical jurisdiction. The State Water Resources Control Board assumed this responsibility when a project has the potential to result in the discharge to waters within multiple Regional Boards.

State Regulations

Fish and Game Code

Fish and Game Code Sections 1600 et. seq. establishes a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources, or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

Fish and Game Code Section 1602 requires any person, state, or local governmental agency or public utility to notify the CDFW before beginning any activity that will do one or more of the following:

(1) substantially obstruct or divert the natural flow of a river, stream, or lake;
(2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or
(3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. CDFW's regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top of bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. A Section 1602 Streambed Alteration Agreement would be required if impacts to identified CDFW jurisdictional areas occur.

Porter Cologne Act

The California *Porter-Cologne Water Quality Control Act* gives the State very broad authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. The Porter-Cologne Act has become an important tool in the post SWANCC and Rapanos regulatory environment, with respect to the state's authority over isolated and insignificant waters. Generally, any person proposing to discharge waste into a water body that could affect its water quality must file a Report of Waste Discharge in the event that there is no Section 404/401 nexus. Although "waste" is partially defined as any waste substance associated with human habitation, the Regional Board also interprets this to include fill discharged into water bodies.

Attachment E

Site Plan

SITE INFORMATION:

APN(S):	435-330-003
PARCEL GROSS AREA:	±164,000 S.F. (3.765 ACRES)
PARCEL NET AREA:	±127,846 S.F. (2.935 ACRES)
ZONING:	INDUSTRIAL LIGHT (IL)
SITE ADDRESS:	980 W. 7TH STREET SAN JACINTO, CA 92582
FAR:	±34,518 S.F. = 27% (MAX FAR - 50%)
LANDSCAPED AREA:	±30,683 S.F. = 24%
IMPERVIOUS SURFACE AREA:	±97,163 S.F. = 76% (MAX AREA - 80%)

EXISTING BUILDING A - SNF DATA:

EXISTING USE:	SKILLED NURSING FACILITY
OCCUPANCY:	I-2 (W/ CONTROLLED EGRESS)
CONSTRUCTION TYPE:	V-A
FIRE SPRINKLERED:	YES
STORIES:	1
AREA:	±12,132 S.F.
EXISTING LICENSED BEDS:	44 BEDS

PROPOSED BUILDING A1 (ADDITION) - 43-BED SNF-STP DATA:

PROPOSED USE:	SKILLED NURSING FACILITY
OCCUPANCY:	I-2 (W/ CONTROLLED EGRESS)
CONSTRUCTION TYPE:	V-A
FIRE SPRINKLERED:	YES
STORIES:	1
AREA:	±17,372 S.F.
PROPOSED LICENSED BEDS:	43 BEDS (TOTAL OF 87 BEDS)

EXISTING OFFICE BUILDING B DATA:

EXISTING USE:	AUXILLARY TO SKILLED NURSING FACILITY
OCCUPANCY:	B
CONSTRUCTION TYPE:	V-B
FIRE SPRINKLERED:	NO
STORIES:	1
AREA:	±2,609 S.F.

PROPOSED BUILDING C - 16-BED PHF DATA :

EXISTING USE:	MEDICAL OFFICE
PROPOSED USE:	PSYCHIATRIC HEALTH FACILITY (PHF)
OCCUPANCY:	I-2 (W/ CONTROLLED EGRESS)
CONSTRUCTION TYPE:	V-A
FIRE SPRINKLERED:	YES
STORIES:	1
TOTAL AREA:	±2,596 S.F.
PROPOSED LICENSED BEDS:	16 BEDS

PARKING TABULATION:

REQUIRED PARKING FOR "CONGREGATE CARE FACILITY (15 OR MORE)":

1 SPACE FOR EACH ON DUTY EMPLOYEE AND 1 SPACE FOR EACH 10 BEDS

REQUIRED PARKING:

PROPOSED 87-BED SNF - (87/10)	9
PROPOSED 16-BED PHF - (16/10)	2
PROPOSED TOTAL STAFF (1 PER STAFF)	41
TOTAL PARKING REQUIRED:	**52**

PROPOSED PARKING:

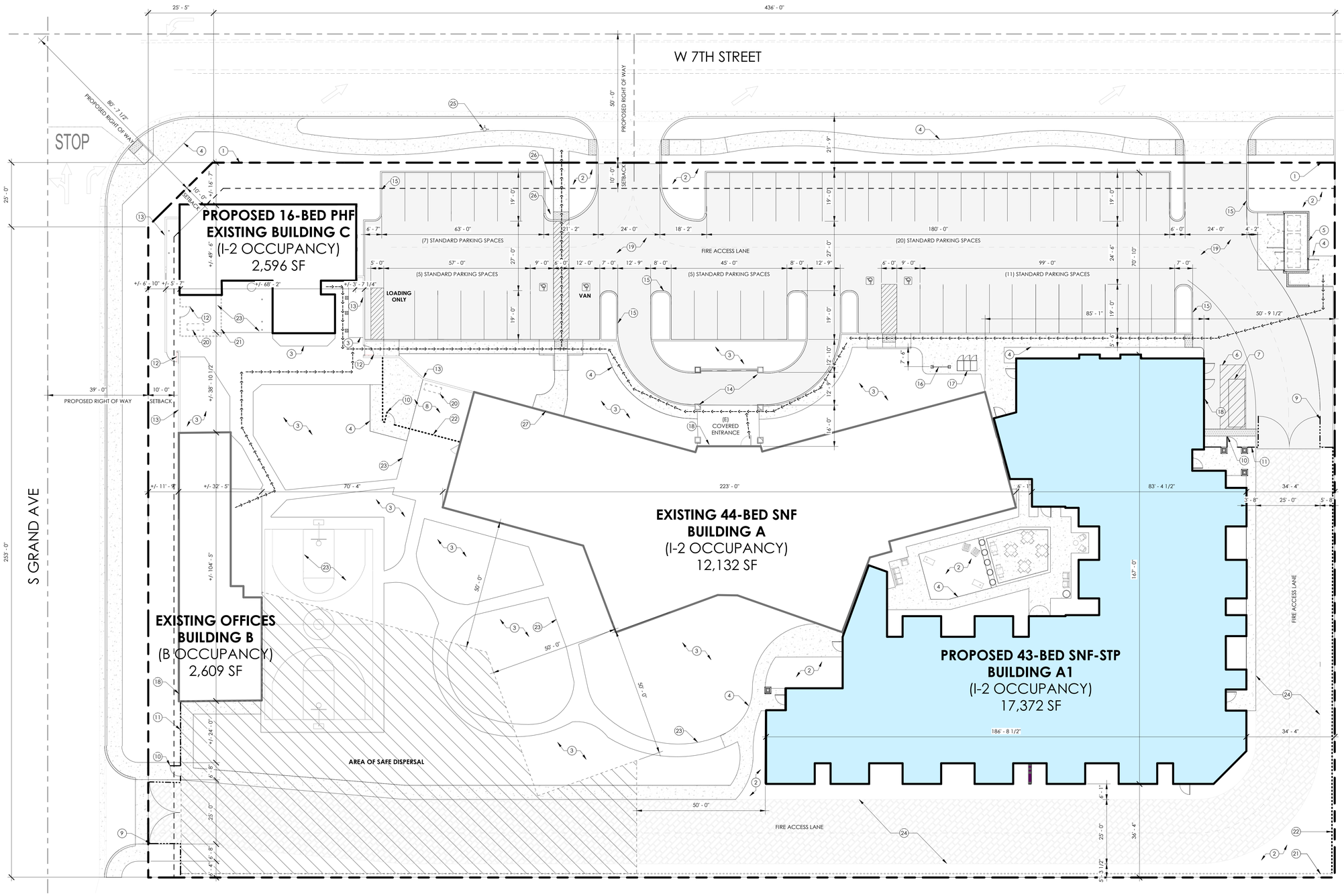
PROPOSED STANDARD SPACES	48
PROPOSED HANDICAP SPACES	4
TOTAL PARKING PROPOSED	**52**

REQUIRED BICYCLE PARKING:

5% OF REQUIRED MOTOR VEHICLE SPACES

PROPOSED BICYCLE PARKING:

PROPOSED SHORT-TERM SPACES	3
PROPOSED LONG-TERM SPACES	3
TOTAL BICYCLE SPACES	**6**



PROJECT DESCRIPTION

PROJECT #: PROJ25-0178

1. NEW FREESTANDING SKILLED NURSING FACILITY BUILDING ADDITION WITH 43 BEDS - 23 ROOMS WHEREIN MENTAL HEALTH PATIENTS ARE RESTRAINED AND DESIGNED WITH CONTROLLED EGRESS AT BUILDING EXITS AND DELAYED EGRESS AT EXTERIOR GATES.
2. INTERIOR REMODEL TO EXISTING SKILLED NURSING FACILITY
3. INTERIOR REMODEL TO EXISTING BUILDING FOR NEW 16-BED PSYCHIATRIC HEALTH FACILITY

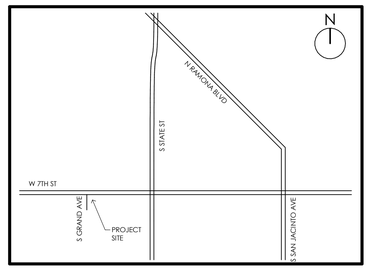
LEGEND

→→→→→→→→→→ ACCESSIBLE PATH OF TRAVEL

KEYNOTES

1	PROPERTY LINE
2	LANDSCAPING
3	EXISTING LANDSCAPING TO REMAIN
4	CONCRETE WALKWAY, TYP.
5	TRASH ENCLOSURE PER 17.305.130 WITH ADJACENT CAN WASH AREA
6	10' X 25' LOADING SPACE
7	GREASE INTERCEPTOR
8	ELECTRICAL SERVICE YARD
9	12'-0" W, X 7'-0" H. MANUAL VEHICULAR GATES WITH HEAVY DUTY HINGES, FOR FIRE LANE ACCESS ONLY
10	4'-0" W, GATE TO MATCH EXISTING GATES, WITH PANIC HARDWARE AND CONTROLLED EGRESS
11	EXISTING 7'-0" H. VINYL FENCE WITH STEEL FRAMES AT VEHICULAR GATES
12	EXISTING 4'-0" W. GATE TO REMAIN
13	EXISTING 7'-0" H. CMU WALL TO REMAIN
14	EXISTING PORTE COCHERE WITH 5'-0" X 20'-0" MINIMUM PASSENGER DROP OFF AND LOADING ZONE
15	6" CONCRETE CURB
16	3 SPACE BICYCLE RACK PARKING
17	3 BAY BICYCLE LOCKERS
18	KNOX BOX
19	ASPHALT CONCRETE PAVING
20	EMERGENCY GENERATOR ON 8" CONCRETE PAD
21	EXISTING 7'-0" H. CHAINLINK FENCE WITH VINYL SLATS TO REMAIN
22	7'-0" H. CHAINLINK FENCE
23	EXISTING CONCRETE FLATWORK TO REMAIN
24	PERVIOUS SURFACE FIRE ACCESS LANE TO BE DESIGNED AND CONSTRUCTED TO MEET OFM-01A REQUIREMENTS
25	FIRE HYDRANT
26	FIRE P.I.V. AND DCDA (BACKFLOW PREVENTOR)
27	EXISTING RISER

VICINITY MAP



REVISION RECORD

ISSUED: 04/06/2026

NO.	DATE	DESCRIPTION
1	06/**24**/2026	REVISION 1

PROPOSED SITE PLAN

THE BRADLEY GARDENS - BED EXPANSION (43-BED SNF AND 16-BED PHF)

SCALE: 1/16"=1'-0"

980 WEST 7TH STREET
GENERATIONS HEALTHCARE
6 HUTTON CENTRE DR #400
SANTA ANA, CA, 92707
P: (714) 241 - 5600

ARCHITECTURE + INTERIORS + PLANNING
321 NORTH RAMPART STREET, SUITE 101
ORANGE, CA 92868 . P: 714.937.1985
PROJECT#: 24060 . JUNE **24**, 2026

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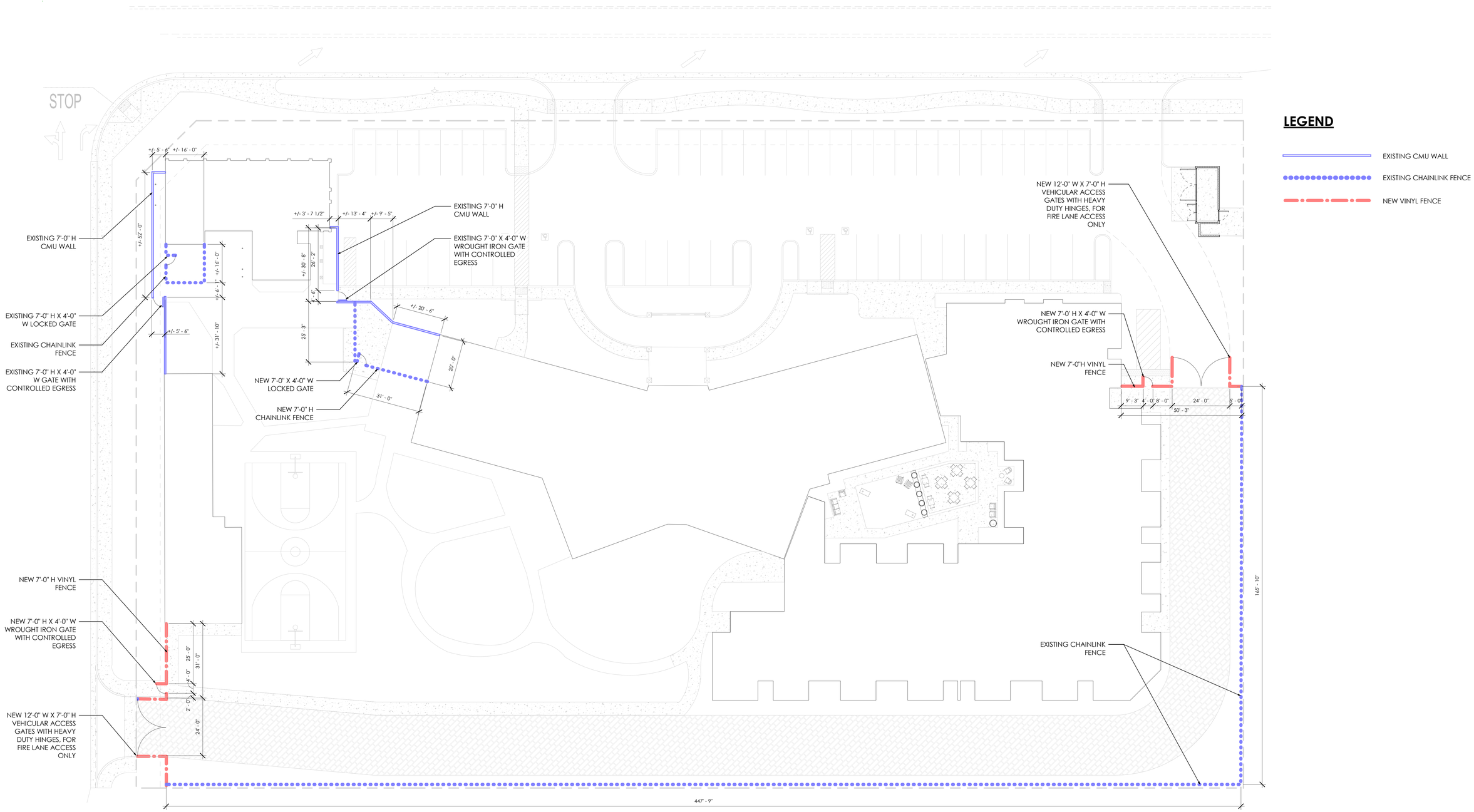

LEGEND

- EXISTING CMU WALL
- EXISTING CHAINLINK FENCE
- NEW VINYL FENCE

FENCE AND WALL SITE PLAN

THE BRADLEY GARDENS - BED EXPANSION (43-BED SNF & 16-BED PHF)

0 8' 16' 32' 64'

SCALE: 1/16"=1'-0"

NORTH

980 WEST 7TH STREET

GENERATIONS HEALTHCARE

6 HUTTON CENTRE DR #400
SANTA ANA, CA, 92707
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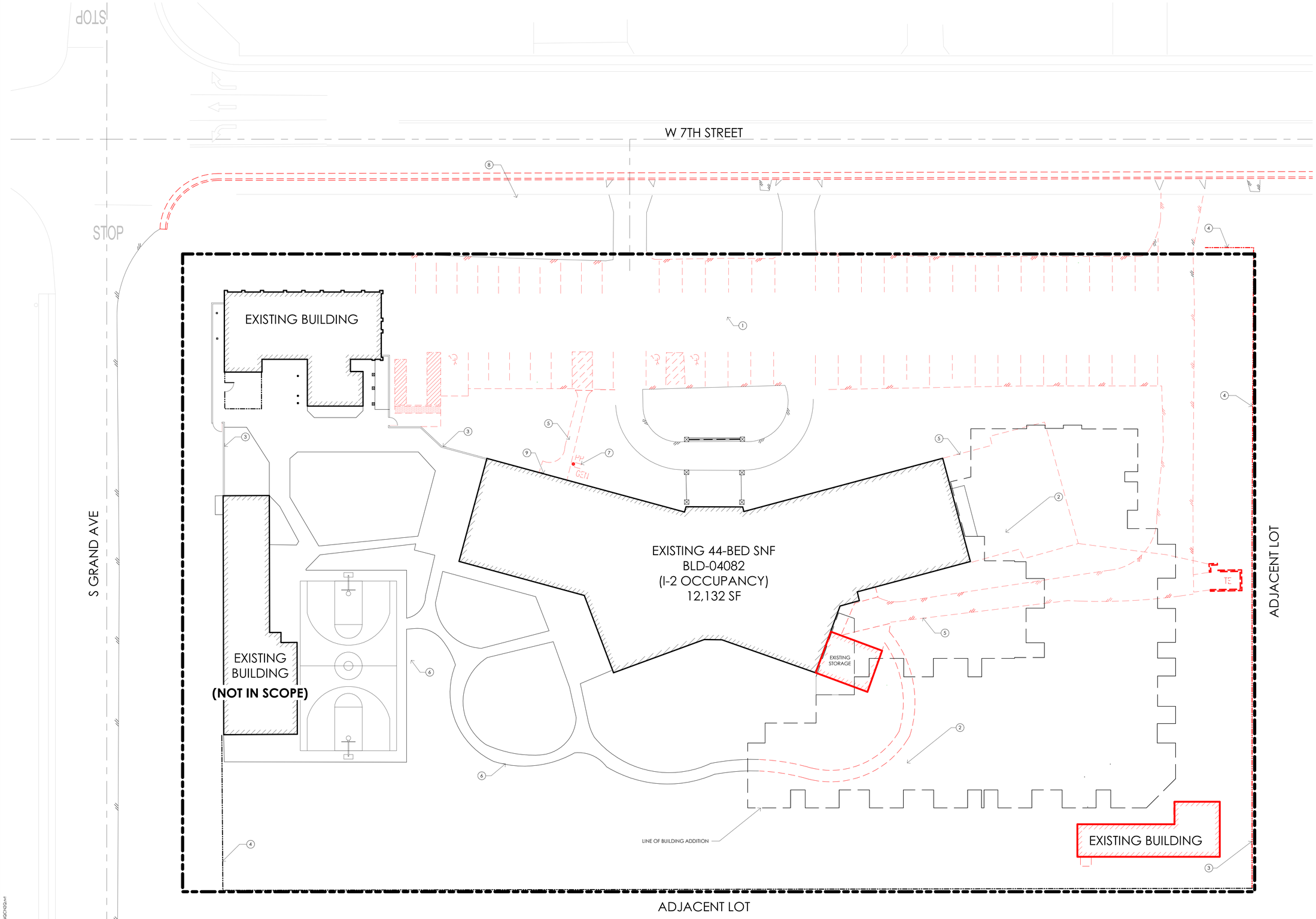

KEYNOTES

1. EXISTING PARKING LOT TO BE RE-PAVED & RE-STRIPED
2. EXISTING LANDSCAPING & HARDSCAPING TO BE REMOVED FOR FUTURE BUILDING PAD
3. EXISTING FENCE TO REMAIN
4. EXISTING CHANLINK FENCE AND GATE TO BE DEMOLISHED
5. EXISTING CONCRETE TO BE DEMOLISHED
6. EXISTING CONCRETE TO REMAIN
7. EXISTING TEMPORARY GENERATOR TO BE REMOVED
8. EXISTING FIRE HYDRANT TO BE REMOVED
9. EXISTING FIRE F.D.C. TO BE REMOVED

LEGEND

- AREAS TO BE DEMOLISHED
- STRUCTURE TO BE DEMOLISHED

EXISTING SITE PLAN

THE BRADLEY GARDENS - BED EXPANSION (43-BED SNF & 16-BED PHF)

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SCALE: 1/16"=1'-0"

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PROJECT#: 24060 . JUNE **24**, 2026

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OVERALL SNF FLOOR PLAN

0' 8' 24' 48'

SCALE: 3/32" = 1'-0"

NORTH

THE BRADLEY GARDENS - BED EXPANSION (43-BED SNF & 16-BED PHF)

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PROPOSED ENLARGED PARTIAL SNF FLOOR PLAN

0 4' 8' 16' 32'
SCALE: 1/8"=1'-0"

NORTH

THE BRADLEY GARDENS - BED EXPANSION (43-BED SNF & 16-BED PHF)

980 WEST 7TH STREET

GENERATIONS HEALTHCARE
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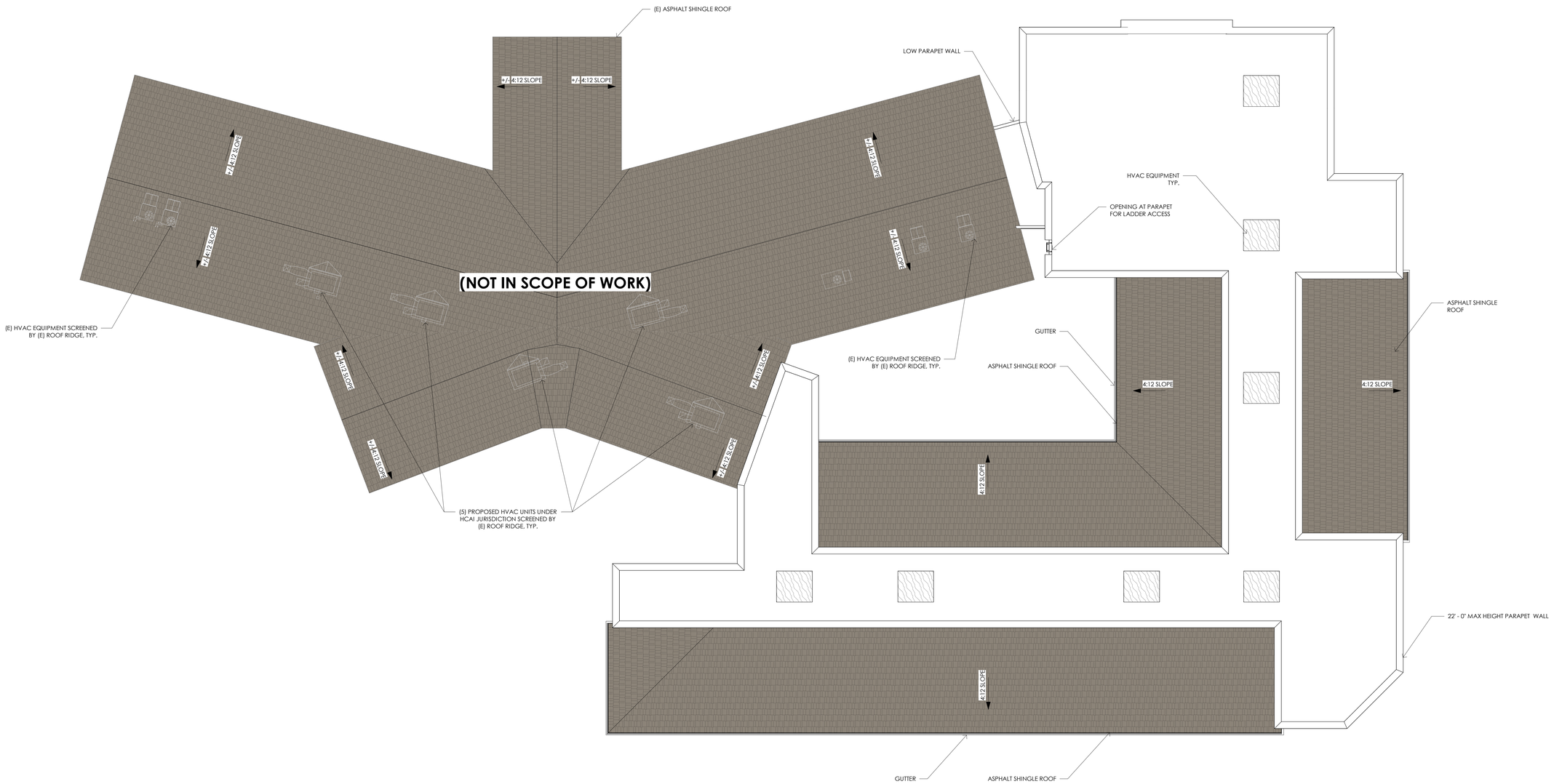

PROPOSED SNF ROOF PLAN

0' 8' 24' 48'

SCALE: 3/32" = 1'-0"

NORTH

THE BRADLEY GARDENS - BED EXPANSION (43-BED SNF & 16-BED PHF)

980 WEST 7TH STREET

GENERATIONS HEALTHCARE

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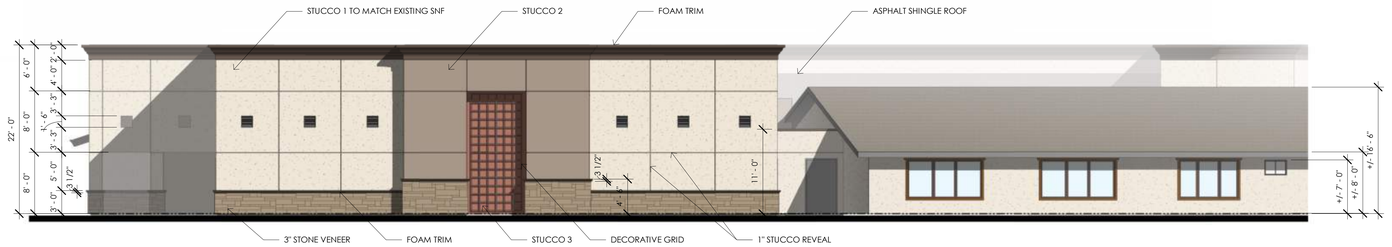


SNF EXTERIOR ELEVATION - NORTH

0 4' 8' 16' 32'

SCALE: 1/8"=1'-0"



SNF EXTERIOR ELEVATION - EAST

0 4' 8' 16' 32'

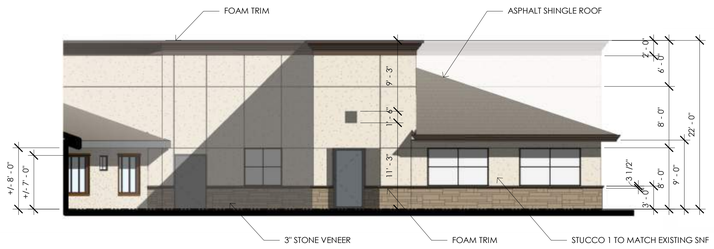
SCALE: 1/8"=1'-0"



SNF EXTERIOR ELEVATION - SOUTH

0 4' 8' 16' 32'

SCALE: 1/8"=1'-0"



SNF EXTERIOR ELEVATION - WEST

0 4' 8' 16' 32'

SCALE: 1/8"=1'-0"

THE BRADLEY GARDENS - BED EXPANSION (43-BED SNF & 16-BED PHF)

980 WEST 7TH STREET

GENERATIONS HEALTHCARE

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NORTH EAST SNF PERSPECTIVE VIEW

THE BRADLEY GARDENS - BED EXPANSION (43-BED SNF & 16-BED PHF)

980 WEST 7TH STREET

GENERATIONS HEALTHCARE

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NORTH SNF PERSPECTIVE VIEW

THE BRADLEY GARDENS - BED EXPANSION (43-BED SNF & 16-BED PHF)

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ASPHALT SHINGLE



STONE VENEER PANEL



ALUMINUM GRID

STUCCO
PRIMARY



STUCCO
SECONDARY



STUCCO
ACCENT 1



STUCCO
ACCENT 2

PROPOSED SNF MATERIAL BOARD

THE BRADLEY GARDENS - BED EXPANSION (43-BED SNF & 16-BED PHF)

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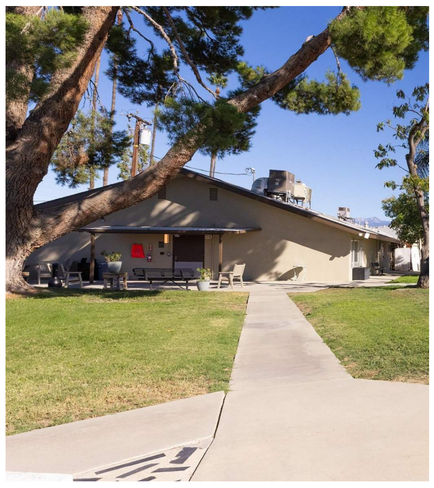





THE BRADLEY GARDENS - BED EXPANSION (43-BED SNF & 16-BED PHF)

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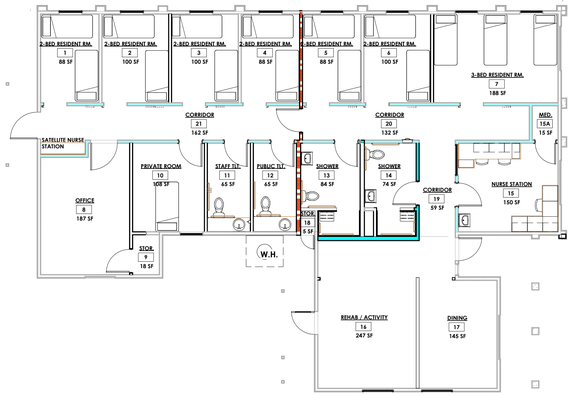
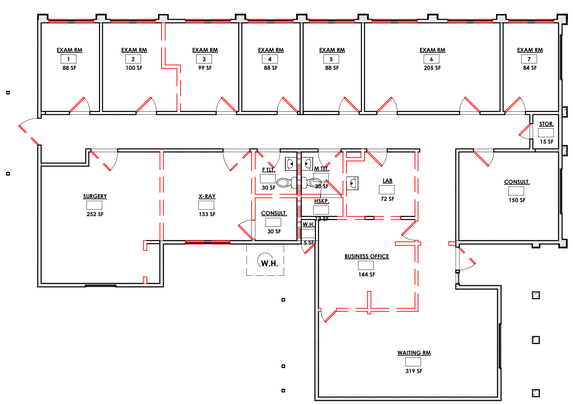


PROPOSED PHF OVERALL FLOOR PLAN

NORTH

0 4' 8' 16' 32'

SCALE: 1/8"=1'-0"



EXISTING PHF OVERALL FLOOR PLAN

NORTH

0 4' 8' 16' 32'

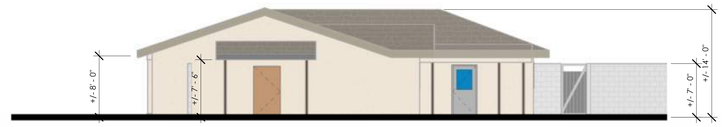
SCALE: 1/8"=1'-0"



PROPOSED PHF - NORTH ELEVATION

0 4' 8' 16' 32'

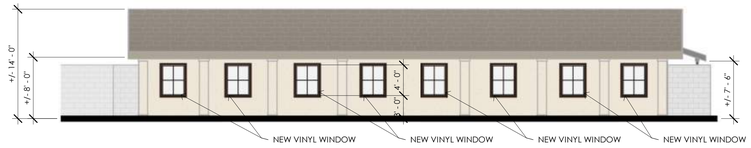
SCALE: 1/8"=1'-0"



PROPOSED PHF - EAST ELEVATION

0 4' 8' 16' 32'

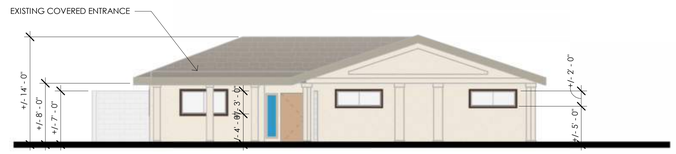
SCALE: 1/8"=1'-0"



PROPOSED PHF - SOUTH ELEVATION

0 4' 8' 16' 32'

SCALE: 1/8"=1'-0"



PROPOSED PHF - WEST ELEVATION

0 4' 8' 16' 32'

SCALE: 1/8"=1'-0"

THE BRADLEY GARDENS - BED EXPANSION (43-BED SNF & 16-BED PHF)

980 WEST 7TH STREET

GENERATIONS HEALTHCARE
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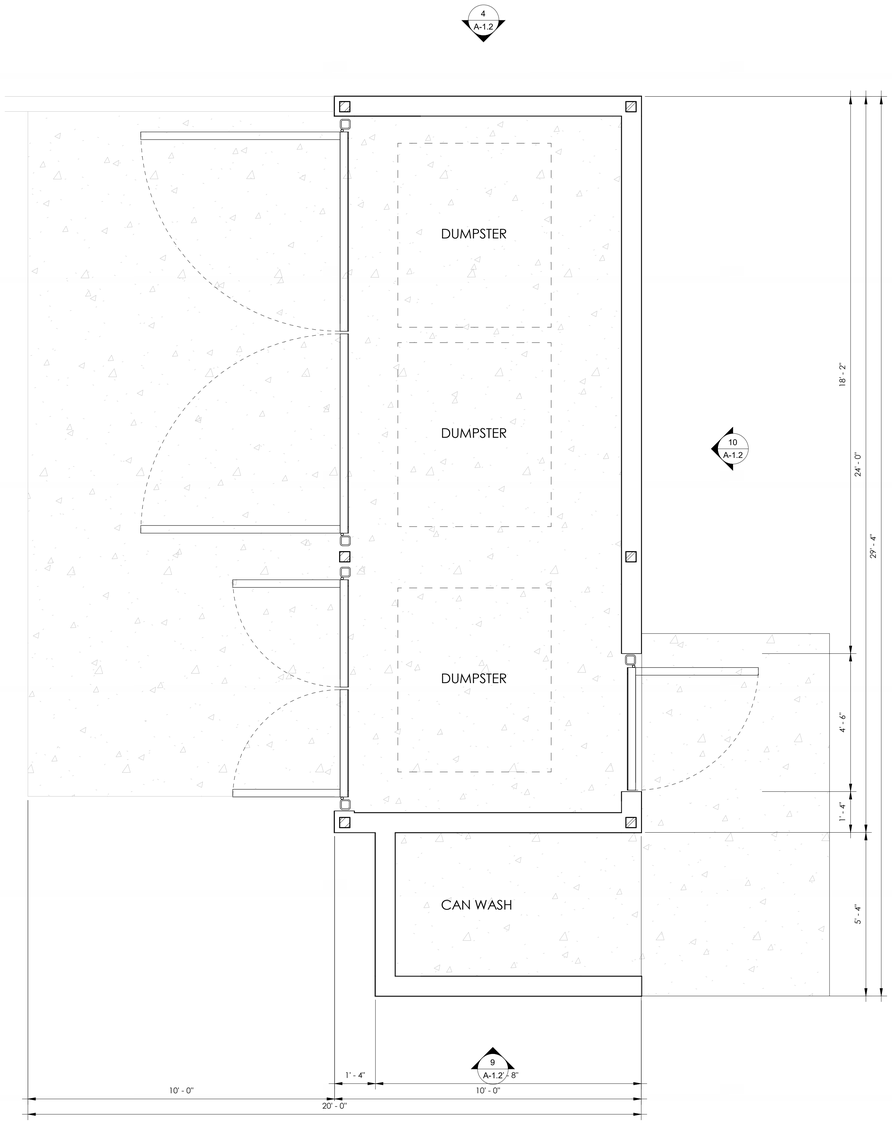
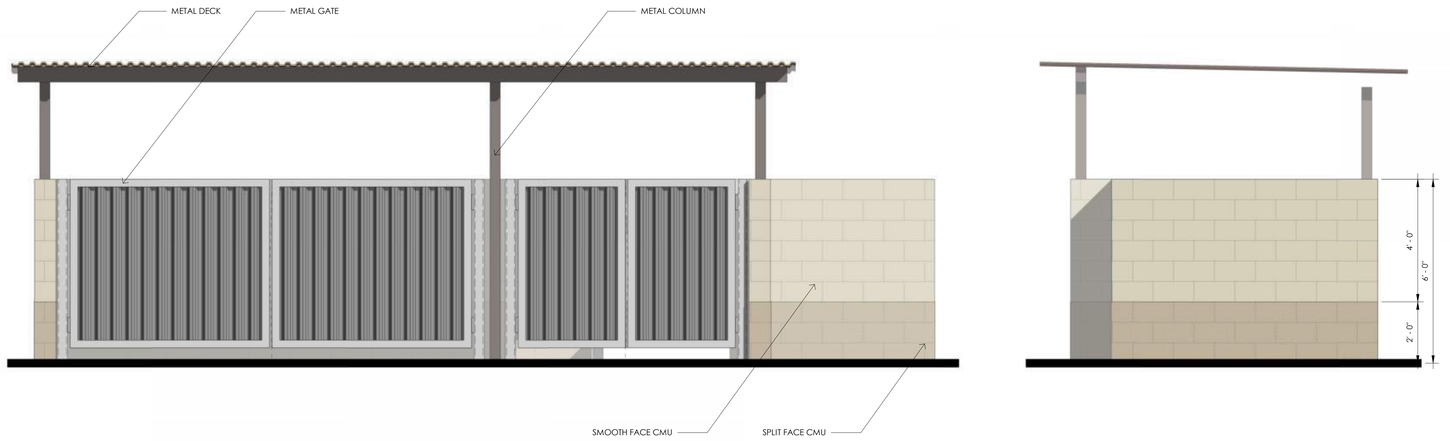


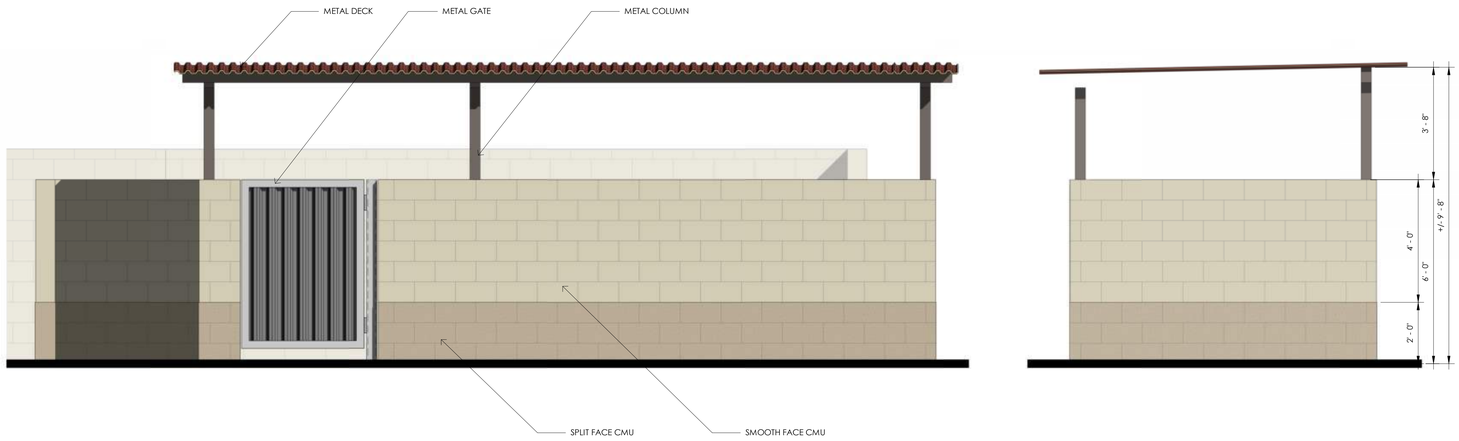
PROPOSED TRASH ENCLOSURE - PLAN

NORTH

0 1' 2' 4' 8'

SCALE: 1/2"=1'-0"





PROPOSED TRASH ENCLOSURE - ELEVATIONS

0 1' 2' 4' 8'

SCALE: 1/2"=1'-0"

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Attachment F

Resumes

Travis J. McGill

Biologist/Regulatory Specialist

Years of Experience: 18

Education

B.S., 2006, Biology, University of California at San Diego

Certifications

Certificate, 2012, Field Ornithology, University of California at Riverside, University Extension

Certificate, 2012, Wetland Delineation, Wetland Training Institute

Certificate, 2014, Certified California Rapid Assessment Method (CRAM) Practitioner, Riverine and Depressional Wetlands

Certificate, 2014, GIS and Spatial Analyst, California State University at Fullerton

Certificate Botany, 2015, University of California at Riverside, University Extension

Additional Training

Southwestern Willow Flycatcher Survey Training Workshop, Southern Sierra Research Station, 2014

Learning California Bird Sounds, Sea and Sage Audubon Society – Sylvia Gallagher, 2012

Introduction to Desert Tortoise Surveying, Monitoring, and Handling Techniques Workshop, Desert Tortoise Council, 2011

Skills and Specialties

General and Focused Habitat Assessments
Focused Sensitive Plant and Wildlife Surveys
Avian Surveys and Monitoring
Wetland and Stream Delineations
Regulatory Permit Processing
Mitigation Implementation
Endangered Species Permits

Mr. Travis McGill specializes in conducting due diligence surveys, habitat assessments, preparing biological technical reports, botanical surveys, protocol listed species surveys, and assisting with environmental permitting and compliance for both public and private sector clients. He assists clients in compliance with a range of environmental regulations, including the California Environmental Quality, National Environmental Policy Act, and State and Federal Endangered Species Acts. He also has experience preparing and processing federal and State Incidental Take Permits through the United States Fish and Wildlife Service (Section 7 and Section 10 of the Federal Endangered Species Act) and California Department of Fish and Game (Section 2080.1, 2081, subds. (b}{c) of the Fish and Game Code).

Mr. McGill conducts delineations of state and federal jurisdictional waters and helps clients through the regulatory permit process pursuant to Sections 404 and 401 of the Clean Water Act, the California Porter-Cologne Water Quality Control Act, and Section 1602 et. seq. of the California Fish and Game Code. Mr. McGill has effectively drafted and processed numerous state and federal regulatory applications for residential, restoration, commercial, flood control, institutional, and transportation projects. Mr. McGill also performs California Rapid Assessment Method analyses on riverine and depressioanl areas to identify the functionality of a drainage system.

Mr. McGill also prepares and conducts Worker Education Training programs, biological monitoring, and nesting bird and burrowing owl clearance surveys in compliance with the federal Migratory Bird Treaty Act and California Fish and Game Code Section 3503, 3503.5, and 3513.

Project Experience

Salt Creek Trail Project, Cities of Menifee and Hemet, California. *County of Riverside Transportation Department.* Biologist/ Regulatory Specialist. The County proposes to construct and operate two (2) segments of the Salt Creek Trail, which will contribute to the County's ultimate goal for an approximately 16-mile-long multi-use trail connecting the cities of Hemet and Menifee. The Project offers an alternative to gasoline-powered vehicle trips, which is key to achieving state and local air quality objectives. Mr. McGill prepared the Caltrans

Natural Environment Study, jurisdictional delineation, sensitive plant survey, Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis, Determination of Biologically Equivalent or Superior Preservation (DBESP), and regulatory permits for the project. In addition, Mr. McGill attended several of the Western Riverside County Regional Conservation Authority (RCA) pre-application meetings to ensure project consistency with the MSHCP and negotiate the mitigation requirements for impacts to jurisdictional waters. Based on negotiations with the RCA and regulatory agencies, Mr. McGill prepared a Habitat Mitigation Monitoring and Reporting Plan to satisfy the mitigation requirements for the project.

Interstate 10/Avenue 50 Interchange Project, City Coachella, California. *City of Coachella*. Biologist/Regulatory Specialist. The project includes the construction of a new interchange at Interstate 10 (I-10) and Avenue 50, from PM R62.3 to R63.7, within the limits of the City of Coachella (City) in the County of Riverside. The proposed interchange is located approximately 3.4 miles east of the existing I-10/Dillon Road interchange (PM 58.9) and approximately 12.7 miles west of the existing I-10/Aqueduct Wash interchange (PM 75.0). Within the limits of the project, I-10 is a four-lane freeway with a median running down the center and no High Occupancy Vehicle (HOV) facilities. Mr. McGill conducted and prepared the delineation of State and federal jurisdictional waters report and tow Caltrans Natural Environment Study-Minimal Impact (NES-MI) reports for the Aerially Deposited Lead and Geotechnical Borings portions of the project. The NES-MI reports included a Coachella Valley MSHCP Consistency Analysis to demonstrate the projects consistency with the Coachella Valley MSHCP. Mr. McGill successfully delineated the jurisdictional boundaries of the drainage features on-site and documented the biological resources occurring within the Biological Study Area. As part of the NES-MI report, Mr. McGill helped prepare a project impact analysis that included quantifying project impacts and outlining a permitting strategy for impacts to jurisdictional waters. Mr. McGill successfully processed and obtained the Approved Jurisdictional Determination through the U.S. Army Corps of Engineers documenting that the drainage features on-site did not qualify as "Waters of the U.S".

Date Palm Drive Bridge over Whitewater River Cathedral City, California. *City of Cathedral City*. Biologist/Regulatory Specialist. The project included the widening of Date Palm Drive from four to six lanes adding sidewalks, bicycle lanes, and a central median. Mr. McGill conducted and helped prepare the delineation of State and federal jurisdictional waters report and Caltrans Natural Environment Study-Minimal Impact (NES-MI) for the project, which included a Coachella Valley MSHCP Consistency Analysis. Mr. McGill successfully delineated the jurisdictional boundaries of the Whitewater River and documented the biological resources occurring within the Biological Study Area. As part of the NES-MI report, Mr. McGill helped prepare a project impact analysis that included quantifying project impacts and outlining a permitting strategy for impacts to jurisdictional waters. Mr. McGill helped draft the resource agency permits through the California Department of Fish and Wildlife (Section 1602 Streambed Alteration Agreement), the Regional Water Quality Control Board (Section 401 Water Quality Certification), and the U.S. Army Corps of Engineers (Section 404 Nationwide Permit) for impacts occurring within the Whitewater River.

Sycamore Canyon Business Park Project, City of Riverside, California. *Hillwood Investment Properties.* Biologist/ Regulatory Specialist. The project would include the construction of two commercial warehouse buildings and associated infrastructure. In addition, multiple detention basins would be construction along the perimeter of the project site to treat surface runoff prior to being discharges off-site. Mr. McGill helped prepare the Delineation of State and Federal Jurisdictional Waters Report and Least Bell's Vireo focused survey reports for the project and assisted with the negotiation efforts with the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife for impacts to on-site jurisdictional features.

Bautista Recharge Basin Expansion Project, Riverside County, California. *Riverside County Flood Control and Water Conservation District*. Biologist/Regulatory Specialist. The District, in partnership with the Lake

Hemet Municipal Water District (LHMWD), proposed to design, construct, operate and maintain the Bautista Recharge Basin Expansion Project as part of an effort to fulfill the District's ongoing goal to promote water conservation and recharge. The recharge project was designed to promote infiltration and increase recharge in the Hemet-San Jacinto Valley groundwater basin areas. Mr. McGill prepared the habitat assessment, jurisdictional delineation, Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis, and Public/Quasi-Public Land Equivalency Analysis for the project.

Renaissance Specific Plan Burrowing Owl Relocation Plan, Rialto, California. *Lewis-Hillwood Rialto Company.* Biologist. The Renaissance Specific Plan was adopted by the City of Rialto in 1997 to provide a long-term strategy for the development of the Rialto Municipal Airport and surrounding area. Currently, Lewis – Hillwood Rialto Company, LLC owns or has an option to buy several of the properties within Renaissance Specific Plan Area. The proposed project included the development of a Town Center, residential housing ranging from low density to high density, a school, public park, a business center, and corporate center. Mr. McGill lead the biological studies for the project which include a general habitat assessment, focused burrowing owl survey, special-status plant suitability assessment, jurisdictional delineation and regulatory permitting. Several burrowing owl were found on the project site during the focused surveys, and Mr. McGill helped prepare a relocation plan that outlined the recommended methods proposed to relocate burrowing owls from the project site and provided measures that would be implemented for the maintenance, monitoring, and reporting of the relocated burrowing owls to increase chances of survivorship and ensure compliance with CDFW guidelines. Once the plan was approved by CDFW, Mr. McGill assisted the San Diego Zoo in the active relocation of the burrowing owls from the project site. The burrowing owls found within the project site were captured and actively relocated to a conservation site within the boundaries of the Western Riverside County MSHCP.

Date Palm Drive Bridge over Whitewater River, Cathedral City, California. *City of Cathedral City*. Biologist/Regulatory Specialist. The project included the widening of Date Palm Drive from four to six lanes adding sidewalks, bicycle lanes, and a central median. Mr. McGill conducted and helped prepare the delineation of State and federal jurisdictional waters report and Caltrans Natural Environment Study-Minimal Impact (NES-MI) for the project, which included a Coachella Valley MSHCP Consistency Analysis. Mr. McGill successfully delineated the jurisdictional boundaries of the Whitewater River and documented the biological resources occurring within the Biological Study Area. As part of the NES-MI report, Mr. McGill helped prepare a project impact analysis that included quantifying project impacts and outlining a permitting strategy for impacts to jurisdictional waters. Mr. McGill helped draft the resource agency permits through the California Department of Fish and Wildlife (Section 1602 Streambed Alteration Agreement), the Regional Water Quality Control Board (Section 401 Water Quality Certification), and the U.S. Army Corps of Engineers (Section 404 Nationwide Permit) for impacts occurring within the Whitewater River.

Andrew Mestas

Associated Biologist

Years of Experience: 3

Education

B.S., 2024, Biological Science, California State University, Fullerton

Research Assistant

Assisted in identifying Washington vascular and non-vascular plants, including special-status species such as the Wenatchee Mountains Checker-mallow (*Sidalcea oregana var. calva*), a federally endangered species.

Assisted in a field survey in the Gifford Pinchot National Forest, focusing on the Indian Heaven Wilderness area which included bryophyte collection of approximately 2000 specimens, herbarium preparation, and use of GPS and digital data collection tools

Additional Training

Introduction to Desert Tortoise Surveying, Monitoring, and Handling Techniques Workshop, Desert Tortoise Council, 2025

Skills and Specialties

General and Focused Habitat Assessments
Focused Sensitive Plant Surveys
Avian Surveys and Monitoring

Mr. Andrew Mestas is a biologist with three years of experience conducting habitat assessments, jurisdictional delineations, and protocol-level surveys for special-status species across southern California. His field experience includes Burrowing Owl focused surveys, Desert Tortoise surveys, and participation in Western Joshua Tree Incidental Take Permit census and processing efforts. Mr. Mestas has prepared and contributed to technical biological reports, Restoration Monitoring Plans, and MSHCP Consistency Analyses for projects subject to Habitat Conservation Plans such as the Western Riverside County MSHCP. He is proficient in the use of BIOS and CNDDB for species occurrence data review and analysis. Mr. Mestas is skilled in identifying regional flora, fauna, and plant communities, and has practical experience in plant cultivation in an academic setting.

Project Experience

Cook Street Hospital District Specific Plan, Palm Desert, Riverside County – Meridian Consultants, LLC. The project involves development of a core hospital and medical center complemented by supporting facilities, including a hotel to accommodate patient families, senior and assisted living residences, and high-density workforce housing for medical, hospitality, and retail employees. Mr. Mestas conducted focused surveys for Burrowing Owl and participated in field investigations to assess potential biological resources within the project area.

Palm Villas, Jurupa Valley, Riverside County – Mckenna Lanier Group. The project involves construction of the Palm Villas at Rancho Jurupa, an affordable housing community totaling 182 dwelling units on approximately 8.3 acres. Mr. Mestas conducted focused surveys for Burrowing Owl and prepared the report documenting survey results and existing site conditions.

Skyline Village, City of Corona, Riverside County – KWC Engineers. The project involves the development of 39 one-bedroom condominiums, 39 three-bedroom townhomes, and a 25,900-square-foot commercial space with restaurant, retail, and office uses. Mr. Mestas conducted the habitat assessment, MSHCP consistency analysis, and jurisdictional delineation and contributed to the preparation of the project's technical reports.

Baxter Iron Mine Desert Native Plant Survey, San Bernardino County – CalPortland. The project involves expanding existing mining operations—occurring on 49 acres—onto an additional 69 acres (increasing the mined footprint to 118 acres) within an approximately 280-acre site immediately south and

east of the current quarry. Mr. Mestas performed a Desert Native Plant Survey to identify cacti and other plant species protected by the San Bernardino County Desert Native Plant Ordinance, precisely GPS-tagging and georeferencing each individual and assembling relocation maps and supporting documentation to enable timely, compliant transplanting prior to project implementation.

Cajon Creek Conservation Area SBKR Study, San Bernardino County – Vulcan Materials Company. Mr. Mestas assisted in the collection of field data for the San Bernardino Kangaroo Rat (SBKR) Habitat Suitability Assessments within 23 designated plots of the Cajon Creek Conservation Area. Data collection included evaluating soil texture and compaction using penetrometers, characterizing surface soil composition, classifying vegetation communities, estimating percent cover for multiple vegetation and substrate categories, identifying dominant plant species, and recording evidence of disturbance, road types, and rodent activity levels. Collected data were used to assess habitat conditions influencing SBKR occupancy and to support long-term monitoring and management efforts conducted in coordination with USFWS, CDFW, and USGS.

10th St Palmdale, Palmdale, Los Angeles County. The project involves construction of an 823,516-square-foot warehouse and distribution facility on approximately 40 acres. Mr. Mestas conducted field investigations, a Western Joshua Tree inventory (census), and contributed to the Incidental Take Permit (ITP) processing and preparation of technical biological reports. He is scheduled to conduct protocol-level focused surveys for Burrowing Owl and presence/absence surveys for Desert Tortoise during the upcoming survey season.

Mission College Athletic Field, Sylmar, City of Los Angeles – Meridian Consultants. The project involves the development of new athletic facilities at Los Angeles Mission College, including a multi-purpose field with track, a new softball field, six tennis courts, restroom and concession buildings, associated parking areas, and renovation of an existing baseball field. Mr. Mestas participated in field investigations to assess biological resources within the project site, mapped jurisdictional aquatic features, and documented the presence of the special-status species Least Bell's Vireo. He also contributed to the preparation of technical biological reports and evaluated applicable city ordinances relevant to the project.

Johnson Road Warehouse Project, Palmdale, Los Angeles County – Palmdale Industrial Partners, LLC. The project involves construction of a new 823,516-square-foot warehouse and distribution facility on approximately 40.18 acres. Mr. Mestas conducted the field investigation, Western Joshua tree Inventory (census), and contributed to the ITP processing and technical reports. Mr. Mestas will conduct protocol-level focused surveys for burrowing owl as well as a presence/absence desert tortoise survey for this project in the upcoming appropriate season.

Central Basin MWD Prop 1, Los Angeles County – Tom Dodson & Associates. The project proposed installation of new recycled water pipelines to connect seven public sites in disadvantaged communities to the Central Basin Municipal Water District's existing recycled water transmission system. The Proposition 1 Recycled Water Customer Conversion Project aims to conserve potable water by converting irrigation systems at these sites to recycled water use. Mr. Mestas conducted field investigations for each of the seven subareas and prepared the Biological Resources Report documenting existing habitat conditions, potential impacts, and applicable regulatory considerations for the project.

A PHASE I CULTURAL RESOURCES STUDY FOR THE BRADLEY GARDENS PROJECT

CITY OF SAN JACINTO, RIVERSIDE COUNTY, CALIFORNIA

APN 435-330-003

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March 13, 2026

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Archaeological Report Summary Information

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Report Title:	A Phase I Cultural Resources Study for the Bradley Gardens Project, City of San Jacinto, Riverside County, California
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Assessor's Parcel Number:	435-330-003
USGS Quadrangle:	Unsectioned portion of the former rancho San Jacinto Viejo, Township 4 South, Range 1 West (projected), on the *San Jacinto, California* USGS quadrangle topographic map
Study Area:	2.98 acres
Key Words:	Archaeological survey program; city of San Jacinto; *San Jacinto* USGS topographic quadrangle; positive; four historic-age buildings collectively recorded as Temp-1; Temp-1 not CRHR- or NRHP-eligible; monitoring recommended.

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1.0 MANAGEMENT SUMMARY/ABSTRACT

The following report describes the results of the cultural resources survey conducted by BFSA Environmental Services, a Perennial Company (BFSA), for the Bradley Gardens Project. The study includes 2.98 acres (Assessor's Parcel Number [APN] 435-330-003) and is located at 980 West Seventh Street, southeast of the intersection of West Seventh Street and South Grand Avenue, in the city of San Jacinto, Riverside County, California. The project is situated within the unsectioned former San Jacinto Viejo Land Grant, Township 4 South, Range 1 West (projected), of the San Bernardino Base and Meridian, as shown on the United States Geological Survey (USGS) *San Jacinto, California* (7.5-minute) quadrangle map. The applicant proposes removal and/or modifications to the existing buildings within the parcel and the construction of a new care building with associated hardscape, landscape, and infrastructure. BFSA conducted this assessment to determine if any cultural resources would be affected by the proposed land development.

1.1 Purpose of Investigation

The purpose of this investigation was to locate and record any cultural resources present within the project and subsequently evaluate those resources as part of the City of San Jacinto's environmental review process conducted in compliance with the California Environmental Quality Act (CEQA). The archaeological investigation of the project included the review of an archaeological records search from the South Coastal Information Center (SCIC) at San Diego State University (SDSU) in order to assess previous archaeological studies and identify any previously recorded archaeological sites within the project boundaries or in the immediate vicinity. A review of the records search results indicates that 59 resources have been recorded within one mile of the property, none of which are recorded within the project. The records search also indicates that 40 previous studies have been conducted within one mile of the property, none of which include the subject property. BFSA also requested a Sacred Lands File (SLF) review by the Native American Heritage Commission (NAHC), which was returned with positive results.

1.2 Major Findings

A review of historic maps and aerial photographs indicates the project was utilized for agricultural purposes by 1953. In 1964, a main care center building and a storage building were constructed as part of the Colonial Nursing Home (Colonial Convalescent Hospital) (now the Bradley Gardens care facility), and in 1971, two medical office buildings were constructed. Various improvements were made to the property from the mid-1960s to 2026, including building expansions, the construction and infilling of a pool, landscaping, and paved parking.

The archaeological survey of the Bradley Gardens Project was conducted on February 6, 2026. During the survey, ground visibility was characterized as poor given the current built environment. No historic or prehistoric archaeological resources were identified anywhere within the project. However, the four buildings that characterize the project's built environment were

reviewed and determined to meet the minimum age threshold to be considered historic according to CEQA criteria. As the buildings reflect the same use of and period of development, they were recorded collectively as Site Temp-1. Given the presence of Site Temp-1 within the project, a historic structure assessment was conducted. The assessment, which included a review of archival records and in-depth analysis of Site Temp-1, found that none of the buildings associated with the site are eligible for the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR).

1.3 Recommendation Summary

The cultural resources assessment for the Bradley Gardens Project resulted in the identification of one historic resource, Site Temp-1. The resource is comprised of four buildings constructed between 1964 and 1971. No prehistoric or historic archaeological resourses were identified during the survey. Given the age of the buildings identified, a historic structure assessment was conducted to evaluate the potential impacts of the proposed project upon significant resources within the property. The assessment revealed that Site Temp-1 is not considered a significant resources according to NRHP or CEQA criteria and, as such, no impacts to significant resources are associated with the proposed development.

Although Site Temp-1 was evaluated as not significant, the potential exists that unidentified significant historic deposits may be present that are related to the occupation of this location since the 1960s. Further, the current built environment masked the existing ground surface, limiting the ability to identify archaeological resources. Because of the potential to encounter buried cultural deposits, monitoring of grading by a qualified archaeologist is recommended. Should potentially significant cultural deposits be discovered, mitigation measures will be implemented to reduce the effects of the grading impacts. As part of this study, a copy of this report will be submitted to the SCIC at SDSU.

2.0 INTRODUCTION

BFSA was retained by the applicant to conduct a cultural resources survey for the Bradley Gardens Project, which proposes to develop 2.98 acres at 980 West Seventh Street, southeast of the intersection of West Seventh Street and South Grand Avenue, in the city of San Jacinto, Riverside County, California (Figure 2.0–1). The project (APN 435-330-003) is situated within the unsectioned former San Jacinto Viejo Land Grant, Township 4 South, Range 1 West (projected), of the San Bernardino Base and Meridian, as shown on the USGS *San Jacinto, California* quadrangle map (Figure 2.0–2). Currently, four historic-age buildings associated with the Bradley Gardens care facility are present on the property. These buildings include the main care center building, one storage building, and two medical office buildings. As designed, the proposed project includes removal and/or modifications to the existing buildings within the parcel for the construction of a new care building along with associated hardscape, and infrastructure (Figure 2.0–3).

Principal Investigator Tracy A. Stropes, M.A., RPA, directed the cultural resources study for the project with assistance from BFSA archaeologist Reina Inlow. The pedestrian survey of the project was conducted on February 6, 2026. The survey was completed by traversing the property in transects spaced at approximately 15-meter intervals when not hindered by the present development. During the survey, it was noted that the entire project has been previously developed for the current Bradley Gardens care facility beginning in the 1960s. Kathleen A. Krogh, M.A., RPA, Alec M. Whitson, M.A., and Tracy A. Stropes, M.A., RPA, prepared the report. Jillian Conroy created the report graphics and Elena Goralogia conducted technical editing and report production. Qualifications of key personnel are provided in Appendix A.

2.1 Previous Work

The archaeological records search for the property identified 59 cultural resources within one mile of the project, none of which are within the subject property. The records search also identified 40 previous cultural resource studies that have been conducted within one mile of the subject property, none of which include the subject property.



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Figure 2.0−1

General Location Map

The Bradley Gardens Project

Esri World Topographic Map

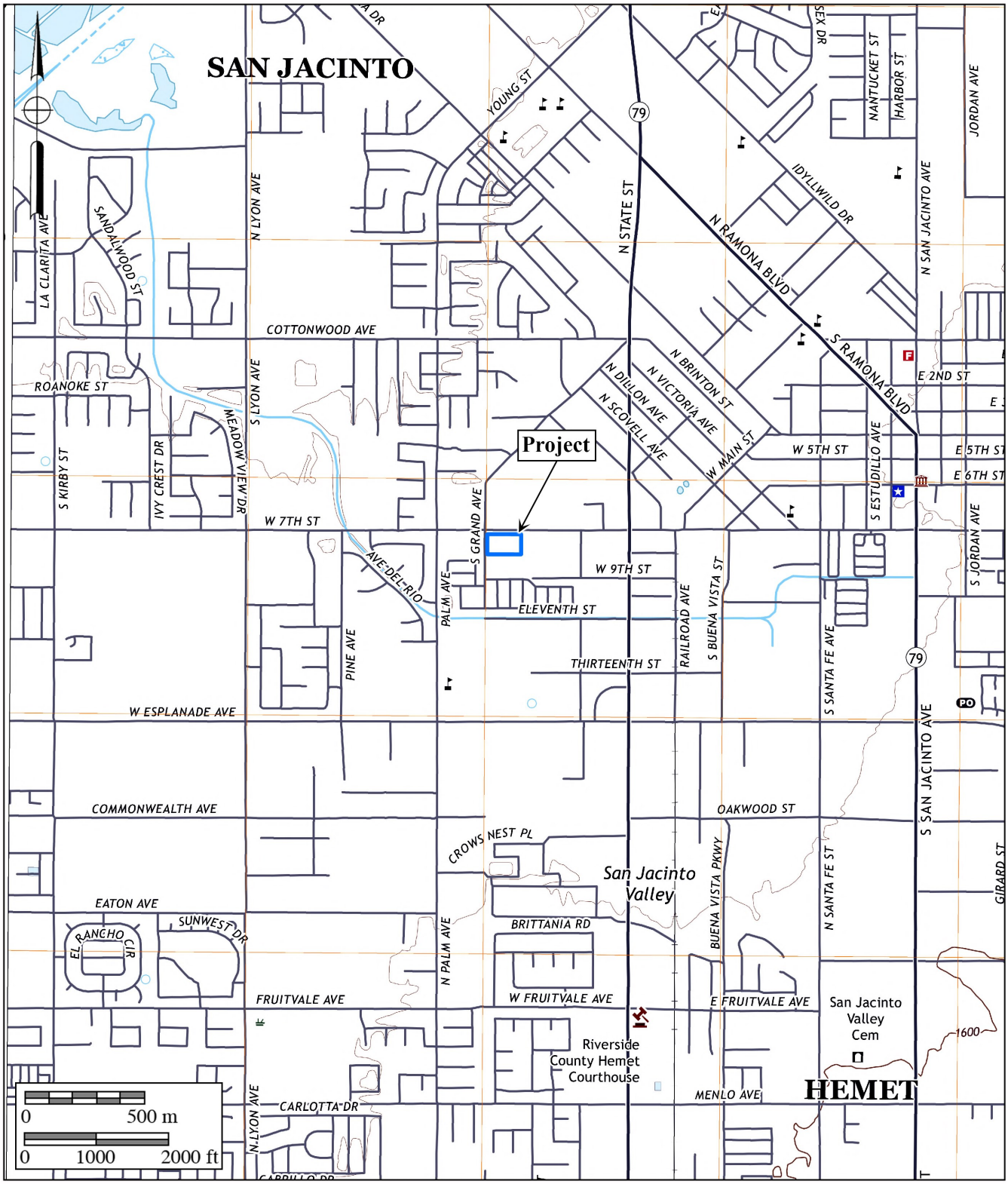

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Figure 2.0–2
Project Location Map

The Bradley Gardens Project

USGS *San Jacinto* Quadrangle (7.5-minute series)

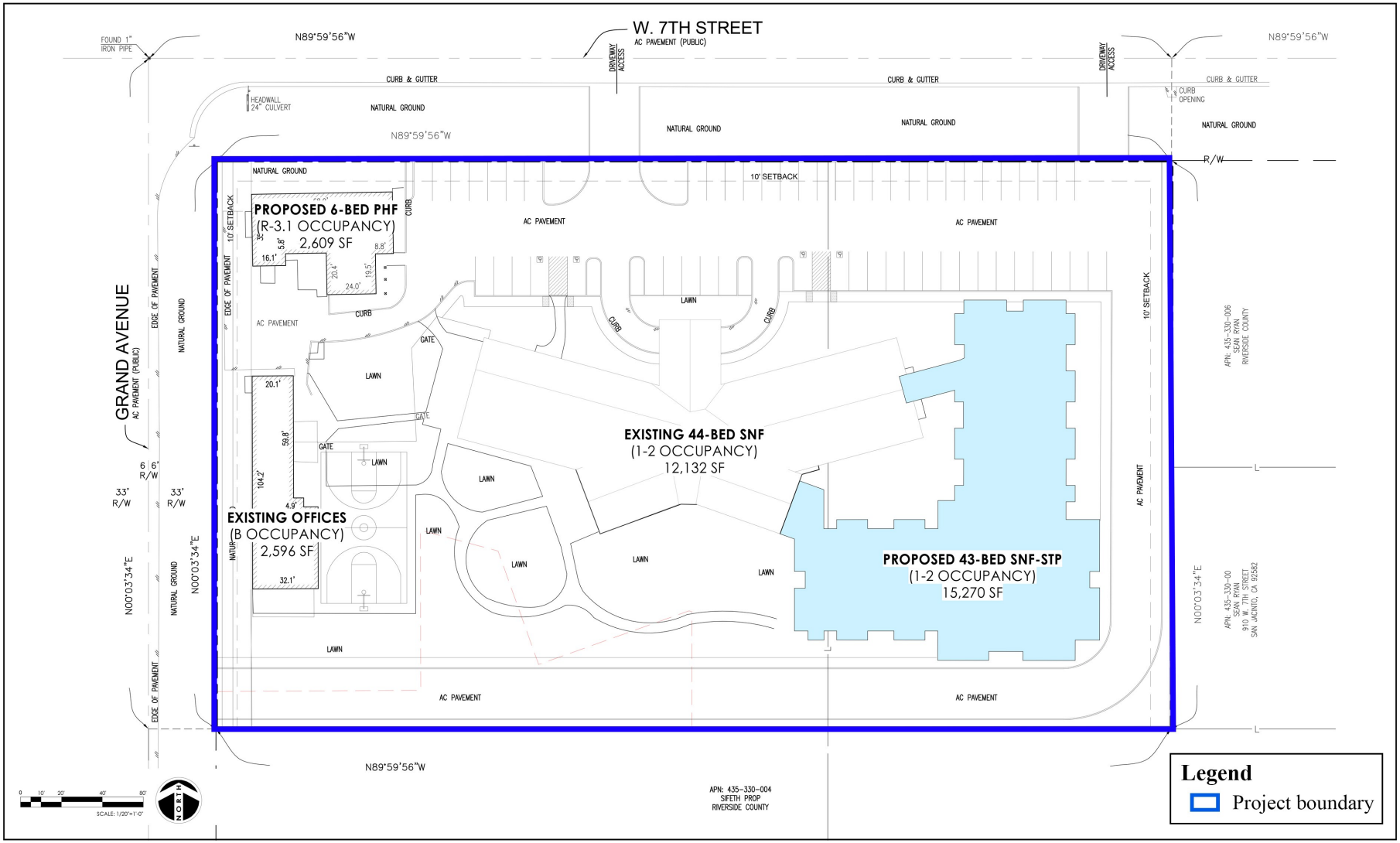

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Figure 2.0–3
Project Development Map
The Bradley Gardens Project

2.2 Project Setting

Riverside County lies in the Peninsular Ranges Geologic Province of southern California. The mountain range, which lies in a northwest to southeast trend through the county, extends around 1,000 miles from the Raymond-Malibu Fault Zone in western Los Angeles County to the southern tip of Baja California. Regionally, the project lies within the San Jacinto Valley, east of the Lakeview Mountains. The surficial geology at the project is mapped as Holocene- and late Pleistocene-aged young alluvial valley deposits (Lancaster et al. 2012). These deposits are characterized as clay, silt, sand, and gravel along stream valleys and alluvial flats of larger rivers (Wirths 2026). The specific soils found on the property consist of Grangeville sandy loam, sandy substratum, drained, 0 to 5 percent slopes (GrB), and Grangeville fine sandy loam, saline-alkali, 0 to 5 percent slopes (GvB) (NRCS 2019). The subject property is relatively flat with an average elevation of approximately 1,526 feet above mean sea level (AMSL). The closest major natural source of water is the San Jacinto River approximately 2.3 miles to the northeast.

The majority of the subject property is currently developed with four buildings associated with the Bradley Gardens care facility and associated hardscape, landscape, and infrastructure. Vegetation within the property primarily consists of grass lawns and commercial landscaping. Historically, the region surrounding the property has been utilized for agriculture and rural residential neighborhoods until transitioning into a medium-density residential community. However, the project vicinity would have originally contained sage and chapparal plant communities. During the prehistoric period, vegetation in the area provided sufficient food resources to support prehistoric human occupants.

Animals that inhabited the project during prehistoric times included mammals such as rabbits, squirrels, gophers, mice, rats, deer, and coyotes, in addition to a variety of reptiles and amphibians. The natural setting of the project during the prehistoric occupation offered a rich nutritional resource base. Fresh water could have been obtained from the San Jacinto River. Historically, the project was utilized for agriculture and the property contained similar plant and animal species as are present today.

2.3 Cultural Setting – Archaeological Perspectives

The archaeological perspective seeks to reconstruct past cultures based upon the material remains left behind. This is done using a range of scientific methodologies, almost all of which draw from evolutionary theory as the base framework. Archaeology provides a deeper look into history or prehistory to see where the beginnings of ideas manifest via analysis of material culture, which in turn allows for the understanding of outside forces that shape social change. Thus, the archaeological perspective allows for a better understanding of the consequences of the history of a given culture upon modern cultures. Archaeologists seek to understand the effects of past contexts of a given culture on this moment in time, not culture in context *in* the moment.

Despite this, a distinction exists between "emic" and "etic" ways of understanding material culture, prehistoric lifeways, and cultural phenomena in general (Harris 1991). While "emic" perspectives serve the subjective ways in which things are perceived and interpreted by the participants within a culture, "etic" perspectives are those of an outsider looking in in the hopes of attaining a more scientific or "objective" understanding of the given phenomena. Archaeologists, by definition, will almost always serve an etic perspective as a result of the very nature of their work. As indicated by Laylander et al. (2014), it has sometimes been suggested that etic understanding, and therefore an archaeological understanding, is an imperfect and potentially ethnocentric attempt to arrive at emic understanding. In contrast to this, however, an etic understanding of material culture, cultural phenomena, and prehistoric lifeways can address significant dimensions of culture that lie entirely beyond the understanding or interest of those solely utilizing an emic perspective. As Harris (1991:20) appropriately points out, "Etic studies often involve the measurement and juxtaposition of activities and events that native informants find inappropriate or meaningless." This is also likely true of archaeological comparisons and juxtapositions of material culture. However, culture as a whole does not occur in a vacuum and is the result of several millennia of choices and consequences influencing everything from technology, to religions, to institutions. Archaeology allows for the ability to not only see what came before, but to see how those choices, changes, and consequences affect the present. Where possible, archaeology should seek to address both emic and etic understandings to the extent that they may be recoverable from the archaeological record as manifestations of patterned human behavior (Laylander et al. 2014).

To that point, the culture history offered herein is primarily based upon archaeological (etic) and ethnographic (partially emic and partially etic) information. It is understood that the ethnographic record and early archaeological records were incompletely and imperfectly collected. In addition, in most cases, more than a century of intensive cultural change and cultural evolution had elapsed since the terminus of the prehistoric period. Coupled with the centuries and millennia of prehistoric change separating the "ethnographic present" from the prehistoric past, this has affected the emic and etic understandings of prehistoric cultural settings. Regardless, there remains a need to present the changing cultural setting within the region under investigation. As a result, both archaeological and Native American perspectives are offered when possible.

2.3.1 Introduction

Paleo Indian, Archaic Period Milling Stone Horizon, and the Late Prehistoric Takic groups are the three general cultural periods represented in Riverside County. The following discussion of the cultural history of Riverside County references the San Dieguito Complex, Encinitas Tradition, Milling Stone Horizon, La Jolla Complex, Pauma Complex, and San Luis Rey Complex, since these culture sequences have been used to describe archaeological manifestations in the region. The Late Prehistoric component present in the Riverside County area was primarily represented by the Cahuilla, Gabrielino, and Luiseño Indians.

Absolute chronological information, where possible, will be incorporated into this archaeological discussion to examine the effectiveness of continuing to interchangeably use these terms. Reference will be made to the geological framework that divides the archaeologically-based culture chronology of the area into four segments: the late Pleistocene (20,000 to 10,000 years before the present [YBP]), the early Holocene (10,000 to 6,650 YBP), the middle Holocene (6,650 to 3,350 YBP), and the late Holocene (3,350 to 200 YBP).

2.3.2 Paleo Indian Period (Late Pleistocene: 11,500 to circa 9,000 YBP)

Archaeologically, the Paleo Indian Period is associated with the terminus of the late Pleistocene (12,000 to 10,000 YBP). The environment during the late Pleistocene was cool and moist, which allowed for glaciation in the mountains and the formation of deep, pluvial lakes in the deserts and basin lands (Moratto 1984). By the terminus of the late Pleistocene, the climate became warmer, which caused the glaciers to melt, sea levels to rise, greater coastal erosion, large lakes to recede and evaporate, extinction of Pleistocene megafauna, and major vegetation changes (Moratto 1984; Martin 1967, 1973; Fagan 1991). The coastal shoreline at 10,000 YBP, depending upon the particular area of the coast, was near the 30-meter isobath, or two to six kilometers further west than its present location (Masters 1983).

Paleo Indians were likely attracted to multiple habitat types, including mountains, marshlands, estuaries, and lakeshores. These people likely subsisted using a more generalized hunting, gathering, and collecting adaptation utilizing a variety of resources including birds, mollusks, and both large and small mammals (Erlandson and Colten 1991; Moratto 1984; Moss and Erlandson 1995).

2.3.3 Archaic Period (Early and Middle Holocene: circa 9,000 to 1,300 YBP)

Archaeological data indicates that between 9,000 and 8,000 YBP, a widespread complex was established in the southern California region, primarily along the coast (Warren and True 1961). This complex is locally known as the La Jolla Complex (Rogers 1939; Moriarty 1966), which is regionally associated with the Encinitas Tradition (Warren 1968) and shares cultural components with the widespread Milling Stone Horizon (Wallace 1955). The coastal expression of this complex appeared in southern California coastal areas and focused upon coastal resources and the development of deeply stratified shell middens that were primarily located around bays and lagoons. The older sites associated with this expression are located at Topanga Canyon, Newport Bay, Agua Hedionda Lagoon, and some of the Channel Islands. Radiocarbon dates from sites attributed to this complex span a period of over 7,000 years in this region, beginning over 9,000 YBP.

The Encinitas Tradition is best recognized for its pattern of large coastal sites characterized by shell middens, grinding tools that are closely associated with the marine resources of the area, cobble-based tools, and flexed human burials (Shumway et al. 1961; Smith and Moriarty 1985). While ground stone tools and scrapers are the most recognized tool types, coastal Encinitas Tradition sites also contain numerous utilized flakes, which may have been used to pry open

shellfish. Artifact assemblages at coastal sites indicate a subsistence pattern focused upon shellfish collection and nearshore fishing. This suggests an incipient maritime adaptation with regional similarities to more northern sites of the same period (Koerper et al. 1986). Other artifacts associated with Encinitas Tradition sites include stone bowls, doughnut stones, discoidals, stone balls, and beads made from stone, bone, and shell.

The coastal lagoons in southern California supported large Milling Stone Horizon populations circa 6,000 YBP, as shown by numerous radiocarbon dates from the many sites adjacent to the lagoons. The ensuing millennia were not stable environmentally and, by 3,000 YBP, many of the coastal sites in central San Diego County had been abandoned (Gallegos 1987, 1992). The abandonment of the area is usually attributed to the sedimentation of coastal lagoons and the resulting deterioration of fish and mollusk habitat. This is a well-documented situation at Batiquitos Lagoon, where over a 2,000-year period, dominant mollusk species occurring in archaeological middens shift from deep-water mollusks (*Argopecten* sp.) to species tolerant of tidal flat conditions (*Chione* sp.), indicating changes in both water depth and temperature (Miller 1966; Gallegos 1987).

This situation likely occurred for other small drainages (Buena Vista, Agua Hedionda, San Marcos, and Escondido creeks) along the central San Diego coast where low flow rates did not produce sufficient discharge to flush the lagoons they fed (Buena Vista, Agua Hedionda, Batiquitos, and San Elijo lagoons) (Byrd 1998). Drainages along the northern and southern San Diego coastline were larger and flushed the coastal hydrological features they fed, keeping them open to the ocean and allowing for continued human exploitation (Byrd 1998). Peñasquitos Lagoon exhibits dates as late as 2,355 YBP (Smith and Moriarty 1985) and San Diego Bay showed continuous occupation until the close of the Milling Stone Horizon (Gallegos and Kyle 1988). Additionally, data from several drainages in Marine Corps Base Camp Pendleton indicates a continued occupation of shell midden sites until the close of the period, which shows that coastal sites were not entirely abandoned during this time (Byrd 1998).

By 5,000 YBP, an inland expression of the La Jolla Complex is evident in the archaeological record, exhibiting influences from the Campbell Tradition from the north. These inland Milling Stone Horizon sites have been termed "Pauma Complex" (True 1958; Warren et al. 1961; Meighan 1954). Pauma Complex sites share a predominance of grinding implements (manos and metates), lack mollusk remains, have greater tool variety (including atlatl dart points, quarry-based tools, and crescentics), and seem to express a more sedentary lifestyle with a subsistence economy based upon the use of a broad variety of terrestrial resources. Although originally viewed as a separate culture from the coastal La Jolla Complex (True 1980), it appears that these inland sites may be part of a subsistence and settlement system utilized by the coastal peoples. Evidence from the 4S Ranch Project in inland San Diego County suggests that these inland sites may represent seasonal components within an annual subsistence round by La Jolla Complex populations (Raven-Jennings et al. 1996). Including both coastal and inland sites of this period in discussions of the Encinitas Tradition, therefore, provides a more complete appraisal of the settlement and subsistence system exhibited by this cultural complex.

More recent work by Sutton has identified a more localized complex known as the Greven Knoll Complex. The Greven Knoll Complex is a redefined northern inland expression of the Encinitas Tradition first put forth by Mark Sutton and Jill Gardner (2010). Sutton and Gardner (2010:25) state that "[t]he early millingstone archaeological record in the northern portion of the interior southern California was not formally named but was often referred to as 'Inland Millingstone,' 'Encinitas,' or even 'Topanga.'" Therefore, they proposed that all expressions of the inland Milling Stone in southern California north of San Diego County be grouped together in the Greven Knoll Complex.

The Greven Knoll Complex, as postulated by Sutton and Gardner (2010), is broken into three phases and obtained its name from the type-site Greven Knoll located in Yucaipa, California. Presently, the Greven Knoll Site is part of the Yukaipa't Site (SBR-1000) and was combined with the adjacent Simpson Site. Excavations at Greven Knoll recovered manos, metates, projectile points, discoidal cogged stones, and a flexed inhumation with a possible cremation (Kowta 1969:39). It is believed that the Greven Knoll Site was occupied between 5,000 and 3,500 YBP. The Simpson Site contained mortars, pestles, side-notched points, and stone and shell beads. Based upon the data recovered at these sites, Kowta (1969:39) suggested that "coastal Milling Stone Complexes extended to and interdigitated with the desert Pinto Basin Complex in the vicinity of the Cajon Pass."

Phase I of the Greven Knoll Complex is generally dominated by the presence of manos and metates, core tools, hammerstones, large dart points, flexed inhumations, and occasional cremations. Mortars and pestles are absent from this early phase, and the subsistence economy emphasized hunting. Sutton and Gardner (2010:26) propose that the similarity of the material culture of Greven Knoll Phase I and that found in the Mojave Desert at Pinto Period sites indicates that the Greven Knoll Complex was influenced by neighbors to the north at that time. Accordingly, Sutton and Gardner (2010) believe that Greven Knoll Phase I may have appeared as early as 9,400 YBP and lasted until about 4,000 YBP.

Greven Knoll Phase II is associated with a period between 4,000 and 3,000 YBP. Artifacts common to Greven Knoll Phase II include manos and metates, Elko points, core tools, and discoidals. Pestles and mortars are present; however, they are only represented in small numbers. Finally, there is an emphasis upon hunting and gathering for subsistence (Sutton and Gardner 2010:8).

Greven Knoll Phase III includes manos, metates, Elko points, scraper planes, choppers, hammerstones, and discoidals. Again, small numbers of mortars and pestles are present. Greven Knoll Phase III spans from approximately 3,000 to 1,000 YBP and shows a reliance upon seeds and yucca. Hunting is still important, but bones seem to have been processed to obtain bone grease more often in this later phase (Sutton and Gardner 2010:8).

The shifts in food processing technologies during each of these phases indicate a change in subsistence strategies; although people were still hunting for large game, plant-based foods eventually became the primary dietary resource (Sutton 2011a). Sutton's (2011b) argument posits that the development of mortars and pestles during the middle Holocene can be attributed to the

year-round exploitation of acorns as a main dietary provision. Additionally, the warmer and drier climate may have been responsible for groups from the east moving toward coastal populations, which is archaeologically represented by the interchange of coastal and eastern cultural traits (Sutton 2011a).

2.3.4 Late Prehistoric Period (Late Holocene: 1,300 YBP to 1790)

Many Luiseño hold the world view that, as a population, they were created in southern California. Archaeological and anthropological data, however, proposes a scientific archaeological perspective, suggesting that at approximately 1,350 YBP, Takic-speaking groups from the Great Basin region moved into Riverside County, marking the transition to the Late Prehistoric Period. An analysis of the Takic expansion by Sutton (2009) indicates that inland southern California was occupied by "proto-Yuman" populations before 1,000 YBP. The comprehensive, multiphase model offered by Sutton (2009) employs linguistic, ethnographic, archaeological, and biological data to solidify a reasonable argument for population replacement of Takic groups to the north by Penutians (Laylander 1985). As a result, it is believed that Takic expansion occurred starting around 3,500 YBP moving toward southern California, with the Gabrielino language diffusing south into neighboring Yuman (Hokan) groups around 1,500 to 1,000 YBP, possibly resulting in the Luiseño dialect.

Based upon Sutton's model, the final Takic expansion would not have occurred until about 1,000 YBP, resulting in the Vanyume, Serrano, Cahuilla, and Cupeño dialects. The model suggests that the Luiseño did not simply replace Hokan speakers, but were rather a northern San Diego County/southern Riverside County Yuman population who adopted the Takic language. This period is characterized by higher population densities and elaborations in social, political, and technological systems. Economic systems diversified and intensified during this period with the continued elaboration of trade networks, the use of shell-bead currency, and the appearance of more labor-intensive, yet effective, technological innovations. Technological developments during this period included the introduction of the bow and arrow between A.D. 400 and 600 and the introduction of ceramics. Atlatl dart points were replaced by smaller arrow darts, including Cottonwood series points. Other hallmarks of the Late Prehistoric Period include extensive trade networks as far-reaching as the Colorado River Basin, as well as the cremation of the dead.

2.3.5 Protohistoric Period (Late Holocene: 1790 to Present)

Ethnohistoric and ethnographic evidence indicates that portions of Riverside County were occupied by three Takic-speaking groups: the Cahuilla, the Gabrielino, and the Luiseño. The geographic boundaries between these groups in pre- and proto-historic times are difficult to place, but the project is located well within the borders of ethnographic Luiseño territory. This group was a seasonal hunting and gathering people with cultural elements that were very distinct from Archaic Period peoples. These distinctions include cremation of the dead, the use of the bow and arrow, and exploitation of the acorn as a main food staple (Moratto 1984). Along the coast, the Luiseño made use of available marine resources by fishing and collecting mollusks for food.

Seasonally available terrestrial resources, including acorns and game, were also sources of nourishment for Luiseño groups. Elaborate kinship and clan systems between the Luiseño and other groups facilitated a wide-reaching trade network that included trade of Obsidian Butte obsidian and other resources from the eastern deserts, as well as steatite from the Channel Islands.

According to Charles Handley (1967), the primary settlements of Late Prehistoric Luiseño Indians in the San Jacinto Plain were represented by Ivah and Soboba near Soboba Springs, Jusipah near the town of San Jacinto, Ararah in Webster's Canyon en route to Idyllwild, Pahsitha near Big Springs Ranch southeast of Hemet, and Corova in Castillo Canyon. These locations share features such as the availability of food and water resources. Features of this land use include petroglyphs and pictographs, as well as widespread milling, which is evident in both the bedrock and portable implements. Groups in the vicinity of the project, neighboring the Luiseño, include the Cahuilla and the Gabrielino. Ethnographic data for the three groups is presented below.

Luiseño: An Archaeological and Ethnographic Perspective

When contacted by the Spanish in the sixteenth century, the Luiseño occupied a territory bounded on the west by the Pacific Ocean, on the east by the Peninsular Ranges mountains at San Jacinto (including Palomar Mountain to the south and Santiago Peak to the north), on the south by Agua Hedionda Lagoon, and on the north by Aliso Creek in present-day San Juan Capistrano. The Luiseño were a Takic-speaking people more closely related linguistically and ethnographically to the Cahuilla, Gabrielino, and Cupeño to the north and east rather than the Kumeyaay who occupied territory to the south. The Luiseño differed from their neighboring Takic speakers in having an extensive proliferation of social statuses, a system of ruling families that provided ethnic cohesion within the territory, a distinct worldview that stemmed from the use of datura (a hallucinogen), and an elaborate religion that included the creation of sacred sand paintings depicting the deity Chingichngish (Bean and Shipek 1978; Kroeber 1976).

Subsistence and Settlement

The Luiseño occupied sedentary villages, most often located in sheltered areas in valley bottoms, along streams, or along coastal strands near mountain ranges. Villages were located near water sources to facilitate acorn leaching, as well as in areas that offered both thermal and defensive protection. Villages were comprised of areas that were both publicly and privately (by family) owned. Publicly owned areas included trails, temporary campsites, hunting areas, and quarry sites. Inland groups had fishing and gathering sites along the coast that were intensively used from January to March when inland food resources were scarce. During October and November, most of the village would relocate to mountain oak groves to harvest acorns. The Luiseño remained at village sites for the remainder of the year, where food resources were within a day's travel (Bean and Shipek 1978; Kroeber 1976).

The most important food source for the Luiseño was the acorn, six different species of which were used (*Quercus californica, Quercus agrifolia, Quercus chrysolepis, Quercus dumosa, Quercus engelmannii,* and *Quercus wislizenii*). Seeds, particularly those of grasses, flowering

plants, and mints, were also heavily exploited. Seed-bearing species were encouraged through controlled burns, which were conducted at least every third year. A variety of other stems, leaves, shoots, bulbs, roots, and fruits were also collected. Hunting augmented this vegetal diet. Animal species taken included deer, rabbit, hare, woodrat, ground squirrel, antelope, quail, duck, freshwater fish from mountain streams, marine mammals, and other sea creatures such as fish, crustaceans, and mollusks (particularly abalone, or *Haliotis* sp.). In addition, a variety of snakes, small birds, and rodents were also eaten (Bean and Shipek 1978; Kroeber 1976).

Social Organization

Social groups within the Luiseño nation consisted of patrilineal families or clans, which were politically and economically autonomous. Several clans comprised a religious party, or nota, which was headed by a chief who organized ceremonies and controlled economics and warfare. The chief had assistants who specialized in particular aspects of ceremonial or environmental knowledge and who, with the chief, were part of a religion-based social group with special access to supernatural power, particularly that of Chingichngish. The positions of chief and assistants were hereditary, and the complexity and multiplicity of these specialists' roles likely increased in the coastal and larger inland villages (Bean and Shipek 1978; Kroeber 1976; Strong 1929).

Marriages were arranged by the parents, often made to forge alliances between lineages. Useful alliances included those between groups of differing ecological niches and those that resulted in territorial expansion. Residence was patrilocal (Bean and Shipek 1978; Kroeber 1976). Women were primarily responsible for plant gathering and men principally hunted, but at times, particularly during acorn and marine mollusk harvests, there was no division of labor. Elderly women cared for children and elderly men participated in rituals, ceremonies, and political affairs. They were also responsible for manufacturing hunting and ritual implements. Children were taught subsistence skills at the earliest age possible (Bean and Shipek 1978; Kroeber 1976).

Material Culture

House structures were conical, partially subterranean, and thatched with reeds, brush, or bark. Ramadas were rectangular, protected workplaces for domestic chores such as cooking. Ceremonial sweathouses were important in purification rituals; these were round and partially subterranean thatched structures covered with a layer of mud. Another ceremonial structure was the wámkis (located in the center of the village, serving as the place of rituals), where sand paintings and other rituals associated with the Chingichngish religious group were performed (Bean and Shipek 1978; Kroeber 1976).

Clothing was minimal; women wore a cedar-bark and netted twine double apron and men wore a waist cord. In cold weather, cloaks or robes of rabbit fur, deerskin, or sea otter fur were worn by both sexes. Footwear included deerskin moccasins and sandals fashioned from yucca fibers. Adornments included bead necklaces and pendants made of bone, clay, stone, shell, bear claw, mica, deer hooves, and abalone shell. Men wore ear and nose piercings made from cane or bone, which were sometimes decorated with beads. Other adornments were commonly decorated

with semiprecious stones including quartz, topaz, garnet, opal, opalite, agate, and jasper (Bean and Shipek 1978; Kroeber 1976).

Hunting implements included the bow and arrow. Arrows were tipped with either a carved, fire-hardened wood tip or a lithic point, usually fashioned from locally available metavolcanic material or quartz. Throwing sticks fashioned from wood were used in hunting small game, while deer head decoys were used during deer hunts. Coastal groups fashioned dugout canoes for nearshore fishing and harvested fish with seines, nets, traps, and hooks made of bone or abalone shell (Bean and Shipek 1978; Kroeber 1976).

The Luiseño had a well-developed basket industry. Baskets were used in resource gathering, food preparation, storage, and food serving. Ceramic containers were shaped by paddle and anvil and fired in shallow, open pits to be used for food storage, cooking, and serving. Other utensils included wood implements, steatite bowls, and ground stone manos, metates, mortars, and pestles (Bean and Shipek 1978; Kroeber 1976). Additional tools such as knives, scrapers, choppers, awls, and drills were also used. Shamanistic items include soapstone or clay smoking pipes and crystals made of quartz or tourmaline (Bean and Shipek 1978; Kroeber 1976).

Cahuilla: An Archaeological and Ethnographic Perspective

At the time of Spanish contact in the sixteenth century, the Cahuilla occupied territory that included the San Bernardino Mountains, Orocopia Mountain, and the Chocolate Mountains to the west, Salton Sea and Borrego Springs to the south, Palomar Mountain and Lake Mathews to the east, and the Santa Ana River to the north. The Cahuilla are a Takic-speaking people closely related to their Gabrielino and Luiseño neighbors, although relations with the Gabrielino were more intense than those with the Luiseño. The Cahuilla differ from the Luiseño and Gabrielino in that their religion is more similar to the Mohave tribes of the eastern deserts than the Chingichngish religious group of the Luiseño and Gabrielino. The following is a summary of the ethnographic data regarding this group (Bean 1978; Kroeber 1976).

Subsistence and Settlement

Cahuilla villages were typically permanent and located on low terraces within canyons in proximity to water sources. These locations proved to be rich in food resources and also afforded protection from prevailing winds. Villages had areas that were publicly owned and areas that were privately owned by clans, families, or individuals. Each village was associated with a particular lineage and series of sacred sites that included unique petroglyphs and pictographs. Villages were occupied throughout the year; however, during a several-week period in the fall, most of the village members relocated to mountain oak groves to take part in acorn harvesting (Bean 1978; Kroeber 1976).

The Cahuilla's use of plant resources is well documented. Plant foods harvested by the Cahuilla included valley oak acorns and single-leaf pinyon pine nuts. Other important plant species included bean and screw mesquite, agave, Mojave yucca, cacti, palm, chia, quail brush, yellowray goldfield, goosefoot, manzanita, catsclaw, desert lily, mariposa lily, and other species

such as grass seed. A number of agricultural domesticates were acquired from the Colorado River tribes including corn, bean, squash, and melon grown in limited amounts. Animal species taken included deer, bighorn sheep, pronghorn antelope, rabbit, hare, rat, quail, dove, duck, roadrunner, and a variety of rodents, reptiles, fish, and insects (Bean 1978; Kroeber 1976).

Social Organization

The Cahuilla were not a political nation, but rather a cultural nationality with a common language. Two non-political, non-territorial patrimoieties were recognized: the Wildcats (túktem) and the Coyotes (?ístam). Lineage and kinship were memorized at a young age among the Cahuilla, providing a backdrop for political relationships. Clans were comprised of three to 10 lineages; each lineage owned a village site and specific resource areas. Lineages within a clan cooperated in subsistence activities, defense, and rituals (Bean 1978; Kroeber 1976).

A system of ceremonial hierarchy operated within each lineage. The hierarchy included the lineage leader, who was responsible for leading subsistence activities, guarding the sacred bundle, and negotiating with other lineage leaders in matters concerning land use, boundary disputes, marriage arrangements, trade, warfare, and ceremonies. The ceremonial assistant to the lineage leader was responsible for organizing ceremonies. A ceremonial singer possessed and performed songs at rituals and trained assistant singers. The shaman cured illnesses through supernatural powers, controlled natural phenomena, and was the guardian of ceremonies, meant to keep evil spirits away. The diviner was responsible for finding lost objects, telling future events, and locating game and other food resources. Doctors were usually older women who cured various ailments and illnesses with their knowledge of medicinal herbs. Finally, certain Cahuilla specialized as traders, who ranged as far west as Santa Catalina and as far east as the Gila River (Bean 1978; Kroeber 1976).

Marriages were arranged by parents from opposite moieties. When a child was born, an alliance formed between the families, which included frequent reciprocal exchanges. The Cahuilla kinship system extended to relatives within five generations. Important economic decisions, primarily the distribution of goods, operated within this kinship system (Bean 1978; Kroeber 1976).

Material Culture

Cahuilla houses were dome-shaped or rectangular, thatched structures. The home of the lineage leader was the largest, located near the ceremonial house with the best access to water. Other structures within the village included the men's sweathouse and granaries (Bean 1978; Kroeber 1976).

Cahuilla clothing, like other groups in the area, was minimal. Men typically wore a loincloth and sandals; women wore skirts made from mesquite bark, animal skin, or tules. Babies wore mesquite bark diapers. Rabbit skin cloaks were worn in cold weather (Bean 1978; Kroeber 1976).

Hunting implements included the bow and arrow, throwing sticks, and clubs. Grinding tools used in food processing included manos, metates, and wood mortars. The Cahuilla were known to use long grinding implements made from wood to process mesquite beans; the mortar was typically a hollowed log buried in the ground. Other tools included steatite arrow shaft straighteners (Bean 1978; Kroeber 1976).

Baskets were made from rush, deer grass, and skunkbush. Different species and leaves were chosen for different colors in the basket design. Coiled-ware baskets were either flat (for plates, trays, or winnowing), bowl-shaped (for food serving), deep, inverted, and cone-shaped (for transporting), or rounded and flat-bottomed for storing utensils and personal items (Bean 1978; Kroeber 1976).

Cahuilla pottery was made from thin, red-colored ceramic ware that was often painted and incised. Four basic vessel types are known for the Cahuilla: small-mouthed jars, cooking pots, bowls, and dishes. Additionally, smoking pipes and flutes were fashioned from ceramic (Bean 1978; Kroeber 1976).

Gabrielino: An Archaeological and Ethnographic Perspective

The territory of the Gabrielino at the time of Spanish contact covers much of present-day Los Angeles and Orange counties. The southern extent of this cultural area is bounded by Aliso Creek, the eastern extent is located east of present-day San Bernardino along the Santa Ana River, the northern extent includes the San Fernando Valley, and the western extent includes portions of the Santa Monica Mountains. The Gabrielino also occupied several Channel Islands including Santa Barbara Island, Santa Catalina Island, San Nicholas Island, and San Clemente Island. Due to their access to certain resources, including a steatite source from Santa Catalina Island, this group was among the wealthiest and most populous aboriginal groups in all of southern California. Trade of materials and resources controlled by the Gabrielino extended as far north as the San Joaquin Valley, as far east as the Colorado River, and as far south as Baja California (Bean and Smith 1978; Kroeber 1976).

Subsistence and Settlement

The Gabrielino lived in permanent villages and occupied smaller resource-gathering camps at various times of the year depending upon the seasonality of the resource. Larger villages were comprised of several families or clans, while smaller, seasonal camps typically housed smaller family units. The coastal area between San Pedro and Topanga Canyon was the location of primary subsistence villages, while secondary sites were located near inland sage stands, oak groves, and pine forests. Permanent villages were located along rivers and streams and in sheltered areas along the coast. As previously mentioned, the Channel Islands were also the locations of relatively large settlements (Bean and Smith 1978; Kroeber 1976).

Resources procured along the coast and on the islands were primarily marine in nature and included tuna, swordfish, ray and shark, California sea lion, Stellar sea lion, harbor seal, northern elephant seal, sea otter, dolphin and porpoise, various waterfowl species, numerous fish species,

purple sea urchin, and mollusks such as rock scallop, California mussel, and limpet. Inland resources included oak acorn, pine nut, Mojave yucca, cacti, sage, grass nut, deer, rabbit, hare, rodent, quail, duck, and a variety of reptiles such as western pond turtle and numerous snake species (Bean and Smith 1978; Kroeber 1976).

Social Organization

Little is known about the social structure of the Gabrielino; however, there appears to have been at least three social classes: 1) the elite, which included the rich, chiefs, and their immediate family; 2) a middle class, which included people of relatively high economic status or long-established lineages; and 3) a class of people that included most other individuals in the society. Villages were politically autonomous units comprised of several lineages. During times of the year when certain seasonal resources were available, the village would divide into lineage groups and move out to exploit them, returning to the village between forays (Bean and Smith 1978; Kroeber 1976).

Each lineage had its own leader, with the village chief coming from the dominant lineage. Several villages might be allied under a paramount chief. Chiefly positions were of an ascribed status, most often passed to the eldest son. Chiefly duties included providing village cohesion, leading warfare, and peace negotiations with other groups, collecting tribute from the village(s) under his jurisdiction, and arbitrating disputes within the village(s). The status of the chief was legitimized by his safekeeping of the sacred bundle, a representation of the link between the material and spiritual realms and the embodiment of power (Bean and Smith 1978; Kroeber 1976).

Shamans were leaders in the spirit realm and their duties included conducting healing and curing ceremonies, guarding the sacred bundle, locating lost items, identifying and collecting poisons for arrows, and making rain (Bean and Smith 1978; Kroeber 1976).

Marriages were made between individuals of equal social status, and in the case of powerful lineages, marriages were arranged to establish political ties between the lineages (Bean and Smith 1978; Kroeber 1976).

Men conducted the majority of the heavy labor, hunting, fishing, and trading with other groups. Women's duties included gathering and preparing plant and animal resources, as well as making baskets, pots, and clothing (Bean and Smith 1978; Kroeber 1976).

Material Culture

Gabrielino houses were domed, circular structures made of thatched vegetation. Houses varied in size and could house anywhere from one to several families. Sweathouses (semicircular, earth-covered buildings) were public structures used in male social ceremonies. Other structures included menstrual huts and a ceremonial structure called a yuvar which was an open-air structure built near the chief's house (Bean and Smith 1978; Kroeber 1976).

Clothing was minimal; men and children most often went naked, while women wore deerskin or bark aprons. In cold weather, deerskin, rabbit fur, or bird skin (with feathers intact) cloaks were worn. Island and coastal groups used sea otter fur for cloaks. In areas of rough terrain,

yucca fiber sandals were worn. Women often used red ochre on their faces and skin for adornment or protection from the sun. Adornment items included feathers, fur, shells, and beads (Bean and Smith 1978; Kroeber 1976).

Hunting implements included wood clubs, sinew-backed bows, slings, and throwing clubs. Maritime implements included rafts, harpoons, spears, hook and line, and nets. A variety of other tools included deer scapulae saws, bone and shell needles, bone awls, scrapers, bone or shell flakers, wedges, stone knives and drills, metates, mullers, manos, shell spoons, bark platters, and wood paddles and bowls. Baskets were made from rush, deer grass, and skunkbush. Baskets were fashioned for hoppers, plates, trays, and winnowers for leaching, straining, and gathering. Baskets were also used for storing, preparing, and serving food, and for keeping both personal and ceremonial items (Bean and Smith 1978; Kroeber 1976).

The Gabrielino had exclusive access to soapstone, or steatite, procured from Santa Catalina Island quarries. This highly prized material was used for making pipes, animal carvings, ritual objects, ornaments, and cooking utensils. The Gabrielino profited well from trading steatite since it was valued so much by groups throughout southern California (Bean and Smith 1978; Kroeber 1976).

2.3.6 Ethnohistoric Period (1769 to Present)

Traditionally, the history of the state of California has been divided into three general periods: the Spanish Period (1769 to 1821), the Mexican Period (1822 to 1846), and the American Period (1848 to present) (Caughey 1970). The American Period is often further subdivided into additional phases: the nineteenth century (1848 to 1900), the early twentieth century (1900 to 1950), and the Modern Period (1950 to present). From an archaeological standpoint, all of these phases can be referred to together as the Ethnohistoric Period. This provides a valuable tool for archaeologists, as ethnohistory is directly concerned with the study of indigenous or non-Western peoples from a combined historical/anthropological viewpoint, which employs written documents, oral narrative, material culture, and ethnographic data for analysis.

European exploration along the California coast began in 1542 with the landing of Juan Rodríguez Cabrillo and his men at San Diego Bay. Sixty years after the Cabrillo expeditions, an expedition under Sebastián Vizcaíno made an extensive and thorough exploration of the Pacific coast. Although the voyage did not extend beyond the northern limits of the Cabrillo track, Vizcaíno had the most lasting effect upon the nomenclature of the coast. Many of his place names have survived, whereas practically every one of the names created by Cabrillo have faded from use. For instance, Cabrillo named the first (now) United States port he stopped at “San Miguel”; 60 years later, Vizcaíno changed it to “San Diego” (Rolle 1969). The early European voyages observed Native Americans living in villages along the coast but did not make any substantial, long-lasting impact. At the time of contact, the Luiseño population was estimated to have ranged from 4,000 to as many as 10,000 individuals (Bean and Shipek 1978; Kroeber 1976).

The historic background of the project area began with the Spanish colonization of Alta California. The first Spanish colonizing expedition reached southern California in 1769 with the intention of converting and civilizing the indigenous populations, as well as expanding the knowledge of and access to new resources in the region (Brigandi 1998). As a result, by the late eighteenth century, a large portion of southern California was overseen by Mission San Luis Rey (San Diego County), Mission San Juan Capistrano (Orange County), and Mission San Gabriel (Los Angeles County), who began colonization in the region and surrounding areas (Chapman 1921).

Up until this time, the only known way to feasibly travel from Sonora to Alta California was by sea. In 1774, Juan Bautista de Anza, an army captain at Tubac, requested and was given permission by the governor of the Mexican State of Sonora to establish an overland route from Sonora to Monterey (Chapman 1921). In doing so, Juan Bautista de Anza passed through Riverside County and described the area in writing for the first time (Caughey 1970; Chapman 1921). In 1797, Father Fermín de Lasuén (of Mission San Diego de Alcalá), Father Norberto de Santiago, and Corporal Pedro Lisalde (of Mission San Juan Capistrano) led an expedition through southwestern Riverside County in search of a new mission site to establish a presence between San Diego and San Juan Capistrano (Engelhardt 1921). Their efforts ultimately resulted in the establishment of Mission San Luis Rey in Oceanside, California.

Each mission gained power through the support of a large, subjugated Native American workforce. As the missions grew, livestock holdings increased and became increasingly vulnerable to theft. In order to protect their interests, the southern California missions began to expand inland to try and provide additional security (Beattie and Beattie 1939; Caughey 1970). In order to meet their needs, the Spaniards embarked on a formal expedition in 1806 to find potential locations within what is now the San Bernardino Valley. As a result, by 1810, Father Francisco Dumetz of Mission San Gabriel had succeeded in establishing a religious site, or capilla, at a Cahuilla rancheria called Guachama (Beattie and Beattie 1939). San Bernardino Valley received its name from this site, which was dedicated to San Bernardino de Siena by Father Dumetz. The Guachama rancheria was located in present-day Bryn Mawr in San Bernardino County.

These early colonization efforts were followed by the establishment of estancias at Puente (circa 1816) and San Bernardino (circa 1819) near Guachama (Beattie and Beattie 1939). These efforts were soon mirrored by the Spaniards from Mission San Luis Rey, who in turn established a presence in what is now Lake Elsinore, Temecula, and Murrieta (Chapman 1921). The indigenous groups who occupied these lands were recruited by missionaries, converted, and put to work in the missions (Pourade 1961). Throughout this period, the Native American populations were decimated by introduced diseases, a drastic shift in diet resulting in poor nutrition, and social conflicts due to the introduction of an entirely new social order (Cook 1976).

Mexico achieved independence from Spain in 1822 and became a federal republic in 1824. As a result, both Baja and Alta California became classified as territories (Rolle 1969). Shortly thereafter, the Mexican Republic sought to grant large tracts of private land to its citizens to begin to encourage immigration to California and to establish its presence in the region. Part of the

establishment of power and control included the desecularization of the missions circa 1832. These same missions were also located on some of the most fertile land in California and, as a result, were considered highly valuable. The resulting land grants, known as "ranchos," covered expansive portions of California and, by 1846, more than 600 land grants had been issued by the Mexican government. Rancho Jurupa was the first rancho to be established and was issued to Juan Bandini in 1838. Although Bandini primarily resided in San Diego, Rancho Jurupa was located in what is now Riverside County (Pourade 1963). A review of Riverside County place names quickly illustrates that many of the ranchos in Riverside County lent their names to present-day locations, including Jurupa, El Rincon, La Sierra, El Sobrante de San Jacinto, La Laguna (Lake Elsinore), Santa Rosa, Temecula, Pauba, San Jacinto Nuevo y Potrero, and San Jacinto Viejo (Gunther 1984). As was typical of many ranchos, these were all located in the valley environments within western Riverside County.

The treatment of Native Americans grew worse during the Rancho Period. Most of the Native Americans were forced off their land or put to work on the now privately-owned ranchos, often as slave labor. The degree to which Native Americans had become dependent upon the mission system due to the brutal ranchos is evident when, in 1838, a group of Native Americans from Mission San Luis Rey petitioned government officials in San Diego to relieve suffering at the hands of the rancheros:

> We have suffered incalculable losses, for some of which we are in part to be blamed for because many of us have abandoned the Mission … We plead and beseech you … to grant us a Rev. Father for this place. We have been accustomed to the Rev. Fathers and to their manner of managing the duties. We labored under their intelligent directions, and we were obedient to the Fathers according to the regulations, because we considered it as good for us. (Brigandi 1998:21)

Native American culture had been disrupted to the point where they could no longer rely upon their prehistoric subsistence and social patterns. Not only does this illustrate how dependent the Native Americans had become upon the missionaries, but it also indicates a marked contrast in the way the Spanish treated the Native Americans compared to the Mexican and United States ranchers. Spanish colonialism (missions) is based upon utilizing human resources while integrating them into their society. The Mexican and American ranchers did not accept Native Americans into their social order and used them specifically for the extraction of labor, resources, and profit. Rather than being incorporated, they were either subjugated or exterminated (Cook 1976).

By 1846, tensions between the United States and Mexico had escalated to the point of war (Rolle 1969). In order to reach a peaceful agreement, the Treaty of Guadalupe Hidalgo was put into effect in 1848, which resulted in the annexation of California to the United States. Once California opened to the United States, waves of settlers moved in searching for gold mines, business opportunities, political opportunities, religious freedom, and adventure (Rolle 1969;

Caughey 1970). By 1850, California had become a state and was eventually divided into 27 separate counties. While a much larger population was now settling in California, this was primarily in the central valley, San Francisco, and the Gold Rush region of the Sierra Nevada mountain range (Rolle 1969; Caughey 1970). During this time, southern California grew at a much slower pace than northern California and was still dominated by the cattle industry that was established during the earlier rancho period. However, by 1859, the first United States Post Office in what would eventually become Riverside County was set up at John Magee's store on the Temecula Rancho (Gunther 1984).

During the same decade, circa 1852, the Native Americans of southern Riverside County, including the Luiseño and the Cahuilla, thought they had signed a treaty resulting in their ownership of all lands from Temecula to Aguanga east to the desert, including the San Jacinto Valley and the San Gorgonio Pass. The Temecula Treaty also included food and clothing provisions for the Native Americans. However, Congress never ratified these treaties, and the promise of one large reservation was rescinded (Brigandi 1998).

With the completion of the Southern Pacific Railroad in 1869, southern California saw its first major population expansion. The population boom continued circa 1874 with the completion of connections between the Southern Pacific Railroad in Sacramento to the transcontinental Central Pacific Railroad in Los Angeles (Rolle 1969; Caughey 1970). The population influx brought farmers, land speculators, and prospective developers to the region. As the Jurupa area became more and more populated, circa 1870, Judge John Wesley North and a group of associates founded the city of Riverside on part of the former rancho.

Although the first orange trees were planted in Riverside County circa 1871, it was not until a few years later when a small number of Brazilian navel orange trees were established that the citrus industry truly began in the region (Patterson 1971). The Brazilian navel orange was well suited to the climate of Riverside County and thrived with assistance from several extensive irrigation projects. At the close of 1882, an estimated half a million citrus trees were present in California. It is estimated that nearly half of that citrus tree population was in Riverside County. Population growth and 1880s tax revenue from the booming citrus industry prompted the official formation of Riverside County in 1893 out of portions of what was once San Bernardino and San Diego counties (Patterson 1971).

Shortly thereafter, with the start of World War I, the United States began to develop a military presence in Riverside County with the construction of March Air Reserve Base. During World War II, Camp Anza and Camp Haan were constructed, with the former located in the western part of the city of Riverside and the latter in what is now the current location of the National Veteran's Cemetery. In the decades that followed, populations spread throughout the county into Lake Elsinore, Corona, Norco, Murrieta, and Wildomar. A significant portion of the county, however, remained largely agricultural well into the 1970s. Following the 1970s, Riverside saw a period of dramatic population increase as the result of new development, more than doubling the population of the county to a population of over 1.3 million residents (Patterson 1971).

History of the City of San Jacinto and the Surrounding Area

Settlement in the San Jacinto Valley began with a 35,500-acre land grant given to José Antonio Estudillo in 1842, known as the Rancho San Jacinto Viejo Land Grant. Estudillo's children began developing the ranch in the 1880s by constructing two, two-story brick mansions, one of which is still located at South Dillon Avenue and Main Street in San Jacinto (Plate 2.3−1). In 1889, 15,000 acres of the Rancho San Jacinto Viejo Land Grant were sold to a group of Los Angeles investors known as the San Jacinto Land Association. Prior to the secession of the acreage, these investors developed a rival town in 1883 just two miles away from San Jacinto.



Plate 2.3−1: The Estudillo Mansion circa 1890.
(*Photograph courtesy of the City of San Jacinto Archives)*



Plate 2.3−2: Old San Jacinto circa 1890.
(Photograph courtesy of the City of San Jacinto Archives)

The town, which called itself New San Jacinto, competed for dominance with Old San Jacinto (Plate 2.3−2). However, the battle was ultimately decided when the Santa Fe Railroad built a branch line that terminated in New San Jacinto. Old San Jacinto faded from existence by the twentieth century (City of San Jacinto 2020). According to one source:

> The San Jacinto Land Association originally wanted the region to be a Methodist temperance colony and had even gone as far as to state that deeds to land sold by the Association would contain a clause prohibiting the manufacture or sale of alcoholic beverages upon land sold by the company. Nevertheless, it appeared as though such clauses were never initiated into the deeds. (Wiley 2018)

The valley land was divided into large farm lots, usually made up of one quarter of the sectioned land. Portions of the San Jacinto Land Association land were irrigated with water obtained in the San Jacinto Mountains to the east. However, the region still lacked a sufficient water supply to support large scale agriculture, until:

> Edward Mayberry, William Whitter, Albert H.H. Judson, Hancock M. Johnston, and Peter Potts formed the Lake Hemet Water Company and the Hemet Land Company after acquiring portions of Rancho San Jacinto. By 1895, the Lake Hemet Water Company had constructed a dam (Lake Hemet) that they planned to use to irrigate the holdings of the Hemet Land Company. The formation of the Lake Hemet Dam led to the incorporation of the city of Hemet in 1910. (Wiley 2018)

With the expanded irrigation capabilities, farmers began to thrive in the San Jacinto Valley throughout the early twentieth century as settlements increased, giving rise to small family-owned agricultural businesses while large-scale cattle ranching declined in popularity (City of San Jacinto 2020). Instead, "small-scale horticulture increased," with many different crops grown throughout the San Jacinto Valley due to its relatively high water table (10 to 15 feet below the surface) and warm climate (Wiley 2018; Pitman 1976). In fact, "Citrus, alfalfa, corn, potatoes, oat hay, and walnut orchards all prospered in the early twentieth century" (Wiley 2018).

Tourism also played an important role to the development of the San Jacinto Valley. In the 1880s, Helen Hunt Jackson visited the San Jacinto Valley to conduct research for her upcoming book, *Ramona*. Although *Ramona* is a fictional dramatization of Native American mistreatment, the book sparked an increase in tourism within the San Jacinto Valley, eventually leading to the creation of the California Historic Landmark Ramona Bowl (CHL No. 1009), where the annual Ramona Pageant, a dramatization of the events depicted in the novel, was first performed in 1923 (Office of Historic Preservation [OHP] 1993).

In 1909, Edwin Cawston, an English businessman, established a second location of his extremely popular ostrich farm from Pasadena just southwest of the subject property at Cawston and Cottonwood avenues. Cawston raised the birds primarily for their feathers, which were used in women's decorative clothing and accessories, such as ostrich feather fans and feather boas. The farm was considered a tourist attraction, where guests could view, feed, and ride the birds and purchase goods made from the feathers. Although Cawston's San Jacinto farm was short lived, his influence on the region is clear, as Cawston Avenue is named after him.

On July 14, 1937, in a dairy pasture located in the northern portion of the city:

> … pilot Mikhail Gromov, co-pilot Andrei Yumashev and navigator Sergei Danilin piloted their brakeless, single-engine ANT-25 plane – with a wingspan of 125 feet – to a landing in what is now near the Riverside County city of San Jacinto.
>
> Although the fliers had charted San Diego as their destination, fog forced them to find an alternative landing site. After flying the 6,305 miles from Moscow in 62 hours and 17 minutes, the crew climbed wearily out of the red-winged, silver-bodied craft, walked up to a farmer who had watched them land and handed him first a pre-printed note asking him to call the Soviet Embassy, and then three cards that read: "Bath," "Eat," and "Sleep." (Rasmussen 2001)

The flight was one of three different Soviet attempts to establish the feasibility of flying from Russia to the United States by way of the North Pole (Wiley 2019). However, fog forced the plane to make a landing in the cow pasture owned by Earl Smith, near the corner of Cottonwood and Sanderson avenues (Plate 2.3–3; Rasmussen 2001). At the time, the 62 hour and 17 minute flight established a new world record for the longest nonstop distance flown of 6,305 miles (OHP 1989). As crowds gathered to look at the plane and Russian crew, Smith began charging admission to the onlookers (Rasmussen 2001; Schultz 2017). Before long, a plane from the nearby March Air Reserve Base landed and men were enlisted to set up a perimeter around the plane. Eventually, the plane was dismantled to be sent back to Russia while the crew was escorted throughout California before also returning to Russia (Rasmussen 2001).



Plate 2.3–3: 1937 photograph of the ANT-25 plane at the Russian Transpolar Landing Site.
(Photograph courtesy of the UCLA Library Archives)

Tourism garnered by the draw of natural hot springs located on the north side of the valley also stimulated the growth of the area by ushering in the development of resorts and hotels. Notably, the Gilman and Soboba Hot Springs, which were developed in the late nineteenth century, drew increased tourism in the early twentieth century (City of San Jacinto 2020). As the population of the valley grew, the demand for dairy products increased, and dairy farming became more prevalent in the San Jacinto Valley. By 1922, dairy farmers in the San Jacinto Valley were producing more than 500,000 gallons of milk yearly (Law 1922). The wide-open acreage and thorough irrigation allowed dairy cows in the San Jacinto Valley to free forage on ample fresh alfalfa, producing healthier cows and a better milk product, which could then be shipped to Los Angeles daily on the railroad lines (City of San Jacinto 2020). Turkey ranching and lime kilns also added to the economy. These industries are still important to the economy of the San Jacinto Valley today.

2.4 Research Goals

The primary goal of the research design is to attempt to understand the way in which humans have used the land and resources within the project through time, as well as to aid in the determination of resource significance. For the current project, the study area under investigation is the central-western portion of Riverside County. The scope of work for the archaeological program conducted for the Bradley Gardens Project included an intensive pedestrian survey of the entire 2.98-acre property and the assessment of four historic buildings. Given the area involved, the research design for this project was focused upon realistic study options. Since the main objective of the investigation was to identify the presence of and potential impacts to cultural

resources, the goal is not necessarily to answer wide-reaching theories regarding the development of early southern California, but to investigate the role and importance of the identified resources. Nevertheless, the assessment of the significance of a resource must take into consideration a variety of characteristics, as well as the ability of the resource to address regional research topics and issues.

Although survey programs are limited in terms of the amount of information available, several specific research questions were developed that could be used to guide the initial investigations of any observed cultural resources:

- Can located cultural resources be associated with a specific time period, population, or individual?
- Do the types of located cultural resources allow a site activity/function to be determined from a preliminary investigation? What are the site activities? What is the site function? What resources were exploited?
- How do the located sites compare to others reported from different surveys conducted in the area?
- How do the located sites fit existing models of settlement and subsistence for the region?

For the historic buildings located within the project, the potential for historic deposits is considered remote, and therefore, the research process was focused upon the built environment and those individuals associated with the ownership, design, and construction of the buildings within the project footprint. Although historic structure evaluations are limited in terms of the amount of information available, several specific research questions were developed that could be used to guide the initial investigations of any observed historic resources:

- Can the building be associated with any significant individuals or events?
- Is the building representative of a specific type, style, or method of construction?
- Is the building associated with any nearby structures? Does the building, when studied with the nearby structures, qualify as a contributor to a potential historic district?
- Was the building designed or constructed by a significant architect, designer, builder, or contractor?

Data Needs

At the survey level, the principal research objective is a generalized investigation of changing settlement patterns in both the prehistoric and historic periods within the study area. The overall goal is to understand settlement and resource procurement patterns of the project area occupants. Further, the overall goal of the historic structure assessment is to understand the construction and use of the buildings within their associated historic context. Therefore, adequate information on site function, context, and chronology from both an archaeological and historical

perspective is essential for the investigation. The fieldwork and archival research were undertaken with the following primary research goals in mind:

1) To identify cultural and historic resources occurring within the project;
2) To determine, if possible, site type and function, context of the deposit, and chronological placement of each cultural resource identified, and the type, style, and method of construction for any buildings;
3) To place each cultural resource identified within a regional perspective;
4) To identify persons or events associated with any buildings and their construction; and
5) To provide recommendations for the treatment of each cultural and historic resource identified.

3.0 METHODOLOGY

The cultural resources study of the project consisted of an institutional records search, an intensive cultural resource survey of the entire 2.98-acre project, and the detailed recordation of all identified cultural resources. This study was conducted in conformance with City of San Jacinto environmental guidelines, Section 21083.2 of the California Public Resources Code (PRC), and CEQA. Statutory requirements of CEQA (Section 15064.5) were followed for the identification and evaluation of resources. Specific definitions for archaeological resource type(s) used in this report are those established by the State Historic Preservation Office (SHPO 1995).

3.1 Methods

3.1.1 Archival Research

Records relating to the ownership and developmental history of this project were sought to identify any associated historic persons, historic events, or architectural significance. Records and lot book research was conducted at the BFSA research library, the SCIC, and the Riverside County Archives held at the County of Riverside Assessor-County Clerk-Recorder Office. Sanborn Fire Insurance maps were searched for at the San Diego Public Library. Appendix E contains maps of the property, including historic USGS maps from 1901, 1943, 1954, 1973, and 1999, the 1887 Estudillo Land and Water Addition to San Jacinto map, and the current Assessor's parcel map. No Sanborn maps are available as the property is outside the San Jacinto coverage areas.

3.1.2 Survey Methods

The survey methodology employed during the current investigation followed standard archaeological field procedures and was sufficient to accomplish a thorough assessment of the project. The field methodology employed for the project included walking evenly spaced survey transects set approximately 15 meters apart while visually inspecting the ground surface, including all potentially sensitive areas where cultural resources might be located. Photographs documenting survey discoveries and overall survey conditions were taken frequently. All cultural resources were recorded as necessary according to the OHP's manual, *Instructions for Recording Historical Resources,* using Department of Parks and Recreation (DPR) forms.

3.1.3 Historic Structure Assessment

Methods for evaluating the integrity and significance of the historic buildings within APN 435-330-003 included photographic documentation and review of available archival documents. During the survey, photographs were taken of all building elevations. The photographs were used to complete architectural descriptions of the buildings. The original core structures and all modifications made to the buildings since their initial construction were also recorded. The current setting of the buildings was compared to the historical setting of the property. This information was combined with the archival research in order to evaluate the buildings' seven aspects of integrity, as well as their potential significance under CEQA guidelines.

3.2 Applicable Regulations

Resource importance is assigned to districts, sites, buildings, structures, and objects that possess exceptional value or quality illustrating or interpreting the heritage of Riverside County in history, architecture, archaeology, engineering, and culture. A number of criteria are used in demonstrating resource importance. Specifically, criteria outlined in CEQA provide the guidance for making such a determination. Below is the CEQA criteria that a resource must meet in order to be determined important.

3.2.1 California Environmental Quality Act

According to CEQA (§15064.5a), the term "historical resource" includes the following:

1) A resource listed in or determined to be eligible by the State Historical Resources Commission for listing in the CRHR (PRC SS5024.1, Title 14 CCR. Section 4850 et seq.).
2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the PRC, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3) Any object, building, structure, site, area, place, record, or manuscript, which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (PRC SS5024.1, Title 14, Section 4852) including the following:

    a) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
    b) Is associated with the lives of persons important in our past;
    c) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
    d) Has yielded, or may be likely to yield, information important in prehistory or history.

4) The fact that a resource is not listed in, or determined eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to Section 5020.1[k] of

the PRC), or identified in a historical resources survey (meeting the criteria in Section 5024.1[g] of the PRC) does not preclude a lead agency from determining that the resource may be a historical resource as defined in PRC Section 5020.1(j) or 5024.1.

According to CEQA (§15064.5b), a project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect upon the environment. CEQA defines a substantial adverse change as:

1) Substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.
2) The significance of a historical resource is materially impaired when a project:

    a) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in the CRHR; or
    b) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in a historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or,
    c) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA.

Section 15064.5(c) of CEQA applies to effects upon archaeological sites and contains the following additional provisions regarding archaeological sites:

1. When a project will impact an archaeological site, a lead agency shall first determine whether the site is a historical resource, as defined in subsection (a).
2. If a lead agency determines that the archaeological site is a historical resource, it shall refer to the provisions of Section 21084.1 of the PRC, Section 15126.4 of the guidelines, and the limits contained in Section 21083.2 of the PRC do not apply.
3. If an archaeological site does not meet the criteria defined in subsection (a), but does meet the definition of a unique archaeological resource in Section 21083.2 of the PRC, the site shall be treated in accordance with the provisions of Section 21083.2. The time

and cost limitations described in PRC Section 21083.2(c-f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.

4. If an archaeological resource is neither a unique archaeological nor historical resource, the effects of the project upon those resources shall not be considered a significant effect upon the environment. It shall be sufficient that both the resource and the effect upon it are noted in the Initial Study or Environmental Impact Report, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

Section 15064.5(d) and (e) contain additional provisions regarding human remains. Regarding Native American human remains, paragraph (d) provides:

(d) When an Initial Study identifies the existence of, or the probable likelihood of, Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC, as provided in PRC SS5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the NAHC. Action implementing such an agreement is exempt from:

1) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).
2) The requirements of CEQA and the Coastal Act.

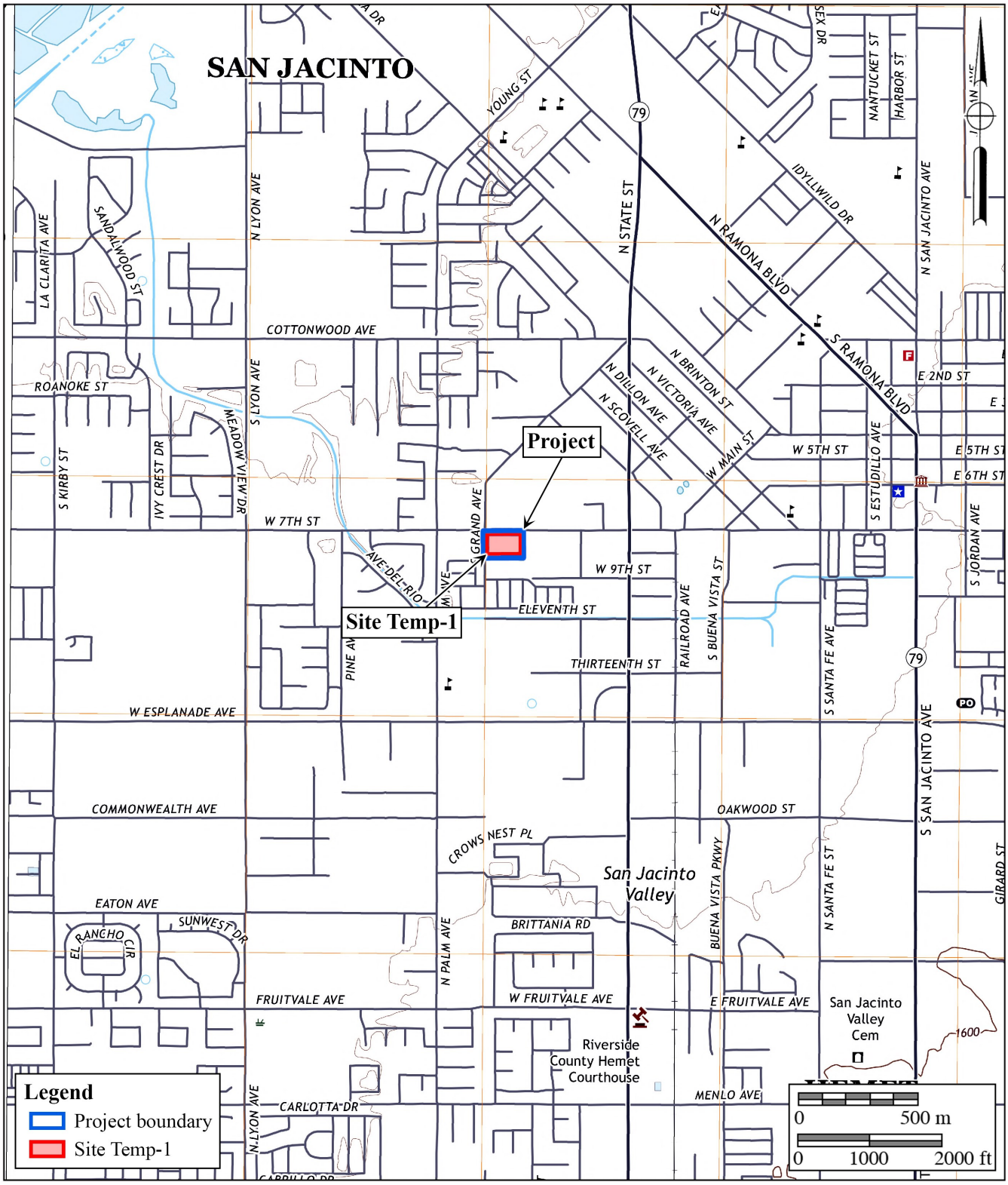

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Figure 4.2−1

Cultural Resource Location Map

The Bradley Gardens Project

USGS *San Jacinto* Quadrangle (7.5-minute series)

Site(s)	Description
RIV-10,093	Historic Kuhn compound
RIV-10,094	Historic adobe and trash scatter
RIV-10,911	Historic ranch complex with associated brick and wood debris

The results of the SCIC records search also identified 40 studies that have been conducted within one mile of the project, none of which overlap the project.

BFSA reviewed the following sources to help facilitate a better assessment of the potential for cultural resources within the property:

- The NRHP index
- The OHP Built Environment Resources Directory
- Historic 1942 and 1956 *Banning, California* (15-minute) USGS topographic maps
- Historic 1953 and 1996 *San Jacinto, California* (7.5-minute) USGS topographic maps
- BLM GLO records
- Aerial photographs (1939 to 2025)

Between 1939 and 1953, the subject property transitioned from a vacant field to agricultural use. The 1962 aerial photograph illustrates that the majority of the subject property consisted of an agricultural field and that a small structure had been constructed directly east of the project. By 1966, the entire subject property appears to have been cleared for the construction of two buildings, a small parking lot, and several driveways that served as the Colonial Nursing Home. Between the 1967 and 1972 aerial photographs, two more buildings had been constructed along the western project boundary and the parking lot on the northern half of the property was expanded. According to Riverside County Assessor's records, these buildings were constructed in 1971. By 1997, there had been several additions to the hardscape and a pool was constructed in the southwest portion of the property. The pool was filled by 2003 and paved over by 2026. The subject property currently includes four buildings associated with what is now the Bradley Garden care facility: a main residential building, a storage building, and two office buildings.

BFSA also requested a records search of the SLF of the NAHC to identify if any known sacred sites or locations of religious or ceremonial importance are within the search radius. The SLF results have been returned with positive results for cultural resources. All correspondence is provided in Appendix C.

4.2 Results of the Field Survey

The cultural resources survey was conducted on February 6, 2026. Principal Investigator Tracy A. Stropes, M.A., RPA, directed the cultural resources study for the project with assistance from BFSA archaeologist Reina Inlow. The intensive reconnaissance consisted of a series of parallel survey transects spaced at approximately 15-meter intervals when not hindered by the present development. All exposed ground surfaces were carefully inspected, including rodent burrows and disturbed areas. A survey form, field notes, and photographs documented the survey work. During the survey, visibility of the natural ground surface was limited to a grass lawn behind the large central building, commercial landscaping, and cleared areas surrounding the southeastern building. Vegetation on the property consisted of commercial landscaping surrounding the development and non-native weeds and grasses on the southern half (Plates 4.2–1 to 4.2–3).

The survey identified four extant buildings and a parking lot associated with the Bradley Gardens care facility (a large main care center building, one storage building in the southeast corner, and two medical office buildings in the northwest and southwest corners) that were constructed between 1964 and 1971 (Plate 4.2–4). No prehistoric resources were identified within the project. As the four Bradley Gardens care facility buildings are historic in age, they have been recorded as Site Temp-1 (Figure 4.2–1) and evaluated for significance below.

4.3 Historic Structure Analysis

Methods for evaluating the integrity and significance of the historic buildings recorded collectively as Site Temp-1 included photographic documentation and review of available archival documents. During the survey, photographs were taken of building elevations. The photographs were used to complete architectural descriptions of the buildings. The original core structures and all modifications made to the buildings since their initial construction were also recorded. The current setting of the buildings was compared to the historical setting of the property. This information was combined with archival research to evaluate the buildings' seven aspects of integrity, as well as their potential significance under CEQA and NRHP guidelines.

Within the boundaries of the subject property, four historic buildings associated with the Bradley Gradens care facility were identified (Figure 4.3–1). The applicable DPR forms have been prepared for submittal to the SCIC along with this report. Once processed, the SCIC will assign the resource a permanent site number. The following section provides the pertinent field results for the significance evaluation for the historic buildings located within the project boundaries, which was conducted in accordance with City of San Jacinto guidelines and site evaluation protocols.

The main care center building and storage building were constructed in 1964, according to Riverside County Assessor's records and a review of aerial photography. The two medical office buildings were constructed in 1971. Descriptions and significance evaluations of the Site Temp-1 buildings are provided below.



Plate 4.2–1: Overview from the southwest corner of the project, facing northeast.



Plate 4.2–2: Overview from the northeast corner of the project, facing southwest.



Plate 4.2–3: Overview from the southeast corner of the project, facing northwest.



Plate 4.2–4: Overview of the main care center building, facing south.

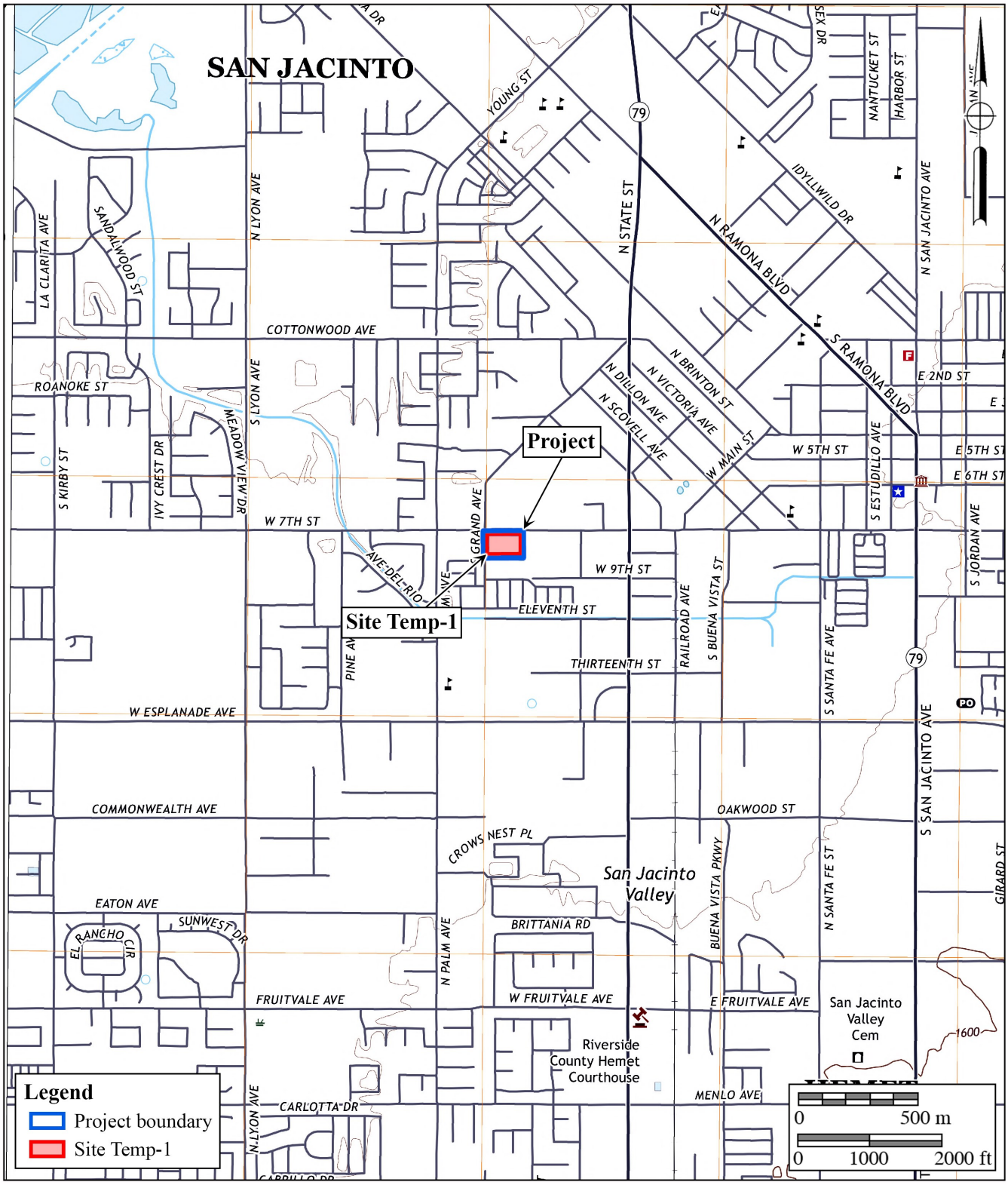

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Figure 4.2−1

Cultural Resource Location Map

The Bradley Gardens Project

USGS *San Jacinto* Quadrangle (7.5-minute series)

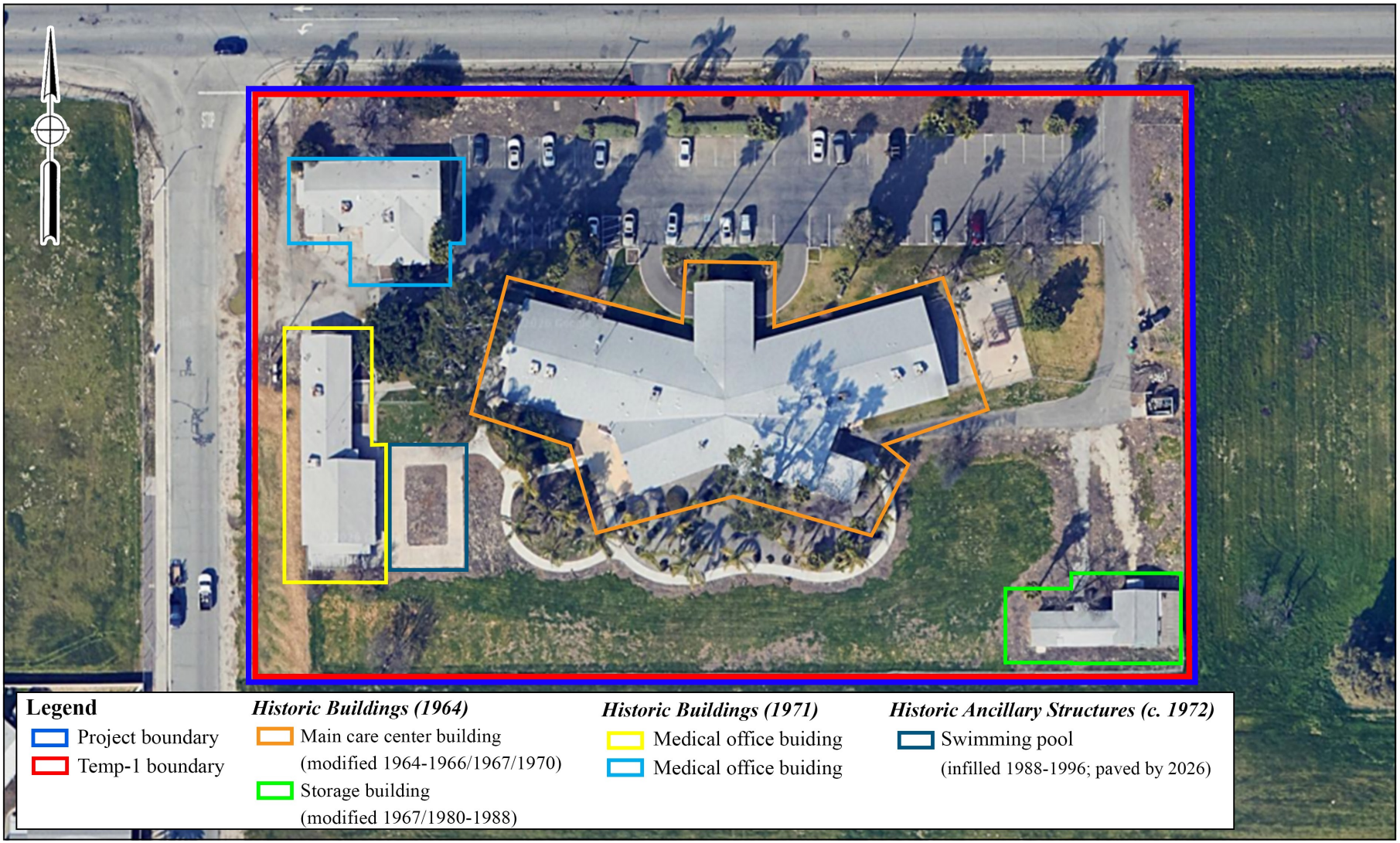

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Figure 4.3−1
Historic Building Location Map
The Bradley Gardens Project

4.3.1 History of the Project Area

According to lot book records, the subject property is located on Lot 14 and a portion of Lot 13 in the Estudillo Land and Water Co. Subdivision of San Jacinto, California. The first building improvements on these lots (listed together in the records) are recorded in 1945. However, a review of aerial imagery from 1962 and 1966 (Plates 4.3–1 and 4.3–2) confirms that any existing building improvements within the current property boundaries were removed by 1966.

According to lot book and building permit records, Howard Patterson and his niece Irene Yokes (Plate 4.3–3) purchased the property in 1961 with the intention of building a nursing home. They were granted a building permit to begin construction in 1963. Patterson was born in Pittsburgh, Pennsylvania, in 1880. In 1911, he married Anna E. Patterson (born circa 1879, maiden name unknown), who died in 1948. Irene Yokes "kept house for her uncle since his wife, Anna, died" and they lived in Hemet, California (*Hemet News* 1976; Ancestry.com 2006). Yokes (née Patterson) was born in Titusville, Pennsylvania, in 1898. In 1916, she married Delos Yokes (born 1895), who died in 1943 (*News Herald* 1916; Ancestry.com 2012).



99 AND GOING STRONG—A large crowd of well-wishers joined Howard H. Patterson Friday night at the Colonial Country Club Estates in the celebration of his 99th birthday. Shown with Mr. Patterson is his niece Irene Yokes. (Hemet News photo)

Plate 4.3–3: Irene Yokes and Howard Patterson at Howard's 99th Birthday Celebration. ***(Photograph courtesy of Hemet News 1979)***

Archival records, building permits, and aerial photographs indicate that Patterson and Yokes had the Colonial Nursing Home (also referred to as Colonial Convalescent Home in archival records) constructed on the property in April 1964, which included the main care center building and the storage building, which are both visible in the 1966 aerial photograph, which also shows a shed-roofed addition on the main care center building southeast wing (see Plate 4.3–2). The facility, listed at 3941 West Seventh Street at that time, was advertised as a 24-hour care facility for elderly, ill, or convalescent patients with a full staff of nurses, aids, and housekeepers (*Hemet News* 1964).

Building permit records and the 1967 aerial photograph (Plate 4.3–4) indicate that a cross-gabled addition to the storage building and additions to the northwest and northeast wings of the main center care building were constructed in 1967. Building records further indicate that a porte cochere was installed on the north façade of the main care center building in 1970, two medical office buildings were constructed along the western property boundary in 1971, and a swimming pool was constructed off the east façade of the southern medical office building likely in 1972, as a building permit was issued in that year but it is not visible in available aerial imagery from 1972 (Plates 4.3–5 and 4.3–6). Between 1980 and 1988, a shed-roofed garage addition was constructed on the east façade of the storage building (Plates 4.3–6 and 4.3–7) and between 1988 and 1996, the swimming pool was infilled (Plate 4.3–8). By the time of the current survey, the swimming pool had been paved for use as a basketball court.



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Plate 4.3−1
1962 Aerial Photograph
The Bradley Gardens Project

(Photograph courtesy of the University of California at Santa Barbara Library Geospatial Collection)



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Plate 4.3–2
1966 Aerial Photograph
The Bradley Gardens Project

(Photograph courtesy of the University of California at Santa Barbara Library Geospatial Collection)

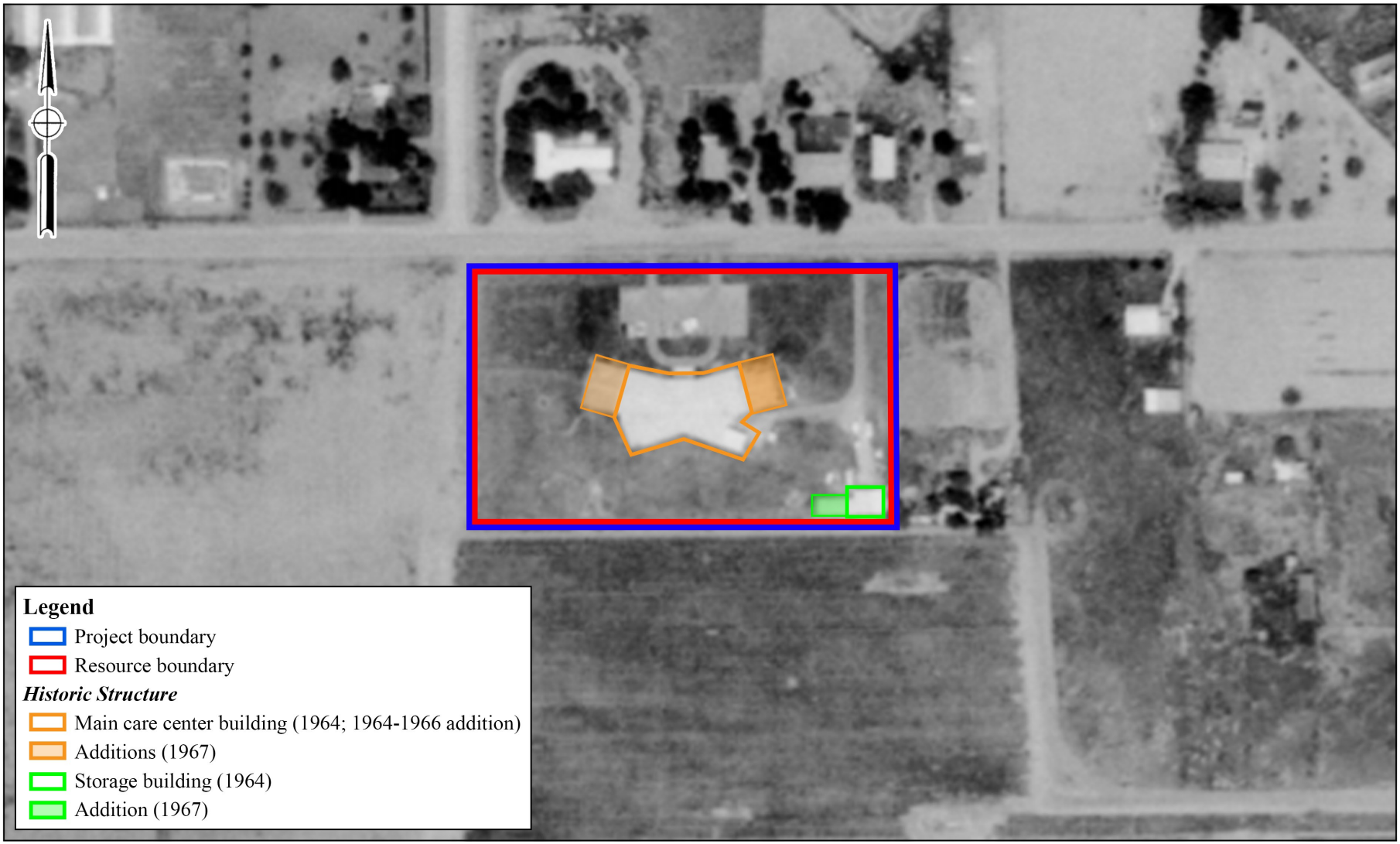

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Plate 4.3−4
1967 Aerial Photograph
The Bradley Gardens Project

(Photograph courtesy of the University of California at Santa Barbara Library Geospatial Collection)



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Plate 4.3–5
1972 Aerial Photograph
The Bradley Gardens Project

(Photograph courtesy of the University of California at Santa Barbara Library Geospatial Collection)



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Plate 4.3−6
1980 Aerial Photograph
The Bradley Gardens Project

(Photograph courtesy of the University of California at Santa Barbara Library Geospatial Collection)

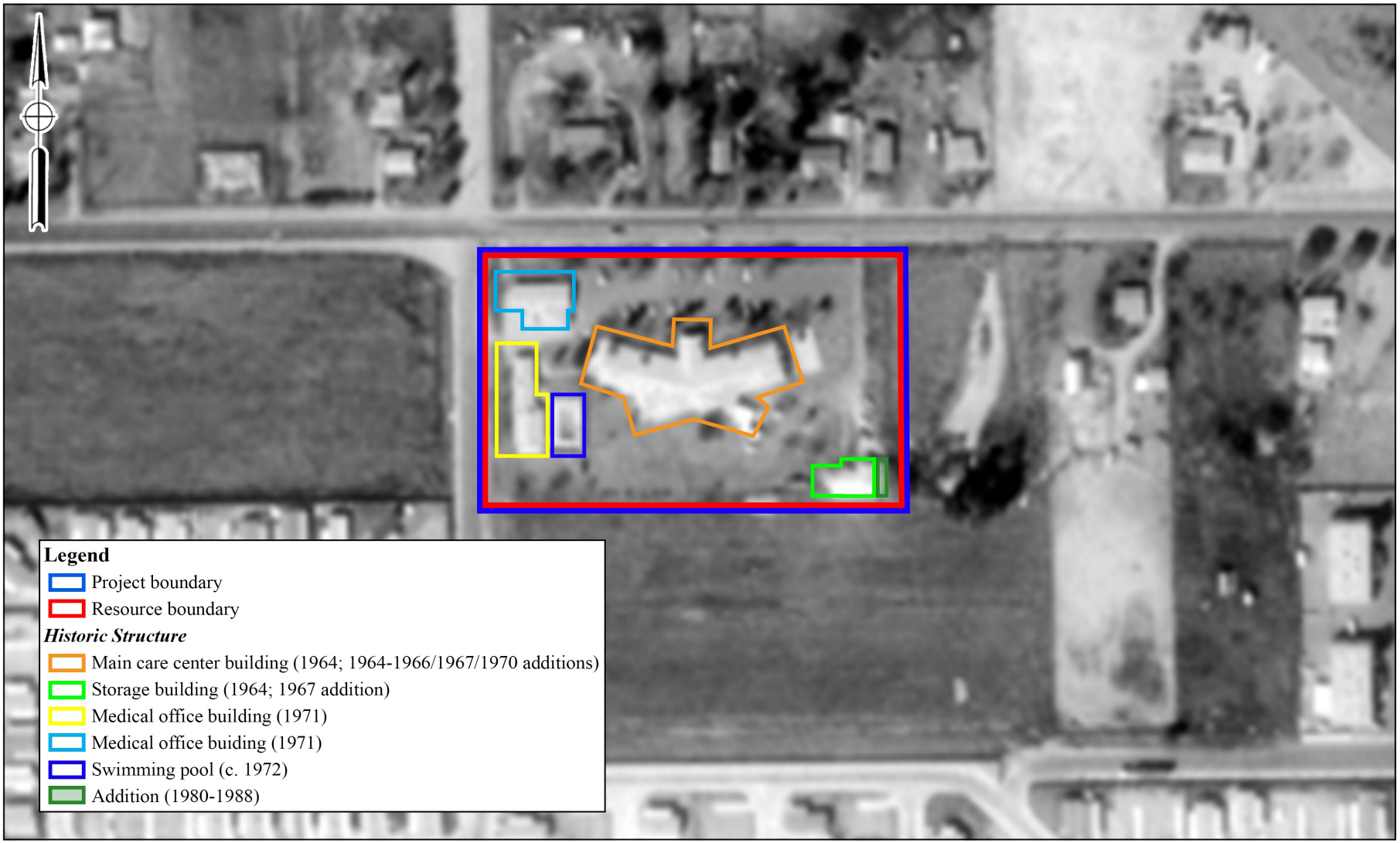

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Plate 4.3–7
1988 Aerial Photograph
The Bradley Gardens Project

(Photograph courtesy of the University of California at Santa Barbara Library Geospatial Collection)

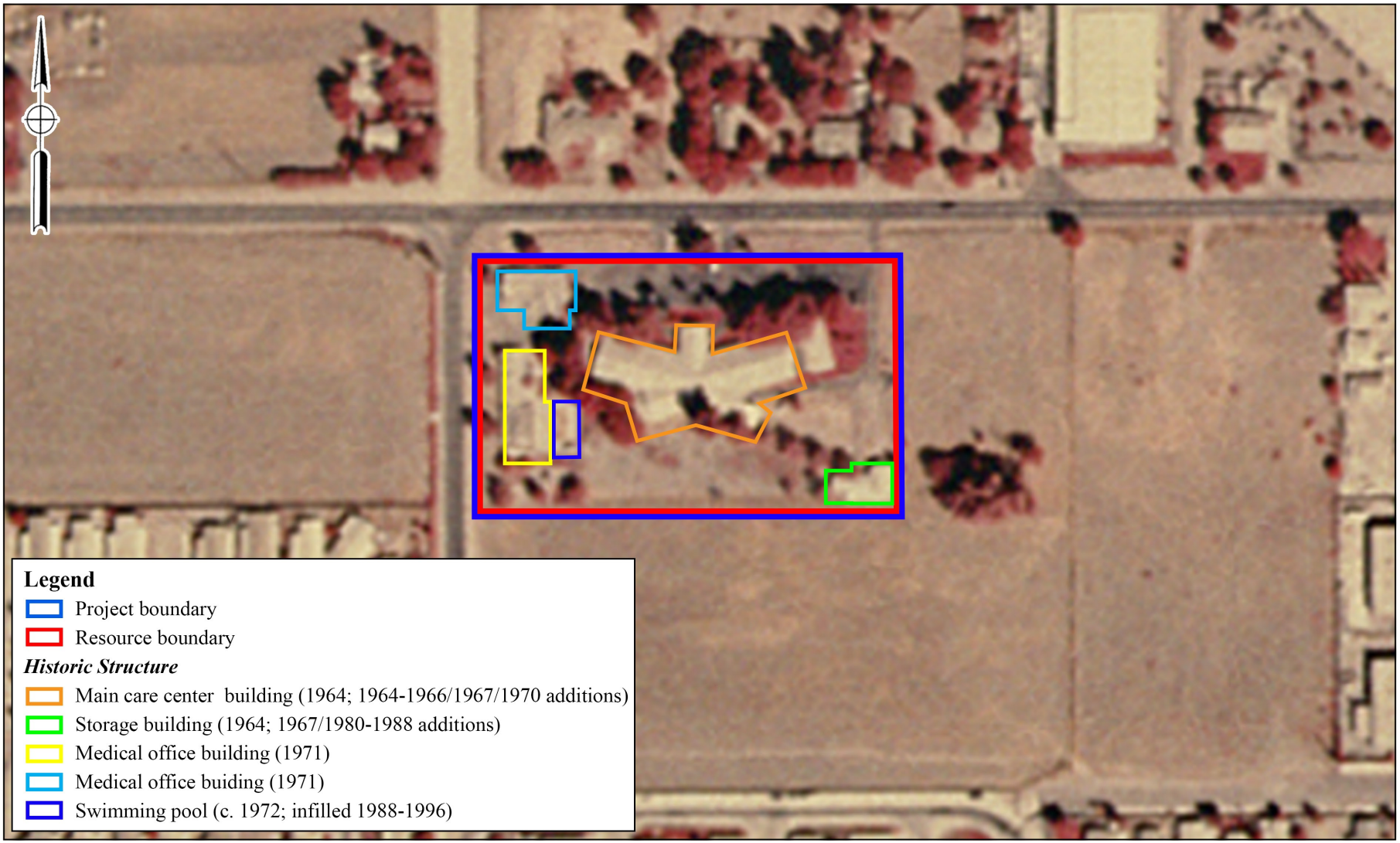

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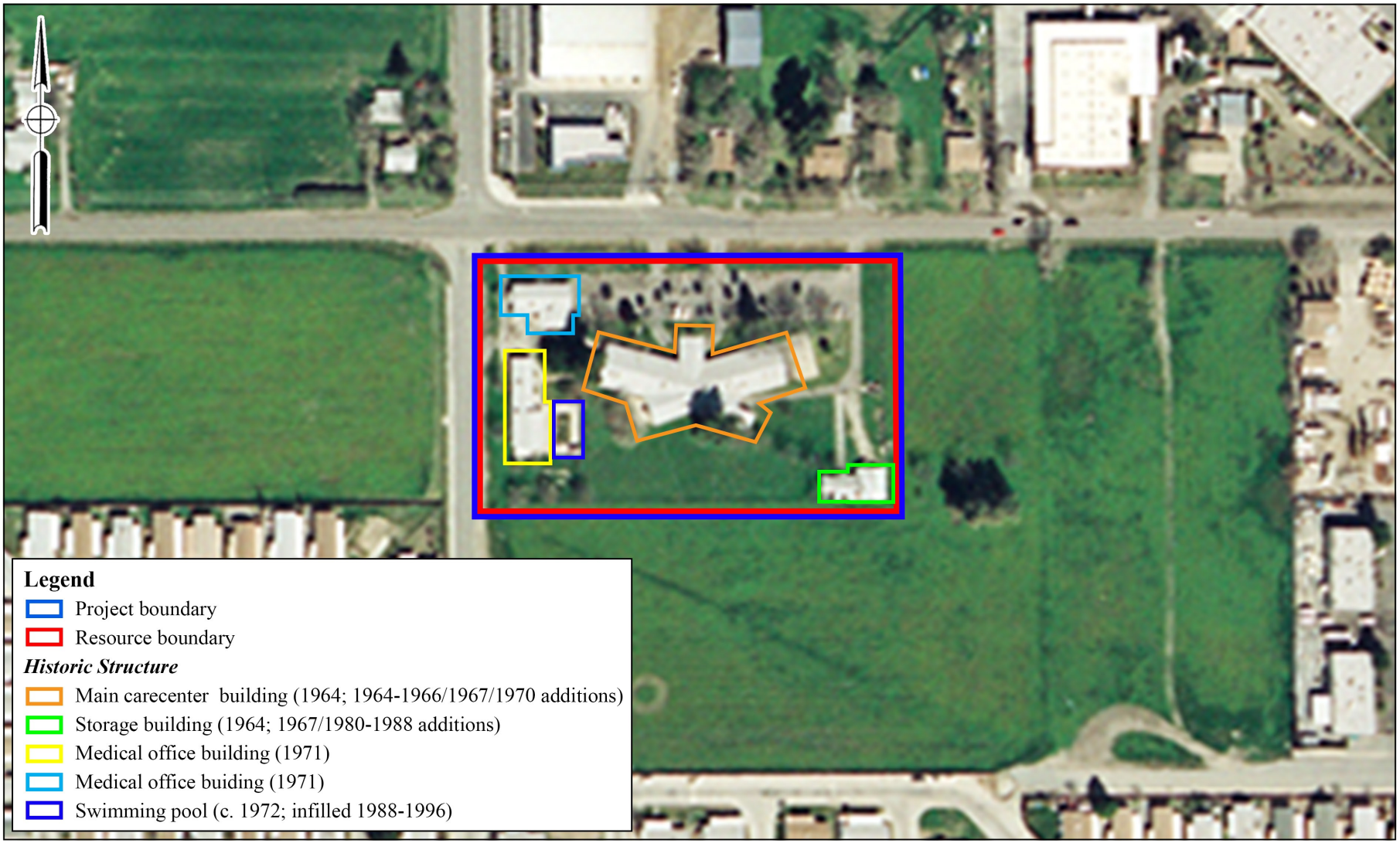
Plate 4.3–8
1996 Aerial Photograph
The Bradley Gardens Project
(Photograph courtesy of the University of California at Santa Barbara Library Geospatial Collection)



BFSA Environmental Services
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Plate 4.3–9
2003 Aerial Photograph
The Bradley Gardens Project

(Photograph courtesy of the University of California at Santa Barbara Library Geospatial Collection)

Howard Patterson died in 1982, and Irene Yokes died in 1991 (*Riverside Independent Enterprise* 1982; Ancestry.com 2012). It is unknown how long the two managed the operations at the Colonial Nursing Home, but building permit and chain of title records from the 1960s to the 1990s list Colonial Convalescent Hospital, Inc. as the property owner and lot book records list them as the owner beginning in 1971.

At an unknown date, the property and surrounding area were annexed into the city of San Jacinto, and by 1985, the subject property was listed under its current address at 980 West Seventh Street (*Hemet News* 1985). Chain of title records show that in 1988, the facility was sold to Care Net, Inc. (later referred to as Care Net Ltd.), but *Hemet News* (1996) still refers to the facility as Colonial Convalescent Hospital.

Healthcare Management Systems, Inc. purchased the property in 1997, when the facility was renamed Bradley Gardens Convalescent Center (also listed as the Bradley Gardens) (*Riverside Press Enterprise* 1997). Bradley Gardens has been in continuous operation from 1997 until the present. In 2024, Healthcare Management Systems sold the property to San Jacinto Real Estate LLC.

4.3.2 Description of Surveyed Resources

The Bradley Gardens care facility at 980 West Seventh Street includes a main care center building, a storage building, and two medical office buildings constructed between 1964 and 1971 in the Ranch architectural style. Each building features a broad, single-story layout, low-pitched, cross-gabled roofs with composite tiles, closed eaves with moderate overhangs, and sheltered entryways with simple wood post porch supports. The buildings feature painted stucco cladding and horizontal massing. Some solid wood or multipanel wood doors are featured, though most have been replaced by sliding aluminum doors or simple, swinging metal doors. Fenestration on each building consists of aluminum-framed windows, with the main care center building and southern medical office building featuring painted wood exterior trim surrounds.

Main Care Center Building

The 12,132-square-foot main care center building was constructed in 1964 with an irregular "X"-shaped floor plan created by two larger northwest and northeast wings and two smaller southwest and southeast wings. The northwest and northeast wings were extended in 1967 (see Plate 4.3–4). A central porte cochere protrudes from the north façade of the building that was added in 1970 (Plate 4.3–10). The front-gabled roof of the porte cochere is supported by fluted, doric-style columns on concrete plinths and projects north toward West Seventh Street. A circular driveway passes beneath and allows for vehicular access to the front entrance (Plates 4.3–11 and 4.3–12). This entrance consists of an automatic, aluminum-framed sliding door (see Plate 4.3–10). Fenestration on the north façade consists of aluminum-framed windows with painted wood exterior trim surrounds (see Plates 4.3–10 to 4.3–13).



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Plate 4.3–10
North Façade of the Main Care Center Building, Facing South
The Bradley Gardens Project



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Plate 4.3−11

North Façade of the Main Care Center Building, Facing South

The Bradley Gardens Project



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Plate 4.3–12
North Façade of the Main Care Center Building, Facing Southwest
The Bradley Gardens Project



BFSA Environmental Services
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Plate 4.3–13

East End of the North Façade of the Main Care Center Building, Facing Southwest

The Bradley Gardens Project

The northwest wing gable end features a painted metal door with a sheltered entryway supported by simple wood post porch supports (Plate 4.3–14), while the south façade of this wing contains one aluminum-framed sliding window and a painted metal door (Plate 4.3–15). The gable end of the northeast wing features two metal doors and an aluminum-framed sliding window (Plate 4.3–16). Two matching aluminum-framed window sets and a sliding aluminum-framed door are present on the south façade of the northeast wing (Plate 4.3–17).

The southwest and southeast wings form a shallow arc at the south façade of the building (see Figure 4.3–1). The wings each feature a recessed entrance in the gable ends with metal access doors (Plates 4.3–18 and 4.3–19). A shed-roof addition protrudes to the southeast from the southeast wing with vertical tongue-and-groove siding on the south and east façades (see Plate 4.3–19). Wood lattice paneling surrounds a metal screen door on the north façade of the southeast wing and wraps around to overlap the siding boards on the east façade (see Plate 4.3–19)

Storage Building

A square, front-gabled storage building was constructed in the southeastern corner of the property in 1964 (Plate 4.3–20). A cross-gabled addition was constructed on the west façade of the building in 1967 (Plates 4.3–21 and 4.3–22). Between 1980 and 1988, a shed-roofed garage addition was constructed on the east façade of the building (Plate 4.3–23). The garage addition features corrugated sheet metal cladding, a roll-up metal garage door, and a wide overhanging eave on the east façade with exposed rafters.

The primary (north) façade of the building features painted stucco cladding, a composite shingle roof with a low pitch and moderate overhang, and a shaded entryway over the primary entrance supported by simple wood posts (see Plate 4.3–20). Small aluminum-framed sliding windows are present on the north and south façades of the cross-gabled addition, along with larger aluminum sliding windows on the south façade of the original building and shed room extension. Two simple metal doors are present on the primary (north) façade (see Plate 4.3–20) and a multipaneled wood door is present on the west corner of the south façade (see Plate 4.3–22).

Medical Office Buildings

Two medical office buildings were constructed in 1971 along the western property boundary. The southern medical office building is a single story and side-gabled with an irregular, north-to-south, "L"-shaped floor plan. The building features a low-pitched roof with composite shingles and a moderate overhang, with painted stucco cladding. The south façade of the southern medical office building features a sheltered entryway with wood post porch supports over a glass, aluminum-framed door (Plate 4.3–24). Fenestration on the west (Plates 4.3–25 and 4.3–26) and east façades (Plate 4.3–27) consist of aluminum-framed sliding windows with painted wood exterior trim.



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Plate 4.3−14
Main Care Center Building Northwest Wing, Facing Southeast
The Bradley Gardens Project



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Plate 4.3−15
South Façade of the Main Care Center Building Northwest Wing, Facing East
The Bradley Gardens Project



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Plate 4.3−16
Main Care Center Building Northeast Wing, Facing Southwest
The Bradley Gardens Project



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Plate 4.3–17

South Façade of the Main Care Center Building Northeast Wing, Facing North

The Bradley Gardens Project



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Plate 4.3−18

West Façade of the Main Care Center Building Southwest Wing, Facing Northwest

The Bradley Gardens Project



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Plate 4.3–19

East Façade of the Main Care Center Building Southeast Wing, Facing West

The Bradley Gardens Project



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Plate 4.3–20
North Façade of the Storage Building, Facing South
The Bradley Gardens Project



BFSA Environmental Services
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Plate 4.3–21
West Façade of the Storage Building, Facing East
The Bradley Gardens Project



BFSA Environmental Services
A Perennial Company

Plate 4.3–22
South Façade of the Storage Building, Facing Northeast
The Bradley Gardens Project



BFSA Environmental Services
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Plate 4.3–23
East Façade of the Storage Building, Facing South
The Bradley Gardens Project



BFSA Environmental Services
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Plate 4.3–24
South Façade of the Southern Medical Office Building, Facing North
The Bradley Gardens Project



BFSA Environmental Services
A Perennial Company

Plate 4.3–25
North End of the West Façade of the Southern Medical Office Building, Facing East
The Bradley Gardens Project



BFSA Environmental Services
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Plate 4.3–26
South End of the West Façade of the
Southern Medical Office Building, Facing Southeast
The Bradley Gardens Project



BFSA Environmental Services
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Plate 4.3–27

East Façade of the Southern Medical Office Building, Facing Northwest

The Bradley Gardens Project

The east façade of the building features an aluminum-framed sliding glass door, three painted wood doors, and square pilasters that divide the east façade into bays. The east façade of the southern medical office building opens up into a paved courtyard area, which featured a pool likely built in 1972 and infilled by 1996, and paved for a basketball court by 2026 (Plate 4.3–28). The north façade does not exhibit any features except for a circular vent under the gable end (Plate 4.3–29).

The northern medical office building features a "L"-shaped floor plan with a small, projecting, south-facing gable on the western end of the south façade. The roof is cross gabled with a hipped roof extension at the southeast corner of the building, and features a low pitch, composite shingles, and a moderate overhang. A recessed entryway is present on the west façade of the hipped roof extension and is covered by a roof extension supported by simple wood posts (Plate 4.3–30). The primary entrance to the building is on the east façade underneath a broad entry porch supported by square, Tuscan-style columns (Plate 4.3–31). Similar square, Tuscan-style pilasters divide the east and north façades into equal bays (Plates 4.3–32 and 4.3–33). Each bay (excluding one on the east façade) features aluminum-framed sliding windows (see Plate 4.3–32). The gable end on the east façade also features a grooved embellishment within the stucco, highlighting the shape of the gable above the prominent bays and pilasters situated below. Views of the south façade are provided in Plates 4.3–34 and 4.3–35.

4.3.3 Significance Evaluation

CEQA guidelines (Section 15064.5) address archaeological and historic resources, noting that physical changes that would demolish or materially alter in an adverse manner those characteristics that convey the historic significance of the resource and justify its listing on inventories of historic resources are typically considered significant impacts. Because demolition and/or expansion of the buildings within the project would require approval from the City of San Jacinto, as part of the proposed project criteria for listing on the CRHR and the NRHP were used to measure the significance of the resources.

Integrity Evaluation

When evaluating a historic resource, integrity is the authenticity of the resource's physical identity clearly indicated by the retention of characteristics that existed during its period of construction. It is important to note that integrity is not the same as condition. Integrity directly relates to the presence or absence of historic materials and character-defining features, while condition relates to the relative state of physical deterioration of the resource. In most instances, integrity is more relevant to the significance of a resource than condition; however, if a resource is in such poor condition that original materials and features may no longer be salvageable, then the resource's integrity may be adversely impacted.



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Plate 4.3–28
East Façade of the Southern Medical Office Building and Basketball Court, Facing West
The Bradley Gardens Project



BFSA Environmental Services
A Perennial Company

Plate 4.3−29
North Façade of the Southern Medical Office Building, Facing South
The Bradley Gardens Project



BFSA Environmental Services
A Perennial Company

Plate 4.3–30
West Façade of the Northern Medical Office Building, Facing East
The Bradley Gardens Project



BFSA Environmental Services
A Perennial Company

Plate 4.3–31
South End of the East Façade of the Northern Medical Office Building, Facing Northwest
The Bradley Gardens Project



BFSA Environmental Services
A Perennial Company

Plate 4.3–32

North End of the East Façade of the Northern Medical Office Building, Facing West

The Bradley Gardens Project



BFSA Environmental Services
A Perennial Company

Plate 4.3−33
North Façade of the Northern Medical Office Building, Facing Southwest
The Bradley Gardens Project



BFSA Environmental Services
A Perennial Company

Plate 4.3–34

South Façade of the Northern Medical Office Building, Facing Northeast

The Bradley Gardens Project



BFSA Environmental Services
A Perennial Company

Plate 4.3–35
East End of the South Façade of the Northern Medical Office Building, Facing North
The Bradley Gardens Project

In order to determine whether or not the buildings are eligible for listing, CRHR and NRHP eligibility criteria were used. Furthermore, BFSA based the review upon the recommended criteria listed in the *National Register Bulletin: How to Apply the National Register Criteria for Evaluation* (Andrus and Shrimpton 2002). This review is based upon the evaluation of integrity of the buildings followed by the assessment of distinctive characteristics:

1. **Integrity of Location** *[refers to] the place where the historic property was constructed or the place where the historic event occurred* (Andrus and Shrimpton 2002). Integrity of location was assessed by reviewing historical records and historic aerial photographs in order to determine if the buildings had always existed at their present locations or if they had been moved, rebuilt, or their footprints significantly altered. Historical research revealed that the Bradley Gardens care facility buildings were constructed in their current locations between 1964 and 1971. Therefore, the buildings retain integrity of location.

2. **Integrity of Design** *[refers to] the combination of elements that create the form, plan, space, structure, and style of a property* (Andrus and Shrimpton 2002). Integrity of design was assessed by evaluating the spatial arrangement of the buildings and any architectural features present. The Bradley Gardens care facility buildings were constructed between 1964 and 1971 in the Ranch architectural style.

   The main care center building southeast wing had a shed-roofed addition constructed off it between 1964 and 1966 and its northwest and northeast wings were extended in 1967. A porte cochere with fluted, doric-style columns on concrete plinths was constructed on its north façade in 1970. These additions represent modifications to the form, plan, space, style, and structure of the original building. Therefore, the main care center building does not retain integrity of design.

   A cross-gabled addition was constructed on the west façade of the storage building in 1967 and a shed-roofed garage addition was constructed on the east façade of the storage building between 1980 and 1988. These additions represent modifications to the form, plan, space, style, and structure of the original building. Therefore, the storage building does not retain integrity of design.

   No known modifications have been made to the medical office buildings since their original date of construction in 1971 and, therefore, they retain integrity of design.

3. **Integrity of Setting** *[refers to] the physical environment of a historic property. Setting includes elements such as topographic features, open space, viewshed, landscape, vegetation, and artificial features* (Andrus and Shrimpton 2002). Integrity of setting was assessed by inspecting the elements of the property, which include topographic features, open space, views, landscape, vegetation, man-made features, and relationships between buildings and other features. The Bradley Gardens care facility buildings were constructed between 1964 and 1971. At the time of the facility's construction, the surrounding area consisted of limited agricultural and industrial development to the north and open farmland to the east, west, and south. Historic aerial photographs indicate that much of the surrounding land began to be replaced with residential development and small industrial parks between 1980 and 1988. Between 1988 and 2003, the land across Seventh Street to the north and northeast was being used for agricultural purposes and industrial development. Between the medical office buildings and main care center building, a pool was built in 1972 that was infilled by 1996 and paved for a basketball court by 2026. Currently, only the parcels immediately adjacent to the property to the east, west, and south remain vacant, with modern residences and agricultural or industrial buildings taking up most of the land in the surrounding area. Residential and industrial lots are also present to the north of the property across Seventh Street. Development of the surrounding area has altered the open space, viewshed, landscape, vegetation, and general built environment around the care facility property. Therefore, the property does not retain integrity of setting.

4. **Integrity of Materials** *[refers to] the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property* (Andrus and Shrimpton 2002). Integrity of materials was assessed by determining the presence or absence of original building materials, as well as the possible introduction of materials that may have altered the architectural design of the buildings. The Bradley Gardens care facility buildings were constructed between 1964 and 1971 in the Ranch architectural style.

   The main care center building southeast wing had a shed-roofed addition constructed off it between 1964 and 1966 and its northwest and northeast wings were extended in 1967. The original walls were removed from the gable ends of these wings and new materials were added when the extensions were built. A porte cochere was constructed on the north façade in 1970, altering the original primary façade and introducing new materials. Therefore, the main care center building does not retain integrity of materials.

A cross-gabled addition was constructed on the west façade of the storage building in 1967 and a shed-roofed garage addition was constructed on the east façade of the storage building between 1980 and 1988. The original walls on the east and west façades of the building were removed for these additions and new materials were added. Therefore, the storage building does not retain integrity of materials.

No known modifications have been made to the medical office buildings since their original date of construction in 1971 and, therefore, they retain integrity of materials.

5. **Integrity of Workmanship** *[refers to] the physical evidence of the labor and skill of a particular culture or people during any given period in history* (Andrus and Shrimpton 2002). Integrity of workmanship was assessed by evaluating the quality of the architectural features present in the buildings. The original workmanship demonstrated by the construction of the Bradley Gardens care facility appears to have been average. Although the buildings have not been significantly modified since their initial construction, with the exception of the storage building, they are not representative of the labor or skill of a particular culture or people. Therefore, none of the buildings ever possessed integrity of workmanship.

6. **Integrity of Feeling** *[refers to] a property's expression of the aesthetic or historic sense of a particular period of time* (Andrus and Shrimpton 2002). Integrity of feeling was assessed by evaluating whether or not the resources' features, in combination with their setting, conveyed a historic sense of the property during the period of construction. As noted previously, the integrity of setting for the property was affected by nearby development and the reduction of farmland. The original aesthetic environment has been significantly altered since the construction of the care facility and no longer conveys a historic sense of the property during its period of construction. Therefore, the buildings do not retain integrity of feeling.

7. **Integrity of Association** *[refers to] the direct link between an important historic event or person and a historic property* (Andrus and Shrimpton 2002). Integrity of association was assessed by evaluating the resources' data or information and their ability to answer any research questions relevant to the history of the San Jacinto area or the state of California. Historical research indicates that the Bradley Gardens care facility is associated with Howard Patterson and Irene Yokes, the first owners who built and operated the original facility as the Colonial Convalescent Hospital. The property was sold in 1985 to Care Net Ltd., and sold again in 1997 to Healthcare Management Systems, Inc., at which time the facility was renamed the Bradley Gardens Convalescent Center. None of these individuals or corporations were found to be historically significant or associated with any historically significant events.

Furthermore, the Bradley Gardens care facility was not found to be a unique example of a convalescent care facility in the surrounding area, nor was it associated with any unique advancements in convalescent or in-patient care. Therefore, the buildings have never possessed integrity of association.

The Bradley Gardens care facility buildings were all determined to retain integrity of location. The two medical offices also retain integrity of design and materials. None of the buildings retain integrity of setting, workmanship, feeling, or association.

CRHR and NRHP Evaluation

For a historic resource to be eligible for listing on the CRHR or the NRHP, the resource must be found significant at the local, state, or national level, under one or more of the following criteria:

- **CRHR Criterion 1/NRHP Criterion A:**
  It is associated with events that have made a significant contribution to the broad patterns of our/California's history and cultural heritage.

  It was discovered through historical research that no significant events could be associated with the Bradley Gardens care facility buildings. Because the property could not be associated with any specific historic event, the buildings are not eligible for designation under CRHR Criterion 1/NRHP Criterion A.

- **CRHR Criterion 2/NRHP Criterion B:**
  It is associated with the lives of persons significant/important in our past.

  Historical research revealed that the Bradley Gardens care facility buildings are not historically significant or associated with any historically significant events. Furthermore, the Bradley Gardens care facility was not found to be a unique example of a convalescent care facility in the surrounding area, nor was it associated with any unique advancements in convalescent or in-patient care. Therefore, the buildings are not eligible for designation under CRHR Criterion 2/NRHP Criterion B.

- **CRHR Criterion 3/NRHP Criterion C:**
  It embodies the distinctive characteristics of a type, period, region, or method of construction, or that represents the work of an important creative individual/master, or that possesses high artistic values, or that represents a significant and distinguishable entity whose components may lack individual distinction.

The Bradley Gardens care facility buildings were constructed between 1964 and 1971 in the Ranch architectural style, during the circa 1935 to 1975 period during which the Ranch style was most popular:

> The Ranch style originated in southern California in the mid-1930s, after a few earlier precursors … During the decades of the 1950s and 1960s it became by far the most popular house style built throughout the country. Often located in large subdivisions, post-World War II Ranch-house suburbs form a dominant part of many American cities – particularly those that grew in the postwar Sunbelt Boom of the 1950s and 1960s, such as Dallas, Houston, Phoenix, Los Angeles, and Atlanta. (McAlester 2015)

Identifying features of the Ranch style, as provided by McAlester (2015) include:

> Broad one-story shape; usually built low to ground; low-pitched roof without dormers; commonly with moderate-to-wide roof overhang; front entry usually located off-center and sheltered under main roof of house; garage typically attached to main façade (faces front, side, or rear); large picture window generally present; asymmetrical façade. (McAlester 2015:597)

None of the buildings were constructed as residential buildings and, as such, the attached garage feature does not apply. Of the remaining seven features listed above, the main care center building, storage building, and medical office buildings each possess five: broad one-story shape, built low to the ground; low-pitched roof without dormers; moderate eave overhangs; and asymmetrical façades. Additionally, the storage building and medical office buildings possess sheltered, off-center front entries. The main care center building features a covered porte cochere entrance that does not meet the criteria of the front entrance feature listed above.

In addition to the identifying features listed above, McAlester (2015) also distinguishes between four principal subtypes of the Ranch architectural style, including hipped roof, cross-hipped roof, side-gabled roof, and cross-gabled roof. The main care center and storage buildings fit in the cross-gabled roof subtype, the southern medical office building fits in the side-gabled roof subtype, and the northern medical office building fits in the cross-hipped roof subtype.

Although the Bradley Gardens care facility buildings were constructed within the circa 1935 to 1975 period of significance for Ranch-style buildings and possess several of the identifying features listed by McAlester (2015), the main care center building and storage building currently only retain one out of seven aspects of integrity, and the medical office buildings only maintain three out of seven aspects of integrity. According to the San Diego Modernism Historic Context Statement, due to the commonality of Ranch-style buildings in southern California, representative examples of the Ranch style eligible for designation on the CRHR or the NRHP should retain the majority of their character-defining features in order to be eligible for designation (City of San Diego 2007:71–74). The buildings do not retain integrity of setting and feeling and are not known to have been designed or built by an important creative individual. Therefore, the buildings are not eligible for designation under CRHR Criterion 3/NRHP Criterion C.

- **CRHR Criterion 4/NRHP Criterion D:**
  It has yielded, or may be likely to yield, information important in prehistory or history.

  The research conducted for this study revealed that because the buildings are not associated with any significant persons or events and were not constructed using unique or innovative methods of construction, they likely cannot yield any additional information about the history of San Jacinto or the state of California. Therefore, the buildings are not eligible for designation under CRHR Criterion 4/NRHP Criterion D.

4.4 Discussion/Summary

During the field survey, four historic buildings constructed as part of the Bradley Gardens care facility were identified and subsequently evaluated for significance. No additional cultural resources were observed during the survey. The buildings are evaluated as not historically or architecturally significant under any CEQA or federal significance criteria due to a lack of association with any significant persons or events and not being representative examples of any specific architectural style, period, or region. Therefore, the buildings are not eligible for the CRHR or the NRHP. Because none of the buildings are eligible for listing on the CRHR or NRHP, no mitigation measures are required for any future alterations or planned demolition of the buildings.

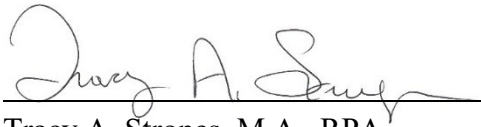
5.0 RECOMMENDATIONS

The archaeological study for the Bradley Gardens Project was completed in accordance with the City of San Jacinto environmental policies and CEQA significance criteria. The current study identified one resource within the project (Site Temp-1), which reflects the built environment of the parcel, consisting of four buildings constructed between 1964 and 1971. No historic or prehistoric archaeological resources were identified during the survey. The current assessment concludes that Site Temp-1 is not eligible for listing on the NRHP or the CRHR and, therefore, is not considered a significant resource. The resource has been thoroughly recorded, and no additional information can be derived from further analysis.

The proposed development of the Bradley Gardens Project will include the removal/modification of the buildings and infrastructure recorded as Site Temp-1, which will not constitute an adverse impact because the resource has been evaluated as not significant and not eligible for listing on the NRHP or CRHR. The potential does still exist, however, that historic deposits may be present that are related to the occupation of this location since the 1960s. To mitigate any potential impacts to unrecorded historic features or deposits inadvertently discovered during the development process, archaeological monitoring of project-related ground disturbances is recommended as a condition of approval.

6.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this archaeological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.



March 13, 2026

Tracy A. Stropes, M.A., RPA — Date
Principal Investigator

7.0 REFERENCES

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2019 Cultural/Tribal Resource Records Search and Historic Building Preliminary Assessment, Assessor's Parcel Number 432-270-012. SRSINC At Riverwalk. Unpublished report on file at the City of San Jacinto, San Jacinto, California.

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APPENDIX A

Resumes of Key Personnel

Tracy A. Stropes, MA, RPA

Vice President of Cultural Resources/ Principal Archaeologist
BFSA Environmental Services, a Perennial Company
14010 Poway Road • Suite A •
Phone: (858) 484-0915 • Email: tstropes@bfsa.perennialenv.com

Education

Master of Arts, Anthropology, San Diego State University, California **2007**

Bachelor of Science, Anthropology, University of California, Riverside **2000**

Professional Memberships

Register of Professional Archaeologists
Society for California Archaeology
Archaeological Institute of America
Association of Oregon Archaeologists

Experience

Vice President of Cultural Resources/Principal Archaeologist **March 2009–Present**
BFSA Environmental Services, a Perennial Company
Poway, California

Tracy A. Stropes has over 33 years of experience in cultural resource management, with experience in project management, report authorship, lithic analysis, laboratory management, Native American consultation, and technical report editing for numerous projects throughout the western United States. Mr. Stropes has conducted cultural resource surveys, archaeological site testing and evaluations for National Register eligibility and CEQA compliance, mitigation of resources through data recovery for archaeological sites, budget and report preparation, and direction of crews of all sizes for projects ranging in duration from a single-day site visit to multiple years. Mr. Stropes is a Registered Professional Archaeologist (RPA) and is on the list of archaeological consultants qualified to conduct archaeological investigations in the city and county of San Diego, county of Riverside, State of Oregon, State of Arizona, and on Arizona and California BLM lands. He has served as project archaeologist for hundreds of projects and composed data recovery and preservation programs for sites throughout the western United States for both CEQA- and NEPA-level compliance.

Archaeological Principal Investigator **June 2008–February 2009**
TRC Solutions **Irvine, California**

Cultural resource segment of Natural Sciences and Permitting Division; management of archaeological investigations for private companies and local, state, and federal agencies, personnel management, field and laboratory supervision, lithic analysis, Native American consultation and reporting, NRHP and CEQA site evaluations, and authoring/coauthoring cultural resource management reports.

Principal Investigator and Project Archaeologist **June 2006–May 2008**
Archaeological Resource Analysts **Oceanside, California**

As a sub consultant, served as Principal Investigator and Project Archaeologist for several projects for SRS Inc., including field direction, project and personnel management, lab analysis, and authorship of company reports.

Project Archaeologist **September 1996–June 2006**
Gallegos & Associates **Carlsbad, California**

Project management, laboratory management, lithic analysis, field direction, Native American consultation, report authorship/technical editing, and composition of several data recovery/preservation programs for both CEQA and NEPA level compliance.

Project Archaeologist **September 1993–September 1996**
Macko Inc. **Santa Ana, California**

Project management, laboratory management, lithic analysis, field supervision, and report authorship/technical editing.

Archaeological Field Technician **January 1993–September 1993**
Chambers Group Inc. **Irvine, California**

Archaeological excavation, surveying, monitoring, wet screen facilities management, and project logistics.

Archaeological Field Technician **May 1992–September 1992**
John Minch and Associates **San Juan Capistrano, California**

Archaeological excavation, surveying, monitoring, wet screen facilities management, and project logistics.

Selected Reports/Papers

Principal Author

2023 A Section 106 (NHPA) Historic Resource Study for the Oak Creek Canyon Project, City of Wildomar, Riverside County, California. Prepared for Ambient Pacific OCC, LLC.

2023 A Section 106 (NHPA) Historic Resource Study for The Questhaven 76 Project, San Diego County, California (APNs 223-070-007, 223-070-008, and 223-080-046). Prepared for ColRich.

2023 A Phase I Cultural Resources Survey for the Bermuda Dunes Self Storage Project, PAR220053, Riverside County, California. Prepared for FAMA Dairy.

2023 A Cultural Resources Study for 4846 Pacifica Drive, City of San Diego. Prepared for Colliers International.

2023 A Section 106 (NHPA) Historical Resources Study for the Maison's Sierra Project, City of Lancaster, California (Tract No. 27099). Prepared for Ravello Holdings, Inc.

2023 Cultural Resource Survey and Evaluation Program for the Omni Hotel Driving Range/Parking Lot Project, City of Carlsbad, California. Prepared for TRT Holdings, Inc.

2022 A Class III Historic Resources Study for the Anna Avenue Project for Section 106 Compliance, City of San Diego, California. Prepared for John Smith Earthworks, Inc.

2022 A Section 106 (NHPA) Historic Resource Study for the Grand Avenue Project, Riverside County, California (APN 379-060-005). Prepared for TriPointe Homes

2022 A Section 106 (NHPA) Historic Resources Study for the Boulder Springs North Project, Riverside County, California (TTMs 31243, 31244, and 31245; APNs 321-020-027, -028, -029, and -030 and 321-130-047 and -048). Prepared for KB Home.

2022 A Section 106 (NHPA) Historical Resources Study for the Alpine Rancho Palo Verde Project, San Diego County, California (SPL-219-00698-CJA). Prepared for Schindler Real Estate Services, Inc.

2022 A Section 106 (NHPA) Historic Resource Study for the Cumming Ranch Project, San Diego County, California (APNs 282-010-08, -30, -34, and -43; 283-011-06; 283-021-01 and -02; 283-022-02; 283-041-25 and -26; and 283-051-01). Prepared for 805 Properties.

2021 A Section 106 (NHPA) Historic Resources Study for the Gatchell Road Project, San Diego County, California (Project No. 100203). Prepared for the National Park Service.

2021 A Section 106 (NHPA) Historic Resources Study for Site CA-SDI-11,934/H, San Diego County, California (APN 532-520-15). Prepared for the National Park Service.

2021 A Section 106 (NHPA) Historical Resources Study for the Renaissance Ranch Project, Riverside County, California (SPL-2004-01431-JPL). Prepared for Richland Developers, Inc.

2021 A Phase I Cultural Resource Survey for the Coppel Remodel & Addition Project, La Jolla, California. Prepared for Marengo Morton Architects, Inc.

2021 A Section 106 (NHPA) Historic Resources Study for CAB-20-1, San Diego County, California (APN 532-520-15). Prepared for the National Park Service.

2021 Cultural Resources Study for 7951 Paseo Del Ocaso, La Jolla, California. Prepared for Aidlin Darling Design.

2021 Cultural Resources Study for the Secret Hills Ranch Project, San Diego County, California (PDS2020-LDGRMJ-30253, APN 520-060-18)

2021 Cultural Resources Study for the UCLA Cedar Suites and Willow Creek Staff Housing Project, Lake Arrowhead, San Bernardino County, California. Prepared for T&B Planning, Inc.

2021 A Section 106 (NHPA) Historic Resources Study for CA-SDI-13,884, San Diego County, California (APN 532-520-13). Prepared for the National Park Service.

2021 A Cultural Resources Study for the UCLA Glamping Facility Project, Lake Arrowhead, San Bernardino County, California. Prepared for UCLA Capital Programs.

2021 Archaeological Test Results for 2596 Chalcedony Street, San Diego, California. Prepared for Colliers International.

2021 Cultural Resources Study for the 12247 Elliott Avenue Project, Los Angeles County, California. Prepared for EPD Solutions.

2021 A Section 106 (NHPA) Historic Resources Study for the Roquet Ranch Project, City of Colton, San Bernardino County, California (Tentative Tract Map No. 19983; APNs 116-701-101, -102, 116-702-101, -105, -121, -122, -123, and 116-703-118). Prepared for Sunmeadows, LLC.

2020 A Section 106 (NHPA) Historical Resources Study for the Ocean Breeze Ranch Project, Bonsall, San Diego County, California (SPL-2020-00176). Prepared for Ocean Breeze Ranch, LLC.

2020 Cultural Resource Monitoring Report for the Encinitas Beach Hotel Project, Encinitas, California. Prepared for JMI Realty, LLC

2020 A Section 106 (NHPA) Historic Resources Study for the Pacifica Estates Project, Fallbrook, San Diego County, California. Prepared for Jose Islas.

2020 A Section 106 (NHPA) Historic Resources Study for the Hidden Valley Ranch Project, SPL-2004-01124, City of Poway, California. Prepared for Barbara Malone.

2020 A Section 106 (NHPA) Historic Resource Study for The Farms in Poway Project, Poway, San Diego County, California (APNs 273-110-070, -080, and -180). Prepared for Kevin McNamara.

2020 A Phase I and II Cultural Resources Assessment for the Hansen Lot Split Project, TPM 37655, Riverside County, California. Prepared for Forest Hansen.

2020 Cultural Resources Study for the West Coast Cold Storage Project, City of Jurupa Valley, County of Riverside (APNs 178-140-010 and -018). Prepared for

2020 Cultural Resources Study for the 340 East Bradley Avenue Project, San Diego County, California (PDS2021-LDGRMJ-30346). Prepared for A N1-Mart, LLC.

2019 Archaeological Monitoring Report for the Atwell Phase 1A Project (formerly Butterfield Specific Plan), City of Banning, Riverside County, California. Prepared for Pardee Homes.

2019 A Cultural Resource Assessment for the Glen Circle Project, Poway, California. Prepared for MDD Homes.

2019 Cultural Resources Survey for the Highlands at Warner Springs and Off-Site Fire Access Road Project, Warner Springs, San Diego County, California. Prepared for Warner Springs Estates, LLC.

2019 A Cultural Resources Assessment for the 8801 East Marginal Way Project, City of Tukwila, King County, Washington. Prepared for CenterPoint Properties Trust.

2019 Cultural Resource Monitoring Report for the 7980 Park Village Road Emergency Repair Project, San Diego, California. Prepared for Orion Construction Corporation.

2019 Mitigation Monitoring and Reporting Program for the Harmony Grove Village, San Diego County, California. Prepared for Lennar – San Diego Division.

2019 Cultural Resource Monitoring Report for the Price-Cohen Residence Project, 2045 Lowry Place, La Jolla, California 92037. Prepared for Lena Price and Thomas Cohen.

2019 A Section 106 (NHPA) Historic Resources Study for the Melrose Drive Widening Project, City of Oceanside, California. Prepared for California West Communities.

2019 A Cultural Resources Study for the Majestic Chino Heritage Project, City of Chino, San Bernardino County, California. Prepared for T&B Planning, Inc.

2019 Cultural Resources Study for the Ocean Breeze Ranch Project, Bonsall, San Diego County, California. Prepared for Ocean Breeze Ranch, LLC.

2019 Mitigation Monitoring and Reporting Program for the Arthofer Residence Project, 1890 Viking Way, La Jolla, California. Prepared for Frank and Sharon Arthofer.

2019 A Phase I and II Cultural Resources Assessment for the Greentree Ranch Project, Riverside County, California. Prepared for T&B Planning, Inc.

2018 A Section 106 (NHPA) Historic Resources Study for the Escondido Country Club Project, SPL-2018-00135-CJA, City of Escondido, California. Prepared for New Urban West, Inc.

2018 A Phase I Cultural Resources Study for the North County Plaza Project, Carlsbad, California. Prepared for Planning Systems, Inc.

2018 Cultural Resources Addendum Report for the Ivey Palms Project, Thousand Palms, Riverside, California. Prepared for T&B Planning, Inc.

2017 Cultural Resource Monitoring Report for the Altman Residence Project, 9696 La Jolla Farms Road, La Jolla, California 92037. Prepared for Steve and Lisa Altman.

2017 Cultural Resources Study for the Escondido Country Club Project, City of Escondido, California. Prepared for New Urban West, Inc.

2017 A Class III Archaeological Study for the Tract 28859 Project for Section 106 Compliance. Prepared for Menifee 28859, LLC.

2016 A Section 106 (NHPA) Historic Resources Study for the Lake Ranch Project, TR 36730, Riverside County, California.

2016 Mitigation Monitoring and Reporting Program for the Imperial Beach Bikeway Village Project, 536 13th Street and 535 Florence Street, Imperial Beach, California. Prepared for Bikeway Village, LLC.

2015 Cultural Resource Data Recovery and Mitigation Monitoring Program for Site SDI-10,237 Locus F, Everly Subdivision Project, El Cajon, California. Prepared for Shea Homes.

2015 A Class III Historic Resource Study for the Miramar Clearwell Improvements Project, San Diego, California. Prepared for Global Environmental Permitting, Inc.

2015 A Class III Historic Resource Study for the College Boulevard Project, Carlsbad, California. Prepared for Bent West, LLC.

2015 A Class III Archaeological Study for the Parkside Project for Section 106 Compliance, Riverside County, California. Prepared for Lennar Corporation.

2015 A Cultural Resource Assessment for the Zhao Residence Project, Poway, California (275-240-66). Prepared for Pacific Sotheby's International Realty.

2014 Phase I Cultural Resources Survey for the Utah Trail Project, County of San Bernardino, California (APNs 621-281-22 through 621-281-25). Prepared for Ecos Energy, LLC.

2014 Phase I Archaeological Assessment for the Sky Canyon Project (PP25309), Riverside County, California. Prepared for Rocky Snider California Project Management Office.

2014 Phase I Cultural Resources Survey for the Shoshone Valley Road Project, County of San Bernardino, California (APNs 613-233-01, -02, -03, -04, -27, -28, -29, and -30). Prepared for Ecos Energy, LLC.

2014 Phase I Cultural Resources Survey for the Nuevo 055 Project, Community of Nuevo, County of Riverside. Prepared for Ecos Energy, LLC.

2014 A Phase I Cultural Resource Study for the Bourgeoios Project, Poway, California. Prepared for Bill Yen & Associates, Inc.

2014 A Cultural Resources Survey for the Aliso Canyon Major Subdivision Project, Rancho Santa Fe, San Diego County, California. Prepared for Zephyr Partners.

2014 Cultural Resource Monitoring Report for the Sewer Group 723 Project, San Diego, California. Prepared for
Ortiz Corporation.

2013 A Phase I Cultural Resource Study for the Rogers Tierra Bonita Project, Poway, California. Prepared for John D. Fitch & Associates.

2013 A Cultural Resource Assessment Update for the Girard Townhome Project, TR 35477, Riverside County, California. Prepared for G8 Development, Inc.

2013 Phase I Archaeological Assessment for the Ridge Park Project, City of Temecula, California. Prepared for Ambient Communities.

2013 A Phase I and Phase II Cultural Resource Study for the Citrus Heights/Fairway Drive Project, Riverside County, California. Prepared for CV Communities.

2013 Phase I Archaeological Assessment for the Bixby Highgrove Project (TTM 36437), Riverside County, California. Prepared for T&B Planning, Inc.

2013 A Class III Cultural Resources Study for the Ramona Ranch Affordable Housing Project for Section 106 Compliance, San Diego County, California. Prepared for AMCAL Multi-Housing, Inc.

2013 Phase I Archaeological Assessment for the Yates Road Project (TTM 36437), Riverside County, California. Prepared for CV Communities, LLC.

2013 A Cultural Resources Survey and Evaluation Program for the Warner Ranch Project, San Diego County, California. Prepared for HP Warner Ranch, LP.

2013 A Phase I Cultural Resource Assessment for TPM 36585, Riverside County, California. Prepared for GF Real Estate Services.

2013 A Class III Cultural Resources Study for TR 31597 and TR 32627, Riverside County, California. Prepared for Standard Pacific Homes.

2013 Phase I Cultural Resources Survey for the Sunny Cal Project, City of Beaumont, County of Riverside. Prepared for CV Communities, LLC.

2013 A Class III Cultural Resources Study for The Sierra Bella Project for Section 106 Compliance, Riverside County, California. Prepared for Forestar Corona, LLC.

2013 A Class III Cultural Resources Study for the Moosa Creek Mitigation Bank Project. Prepared for a Creek LLC.

2013 Archaeological Survey of the Rohmiller Residence for a Bulletin 560 Permit Application, 2350 Calle De La Garza, La Jolla, California 92037 (APN 346-180-22). Prepared for Architect Mark D. Lyon, Inc.

2013 Cultural Resources Survey and Evaluation Program for the Oak Creek Project, City of Escondido, California. Prepared for New Urban West, Inc.

2013 Phase I Cultural Resources Survey for the Hope Harbor Project, Riverside County, California. Prepared for Medhat Rofael.

2013 Archaeological Survey of the Liske Residence, La Jolla, California. Prepared for ECEGC Inc.

2013 An Updated Phase I Cultural Resources Assessment for Tentative Tract Maps Nos. 36484 and 36485, Audie Murphy Ranch. Prepared for Brookfield Residential.

2013 A Phase I Cultural Resources Study For the 401 West Ash Street Project San Diego, California. Prepared for PierPoint Legacy Holdings, LLC.

2013 Cultural Resource Test Plan for the Ten on Columbia Project, San Diego, California. Prepared for InDev, Inc.

2013 Phase I Cultural Resources Survey for the Washington Avenue Project, City of Murrieta, California. Prepared for Coastal Land Solutions.

2012 Phase I Cultural Resources Survey for the Wildomar 23 Project, Riverside County, California. Prepared for Lennar.

2012 A Class III Cultural Resources Study for the USGS Creepmeter Project. Prepared for Bureau of Land Management, El Centro Office.

2012 Mitigation Monitoring Report for the for the Johnston Residence Project, La Jolla, California. Prepared for Heather Johnston.

2012 A Phase I Cultural Resource Study for the Howell Residence Project, Poway, California. Prepared for Cal Howell.

2012 Cultural Resource Monitoring Report for the Sewer and Water Group 799 Project. Prepared for Burtech Pipeline.

2012 A Phase I Cultural Resources Study For the Villa Hermosa Project San Diego, California. Prepared for David Chow.

2012 A Phase I Cultural Resource Study for the Payan Property Project, San Diego, California. Prepared for Landmark Engineering.

2012 A Phase I Cultural Resource Study for the El Camino Real Widening Project, Carlsbad, California. Prepared for Planning Systems.

2012 A Phase I Cultural Resource Study for the Encore Trust Project, La Jolla, California. Prepared for Metcalf Development and Consulting.

2012 A Phase I Cultural Resource Study for the Andres Residence Project, La Jolla, California. Prepared for Engineering Design Group.

2012 Phase I Cultural Resources Survey for the Diamond Springs Project, Riverside County, California. Prepared for Benjamin J. Stables III, B 3 Consulting.

2012 A Phase I Cultural Resource Study for the ActivCare at Mission Bay Project, San Diego, California. Prepared for ActivCare Living, Inc.

2012 Mitigation Monitoring Report for the Water Group 790 Project, City of San Diego, California. Prepared for Orion Construction Corporation.

2012 Results of the Mitigation Monitoring Program for the Mission Brewery Villas Project, City of San Diego, California. Prepared for Eilar Associates, Inc.

2012 Cultural Resource Monitoring Report for the Gatto Residence Project, La Jolla, California. Prepared for Marengo Morton Architects Inc.

2012 Cultural Resource Monitoring Report for the Sunset Cliffs Trunk Sewer Project, City of San Diego, California. Prepared for KTA Construction.

2012 Mitigation Monitoring Report for the Sewer Group 682M Project, City of San Diego, California. Prepared for BRH Garver.

2012 Cultural Resource Monitoring Report for the Pelberg Residence Project, City of San Diego, California. Prepared for Linda and Art Pelberg.

2012 Cultural Resource Monitoring Report for the Rose Creek Bikeway Bridge Project, City of San Diego, California. Prepared for Flatiron West, Inc.

2011 Mitigation Monitoring Report for the South Mission Valley Trunk Sewer Project, City of San Diego, California. Prepared for HPS Mechanical, Inc.

2011 A Class III Cultural Resources Study for the La Dama de Oro Project, San Bernardino County, California. Prepared for Mohave Gold Mining & Exploration, Inc.

2011 Mitigation Monitoring Report for the Jacobs Health Care Facility Project, City of San Diego, California. Prepared for Jacobs Health Care, LLC.

2011 A Phase I Cultural Resources Study For the Rowland Auto Dismantling Project, City of San Diego, California. Prepared for David Rowland.

2011 A Phase I Cultural Resource Study for the Dye Residence Project, La Jolla, California. Prepared for Eric Dye.

2011 Phase I Cultural Resources Survey for the Santa Rosa Academy Project, Riverside County, California. Prepared for Santa Rosa Academy Charter School c/o Bradley Burke Competitive Edge Development, LLC.

2011 Cultural Resource Data Recovery Study for SDI-4606 Locus B for Saint Gabriel's Catholic Church, Poway, California. Prepared for Saint Gabriel's Catholic Church.

2011 A Phase I Cultural Resource Study for the Nooren Residence Project, La Jolla, California. Prepared for Jack Nooren.

2011 Mitigation Monitoring Report for the Sewer and Water Group 768 Project, City of San Diego, California. Prepared for Ortiz Corporation.

2011 Cultural Resource Test for the 10th Avenue Parking Lot Project, City of San Diego, California. Prepared for 11th and B Investment Associates, LLC.

2011 A Cultural Resources Study for the Ampudia Lot Project, City of San Diego, California. Prepared for Venture Pacific Commercial Services, Inc.

2011 A Phase I Cultural Resource Study for the Hyde Residence Project, La Jolla, California. Prepared for Paul and Denise Hyde.

2011 A Phase I Cultural Resource Study for the Fialko Residence Project, La Jolla, California. Prepared for Thomas Armstrong Construction, Inc.

2011 Mitigation Monitoring Report for the Sewer Group 682M Project, City of San Diego, California. Prepared for HTA Engineering & Construction Inc.

2011 A Phase I Cultural Resource Study for the Butterfield Residence Project, La Jolla, California. Prepared for Geotechnical Exploration, Inc.

2011 A Cultural Resource Monitoring Report for the Eichen Residence Project, San Diego, California. Prepared for Steigerwald-Dougherty, Inc.

2011 Phase I Cultural Resources Survey for the Galway Downs Project, Riverside County, California. Prepared for Trip Hord.

2011 Cultural Resource Monitoring Report for Rancho Bella Vista Phase IV (TR 31871), Riverside County, California. Prepared for Lennar Inland Division.

2011 Cultural Resource Monitoring Report for the Salvation Army Vehicle Storage Area Demolition Project. Prepared for The Salvation Army General Counsel.

2011 A Phase I Cultural Resource Study for the Kates Residence Project, La Jolla, California. Prepared for Brad and Shannon Kates.

2011 A Phase I Cultural Resource Study for the Kralik Residence Project, La Jolla, California. Prepared for John Kralik.

2010 An Archaeological Monitoring Report for the Cricket Cell Tower Project (Permit # 3399 06-032), San Diego County, California. Prepared for Ken Hayes.

2010 A Cultural Resources Study for the 47th Street Warehouse Project City of San Diego, California, Project No. 190957. Prepared for 47th Street Properties.

2010 A Cultural Resource Study for the Dickenson Ranch Project, San Bernardino County, California. Prepared for Dickenson and Son Property Management and Investments.

2010 A Phase I Cultural Resources Survey for the Young Family Trust Lot Split Project City of Escondido, California. Prepared for Young Family Trust.

2010 An Archaeological Monitoring Report for the Jamul Rural Fire Station Auxiliary Access Road Project, San Diego County, California. Prepared for TCB.

2010 Cultural Resource Survey and Evaluation Program for the Citracado Parkway Extension Project, City of Escondido, California. Prepared for AECOM.

2010 Phase I Cultural Resources Survey for the Sycamore Creek Specific Plan No. 256 Amendment No. 2, Riverside County, California. Prepared for T&B Planning.

2010 A Phase III Cultural Resource Data Recovery Program for CA-SDI-16,986, Hidden Meadows, San Diego County, California (TPM 20794). Tuscan Ridge, LLC.

2010 Historic Properties Treatment Plan for the Talega (64 Area) 12kV Conversion Project Marine Corps Base Camp Pendleton San Diego County California. Prepared for Synergy Electric Company, Inc.

2010 A Cultural Resources Survey and Evaluation Program for the Highlands at Warner Springs Project, Warner Springs, San Diego County, California. Prepared for Warner Springs Estates, LLC.

2010 A Cultural Resources Literature Review for the 11099 North Torrey Pines Road Project, San Diego, California. Prepared for Touchstone Investments.

2010 A Phase I Cultural Resources Survey for the San Jacinto Poultry Ranch Storage Building Project, San Jacinto, California. Prepared for Moark, LLC.

2010 A Phase III Cultural Resource Data Recovery Program for SDI-16986, Hidden Meadows, San Diego, California (TPM 20794). Prepared for Tuscan Ridge, LLC.

2010 Cultural Resources Study for the Dos Colinas Project, Carlsbad, California. Prepared for Dos Colinas, LLC.

2010 A Phase I Archaeological Survey of the Greater Alpine Fire Safe Council Horsethief Vegetation Management Project. Prepared for the Greater Alpine Fire Safe Council.

2010 A Phase I Cultural Resource Study for the Moses Residence Project, La Jolla, California. Prepared for Brian Moses.

2010 Pottery Canyon Site Archaeological Evaluation Project City of San Diego, California. Prepared for the City of San Diego Park and Recreation Department.

2010 A Phase I Cultural Resource Study for the Shabaz Residence Project, La Jolla, California. Prepared for Negar Shabaz.

2009 A Phase I Cultural Resources Study for the Kramer 453 Project, San Bernardino County, California. Prepared for LightSource Renewables LLC.

2009 A Cultural Resources Study for the Hronopoulus Residence Project, City of San Diego, California. Prepared for Andreas Hronopoulus.

2009 A Cultural Resources Monitoring Report for the East Point Loma Trunk Sewer Project, San Diego, California. Prepared for Southern California Soil and Testing.

2009 A Cultural Resources Study for the McKean SDP Project. San Diego, California.

2009 An Archaeological Assessment for the Rivera-Placentia Project, City of Riverside, California.

Prepared for Riverside Construction Company.

2009 Cultural Resource Data Recovery Plan for the North Ocean Beach Gateway Project. Prepared for the City of San Diego and KTU+A.

2009 Cultural Resource Letter Report for the Borrego Substation Feasibility Study, Borrego Springs, California. Prepared for RBF Consulting.

2009 A Cultural Resource Study for the Gatto Residence Project, La Jolla, California. Prepared for Marengo Martin Architects Inc.

2009 A Cultural Resource Report for the Central Feeder Connection Project, San Bernardino, California. Prepared for Albert A. Webb and Associates.

2009 A Cultural Resource Report for the Clay Street Connection Project, Riverside, California. Prepared for Albert A. Webb and Associates.

2009 A Cultural Resource Report for the Green Hills Project, San Diego County, California. Prepared for Atlas Investments, LLC.

2009 A Cultural Resource Report for the La Sierra Pipeline Project, Riverside, California. Prepared for Albert A. Webb and Associates.

2009 Cultural Resources Monitoring Report for the East Point Loma Trunk Sewer Project. Prepared for Southern California Soil & Testing.

2009 A Cultural Resource Report for the Mockingbird Connection Project, Riverside, California. Prepared for Albert A. Webb and Associates.

2009 A Cultural Resource Report for the Mesquite Lake Treatment Plan Project, Imperial County, California. Prepared for Albert A. Webb and Associates.

2008 Phase I Cultural Resource Survey for the 28220 Highridge Road Development Project, Rancho Palos Verdes, California. Prepared for REC Development.

2008 Wild Goose Expansion 3 Project Butte County, California Colusa County, California. Prepared for Niska Gas Storage LLC.

2008 Class III Cultural Resource Survey for the Burlington Northern Santa Fe Four Railway Bridge Renewal Project, San Bernardino County, California. Prepared for BNSF Railway Company.

2008 I-80 Colfax Site Cultural Resource Records Search Report, Placer County, California. Prepared for Granite Construction Company.

2008 I-80 Gold Run Site Cultural Resource Records Search Report, Placer County, California. Prepared for Granite Construction Company.

2008 Cultural Resource Monitoring at 31431 Camino Capistrano, San Juan Capistrano, California. Prepared for Herman Weissker, Inc.

2008 Cultural Resource Inventory for the Snow White Pumice Mine, Hinkley, California. Prepared for U.S. Mining and Minerals Corporation.

2007 Nodule Industries of North Coastal San Diego: Change and Stasis in 10,000 Years of Lithic

Technology. Masters thesis on file, San Diego State University.

2007 Cultural Resource Inventory for Empire Homes (APN 104-180-04), Lake Forest, California. Prepared for Empire Homes.

2007 Phase I Archaeological Assessment for APN 104-200-09, Beaumont, California. Prepared for Mary Chan.

2007 Cultural Resource Inventory for Empire Homes (APN 104-180-04), Lake Forest, California. Prepared for Empire Homes.

2006 Carlsbad Municipal Golf Course Data Recovery Program for CA-SDI-8694, and Indexing and Preservation Program Study for CA-SDI-8303 and CA-SDI-8797 Locus C, City of Carlsbad, California. Prepared for City of Carlsbad.

2005 Grand Pacific Resorts Data Recovery and Index Sample Program for CA-SDI-8797, Area A, City of Carlsbad, California. Prepared for Grand Pacific Resorts Inc.

2004 "Near the Harris Site Quarry" Cultural Resource Data Recovery and Preservation Program for CA-SDI-13028, San Diego County, California. Prepared for Harbrecht Development, L.P.

2004 Cultural Resource Survey and Boundary Test Report for the Lilac Ranch Project, San Diego County, California. Prepared for Empire Companies.

2003 Cultural Resource Data Recovery and Preservation Program for CA-SDI-12027, San Diego County, California. Prepared for Harbrecht Development Inc.

2002 Data Recovery Program for the Pacbell Site CA-SDI-5633, San Marcos, California. Prepared for Joseph Wong Design Associates.

2001 McCrink Ranch Cultural Resource Test Program Additional Information for Selected Sites, San Diego County, California. Prepared for Shapouri & Associates.

2001 The Quail Ridge Project Cultural Resource Test Program, San Diego County, California. Prepared for Helix Environmental Planning, Inc.

2000 Cultural Resource Survey and Evaluation for the North Sand Sheet Full Buildout Program, Owens Lake, California. Prepared for CH2MHill.

1995 Final Report: Archaeological Investigations Conducted for the Abalone Cove Dewatering Wells, City of Rancho Palos Verdes Los Angeles County, California. Prepared for the City of Rancho Palos Verdes, Environmental Services.

1995 Final Report: A Class III Intensive Survey of a 100-Acre Sand and Gravel Mining Area, Imperial County, California. Prepared for the Lilburn Corporation.

1994 Final Report: Data Recovery Excavations at Five Late Prehistoric Archaeological Sites Along the Los Trancos Access Road, Newport Coast Planned Community, Orange County, California. Prepared for the Coastal Community Builders, a division of The Irvine Company.

Contributing Author

2019 Cultural Resources Study for the 3868-3900 Sepulveda Boulevard Project, City of Culver City, Los Angeles County, California. Prepared for Sepulveda Suites, Inc.

2019 Final Archaeological Data Recovery and Mitigation Monitoring Program for the Westin Hotel and Timeshare Project, City of Carlsbad, California. Prepared for Grand Pacific Resorts, Inc.

2019 Cultural Resources Study for the Commerce Logistics Center Project, 5200 Sheila Street, Commerce, California 90040. Prepared for T&B Planning, Inc.

2019 A Section 106 (NHPA) Historic Resource Study for the McElwain Project (SPL-2019-00565), Murrieta, Riverside County, California. Prepared for Murrieta Development II, LLC.

2019 Phase II Cultural Resource Study for the McElwain Project, City of Murrieta, California. Prepared for Murrieta Development II, LLC.

2018 A Phase I and II Cultural Resources Assessment for the Emerald Acres Project, Winchester, Riverside County. Prepared for T&B Planning, Inc.

2018 A Cultural Resources Monitoring Report for the Golden City Project, Tracts 28532-1, -2, -3, -4, and -5 and Tract 34445, City of Murrieta, California. Prepared for North Murrieta Community, LLC.

2018 An Archaeological/Historical Study for the Citracado Business Park West Project, City of Escondido. Prepared for Pacific Harmony Grove Development.

2015 Cultural Resource Survey and Evaluation Program for the Westin Hotel and Timeshare Project, City of Carlsbad, California. Prepared for Grand Pacific Resorts, Inc.

2015 A Class III Cultural Resource Study for the Habitat for Humanity Project, Perris, California. Habitat for Humanity Inland Valley.

2015 A Phase II Cultural Resource Assessment for the Munro Valley Solar Project, Inyo County, California. Prepared for Prepared for Ecos Energy, LLC.

2014 An Extended Phase I Cultural Resource Assessment for the Belvedere-Webster Project, City of Poway, California (APN 323-010-26-00). Prepared for Webster Realty Group.

2014 Cultural Resources Study for the Brook Forest Conservation Bank Project, Valley Center, San Diego County, California. Prepared for Brook Forest, LLC.

2014 A Phase I Cultural Resource Study for the Crystal View Lane Project, Poway, California. Prepared for Mark Catrambone.

2014 Cultural Resource Assessment for the Muscat Project, Poway, California (TPM 13-002; APN 278-180-44). Prepared for Mr. Ed Muscat.

2014 An Extended Phase I Cultural Resource Assessment for the Mulholland Highway Improvement Project, Cities of Calabasas and Los Angeles, Los Angeles County, California. City of Calabasas Public Works Department.

2014 Mitigation Monitoring Report for the 9th and Broadway Project, City of San Diego. Prepared for Bridge Housing Corporation.

2013 Cultural Resource Test Plan for the Cisterra Sempra Tower Project San Diego, California. Prepared for Eilar Associates, Inc.

2013 A Section 106 (NHPA) Cultural Resources Study for the Toscana Project, Riverside County, California. Prepared for Forestar Toscana, LLC.

2013 Cultural Resource Test Plan for the Gaslamp Hotel Project. Prepared for The Robert Green Company.

2012 Cultural Resource Test Plan for the Pinnacle International 15th and Island Project. Prepared for Pinnacle International.

2012 Cultural Resource Test Plan for the Horton Plaza Park Improvement Project. Prepared for the City of San Diego.

2012 Mitigation Monitoring Report for the T-Mobile West, LLC Telecommunications Candidate SD02867C (Presidio Park). Prepared for Michael Brandman Associates.

2012 Cultural Resource Test Plan for the Old Police Headquarters Project. Prepared for Terramar Retail Centers.

2012 Cultural Resource Test Plan for the Knight Residence Project. Prepared for Mr. Dennis Knight.

2012 Cultural Resource Test Plan for the 9th and Broadway Project. Prepared for Bridge Housing Corporation.

2012 Cultural Resource Test Plan for the Blue Sky Project. Prepared for Gray Development.

2011 An Archaeological Study for 1887 Viking Way Project, La Jolla, California. Prepared for Island Architects.

2011 A Cultural Resource Evaluation Program for the Otay Hills Quarry Project, San Diego County, California, Log No. 93-19-006J; P04-004; RPO4-001. Prepared for EnviroMINE.

2010 A Cultural Resource Evaluation Program for the Batchelder Lot Split Project, San Diego County, California, TPM 21177; KIVA PROJECT 10-0125593; APNs 247-010-10, -13. Prepared for David Batchelder.

2010 A Cultural Resources Survey and Evaluation Program for the Butterfield Trails Ranch Project, Valley Center, San Diego County, California, TM 5551, P 08-028, GPA 06-007, REZ 06-010, LOG NO. 06-08-033. Prepared for Wayne B. Hilbig.

2008 Lithic Analysis for Thirteen Sites Along the Transwestern Phoenix Expansion Project, Loops A and B. Prepared for Transwestern Pipeline Company, LLC.

2005 Cultural Resource Survey and Testing for the Star Ranch Property, San Diego, California.

2004 Cultural Resource Test Report for the Palomar Point Project: Site CA-SDI-16205, Carlsbad, California. Prepared for Lanikai Management Corp.

2004 Cultural Resource Survey and Test Report for the Canyon View Project, Carlsbad, California. Prepared for Shapouri & Associates.

2004 Cultural Resource Test Report for the Yamamoto Property: Site SDM-W-2046, Carlsbad, California. Prepared for Cunningham Consultants, Inc.

2004 Historical Resources Report for the Kuta and Mascari Properties, Otay Mesa, California. Prepared for Centex Homes.

2004 Cultural Resource Monitor and Test Report for the Encina Power Plant Project, Carlsbad,

California. Prepared for Haley & Aldrich, Inc.

2004 Cultural Resource Test Report for Site CA-SDI-16788, Otay Mesa, California. Prepared for Otay Mesa Property, L.P.

2004 Cultural Resource Survey and Test Report for the Lonestar Project, Otay Mesa, San Diego County, California. Prepared for Otay Mesa Property, L.P.

2003 Cultural Resource Mitigation Program for the Torrey Ranch Site CA-SDI-5325, San Diego, California. Prepared for Garden Communities.

2003 Cultural Resource Survey and Test Report for the Johnson Canyon Parcel, Otay Mesa, San Diego County, California. Prepared for Otay Mesa Property, L.P.

2002 Cultural Resource Data Recovery Plan for the Shaw Project: Sites CA-SDI-13025 and CA-SDI-13067, San Diego County, California. Prepared for Shapouri & Associates.

2001 Archaeological Test Program for CA-SDI-14112 Mesa Norte Project, San Diego, California. Prepared for Hunsaker & Associates.

2001 The Vista-Oceanside Cultural Resource Survey and Test Program, Vista, California. Prepared for Shapouri & Associates.

2001 Cultural Resource Test Program for the Wilson Property, Carlsbad, California. Prepared for the City of Carlsbad.

2001 Cultural Resource Test Plan for the Oceanside-Escondido Project, County of San Diego, California. Prepared for Dudek & Associates.

2001 Cultural Resource Test Program for the Kramer Junction Expansion Project Adelanto, California. Prepared for AMEC.

2001 Cultural Resource Test Program for CA-SDI-12508 San Diego, California (LDR No. 99-1331). Prepared for Garden Communities.

2000 Archaeological Testing of Prehistoric Sites CASDI-14115 and CA-SDI-14116 for The Mesa Grande Project, San Diego, California. Prepared for Solana Mesa Partners, LLC.

2000 Cultural Resource Survey and Test Report for the Wetmore Property, Otay Mesa, San Diego County, California. Prepared for Mr. Andy Campbell.

2000 The Torrey Ranch Cultural Resource Test Program, San Diego County, California. Prepared for Garden Communities.

2000 Cultural Resource Test Results for the Otay Mesa Generating Project. Prepared for the California Energy Commission and Otay Mesa Generating Company, LCC.

2000 The Eternal Hills Cultural Resource Survey and Test Program, City of Oceanside, California. Prepared for Eternal Hills Memorial Park.

2000 The Quail Ridge Cultural Resource Test Program, San Diego County, California. Prepared for Helix Environmental Planning Inc.

2000 Cultural Resource Testing Program for CA-SDI-5652/H and CA-SDI-9474H SR 78/Rancho Del Oro

Interchange Project, Oceanside, California. Prepared for Tetratech Inc.

2000 Cultural Resource Test Results for a Portion of CA-SDI-8654 (Kuebler Ranch) Otay Mesa, San Diego County, California. Prepared for Shapouri & Associates.

2000 Historical/Archaeological Monitoring and Data Recovery Program for Prehistoric Site CA-SDI-48, Locus C Naval Base Point Loma, San Diego, California. Prepared for Department of the Navy, Southwest Division.

2000 Cultural Resource Evaluation Report for the Palomar College Science Building Project, San Marcos, California. Prepared for Parsons Engineering Science Inc.

1999 Cultural Resource Monitoring Report for the Village of Ystagua Water Main Break City of San Diego, California. Prepared for the City of San Diego Water Department.

1999 The Effect of Projectile Point Size on Atlatl Dart Efficiency in Lithic Technology Vol. 24, No 1 p (27-37).

1999 Cultural Resource Evaluation Report for the Oceanside-Escondido Bikeway Project, San Marcos, California. Prepared for City of San Marcos.

1999 5000 Years of Occupation: Cultural Resource Inventory and Assessment Program for the Carlsbad Municipal Golf Course Project City of Carlsbad, California. Prepared or Cotton/Beland/Associates, Inc.

1999 Silver Oaks Estates Cultural Resource Enhanced Survey and Test Report for a Portion of CA-SDI-7202 San Diego, California. Prepared for Helix Environmental Planning Inc.

1999 Historical Archaeological Test of a portion of CA-SDI-8303 for the Faraday Road Extension Carlsbad, California. Prepared for the City of Carlsbad.

1999 Cultural Resource Literature Review for the North Coast Transportation Study Arterial Streets Alternative San Diego County, California. Prepared for MLF/San Diego Association of Govt.

1998 Archaeological Test Report for a Portion of CA-SDI-9115/SDM-W-122 Carlsbad, California. Prepared for Industrial Developments International.

1998 Rainforest Ranch Cultural Resource Survey and Significance Test for Prehistoric Sites CA-SDI-14932, CA-SDI-14937, CA-SDI-14938, and CA-SDI-14946 County of San Diego, California. Prepared for the Boys and Girls Club of Inland North County.

1998 Cultural Resource Evaluation Report for the Oceanside-Escondido Bikeway Project San Marcos, California.

1998 Final Report: Cultural Resource Survey Report for the Sterling Property, Carlsbad, California. Prepared for SPT Holdings LCC.

1996 Final Report: Archaeological Survey and Test for the Huber Property Carlsbad, California. Prepared for Gene Huber.

1996 Final Report: Results of Phase II Test Excavations and Phase III Data Recovery Excavations at Nine Archaeological Sites Within the Newport Coast Planned Community Phase III Entitlement Area, San Joaquin Hills, Orange County, California. Prepared for Coastal Community Builders, a division of The Irvine Company.

1995 Preliminary Report: Phase II Test Results From Nine Prehistoric Archaeological Sites within the Proposed Upper Newport Bay Regional County Park. Prepared for EDAW, Inc.

1995 Final Report: A Phase II Test Excavation at CA-ORA-136, Block 800 City of Newport Beach, Orange County California. Prepared for the Irvine Apartment Communities.

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Archaeologist

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Education

Masters of Arts, Anthropology, San Diego State University, San Diego **2025**

Bachelor of Arts, Anthropology, University of California, San Diego **2021**

Experience

Archaeologist **July 2021–Present**
BFSA Environmental Services, a Perennial Company **Poway, California**

Full-time archaeological field technician, archaeological monitoring, shovel testing, wet screening and lab work. Currently aids in writing archaeological reports and historic structure assessments.

Project Experience

14201 California Avenue, Beaumont, Riverside County. Served as archaeological monitor under the supervision of Brian F. Smith. **Present**

Espana II, Indio, Riverside County. Served as field technician conducting archaeological data recovery under the supervision of Brian F. Smith. **2024–Present**

Citracado, Escondido, San Diego County. Served as field technician conducting archaeological data recovery under the supervision of Brian F. Smith. **2022–2024**

Seaton Avenue & Perry Street (BGR2000297), Riverside County. Served as archaeological monitor under the supervision of Brian F. Smith. **2022–Present**

La Costa 48, Encinitas, San Diego County. Served as field technician conducting archaeological data recovery under the supervision of Brian F. Smith. **2022–Present**

Otay Business Park, San Diego, San Diego County. Served as field technician conducting archaeological data recovery under the supervision of Brian F. Smith. **2022–Present**

San Diego International Airport, San Diego, San Diego County. Served as archaeological monitor under the supervision of Brian F. Smith. **2021–Present**

Oceanside Pavilion – Ocean Kamp, Oceanside, San Diego County. Served as field technician conducting archaeological data recovery under the supervision of Brian F. Smith. **2021–Present**

Rockport Ranch, Menifee, Riverside County. Served as archaeological monitor under the supervision of Brian F. Smith. **2021–Present**

Menifee 80, Menifee, Riverside County. Served as archaeological monitor under the supervision of Brian F. Smith. **2021–Present**

Grady Residence, San Diego, San Diego County. Served as field technician conducting archaeological data recovery under the supervision of Brian F. Smith. **2021–Present**

Oak Creek, Escondido, San Diego County. Served as archaeological monitor under the supervision of Brian F. Smith. **2021–Present**

La Pradera (TR 34677), Riverside County. Served as archaeological monitor under the supervision of Brian F. Smith. **2021–Present**

Brisas Del Mar (MMRP), San Diego County. Served as field technician conducting archaeological data recovery under the supervision of Brian F. Smith. **2021–Present**

7960 La Jota, San Diego, San Diego County. Served as field technician conducting archaeological data recovery under the supervision of Brian F. Smith. **2021–Present**

1834 Spindrift, San Diego, San Diego County. Served as field technician conducting archaeological data recovery under the supervision of Brian F. Smith. **2021–Present**

9th & Vineyard, Rancho Cucamonga, San Bernardino County. Served as archaeological monitor under the supervision of Brian F. Smith. **2021–Present**

Cabrillo National Monument, San Diego, San Diego County. Served as field technician conducting archaeological testing under the supervision of Brian F. Smith. **2021–Present**

Serrano (TTM 37153; BGR1800380), Riverside County. Served as archaeological monitor under the supervision of Brian F. Smith. **2021–Present**

Ontario Ranch, Ontario, San Bernardino County. Served as archaeological monitor under the supervision of Brian F. Smith. **2021–Present**

Fontana 489, Fontana, San Bernardino County. Served as archaeological monitor under the supervision of Brian F. Smith. **2021–Present**

Mountain View, Redlands, San Bernardino County. Served as archaeological monitor under the supervision of Brian F. Smith. **2021–Present**

The Center at La Quinta, La Quinta, Riverside County. Served as archaeological monitor under the supervision of Brian F. Smith. **2021–Present**

Parente 200, Ontario, San Bernardino County. Served as archaeological monitor under the supervision of Brian F. Smith. **2024**

Ocean Pavilion, Oceanside, San Diego County. Served as field technician conducting archaeological data recovery under the supervision of Brian F. Smith. **2021–2024**

Spindrift, San Diego, San Diego County. Served as field technician conducting archaeological data recovery under the supervision of Brian F. Smith. **2021**

Reports/Papers

2024 Mitigation Monitoring Report for 13th and Broadway Project, City of San Diego. BFSA Environmental Services, a Perennial Company.

2024 Results of a Cultural, Paleontological, and Biological Resources Due Diligence Study for the Skyborne Villages Village 5 Project, City of Desert Hot Springs, Riverside County, California. BFSA Environmental Services, a Perennial Company.

2024 Cultural Resources Study for the Palm Villas at Rancho Jurupa Project, City of Jurupa Valley, Riverside County, California. BFSA Environmental Services, a Perennial Company.

2024 A Section 106 (NHPA) Historical Resources Study for the 6th Street Seniors Project, City of Coachella, California (APNs 778-113-001 and -002). BFSA Environmental Services, a Perennial Company.

2024 Cultural Resources Study for the New Bear Valley Hospital Project, City of Big Bear Lake, San Bernardino County, California. BFSA Environmental Services, a Perennial Company.

2024 A Phase I Cultural Resources Study for the Victor Valley Construction and Demolition Processing Facility Project, City of Victorville, San Bernardino County, California. BFSA Environmental Services, a Perennial Company.

2024 Results of a Cultural, Paleontological, and Biological Resources Due Diligence Study for the Benton & Moser Project (TM 38300), Riverside County, California. BFSA Environmental Services, a Perennial Company.

2024 Cultural Resources Study for the Senna Project, City of Hemet, Riverside County, California (APNs 446-300-005 and -011). BFSA Environmental Services, a Perennial Company.

2024 Results of a Cultural and Paleontological Due Diligence Study for the IL Housing Solutions Newport Road Project, City of Menifee, Riverside County, California. BFSA Environmental Services, a Perennial Company.

2024 A Phase I Cultural Resources Assessment for the Conifer Court Storage Project, City of Fontana, San Bernardino County, California. BFSA Environmental Services, a Perennial Company.

2024 Cultural Resources Study for the Highway 18 Pipeline Replacement Project, Arrowbear Lake, San Bernardino County, California. BFSA Environmental Services, a Perennial Company.

2024 Cultural Resources Study for the Olive Grove Project, City of Rialto, San Bernardino County, California (APN 0264-032-21). BFSA Environmental Services, a Perennial Company.

2024 A Cultural Resource Monitoring Report for the 3900 Harney Street Fiber Optic Project, City of San Diego, California (PRJ No.1113755). BFSA Environmental Services, a Perennial Company.

2024 Results of a Cultural, Paleontological, and Biological Resources Due Diligence Study for the Downtown Gateway Project, City of Escondido, San Diego County, California. BFSA Environmental Services, a Perennial Company.

2024 Results of a Cultural, Paleontological, and Biological Resources Due Diligence Study for the Santee Town Center Project, City of Santee, San Diego County, California. BFSA Environmental Services, a Perennial Company.

2024 Phase I Archaeological Assessment for the 840 Carlsbad Village Drive Project, City of Carlsbad, California (APN 203-354-15). BFSA Environmental Services, a Perennial Company.

2024 A Phase I Cultural Resources Assessment for the RDO Menifee Project, City of Menifee, Riverside County, California. BFSA Environmental Services, a Perennial Company.

2024 Mitigation Monitoring Report for the Citrus Avenue Condominium Project, City of Fontana, San Bernardino County, California. BFSA Environmental Services, a Perennial Company.

2024 Cultural Resources Study for the 402 Pasadena Court Project, City of San Clemente, Orange County, California (APNs 692-031-04 and -05). BFSA Environmental Services, a Perennial Company.

2024 Cultural Resources Study for the Downtown West Parking Structure Project, City of Fontana, San Bernardino County, California (APNs 0191-163-05, -23, and -24). BFSA Environmental Services, a Perennial Company.

2024 A Cultural Resources Monitoring Report for the Acacia Project (TR 31651), City of Perris, Riverside County, California. BFSA Environmental Services, a Perennial Company.

2024 A Negative Cultural Resources Survey Report for the TPM 21314 Project, San Diego County, California (PDS2022-TPM-21314). BFSA Environmental Services, a Perennial Company.

2024 Cultural Resources Monitoring Report for the Dusa Project, Ontario, San Bernardino County, California (SCH No. 2004071095). BFSA Environmental Services, a Perennial Company.

2024 Cultural Resources Monitoring Report for the Rialto Renaissance Project, City of Rialto, San Bernardino County, California (Tract [TTM] 20448). BFSA Environmental Services, a Perennial Company.

2024 Cultural Resources Monitoring Report for the 436 West Rialto Avenue Project, City of Rialto, San Bernardino County, California. BFSA Environmental Services, a Perennial Company.

2024 Cultural Resources Monitoring Report for the TTM 16072 Project, Rancho Cucamonga, San Bernardino County, California (SCH No. 2002091053). BFSA Environmental Services, a Perennial Company.

2024 Cultural Resources Monitoring Report for the Ontario Ranch Business Park Project, Ontario, San Bernardino County, California (SCH No. 2019050018). BFSA Environmental Services, a Perennial Company.

2024 Phase 1 Archaeological Assessment for the Barton Road and California Street Project. BFSA Environmental Services, a Perennial Company.

2024 Cultural Resource Monitoring Report for the Ridgeway Apartments Project, San Diego County, California (PDS2021-LDGRMJ-30273). BFSA Environmental Services, a Perennial Company.

2024 Results of a Cultural and Paleontological Resources Due Diligence Study for the 38853 15th Street East Project, City of Palmdale, Los Angeles County, California. BFSA Environmental Services, a Perennial Company.

2024 Cultural Resources Study for the 6401 33rd Street Project, City of Jurupa Valley, Riverside County, California. BFSA Environmental Services, a Perennial Company.

2024 Cultural Resources Study for the East Avenue K-8 (TTM 083324) Project, City of Lancaster, Los Angeles County, California (APN 3170-003-045). BFSA Environmental Services, a Perennial Company.

2024 Results of a Cultural and Paleontological Resources Due Diligence Study for the Olive Avenue 56 Project), Winchester, Riverside County, California. BFSA Environmental Services, a Perennial Company.

2024 Phase I Cultural Resources Survey for the TTM 39021 Project, City of Moreno Valley, County of Riverside. BFSA Environmental Services, a Perennial Company.

2024 Phase I Cultural Resources Survey for the TTM 39124 Project, City of Moreno Valley, Riverside County, California. BFSA Environmental Services, a Perennial Company.

2024 Results of a Cultural, Paleontological, and Biological Resources Due Diligence Study for the Desert Bloom Project, Cathedral City, Riverside County, California. BFSA Environmental Services, a Perennial Company.

2024 Phase I Archaeological Assessment for the Met at LA Project, City of Los Angeles, Los Angeles County, California. BFSA Environmental Services, a Perennial Company.

2024 Cultural Resources Study for the Pigeon Pass Project, City of Moreno Valley, Riverside County, California. BFSA Environmental Services, a Perennial Company.

2024 Phase I Cultural Resource Survey for the Dorothea Terrace Project, Poway, California. BFSA Environmental Services, a Perennial Company.

2025 A Phase I Cultural Resources Study for the Temecula Parkway South Project, Riverside County, California (TTM 39073). BFSA Environmental Services, a Perennial Company.

2025 A Phase I Cultural Resources Study for the Temecula Parkway North Project, Riverside County, California (TTM 38995). BFSA Environmental Services, a Perennial Company.

2025 A Phase I Cultural Resources Survey for the Kingfisher Site Project, City of Palm Springs, Riverside County, California. BFSA Environmental Services, a Perennial Company.

2025 Cultural Resources Survey Report for the Buena Vista Drive Project, City of Vista, California. BFSA Environmental Services, a Perennial Company.

2025 Cultural Resources Study for the Ground Up Seed Bank Project, Joshua Tree, San Bernardino County, California. BFSA Environmental Services, a Perennial Company.

2025 Phase I Cultural Resource Survey for the Heritage Road Automotive Facility Project, Community of Otay Mesa, San Diego, California. BFSA Environmental Services, a Perennial Company.

2025 Cultural Resources Study for the San Luis Rey Equine Hospital MUP Support Project, San Diego County, California. BFSA Environmental Services, a Perennial Company.

2025 Phase I Cultural Resource Survey for the 701 San Pasqual Valley Road Project, Escondido, California. BFSA Environmental Services, a Perennial Company.

2025 Cultural Resources Survey for the 32864 Hilltop Boulevard Project, Community of Arrowbear Lake, San Bernardino County, California. BFSA Environmental Services, a Perennial Company.

2025 Historic Structure Assessment for the 2445-2447 Ocean Street Project, City of Carlsbad, San Diego County, California. BFSA Environmental Services, a Perennial Company.

2025 Phase I Archaeological Assessment for the Rincon Garfield 8 Project, City of Carlsbad, California. BFSA Environmental Services, a Perennial Company.

2025 Phase I Archaeological Assessment for the Rincon Jefferson 36 Project, City of Carlsbad, California. BFSA Environmental Services, a Perennial Company.

2025 Phase I Archaeological Assessment for the 7320 El Fuerte Street Project, City of Carlsbad, San Diego County, California. BFSA Environmental Services, a Perennial Company.

2025 Cultural Resource Study for the Hesperia Gateway Project, City of Hesperia, San Bernardino County, California. BFSA Environmental Services, a Perennial Company.

2025 Cultural Resource Study for the Hesperia North Industrial Park Project, City of Hesperia, San Bernardino County, California. BFSA Environmental Services, a Perennial Company.

2025 Historic Structure Assessment for the 400 West Warner Avenue Project, City of Santa Ana, Orange County, California. BFSA Environmental Services, a Perennial Company.

2025 Phase I Cultural Resources Survey for the Monterra Homes Project, City of Moreno Valley, Riverside County, California. BFSA Environmental Services, a Perennial Company.

2025 Historic Structure Assessment for the Goodman Gateway Project, City of Santa Fe Springs, Los

Angeles County, California. BFSA Environmental Services, a Perennial Company.

2025 Historic Structure Assessment for the 500, 512, and 520 Midvale Avenue Project, Los Angeles, California. BFSA Environmental Services, a Perennial Company.

2025 Phase I Archaeological Assessment for the Carlsbad Site Project, City of Carlsbad, California. BFSA Environmental Services, a Perennial Company.

2025 Historic Structure Assessment for the 4542 Dunham Street Buildings, City of Commerce, Los Angeles County, California. BFSA Environmental Services, a Perennial Company.

2025 Cultural Resources Study for the 6210 Riverside Drive Project, City of Chino, San Bernardino County, California. BFSA Environmental Services, a Perennial Company.

2025 Phase I Archaeological Assessment for the Preuss Road Project, City of Los Angeles, Los Angeles County, California. BFSA Environmental Services, a Perennial Company.

2025 Phase I Cultural Resources Study for the 13112 Vista View Drive Project, Poway, California. BFSA Environmental Services, a Perennial Company.

2025 Cultural Resources Study for the 8428 Banana Avenue Project, Fontana, San Bernardino County, California. BFSA Environmental Services, a Perennial Company.

2025 A Phase I Cultural Resources Study for the TTM 39003 Project, Riverside County, California. BFSA Environmental Services, a Perennial Company.

2025 A Cultural Resources Study for the 157 Maples Avenue Project, Carlsbad, San Diego County, California. BFSA Environmental Services, a Perennial Company.

2025 Cultural Resources Study for the Mini Warehouse Self-Storage Project, City of Jurupa Valley, Riverside County, California. BFSA Environmental Services, a Perennial Company.

2025 Cultural Resources Study for the Eucalyptus and Amherst Avenues Project, City of Ontario, San Bernardino County, California. BFSA Environmental Services, a Perennial Company.

2025 Cultural Resources Study for the Aliso Viejo Parkway and Pacific Drive Project, City of Aliso Viejo, Orange County, California. BFSA Environmental Services, a Perennial Company.

2025 Cultural Resources Study for the General Atomic Aeronautical Systems Project, El Mirage, San Bernardino County, California. BFSA Environmental Services, a Perennial Company.

2025 Historic Structure Assessment for the 4080 Skyline Road Project, Carlsbad, California. BFSA Environmental Services, a Perennial Company.

2025 A Phase I Cultural Resources Study for the Galway Downs Project, Riverside County, California. BFSA Environmental Services, a Perennial Company.

2025 Cultural Resources Study for the TPM 20838 Project, San Bernardino County, California. BFSA Environmental Services, a Perennial Company.

2025 Cultural Resources Study for the RC Homes-Citrus Avenue Project, City of Fontana, San Bernardino County, California. BFSA Environmental Services, a Perennial Company.

2025 Phase I Cultural Resources Study for the 13520 Olive Tree Lane Project, City of Poway, San Diego County, California. BFSA Environmental Services, a Perennial Company.

2025 Cultural Resources Study for the Santa Fe Industrial Project, City of Hemet, Riverside County, California. BFSA Environmental Services, a Perennial Company.

2025 Phase I Cultural Resources Survey for the 17500 North Perris Boulevard Project, City of Moreno Valley, Riverside County, California. BFSA Environmental Services, a Perennial Company.

2025 A Mitigation Monitoring Report for the Candlelight Project, City of San Diego, San Diego County, California. BFSA Environmental Services, a Perennial Company.

2025 Cultural Resources Study for the 801 South State College Boulevard Project, City of Anaheim, Orange County, California. BFSA Environmental Services, a Perennial Company.

2025 A Cultural Resources Survey Report for the 1515 Lake Drive Project, City of Encinitas, San Diego County, California. BFSA Environmental Services, a Perennial Company.

2025 A Phase I Cultural Resources Study for the 1868 South San Jacinto Avenue Project, City of San Jacinto, Riverside County, California. BFSA Environmental Services, a Perennial Company.

2025 Cultural Resources Study for the Avenue M and 62nd Street West Reservoir Project, Los Angeles, County, California. BFSA Environmental Services, a Perennial Company.

2025 Cultural Resources Study for the Palmdale 37 Project, City of Palmdale, Los Angeles County, California. BFSA Environmental Services, a Perennial Company.

APPENDIX B

Site Record Form

(Deleted for Public Review; Bound Separately)

APPENDIX C

Archaeological Records Search Results

(Deleted for Public Review; Bound Separately)

APPENDIX D

NAHC Sacred Lands File Search Results

(Deleted for Public Review; Bound Separately)

APPENDIX E

Historic Documents

Building Development Information

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

HEADQUARTERS

BUILDING INFORMATION — SEP-10-63

NEW [X] ENLARGE [ ] RELOCATE [ ] REMOVE [ ]
ALTER [ ] REPAIR [ ] DEMOLISH [ ] SPECIAL [ ]

OWNER [ ] ARCHITECT [X] DESIGNER [ ]
DRAFTSMAN [ ] ENGINEER [ ]

WOOD [ ] CONCRETE [X] FIREPROOF [ ]
CONCRETE [X] PIERS [ ]

BLOCK [ ] FRAME [X] STUCCO [X] BRICK [ ] CONC. [ ] METAL [ ] OTHER [ ]

PLASTER [X] DRY WALL [ ] ROOF COVERING CARP. SHGL. DD. RES. [ ]

ZONE A-1-1 ZONING CHECKED BY VARIANCE APPROVED HARVEY $ 4.00

SET BACK FRONT 100ft SIDE 100' REAR 440 LOT SIZE 440 X 220

1st. Fl. 8292 Sq. Ft. @
2nd. Fl. _____ Sq. Ft. @
Por. _____ Sq. Ft. @
Gar. _____ Sq. Ft. @
Car P. _____ Sq. Ft. @
Wall _____ Sq. Ft. @

ESTIMATED VALUATION $ 79,578

PLANS CHECKED BY BRINDLEY FEE $ 185.50

ELECTRICAL FEES 11-5-63 $ 61.25

NO.			
	49625		
	49626		
1	MOTOR 1/2 H.P.	.25	
2	MOTOR 3 H.P.	2.00	
2	MOTOR 2 1/2 H.P.	2.00	
	MOTOR H.P.		
107	FIXTURES	10.70	
292	OUTLETS	29.20	
1	FIXTURE FEE	1.00	
1	GARBAGE DISPOSAL	.75	
8	EXHAUST FAN	2.00	
1	DISHWASHER	.25	
	RANGE AND/OR OVEN		
	WATER HEATER		
4	SPACE HEATER	2.00	
1	CONSTRUCTION POLE	2.00	
1	SERVICE ENTRANCE	2.00	
3	SUB-PANEL	4.00	
	PERMIT FEE	1.00	

PLANS CHECKED BY FEE $ 61.25

PLUMBING FEES 11-5-63 $ 165.50

NO.		
1	SEWER ELE	61.25
1	SEWER PLB	76.75
	DRAINAGE PIPING	
1	DRINKING FOUNTAIN	1.25
	URINAL	
	WATER PIPING	
2	FLOOR DRAIN	2.50
	WATER SOFTENER	
2	WASHER (AUTO) (HOSE)	2.50
1	GARBAGE DISPOSAL	1.25
2	LAUNDRY TRAY	2.50
1	KITCHEN SINK	1.25
11	WATER CLOSET	13.75
16	LAVATORY	20.00
2	SHOWER	2.50
1	BATH TUB	1.25
3	WATER HEATER	0.50
2	SEWAGE DISPOSAL	2.00
	HOUSE SEWER	
1	GAS PIPING	1.50
1	PERMIT FEE	2.00

PLANS CHECKED BY FEE $ 76.75

PLAN CHECK FEE	$
CONSTRUCTION FEE	$ 185.50
ELECTRICAL FEE	$ 61.25
PLUMBING FEE	$ 76.75
TOTAL FEE	$ 323.50

CASH [ ] CHECK [X] B.O. [ ] N.C. [ ]

RECEIVED BY Allen DATE 9-5-63

WATER VALVES SHUT? YES [ ] LEAVE LIKE [ ] SEEPAGE PIT [ ]

RESERVE S.T. 3000 GAL. - 2 PITS 40 X 30 EACH
S.T. 2700 GAL. - 2 PITS 40 X 29 EACH
By Boring
COMPLY TO OLD ELECT CODE

JOB ADDRESS 39-241 - 7TH ST. OWNER PATTERSON, H.

COMMUNITY SAN JACINTO SCHOOL DISTRICT SAN JACINTO DATE 9-5-63

USE OF BUILDING NURSING HOME SUPPLEMENT TO PERMIT

DISTRICT	SUBAREA	P.C.	UNITS	VALUATION	OFFICE
H	63	14		80,578	2

PERMIT NUMBER 105018

DESCRIPTIVE ADDRESS ESTUDILLO LAND & WATER Co. "H" PERMIT NO.

LEGAL DESCRIPTION LOT 4 x PORT LOT 5

BOND $ [ ] BOND [ ] CASH [ ]

GROUP	TYPE	FIRE ZONE	PAGE	MAP	PAGE	LINE
D	V					

RELEASE BOND DATE

FINALED DATE | INSPECTOR | CERTIFICATE OF COMPLIANCE | CERT. SENT DATE

CONTRACTOR LICENSE TYPE & # PLAN FILE # 3154

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 60 DAYS, CESSATION OF WORK FOR 120 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID.
I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA. I ALSO AGREE TO CARRY COMPENSATION INSURANCE UPON MY EMPLOYEES. COMPLIANCE WITH LAWS OF THE STATE OF CALIFORNIA COVERING CONTRACTORS IS ALSO SOLICITED.

OWNER	SAME	CONTRACTOR	
MAILING ADD.	P.O. Box 184	MAILING ADD.	
POST OFFICE	HEMET, CALIF.	POST OFFICE	
TEL.	438-8135	TEL.	BY

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

FIELD

BUILDING INFORMATION

NEW [X] ENLARGE [ ] RELOCATE [ ] REMASTER [ ]
ALTER [ ] REPAIR [ ] DEMOLISH [ ] SPECIAL [ ]

OWNER [ ] ARCHITECT [X] HOMEBUILT [ ]
DRAFTSMAN [ ] ENGINEER [ ]

WOOD [ ] CONCRETE [X] FIREPLACE
CONCRETE [X] PIERS

BLOCK [ ] FRAME [X] STUCCO [X] BRICK [ ] CONC. [ ] METAL [ ] OTHER

PLASTER [X] DRY WALL [ ] ROOF COVERING [ ] NO. STS. [ ]

ZONE: A-1-1 | ZONING CHECKED BY: HARVEY | VARIANCE APPROVED: [illegible]

SET BACK	FRONT	SIDE	REAR	LOT SIZE
	[illegible]	100'	80'	[illegible]

1st. Fl. [illegible] Sq. Ft. @ 2.— = 29.52
2nd. Fl. ____ Sq. Ft. @ ____
Port. ____ Sq. Ft. @ ____
Gar. ____ Sq. Ft. @ ____
Car P. ____ Sq. Ft. @ ____
Wall ____ Sq. Ft. @ ____

ESTIMATED VALUATION $ 79,598.00

PLANS CHECKED BY [illegible] FEE $ 185.50

ELECTRICAL FEES

NO.		
	INSPECTION CALL	
	DRIER	
1	MOTOR ½ H.P.	25
3	MOTOR 3 H.P.	2.—
2	MOTOR 2½ H.P.	2.—
	MOTOR H.P.	
29	FIXTURES	10.90
392	OUTLETS	29.40
1	FIXTURE FEE	1.—
1	GARBAGE DISPOSAL	25
1	[illegible] FAN	2.—
1	DISHWASHER	25
	RANGE AND/OR OVEN	
	WATER HEATER	
4	SPACE HEATER	2.—
1	CONSTRUCTION POLE	2.—
1	SERVICE ENTRANCE	4.—
3	SUB-PANEL	6.—
	PERMIT FEE	1.—

PLANS CHECKED BY [illegible] FEE $ 61.25

PLUMBING FEES

NO.		
	BUILDING PIPING	
1	DRINKING FOUNTAIN	1.25
	URINAL	
	WATER PIPING	
2	FLOOR DRAIN	2.50
	WATER SOFTENER	
2	WASHER (AUTO) [illegible]	2.50
1	GARBAGE DISPOSAL	1.25
1	LAUNDRY TRAY	2.50
1	KITCHEN SINK	1.25
11	WATER CLOSET	13.75
11	LAVATORY	5.50
5	SHOWER	2.50
1	BATH TUB	1.25
3	WATER HEATER	3.75
2	SEWAGE DISPOSAL	5.—
	HOUSE SEWER	
1	GAS PIPING	1.50
1	PERMIT FEE	2.—

PLANS CHECKED BY [illegible] FEE $ 76.25

PLAN CHECK FEE	$
CONSTRUCTION FEE	$ 185.50
ELECTRICAL FEE	$ 61.25
PLUMBING FEE	$ 76.25
TOTAL FEE	$ 323.00

CASH [ ] CHECK [X] M.O. [ ] N.C. [ ]

RECEIVED BY [illegible] DATE 4-5-63

WATER METER SERVICE TAPS | LARGER LINE | SEWERAGE PIT

REMARKS: [illegible]

JOB ADDRESS: 32-241 - 7TH ST. | OWNER: PATTERSON H.

COMMUNITY: SAN JACINTO | SCHOOL DISTRICT: SAN JACINTO | DATE: 4-5-63

USE OF BUILDING: NURSING HOME | SUPPLEMENT TO PERMIT:

DISTRICT	MAP AREA	P.C.	UNITS	VALUATION	OFFICE
N	63	14		80,598	2

PERMIT NUMBER: 105018

DESCRIPTIVE ADDRESS: E. [illegible] San Jac. Dist.

LEGAL DESCRIPTION: L.T 4 BLK 5

BOND $ | PIER | CARD

GROUP	TYPE	FIRE ZONE	POOL	MAP	PAGE	LINE
	R					

RELEASE BOND DATE

FINALED DATE | INSPECTOR | CERTIFICATE OF COMPLIANCE | CERT. SENT DATE

CONTRACTOR

LICENSE-TYPE

PLAN FILE # 31 SM

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 90 DAYS. CESSATION OF WORK FOR 180 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID.
I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA. I ALSO AGREE TO CARRY COMPENSATION INSURANCE DONE BY EMPLOYEES. COMPLIANCE WITH LAWS OF THE STATE OF CALIFORNIA GOVERNING CONTRACTORS IS ALSO GUARANTEED.

OWNER [illegible]
MAILING ADD. [illegible]
POST OFFICE HEMET, CALIF.
TEL. [illegible]

CONTRACTOR
MAILING ADD.
POST OFFICE
TEL. BY

APPROVALS

	DATE	INSPECTOR
SET BACKS		
FND. FORMS	10-21-63	[illegible]
REIN. STEEL		
BOND BEAM		
FRAMING		
VENTS		
ROOF DECK		
LATH EXT.	1-10-64	Helcomb
LATH INT.	1-10-64	Helcomb
FINAL	2-3-64	Kennedy

UTIL. CO. NOTIF.

BUILDING NOTICES

ROOF TARRING GOOD.
WEST HALF OK INT.
EXT. OK 1-6-64 LH

Check Plans Comm. requirements before final.

Before final check for curbs and gutters 2" asphalt material for all driveways, parking, loading and unloading areas

APPROVALS

		DATE	INSPECTOR
TEMP. SERVICE POLE			
UNDERGROUND	CONDUIT		
	SERVICE ENT.		
	WIRING	12-[illegible]	Helcomb
FINAL	FIXTURES		
	SERVICE ENT.		
	GROUNDING		

UTIL. CO. NOTIF.

ELECTRICAL NOTICES

Underground Conduit OK 10-9-63
Elect. By Yeon
Note: Power on 2-6-64 Kennedy

APPROVALS

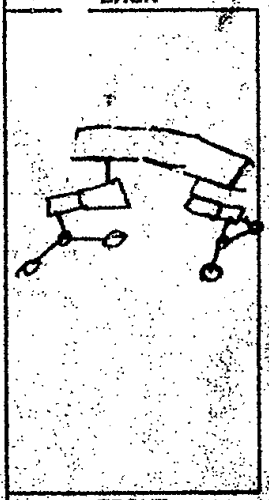
		DATE	INSPECTOR
GROUND PLUMBING		10-18-63	[illegible]
ROUGH PLUMBING			
SEWER			
SEWAGE DISPOSAL		2-3-64	Helcomb
FINAL	GAS	2-3-64	Helcomb
	WATER	2-3-64	[illegible]
	FIXTURES	2-3-64	Kennedy

UTIL. CO. NOTIF.

PLUMBING NOTICES

1. C.O. Not to grade
2. PLUMBING ON NORTH SECT. OK TO POUR
3. CK ALL GAS ON FINAL
GAUGE T. GAS TO DRY PLASTER 2-3-64 T.T.H.

BACK



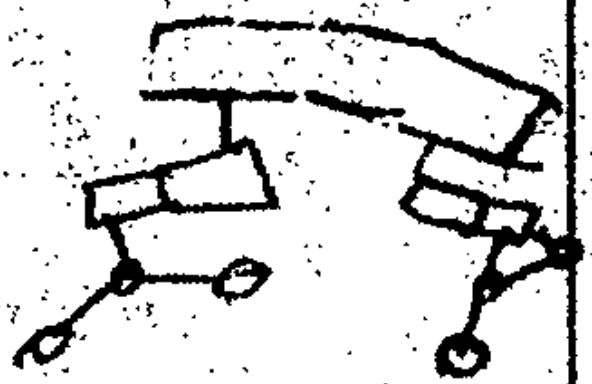
FRONT

☒ INSIDE ☐ CORNER ☐ KEY

PLUMBING NOTICES

1. C.O. Not to grade
2. PLUMBING ON NORTH SECT. OK TO POUR
3. CK ALL GAS ON FINAL
GAUGE GAS TO DRY PLASTER 2-3-64 F.F.M.

BACK



FRONT

■ INSIDE □ CORNER □ KEY

Permit Copy

Department of Building and Safety

COUNTY OF RIVERSIDE

TO Peterson & Jones Dist

Address 179 St. Date 9-30-63

CORRECTION NOTICE

Permit No. 105018

1. Plumbing has deviations from approved plans.

2. C.O. Not brought to grade.

3. Water test down.

I shall be glad to meet you Friday A.M. and go over this with you.

Please before 10:00 AM

Inspector

Permit Copy

Department of Building and Safety

COUNTY OF RIVERSIDE

TO: MR. PATTERSON Dist.

ADDRESS: 39-241 7th Date Oct. 1, 1963

CORRECTION NOTICE

Permit No. 105018

1. C.O. TO BE BROUGHT TO GRADE.

2. 4" C.I. FOR SERVICE SINK IN UTILITY ROOM.
(CHECK ON TRISONE)

Kilburn
Inspector

Permit Copy

Department of Building and Safety

COUNTY OF RIVERSIDE

TO: Mr. PATTERSON Dist.

ADDRESS: 39-241 7th St. Date 10-14-63

CORRECTION NOTICE

Permit No. 105018

1. All outside forms are to have a minimum of 18" from the top of the form TO THE BOTTOM OF TRENCH.

2. ~~The entire system shall be~~ COMPLETED

3. ADDITIONAL PIERS AS PER PLANS.

4. Tamp all cement area.

5. Slope all sand base that is to be encased in concrete.

6. There are two or three items in question. I will have the engineer bring them when you make above correction.

R. Clausen
Inspector

D

Permit Copy

Department of Building and Safety

COUNTY OF RIVERSIDE

TO: MR. PATTERSON Dist.

ADDRESS: 39-241 1st Date Oct. 5, 1965

CORRECTION NOTICE

Permit No. 105018

1. Provide 4" C.I. Waste for Service Sink.

2. Remove all grass and roots in building area. No grass and root allowed under concrete slab.

Inspector

Permit Copy

Department of Building and Safety

COUNTY OF RIVERSIDE

TO: Mr. Christensen Dist.

ADDRESS: 7th St. Date 10-18-63

CORRECTION NOTICE

Permit No. 105018

1. Please save all delivery tickets on concrete and either give them to me or turn them in to the office.

2. All specifications as prescribed are to be strictly followed.

Kilburn

Inspector

F

Job

Department of Building and Safety

COUNTY OF RIVERSIDE

TO: PATTERSON Dist. 4

ADDRESS: 7th St. Date 4-2063

CORRECTION NOTICE

Permit No. 105018

OK BY ENGINEER

V (1) TRUSS CALL FOR 5/8" C.C. PLYWOOD WITH CLIPS.

V (2) Z-BAR AT ROOF UNDER JACKS.

V (3) REAM ALL PIPE IN PLUMBING SYSTEM, ABOVE ROOF IS NOT REAMED.

V (4) ALL VENTS THRU ROOF, WATER HEATER & FURN.

V (5) FILL RIDGE GAP.

V (6) CENTER ALL HEAT VENTS 1" MIN. FROM COMBUSTIBLE

V (7) 5/8" DRYWALL ATTIC SEPARATION WILL NEED NAILING MAX 5" TO 7" ON 16" CENTERS.

V (8) FRONT BRACE

V (9) WHALER ON GABLE STUDS OVER 16" WHERE FLAT

V (10) SHOOT ALL PLATE SPLICES.

V (11) SUPPORT PURLINS @ GABLE

Inspector

(12) NAIL ALL CORNERS AND INTERSECTING PART. EA. 30" INSIDE & OUT

(13) ADD CRIPPLES UNDER WINDOWS PUBLIC BATH MAIN.

(14) STRAIGHTEN BOWED CORNERS.

(15) DOUBLE 2x6 AT RECESS ENTRY.

(16) STRAP REAR WINDOW AT ANGLES.

(17) STRAP TOP PLATES WHERE DOUBLE CUT 3".

(18) CORR. BRACE BATH SAME LOC.

(19) STACK FOR GARBAGE BURNER. THRU ROOF.

(20) TRIMMERS & CORR STUD GARBAGE ROOM DOOR.

(21) STRAP AT MAIN GAS PLATE CUT OUT.

G

Primary Copy

Department of Building and Safety

COUNTY OF RIVERSIDE

TO: PATTERSON Dist: H

ADDRESS: 7TH ST. JACKSON Date 11-27-63

CORRECTION NOTICE

Permit No. 10501B

✓ (1) CLEAR ALL HEAT VENTS TRANSITE 1" + CENTER

✓ (2) PLUMBING ROOF SHOE BE BEARED AS PER CORR.

✓ (3) ROOF DECK HELD TILL WE GET CLEARANCE COMBUSTION AIR ALL GAS UNITS.

✓ 30" CRAWL HOLE & WALK WAY PLACE FORESTURM WITHIN 20'.

Inspector

H-2

Permit Copy

Department of Building and Safety
COUNTY OF RIVERSIDE

SHERIFF

TO: PATTERSON Dist. H

ADDRESS: 7th ST. Date 12-10-63

CORRECTION NOTICE

Permit No. 105018

✓ (1) COMPLETE 30" SOLID WALK FROM FURN. TO RECES.

✓ (2) CRAWL HOLE FOR FURN.

✓ (3) METAL CLAMP DRYER VENT.

✓ (4) HOODS FOR COMB AIR VENTS LAUNDRY.

✓ (5) CK. BOXES FOR DISTANCE FINISH PLASTER (ELECTRIC)

✓ (6) GRADE WATER CLOSETS.

(7) CORRECT FLOOR DRAINS

✓ (8) DAMPERS FOR COMB. — AIR FURNACES.

✓ (9) PLUMBING NOT COMPLETE AT STERILIZER.

✓ (10) SHOWER PANS TEST.

✓ (11) CUT CONCRETE FLUSH WITH STUD WALL AT SHOWERS

✓ (12) STRAP TOP PLATE W. WALL

✓ (13) 1X BOARD JOIST LAP

✓ (14) BRIDGE OR BL BELOW FURN BOARDS (JOISTS

Inspector Holcomb

H2

Permit Copy

Department of Building and Safety

SHEET #2 COUNTY OF RIVERSIDE

TO: PATTERSON Dist. H

ADDRESS: 7TH ST. Date 12-10-63

CORRECTION NOTICE

Permit No. 105018

✓(15) 1" X BOARD AT EDGES TO STABILIZE 2 X 8 JOISTS.

✓(16) BLOCK OR HANG COOK STOVE VENT JOIST.

(17) BLK. DINING RM DUCT JOIST.

✓(18) MAIN ENTRANCE CEILING AT MAIN OFFICE ADD JOIST OVER DOOR

✓(19) NAIL ANGLE CORNER NEAR MAIN OFFICE.

✓(20) PERMANENT LADDER EA. ATTIC ACCESS.

✓(21) CK ATTIC ROOF FRAMING.

✓(22) CK OVERHANG FOR LOUVRES & VERT COMB AIR TO EA ATTIC COMPARTMENT WITH FURR.

✓(23) TAPE FIREWALL JTS ATTIC

✓(24) VERIFY FIRE WALL LADDERS & CORRIDOR

LOUVERS NOR. GABLE

Inspector

1

Permit Copy

Department of Building and Safety

COUNTY OF RIVERSIDE

TO: Patterson Dist. 4

ADDRESS: 7th St. Date 12-16-65

CORRECTION NOTICE

Permit No. 10501B

✓ (1) ELEC. BOXES WITH MORE THAN 10 #12 WIRES TO BE CHANGED.

✓ (2) PLASTER RINGS TO BE CHANGED.

✓ (3) VERT. LOUVRES NOT. CABLE FRONT (FOR FURN.)

✓ (4) TAPE ALL FIREWALL IN ATTIC.

✓ (5) VERIFY CORRIDOR FIREWALL WHERE LADDERS ARE.

✓ (6) NEED TO VERIFY CHANGE ON ELECTRIC PHASE.

✓ (7) CK. SWITCHES AHEAD CRAWL HOLE. HOW CLOSE?

✓ ALARM SYSTEM.

Inspector

5

Permit Copy

Department of Building and Safety

COUNTY OF RIVERSIDE

TO: PATTERSON Dist. H

ADDRESS: 7TH STREET Date 1-3-64

CORRECTION NOTICE

Permit No. 105018

V (1) EAST GABLE END 24" CENTERS OVER DOOR.
V (2) METAL CORNER AT SAME EAST SIDE ARCH. (2)
V (3) ALSO WEST. YES FOR METAL CORNERS.
V (4) METAL AT UNDER SHOT ROOF WEST END.
V (5) WIRE FLOATING JTS. 24" CENTERS WEST OVERHANG So. WALL.
V (6) NOR. OVERHANG WEST UNITS H.R.B NOT WIRED.
V (7) NAIL FRAMING AT JNTS. LATHE
V (8) WEST STUCCO REQ. DOUBLE CUT JOINT NO METAL LATH
(9) LAP METAL CORNERS HEAD TUB ROOM. ALL ROOMS INSPECTED ALL EXT. + 2 WEST & So. WINGS. + 1 CORRIDOR.
CALL RE-INSPEC. WHEN CORR.

Inspector

Holcomb

105018

H

B:M:RJ309

March 5, 1963

The Honorable Board of Supervisors
Court House
Riverside, California

SUBJECT: Variance Case No. 496
Everett H. Pettengill and Irene Tobin
Convalescent Hospital
Zone A-1-5
Hemet-San Jacinto District

Fifth Supervisorial District

Gentlemen:

Pursuant to the request of your honorable Board dated February 26, 1963, the Planning Commission respectfully recommends the following conditions for the operation and maintenance of a convalescent hospital in the A-1-5 Zone of Hemet-San Jacinto:

1. That development of the premises conform substantially with that shown on plot plan marked Exhibit "A" (2 pages) on file with Variance Case No. 496 in the office of the Riverside County Planning Commission.

2. That curb and gutter be installed at a grade and alignment approved by the Riverside County Road Commissioner along the 7th Street frontage of the property, and that the existing road paving be extended to the into said curb and gutter, and further that said improvements be done at no cost to any government agency.

3. That a 6-foot concrete block wall be erected around the perimeter of the property with consideration with the exception that a 12-inch concrete block wall may be erected along the 7th Street frontage. OR CHAIN LINK BY BERGER

4. That all open areas shown on Exhibit "A" be established in lawn and be planentably landscaped and maintained at all times.

5. That all driveways and parking areas be paved with not less than two (2) inches of asphaltic material.

105018

[redacted]

6. [redacted] with all State requirements as well as requirements of the Health Department and the Department of Building and Safety of the County of Riverside.

7. [redacted] within 6 months of the effective date of approval, otherwise it shall be null and void and of no effect whatsoever.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

COPY

RECEIVED

JUL 7 1963

COUNTY OF RIVERSIDE
BUILDING DEPARTMENT
LAND USE DIVISION

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

HEADQUARTERS

BUILDING INFORMATION

ERECT | ENLARGE | RELOCATE | RESIST | 116-[illegible]-63

ALTER | REPAIR | DEMOLISH | SPECIAL

OWNER | ARCHITECT | MEMBRANE

DRAFTSMAN | ENGINEER

WOOD | CONCRETE | FIREPLACE

CONCRETE | PIERS

BLOCK | FRAME | Stucco | BRICK | CONC. | METAL | OTHER

PLASTER | DRY WALL | ROOF COVERING | NO. FIRES

ZONE: A-1-1 | ZONING CHECKED BY: BF | VARIANCE APPROVED: $

SET BACK: FRONT | SIDE | REAR | LOT SIZE

1st. Fl.	3242 Sq. Ft. @ 2	12.50	
2nd. Fl.	Sq. Ft. @		
Par.	Sq. Ft. @		
Gar.	Sq. Ft. @		
Car P.	Sq. Ft. @		
Well	Sq. Ft. @		
	Sq. Ft. @		

ESTIMATED VALUATION: $

PLANS CHECKED BY | FEE $

ELECTRICAL FEES

46666 • H210 [illegible]

INSPECTION CALL		
DRIER		
MOTOR	H.P.	
MOTOR	H.P.	
MOTOR	H.P.	
MOTOR	H.P.	
FIXTURES		
OUTLETS		
FIXTURE FEE		
GARBAGE DISPOSAL		
KITCHEN FAN		
DISHWASHER		
RANGE AND/OR OVEN		
WATER HEATER		
SPACE HEATER		
CONSTRUCTION POLE		
SERVICE ENTRANCE		
SUB-PANEL		
PERMIT FEE		

PLANS CHECKED BY | FEE $

PLUMBING FEES

1 — PCH 9275

DRAINAGE PIPING	
DRINKING FOUNTAIN	
URINAL	
WATER PIPING	
FLOOR DRAIN	
WATER SOFTENER	
WASHER (AUTO) (DISH)	
GARBAGE DISPOSAL	
LAUNDRY TRAY	
KITCHEN SINK	
WATER CLOSET	
LAVATORY	
SHOWER	
BATH TUB	
WATER HEATER	
SEWAGE DISPOSAL	
HOUSE SEWER	
GAS PIPING	
PERMIT FEE	

PLANS CHECKED BY | FEE $

J | P | B | A | M | J | J | A | R | O | N | B

	$
PLAN CHECK FEE	$ 92 75
CONSTRUCTION FEE	$
ELECTRICAL FEE	$
PLUMBING FEE	$
TOTAL FEE	$ 92 75

CASH | CHECK ✓ | M.O. | N.C.

RECEIVED BY: Helen | DATE: 8-14-63

SEWER VOLUME DEPTH TANK | LEACH LINES | SEEPAGE PIT

REMARKS:

JOB ADDRESS: 39241 7TH ST | OWNER: PATTERSON, H.

COMMUNITY: SAN JACINTO | SCHOOL DISTRICT: SAN JACINTO | DATE: 8-14-63

USE OF BUILDING: NURSING HOME | SUPPLEMENT TO PERMIT

DISTRICT	SUB AREA	P.C.	UNITS	VALUATION	OFFICE	PERMIT NUMBER
V/11	63	70		—	2	104581

DESCRIPTIVE ADDRESS | 'B' PERMIT NO.

LEGAL DESCRIPTION | BOND $ | BOND | CASH

GROUP	TYPE	FIRE ZONE	BOOK	MAP	PAGE	LINE	RELEASE BOND DATE

FINALED DATE	INSPECTOR	CERTIFICATE OF COMPLIANCE	CERT. SENT DATE

CONTRACTOR | LICENSE-TYPE | # | PLAN FILE # 3154

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 90 DAYS. CESSATION OF WORK FOR 180 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID.
I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA. I ALSO AGREE TO CARRY COMPENSATION INSURANCE COVERING MY EMPLOYEES. COMPLIANCE WITH LAWS OF THE STATE OF CALIFORNIA COVERING CONTRACTORS IS ALSO GUARANTEED.

OWNER: Hayward Patterson by Ray G. Lundgren | CONTRACTOR

MAILING ADD: P.O. Box 124 | MAILING ADD.

POST OFFICE: Hemet Calif | POST OFFICE

TEL: 658-8155 BY J Lundgren | TEL | BY

DEPARTMENT OF BUILDING & SA[illegible]

COUNTY OF RIVERSIDE

FIELD

BUILDING INFORMATION

ERECT		ENLARGE		RELOCATE		REGISTER	
ALTER		REPAIR		DEMOLISH		SPECIAL	

PLANS: OWNER | ARCHITECT | MEMBRANE | DRAFTSMAN | ENGINEER

FOUND: WOOD | CONCRETE | CONCRETE | PIERS | FIREPLACE

WALLS: BLOCK | FRAME | STUCCO | BRICK | CONC. | METAL | OTHER

INT: PLASTER | DRY WALL | ROOF COVERING | SQ. FTS.

ZONE	ZONING CHECKED BY	VARIANCE APPROVED #
A-1-1	BP	

SET BACK	FRONT	SIDE	REAR	LOT SIZE

1st. Fl.	1992	Sq. Ft. @ 1	1992
2nd. Fl.		Sq. Ft. @	
Por.		Sq. Ft. @	
Gar.		Sq. Ft. @	
Car P.		Sq. Ft. @	
Wall		Sq. Ft. @	
		Sq. Ft. @	

ESTIMATED VALUATION $

PLANS CHECKED BY | FEE $

ELECTRICAL FEES

NO.		
8	EXHAUST FANS	2 -
1	[illegible]	25
	INSPECTION CALL	
	DRIER	
2	MOTOR ½ H.P.	2 -
3	MOTOR 4 H.P.	3 -
	MOTOR H.P.	
	MOTOR H.P.	
7	FIXTURES	[illegible]
[illegible]	OUTLETS	2980
1	FIXTURE FEE	1 -
1	GARBAGE DISPOSAL	25
	KITCHEN FAN	
1	DISHWASHER	25
	RANGE AND/OR OVEN	
	WATER HEATER	
[illegible]	SPACE HEATER	3 -
1	CONSTRUCTION POLE	2 -
1	SERVICE ENTRANCE	2 -
5	SUB-PANEL	5 -
1	PERMIT FEE	1 -

PLANS CHECKED BY | FEE $61

PLUMBING FEES

NO.		
	DRAINAGE PIPING	
1	DRINKING FOUNTAIN	1.25
	URINAL	
	WATER PIPING	
2	FLOOR DRAIN	2.50
	WATER SOFTENER	
2	WASHER (AUTO)	2.50
1	GARBAGE DISPOSAL	1.25
2	LAUNDRY TRAY	2.50
1	KITCHEN SINK	1.25
11	WATER CLOSET	13.75
16	LAVATORY	20 -
2	SHOWER	2.50
1	BATH TUB	1.25
3	WATER HEATER	4.50
2	SEWAGE DISPOSAL	50 -
	HOUSE SEWER	
1	GAS PIPING	1.50
1	PERMIT FEE	2 -

PLANS CHECKED BY | FEE $76 75

PLAN CHECK FEE	$92 75
CONSTRUCTION FEE	$185 50
ELECTRICAL FEE	$61 25
PLUMBING FEE	$76 75
TOTAL FEE	$323 50

CASH | CHECK | M.O. | N.C.

RECEIVED BY: Esther | DATE: 8-14-63

WATER VOLUME DEPTH TANK | LEACH LINE | SEEPAGE PIT

REMARKS: 323.50

JOB ADDRESS: 39341 7TH ST | OWNER: PATTERSON, H.

COMMUNITY: SAN JACINTO | SCHOOL DISTRICT: SAN JACINTO | DATE: 8-14-63

USE OF BUILDING: NURSING HOME | SUPPLEMENT TO PERMIT

DISTRICT	CODE AREA	P.C.	UNITS	VALUATION	OFFICE	PERMIT NUMBER
9/11	63	70		—	2	104581

DESCRIPTIVE ADDRESS | 'M' PERMIT NO.

LEGAL DESCRIPTION | BOND $ | PORB | CASH

GROUP	TYPE	FIRE ZONE	POOL	MAP	PAGE	LINE	RELEASE BOND DATE

FINALED DATE	INSPECTOR	CERTIFICATE OF COMPLIANCE	CERT. SENT DATE
9-5-63	Nesela	I / E / N O	

CONTRACTOR | LICENSE-TYPE # | PLAN FILE # 375-4

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 60 DAYS, CESSATION OF WORK FOR 120 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID.
I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA. I ALSO AGREE TO CARRY COMPENSATION INSURANCE UPON MY EMPLOYEES. COMPLIANCE WITH LABOR LAWS OF THE STATE OF CALIFORNIA COVERING CONTRACTORS IS ALSO GUARANTEED.

OWNER: Ray J. Lundgren | CONTRACTOR

MAILING ADD. P.O. Box 124 | MAILING ADD.

POST OFFICE Hemet Calif | POST OFFICE

TEL. 658-3155 BY J. Lundgren | TEL. BY

APPROVALS		
	DATE	INSPECTOR
SET BACKS		
FND. FORMS		
REIN. STEEL		
BOND BEAM		
FRAMING		
VENTS		
ROOF DECK		
LATH EXT.		
LATH INT.		
FINAL		

BUILDING NOTICES

APPROVALS			
		DATE	INSPECTOR
TEMP. SERVICE POLE			
ROUGH	CONDUIT		
	SERVICE ENT.		
	WIRING		
FINAL	FIXTURES		
	SERVICE ENT.		
	GROUNDING		
UTIL. CO. NOTIF.			

ELECTRICAL NOTICES

APPROVALS		
	DATE	INSPECTOR
GROUND PLUMBING		
ROUGH PLUMBING		
SEWER		
SEWAGE DISPOSAL		
FINAL GAS		
FINAL WATER		
FINAL FIXTURES		
UTIL. CO. NOTIF.		

PLUMBING NOTICES

BACK

FRONT

☐ INSIDE ☐ CORNER ☐ KEY

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

HEADQUARTERS

BUILDING INFORMATION

ERECT X | ENLARGE | RELOCATE | REGISTER
ALTER | REPAIR | DEMOLISH | SPECIAL

PLANS: OWNER | ARCHITECT | MEMBRANE
DRAFTSMAN X | ENGINEER

FOUNDATION: WOOD | CONCRETE X | PIERS
ROOF: CONCRETE X | FIREPLACE

EXT: BLOCK | FRAME X | STUCCO X | BRICK | CONC | METAL | OTHER

INT: PLASTER X | DRY WALL | ROOF COVERING: Comp | BD. RMS

ZONE: A-1-1 | ZONING CHECKED BY: Harvell | VARIANCE APPROVED #

SET BACK: FRONT 2-30-12 REAR | LOT SIZE: 190X218

1st. Fl.	Sq. Ft. @		
2nd. Fl.	Sq. Ft. @		
Por.	Sq. Ft. @		
Gar.	480 Sq. Ft. @	2.5	1200
Car P.	Sq. Ft. @		
Wall	Sq. Ft. @		
	Sq. Ft. @		

ESTIMATED VALUATION $ 1200

PLANS CHECKED BY | FEE $ 9.00

ELECTRICAL FEES

NO. 463 — 5 6 1 2 — 1 — 107078 TB

INSPECTION CALL 463 — 6 4 8 1 3

MOTOR	H.P.	
MOTOR	H.P.	
	H.P.	
MOTOR	H.P.	
FIXTURES		
OUTLETS 480 @ ½		2.40
FIXTURE FEE		
GARBAGE DISPOSAL		
KITCHEN FAN		
DISHWASHER		
RANGE AND OR OVEN		
WATER HEATER		
SPACE HEATER		
CONSTRUCTION POLE		
SERVICE ENTRANCE		
SUB-PANEL		
PERMIT FEE	1	1.-

PLANS CHECKED BY | FEE $ 3.40

PLUMBING FEES

NO. 3 — PCH — 4.-

3 — BD — 9.00

DRAINAGE PIPING	
3 — FIXTURE TRAP	3.-
URINAL	
WATER PIPING	
FLOOR DRAIN	
WATER SOFTENER	
WASHER (AUTO) (DISH)	
GARBAGE DISPOSAL	
LAUNDRY TRAY	
KITCHEN SINK	
WATER CLOSET	
LAVATORY	
SHOWER	
BATH TUB	
WATER HEATER	
SEWAGE DISPOSAL	
HOUSE SEWER	
GAS PIPING	
PERMIT FEE	

PLANS CHECKED BY | FEE $ ____

PLAN CHECK FEE	$ 4.50
CONSTRUCTION FEE	$ 9.00
ELECTRICAL FEE	$ 3.40
PLUMBING FEE	$
TOTAL FEE	$ 16.90

CASH | CHECK | M.O. | N.C.

RECEIVED BY: Mona | DATE: 10-30-63

WATER | VOLUME | SEPTIC TANK | LEACH LINE | SEEPAGE PIT
GAL. | SQ. FT. | GAL.

REMARKS:

DET. GAR FOR REST HOME
SUPP. TO PERMIT
107078

CCG

JOB ADDRESS: 39291 7TH ST. | OWNER: PATTERSON, H.

COMMUNITY: SAN JACINTO | SCHOOL DISTRICT: S. JAC. | DATE: 10-30-63

USE OF BUILDING: DET. GARAGE | SUPPLEMENT TO PERMIT: 105018

DISTRICT	CODE AREA	F.C.	UNITS	VALUATION	OFFICE
H	63	12		1200.-	H

PERMIT NUMBER: 107078

DESCRIPTIVE ADDRESS: LOT 4 & POR. LOT 5

LEGAL DESCRIPTION: ESTADILLO LAND & WATER

IN PERMIT NO.

BOND $ | BOND | CASH

GROUP: J | FIRE: X | FIRE ZONE: 3 | BOOK | MAP | PAGE | LINE

RELEASE BOND DATE

FINALED DATE | INSPECTOR | CERTIFICATE OF COMPLIANCE | CERT SENT DATE

CONTRACTOR | PLAN FILE

LICENSE-TYPE | #

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 60 DAYS. CESSATION OF WORK FOR 120 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID.
I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA. I ALSO AGREE TO CARRY COMPENSATION INSURANCE UPON MY EMPLOYEES. COMPLIANCE WITH LAWS OF THE STATE OF CALIFORNIA COVERING CONTRACTORS IS ALSO GUARANTEED.

OWNER: SAME | CONTRACTOR: 134 7th, Lundgren

MAILING ADD: P.O. BOX 124 | MAILING ADD

POST OFFICE: HEMET CALIF. | POST OFFICE

TEL. | BY | TEL. | BY

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

FIELD

BUILDING INFORMATION

ERECT	X	ENLARGE		RELOCATE	REGISTER
ALTER		REPAIR		DEMOLISH	SPECIAL

PLANS: OWNER | ARCHITECT | MEMBRANE | DRAFTSMAN X | ENGINEER

FOUNDATION: WOOD | CONCRETE | PIERS

FLOOR: CONCRETE | FIREPLACE

EXT: BLOCK | FRAME | STUCCO X | BRICK | CONC | METAL | OTHER

INT: PLASTER | DRY WALL X | ROOF COVERING: Comp | BD. RMS.

ZONE	ZONING CHECKED BY	VARIANCE APPROVED
R-1		

SET BACK	FRONT	SIDE	REAR	LOT SIZE
	40	5	5	90 x 150

1st. Fl.		Sq. Ft. @	
2nd. Fl.		Sq. Ft. @	
Por.		Sq. Ft. @	
Gar.	288	Sq. Ft. @ 5.00	1440.00
Car P.		Sq. Ft. @	
Wall		Sq. Ft. @	
		Sq. Ft. @	

ESTIMATED VALUATION $ 1200.00

PLANS CHECKED BY | FEE $ 12.00

ELECTRICAL FEES

NO.

INSPECTION CALL	
DRIER	
MOTOR H.P.	
MOTOR H.P.	
MOTOR H.P.	
MOTOR H.P.	
FIXTURES	
OUTLETS 20 @ .25	5.00
FIXTURE FEE	
GARBAGE DISPOSAL	
KITCHEN FAN	
DISHWASHER	
RANGE AND/OR OVEN	
WATER HEATER	
SPACE HEATER	
CONSTRUCTION POLE	
SERVICE ENTRANCE	
SUB PANEL	
PERMIT FEE	1.00

PLANS CHECKED BY | FEE $ 3.50

PLUMBING FEES

NO.

DRAINAGE PIPING	
DRINKING FOUNTAIN	
URINAL	
WATER PIPING	
FLOOR DRAIN	
WATER SOFTENER	
WASHER (AUTO) (DISH)	
GARBAGE DISPOSAL	
LAUNDRY TRAY	
KITCHEN SINK	
WATER CLOSET	
LAVATORY	
SHOWER	
BATH TUB	
WATER HEATER	
SEWAGE DISPOSAL	
HOUSE SEWER	
GAS PIPING	
PERMIT FEE	

PLANS CHECKED BY | FEE $

	$
PLAN CHECK FEE	$ 7.50
CONSTRUCTION FEE	$ 1.00
ELECTRICAL FEE	$ 3.40
PLUMBING FEE	$
TOTAL FEE	$ 16.90

CASH | CHECK | M.O. | N.C.

RECEIVED BY: [illegible] | DATE: 11-30-63

WATER SOURCE | SEPTIC TANK | LEACH LINE | SEEPAGE PIT

GAL. | SQ. FT. | GAL.

REMARKS:

Pat. Cert. Rec
Pat. Agmt
Note

JOB ADDRESS: 2184 - 3rd St. | OWNER: Peterson

COMMUNITY: Riverside | SCHOOL DISTRICT: [illegible] | DATE: 11-30-63

USE OF BUILDING: Det Garage | SUPPLEMENT TO PERMIT:

DISTRICT	CODE AREA	F.C.	UNITS	VALUATION	OFFICE
11	03	2		1200	H

PERMIT NUMBER: 107078

DESCRIPTIVE ADDRESS | N° PERMIT NO.

LEGAL DESCRIPTION | BOND $ | BOND | CASH

GROUP	TYPE	FIRE ZONE	BOOK	MAP	PAGE	LINE
	V					

RELEASE BOND DATE

FINALED DATE	INSPECTOR	CERTIFICATE OF COMPLIANCE	CERT. SENT
12-2-63	[illegible]	T S D N O	DATE

CONTRACTOR | PLAN FILE

LICENSE TYPE | #

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 90 DAYS. CESSATION OF WORK FOR 120 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID.
I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA. I ALSO AGREE TO CARRY COMPENSATION INSURANCE UPON MY EMPLOYEES. COMPLIANCE WITH LAWS OF THE STATE OF CALIFORNIA COVERING CONTRACTORS IS ALSO GUARANTEED.

[signature]

OWNER	CONTRACTOR
Owner	
MAILING ADD. P.O. Box 24	MAILING ADD.
POST OFFICE Norco Calif.	POST OFFICE
TEL. BY	TEL. BY

APPROVALS

	DATE	INSPECTOR
SET BACKS		
FND. FORMS	10-30-63	Kilburn
REIN. STEEL		
BOND BEAM		
FRAMING	11-7-63	Kilburn
VENTS		
ROOF DECK	11-4-63	Kilburn
LATH EXT.	11-7-63	Kilburn
LATH INT.		
FINAL	12-9-63	J. [illegible]

BUILDING NOTICES

APPROVALS

		DATE	INSPECTOR
	TEMP. SERVICE POLE		
ROUGH	CONDUIT		
ROUGH	SERVICE ENT.		
ROUGH	WIRING		
FINAL	FIXTURES		
FINAL	SERVICE ENT.		
FINAL	GROUNDING		
	UTIL. CO. NOTIF.		

ELECTRICAL NOTICES

APPROVALS

	DATE	INSPECTOR
GROUND PLUMBING		
ROUGH PLUMBING		
SEWER		
SEWAGE DISPOSAL		
FINAL GAS		
FINAL WATER		
FINAL FIXTURES		
UTIL. CO. NOTIF.		

PLUMBING NOTICES

BACK

FRONT

☐ INSIDE ☐ CORNER ☐ KEY

TO: THE RIVERSIDE COUNTY PLANNING COMMISSION

RE: REPORT AND RECOMMENDATION OF HEARING BOARD

DATE: JANUARY 9, 1963

SUBJECT: VARIANCE CASE NO. 496
Howard H. Patterson and Irene Yokes
Convalescent Hospital
Zone A-1-5
Hemet-San Jacinto District
Fifth Supervisorial District

FACTUAL DATA: Nine (9) notices of this hearing were mailed to those persons whose names and addresses appeared on the latest available assessment roll of the County Assessor as property owners of record within a 300-foot radius of the boundaries of the property under consideration. Thirteen (13) additional notices were mailed to other interested persons and organizations and to other government agencies.

PLOT PLAN: The plan, consisting of two pages, indicates a 76 bed hospital with parking area adjacent to 7th Avenue with four entries.

STAFF REPORT: The request for variance covers 2.6 acres in an A-1-5 Zone for a convalescent hospital.

SUMMARY

PROPONENTS: Howard H. Patterson, P. O. Box 124, Hemet (applicant)
Irene Yokes, P. O. Box 124, Hemet (applicant)
John Longrin, Contractor

OPPONENTS: None

ADVISORY: Ray C. Smith, Land Use Administrator

Mr. Patterson and Irene Yokes, applicants, appeared and stated that they were ready to go ahead with the project, had owned the property for two years, intended a 76-bed hospital, and stated that no farm water was available but domestic water was available for the hospital. Their reason for hardship was stated to be that the land was too small to farm (less than 5 acres) and that no water was available. The matter of the cattle feed yard and chicken ranch was discussed. Mr. Longrin, contractor for the hospital, stated that there was fire protection and water and requested a continuance to establish a hardship.

FINDINGS: 1) That the evidence submitted by the staff is correct. 2) Since the applicant had previously been advised to be prepared to establish a legal hardship, the Board felt that the matter should be decided upon. 3) No legal hardship was established by the applicants.

RECOMMENDATION: That the permit be denied.

HEARING BOARD MEMBERS CONCURRING: Commissioners Perry and Katzenstein, and R. C. Lober.

LIST OF PROPERTY OWNERS

DATE: Dec 13 1962 FOR: Variance 444

DATE OF HEARING _____

	DESCRIPTION	NAME	ADDRESS
1	✓	Glenn Mapnick	11711 Seaside Ave Downey
2	✓	Forest McEwen et al	3402 Buena Vista Hemet
—		Howard Patterson et al see petition	
—		James Valore	
—		Wigley not listed	
—		Edward Lewis not listed	
3	✓	Ted Nelson et Norma Powell	Box 475 San Jacinto
4	✓	Lelia Van Winkle	Box 172 Hemet
5	✓	William et Ruth Hart	1326 W 7th St San Jacinto
6	✓	Fred et Ruth Stickel	3139 Wilbrook Ave Riv
7	✓	Mary J Caskenette Pt 1	Box 585 E 2 San Jacinto
8	✓	H. E. et Winifred Culbertson Pt 1	Box 145 Hemet
9	✓	Virgil et Fern Prater	1240 W 7th St San Jacinto
—		Others:	
10	✓	San Jacinto C/C	
11	✓	Hemet C/C	
12	✓	City of San Jacinto	
13	✓	City of Hemet	
14	✓	Water Poll. Cont. #8	
15	✓	Mr. James Parker, Executive Sec., Riv. Co. Farm Bureau, 3200	
—		Chicago Ave, Riverside	
16	✓	Comm. Perry (Comp.)	
17	✓	" Katzenstein "	
—		Form Letters & Maps	
18	✓	Ag. Dept	
19	✓	Flood Cont.	
20	✓	Health Dept	
21	✓	Land Use	
22	✓	Rd. Dept	
23			

I hereby certify under penalty of perjury that notices were mailed, postage prepaid, to those owners indicated by ✓ on the attached list on the 28 day of December 1962. (NOTE: A CHECK MARK TO BE PLACED BESIDE EACH NAME ON OWNER'S LIST)

Case No. 496

APPLICATION FOR VARIANCE

As Provided by Article XIX of Zoning Ordinance
ORDINANCE NO. 348

COUNTY OF RIVERSIDE, CALIFORNIA

TO: THE RIVERSIDE COUNTY PLANNING COMMISSION:

I. NAME OF APPLICANT Howard M. Patterson & Irene Yokes

~~XXXXA~~. Only the following persons may file. Applicant must indicate under what capacity he is filing by placing (x) in block provided.

XXX 1. The record owner of the land. (If in escrow, give Escrow No. _____.)

2. The purchaser thereof under a contract in writing duly acknowledged by both the buyer and the seller. (COPY OF CONTRACT MUST BE ATTACHED.)

3. The lessee in possession of the property, with the written consent of the record owner. (WRITTEN AUTHORIZATION MUST BE ATTACHED.)

4. The agent of any of the foregoing, duly authorized thereto in writing. (WRITTEN AUTHORIZATION MUST BE ATTACHED.)

II. PROPERTY IN QUESTION

A. Street address of property 39151 Seventh Ave, San Jacinto, Calif.
Situated on the South side of said street between
Gilbert and Grand

B. Legal description of real property located in the County of Riverside must be accurately described as per Riverside County records.
Estedulla Land And Water Co. Add. MB. 9 410 SD.
Lot 14 And West 160 Feet of Lot 13. 2.87 A.

(If more space is needed for above description, please attach supplementary sheet.)

C. Date of acquisition of property. June 1, 1961

D. Outline deed restrictions pertinent to this application. (Any permit granted pursuant to this petition shall not affect deed restrictions of record.) None

E. Land use of property. Idle

III. APPLICANT'S REQUEST

A. Outline in space below in clear and concise wording what you are requesting for the property in question. Before this application is accepted, there must be attached a plot plan drawn to scale showing boundaries and dimensions of the property, width of boundary streets, all existing improvements on property, and plans and elevations of all proposed new improvements. Applicant must file with this application evidence of his ability and intention to proceed with the actual construction work in accordance with said plans within six (6) months from date of filing this application.
A Seventy Six Bed Convalescent Hospital

Case No. 496

APPLICATION FOR VARIANCE

As Provided by Article XIX of Zoning Ordinance
ORDINANCE NO. 348

COUNTY OF RIVERSIDE, CALIFORNIA

TO: THE RIVERSIDE COUNTY PLANNING COMMISSION:

I. NAME OF APPLICANT Howard M. Patterson & Irene Yokes

~~XXXXA~~. Only the following persons may file. Applicant must indicate under what capacity he is filing by placing (x) in block provided.

XXX 1. The record owner of the land. (If in escrow, give Escrow No. _____.)

2. The purchaser thereof under a contract in writing duly acknowledged by both the buyer and the seller. (COPY OF CONTRACT MUST BE ATTACHED.)

3. The lessee in possession of the property, with the written consent of the record owner. (WRITTEN AUTHORIZATION MUST BE ATTACHED.)

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Estedulla Land And Water Co. Add. MB. 9 410 SD.
Lot 14 And West 160 Feet of Lot 13. 2.87 A.

(If more space is needed for above description, please attach supplementary sheet.)

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D. Outline deed restrictions pertinent to this application. (Any permit granted pursuant to this petition shall not affect deed restrictions of record.) None

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III. APPLICANT'S REQUEST

A. Outline in space below in clear and concise wording what you are requesting for the property in question. Before this application is accepted, there must be attached a plot plan drawn to scale showing boundaries and dimensions of the property, width of boundary streets, all existing improvements on property, and plans and elevations of all proposed new improvements. Applicant must file with this application evidence of his ability and intention to proceed with the actual construction work in accordance with said plans within six (6) months from date of filing this application.
A Seventy Six Bed Convalescent Hospital

B. State what exceptional or extraordinary circumstances or conditions there are applicable to the property involved, or to the intended use of the property, and explain why these conditions do not apply generally to other property adjacent to your property and in the neighborhood.

The proposed use requires a large portion of land which is satisfied by the size and shape of the parcel involved. Many of the neighboring parcels are too small for similar use. Adjacent property, presenty not developed and not need, would not be affected by granting of the requested variance.
Also, this parcel has existing adequate utilities (water, gas, and electric) at the parcel frontage. Many parcels looked at by the applicants did not have the necessary utilities, which would have ~~located~~ great expense to have such utilites made available.

C. State why the granting of this Variance as requested is necessary to do substantial justice to the applicant and to avoid practical difficulty, unnecessary hardship and results inconsistent with the general purpose of the Zoning Ordinance.

Applicant has the necessary experience, abilities and backing for the construction and operation of the proposed convalescent hospital. Granting of this variance will permit construction of a substantial improvement ~~involving a considerable investment and adding greatly~~ to neighboring property values.

D. State why the granting of this variance as requested will not result in material damage to other property in the neighborhood, nor be detrimental to the public safety or welfare.

The proposed use will in no way bring about any material damage or create any hazards for other property in the area. On the contrary, the improvement will benefit the entire community through improved and expanded facitities for the proposed use (such as road improvement, curbs and gutters, power and water facilities, etc.).

NOTE: It is desirable but not mandatory to have the signature of owners of adjacent property certifying that they have no objection to the establishment of the use as applied for in this application.

We, the undersigned owners of property in the vicinity of the property legally described in this APPLICATION FOR VARIANCE, hereby certify that we do not object to the granting of this application.

Signature	Address
Mrs Gladys T. Watson	1219 N. 7th Street
Ligi Gilbertson	39272 7th St. (mail to: PO Box 195, Hemet)

OWNER'S AFFIDAVIT

STATE OF CALIFORNIA)
COUNTY OF RIVERSIDE)

I, Howard H. Patterson and Irene Yokes, being duly sworn depose and say that I am an owner of property involved in this application and that the foregoing signatures, statements and answers herein contained and the information submitted herewith are in all respects true and correct to the best of my knowledge and belief.

Signed Howard H Patterson
Irene Yokes
(address)
P.O. Box 124 Hemet Calif

PHONE NO. 658-8153

Subscribed and sworn to before me this third day of December 1962

Harry E Wright
(Notary Public)

My C... ...ay 22, 1963

CHECK SHEET
RIVERSIDE COUNTY PLANNING COMMISSION

NAME H. Howard H. Patterson & Irene Yokes ADDRESS P.O. Box 124 Hemet Calif

AGENT Convalescent Hospital DATE 12-4-62 INTERVIEWED BY Pad

1. Application complete — (2 copies)
2. Filing fee attached — DISTRICT ~~Hemet~~ Hemet-San Jacinto
3. Plot plans checked — USE A-1-5
4. Supporting information to be determined at time of counter interview:
   a. Type of operation Convalescent Hospital
   b. Size (present)
   c. Proposed expansion
   d. Number employees
   e. Flood protection
   f. Number of employees
5. Legal description complete and checked ok Pad —
6. Legal description checked against plot plan ok Pad —
7. Variance case No. Variance Case No 496 12-4-62 bw
8. Variance No. 90868 12-21-62 bw
9. Hearing place on agenda (date and hour) 1-2-63
10. Easement
    To be published not later than
11. Notice to applicant mailed 12-21-62 bw
12. Notices mailed to property owners within 300 feet of subject property bw
13. Notice posted on property by Date

Sent To:

Engineering Department ✓	Riv. Co. Flood Control ✓
Fire Protection District	Health Department ✓
Sheriff Investigation	Land Use Division ✓
Chamber of Commerce San Jacinto Hemet	Road Department ✓
City of	State Division of Forestry
Irrigation District	State Division of Highways
Perris Valley Flood Control	Water Pollution Control No. 8

Commissioners: Katy Perry

Other Interested Persons or Organizations concerned:
Jean Perrell

14. Petition made on "STATUS CONTROL SHEET" DATE

Petition Received for Consideration by DATE

1. Factual data Property owners & others 13

Var 496 Staff Report

3. The request for variance came to be heard on 4-1-5 go for a cond. permit. [illegible] is vacant & was dev. in mixed hosp. and light agricultural uses and S.F. Res.

2. Char. of area: The plans indicate a 76 bed hosp. is with parking area adjacent to 7th Ave with 4 entries.

Condition — Approved by Developed Par. Hearing Board

SUMMARY

PROPONENTS: Howard H. Patterson, P. O. Box 124, Hemet (applicant)
Irene Yokes, P. O. Box 124, Hemet (applicant)
John Longrin, Contractor

OPPONENTS: None

ADVISORY: Ray C. Smith, Land Use Administrator

Mr. Patterson and Irene Yokes, applicants, appeared and stated that they were ready to go ahead with the project, had owned the property for two years, intended a 76-bed hospital, and stated that no farm water was available but domestic water was available for the hospital. Their reason for hardship was stated to be that the land was too small to farm (less than 5 acres) and that no water was available. The matter of the cattle feed yard and chicken ranch was discussed. Mr. Longrin, contractor for the hospital, stated that there was fire protection and water and requested a continuance to establish a hardship.

FINDINGS: 1) That the evidence submitted by the staff is correct. 2) 2) Since the applicant had previously been advised to prepared to establish a legal hardship, the Board felt that the matter should be decided upon. 3) No legal hardship was established by the applicants.

RECOMMENDATION: That the permit be denied.

HEARING BOARD MEMBERS CONCURRING: Commissioners Perry and Katzenstein, and R. C. Lober.

HEARING BOARD

WORK SHEET
NOTICE OF PUBLIC HEARING

VARIANCE CASE NO. 496

NOTICE IS HEREBY GIVEN that a public hearing will be held before the Riverside County Planning Commission Hearing Board on the application of Hazel Estes (name of applicant or commission initiative) made pursuant to Article XIX and Article XXa, Ordinance No. 348, Riverside County Zoning Ordinance for a variance to said Ordinance permitting the establishment of Convalescent Hospital

in zone A-1-5 (Light Farming Cattle) on property located at the SE corner of 7th St and Grand Ave

in the Hemet San Jacinto District

and more particularly described as follows:

Lot 12 and the west 160 feet of Lot 13 of Estudillo Land & Water Co as shown by map on file in Book 9 Page 410, SD Co. R.

Said public hearing will be held on Wed (day of week), Jan. (month), 9 (day of month), 1963 (year), at 9:50 o'clock A.M., ~~P.M.~~ in the Board of Supervisors Room, Court House, Riverside, California, at which time and place pertinent testimony will be heard.

RIVERSIDE COUNTY PLANNING COMMISSION
TYLER SUESS - PLANNING DIRECTOR
BY: Hazel I. Evensen - Secretary

CORRECTED COPY

OFFICE OF THE CLERK OF THE BOARD OF SUPERVISORS

County of Riverside, State of California

On motion of Supervisor McCall, seconded by Supervisor Cook and duly carried by unanimous vote, IT WAS ORDERED that the appeal of Howard H. Patterson and Irene Yokes from denial of their application for a zoning variance for operation and maintenance of a convalescent hospital in the Hemet-San Jacinto area, 5th Road District, Case No. 496, be granted and that they be granted a variance subject to the conditions as recommended by the Planning Commission dated March 5, 1963, with the exception of Item No. 3 whereby a chain link fence shall be substituted in place of the 6-foot concrete block wall.

Note
Nita — Make 2 copies of this — one for Case file and send one to Ray Smith. Richard

ed

I hereby certify that the foregoing is a full, true and correct/copy of an order made and entered on March 11, 19 63, Book 66 page 260 of Supervisors Minutes.

WITNESS my hand and the seal of the Board of Supervisors

Dated: March 12, 1963.

DONALD D. SULLIVAN, Clerk of the Board of Supervisors, in and for the County of Riverside, State of California.

(SEAL)

By [illegible], Deputy

FORM 418

OFFICE OF THE CLERK OF THE BOARD OF SUPERVISORS

County of Riverside, State of California

1:30 P.M. being the time heretofore set for hearing the appeal of Patterson and Yokes from the denial of a zoning variance in Case No. 496, for establishment of a convalescent hospital in the Hemet-San Jacinto District, the Chairman called the matter for hearing.

The recommendation of the Planning Commission was presented and was explained by the Planning Director.

Irene Yokes spoke in support of the appeal.

It appearing that no one else present desired to be heard on the matter, the Chairman declared the hearing closed.

On motion of Supervisor McCall, seconded by Supervisor Cook and duly carried by unanimous vote, IT WAS ORDERED that this matter be referred back to the Planning Commission for its recommendation on conditions to be attached to the variance if granted. Said recommendation to be returned to the Board not later than March 11, 1963.

RECEIVED
COUNTY
PLANNING COMMISSION

I hereby certify that the foregoing is a full, true and correct copy of an order made and entered on February 25, 19 63, Book 66 page 232 of Supervisors Minutes.

WITNESS my hand and the seal of the Board of Supervisors
Dated: February 27, 1963.

DONALD D. SULLIVAN, Clerk of the Board of Supervisors,
in and for the County of Riverside, State of California.

(SEAL)

By ..... , Deputy

FORM 418

OFFICE OF THE CLERK OF THE BOARD OF SUPERVISORS

County of Riverside, State of California

On motion of Supervisor McCall, seconded by Supervisor Anderson and duly carried, IT WAS ORDERED that Monday, February 25, 1963, at 1:30 P.M., in the regular meeting room of the Board of Supervisors, Court House, Riverside, California, be set as the time and the place for hearing on the appeal of Howard H. Patterson and Irene Yokes from denial by the Planning Commission of their application for a zoning variance to establish a convalescent Hospital in the Hemet-San Jacinto area, 5th Road District, Case No. 496.

Roll Call resulted as follows:

Ayes: Supervisors Anderson, Cook, McCall & Davis.

Noes: None.

Absent: Supervisor Jones.

RECEIVED
FEB 4 1963
RIVERSIDE COUNTY
PLANNING COMMISSION

I hereby certify that the foregoing is a full, true and correct copy of an order made and entered on February 4, 1963, Book 66 page 167 of Supervisors Minutes.

WITNESS my hand and the seal of the Board of Supervisors

Dated: February 4, 1963.

DONALD D. SULLIVAN, Clerk of the Board of Supervisors, in and for the County of Riverside, State of California.

(SEAL)

By ..... , Deputy

FORM 418

MEMO COUNTY OF RIVERSI[redacted]

To: Health Dept
From: Land Use - R Birbeck
Re: Var. Case No 496

RECEIVED
L22 1964
RSIDE COUNTY
G COMMISSION

Date 7-13-64

Var. Case 496 Condition No 6. requires that the use Contemplated meet all State requirements as well as requirements of the Health Dept and the Dept. of Building & Safety of the Co. of Riverside.

In order to complete the files pertaing to this case would you please send a memo to this office and the Riverside County Planning Comm. indicating compliance, or action required concerning this case.

Thank you very much

R Birbeck

Co. RCPC

[illegible]
21700 Sunnyslope Ave.
[illegible], California

[illegible]
[illegible] Avenue Vista
Hemet, California

[illegible]
[illegible]
San Jacinto, California

Arthur Van Winkle
Box 172
Hemet, California

William & Ruth Harte
1320 W. 7th St.
San Jacinto, California

Fred & Ruth Chidaley
13139 Willowbrook Ave.
Compton, California

Mary J. Caplinger
Rt. 1 Box 6252
San Jacinto, California

E. A. & Winifred Culbertson
Box 145
Hemet, California

Virgil & Vern Prater
1240 W. 7th Street
San Jacinto, California

San Jacinto Valley Chamber of Commerce
P.O. Box 677
San Jacinto, California

Hemet Valley Chamber of Commerce
528 E. Florida Avenue
Hemet, California

City of San Jacinto
City Hall
San Jacinto, California

City of Hemet
City Hall
Hemet, California

Water Pollution Control Board No. 8
3691 Main Street
Riverside, California

Mr. James Parker, Exec. Sec.
Riverside County Farm Bureau
3700 Chicago Avenue
Riverside, California

Mr. Maurice A. Perry
37833 Fruitvale Ave.
Hemet, California

Mr. Elmer H. Katzenstein
Box 3077
Riverside, California

Agriculture Department

Flood Control Division

Health Department

Land Use Division

Road Department

DEPARTMENT OF BUILDING AND SAFETY

C. G. BIXEL
BUILDING DIRECTOR

R. C. SMITH
LAND USE ADMINISTRATOR



COUNTY OF RIVERSIDE

4046 ORANGE STREET
RIVERSIDE, CALIFORNIA
92501

LAND USE DIVISION

January 20, 1964

Riverside County Planning Commission
County Court House
Riverside, California

Subject: Variance Case No. 496
Hemet-San Jacinto District
RJS:21399 (1963)

Gentlemen:

An on site inspection was made this date regarding subject case.

The Convalescent Hospital is nearing completion. Workmen were working on the building which is approximately 90% complete.

A chain link fence was erected around the property, which was an exception granted by the Board of Supervisors.

No curb and gutter or parking area was installed.

A follow up report on this case will be made in June 1964.

Yours very truly,

R. C. SMITH
LAND USE ADMINISTRATOR

R. W. Birbeck

R. W. Birbeck
Land Use Administrator

RECEIVED
JAN 23 1964
RIVERSIDE COUNTY
PLANNING COMMISSION

RWB:vp

DEPARTMENT OF BUILDING AND SAFETY

C. G. BIXEL
BUILDING DIRECTOR

R. C. SMITH
LAND USE ADMINISTRATOR



COUNTY OF RIVERSIDE

4046 ORANGE STREET
RIVERSIDE, CALIFORNIA
92501

LAND USE DIVISION

July 20, 1964

Riverside County Planning Commission
County Court House
Riverside, California

Subject: Variance Case No. 496
Convalescent Hospital
Hemet-San Jacinto District
Howard H. Patterson, et al

Gentlemen:

A recent on site inspection was made concerning subject Variance Case No. 496. All Items have been complied with, except Items 2 and 6.

A Memo is on file from the Road Department stating that Item 2 requiring curb and gutter is not feasible at this time.

Regarding Item 6 a Memo has been sent to the Riverside County Health Department requesting they advise your office as to compliance with the Health Department requirements.

If there are no objections from the Health Department, recommend this case be closed.

Very truly yours,

R. C. SMITH
BUILDING DIRECTOR

R. W. Birbeck
Land Use Technician

RWB:vp
cc: Riverside - Health Dept.
Riverside - Road Dept,
J. Kravitz

RECEIVED
JUL 24 1964
RIVERSIDE COUNTY
PLANNING COMMISSION

STATE OF CALIFORNIA

DEPARTMENT OF PUBLIC HEALTH

MALCOLM H. MERRILL, M.D.
DIRECTOR OF PUBLIC HEALTH

EDMUND G. BROWN
GOVERNOR

617 WEST FIRST STREET
LOS ANGELES 12, CALIFORNIA

September 18, 1963

A. J. Manfield, M.D.
9070 Cajalco Road
Box 129, Route #2
Corona, California

Dear Dr. Manfield:

Subject: Colonial Nursing Home
3241 - 7th Street
San Jacinto, California
Proposed 15-Bed Nursing
and Convalescent Home

RECEIVED
SEP 19
PLANNING COMMISSION

This will acknowledge receipt of three sets of Revised Final Plans, Sheets 0 through 13. These plans may be identified by our date stamp of September 13, 1963. Copies have been sent to the Office of the State Fire Marshal. The Fire Marshal's report will be forwarded to you separately.

Review of your plans by the Architectural and Licensing Sections of the Bureau of Hospitals with respect to the requirements of Title 17, California Administrative Code, discloses substantial compliance with the Code, with one exception. The letter which was submitted with regard to compliance to local zoning requirements appears to be a recommendation approving the variance submitted by the Riverside County Planning Commission to the Riverside County Board of Supervisors. Final approval by the Riverside County Board of Supervisors is not indicated. It is also pointed out that the variance permit must be used within six months of the effective date of approval. It is assumed that this effective date of approval is the date on which the approval of the Board of Supervisors was issued.

Approval of your plans is issued contingent upon your providing this Department with a current approved variance permit as issued by the Riverside County Board of Supervisors, or by the Riverside County Planning Commission, indicating approval by the Board of Supervisors.

Approval of your plans is further contingent upon concurrence by the State Fire Marshal and upon compliance with all local codes and ordinances.

COPY

It should be understood that final approval and acceptance for licensure is subject to field inspection and determination that the facility, as completed, is in accordance with the requirements of Title 17, California Administrative Code.

Very truly yours,

John R. Derry, Acting Chief
Bureau of Hospitals

C. R. Lafferty
Hospital Field Representative

CRL:rm
cc: SFS/LA
Mr. Howard Patterson & Mrs. Irene Yokes
Riverside County Bldg. Dept.
Riverside County Planning Commission ✓
Mr. W. B. Cameron
Mr. C. R. Lafferty

RJS:21399

March 5, 1963

The Honorable Board of Supervisors
Court House
Riverside, California

SUBJECT: Variance Case No. 496
Howard H. Patterson and Irene Yokes
Convalescent Hospital
Zone A-1-5
Hemet-San Jacinto District

Fifth Supervisorial District

Gentlemen:

Pursuant to the request of your honorable Board dated February 26, 1963, the Planning Commission respectfully recommends the following conditions for the operation and maintenance of a convalescent hospital in the A-1-5 Zone of Hemet-San Jacinto:

1. That development of the premises conform substantially with that shown on plot plan marked Exhibit "A" (2 pages) on file with Variance Case No. 496 in the office of the Riverside County Planning Commission.

2. That curb and gutter be installed at a grade and alignment approved by the Riverside County Road Commissioner along the 7th Street frontage of the property, and that the existing road paving be extended to tie into said curb and gutter, and further that said improvements be done at no cost to any government agency.

3. That a 6-foot concrete block wall be erected around the perimeter of the property under consideration with the exception that a 42-inch concrete block wall may be erected along the 7th Street frontage.

4. That all open areas shown on Exhibit "A" be established in lawn and be pleasantly landscaped and maintained at all times.

5. That all driveways and parking areas be paved with not less than two (2) inches of asphaltic material.

6. That the use contemplated meet all State requirements as well as requirements of the Health Department and the Department of Building and Safety of the County of Riverside.

7. That this permit shall be used within 6 months of the effective date of approval, otherwise it shall be null and void and of no effect whatsoever.

Respectfully submitted,

RIVERSIDE COUNTY PLANNING COMMISSION

Tyler Buess - Planning Director

TB:af
Encls.

cc: Supervisor McCall
Land Use Division (2)
Health Dept. - L. Irons
Road Dept. - J. Kravitz

SUGGESTED CONDITIONS

Var CASE NO. 496

1. That development of the premises conform substantially with that shown on plot plan marked Exhibit "A" (2 pages) on file with ~~[illegible]~~ Var Case No. 496 in the office of the Riverside County Planning Commission.

2. ~~That additional right of way along the _____ (Name of Street) frontage of the property be offered for dedication for public road purposes to provide for a _____ foot 1/2 street and without cost to any government agency.~~

3. That curb and gutter be installed at a grade and alignment approved by the (Riverside County Road Commissioner) ~~(State Division of Highways)~~ along the 7th St frontage of the property, and that the existing road paving be extended to tie into said curb and gutter, and further that said improvements be done at no cost to any government agency.

4. That all open areas shown on Exhibit A ~~and B~~ be established in lawn and be pleasantly landscaped and maintained at all times.

5. That all driveways and parking areas be paved with not less than two (2) inches of asphaltic material.

6. That the use contemplated meet all State requirements as well as requirements of the Health Department and the Department of Building and Safety.

7. That this permit shall be used within 6 months of the effective date of approval, otherwise it shall be null and void and of no effect whatsoever.

~~8. That a 6-foot wall be erected around the perimeter of the property under consideration with the exception that a 42-inch block wall may be erected along the Pacific Avenue frontage.~~

Concrete block wall 7TH ST. Concrete

No Sucess

Join Counts - feels C & G can be installed

L.U.

S.

W.S.

Mar 1-63

W

Pad

COPY

RESOLUTION

January 29, 1963

The Honorable Board of Supervisors
Court House
Riverside, California

SUBJECT: Variance Case No. 496
Howard H. Patterson and Irene Yahne
Convalescent Hospital
Zone A-1-5
Hemet-San Jacinto District

Fifth Supervisorial District

Gentlemen:

The Planning Commission respectfully reports denial of the attached application of Howard H. Patterson and Irene Yahne, P. O. Box 184, Hemet, California for a variance to establish, operate, and maintain a convalescent hospital in Zone A-1-5 (Light Agriculture - 5 acre minimum lot size) on property located at the northwest corner of 7th Street and Grand Avenue in the Hemet-San Jacinto District.

Pursuant to Ordinance 348, a public hearing was held on this matter before the Planning Commission Hearing Board on January 9, 1963. A summary of evidence presented and the findings and recommendations of the Hearing Board are attached hereto. The Commission, at its regular meeting on January 29, 1963 approved and adopted the findings and recommendations of the Hearing Board.

No further action is required by your Board unless an appeal is filed by the applicant or some property owner within 300 feet of the exterior boundaries of the property under consideration within seven days of the date this report first appears on your Board Agenda, or the Board on its own motion orders the application transferred to it for further proceedings.

Respectfully submitted,

RIVERSIDE COUNTY PLANNING COMMISSION

Tyler Bunce - Planning Director

Encls.
Appl., Maps, Legal, Labels
Property Owners List
Hearing Board Report
cc: Supervisor McCall
Land Use Division (2)
Health Dept. - L. Irvine
Road Dept. - J. Erwitte
Applicant_____(mailed)_____(initial)

RECEIVED
RIVERSIDE COUNTY
PLANNING COMMISSION

Hearing set for 2-25-63 at 1:30 PM.

BJS:ELOTT

Rad

COPY

January 29, 1963

The Honorable Board of Supervisors
Court House
Riverside, California

SUBJECT: Variance Case No. 496
Howard H. Patterson and Irene Yakas
Convalescent Hospital
Zone A-1-5
Hemet-San Jacinto District

Fifth Supervisorial District

Gentlemen:

The Planning Commission respectfully reports denial of the attached application of Howard H. Patterson and Irene Yakas, P. O. Box 134, Hemet, California for a variance to establish, operate, and maintain a convalescent hospital in Zone A-1-5 (Light Agriculture - 5 acre minimum lot size) on property located at the southeast corner of 7th Street and Grand Avenue in the Hemet-San Jacinto District.

Pursuant to Ordinance 348, a public hearing was held on this matter before the Planning Commission Hearing Board on January 9, 1963. A summary of evidence presented and the findings and recommendations of the Hearing Board are attached hereto. The Commission, at its regular meeting on January 29, 1963 approved and adopted the findings and recommendations of the Hearing Board.

No further action is required by your Board unless an appeal is filed by the applicant or some property owner within 300 feet of the exterior boundaries of the property under consideration within seven days of the date this report first appears on your Board Agenda, or the Board on its own motion orders the application transferred to it for further proceedings.

TS:sf
Encls.
Appl., Maps, Legal, Labels
Property Owners List
Hearing Board Report
cc: Supervisor McCall
Land Use Division (2)
Health Dept. - L. Irons
Road Dept. - J. Krevitz
Applicant_____(mailed)_____(initial)

Respectfully submitted,

RIVERSIDE COUNTY PLANNING COMMISSION

Tyler Sunes - Planning Director

RECEIVED
RIVERSIDE COUNTY
PLANNING COMMISSION

Hearing set for 2-25-63 at 1:30 P.M.

AF:21099

January 30, 1963

Mr. Howard H. Patterson and Miss Irene Yokes
P. O. Box 124
Hemet, California

SUBJECT: Variance Case No. 496

Dear Mr. Patterson and Miss Yokes:

Please find enclosed a copy of our letter to the Board of Supervisors recommending denial of your application for a convalescent hospital in the Hemet-San Jacinto District.

Very truly yours,

RIVERSIDE COUNTY PLANNING COMMISSION

Tyler Suess - Planning Director

TS:af
Encl.

RJS:21079

January 29, 1963

The Honorable Board of Supervisors
Court House
Riverside, California

SUBJECT: Variance Case No. 496
Howard H. Patterson and Irene Yokes
Convalescent Hospital
Zone A-1-5
Hemet-San Jacinto District

Fifth Supervisorial District

Gentlemen:

The Planning Commission respectfully reports denial of the attached application of Howard H. Patterson and Irene Yokes, P. O. Box 124, Hemet, California for a variance to establish, operate, and maintain a convalescent hospital in Zone A-1-5 (Light Agriculture - 5 acre minimum lot size) on property located at the southeast corner of 7th Street and Grand Avenue in the Hemet-San Jacinto District.

Pursuant to Ordinance 348, a public hearing was held on this matter before the Planning Commission Hearing Board on January 9, 1963. A summary of evidence presented and the findings and recommendations of the Hearing Board are attached hereto. The Commission, at its regular meeting on January 29, 1963 approved and adopted the findings and recommendations of the Hearing Board.

No further action is required by your Board unless an appeal is filed by the applicant or some property owner within 300 feet of the exterior boundaries of the property under consideration within seven days of the date this report first appears on your Board Agenda, or the Board on its own motion orders the application transferred to it for further proceedings.

TS:af
Encls.
Appl., Maps, Legal, Labels
Property Owners List
Hearing Board Report
cc: Supervisor McCall
Land Use Division (2)
Health Dept. - L. Irons
Road Dept. - J. Kravits
Applicant_____(mailed)_____(initial)

Respectfully submitted,

RIVERSIDE COUNTY PLANNING COMMISSION

Tyler Suess - Planning Director

DEPARTMENT OF PUBLIC HEALTH

COUNTY OF RIVERSIDE

Health-Finance Building
Riverside, California

Telephone
683-4000

Everett M. Stone, M.D.
Director of Public Health

December 28, 1962

Riverside County Planning Commission
Court House
Riverside, California

Attention: Tyler Suess
Planning Director

Re: Variance Case No. 496
Convalescent Hospital
Hemet-San Jacinto District

Gentlemen:

The Riverside County Department of Public Health has reviewed the application filed by Howard Patterson and Irene Yokes to establish, operate and maintain a convalescent hospital in Zone A-1-5 on property located at the southeast corner of 7th Street and Grand Avenue in the Hemet-San Jacinto District, in the unincorporated territory of Riverside County.

This Department does not feel that the establishment, maintenance and operation of a convalescent hospital at this location would be detrimental to the health, safety and general welfare of the persons living in the immediate vicinity.

Very truly yours,

Jack H. Bristow

JACK H. BRISTOW, M.D.
Assistant Director of Public Health

LEI:jb

cc: William Smith, R.S.

File Var #496

DEC 20 19[illegible]
PLANNING COMMISSION

We, Howard H. Patterson and Irene Yokes, Owner of the Property on the South side of Seventh Street and Grand Avenue, adjacent to the Town of San Jacinto, California, are requesting your signature of approval for t he building of a seventy-six bed Nursing Home. Thanking you.

Signature	address
James V. Yokes	1219 W. 7th St. San Jacinto, Cal.
Celeste T. Yokes	1219 W. 7th St. San Jacinto Cal.
Mr. & Mrs. John A Rohmer	39252 W 7th St San Jacinto, Calif.
H. Z. Culbertson	39252 W 7th St. San Jacinto, Calif.
Mr & Mrs Calmer Hulstrom	39224 W. 7th St San jacinto
Mrs. Janet Caplinger	1230 W. 7th St San Jacinto.
[illegible]	39146 7th St San Jacinto
Virgil L Wigley	39244 W 7th San Jacinto
Louie V Wigley	39244 W 7th San Jacinto
[illegible] Stanley Gholam	1201 W 7th San Jacinto
Mr J C Barton	1135 W 7th San Jacinto
Mrs Zella Barton	1135 W. 7th San Jacinto
J. E. Marsh	1125 W 7th San Jacinto.
Mrs Frankie Marsh	1125 W. 7th San Jacinto
Clarence S. Allison	1123 W 7th St. San Jacinto
Merle O. Allison	1123 W 7th St San Jacinto
Mr. & Mrs R.T. Haskins	1121 W 7th St. San Jacinto
[illegible]	1211 W 7th St. Sp.
Mr. William F. Haste	39072 7th St. San Jacinto
Joseph R. Donlan	1202 W. 7th St San Jacinto

We, Howard H. Patterson and Irene Yokes, Owner of the Property on the South side of Seventh Street and Grand Avenue, adjacent to the Town of San Jacinto, California, are requesting your signature of approval for t he building of a seventy-six bed Nursing Home. Thanking you.

Signature	address
James A Cotora	1219 W. 7th St San Jacinto, Calif.
Celeste L. Cotora	1219 W. 7th St. San Jacinto Calif.
Mr. & Mrs John A Robinson	39252 W 7th St San Jacinto, Calif.
H. E. Culbertson	39252 W 7th St. San Jacinto, Calif.
Mr & Mrs Calmer Hulstrom	39224 W. 7th St San Jacinto
[illegible]	[illegible]
Pippo Fern Pratt	39146 7th St San Jacinto
Virgil R Wigley	39244 W 7th San Jacinto
Lorie D Wigley	39244 W 7th San Jacinto
Mrs Stanley Graham	1901 W 7th San Jacinto
Mr J C Barton	1135 W 7th San Jacinto
Mrs Zella Barton	1135 W. 7th San Jacinto
J. C. Marsh	1125 W 7th San Jacinto.
Mrs Frankie Marsh	1125 W. 7th San Jacinto
Clarence J. Allison	1123 W 7th St San Jacinto
Merle O. Allison	1123 W 7th St San Jacinto
Mr. & Mrs R.T. Hastings	1121 W 7th St. San Jacinto
Mrs. Thyrdes Snyder	1211 W. 7th St. San Jacinto
Mr. William F. Haste	39072 7th St. San Jacinto
Joseph P. Donlan	1202 W. 7th St San Jacinto

We, Howard H. Patterson and Irene Yokes, Owner of the Property on the South side of Seventh Street and Grand Avenue, adjacent to the Town of San Jacinto, California, are requesting your signature of approval for the building of a seventy-six bed Nursing Home. Thanking you.

Signature Address

Mr. Jack Fuller 39478 W. 7th San Jacinto

Mrs. Jack L. Williams 39038 W. 7th San Jacinto

(Waterflow Boys Ranch)

Ora M Planchon Box 17 San Jacinto

RECEIVED
DEC 20 1962
SSION

We, Howard H. Patterson and Irene Yokes, Owner of the Property on the South side of Seventh Street and Grand Avenue, adjacent to the Town of San Jacinto, California, are requesting your signature of approval for the building of a seventy-six bed Nursing Home.

Thanking you.

Signature Address

Mr. & Mrs. William J. 31030 W 7th St. San Jac.
(Wellington Sign Painter)

RECEIVED
DEC 20 1962
RIVERSIDE COUNTY
PLANNING COMMISSION

We, Howard H. Patterson and Irene Yokes, Owner of the Property on the South side of Seventh Street and Grand Avenue, adjacent to the Town of San Jacinto, California, are requesting your signature of approval for the building of a seventy-six bed Nursing Home.

Thanking you.

Signature	Address
Mrs. Jack Fuller	39488 W. 7th San Jacinto
Mr. & Mrs. Wiseke	39470 W. 7th San Jacinto
Mr. & Mrs. Jack L. Williams	39030 W. 7th San Jacinto
(Waterford Boys Ranch)	
Zora M. Planchon	Box 17 San Jacinto

RECEIVED
DEC 20 1962
RIVERSIDE COUNTY
PLANNING

Hemet, Calif.
Dec 12th 1962.

RECEIVED
DEC 20 1962
RIVERSIDE COUNTY
PLANNING COMMISSION

Var # 496

To whom it May Concern:

In the latter part of May 1961, acting as Broker, I sold to Mr. Patterson - a parcel of land on Seventh St in San Jacinto. After looking over this Community for several Weeks, this plot of ground was the only place suitable for Mr. Patterson's intended use: which was a location, meeting all specifications, to build a Nursing or rest home.

Sincerely,

Marvin Tipler
230 No. Carmalita,
Hemet, Calif.

RECEIVED
DEC 20 1962
RIVERSIDE COUNTY
PLANNING COMMISSION

Var # 496 San Jacinto - Cal.
Dec. 12-62

Planning Comission - Riverside County

This will concern the property I sold to Mr. Howard Peterson & Irene Yokes about in month of May 1961 — I with this intensions to build Nursing Home on this property.

I & my wife are both satisfied and in favor of this project.

Celeste J. Vobora James V. Vobora

1219 W. 7th St.
San Jacinto - Cal.

RJS:20860

December 5, 1962

Mr. Howard H. Patterson
P. O. Box 124
Hemet, California

SUBJECT: Variance Case No. 496

Dear Mr. Patterson:

Your application for variance has been brought to my attention for processing and I find numerous changes that should be made on your plot plan which I have indicated on the returned map. Kindly furnish us with two revised plot plans showing these corrections.

I hope that you are fully aware of the fact that you must establish a legal hardship at the time you present your matter to the Hearing Board. My first impression of a convalescent hospital in the A-1-5 Zone strikes me as being a matter which would be difficult to prove hardship.

Very truly yours,

RIVERSIDE COUNTY PLANNING COMMISSION
Tyler Suess - Planning Director

Richard J. Stokes - Planning Associate

RJS:hj
Encl.

December 28, 1962 TS:20939

Mr. Howard H. Patterson and Miss Irene Yokes
P. O. Box 124
Hemet, California

SUBJECT: Variance Case No. 496

Dear Mr. Patterson and Miss Yokes:

Please find enclosed a copy of legal notification in connection with your application to establish a convalescent hospital in the Hemet-San Jacinto District.

Very truly yours,

RIVERSIDE COUNTY PLANNING COMMISSION

Tyler Suess - Planning Director

TS:lw
Encls. 2

NOTICE OF PUBLIC HEARING VARIANCE CASE NO. 496

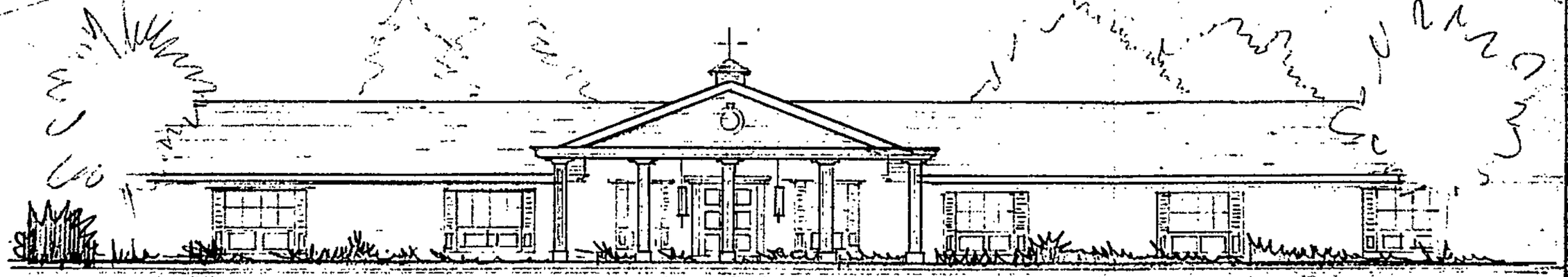
NOTICE IS HEREBY GIVEN that a public hearing will be held before the Riverside County Planning Commission Hearing Board on the application of Howard Patterson and Irene Yokes made pursuant to Article XIX and Article XXa, Ordinance No. 348, Riverside County Zoning Ordinance for a variance to said Ordinance permitting the establishment of a convalescent hospital in Zone A-1-5 (Light Agriculture - 5 Acre Minimum Lot Size) on property located at the southeast corner of 7th Street and Grand Avenue in the Hemet-San Jacinto District and more particularly described as follows:

Lot 14 and the W 160 ft. of Lot 13 of Estudillo Land & Water Co. as shown by Map on file in Book 9 Page 410, San Diego County records.

Said public hearing will be held on Wednesday, January 9, 1963, at 9:50 o'clock A.M., in the Board of Supervisors Room, Court House, Riverside, California, at which time and place pertinent testimony will be heard.

RIVERSIDE COUNTY PLANNING COMMISSION
TYLER SUESS - PLANNING DIRECTOR
By: Hazel I. Evensen - Secretary

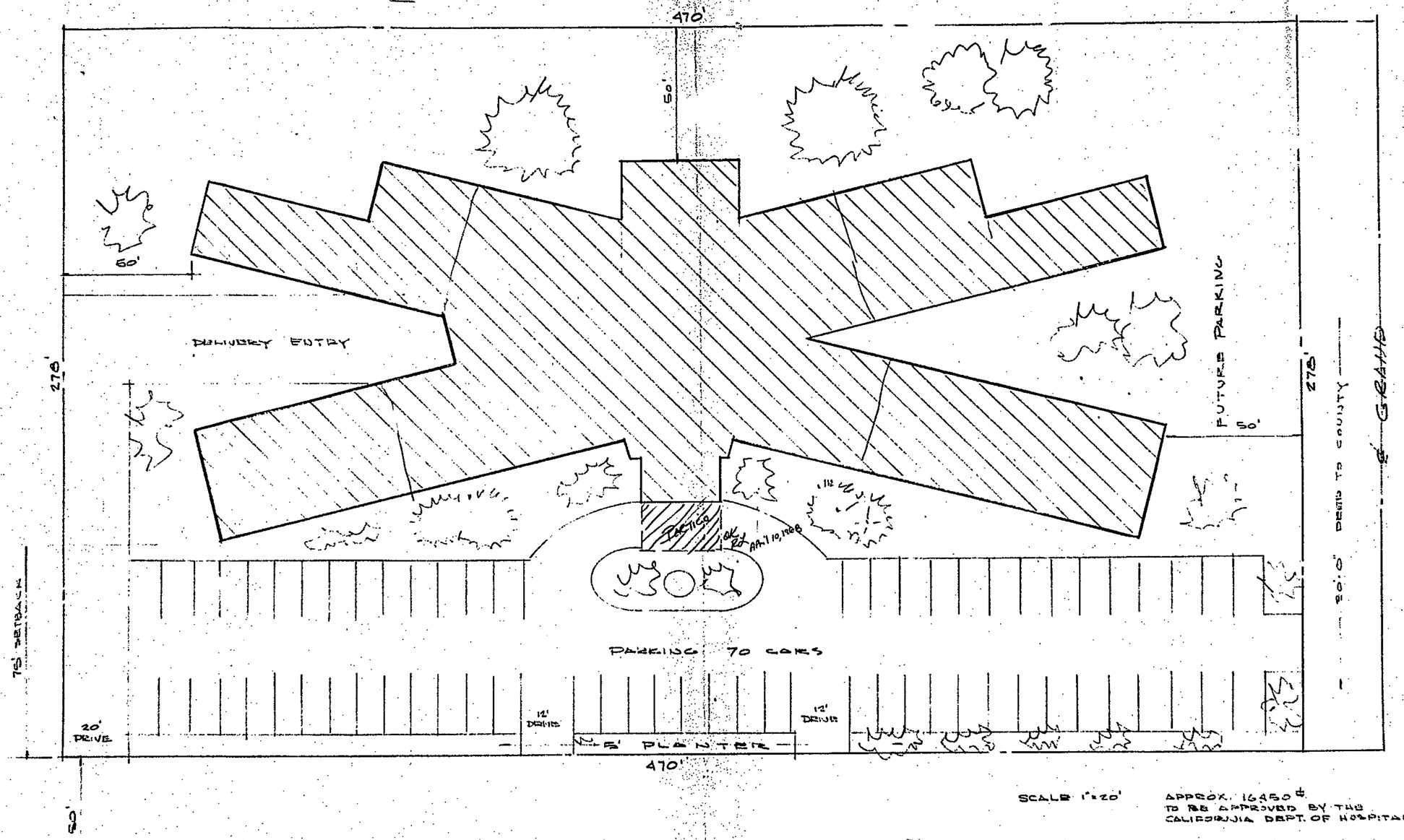
December 28, 1962:lw



PROPOSED ~~FRONT~~ ELEVATION
for
76 BED CONVALESCENCE HOSPITAL

EXHIBIT NO. A
VAR CASE NO 496
(2 PAGES)

archived j. murphy



℄ SEVENTH AVENUE

PROPOSED 76 BED CONVALESCENCE HOSPITAL

michael j. murphy
ASSOCIATES

ASR. BK 21 P 21&22
DRAWN 12-6-62

T 4 S R 1 W

EXHIBIT NO. 1

CASE NO

F. C.

F. C.

YOUNG WALNUTS

CHIX

W ½ Cor. Sec 36

DIRT

CATTLE (APT)

PAST

NURSERY BLDG.

PAVED

NO C. & G ST.

SAN JACINTO CITY LIMITS

1000'

100'

V.C. SHED

ELIZABETH AVE.

GRAND AVE.

MASTER PLAN OF HIGHWAYS
PLOWED
SHOWS 88' SECONDARY HIGHWAYS
AVE 84TH ST
THIRD ST

PLOWED

PAST

CULT.

ST.

ST.

ESTUDILLO LAND & WATER CO. ADDITION

N

SCALE: 1" = 200'

VARIANCE CASE NO. 496

HOWARD H. PATTERSON & IRENE YOKES (APPLICANT) CONVALESCENT HOSPITAL IN A-1-5 (USE) HEMET SAN JACINTO (AREA OR DISTRICT)

THE RIVERSIDE COUNTY PLANNING COMMISSION

LAND USE

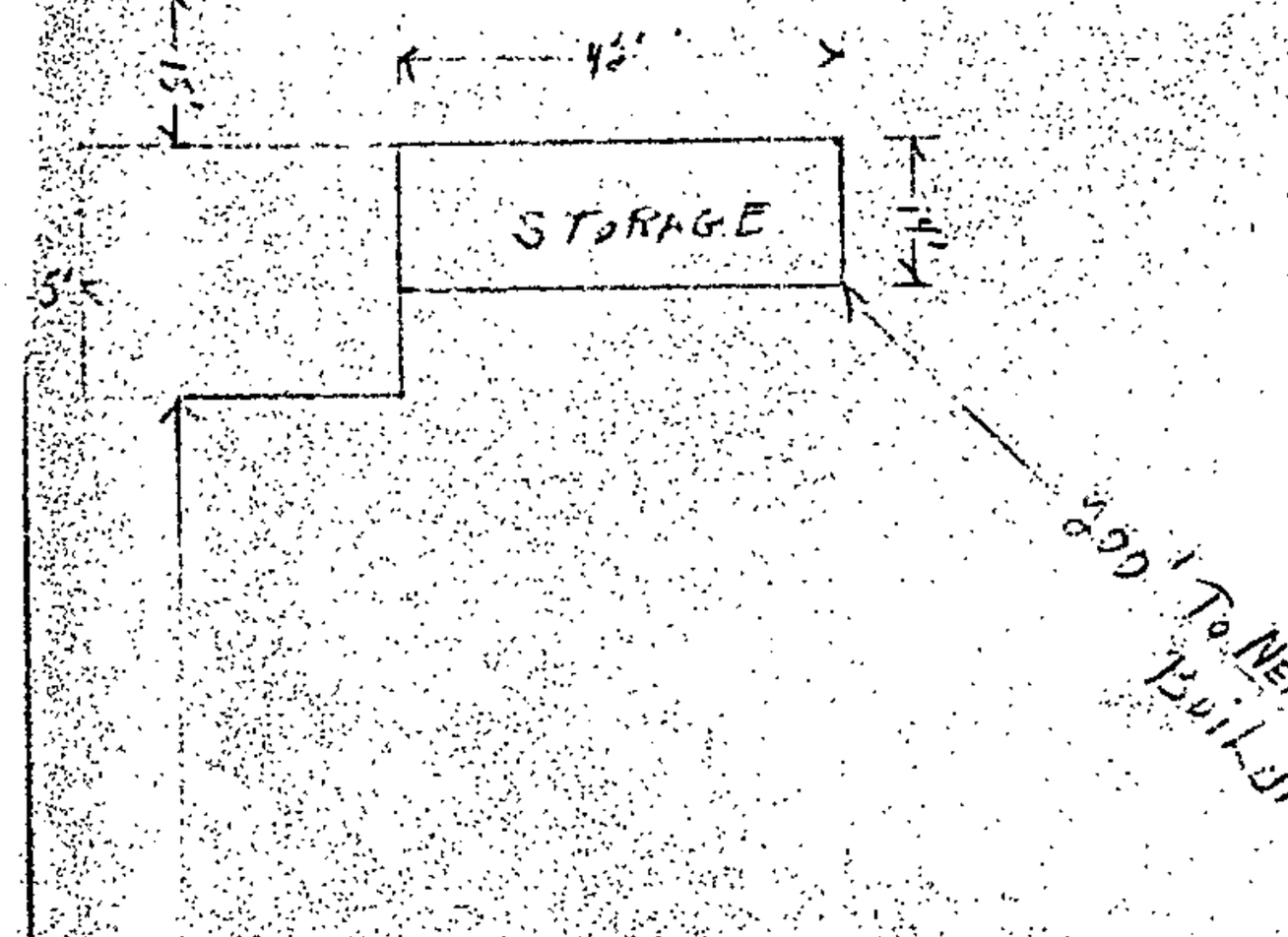
NOTE—This set of plans and specifications MUST be kept on the job at all times and it is unlawful to make any changes or alterations without written permission from the Dept. of Building and Safety. Variations required by site conditions must be approved by the District Inspector. Approval of this plan and specification SHALL NOT be construed to permit the violation of any law.

NOTICE

Site inspection has not been made

Approved plans and specifications shall not be changed, modified or altered without authorization from the Building Official; and all work shall be done in accordance with the approved plans.

In the event unsatisfactory soil, structural, material, or other questionable conditions or errors are found to exist, the Permittee, shall make corrections to comply with the codes or ordinances applicable and be approved by the Building Official.



Plot Plan
1" = 20'

Vs

12th st

STORAGE
For MR HOWARD PATTERSON
Job 39241 W 7th SAN JACINTO CALIF
LEGAL - SURVEY LOT Y AND THAT PORTION OF LOT 5 AS SHOWN ON AMENDED MAP OF ESTUDILLO-LAND AND WATER CO ADD OF SAN ON FILE IN BOOK 7 - PAGE 272 MISCELLANEOUS RECORDS OF SAN DIEGO CO - LYING WEST OF LINE PARALLEL WITH DISTANT SOUTHERLY 300.00 FT FROM CENTER LINE OF GRAND AV

Sheet 1 of 2

R-1-S ZONE
LOT AREA
DATE RECEIVED
FRONT YARD
SIDE YARD
4-21-67 DATE
REAR YARD
PARKING
LOADING
HEIGHT BLDG.
% OF LOT COV'D.
SETBACK ORD.
VAR-496 APPROVED BY: [signature]
LAND USE DIVISION

File Var. 496

COUNTY OF RIVERSIDE
DEPARTMENT OF
BUILDING & SAFETY
APPROVED

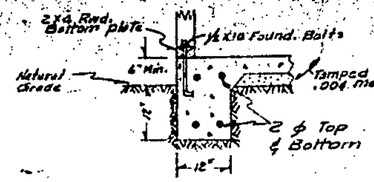
BY _____ DATE _____

Approval of these plans does not be construed to be a permit for, or approval of, any violation of any of the provisions of the building laws of this county. Any violations of these laws or regulations shall be corrected when discovered.

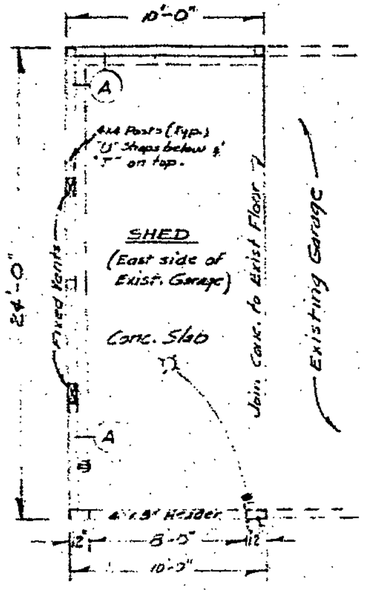
Var 496 ok to Mike Bell off of above

REAR YARD
PARKING
LOADING
HEIGHT
% OF LOT COVERED

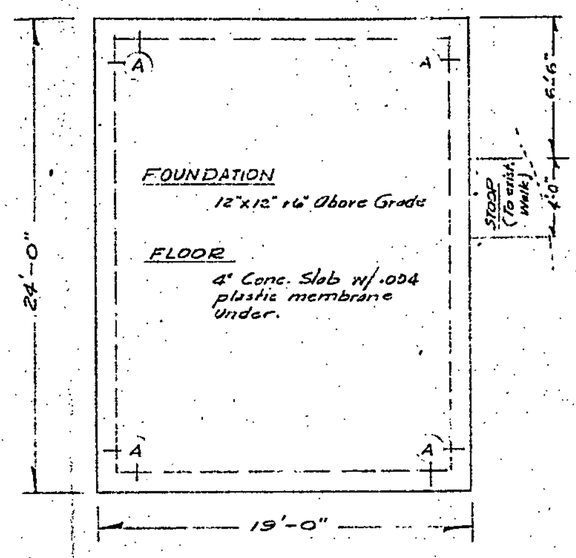
Plot Plan
4-21-67



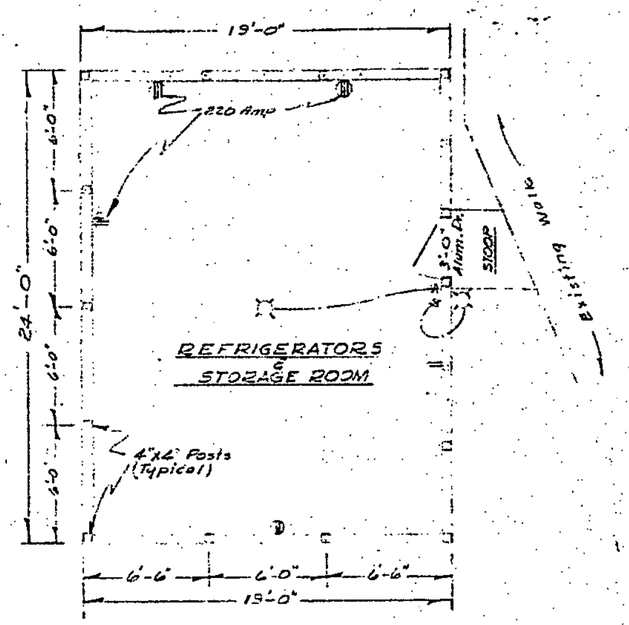
DETAIL (A)



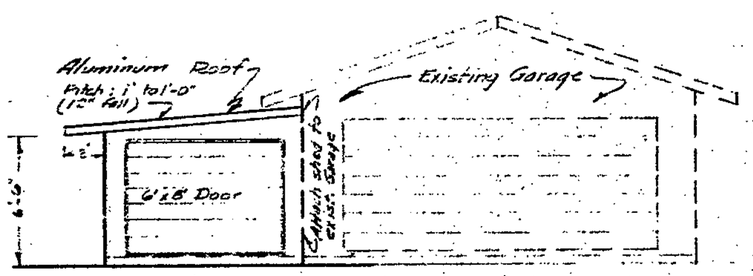
FLOOR PLAN
Scale: ⅛"=1'-0"



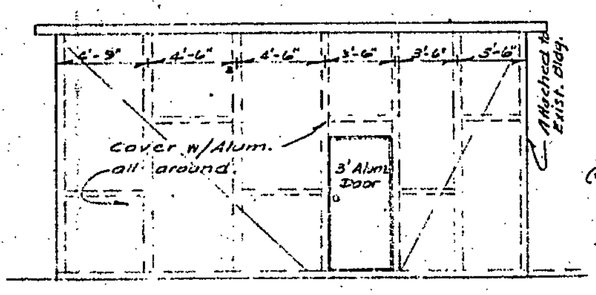
FOUNDATION PLAN
Scale: ⅛"=1'-0"



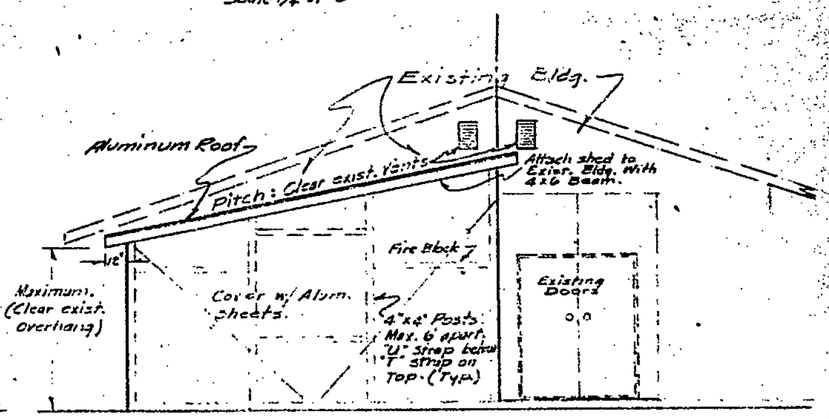
FLOOR PLAN
Scale: ⅛"=1'-0"



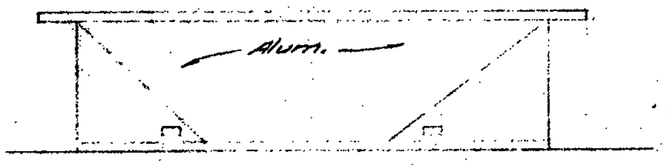
FRONT ELEVATION
Scale: ½"=1'-0"



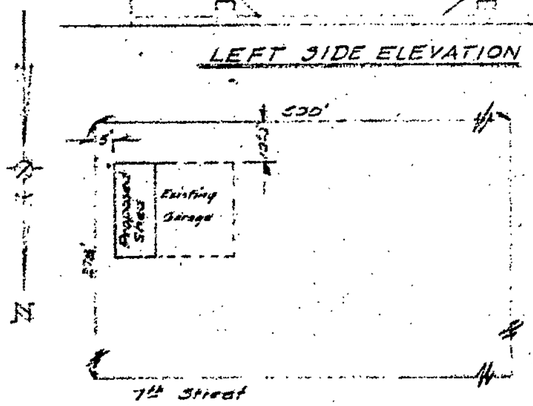
FRONT ELEVATION
Scale: ¼"=1'-0"



LEFT END ELEVATION
Scale: ½"=1'-0"

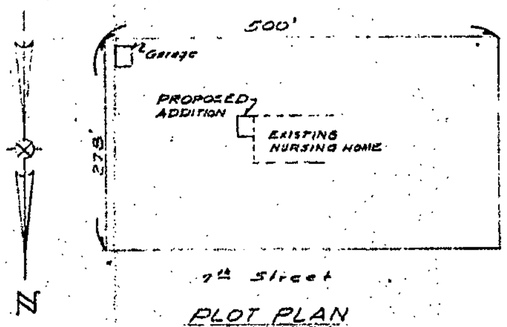


LEFT SIDE ELEVATION



PLOT PLAN
Scale: 1"=100.0'

PROPOSED SHED
East side of Garage



PLOT PLAN
Scale: 1"=100.0'

LEGAL

To Land & Water ADDMB 9-410 SD, Lot 14 & W. 160.0' of Lot 13, 2787 ACML.

Approved with corrections noted on plans
Zone C-P-S
Use Permitted
Minimum Lot Area
Minimum Lot Width
Minimum Front Yard
Minimum Side Yard
Minimum Rear Yard
Maximum Height
Maximum % of Lot Covered
Off-Street Parking Spaces
Additional R/W of ___ feet to be dedicated to Riverside County
Approved as to Parking
By
Date 10-26-65
Riverside County Planning Commission

PROPOSED ADDITIONS TO COLONIAL NURSING HOME

33241 W. 7th, SAN JACINTO, CAL.

Pho. 654-2933

Drawn By Scott Cast

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

HEADQUARTERS

BUILDING INFORMATION

NEW ☐ ENLARGE ☐ RELOCATE ☐ REGISTER ☐
ALTER ☐ REPAIR ☐ DEMOLISH ☐ SPECIAL ☐

OWNER ☑ ARCHITECT ☐ HENEMANE ☐
DRAFTSMAN ☐ ENGINEER ☐

WOOD ☐ CONCRETE ☑ FIREPLACE ☐
CONCRETE ☑ PIERS ☐

BLOCK ☐ FRAME ☑ STUCCO ☐ BRICK ☐ CONC. ☐ METAL ☑ OTHER ☐

PLASTER ☐ DRY WALL ☐ ROOF COVERING Asph. ☐ SD. RMS ☐

ZONE A-1 — ZONING CHECK & VARIANCE APPROVED

SET BACK	FRONT		REAR	LOT SIZE
	1nt	5	10	500 X 278

1st Fl.	Sq. Ft. @		
2nd Fl.	Sq. Ft. @		
Por.	Sq. Ft. @		
Gar.	240 Sq. Ft. @	2.50	600
Car P.	Sq. Ft. @		
Wall	Sq. Ft. @		
	Sq. Ft. @		

ESTIMATED VALUATION $ 600

PLANS CHECKED BY — FEE $ 5.00

ELECTRICAL FEES

NO. 2965 110026 • 3

SIGNS		
YEARS AND/OR T. CLK.		
MOTOR	H.P.	
MOTOR	H.P.	
MOTOR	H.P.	
MOTOR	H.P.	
MOTOR	H.P.	
FIXTURES		
OUTLETS		
RANGE AND/OR OVEN		
WATER HEATER		
SPACE HEATER		
CONSTRUCTION POLE		
SERVICE ENTRANCE		
RESID. ½ SQ. FT.		
GARAGE ½¢ SQ. FT.		1.20
PERMIT FEE		1.00

PLANS CHECKED BY — FEE $ 2.20

PLUMBING FEES

NO. 69 4 3 SH 7.20

GARBAGE PIPING	
DRINKING FOUNTAIN	
URINAL	
WATER PIPING	
FLOOR DRAIN	
WATER SOFTENER	
WASHER (AUTO) (DISH)	
GARBAGE DISPOSAL	
LAUNDRY TRAY	
KITCHEN SINK	
WATER CLOSET	
LAVATORY	
SHOWER	
BATH TUB	
WATER HEATER	
SEWAGE DISPOSAL	
HOUSE SEWER	
GAS PIPING	
PERMIT FEE	

PLANS CHECKED BY — FEE $

PLAN CHECK FEE	$	
CONSTRUCTION FEE	$	5.00
ELECTRICAL FEE	$	2.20
PLUMBING FEE	$	
TOTAL FEE	$	7.20

CASH ☐ CHECK ☑ M.O. ☐ N.C. ☐

RECEIVED BY Terrblis — DATE 12-29-65

WATER VOL/MIN SEPTIC TANK GAL. — LEACH LINE SQ. FT. — SEEPAGE PIT GAL.

REMARKS:

JOB ADDRESS 39241 7th St — OWNER Colonial Nursing Home

COMMUNITY San Jacinto — SCHOOL DISTRICT San Jacinto — DATE 12-29-65

USE OF PERMIT ADD. TO Gar. - Det. — SUPPLEMENT TO PERMIT

DISTRICT	CODE AREA	P.C.	UNITS	VALUATION	OFFICE	PERMIT NUMBER
H	63	22		600	Z	136914

DESCRIPTIVE ADDRESS — 'B' PERMIT NO.

LEGAL DESCRIPTION — BOND $ — TRACT — LOT

GROUP	TYPE	FIRE ZONE	INDEX	MAP	PAGE	LINE

RELEASE BOND DATE

FINALED DATE — INSPECTOR — CERTIFICATE OF COMPLIANCE — CERT. SENT DATE

CONTRACTOR — LICENSE-TYPE — $ — PLAN FILE # 1596

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 90 DAYS. CESSATION OF WORK FOR 120 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID.
I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA. I ALSO AGREE TO CARRY COMPENSATION INSURANCE UPON MY EMPLOYEES. COMPLIANCE WITH LAWS OF THE STATE OF CALIFORNIA COVERING CONTRACTORS IS ALSO GUARANTEED.

OWNER Mrs. Mildred Patterson — CONTRACTOR

MAILING ADD. 39241-7th St — MAILING ADD.

POST OFFICE San Jacinto Calif — POST OFFICE

TEL 654-2833 BY — TEL. BY

$20

DEPARTMENT OF BUILDING & SAFETY

COUNTY OF RIVERSIDE

FIELD

BUILDING INFORMATION

TYPE: ERECT | ENLARGE | RELOCATE | REGISTER | ALTER | REPAIR | DEMOLISH | SPECIAL

OWNER | ARCHITECT | DRAFTSMAN | ENGINEER | HENDRANE

WOOD | CONCRETE | FIREPLACE | CONCRETE | PIERS

BLOCK | FRAME | STUCCO | BRICK | CONC. | METAL | OTHER

PLASTER | DRY WALL | ROOF COVERING: Asphalt | SQ. FTS.

ZONE: A-1-5 | ZONING CHECK & VARIANCE APPROVED: PP 9241 EH

SET BACK	FRONT	SIDE	REAR	LOT SIZE
	100'	5'	10'	500 X 275

	Sq. Ft.	@	
1st Fl.			
2nd Fl.			
Pos.			
Gar.	240	2.50	600
Car P.			
Wall			

ESTIMATED VALUATION: $ 600

PLANS CHECKED BY | FEE $ 5.00

ELECTRICAL FEES

NO.			
	SIGNS		
	TRANS. AND/OR T CLK		
	MOTOR	H.P.	
	MOTOR	H.P.	
	MOTOR	H.P.	
	MOTOR	H.P.	
	MOTOR	H.P.	
	FIXTURES		
	OUTLETS		
	RANGE AND/OR OVEN		
	WATER HEATER		
	SPACE HEATER		
	CONSTRUCTION POLE		
	SERVICE ENTRANCE		
	RESID. 1¢ SQ. FT.		
	GARAGE ½¢ SQ. FT.		1.20
	PERMIT FEE		1.00

PLANS CHECKED BY | FEE $ 2.20

PLUMBING FEES

NO.		
	DRAINAGE PIPING	
	DRINKING FOUNTAIN	
	URINAL	
	WATER PIPING	
	FLOOR DRAIN	
	WATER SOFTENER	
	WASHER (AUTO) (DISH)	
	GARBAGE DISPOSAL	
	LAUNDRY TRAY	
	KITCHEN SINK	
	WATER CLOSET	
	LAVATORY	
	SHOWER	
	BATH TUB	
	WATER HEATER	
	SEWAGE DISPOSAL	
	HOUSE SEWER	
	GAS PIPING	
	PERMIT FEE	

PLANS CHECKED BY | FEE $

PLAN CHECK FEE	$
CONSTRUCTION FEE	$ 5.00
ELECTRICAL FEE	$ 2.20
PLUMBING FEE	$
TOTAL FEE	$ 7.20

CASH | CHECK ✓ | M.O. | M.C.

RECEIVED BY: [illegible] | DATE: 12-29-65

WATER HEATER | SEPTIC TANK | LEACH LINE | SEEPAGE PIT

GAL. | SQ. FT. | GAL.

REMARKS:

JOB ADDRESS: 39341 Ivy St | OWNER: Community Memorial Home

COMMUNITY: San Jacinto | SCHOOL DISTRICT: San Jacinto | DATE: 12-29-65

USE OF PERMIT: Add. - Clinic

DISTRICT	CODE AREA	P.C.	UNITS	VALUATION	OFFICE
H	12	82		600	2

PERMIT NUMBER: 136914

DESCRIPTIVE ADDRESS | "M" PERMIT NO.

LEGAL DESCRIPTION | BOND $ | BOND | CASH

GROUP	TYPE	FIRE ZONE	POOL	MAP	PAGE	LINE

RELEASE BOND DATE

FINALED DATE: 2-3-66 | INSPECTOR | CERTIFICATE OF COMPLIANCE

CERT. SENT DATE

CONTRACTOR | LICENSE-TYPE | PLAN FILE

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 60 DAYS. CESSATION OF WORK FOR 120 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID.
I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA. I ALSO AGREE TO CARRY COMPENSATION INSURANCE UPON MY EMPLOYEES. COMPLIANCE WITH LAWS OF THE STATE OF CALIFORNIA COVERING CONTRACTORS IS ALSO GUARANTEED.

OWNER	CONTRACTOR
MAILING ADD.	MAILING ADD.
POST OFFICE	POST OFFICE
TEL. BY	TEL. BY

APPROVALS	DATE	INSPECTOR
SET BACKS *	1-4-66	
FND. FORMS	1-4-66	
REIN. STEEL		
BOND BEAM		
FRAMING	2-3-66	
VENTS		
ROOF DECK		
LATH EXT.		
LATH INT.		
FINAL	2-3-66	

APPROVALS		DATE	INSPECTOR
TEMP. SERVICE POLE			
ROUGH	CONDUIT	2-3-66	
ROUGH	SERVICE ENT.		
ROUGH	WIRING	2-3-66	
FINAL	FIXTURES		
FINAL	SERVICE ENT.		
FINAL	GROUNDING		
UTIL. CO. NOTIF.			

APPROVALS		DATE	INSPECTOR
GROUND PLUMBING			
ROUGH PLUMBING			
SEWER			
SEWAGE DISPOSAL			
FINAL	GAS		
FINAL	WATER		
FINAL	FIXTURES		
UTIL. CO. NOTIF.			

BUILDING NOTICES

* Fence in on Property 8"

*: Locks Vent 6" From Floor 2-2-66

ELECTRICAL NOTICES

PLUMBING NOTICES

BACK

FRONT

☐ INSIDE ☐ CORNER ☐ KEY

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

HEADQUARTERS

CONSTRUCTION ESTIMATE

	538	Sq. Ft. @ 7.85	4263
		Sq. Ft. @	
		Sq. Ft. @	
		Sq. Ft. @	
		Sq. Ft. @	
		Sq. Ft. @	
		Sq. Ft. @	

ESTIMATED VALUATION $ 4263

MECHANICAL FEES

HEAT APPLIANCES	
INLETS	
M. BB. FT. – UNIT HEATER	
M. BB. FT. – PERF. CEILING MAT.	
APPLIANCE VENT	
GAS PIPE	
REPAIR OR ALTER	
VENT SYSTEM ☐ HOOD ☐ EVAP. COOL ☐	
COMPRESSOR	
COMPRESSOR	
COMPRESSOR	
PERMIT FEE	

ELECTRICAL FEES

NO.			
	POLES		
	SIGNS		
	TRANS. AND/OR M. T. CLR.		
	MOTOR H.P.		
	Swimming Pool H.P.	3149259	
	MOTOR H.P.		
	MOTOR H.P.		
	MOTOR H.P.		
3	FIXTURES	60	
19	OUTLETS	2 00	
1	SWG-PANEL	1 00	
	RANGE AND/OR OVEN		
	WATER HEATER		
	SPACE HEATER		
	CONSTRUCTION POLE		
	SERVICE ENTRANCE		
	RESID. 1¢ SQ. FT.		
	GARAGE ½¢ SQ. FT.		
1	PERMIT FEE	1 00	

PLUMBING FEES

NO.			
	DRAINAGE PIPING		
	DRINKING FOUNTAIN		
	URINAL GAL.		31 60
	WATER PIPING		
	FLOOR DRAIN		
	WATER SOFTENER		
	WASHER (AUTO) (DISH)		
	GARBAGE DISPOSAL		
	LAUNDRY TRAY		
	KITCHEN SINK		
	WATER CLOSET		
	LAVATORY		
	SHOWER		
	BATH TUB		
	WATER HEATER		
	SEWAGE DISPOSAL		
	HOUSE SEWER		
	GAS PIPING		
	PERMIT FEE		

PERMIT NUMBER	BEE	DBL	PLG CHK FEE	CONSTR. FEE	HEAT & VENT	ELECT. FEE	PLUMB. FEE	TOTAL FEES	PLAN CHECKER
149259			9 00	18 00		4 60	—	31 60	HAMPTON

BUILDING INFORMATION

WOOD		CONCRETE	✓	FIREPLACE	NO		
CONCRETE	✓	PIERS		MEMBRANE			
BLOCK	FRAME ✓	STUCCO ✓	BRICK	CONC.	METAL	OTHER	
PLASTER	DRY WALL ✓	ROOF COVERING B. U.				SQ. SMS.	—

ZONE	ZONING CHECKED BY	PERMIT USE NO.
A-1-5	J. R.	VAR 496

SET BACK	FRONT	SIDE	REAR	AVERAGE SLOPE
	239'	5'	15'	270

PLAN CHECK FEE	$ 9 00
MECHANICAL FEE	$ —
CONSTRUCTION FEE	$ 18 00
ELECTRICAL FEE	$ 4 60
PLUMBING FEE	$ —
TOTAL FEE	$ 31 60

CASH | CHECK | M.O. | M.C.

RECEIVED BY: Blanche

PLAN FILE #

WATER VOLUME SEPTIC TANK GAL. | LEACH LINE SQ. FT. | SEEPAGE PIT GAL.

LETTER ☐ FILE ☐

JOB ADDRESS: 39241 7TH ST

OWNER: PATTERSON, HOWARD

USE OF BUILDING: STORAGE

DATE: 3-25-67

COMMUNITY: HEMET | DISTRICT: H | F.C.: 22 | UNITS: 1

VALUATION: 4263 | OFFICE: H

LEGAL DESCRIPTION: POR OF LOT 4, LOT 6 ESTUDILLO LAND & WATER CO

PERMIT NUMBER: 149259

SUPPLEMENT TO PERMIT

FINALED DATE	INSPECTOR	GROUP	TYPE
		F 2	V-N

CONTRACTOR

LICENSE-TYPE ☐ #

BOND $ | BOND | CASH

RELEASE BOND DATE

In accordance with Sec. 302-D of the Uniform Building Code, this permit shall expire if work is not commenced within 60 days. If work is suspended or abandoned for a period of 120 days, this permit shall automatically become null and void.

This permit is issued, and shall continue in effect, pursuant to the terms and conditions of Sec. 3800 of the Business and Professions Code and as a condition of the issuance hereof the following certificate is executed.

OWNER-BUILDER

I hereby certify that in performance of the work for which this permit is issued I shall not employ any person in any manner whatsoever as to become subject to the Workmen's Compensation Laws of the State of California.

Owner H Patterson

Address 2 Lot

Telephone

CONTRACTOR

I hereby certify that in performance of the work for which this permit is issued I have complied with Title 8, Article 3, Sec. 3800 of the Labor Code, and a certificate or certified copy is on file with the Riverside County Building Department.

Contractor Paul G. Temple

Address #1913 Buena

Tel. 85-8-3813 Lic. #

Ed P. KOEPEE

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

FIELD ✓

CONSTRUCTION ESTIMATE

1st Fl.	588	Sq. Ft. @ 7.25	4263
2nd Fl.		Sq. Ft. @	
Pat.		Sq. Ft. @	
Gar.		Sq. Ft. @	
Car P.		Sq. Ft. @	
Addn		Sq. Ft. @	
		Sq. Ft. @	

ESTIMATED VALUATION $ 4263

MECHANICAL FEES

HEAT APPLIANCES	
INLETS – OUTLETS	
SQ. FT. – UNIT HEATER	
SQ. FT. – PERF. CEILING AREA	
GAS PIPE	
REPAIR OR ALTER	
VENT SYSTEM ☐ NONE ☐ EVAP. COOL ☐	
COMPRESSOR	
COMPRESSOR	
COMPRESSOR	
PERMIT FEE	

ELECTRICAL FEES

NO.			
	POLES		
	SIGNS		
	TRANS. AND/OR T. CTS.		
	MOTOR	H.P.	
	MOTOR	H.P.	
	MOTOR	H.P.	
	MOTOR	H.P.	
	MOTOR	H.P.	
3	FIXTURES		60
19	OUTLETS		2 00
1	SUB-PANEL		1 20
	RANGE AND/OR OVEN		
	WATER HEATER		
	SPACE HEATER		
	CONSTRUCTION POLE		
	SERVICE ENTRANCE		
	RESID. 1¢ SQ. FT.		
	GARAGE 1¢ SQ. FT.		
1	PERMIT FEE		1 00

PLUMBING FEES

NO.		
	DRAINAGE PIPING	
	DRINKING FOUNTAIN	
	URINAL	
	WATER PIPING	
	FLOOR DRAIN	
	WATER SOFTENER	
	WASHER (AUTO) (DISH)	
	GARBAGE DISPOSAL	
	LAUNDRY TRAY	
	KITCHEN SINK	
	WATER CLOSET	
	LAVATORY	
	SHOWER	
	BATH TUB	
	WATER HEATER	
	SEWAGE DISPOSAL	
	HOUSE SEWER	
	GAS PIPING	
	PERMIT FEE	

PERMIT NUMBER	DEP	DEL	PLAN CHK FEE	CONSTR. FEE	HEAT & VENT	ELECT. FEE	PLUMB. FEE	TOTAL FEES	PLAN CHECKER
149259			9 00	18 00		4 60	—	31 60	HAMPTON

BUILDING INFORMATION

WOOD			CONCRETE		FIREPLACE	NO
CONCRETE		✓	PIERS		MEMBRANE	
BLOCK	FRAME	STUCCO	ADOBE	CONC.	METAL	OTHER
	✓	✓				

PLASTER	DRY WALL	ROOF COVERING	SQ. MTRS.
	✓	B.U.	—

ZONE	ZONING CHECKED BY	PERMIT USE NO.
A-1-S	J.R.	VAR 496

SET BACK	FRONT	SIDE	REAR	LOT SIZE
	234'	5'	15'	75X270

PLAN CHECK FEE	$ 9 00
MECHANICAL FEE	$ —
CONSTRUCTION FEE	$ 18 00
ELECTRICAL FEE	$ 4 60
PLUMBING FEE	$ —
TOTAL FEE	$ 31 60

CASH | CHECK ☑ | M.O. | N.C.

RECEIVED BY

PLAN FILE #

WATER VOLUME SEPTIC TANK GAL. | LEACH LINE SQ. FT. | SEEPAGE PIT GAL.

LETTER ☐ FILE ☐

600 P.

JOB ADDRESS 39241 7th ST

OWNER PATTERSON, HOWARD

USE OF BUILDING STORAGE

DATE 3-25-67

COMMUNITY	DISTRICT	P.C.	UNITS	VALUATION	OFFICE
HEMET	4	22	1	4263	4

LEGAL DESCRIPTION PAR 2 & LOT 4, LOT 6

EXTENDED KNOWN WATER CO

PERMIT NUMBER 149259

SUPPLEMENT TO PERMIT

FINALED DATE	INSPECTOR	GROUP	TYPE	BOND $	BOND	CASH
6-12-67	[signature]	F 2	I V			

CONTRACTOR

LICENSE-TYPE ☐ #

RELEASE BOND DATE

In accordance with Sec. 302-D of the Uniform Building Code, this permit shall expire if work is not commenced within 60 days. If work is suspended or abandoned for a period of 120 days, this permit shall automatically become null and void.

This permit is issued, and shall continue in effect, pursuant to the terms and conditions of Sec. 3800 of the Business and Professions Code and as a condition of the issuance hereof the following certificate is executed.

OWNER-BUILDER

I hereby certify that in performance of the work for which this permit is issued I shall not employ any person in any manner whatsoever as to become subject to the Workmen's Compensation Laws of the State of California.

Owner [signature]

Address

Telephone

CONTRACTOR

I hereby certify that in performance of the work for which this permit is issued I have complied with Title 3, Article 3, Sec. 3800 of the Labor Code, and a certificate or certified copy is on file with the Riverside County Building Department.

Contractor [signature]

Address

Tel. Lic. #

KOEPEE

NO.	OPERATION	DATE	INSPECTOR
	BUILDING APPROVALS		
1	Set Back	4-27-67	Polanco
2	FTGS & FRMS	4-27-67	Polanco
3	Steel		
4	Grout Blocks		
5	Bond Beams		
6	Deck	5-5-67	Polanco
7		5-5-67	Polanco
8	Vents	5-5-67	Polanco
9	Garage Fire Wall		
10	Fireplace P/L ☐ T/O ☐		
11	Exterior Lath DRYWALL	5-12-67	Polanco
12	Internal Lath	5-12-67	Polanco
13	Exterior Grade	6-12-67	Polanco
14	Final	6-12-67	Polanco
	PLUMBING APPROVALS		
15	Ground Plumb		
16	Water Piping		
17	Rough Plumb		
18	Vents		
19	Sewage Disposal		
20	Sewer		
21	Water Heater	N.O.	
22	Water Softener		
23	Water Service		
24	Gas Test		
25	Final		
	ELECTRICAL APPROVALS		
26	Power Pole		
27	Conduit	6-12-67	Polanco
28	Service Entrance	5-5-67	Polanco
29	Wiring X	6-12-67	Polanco
30	Fixtures	6-12-67	Polanco
31	Service	6-12-67	Polanco
32	Final	6-12-67	Polanco

NO.	OPERATION	DATE	INSPECTOR
	MECHANICAL APPROVALS		
33	Ovens		
34	Plenums & Ducts		
35	Furnace Compart.		
36	Inlets & Outlets		
37	Comb. & Ret. Air		
38	Compressor		
39	Appl. Clearance		
40	Final		
OPT'N NO.	**PROGRESS CHECKS**		
29	ALL INFLEX Polanco 5-5-67		

SEWER DISPOSAL LOCATION

BACK

FRONT

☐ INSIDE ☐ OUTSIDE ☐ KEY

Route
Land Use Div.
Health Dept.
Other Dept.
Building Dept.

NOTICE: THIS IS NOT A BUILDING PERMIT

APPLICATION TO CONSTRUCT
DEPARTMENT OF BUILDING AND SAFETY
COUNTY OF RIVERSIDE

Dist. Office 4
Permit No.
Del. Date

OWNER

Owner Harrison Carson
Address 39341 - 71st
City Palm Desert
Phone

Architect Nelson
Address Palm Desert
City
Phone

Contractor Owner-Builder
Address
City Hemet
Phone 1-5-3093

I (we) the undersigned, hereby certify and acknowledge that I (we) have read the application and agree that if Curb and Gutter, and Paving, and/or Dedication of right of way is required by the County of Riverside, the Riverside County Department of Building and Safety shall not make a Final Inspection until said requirements have been met. I am also aware that no work is to be done within the County R/W without an encroachment permit.

NOW, therefore, it is agreed that I (we) will not occupy and will not cause said property to be occupied until I (we) have complied with all laws of the County of Riverside applicable governing said property.

DATE 4-21-67 SIGNATURE OF OWNER Harrison Carson

Approval by Signature from the Following Departments Listed Below Must Be Obtained Prior to the Issuing of a Construction Permit.

LAND USE DIVISION BUILDING AND SAFETY

Location of Job Same as Above
Legal Description of Property Acreage Lot 5
Eisenhower Water Co
NO. OF SUBMITTED PLANS 2
ADDITIONAL PLOT PLANS 0
CASE NO. 12496
TYPE OF CONSTRUCTION Add to Storage Bldg

USE OF STRUCTURE
SINGLE FAMILY ☐ DUPLEX ☐
APARTMENTS ☐ AGRIC. ☐
COMMERCIAL ☐ INDUSTRIAL ☐
ALTERATIONS ☒

NO. OF PARKING SPACES REQUIRED 4 NIR NO. OF BUILDINGS NOW EXISTING 2
ZONE A-1-5 SETBACKS FRONT 25' SIDE 5' REAR 15'
IF 1 - 50 GRADE OR MORE, TOPOGRAPHIC PLOT PLAN REQUIRED. RECEIVED YES ☐ NO ☒
SETBACK ORDINANCE # OF N/A FEET REQUIRED ON STREET
DATE 4-21-67 SIGNATURE OF LAND USE OFFICIAL

ROAD DEPARTMENT

DEDICATION REQUIRED: YES ☐ NO ☒ NO. OF FEET
CURB AND GUTTER REQUIRED: YES ☐ NO ☐ STREET
THE ABOVE CONSTRUCTION? YES ☐ NO ☐
CAN CURB AND GUTTER FEASIBLY BE INSTALLED? YES ☐ NO ☐
HAS AN ACCEPTABLE APPLICATION BEEN MADE FOR ENCROACHMENT PERMIT FOR DRIVEWAY AND STREET IMPROVEMENT? YES ☒ NO ☐
DATE SIGNATURE OF ROAD DEPT. OFFICIAL Road Dept Notified

HEALTH DEPT.

RESIDENTIAL SEWAGE DISPOSAL
COMMERCIAL SEWAGE
FOOD ESTABLISHMENT SWIMMING POOLS PUBLIC

OTHER DEPARTMENTS

BLDG. DEPT GRADING PERMIT REQUIRED PLAN CHECK
FLOOD CONTROL WATER POLLUTION
AIR POLLUTION DIV OF HWY

REMARKS: Your property may be subject to flood. Riverside County assumes no responsibility in event of flood.

Plate # 284-199

WHITE — ROAD DEPT., CANARY — FILE, PINK — APPLICANT

DEPARTMENT OF BUILDING & SAFETY

COUNTY OF RIVERSIDE

HEADQUARTERS

CONSTRUCTION ESTIMATE

	Sq. Ft. @	
	Sq. Ft. @	
	Sq. Ft. @	
	Sq. Ft. @	
	Sq. Ft. @	
	Sq. Ft. @	
	Sq. Ft. @	

ESTIMATED VALUATION $

MECHANICAL FEES

VENT SYSTEM ☐ FAN ☐ EVAP. COOL ☐ HOOD

APPLIANCE

FURNACE ☐ UNIT ☐ WALL ☐ FLOOR ☐ HORIZONTAL

AIR CONDITIONING UNIT

GAS PIPE ☐ NATURAL ☐ L.P.G. ☐ OIL

COMPRESSOR ___ HP

APPLIANCE VENT

AIR INDUCTION SYSTEM ___ S.F.M.

INCINERATOR DOMESTIC ☐ COMM'L. ☐ INDUS.

HEATING SYSTEM ☐ FORCED ☐ GRAVITY

BOILER ___ B.T.U.

MECHANICAL FEE ___ SQ. FT. ___ @

PERMIT FEE

ELECTRICAL FEES

NO.

POLES		
SIGNS		
TRANS. AND/OR M. G. SETS		
MOTOR	H.P.	
MOTOR	H.P.	
MOTOR	H.P.	
MOTOR	H.P.	
MOTOR	H.P.	
FIXTURES		
OUTLETS		
PUB-PANEL		
RANGE AND/OR OVEN		
WATER HEATER		
SPACE HEATER		
CONSTRUCTION POLE		
SERVICE ENTRANCE		
REMOD. 15 SQ. FT.		
REMODEL 16 SQ. FT.		
PERMIT FEE		

PLUMBING FEES

NO. 3 — 3/4 — 7.50

DRAINAGE PIPING	
IRRIGATION SYSTEM	
SEWAGE	
WATER PIPING	
FLOOR DRAIN	
WATER SOFTENER	
WASHER (WATER SUPPLY)	
GARBAGE DISPOSAL	
LAUNDRY TRAY	
KITCHEN SINK	
WATER CLOSET	
LAVATORY	
SHOWER	
BATH TUB	
WATER HEATER	
SEWAGE DISPOSAL	
HOUSE SEWER	5.00
GAS PIPING	
PERMIT FEE	2.50

PERMIT NO. 160155 — MECH. — ELEC. — PLUMB. 15.00 — GRAD. & DRAIN FEE — GEN. CK. FEE — CONST. FEE — ELEC. FEE — PLUMB. FEE

LOT BLOCK — LOT SIZE — TRACT #

N/A

PLAN CHECK FEE

MECHANICAL FEE

CONSTRUCTION FEE

ELECTRICAL FEE

PLUMBING FEE 7.50

TOTAL FEES $ 7.50

CASH — CHECK — M.O. — M.C.

ISSUED BY

SEWAGE SYSTEM

INFORMATION

JOB ADDRESS 29241 7TH ST

OWNER PATTERSON, HOWARD

USE OF BUILDING CONNECT TO SEWER

ZONE A-1-5

PROCESSED BY

COMMUNITY SAN JACINTO — DISTRICT 4 — P.C. 35 — SITE — VALUATION 300 — OFFICE 4

LEGAL DESCRIPTION LOT 4 + 5 ESTUDILLO

PERMIT NUMBER 160155

BOOK — PAGE — PARCEL — PLAN CHECKED — PLAN FILE # — FINAL DATE — INSPECTOR — RETURN TO PERMIT

LAND & WATER CO

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 90 DAYS. CESSATION OF WORK FOR 180 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID.

I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA. I ALSO AGREE TO CARRY COMPENSATION INSURANCE UPON MY EMPLOYEES. COMPLIANCE WITH LAWS OF THE STATE OF CALIFORNIA COVERING CONTRACTORS IS ALSO GUARANTEED.

OWNER

ADDRESS

CITY

TEL. NO.

CONTRACTOR [illegible] WHITE PLUMBING CO.

ADDRESS 941 E. MAIN ST SAN JACINTO

TEL. NO. 654-7811

LICENSE NO.

808

3844-2000 11/67

DEPARTMENT OF BUILDING & SAFETY

COUNTY OF RIVERSIDE

FIELD

CONSTRUCTION ESTIMATE

First Flr.	Sq. Ft. @	
2nd Flr.	Sq. Ft. @	
Flr.	Sq. Ft. @	
Gar.	Sq. Ft. @	
Carp't.	Sq. Ft. @	
Guest	Sq. Ft. @	
	Sq. Ft. @	
	Sq. Ft. @	

ESTIMATED VALUATION $

MECHANICAL FEES

HEAT SYSTEM ☐ GAS ☐ ELEC. HTG. ☐ OIL	
AIR COND.	
FURNACE ☐ UNIT ☐ WALL ☐ FLOOR ☐ SUSPENDED	
GAS PIPING TO WALL	
GAS PIPE ☐ OUTLETS ☐ Q.F.O. ☐ OIL	
BOILER ☐ H.P.	
REFRIGERATION ☐ B.T.U.	
VENTILATING EQUIPMENT ☐ EXHAUST ☐ BLOWER	
HEATING APPLIANCES ☐ FLOOR ☐ WALL ☐ HEATER	
BOILER ☐ B.T.U.	
MECHANICAL FEE ☐ SQ. FT. ☐	
MISCELLANEOUS FEE	

ELECTRICAL FEES

NO.		
	POLES	
	SIGNS	
	TRANSF. VAULT OR PEDESTAL	
	METER B.S.	
	METER M.S.	
	METER M.T.	
	METER W.P.	
	METER M.H.	
	FIXTURES	
	OUT	
	TOR	
	RANGE AND/OR OVEN	
	WATER HEATER	
	SPACE HEATER	
	CONSTRUCTION POLE	
	SERVICE ENTRANCE	
	PANEL 16 SQ. FT.	
	GARAGE 16 SQ. FT.	
	PERMIT FEE	

PLUMBING FEES

NO.		
	BATHROOM SINKS	
	BATHROOM FIXTURES	
	URINALS	
	WATER HEATERS	
	FLOOR DRAIN	
	WATER SOFTENER	
	GARBAGE (WITH GRIND)	
	GARBAGE DISPOSAL	
	LAUNDRY TRAY	
	KITCHEN SINK	
	WATER CLOSET	
	LAVATORY	
	SHOWER	
	BATH TUB	
	WATER HEATER	
	GREASE INTERCEPTOR	
	HOUSE SEWER	
	GAS PIPING	
	PERMIT FEE	

T60155 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible]

[illegible]

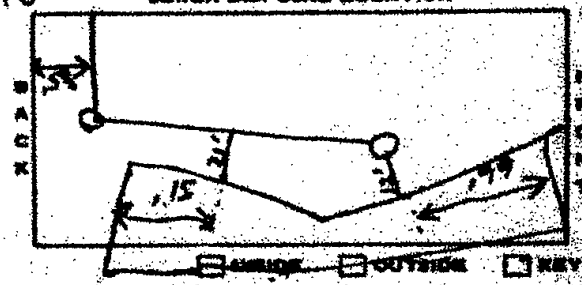
NO.	OPERATION	DATE	INSPECTOR
	BUILDING APPROVALS		
1	Set Back		
2	FTGS & FNMS		
3	Steel		
4	Grout Blocks		
5	Roof Beams		
6	Roof Sheath		
7	Flashing		
8	Vents		
9	Garage Fire Wall		
10	Fireplace P/A ☐ F/G ☐		
11	Exterior Lath		
12	Internal Lath		
13	Rainwater Goods		
14	Final		
	PLUMBING APPROVALS		
15	Ground Plumb		
16	Water Piping		
17	Rough Plumb		
18	Vents		
19	Sewage Disposal		
20	Sewer	X 4-5-68	Pblanco
21	Water Heater		
22	Water Softener		
23	Water Service		
24	Gas Test		
25	Final	4-5-68	Pblanco
	ELECTRICAL APPROVALS		
26	Power Pole		
27	Conduit		
28	Service Entrance		
29	Wiring		
30	Fixtures		
31	Service		
32	Final		

NO.	OPERATION	DATE	INSPECTOR
	MECHANICAL APPROVALS		
33	Ventilation System		
34	Plenums & Ducts		
35	Furnace Compart.		
36	Inlets & Outlets		
37	Combustion Air		
38	Compressor		
39	Appl. Clearance		
40	Fire Damper		
41	Smoke Detector Device		
42	Commercial Hood		
43	Final		

DATE	PROGRESS CHECKS
	SKETCH ON BACK OF SLIP. INSERT IN ENVELOPE OF TO OWNER
	NO DEMO H-> YET
	6" SEWER LINE
	DEMOS APPEAR COMPLETE
	4 PITS + TANKS Pblanco 8-6-68

Tank No. 1 Line SEVENTH

SEWER DISPOSAL LOCATION



SEWER DISPOSAL LOCATION

Route

Land Use Div.
Road Dept.
Health Dept.
Other Dept.
Building Dept.

NOTICE: THIS IS NOT A BUILDING PERMIT

APPLICATION TO CONSTRUCT
DEPARTMENT OF BUILDING AND SAFETY
COUNTY OF RIVERSIDE

Dist. Office H
Permit No. 160156
Dat. Date 5-21-68

OWNER

Owner VANCE PATTERSON
Address 39241 7TH
City CAN JACINTO
Phone

Architect
Address
City
Phone

Contractor
Address
City
Phone

I (we) the undersigned, hereby certify and acknowledge that I (we) have read the application and agree that if Curb and Gutter, and Paving, and/or Dedication of right of way is required by the County of Riverside, the Riverside County Department of Building and Safety shall not give a Final Inspection until said requirements have been met. I am also aware that no work is to be done within the County R/W without an encroachment permit.

NOW, therefore, it is agreed that I (we) will not occupy said property and will not cause said property to be occupied until I (we) have complied with all laws of the County of Riverside and the State of California governing said property.

DATE 5-21-68 SIGNATURE OF OWNER Vance A. Patterson

Approval by Signatures from the Following Departments Listed Below
Must Be Obtained Prior to the Issuing of a Construction Permit.

LAND USE DIVISION — BUILDING AND SAFETY

Location of Job 39241 7th St
Legal Description of Property Lot 4 of Estates Addn. Land & Water
NO. OF SUBMITTED PLANS
ADDITIONAL PLOT PLANS
CASE NO.
TYPE OF CONSTRUCTION Service Station & Alterations

USE OF STRUCTURE
SINGLE FAMILY ☐ DUPLEX ☐
APARTMENTS ☐ AGRIC. ☐
COMMERCIAL ☑ INDUSTRIAL ☐

NO. OF PARKING SPACES REQUIRED NO. OF BUILDINGS NOW EXISTING
ZONE A-1-5 SETBACKS FRONT N/A SIDE REAR
IF 1 - 10 GRADE OR MORE, TOPOGRAPHIC PLOT PLAN REQUIRED. YES ☐ NO ☐ RECEIVED YES ☐ NO ☐
SETBACK ORDINANCE # OF FEET REQUIRED ON STREET
DATE 5-21-68 SIGNATURE OF LAND USE OFFICIAL

ROAD DEPARTMENT

DEDICATION REQUIRED: YES ☐ NO ☐ NO. OF FEET
CURB AND GUTTER REQUIRED: YES ☐ NO ☐ STREET
THIS ABOVE CONSTRUCTION? YES ☐ NO ☐
CAN CURB AND GUTTER FEASIBLY BE INSTALLED? YES ☐ NO ☐
HAS AN ACCEPTABLE APPLICATION BEEN MADE FOR ENCROACHMENT PERMIT FOR DRIVEWAY AND STREET IMPROVEMENT? YES ☐ NO ☐
DATE SIGNATURE OF ROAD DEPT. OFFICIAL

HEALTH DEPT.

RESIDENTIAL SEWAGE DISPOSAL
COMMERCIAL SEWAGE
FOOD ESTABLISHMENT SWIMMING POOLS PUBLIC

OTHER DEPARTMENTS

BLDG. DEPT. GRADING PERMIT REQUIRED PLAN CHECK
FLOOD CONTROL WATER POLLUTION
AIR POLLUTION DIV OF HWY

REMARKS:

YOUR PROPERTY MAY BE SUBJECT TO FLOOD. RIVERSIDE COUNTY ASSUMES NO RESPONSIBILITY IN EVENT OF FLOOD.

FORM # 284-199, 9/67

WHITE — ROAD DEPT., CANARY — FILE, PINK — APPLICANT

DEPARTMENT OF BUILDING & SAFETY — HEADQUARTERS

COUNTY OF LOS ANGELES

ESTIMATED VALUATION: 12,000.00

MECHANICAL FEES

ELECTRICAL FEES

	METER	S.P.	2.50
4	METER	S.P.	5.00
	METER	S.P.	
	METER	S.P.	
	METER	S.P.	
20	FIXTURES		3.00
2	OUTLETS		4.00
3	SUB-PANEL		3.00
	HEATER OVER 50 GAL.		
	WATER HEATER		
	SPACE HEATER		
	CONSTRUCTION FEE		
	SERVICE ENTRANCE		
	FLOOR, TO 50 SQ. FT.		
	FURNACE TO 50 SQ. FT.		
1	PERMIT FEE		1.00

PLUMBING FEES

	BUILDING SEWER	
	BUILDING SEWER PERMIT	
	VENTING	
	WATER PIPING	
	FLOOR DRAIN	
	WATER SOFTENER	
	WASHER (AUTO. TYPE)	
	GARBAGE DISPOSAL	
	LAUNDRY TRAP	
	KITCHEN SINK	
7	WATER CLOSET	7.00
3	LAVATORY	6.00
	SHOWER	1.00
	BATH TUB	
	WATER HEATER	
	SEWAGE DISPOSAL	
1	HOUSE SEWER	4.00
	GAS PIPING	
1	PERMIT FEE	2.00

175.00				3.50	22.00				

BUILDING INFORMATION

WOOD		CONCRETE		STEEL FRAME	
CONCRETE		TILE		REINFORCED	
BRICK	PANEL	VENEER	CHECK	CODE	METAL

FIREPLACE: 1ST FLOOR | 2ND FLOOR | NO. FLUES

LOT	PERMIT ISSUED BY	PERMIT USE NO.	
SET BACK	FRONT	SIDE	REAR
	45	120	22

LOT SIZE

PLAN CHECK FEE $

MECHANICAL FEE $

CONSTRUCTION FEE $ 90.50

ELECTRICAL FEE $ 31.50

PLUMBING FEE $ 22.00

TOTAL FEE $ 144.00

CASH | CHECK | M.O. | No.

SUPERVISOR

PLAN FILE # 4362

WATER SUPPLY | SEWER OR SEPTIC TANK | LEACH LINE | SEEPAGE PIT

GAL. | LEACH LINE SQ. FT. | GAL.

OWNER COLONIAL HOUSE APARTMENTS

ADDRESS 2341 2nd

TELEPHONE SAN DIEGO

OWNER

USE OF BUILDING

DATE 2-24-42

CONTRACTOR

DISTRICT

U.C.

UNITS

DESCRIPTION

STORIES 2

LEGAL DESCRIPTION Lot #5 ESTRADILLO

Land & Water Co.

PERMIT NO. 147546

SUPPLEMENT TO PERMIT NO. 44487

PERMIT DATE | INSPECTOR | GROUP | TYPE

MAP | BOOK | PAGE

RELEASE GOOD

DATE

LICENSE NO.

In accordance with Sec. 302-D of the Uniform Building Code, this permit shall expire if work is not commenced within 60 days, if work is suspended or abandoned for a period of 120 days, this permit shall automatically become null and void.

This permit is issued, and shall continue in effect, pursuant to the terms and conditions of Sec. 3090 of the Business and Professions Code and as a condition of the issuance hereof the following certificate is executed.

OWNER-BUILDER

I hereby certify that in performance of the work for which this permit is issued I shall not employ any person in any manner whatsoever so as to become subject to the Workmen's Compensation Laws of the State of California.

Owner COLONIAL HOUSE APARTMENTS

Address 2341 2nd

Telephone SAN DIEGO

CONTRACTOR

I hereby certify that in performance of the work for which this permit is issued I have complied with Title 3, Article 3, Sec. 3090 of the Labor Code, and a certificate or certified copy is on file with the

Address

Tel.

LETTER ☐ FILE ☐

DEPARTMENT OF BUILDING & SAFETY

COUNTY OF RIVERSIDE

FILE

CONSTRUCTION ESTIMATE

1st Flr.	1008	Sq. Ft. @	20.00
2nd Flr.		Sq. Ft. @	
Bsmt.		Sq. Ft. @	
Gar.		Sq. Ft. @	
Carp. Port		Sq. Ft. @	
Sun Deck		Sq. Ft. @	
Misc.		Sq. Ft. @	

ESTIMATED VALUATION $ 32,000

MECHANICAL FEES

HEAT AND COOLING		
UNITS — GAS FIRED		
UNITS — OIL FIRED		
SQ. FT. — FLOOR, CEILING, WALL		
SPECIAL EXHAUST		
BOILERS		
DUCTWORK		
REPAIR OR ALTER		
FLUE SERVICE ☐ GAS ☐ FUEL, OIL ☐		
REFRIGERATION		
AIR CONDITIONING		
VENTILATING FAN		

ELECTRICAL WORK

NO.		
	METER	
	SIGNS	
	TRANS., BELL, GAS VALVES	
4	MOTOR H.P.	2.00
4	MOTOR 3/4 H.P.	2.00
	MOTOR H.P.	
	MOTOR H.P.	
	MOTOR H.P.	
50	FIXTURES	7.00
35	OUTLETS	5.25
2	LUMINAIRE	2.00
	RANGE AND/OR OVEN	
	WATER HEATER	
	SPACE HEATER	
	CIRCUIT ADDITION POLE	
	SERVICE ENTRANCE	
	HEATH, 75 SQ. FT.	
	GARAGE 25 SQ. FT.	
1	PERMIT FEE	1.50

PLUMBING FEES

NO.		
	DRAIN, SEWER	
	REPAIR OR REPLACE	
	GENERAL	
	WATER PIPING	
	FLOOD LEVEL	
	WATER SOFTENER	
	TRAPPED FLOOR DRAIN	
	GREASE INTERCEPTOR	
	LAUNDRY TRAY	
	KITCHEN SINK	
3	WATER CLOSET	4.50
3	LAVATORY	4.50
	SHOWER	
	BATH TUB	
	WATER HEATER	
	GARBAGE DISPOSAL	
1	HOUSE TRAP	2.00
	GAS PIPING	
1	PERMIT FEE	2.00

1046					CASH	CHECK	HEAT & VENT	ELECT. FEE	PLUMB. FEE	TOTAL FEES	PLAN CHECKER
					90.50			31.50	22.00	144.00	

BUILDING INFORMATION

WOOD		CONCRETE		FIREPLACE				
OWNER'S		HIRED		CONVENTIONAL				
MASON	PLASTER	LATH	BRICK	STONE	CONCRETE	METAL	GYP.	

FOUNDATION	CUT WALL	BASE SHEATHING	SQ. FEET

TYPE	FRAMING CHECKED BY	PERMIT CASE NO.
R-1-F	BH	

	FRONT	SIDE	REAR	LOT SIZE
SET BACK	35	120	20	

PLAN CHECK FEE	$	
MECHANICAL FEE	$	
CONSTRUCTION FEE	$	90 50
ELECTRICAL FEE	$	31 50
PLUMBING FEE	$	22 00
TOTAL FEE	$	144 00

CASH	CHECK	NO.	M.O.	NO.

RECEIVED BY: Kilgore

PLAN FILE # 436 2L

WATER SUPPLY	SEPTIC TANK	LEACH LINE	SEEPAGE PIT
Lenox	GAL.	SQ. FT.	GAL.

LETTER ☐ FILE ☐

JOB ADDRESS: 5231 Jay St

OWNER: Leonard Kilgore

TYPE OF BUILDING: Private Home Addition

BLDG. PERMIT: 2-1-67

LEGAL DESCRIPTION: Lot 4-5 Estudillo

SUBDIVISION: Lenox Water Co.

TRACT: 34754

SUPPLEMENT TO PERMIT: 16017

PERMIT DATE	INSPECTOR	GROUP	TYPE
2-1-67	Sanders		

CONTRACTOR:

LICENSE TYPE:

DEPOSIT	BOND	CASH
$		

RELEASED BOND NO. / DATE

VALUATION: 2000 — 2 STORY

In accordance with Sec. 302-D of the Uniform Building Code, this permit shall expire if work is not commenced within 90 days. If work is suspended or abandoned for a period of 120 days, this permit shall automatically become null and void.

This permit is issued, and shall continue in effect, pursuant to the terms and conditions of Sec. 3800 of the Business and Professions Code and as a condition of the issuance hereof the following certificate is executed.

OWNER-BUILDER

I hereby certify that in performance of the work for which this permit is issued I shall not employ any person in any manner whatsoever so to become subject to the Workmen's Compensation Laws of the State of California.

Owner Leonard Kilgore

Address 5231 Jay St

Telephone 354-4990

CONTRACTOR

I hereby certify that in performance of the work for which this permit is issued I have complied with Title 8, Article 3, Sec. 3800 of the Labor Code, and a certificate or certified copy is on file with the Riverside County Building Department.

Contractor

Address

Tel. Lic. #

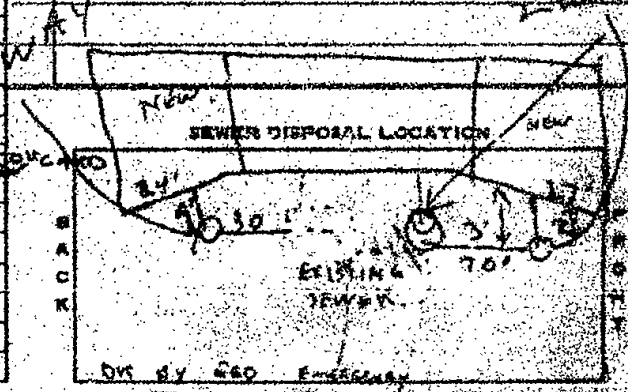
NO.	OPERATION	DATE	INSPECTOR
BUILDING APPROVALS			
1	Z-Bar Bond	5-17-67	
3	F'TGS & PRMS P/F	5-22-67	
4	Steel	5-23-67	
5	Grout Blocks		
6	Bond Beams		
6	Roof Deck	5-24-67	
7	Framing	5-26-67	
8	Vents		
	Fire Wall	6-5-67	
	P/L [illegible]		
11	Exterior Lath	6-5-67	
12	Interior Lath	6-5-67	
13	Exterior Coats	7-21-67	
14	Final	1-4-68	
PLUMBING APPROVALS			
16	Ground Plumb P/L+T	5-26-67	
18	Water Piping		
19	Sewer Piping	7-10-67	
16	Vents		
17	Sewage Disposal/Septic	4-5-67	
20	Sewer		
21	Water Heater		
22	Water Softener		
23	Water Service		
24	Gas Test SEE	PER # 151156	
25	Final	1-4-68	
ELECTRICAL APPROVALS			
26	Power Pole		
27	Conduit	5-25-67	
28	Service Entrance		
29	Wiring	5-25-67	
30	Fixtures	7-21-67	
31	Service		
32	Final	9-26-67	

NO.	OPERATION	DATE	INSPECTOR
MECHANICAL APPROVALS			
33	Ovens		
34	Plenums & Ducts		
35	Furnace Compart.		
36	Inlets & Outlets		
37	Comb. & Ref. Air		
38	Compressor		
39	Appl. Clearance		
40	Final		

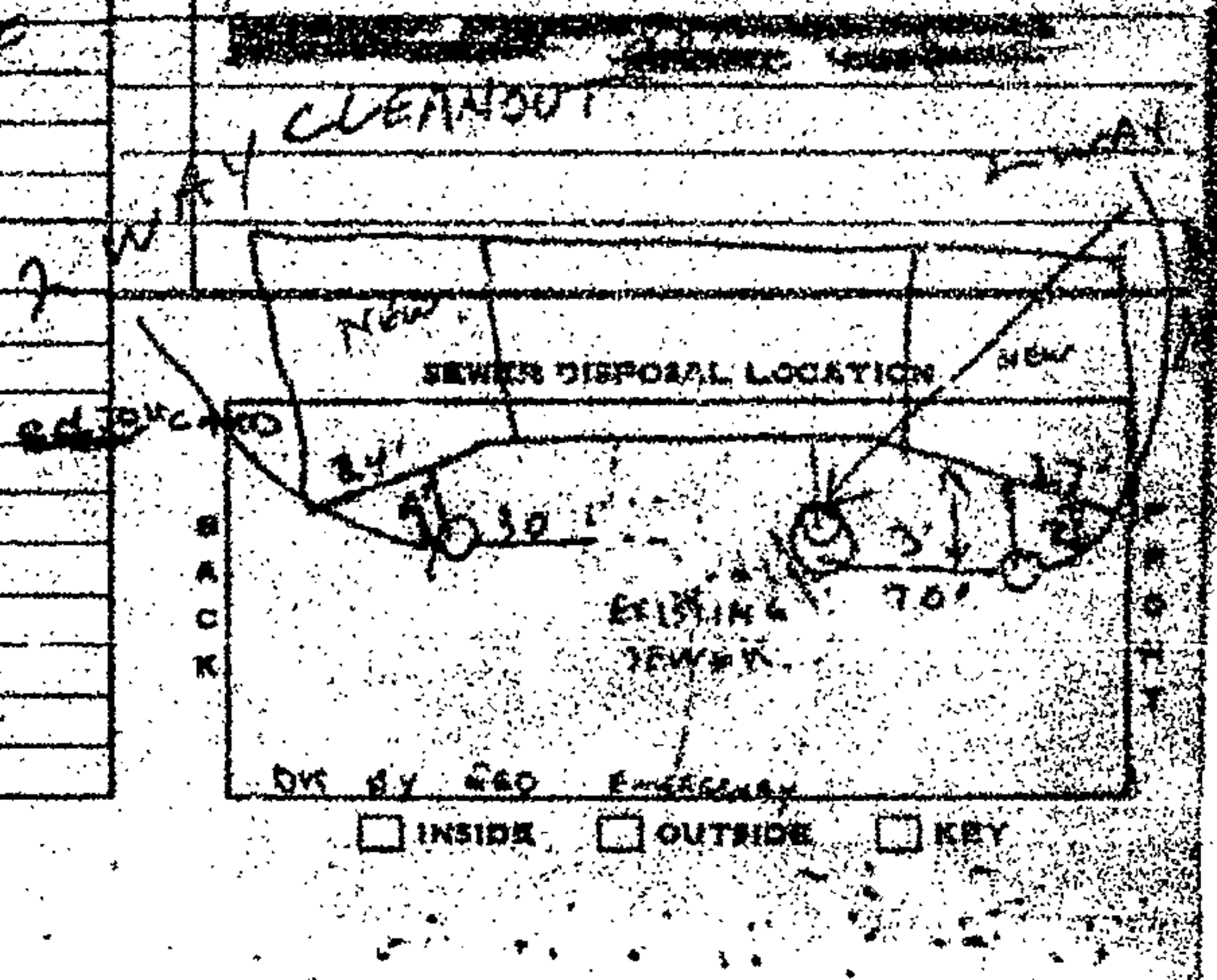
PROGRESS CHECKS

1 NO PERMIT POSTED
2 ERECT POSTED ONLY
7 CONTACT WITH CONTRACTOR IN REGARDS TO CORRECTIONS 5-12-67
21 RECHECK FOR VENT OF W/H
29 Water - 5-19-67 - Not complete
7 FRAMING OK
17 SHOWER PAN OK
17 Closet Rings ok. 7-10-67
24 PERMIT NEEDED FOR GAS TEST

CLEANOUT



☐ INSIDE ☐ OUTSIDE ☐ KEY


SEWER DISPOSAL LOCATION
EXISTING SEWER
INSIDE
OUTSIDE
KEY

Route
Land Use Div.
Road Dept.
Health Dept.
Other Dept.
Building Dept.

NOTICE: THIS IS NOT A BUILDING PERMIT

APPLICATION TO CONSTRUCT
DEPARTMENT OF BUILDING AND SAFETY
COUNTY OF RIVERSIDE

Dist. Office
Permit No.
Del. Date

OWNER

Owner Lafayette Hawley Jr. Address 3242 Jean St. Phone
Architect Wm. Mason Address 10614 Magnolia Blvd Phone TU-7-0761
Contractor M. W. Erickson & Son Address 1200 Pennsylvania Phone PO-6-2523

I (we) the undersigned, hereby certify and acknowledge that I (we) have read this application and agree that if Curb and Gutter, and Paving, and/or Dedication of right of way is required by the County of Riverside, the Riverside County Department of Building and Safety shall not make a Final Inspection until said requirements have been met. I am also aware that no work is to be done within the County R/W without an encroachment permit.

NOW, therefore, it is agreed that I (we) will not occupy said property and will not cause said property to be occupied until I (we) have complied with all laws of the County of Riverside and the State of California governing said property.

DATE 12-6-66 SIGNATURE OF OWNER

Approval by signature from the Following Departments Listed Below
Must Be Obtained Prior to the Issuing of a Construction Permit.

LAND USE DIVISION
BUILDING AND SAFETY

Location of Job 33291 Lot 4 Block F
Legal Description of Property Lot 4 of F 5 Estudillo Land & Water Co

TYPE OF CONSTRUCTION: APARTMENTS ☐ DUPLEX ☐ SINGLE FAMILY ☐ AGRIC. ☐
Var 966 USE PERMIT NO. ☐ COMMERCIAL ☒ INDUSTRIAL ☐ ALTERATIONS ☒
NO. OF SUBMITTED PLANS 4 ADDITIONAL PLOT PLANS 2
NO. OF PARKING SPACES REQUIRED 179 NO. OF BUILDINGS NOW EXISTING 1
ZONE C-1 SETBACKS FRONT 45 SIDE 1-30 REAR 75
IF 1 - 10 GRADE OR MORE, TOPOGRAPHIC PLOT PLAN REQUIRED. RECEIVED: YES NO
SETBACK ORDINANCE # OF FEET REQUIRED ON STREET
CURB AND GUTTER REQUIRED: YES ☐ NO ☒ STREET
DATE 12/12/66 SIGNATURE OF LAND USE OFFICIAL

ROAD DEPARTMENT

DEDICATION REQUIRED: YES ☐ NO ☒ NO. OF FEET
IF YES, WILL THE DEED BE SECURED WITHIN 90 DAYS PRIOR TO COMPLETION OF THE ABOVE CONSTRUCTION? YES ☐ NO ☐
CAN CURB AND GUTTER FEASIBLY BE INSTALLED? YES ☐ NO ☐
HAS AN ACCEPTABLE APPLICATION BEEN MADE FOR ENROACHMENT PERMIT AND STREET IMPROVEMENT? YES ☐ NO ☐
DATE SIGNATURE OF ROAD DEPT. OFFICIAL

HEALTH DEPT.

RESIDENTIAL SEWAGE DISPOSAL Dec 2-66
COMMERCIAL SEWAGE Connection to Sewer
FOOD ESTABLISHMENT SWIMMING POOLS, PUBLIC

BLDG. DEPT.

GRADING PERMIT REQUIRED
PLAN CHECK

OTHER DEPTS.

FLOOD CONTROL
AIR POLLUTION

FILE COPY

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

HEADQUARTERS

CONSTRUCTION ESTIMATE

	Sq. Ft. @	
	Sq. Ft. @	
	Sq. Ft. @	
	Sq. Ft. @	
	Sq. Ft. @	
	Sq. Ft. @	
Carport	Sq. Ft. @	200

ESTIMATED VALUATION $ 2200

ELECTRICAL FEES

	NO.		NO.
POLES			
SIGNS		DRAINAGE PIPING	
TEMP. SERV. 200 A. OR LESS		DRINKING FOUNTAIN	
MOTOR H.P.		URINAL	
MOTOR H.P.		WATER PIPING	
MOTOR H.P.		FLOOR DRAIN	
MOTOR H.P.		WATER SOFTENER	
MOTOR H.P.		GARBAGE GRATING (DRAIN)	
FIXTURES		GARBAGE DISPOSAL	
OUTLETS		LAUNDRY TRAY	
SWITCHBOARD		KITCHEN SINK	
		WATER CLOSET	
RANGE AND/OR OVEN		LAVATORY	
WATER HEATER		SHOWER	
SPACE HEATER		BATH TUB	
CONSTRUCTION - SALE		WATER HEATER	
SERVICE ENTRANCE		SEWAGE DISPOSAL	
RESID. 15 SQ. FT.		HOUSE SEWER	
GARAGE 15 SQ. FT.		GAS PIPING	
PERMIT FEE		PERMIT FEE	

MECHANICAL FEES

FURNACE ☐ FAN ☐ EVAP. COOL ☐ HEAT	
APPLIANCES	
FIREPLACE ☐ UNIT ☐ WALL ☐ FLOOR ☐ SUSPENDED	
GAS PIPING NO. UNIT	
GAS LINE ☐ NATURAL ☐ L.P.G. ☐ OIL	
COMPRESSOR HP	
APPLIANCE VENT	
ABSORPTION SYSTEM B.T.U.	
INCINERATOR OR BURNER ☐ INCIN. ☐ BURNER	
HEATING SYSTEM ☐ FURNACE ☐ GRAVITY	
BOILER B.T.U.	
RESIDENTIAL FEE NO. FT.	
PERMIT FEE	

PERMIT NUMBER	BLDG.	ELEC.	TOTAL FEES	HEAT & VENT FEE	PLB. GS. FEE	CONST. FEE	ELEC. FEE	PLUMB. FEE
159661			6.00		6.00			

DEPARTMENT OF BUILDING & SAFETY

COUNTY OF RIVERSIDE

FIELD

CONSTRUCTION ESTIMATE

Living	672	Sq. Ft. @	
Gar.		Sq. Ft. @	
Patio		Sq. Ft. @	
Porch		Sq. Ft. @	
Cov. P.		Sq. Ft. @	
Wall		Sq. Ft. @	
Etc.	Cabs.	Sq. Ft. @	2 Lin Ft

ESTIMATED VALUATION $ 2800

MECHANICAL FEE

HEAT SYSTEM ☐ FAN ☐ GRAV. STEAM ☐ HEAT PUMP		
APPLIANCE		
FURNACE ☐ UNIT ☐ WALL ☐ FLOOR ☐ SUSPENDED		
AIR CONDITIONING UNIT		
GAS PIPE ☐ NATURAL ☐ L.P.G. ☐ OIL		
CONDENSER ____ H.P.		
APPLIANCE VENT		
ABSORPTION SYSTEM ____ B.T.U.		
INCINERATOR DOMESTIC ☐ INDUS. ☐ CREMA.		
HEATING SYSTEM ☐ FORCED ☐ GRAVITY		
BOILER ____ B.T.U.		
RESIDENTIAL FEE ____ SQ. FT. ____ @		
PERMIT FEE		

ELECTRICAL FEES

NO.		
	POLES	
	SIGNS	
	TRANS. SIZE/ KV. T. S.U.	
	MOTOR H.P.	
	MOTOR H.P.	
	MOTOR H.P.	
	MOTOR H.P.	
	MOTOR H.P.	
2	FIXTURES	90
2	OUTLETS	90
	SUB-PANEL	
	RANGE AND/OR OVEN	
	WATER HEATER	
	SPACE HEATER	
	CONSTRUCTION POLE	
	SERVICE ENTRANCE	
	MOBILE (C SQ. FT.	
	GARAGE (C SQ. FT.	
1	PERMIT FEE	1.00

PLUMBING FEES

NO.		
	DRAINAGE PIPING	
	DRINKING FOUNTAIN	
	HOSE BIB	
	WATER PIPING	
	FLOOR DRAIN	
	WATER SOFTENER	
	WASHER (AUTO) (DISH)	
	GARBAGE DISPOSAL	
	LAUNDRY TRAY	
	SINK	
	WATER CLOSET	
	LAVATORY	
	SHOWER	
	BATH TUB	
	WATER HEATER	
	SEWAGE DISPOSAL	
	HOUSE SEWER	
	GAS PIPING	
	PERMIT FEE	

PERMIT NUMBER 159661 | REV. | VAL. | TOTAL FEES | MECH. UNIT FEE | PLB. EQ. FEE | CONST. FEE 12.00 | ELEC. FEE 1.80 | PLUMB. FEE

33	5	5	50								

LOT SIZE | LOT NO. | TRACT # VAR 496 | JOB ADDRESS 3044 SEVENTH | OWNER PATTERSON HOMES

PLAN CHECK FEE | ZONE R-1-5 | USE OF BUILDING DOUBLE ENTRANCES | DATE 7-16

MECHANICAL FEE — | CHECKED BY B.W. | SUBDIVISION CAN JACINTO | DISTRICT T/K | P.C. 32-40 | UNITS 1 | VALUATION 2800. | APPEAL Z

CONSTRUCTION FEE 12.00 | GROUP D | TYPE V | LEGAL DESCRIPTION LOT 5 IN ESTUDILLO

ELECTRICAL FEE 1.80 | SPEC. USE | LOT NO. 1 IN BLK B

PLUMBING FEE — | PLAN ENGINEER | MAPS | BOOK | PAGE | PLAN FILE # 491H | FINAL DATE 8-6-68 | INSPECTION Palance

TOTAL FEES $ ~~13.80~~ 12.00

CASH | CHECK ✓ | M.O. | N.C.

RECEIVED BY C. Allen | SEWAGE SYSTEM | LL

INFORMATION

4 Units 3 Bldgs.
Corr. call
OK

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 90 DAYS. CESSATION OF WORK FOR 120 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID.

I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA. I ALSO AGREE TO CARRY COMPENSATION INSURANCE UPON MY EMPLOYEES. COMPLIANCE WITH LAWS OF THE STATE OF CALIFORNIA COVERING CONTRACTORS IS ALSO GUARANTEED.

OWNER | CONTRACTOR

ADDRESS 3044 Seventh St. | ADDRESS

TEL. NO. 625-4-2933 | TEL. NO.

LICENSE NO.

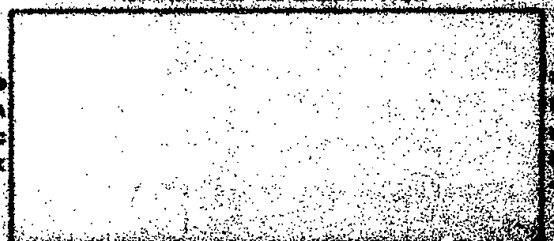
BA-208 11/67

	INSPECTIONS	DATE	INSPECTOR
	PLUMBING APPROVALS		
1	Soil Stack	4-5-68	[illegible]
2	Vent & Flue		
3	Steel	4-13-68	[illegible]
4	Water Heater Gas		
5	Sand Beams		
6	Roof Drain	4-30-68	[illegible]
7	Flooring	5-13-68	[illegible]
8	Water		
9	Garage Fire Wall		
	Fireplace F/C ☐ T/G ☐		
11	Exterior Lath	6-14-68	[illegible]
12	Interior Lath NONE		
13	Exterior Grade	8-6-68	[illegible]
14	Final	8-6-68	[illegible]
	PLUMBING APPROVALS		
15	Ground Plumb		
16	Water Piping		
17	Rough Plumb		
18	Vents		
19	Sewage Disposal		
20	Sewer		
21	Water Heater		
22	Water Softener		
23	Water Service		
24	Gas Test		
25	Final		
	ELECTRICAL APPROVALS		
26	Power Pole		
27	Conduit	6-13-68	[illegible]
28	Service Entrance 60 AMP	6-13-68	[illegible]
29	Wiring	6-13-68	[illegible]
30	Fixtures	8-6-68	[illegible]
31	Service	8-6-68	[illegible]
32	Final	8-6-68	[illegible]

NO.	INSPECTIONS	DATE	INSPECTOR
	MECHANICAL APPROVALS		
33	Ventilation System		
34	Flooring & Ducts		
35	Furnace Cooper		
36	Inlets & Outlets		
37	Combustion Air		
38	Compressor		
39	Appl. Clearance		
40	Fire Damper		
41	Smoke Detection Device		
42	Commercial Hood		
43	Final		
	PROGRESS CHECKS		

Yard ____ Pit ____ Lifts ____

SEWER DISPOSAL LOCATION



☐ Septic ☐ Sewerage ☐ Well

Trans.
Land Use Div.
Road Dept.
Health Dept.
Other Local
Building Dept.

NOTICE: THIS IS NOT A PERMIT

APPLICATION TO CONSTRUCT
DEPARTMENT OF BUILDING AND SAFETY
COUNTY OF RIVERSIDE

Dist. Office: San Jacinto
Permit No.
Oct. Date

Owner	Contractor
Address	Address
City	City
Phone	Phone

I (we) the undersigned, hereby certify and acknowledge that I (we) have read the application and agree that if Curb and Gutter, and Paving, and/or Dedication of right of way is required by the County of Riverside, the Riverside County Department of Building and Safety shall not make a final inspection until said requirements have been met. I am also aware that no work is to be done within the County R/W without an encroachment permit.

NOW, THEREFORE, it is agreed that I (we) will not occupy said property and will not cause said property to be occupied until I (we) have complied with all laws of the County of Riverside and the State of California governing said property.

DATE 4-10-67 SIGNATURE OF OWNER

Approval by Signature from the Following Departments Listed Below Must Be Obtained Prior to the Issuing of a Construction Permit.

LAND USE DIVISION BUILDING AND SAFETY

Location of Job 39-245 Seven Oaks Rd
Legal Description of Property

NO. OF SUBMITTED PLANS
TYPE OF CONSTRUCTION
ADDITIONAL PLOT PLANS
CASE NO. Var 496
NO. OF PARKING SPACES REQUIRED NO. OF BUILDINGS NOW EXISTING 1
ZONE R-1 SETBACKS FRONT 50' SIDE 10' REAR 50'
IF 1 - 10 GRADE OR MORE, TOPOGRAPHIC PLOT PLAN REQUIRED. YES ☐ NO ☐ RECEIVED YES ☐ NO ☐
SETBACK ORDINANCE # 348 MET REQUIRED ON STREET
DATE 4-12-67 SIGNATURE OF LAND USE OFFICIAL

USE OF STRUCTURE
SINGLE FAMILY ☐ DUPLEX ☐
APARTMENTS ☐ AGRIC. ☐
COMMERCIAL ☐ INDUSTRIAL ☐
ALTERATIONS ☐

ROAD DEPARTMENT

DEDICATION REQUIRED: YES ☐ NO ☐ NO. OF FEET
CURB AND GUTTER REQUIRED: YES ☐ NO ☐ STREET
THE ABOVE CONSTRUCTION? YES ☐ NO ☐
CAN CURB AND GUTTER FEASIBLY BE INSTALLED? YES ☐ NO ☐
HAS AN ACCEPTABLE APPLICATION BEEN MADE FOR ENCROACHMENT PERMIT FOR DRIVEWAY AND STREET IMPROVEMENT? YES ☐ NO ☐
DATE SIGNATURE OF ROAD DEPT. OFFICIAL

HEALTH DEPT.

RESIDENTIAL SEWAGE DISPOSAL
COMMERCIAL SEWAGE
FOOD ESTABLISHMENT SWIMMING POOLS PUBLIC

OTHER DEPARTMENTS

BLDG. DEPT. GRADING PERMIT REQUIRED PLAN CHECK
FLOOD CONTROL WATER POLLUTION
AIR POLLUTION DIV. OF HWY.

REMARKS:

YOUR PROPERTY MAY BE SUBJECT TO FLOOD. RIVERSIDE COUNTY ASSUMES NO RESPONSIBILITY IN EVENT OF FLOOD.

FORM 284-199, 9/67

WHITE — ROAD DEPT. CANARY — FILE. PINK — APPLICANT

DEPARTMENT OF BUILDING & SAFETY

COUNTY OF RIVERSIDE

HEADQUARTERS

CONSTRUCTION ESTIMATE

1st Fl.	3417 Sq. Ft.	@ 10.00	24,670
2nd Fl.	Sq. Ft.	@	
Fur.	Sq. Ft.	@	
Gar.	Sq. Ft.	@	
Car P.	Sq. Ft.	@	
Wall	Sq. Ft.	@	
	Sq. Ft.	@	

ESTIMATED VALUATION $24,670

MECHANICAL FEES

HEAT SYSTEM: ☑ FAN ☐ EVAP. COOL ☐ GRAV.	6	00
APPLIANCE		
FURNACE ☐ UNIT ☐ WALL ☐ FLOOR ☐ SUSPENDED		
AIR HANDLING UNIT		
GAS PIPE ☑ NATURAL ☐ L.P.G. ☐ OIL		
COMPRESSOR 2-3 HP	8	00
APPLIANCE VENT		
ADSORPTION SYSTEM ____ B.T.U.		
REFRIGERATION MACHINE ☐ HERM. ☐ OPEN		
HEATING WATER ☑ BOILER ☐ HEATER 2-180,000	8	00
BOILER ____ B.T.U.		
PERMIT FEE	3	00

ELECTRICAL FEES

NO.			
	POLES		
	SIGNS		
	TRANS. AND/OR M. V. SIZE		
	MOTOR H.P.		
	MOTOR H.P.		
	MOTOR H.P.		
	MOTOR H.P.		
	MOTOR H.P.		
1	SERVICE ENTRANCE	1	25
1542	RESID. 1¢ SQ. FT.	24	65
	GARAGE ½¢ SQ. FT.		
1	PERMIT FEE	3	00

PLUMBING FEES

NO.			
	DRAINAGE PIPING		
1	DRINKING FOUNTAIN	1	50
	URINAL		
	WATER PIPING		
	FLOOR DRAIN		
	WATER SOFTENER		
	WARMER (AUTO) (DISH)		
	GARBAGE DISPOSAL		
	LAUNDRY TRAY		
6	SPRINKLER SYS.	9	00
2	WATER CLOSET	3	00
2	LAVATORY	3	00
	SHOWER		
	BATH TUB		
1	WATER HEATER	1	50
1	SEWAGE DISPOSAL	5	00
	HOUSE SEWER		
1	GAS PIPING	1	50
1	PERMIT FEE	2	00

BUILDING NUMBER	MECH.	ELEC.	TOTAL FEES	HEAT & VENT FEE	PLN. EX. FEE	CONST. FEE	ELEC. FEE	PLUMB. FEE
182883			169.00	25.00	—	89.00	28.00	26.50

M.T. BOOK	LOT BLOCK	USE #	JOB ADDRESS	OWNER	DATE
60' x 100'	N 10th Arrega	PU 225	39241 - 7th St	Colonial Conv. Hosp.	8/3/70

PLAN CHECK FEE $	ZONE	USE OF BUILDING						
	M-1-5	Medical Offices						
MECHANICAL FEE $ 25.00	CHECKED BY	COMMUNITY	DISTRICT	P.E.	UNITS	VALUATION	OFFICE
	J.R.	San Jacinto	"H"	14		$24,670.00	H
CONSTRUCTION FEE $ 89.00	GROUP	TYPE	LEGAL DESCRIPTION	PERMIT NUMBER
	V-2	V	Lot #5, Estudillo Land & Water Company	182883
ELECTRICAL FEE $ 28.00	EXIST. USE			SUPP. TO PERMIT
PLUMBING FEE $ 26.50	PLAN CHECKER	BOND #	BOND	CASH	PLAN FILE #	FINAL DATE	INSPECTOR
	Hampton				2068		

TOTAL FEES $ 169.00

CASH ____ CHECK ____ M.O. ____ M.C. ____

EXAMINED BY ____ SEWAGE SYSTEM ____

NAME OF CONSTRUCTION LENDER

BANK ADDRESS

CITY ____ STATE ____

NO LENDER INVOLVED — INFORMATION

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 60 DAYS. CESSATION OF WORK FOR 120 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID.

I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA. I ALSO AGREE TO CARRY COMPENSATION INSURANCE UPON MY EMPLOYEES. COMPLIANCE WITH LAWS OF THE STATE OF CALIFORNIA COVERING CONTRACTORS IS ALSO GUARANTEED.

OWNER ____

CONTRACTOR Ron Peck

ADDRESS ____

ADDRESS 4134 E. Florida Ave.

TEL. NO. ____

TEL. NO. Hemet 658-3661

SIGNATURE ____

LICENSE NO. 225217

DEPARTMENT OF BUILDING & SAFETY

COUNTY OF RIVERSIDE

CONSTRUCTION ESTIMATE

1st Fl.	2562	Sq. Ft.	360
2nd Fl.		Sq. Ft.	
Por.		Sq. Ft.	
Gar.		Sq. Ft.	
Cov P.		Sq. Ft.	
Wall		Sq. Ft.	
		Sq. Ft.	

ESTIMATED VALUATION $ 24,600.00

MECHANICAL FEES

HEAT SYSTEM ☐ FAN ☐ EVAP. COOL ☐ DUCT		$ 4.00
APPLIANCES		
FURNACE ☐ UNIT ☐ WALL ☐ FLOOR ☐ SUSPENDED		
AIR CONDITIONING UNIT		
GAS PIPING ☐ NATURAL ☐ L.P.G. ☐ OIL		
VENTILATION	HP	$ 2.00
APPLIANCE VENT		
REFRIGERATION SYSTEM	B.T.U.	
INCINERATOR DOMESTIC ☐ HOTEL ☐ COMM.		
HEATING SYSTEM ☐ FORCED ☐ GRAVITY	$ 20.00/ton	$ 20.00
COOLING	B.T.U.	
PERMIT FEE		3.50

ELECTRICAL FEES

NO.			
	POLES		
	SIGNS		
	TRANS. MBR/ SER. V. SYS.		
	MOTOR	H.P.	
	MOTOR	H.P.	
	MOTOR	H.P.	
	MOTOR	H.P.	
	MOTOR	H.P.	
	FIXTURES		
	OUTLETS		
	SUB-PANEL		
	RANGE AND/OR OVEN		
	WATER HEATER		
	SPACE HEATER		
	CONSTRUCTION POLE		
1	SERVICE ENTRANCE	1	4.25
22	RESID. 1¢ SQ. FT.	24	4.25
	GARAGE 1¢ SQ. FT.		
1	PERMIT FEE	3.50	1

PLUMBING FEES

NO.			
	DRAINAGE PIPING		
1	DRINKING FOUNTAIN	1	4.25
	URINAL		
	WATER PIPING		
	FLOOR DRAIN		
	[illegible] (10 SM)		
	GARBAGE DISPOSAL		
	LAUNDRY TRAY		
6	BARBER SINK	6	4.25
3	WATER CLOSET	3	4.25
2	LAVATORY	2	4.25
	SHOWER		
	BATH TUB		
1	WATER HEATER	1	4.25
1	SEWAGE DISPOSAL	5	4.25
	HOUSE SEWER		
1	GAS PIPING	1	4.25
1	PERMIT FEE	2	3.50

PERMIT NUMBER 182883 | BLDG. | ELEC. | TOTAL FEES $167.40 | HEAT & VENT FEE $6.00 | PLB. EN. FEE $1.25 | COUNTY FEE $89.00 | ELEC FEE $44.25 | PLUMB. FEE $26.50

LOT | BLOCK | TRACT | LOT SIZE | USE P | JOB ADDRESS 3244 Tyler St | OWNER Investment Corp. Hosp.

PLAN CHECK FEE $ [illegible] | ZONE R-1-5 | USE OF BUILDING Medical Offices | DATE 9-16

MECHANICAL FEE $ 2.00 | CHECKED BY J.R. | COMMUNITY Riverside | DISTRICT H | P.C. | UNITS | VALUATION $24,600.00 | OFFICE H

CONSTRUCTION FEE $ 89.00 | GROUP F-2 | TYPE V | SPEC. INSP. | LEGAL DESCRIPTION Lot #5, E. Hillside Land & Water Company | PERMIT NUMBER 182883 | SUPP. TO PERMIT

ELECTRICAL FEE $ 44.25 | PLAN CHECKED Raymond | BOND $ | BOND | CASH | PLAN FILE 2068 | FINAL DATE 2-5-71 | INSPECTOR Palmer-Gr

PLUMBING FEE $ 26.50

TOTAL FEES $167.40

CASH | CHECK | M.O. | N.C.

CREDITED BY | SEWAGE SYSTEM

NAME OF CONSTRUCTION LENDER

BRANCH OFFICE

ADDRESS

CITY | STATE

NO LENDER INVOLVED

INFORMATION

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 90 DAYS. CESSATION OF WORK FOR 120 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID.

I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA. I ALSO AGREE TO CARRY COMPENSATION INSURANCE UPON MY EMPLOYEES. COMPLIANCE WITH LAWS OF THE STATE OF CALIFORNIA COVERING CONTRACTORS IS ALSO GUARANTEED.

OWNER

ADDRESS

TEL. NO.

CONTRACTOR [illegible]

ADDRESS 4134 [illegible]

TEL. NO. [illegible]

SIGNATURE DATE 2-17-71

NO.	OPERATION	DATE	INSPECTOR
	BUILDING APPROVALS		
1	Soil Stack	8-27-70	Reference-Q
2	Flue & Fire		
3	Steel		
4	Grout Blocks		
5	Bond Beams		
6	Roof Deck	9-8-70	Reference
7	Framing	9-8-70	Reference
8	Vents	9-8-70	Reference-Q
9	Garage Fire Wall		
10	Fireplace F		
11	Exterior Lath	9/21/70	Reference-Q
12	Interior Lath		
13	Exterior Grade	2-2-71	Reference-Q
14	Final		
	PLUMBING APPROVALS		
15	Ground Work	8-5-70	Reference-Q
16	Water Piping	9-8-70	Reference
17	Rough Fixes	9-8-70	Reference
18	Vents	9-8-70	Reference-Q
19	Sewage Disposal		
20	Sewer	10-16-70	Reference-Q
21	Water Heater	2-2-71	Reference-Q
22	Water Softener		
23	Water Service	2-2-71	Reference-Q
24	Gas Test	11-23-70	Reference-Q
25	Final	2-2-71	Reference-Q
	ELECTRICAL APPROVALS		
26	Power Pole		
27	Conduit	11-23-70	Reference-Q
28	Service Entrance		
29	Wiring YATES	9-8-70	Reference
30	Fixtures	11-23-70	Reference-Q
31	Service		
32	Final		

NO.	OPERATION	DATE	INSPECTOR
	MECHANICAL APPROVALS		
33	Ventilation System		
34	Plenums & Ducts	9-8-70	Reference
35	Furnace Compart.		
36	Inlets & Outlets		
37	Combustion Air		
38	Compressor		
39	Appl. Clearance		
40	Fire Damper		
41	Smoke Detection Device		
42	Commercial Hood		
43	Final	2-2-71	Reference-Q
	PROGRESS CHECKS		
27	KNOCK OUT OK-9-17-70 Reference-Q		

Tank PN L Line

SEWER DISPOSAL LOCATION



☐ INSIDE ☐ OUTSIDE ☐ KEY

NOTICE: THIS IS NOT A BUILDING PERMIT

Dist. Office A

Permit No. 18284

APPLICATION TO CONSTRUCT
DEPARTMENT OF BUILDING AND SAFETY
COUNTY OF RIVERSIDE

OWNER

Owner Colonial Land North, A Calif. Ltd.
Address 3743 Jurupa St.
City San Jacinto
Phone

ARCHITECT

Architect Hales Nielsen & Nielsen
Address
City
Phone

CONTRACTOR

Contractor Don Fisher
Address 2191 E. Florida
City Hemet, Calif.
Phone 7-5-2004

I (we) the undersigned, hereby certify and acknowledge that I (we) have read the application and agree that if Curb and Gutter, and Paving, and/or Dedication of right of way is required by the County of Riverside, the Riverside County Department of Building and Safety shall not make a Final Inspection until said requirements have been met. I am also aware that no work is to be done within the County R/W without an encroachment permit.

NOW, therefore it is agreed that I (we) will not occupy _____ city and will not cause said property to be occupied until I (we) have complied with all laws of the County of Riverside and the State of California governing said property.

DATE 7/12/70 SIGNATURE OF OWNER AND/OR AGENT

Approval by Signature from the Following Departments Listed Below Must Be Obtained Prior to the Issuing of a Construction Permit.

PLANNING AND LAND USE DEPARTMENT

LOCATION OF JOB 29730 - 7th St. 25-3E

LEGAL DESCRIPTION OF PROPERTY Lot 5, Extyo Land & Water Co.

COMMUNITY Hemet

NO. OF SUBMITTED PLANS 3

CASE NO. ZPM 225

NO. OF PARKING SPACES REQUIRED 8-13

ZONE M-S SETBACKS FRONT 50' SIDE BEAR 5 Setbacks

GRADING PERMIT REQUIRED YES ☐ NO ☐ N/R

SETBACK ORDINANCE # _____ OF _____ FEET REQUIRED ON _____

DATE 7-21-70 SIGNATURE OF LAND USE OFFICIAL

USE OF STRUCTURE

SINGLE FAMILY DWELLING ☐ DUPLEX ☐

APARTMENTS ☐ AGRIC. ☐

COMMERCIAL ☐ INDUSTRIAL ☐

ALTERATIONS ☐

TYPE OF CONSTRUCTION Tilt-up Rehabilitation Bldg.

NO. OF BUILDINGS INCLUDED IN THIS PERMIT 10 ☐

ROAD DEPARTMENT

DEDICATION REQUIRED: YES ☐ NO ☐ NO. OF FEET _____

CURB AND GUTTER REQUIRED: YES ☐ NO ☐ _____ STREET

THE ABOVE CONSTRUCTION? YES ☐ NO ☐ Check Card #2 P.M. 225

CAN CURB AND GUTTER FEASIBLY BE INSTALLED? YES ☐ NO ☐

HAS AN ACCEPTABLE APPLICATION BEEN MADE FOR ENCROACHMENT PERMIT FOR DRIVEWAY AND STREET IMPROVEMENT? YES ☐ NO ☐

DATE 7-21-70 SIGNATURE OF ROAD DEPT. OFFICIAL John Byrd

HEALTH DEPT.

SWIMMING POOLS PUBLIC _____

SEWAGE DISPOSAL Connection to Sewer July 21 70

FOOD ESTABLISHMENT _____

OTHER REQUIREMENTS

WATER POLLUTION _____

FLOOD CONTROL _____

AIR POLLUTION _____

DEV. SERVICES Dist. Engr. David Fisher

REMARKS OK by Planning 7-21-70

YOUR PROPERTY MAY BE SUBJECT TO FLOOD. RIVERSIDE COUNTY ASSUMES NO RESPONSIBILITY IN EVENT OF FLOOD.

DEPARTMENT OF BUILDING & SAFETY

COUNTY OF RIVERSIDE

HEADQUARTERS

CONSTRUCTION ESTIMATE

1st Fl.	2807	Sq. Ft. @ 10.00	28,070
2nd Fl.		Sq. Ft. @	
Por.		Sq. Ft. @	
Gar.		Sq. Ft. @	
Car P.		Sq. Ft. @	
Wall		Sq. Ft. @	
		Sq. Ft. @	

ESTIMATED VALUATION $ 25,690

MECHANICAL FEES

HEAT SYSTEM ☐ FAN ☐ EVAP. COOL ☐ HOOD	2	2.00
APPLIANCE		
FURNACE ☐ WALL ☐ FLOOR ☐ UNDERFIRED		
AIR HANDLING UNIT		
GAS PIPE ☐ NATURAL ☐ L.P.G. ☐ OIL		
COMPRESSOR 2 HP	2	2.00
APPLIANCE VENT		
ABSORPTION SYSTEM P.T.U.		
INCINERATOR DOMESTIC ☐ INDUS. ☐ COMM.		
HEATING SYSTEM ☐ FORCED ☐ GRAVITY 150,000	5	5.00
BOILER S.T.U.		
PERMIT FEE	3	3.00

ELECTRICAL FEES

NO.			
	POLES		
	SIGNS		
	TRANS. AND/OR G. T. CAP.		
	MOTOR H.P.		
	MOTOR H.P.		
	MOTOR H.P.		
	MOTOR H.P.		
	MOTOR H.P.		
	FIXTURES		
	OUTLETS		
	SUB-PANEL		
1	W.H.	5	00
	RANGE AND/OR OVEN		
	WATER HEATER		
	SPACE HEATER		
1	CONSTRUCTION POLE	2	00
1	SERVICE ENTRANCE	1	25
2560	AREA 10 SQ. FT.	25	60
	GARAGE 5 SQ. FT.		
1	PERMIT FEE	3	00

PLUMBING FEES

NO.			
	DRAINAGE PIPING		
1	DRINKING FOUNTAIN	1	50
	URINAL		
	WATER PIPING		
1	FLOOR DRAIN	1	50
	WATER SOFTENER		
	WASHER (CUPS) (DISH)		
	GARBAGE DISPOSAL		
1	LAUNDRY TRAY Rep	1	50
	KITCHEN SINK		
3	WATER CLOSET	3	00
7	LAVATORY	10	50
2	SHOWER	3	00
	BATH TUB		
1	WATER HEATER	1	50
	SEWAGE DISPOSAL		
1	HOUSE SEWER	5	00
1	GAS PIPING	1	50
1	PERMIT FEE	2	00

T182884 | TOTAL FEES 178.35 | HEAT & VENT FEE 19.00 | PLAN CK. FEE | CONST. FEE 91.50 | ELEC. FEE 36.25 | PLUMB. FEE 31.00

SEC. NO. | LOT NOS. | ABS #

PLAN CHECK FEE $

MECHANICAL FEE $ 19.00

CONSTRUCTION FEE $ 91.50

ELECTRICAL FEE $ 36.25 + 29.25

PLUMBING FEE $ 31.00

TOTAL FEES $ 178.35

CASH | CHECK | M.O. | N.C.

RECEIVED BY Tenpleton

SEWAGE SYSTEM Sewer

NAME OF CONSTRUCTION LENDER

BRANCH OFFICE

ADDRESS

CITY | STATE

NO LENDER INVOLVED INFORMATION

Lot 225 Acres

ZONE A-1-5

CHECKED BY JR.

GROUP R-2 | TYPE V

FIRE ZONE

PLAN CHECKER R H

LOT SIZE

ADDRESS 39241 Zinfandel St

OWNER Colonial Conv. Hosp. Inc.

USE OF BUILDING Therapeutic & Rehabilitative Center

DATE 8-5-72

COMMUNITY San Jacinto | DISTRICT H | P.C. HH | UNITS | VALUATION 25,690.00 | OFFICE H

LEGAL DESCRIPTION Lots Esterillo L + N Co

PERMIT NUMBER 182884

SUPP. TO PERMIT

BOND # | BOND | CASH | PLAN FILE # | FINAL DATE | INSPECTOR

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 90 DAYS, CESSATION OF WORK FOR 120 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID.

I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA. I ALSO AGREE TO CARRY COMPENSATION INSURANCE UPON MY EMPLOYEES. COMPLIANCE WITH LAWS OF THE STATE OF CALIFORNIA COVERING CONTRACTORS IS ALSO GUARANTEED.

OWNER

CONTRACTOR Allen Lund

ADDRESS

ADDRESS 47311 E. Florinda

ADDRESS Same

CITY Hemet

TEL. NO.

TELEPHONE NO. 658-2001

LICENSE NO. 226919

DEPARTMENT OF BUILDING & SAFETY

COUNTY OF RIVERSIDE

FIELD

CONSTRUCTION ESTIMATE

1st Flr.	Sq. Ft. @	
2nd Flr.	Sq. Ft. @	
Fdn.	Sq. Ft. @	
Gar.	Sq. Ft. @	
Cov. Pr.	Sq. Ft. @	
Walls	Sq. Ft. @	
	Sq. Ft. @	

ESTIMATED VALUATION $

MECHANICAL FEES

ELECTRICAL FEES

NO.		
	POLES	
	SIGNS	
	TRANS. AMPS OR K.V.A.	
	MOTOR H.P.	
	MOTOR H.P.	
	MOTOR H.P.	
	MOTOR H.P.	
	MOTOR H.P.	
	FIXTURES	
	OUTLETS	
	SUB-PANEL	
	RANGE AND/OR OVEN	
	WATER HEATER	
	SPACE HEATER	
	CONSTRUCTION POLE	
	SERVICE ENTRANCE	
	REWIRE, 1ST 50 SQ. FT.	
	GARAGE 1ST 50 SQ. FT.	
	PERMIT FEE	

PLUMBING FEES

NO.		
	SEWER PIPING	
1	DRINKING FOUNTAIN	1
	URINAL	
	WATER PIPING	
1	FLOOR DRAIN	1
	REPAIR OR ALTERATION	
	OTHER (NOT LISTED)	
	GARBAGE DISPOSAL	
1	LAUNDRY TRAY	1
	KITCHEN SINK	
2	WATER CLOSET	2
1	LAVATORY	1
2	SHOWER	2
	BATH TUB	
1	WATER HEATER	1
	SEWAGE DISPOSAL	
1	HOUSE SEWER	1
1	GAS PIPING	1
1	PERMIT FEE	1

182884 | MECH. | ELEC. | PERMIT FEE | MECH. & MISC. FEE | PLN. CK. FEE | CONST. FEE | ELEC. FEE | PLUMB. FEE

LOT | BLOCK | TRACT | OWNER

Diamond Canyon Hosp. Inc.

LOCATION | DISTRICT | U.S.E. | UNITS | VALUATION | OFFICE

14

PERMIT NUMBER

182884

APPL. TO PERMIT

182278

TOTAL FEES $

GAS	SEWER	W.O.	M.C.
WATER ☐	SEWER SYSTEM		

NAME OF CONTRACTOR OR OWNER

STREET OR P.O.

CITY | STATE

OR OWNER-BUILDER INFORMATION

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 90 DAYS. CESSATION OF WORK FOR 180 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID.

I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA. I ALSO AGREE TO CARRY COMPENSATION INSURANCE UPON MY EMPLOYEES. COMPLIANCE WITH LAWS OF THE STATE OF CALIFORNIA COVERING CONTRACTORS IS ALSO GUARANTEED.

OWNER

ADDRESS

CITY

TEL. NO.

CONTRACTOR

ADDRESS

TEL. NO.

LIC. NO.

23717

NO.	OPERATION	DATE	INSPECTOR
	BUILDING APPROVALS		
1	Set Back	8-5-70	P. Blanco
2	Piers & Piers		
3	Roof		
4	Crawl Spaces		
5	Sand Beams		
6	Roof Deck	9-1-70	Blanco
7	Framing	9-5-70	P. Blanco
8	Piers	5-8-70	
9	Garage Fire Wall		
10	Fireplace P.O. ☐ T.O. ☐		
11	Exterior Lath	9-21-70	P. Blanco
12	Interior Lath		
13	Exterior Stairs	8-2-71	P. Blanco
14	Final		
	PLUMBING APPROVALS		
15	Ground Plumb	8-5-70	P. Blanco
16	Water Piping	9-8-70	P. Blanco
17	Rough Plumb	9-8-70	P. Blanco
18	Shower	9-8-70	P. Blanco
19	Sewage Disposal		
20	Sewer	12-16-70	P. Blanco
21	Water Heater	2-2-71	P. Blanco
22	Water Softener		
23	Water Service	2-2-71	P. Blanco
24	Gas Test	1-22-70	P. Blanco
25	Final	2-2-71	P. Blanco
	ELECTRICAL APPROVALS		
26	Power Pole	8-10-70	P. Blanco
27	Conduit	9-29-70	
28	Service Entrance		
29	Rough YATES	9-8-70	P. Blanco
30	Fixtures	11-23-70	
31	Service		
32	Final		

NO.	OPERATION	DATE	INSPECTOR
	MECHANICAL APPROVALS		
33	Ventilation System		
34	Flumes & Ducts	9-5-70	P. Blanco
35	Furnace Compart.		
36	Inlets & Outlets		
37	Combustion Air		
38	Compressor		
39	Appl. Clearance		
40	Fire Damper		
41	Smoke Detection Device		
42	Commercial Hood		
43	Final	2-2-71	P. Blanco
	PROGRESS CHECKS		
	Ok to Wrap - 2-10-70 P. Blanco		

Tank Pit L Line

SEWER DISPOSAL LOCATION

MARK

NORTH

☐ INSIDE ☐ OUTSIDE ☐ KEY

NOTICE: THIS IS NOT A BUILDING PERMIT

APPLICATION TO CONSTRUCT
DEPARTMENT OF BUILDING AND SAFETY
COUNTY OF RIVERSIDE

Dist. Office 4

Permit No. 182888

OWNER

Or w Colonial Gate Homes — Architect Mike Wood — Contractor Don Peel

Address 3242 Tyler St — Address [illegible] — Address 4131 E. Florida

City San Jacinto — City — City Hemet, Calif.

Phone — Phone — Phone 658-7001

I (we) the undersigned, hereby [illegible] acknowledge(s) that I (we) have read the application and agree that if Curb and Gutter, and [illegible] by the County of Riverside, the Riverside County Department of Building and Safety [illegible] ments have been met. I am also aware that no work is to be done within the County R/W [illegible] without an encroachment permit.

NOW, therefore, it is agreed that I (we) will not occupy said property and will not cause said property to be occupied until I (we) have complied with all laws of the County of Riverside and the State of California governing said property.

DATE 7/10/70 SIGNATURE OF OWNER AND/OR AGENT [signature]

Approval by Signature from the Following Departments Listed Below Must Be Obtained Prior to the Issuing of a Construction Permit.

LAND USE DIVISION BUILDING AND SAFETY

LOCATION OF JOB 3241 (3430) 7th St.

LEGAL DESCRIPTION OF PROPERTY Lot #5 Estudillo [illegible]

COMMUNITY San Jacinto

NO. OF SUBMITTED PLANS 3 TYPE OF CONSTRUCTION V-B

CASE NO. [illegible] ZONE R-1

NO. OF PARKING SPACES REQUIRED 2 NO. OF BUILDINGS NOW EXISTING 0

ZONE R-1-5 SETBACKS FRONT 50 SIDE 10' REAR 10'

GRADING PERMIT REQUIRED YES ☐ NO ☐

FLOODWAY ORDINANCE # [illegible] OF N/A SET REQUIRED ON [illegible] STREET

DATE 7-22-70 SIGNATURE OF LAND USE OFFICIAL [signature]

USE OF STRUCTURE

SINGLE FAMILY	☐	DUPLEX	☐
APARTMENTS	☐	AGRIC.	☐
COMMERCIAL	☐	INDUSTRIAL	☐
		ALTERATIONS	☐

See Remarks

ROAD DEPARTMENT

DEDICATION REQUIRED: YES ☐ NO ☐ NO. OF FEET [illegible]

CURB AND GUTTER REQUIRED: YES ☐ NO ☐ [illegible] STREET

THE ABOVE CONSTRUCTION? YES ☐ NO ☐ Check Cond 2 P.U. 225 -

CAN CURB AND GUTTER FEASIBLY BE INSTALLED? YES ☐ NO ☐

HAS AN ACCEPTABLE APPLICATION BEEN MADE FOR ENCROACHMENT PERMIT FOR DRIVEWAY AND STREET IMPROVEMENTS? YES ☐ NO ☐

DATE 7-21-70 SIGNATURE OF ROAD DEPT. OFFICIAL John M Byrd

HEALTH DEPT.

SWIMMING POOLS PUBLIC Operation & Sanitation July 21-70

SEWAGE DISPOSAL

FOOD ESTABLISHMENT [signature]

OTHER DEPARTMENTS

WATER POLLUTION

FLOOD CONTROL

AIR POLLUTION

CITY OR HWY Riverside County [signature]

REMARKS OK by Planning Commission 7-28-70

YOUR PROPERTY MAY BE SUBJECT TO FLOOD. RIVERSIDE COUNTY ASSUMES NO RESPONSIBILITY IN EVENT OF FLOOD.

284-175, 8/16/69

WHITE — ROAD DEPT., CANARY — FILE, PINK — APPLICANT

BUILDING PERMIT

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

HEADQUARTERS

CONSTRUCTION ESTIMATE			
1ST FL.		SQ. FT. @	
2ND FL.		SQ. FT. @	
POR.		SQ. FT. @	
GAR.		SQ. FT. @	
CAR P.		SQ. FT. @	
WALL		SQ. FT. @	
		SQ. FT. @	
ESTIMATED VALUATION	$		

MECHANICAL FEES			
VENT SYSTEM ☐ FAN ☐ EVAP. COOL ☐ HOOD			
APPLIANCE			
FURNACE ☐ UNIT ☐ WALL ☐ FLOOR ☐ SUSPENDED			
AIR HANDLING UNIT	CFM		
GAS PIPE ☐ NATURAL ☐ L.P.G. ☐ OIL			
COMPRESSOR	HP		
APPLIANCE VENT			
ABSORPTION SYSTEM	B.T.U.		
INCINERATOR ☐ DOMESTIC ☐ INDUS. OR COMM.			
HEATING SYSTEM ☐ FORCED ☐ GRAVITY			
BOILER	B.T.U.		
PERMIT FEE			
MOBILEHOME HOOKUP FEE	$		

ELECTRICAL FEES			
NO.			
	MOTOR 1 OR LESS H.P.		
1	MOTOR 5 OR LESS H.P.	2	—
	MOTOR 20 OR LESS H.P.		
1	TIME CLOCK	1	—
	K.W. UNITS		
	SIGN		
	TRANSFORMER K.W.		
4	OUTLETS	1	—
	FIXTURE OR SOCKET		
	CONST. SERV. ENTRANCE		
	POLE		
	AMPERES SERV. ENT.		
	SQ. FT.		
	SQ. FT.		
	SQ. FT. RESID.		
	SQ. FT. GARAGE		
	BALANCE OF MIN. FEE		
1	PERMIT FEE	3	00

PLUMBING FEES			
NO.			
1	DRAINAGE PIPING	1	50
	DRINKING FOUNTAIN		
	URINAL		
	WATER PIPING		
	FLOOR DRAIN		
	WATER SOFTENER		
	WASHER (AUTO) (DISH)		
	GARBAGE DISPOSAL		
	LAUNDRY TRAY		
	KITCHEN SINK		
	WATER CLOSET		
	LAVATORY		
	SHOWER		
	BATH TUB		
1	WATER HEATER	1	50
	SEWAGE DISPOSAL		
	HOUSE SEWER		
1	GAS PIPING	1	50
1	PERMIT FEE	2	—

PERMIT NUMBER	TOTAL FEES	MOB. HOME FEE	HEAT & VENT. FEE	PLAN CHECK FEE	CONST. FEE	ELEC. FEE	DBL.	FEE	PLUMBING FEE	DBL.
212643	52 50	—	—	13 00	26 00	7 00		—	6 50	

	J	F	M	A	M	J	J	A	S	O	N	D
72												
73												
74												
75												
76												

JOB ADDRESS: 39-241 7TH ST
OWNER: GERARD, BARBARA
USE OF BUILDING: PUBLIC POOL (SWIMMING POOL)
DATE: 6-28-72
PERMIT NO.: 212643
COMMUNITY: SAN JACINTO
DIST.: A
UNITS:
ROOMS:
VALUATION: 41000 —
SUPP. TO PERMIT:
OFFICE: 2

LEGAL DESCRIPTION: LOTS 4 & 5 ESTUDILLO LAND & WATER CO.

SET BACK	LOT SIZE	ZONE	USE NO.	GRP	TYPE	CK BY
F 10' S 10' R 10'		R-1-5	RD-225			EG

BOND AMT.	PLAN NO.	PLAN CHECKER	FINAL DATE	INSPECTOR
	—	DRAKE		

NAME OF CONST. LENDER	BRANCH OFFICE	NO LENDER INVOLVED

ADDRESS	CITY	STATE

	DBL		
MOBILEHOME HOOKUP FEE		$ —	
MECHANICAL FEE	DBL	$ —	
PLAN CHECK FEE		$13	00
CONSTRUCTION FEE	DBL	$26	00
ELECTRICAL FEE	DBL	$ 7	00
FEE		$ —	
PLUMBING FEE	DBL	$ 6	50
TOTAL FEES $		52	50

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 60 DAYS. CESSATION OF WORK FOR 120 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID.
I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA. I ALSO AGREE TO CARRY COMPENSATION INSURANCE UPON MY EMPLOYEES. COMPLIANCE WITH THE LAWS OF THE STATE OF CALIFORNIA COVERING CONTRACTORS IS ALSO GUARANTEED.
I HEREBY CERTIFY THAT THE INDIVIDUAL WHO PREPARED THE PLANS AND SPECIFICATIONS HAS DONE SO IN ACCORDANCE WITH SECTION 6541 OF THE BUSINESS AND PROFESSIONS CODE OF THE STATE OF CALIFORNIA.

CASH ☐ CHECK ☑ M.O. ☐ N.C. ☐

Received By: K Drake

Sewage System	T	LL	P
Trees Required		Yes	No

INFORMATION

OWNER	CONTRACTOR: Sunrise Pools
ADDRESS	ADDRESS: 6404 Etiwanda Ave
CITY	CITY: Mira Loma CA
TEL. NO.	TEL. NO.: 685 5933 LICENSE: 251158

FORM 284-208 (REV. 4/71)

BUILDING PERMIT

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

FIELD

CONSTRUCTION ESTIMATE			
1ST FL.	SQ. FT. @		
2ND FL.	SQ. FT. @		
FOR.	SQ. FT. @		
GAR.	SQ. FT. @		
CAR P.	SQ. FT. @		
WALL	SQ. FT. @		
	SQ. FT. @		
ESTIMATED VALUATION	$		

ELECTRICAL FEES			
NO.			
	MOTOR 1 OR LESS H.P.		
1	MOTOR 5 OR LESS H.P.	2	—
	MOTOR 20 OR LESS H.P.		
1	Temp. Pole	1	-
	K.W. UNITS		
	SIGN		
	TIMER K.W.		
21	OUTLETS	1	—
	FIXTURE OR SOCKET		
	CONST. SERV. ENTRANCE		
	POLE		
	AMPERES SERV. ENT		
	SQ. FT.		
	SQ. FT.		
	SQ. FT. RESID.		
	SQ. FT. GARAGE		
	BALANCE OF MIN. FEE		
1	PERMIT FEE		

PLUMBING FEES			
NO.			
			3
1	DRAINAGE PIPING	1	3.00
	DRINKING FOUNTAIN		
	URINAL		
	WATER PIPING		
	FLOOR DRAIN		
	WATER SOFTENER		
	WASHER (AUTO) DISH)		
	GARBAGE DISPOSAL		
	LAUNDRY TRAY		
	KITCHEN SINK		
	WATER CLOSET		
	LAVATORY		
	SHOWER		
	BATH TUB		
1	WATER HEATER	1	3.00
	SEWAGE DISPOSAL		
	HOUSE SEWER		
1	GAS PIPING	1	3.00
1	PERMIT FEE	1	—

MECHANICAL FEES	
VENT SYSTEM ☐ FAN ☐ EVAP. COOL ☐ HOOD	
APPLIANCE	
FURNACE ☐ UNIT ☐ WALL ☐ FLOOR ☐ SUSPENDED	
AIR HANDLING UNIT ____ CFM	
GAS PIPE ☐ NATURAL ☐ L.P.G. ☐ OIL	
COMPRESSOR ____ HP	
APPLIANCE VENT	
ABSORPTION SYSTEM ____ B.T.U.	
INCINERATOR ☐ DOMESTIC ☐ INDUS. OR COMM.	
HEATING SYSTEM ☐ FORCED ☐ GRAVITY	
BOILER ____ B.T.U.	
PERMIT FEE	
MOBILEHOME HOOKUP FEE	$

PERMIT NUMBER **212643** | TOTAL FEES 52.50 | MOB. HOOK FEE — | HEAT & VENT FEE — | EQ. PL. CK. FEE 13.12 | CONST. FEE 24.62 | ELEC. FEE 7.50 | FEE — | PLUMBING FEE 6.50

	J	F	M	A	M	J	J	A	S	O	N	D
72												
73												
74												
75												
76												

JOB ADDRESS: 21241 7TH ST | OWNER: Gemini, Edward

USE OF BUILDING: Private Pool | F.C. | DATE: 6-29-72 | PERMIT NO.: 212643

COMMUNITY: Nuevo | DIST: 4 | UNITS | ROOMS | VALUATION: 4,000 — | SUPP. TO PERMIT | OFFICE: 2

LEGAL DESCRIPTION: Lot 435 Ensenada Lane Nuevo Ranch

SET BACK	LOT SIZE	ZONE	USE NO.	GRP	TYPE	CK BY
F. S. R.		R-1-5	R-225			EG

BOND AMT.	PLAN NO.	PLAN CHECKER	FINAL DATE	INSPECTOR
	—	Levine	9-11-72	Poland

NAME OF CONST. LENDER	BRANCH OFFICE	NO LENDER INVOLVED

ADDRESS	CITY	STATE

	DBL		
MOBILEHOME HOOKUP FEE		$ —	
MECHANICAL FEE	DBL	$ —	
PLAN CHECK FEE		$ 13	00
CONSTRUCTION FEE	DBL	$ 24	00
ELECTRICAL FEE	DBL	$ 7	00
FEE		$ —	
PLUMBING FEE	DBL	$ 6	50
TOTAL FEES $		52	50

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 60 DAYS, CESSATION OF WORK FOR 120 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID.

I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA. I ALSO AGREE TO CARRY COMPENSATION INSURANCE UPON MY EMPLOYEES. COMPLIANCE WITH THE LAWS OF THE STATE OF CALIFORNIA COVERING CONTRACTORS IS ALSO GUARANTEED.

I HEREBY CERTIFY THAT THE INDIVIDUAL WHO PREPARED THE PLANS AND SPECIFICATIONS HAS DONE SO IN ACCORDANCE WITH SECTION 5641 OF THE BUSINESS AND PROFESSIONS CODE OF THE STATE OF CALIFORNIA.

CASH ☐ CHECK ☑ M.O. ☐ N.C. ☐

Received By: K Bucher

Sewage System: T | LL | P

Trees Required: Yes | No

INFORMATION: CAD

OWNER	CONTRACTOR
	Sunrise Pools
ADDRESS	ADDRESS
	24804 Fm 1 Hwy Ave
CITY	CITY
	Mira Loma CA
TEL. NO.	TEL. NO. / LICENSE
	685 727 2511 [illegible]

Form 284-288 (REV. 4/71)

NO.	OPERATION	DATE	INSPECTOR
	BUILDING APPROVALS		
1	Set Back	9-11-72	[signature]
2	Pigs & Frms		
2A	Slab Grade		
3	Steel		
4	Grout Blocks		
5	Bond Beams		
6	Roof Deck		
7	Framing		
8	Vents		
9	Garage Fire Wall		
10	Fireplace P.L. ☐		
10A	Fireplace T.O. ☐		
11	Exterior Lath		
12	Internal Lath		
12A	Drywall		
13	Exterior Grade		
14	Final	9-11-72	[signature]
	PLUMBING APPROVALS		
15	Ground Plumb	7-1 -.7	[signature]
16	Water Piping	9-11-72	[signature]
17	Rough Plumb		
18	Vents		
19	Sewage Disposal		
20	Sewer		
21	Water Heater		
22	Water Softener		
23	Water Service		
24	Gas Test	8-16-72	[signature]
25	Final	9-11-72	[signature]
	BONDING	7-11-72	[signature]
	ELECTRICAL		
26	Power Pole		
27	Conduit	8-17-72	[signature]
28	Service Entrance		
29	Wiring		
29A	Grounding Wire		
30	Fixtures		
31	Service		
32	Final	9-11-72	[signature]

NO.	OPERATION	DATE	INSPECTOR
	MECHANICAL APPROVALS		
33	Ventilation System		
34	Plenums & Ducts		
35	Furnace Compart.		
36	Inlets & Outlets		
37	Combustion Air		
38	Compressor		
39	Appl. Clearance		
40	Fire Damper		
41	Smoke Detection Device		
42	Commercial Hood		
43	Final		

OP'N NO. **ADDITIONAL INFORMATION**

Tank Pit L. Line

SEWER DISPOSAL LOCATION

BACK FRONT

☐ INSIDE ☐ OUTSIDE ☐ KEY

RIVERSIDE COUNTY DEPARTMENT OF BUILDING AND SAFETY
CORRECTION NOTICE

To: _____ Permit No. 212643

Address: 39241 Jay Date: 9-5-72

FINAL STRUCTURAL INSPECTION—U.B.C., 1970 EDITION

1. Slope Finish grade away from building ½" per foot for 3' from building. (Ord 457).
2. Finish grade to be 6 inches below wood (2905).
3. Counterflash chimney. (3208).
4. Firewall: door to be solid core 1⅜" and self-closing (503).
5. Back wall on planter shall be 6" above outside wall of planter (Sec 2517)
6. Glass not fixed. Door not self-closing. (Sec. 1412).
7. Hand rail or guard rail. Intermediate rails 9" max. apart. (1714).

FINAL ELECTRICAL INSPECTION

* National Electrical Code, 1968 Edit.
x Uniform Wiring Code, 1968 Edit.

1. Install missing blanks in main service or sub panel dead front. (230-62 *).
2. Place circuit identification on panel board (170 21 x).
3. Electric service ground clamp shall be accessible at all times and securely fastened. (111.5 x).
4. Receptacles shall be installed in _____ room. (210-22(b)* 170.13x).
5. Fixtures or plates shall be installed in _____ room. (410-12 *).
6. Cord connection has not been installed on disposal unit. (170.9 x).
7. Properly connect hood fan over range. (250-57 (a)(b) * 400-4 * 150.12x).
8. Make provision for heating unit or air handler to be connected to electrical supply.
9. Weatherproof covers on exterior outlets. (370-5 *).
10. Exterior wiring to be in weatherproof raceways or approved open wiring. (50.8 x).
11. Provide the space for the minimum of 20 overcurrent devices. (140.3x).
12. Provide disconnect for A.C. and/or air handlers (170.22x).
13. Provide correct wire sizes for appliances (310, 430*).

FINAL PLUMBING INSPECTION—U.P.C., 1970 EDITION

1. Permanent water supply to be connected to building before final (1001).
2. Hot and cold are cross-connected. (1003).
3. Trap leaks _____ (318).
4. No slip joint on outlet side of trap. (703).
5. Clean breather holes on vent buckets. (1315).
6. Shower enclosure not watertight at walls. (909).
7. Water heater burners or heating elements shall be 18" from floor. (1310).
8. Water heater shall have protective barrier in front. (1310).
9. Separate combustion air and return air intakes by 10' min. (706 Vol. II U.B.C.).
10. Mastic around pipes extending through flashing. (506).
11. Gas gauge down; must hold 10 lb. pressure for 15 min. (1206).
12. Gas gauge defective; replace. (1206).
13. Seal floor and door of furnace room. (706 Vol. II U.B.C.).
14. Water service line shall be of same material as house lines. (1004).
15. Full way gate valve to be accessible on service line and at water heater. (1005).
16. Support conductor vent pipe on water heater _____, furnace _____ (1315).
17. Toilets to be sealed water tight at floors. (907).
18. Anti-syphon Ball cock required on toilet. (1003).
19. No appliance or equipment permitted in lot setback. (Ord. 348).
20. More combustion air required for water heater ( ), furnace ( ), top ( ), bottom ( ), (1307).
21. Furnace compartment too small. (704 Vol. II U.B.C.).

Elect Grd Bond pool mate:- 250-6 U.W.C
(5) Supply breakers for each Cir in Panel Conc wire one terminal 110-14 REC

INSPECTOR

CORRECT THE ABOVE CIRCLED ITEMS AND CALL FOR RE-INSPECTION.

284-236 REV. 6/70

NOTICE: THIS IS NOT A BUILDING PERMIT

Dist. Office H

Permit No.

APPLICATION TO CONSTRUCT
DEPARTMENT OF BUILDING AND SAFETY
COUNTY OF RIVERSIDE

Prior to final inspection of any use, the pool will be fenced as required by County Ordinance 421.1

Owner	Architect	Contractor
Gerard Bonnar		Sunrise Pools
Address 39241 West 7th St.	Address	Address 6404 Etiwanda Ave
City San Jacinto Calif.	City	City Mira Loma, Calif.
Phone 654-9347	Phone	Phone 685-5933

I (we) the undersigned, hereby certify and acknowledge that I (we) have read the application and agree that if Curb and Gutter, and Paving, and/or Dedication of right of way is required by the County of Riverside, the Riverside County Department of Building and Safety shall not make a Final Inspection until said requirements have been met. I am also aware that no work is to be done within the County R/W without an encroachment permit.

NOW, therefore, it is agreed that I (we) will not occupy said property and will not cause said property to be occupied until I (we) have complied with all laws of the County of Riverside and the State of California governing said property.

DATE 6-16-72 SIGNATURE OF OWNER AND/OR AGENT X G. Bonnar

Approval by Signature from the Following Departments Listed Below Must Be Obtained Prior to the Issuing of a Construction Permit.

LAND USE DIVISION BUILDING AND SAFETY

LOCATION OF JOB 39241 7th Street

LEGAL DESCRIPTION OF PROPERTY Lot 485 Eatudillo Land & Water Co.

COMMUNITY San Jacinto

USE OF STRUCTURE

SINGLE FAMILY	☐	DUPLEX	☐
APARTMENTS	☐	AGRIC.	☐
COMMERCIAL	☒	INDUSTRIAL	☐
		ALTERATIONS	☐

NO. OF SUBMITTED PLANS

CASE NO. PM #225

TYPE OF CONSTRUCTION Swimming Pool

NO. OF PARKING SPACES REQUIRED NO. OF BUILDINGS NOW EXISTING

ZONE A-1-5 SETBACKS FRONT 10' SIDE 10' REAR 10'

GRADING PERMIT REQUIRED YES ☐ NO ☐

SETBACK ORDINANCE # None OF FEET REQUIRED ON STREET

DATE 6/29/72 SIGNATURE OF LAND USE OFFICIAL Epelyn Hart

ROAD DEPARTMENT

6/21-22

DEDICATION REQUIRED: YES ☐ NO ☐ NO. OF FEET

CURB AND GUTTER REQUIRED: YES ☐ NO ☐ STREET

THE ABOVE CONSTRUCTION? YES ☐ NO ☐

CAN CURB AND GUTTER FEASIBLY BE INSTALLED? YES ☐ NO ☐

HAS AN ACCEPTABLE APPLICATION BEEN MADE FOR ENCROACHMENT PERMIT FOR DRIVEWAY AND STREET IMPROVEMENT? YES ☐ NO ☐

DATE SIGNATURE OF ROAD DEPT. OFFICIAL

HEALTH DEPT.

SWIMMING POOLS PUBLIC

SEWAGE DISPOSAL

FOOD ESTABLISHMENT

OTHER DEPARTMENTS

WATER POLLUTION

FLOOD CONTROL OK Ly. Powell 6/29/72

AIR POLLUTION

DIV OF HWY

REMARKS

YOUR PROPERTY MAY BE SUBJECT TO FLOOD. RIVERSIDE COUNTY ASSUMES NO RESPONSIBILITY IN EVENT OF FLOOD.

284-199, 5/15/69

WHITE — ROAD DEPT., CANARY — FILE, PINK — APPLICANT

BUILDING PERMIT

HEADQUARTERS

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

SHT 7

CONSTRUCTION ESTIMATE		NO.	ELECTRICAL FEES	NO.	PLUMBING FEES	
1ST FL.	SQ. FT. @		UNITS			
2ND FL.	SQ. FT. @				YARD SPKLR SYSTEM	
POR.	SQ. FT. @		MOBILEHOME SVC		BAR SINK	
GAR.	SQ. FT. @		POWER OUTLET		ROOF DRAINS	
CAR P.	SQ. FT. @				DRAINAGE PIPING	
WALL	SQ. FT. @				DRINKING FOUNTAIN	
	SQ. FT. @					
ESTIMATED CONSTRUCTION VALUATION	$			1	WATER PIPING	2 50
NOTE: Not to be used as property tax valuation			SWIM POOL PVT		FLOOR DRAIN	
MECHANICAL FEES			SWIM POOL COMM		WATER SOFTENER	
VENT SYSTEM ☐ FAN ☐ EVAP. COOL ☐ HOOD			SIGN		WASHER (AUTO) (DISH)	
APPLIANCE					GARBAGE DISPOSAL	
FURNACE ☐ UNIT ☐ WALL ☐ FLOOR ☐ SUSPENDED					LAUNDRY TRAY	
AIR HANDLING UNIT CFM			IDLE METER	2	~~KITCHEN~~ SINK	4 00
ABSORPTION SYSTEM BTU			TEMP USE PERM SVC		WATER CLOSET	
COMPRESSOR HP			POLE TEMP/PERM		LAVATORY	
HEATING SYSTEM ☐ FORCED ☐ GRAVITY			AMPERES SERV ENT		SHOWER	
BOILER BTU			SQ FT @ ¢		BATH TUB	
			SQ FT @ ¢		WATER HEATER	
			SQ FT RESID @ ¢		SEWAGE DISPOSAL	
			SQ FT GARAGE @ ¢	1	HOUSE SEWER	5 00
PERMIT FEE					GAS PIPING	
MOBILE HOME PERMIT FEE	$		PERMIT FEE		PERMIT FEE	3 00

PERMIT NO.	TOTAL FEES	MOB HM FEE	MICRO FEE	MECH FEE	DBL	PL CK FEE	CONST FEE	DBL	ELECT FEE	DBL	SMI FEE	FEE	PLUMB FEE	DBL
262580	14 50												14 50	

	J	F	M	A	M	J	J	A	S	O	N	D
74												
75												
76												

JOB ADDRESS: 39241 7TH ST | SP NO | OWNER: Colonial Conv. Hosp.

USE OF PERM.: ADD PLUMB. TO CONV. HOSP. | T C | DATE: 12/23/75 | PERMIT NO.: 262580

COMMUNITY	DST	UNITS	ROOMS	VALUATION	SUPP TO PERMIT	OFFICE
SAN JAC	7			400 —		11

LEGAL DESCRIPTION: LOT 14 EST. LND. & WTR. Co. (435-180-002)

SET BACK	LOT SIZE	ZONE	USE NO.	GRP	TYPE	CK BY
F R S			VAR 225	446		JR

BOND AMT	PLAN NO	PLAN CHECKED	FINAL DATE	INSPECTOR

NAME OF CONST. LENDER	BRANCH OFFICE	NO LENDER INVOLVED

ADDRESS	CITY	STATE

MH PERMIT FEE		$	—
MICROFILM FEE	COPIES	$	—
MECHANICAL FEE	DBL	$	—
PLAN CHECK FEE		$	—
CONSTRUCTION FEE	DBL	$	—
ELECTRICAL FEE	DBL	$	—
STRONG MOTION INSTRUMENTATION FEE		$	—
FEE		$	—
PLUMBING FEE	DBL	$	14 50
TOTAL FEES		$	14 50

OWNER/AGENT'S SIGNATURE	CONTRACTOR
	Virgil Rogers
ADDRESS	ADDRESS: 241 E. Main
CITY / ZIP CODE	CITY: San Jacinto / ZIP CODE
TEL NO	TEL NO: 654-7219 / LICENSE: 122004

CASH ☐ CHECK ☑ M.O. ☐ N.C. ☐

RECEIVED BY: Gubar | TREES REQUIRED

SEWAGE SYSTEM | T | LL | P

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 120 DAYS CESSATION OF WORK FOR 120 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID

I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA. I ALSO AGREE TO CARRY COMPENSATION INSURANCE UPON MY EMPLOYEES. COMPLIANCE WITH THE LAWS OF THE STATE OF CALIFORNIA COVERING CONTRACTORS IS ALSO GUARANTEED.

I HEREBY CERTIFY THAT THE INDIVIDUAL WHO PREPARED THE PLANS AND SPECIFICATIONS HAS DONE SO IN ACCORDANCE WITH SECTION 6847 OF THE BUSINESS AND PROFESSIONS CODE OF THE STATE OF CALIFORNIA

FORM 284-208 (Rev 10-74) Ⓡ | Sanpson

BUILDING PERMIT

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

FIELD

DIST 7

CONSTRUCTION ESTIMATE			NO.	ELECTRICAL FEES		NO.	PLUMBING FEES	
1ST FL.	SQ. FT. @			UNITS				
2ND FL.	SQ. FT. @						YARD SPKLR SYSTEM	
POR.	SQ. FT. @			MOBILEHOME SVC			BAR SINK	
GAR.	SQ. FT. @			POWER OUTLET			ROOF DRAINS	
CARP.	SQ. FT. @						DRAINAGE PIPING	
WALL	SQ. FT. @						DRINKING FOUNTAIN	
	SQ. FT. @						URINAL	
ESTIMATED CONSTRUCTION VALUATION	$					1	WATER PIPING	2 50
NOTE: Not to be used as property tax valuation				SWIM POOL PVT			FLOOR DRAIN	
MECHANICAL FEES				SWIM POOL COMM			WATER SOFTENER	
VENT SYSTEM ☐ FAN ☐ EVAP. COOL ☐ HOOD				SIGN			WASHER/AUTO DISH	
APPLIANCE							GARBAGE DISPOSAL	
FURNACE ☐ UNIT ☐ WALL ☐ FLOOR ☐ SUSPENDED							LAUNDRY TRAY	
AIR HANDLING UNIT	CFM			METER		1	KITCHEN SINK	4 00
ABSORPTION SYSTEM	BTU			TEMP USE PERM SVC			WATER CLOSET	
COMPRESSOR	HP			POLE TEMP. PERM.			LAVATORY	
HEATING SYSTEM ☐ FORCED ☐ GRAVITY				AMPERES SERV ENT			SHOWER	
BOILER	BTU			SQ FT @	¢		BATH TUB	
				SQ FT @	¢		WATER HEATER	
				SQ FT RESID @	¢		SEWAGE DISPOSAL	
				SQ FT GARAGE @	¢	1	HOUSE SEWER	3 00
PERMIT FEE							GAS PIPING	
MOBILE HOME PERMIT FEE	$			PERMIT FEE			PERMIT FEE	3 00

PERMIT NO.	TOTAL FEES	WORK SITE FEE	MECH. FEE	DBL	PL. CK FEE	CONST. FEE	DBL	ELECT. FEE	DBL	SURVEY	FEE	PLUMB. FEE	DBL
262580	14 50											14 50	

	J	F	M	A	M	J	J	A	S	O	N	D
74												
75												
76												

JOB ADDRESS 39741 7TH ST | LP NO | OWNER [illegible] Conv Hosp

USE OF PERMIT Add Fire Sta to Conv Hosp | P C | DATE 11/3/75 | PERMIT NO. 262580

COMMUNITY [illegible] | DIST 7 | UNITS | ROOMS | VALUATION 200 — | SIGN TO PERMIT | OFFICE 11

LEGAL DESCRIPTION Lot 14 [illegible] (435-180-001)

SET BACK F [illegible] | LOT SIZE | ZONE | USE [illegible] | GRP | TYPE | CK BY JP

BOND AM'T | PLAN NO | PLAN CHECKER | FINAL DATE 1-5-76 | INSPECTOR [illegible]

NAME OF CONST. LENDER | BRANCH OFFICE | NO LENDER INVOLVED

ADDRESS | CITY | STATE

OWNER'S AGENT'S SIGNATURE | CONTRACTOR

ADDRESS | ADDRESS

CITY | ZIP CODE | CITY | ZIP CODE

TEL NO | TEL NO | LICENSE

PLAN CHECK FEE		$ —
CONSTRUCTION FEE	DBL	$ —
ELECTRICAL FEE	DBL	$ —
STRONG MOTION INSTRUMENTATION FEE		$ —
FEE		$ —
PLUMBING FEE	DBL	$ 14 50
TOTAL FEES		$ 14 50

CASH ☐ CHECK ☑ M.O. ☐ N/C ☐

RECEIVED BY [signature] | FEES REQUIRED

SEWAGE SYSTEM | I | II | P

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 120 DAYS. CESSATION OF WORK FOR 120 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID

I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA. I ALSO AGREE TO CARRY COMPENSATION INSURANCE UPON MY EMPLOYEES. COMPLIANCE WITH THE LAWS OF THE STATE OF CALIFORNIA COVERING CONTRACTORS IS ALSO GUARANTEED.

I HEREBY CERTIFY THAT THE INDIVIDUAL WHO PREPARED THE PLANS AND SPECIFICATIONS HAS DONE SO IN ACCORDANCE WITH SECTION 5537 OF THE BUSINESS AND PROFESSIONS CODE OF THE STATE OF CALIFORNIA.

NO.	OPERATION	DATE	INSPECTOR
	BUILDING APPROVALS		
[illegible]	Set Back		
3	Piers & Piers		
3A	Soil Grade		
3	Steel		
4	Cavity Blocks		
5	Bond Beams		
6	Roof Deck		
7	Framing		
8	Vents		
9	Garage Fire Wall		
10	Fireplace P.I. ☐		
10A	Fireplace F. ☐		
11	External Lath		
12	Internal Lath		
12A	Drywall		
13	Finish Grade		
14	Final		
	PLUMBING APPROVALS		
15	Ground Plumb		
16	Water Piping		
17	Roof & Vents	1-5-76	Allen
18	Vents		
19	Sewage Disposal		
20	Sewer	1-5-76	Allen
21	Water Heater		
22	Water Softener		
23	Water Service		
24	Gas Test		
25	Final	1-5-76	Allen
	ELECTRICAL APPROVALS		
26	Power Pole		
27	Conduit		
28	Service Entrance		
29	Wiring		
29A	Underground Wire		
29B	Bonding		
30	Fixtures		
31	Service		
32	Final		

NO.	OPERATION	DATE	INSPECTOR
	MECHANICAL APPROVALS		
33	Ventilation System		
34	Plenums & Ducts		
35	Furnace Compart		
36	Inlets & Outlets		
37	Combustion Air		
38	Compressor		
39	Appl. Clearance		
40	Fire Damper		
41	Smoke Detection Device		
42	Conversion Hood		
43	Final		
NO.	**ADDITIONAL INFORMATION**		

SEWAGE SYSTEM SIZE & LOCATION

Tank ____ Gal. ____ Line

CLEAR OF PROPERTY LINE

P/L P/L

STREET NAME: _____

NOTICE: THIS IS NOT A BUILDING PERMIT

APPLICATION TO CONSTRUCT
DEPARTMENT OF BUILDING AND SAFETY
COUNTY OF RIVERSIDE

DISTRICT (7)
Permit No. 262580

OWNER

Owner Co. Gen. Hosp	Architect	Contractor Virgil Rogers
Address 39241 W 7th	Address	Address 24 E Tahquitz
City San Jacinto	City	City San Jacinto
Phone	Phone	Phone 654-7218

I (we) the undersigned, hereby certify and acknowledge that I (we) have read the application and agree that if Curb and Gutter, and Paving, and/or Dedication of right of way is required by the County of Riverside, the Riverside County Department of Building and Safety shall not make a Final Inspection until said requirements have been met. I am also aware that no work is to be done within the County R/W without an encroachment permit.

NOW, therefore, it is agreed that I (we) will not occupy said property, and will not cause said property to be occupied until complied with all laws of the County of Riverside and the State of California governing said property.

DATE 12-23-75 SIGNATURE OF OWNER AND OR AGENT Virgil Rogers

Approval by Signature from the Following Departments Listed Below Must Be Obtained Prior to the Issuing of a Construction Permit.

LAND USE DIVISION BUILDING AND SAFETY

JOB ADDRESS 39241 - 7th St SPACE NO.

LEGAL DESCRIPTION OF PROPERTY Lot 17 Estudillo Land & Water Co. #35-180-002

COMMUNITY San Jacinto

NO. OF SUBMITTED PLANS

CASE NO. PU #225 VAR #214

USE OF PERMIT Add plumbing & fixtures to existing bldg

NO. OF PARKING SPACES REQUIRED NO. OF BUILDINGS NOW EXISTING

ZONE A-1-5 SETBACKS: FRONT SIDE REAR

GRADING PERMIT REQUIRED? YES ☐ NO ☐ N/A LOT SIZE

SETBACK ORDINANCE # OF FEET REQUIRED ON STREET

DATE 12/23/75 SIGNATURE OF LAND USE OFFICIAL John W. Ratliff

USE OF STRUCTURE

SINGLE FAMILY	☐	DUPLEX	☐
APARTMENTS	☐	AGRIC.	☐
COMMERCIAL	☑	INDUSTRIAL	☐
		ALTERATIONS	☐

ROAD DEPARTMENT

DEDICATION REQUIRED: YES ☐ NO ☐ NO. OF FEET

CURB AND GUTTER REQUIRED: YES ☐ NO ☐ STREET

CAN CURB AND GUTTER FEASIBLY BE INSTALLED? YES ☐ NO ☐

HAS AN ACCEPTABLE APPLICATION BEEN MADE FOR ENCROACHMENT PERMIT FOR DRIVEWAY AND STREET IMPROVEMENT? YES ☐ NO ☐

DATE SIGNATURE OF ROAD DEPT OFFICIAL

HEALTH DEPT.

SWIMMING POOLS PUBLIC

SEWAGE DISPOSAL

FOOD ESTABLISHMENT

OTHER DEPARTMENTS

WATER POLLUTION REMARKS

FLOOD CONTROL

AIR POLLUTION

DIV OF HWY

YOUR PROPERTY MAY BE SUBJECT TO FLOOD. RIVERSIDE COUNTY ASSUMES NO RESPONSIBILITY IN EVENT OF FLOOD.

284 1994 9/74

CANARY — FILE, PINK — APPLICANT

County of Riverside

TO: Planning Department DATE: May 14, 1976

FROM: Land Use Division - Norman A. Lostbom

RE: Public Use Case No. 225, Expand Convalescent Hospital, San Jacinto Area

Inspection of property on 4-26-76 revealed that the expansion to the convalescent hospital has not been made.

Case expired November 1971.

Case closed.

NAL:rj

cc: Hemet - Land Use

RECEIVED
MAY 14 1976
RIVERSIDE COUNTY
PLANNING COMMISSION

Land Use PU. 225

PUBLIC USE CASE NO. 225
Colonial Convalescent Hospital, Inc.
Expand a convalescent hospital
Zone A-1-5
Hemet-San Jacinto District
Fifth Supervisorial District

October 27, 1969

1. The development of the premises shall conform substantially with that as shown on plot plan marked Exhibit "A" on file with Public Use Case No. 225 in the office of the Riverside County Planning Commission unless otherwise amended by the following conditions.

   a. Use shall be limited to a 107 bed convalescent hospital.

2. Prior to the issuance of a building permit or any use contemplated by this permit, a bond for the cost of curb and gutter and tie-in paving shall be deposited with the Road Commissioner By January 1, 1972 said curb and gutter and tie-in paving shall be installed at no cost to any government agency, at a grade and alignment approved by the Riverside County Road Commissioner on 7th Street.

3. Prior to the issuance of a building permit for construction of any use contemplated by this approval, the applicant shall first obtain permits and/or clearance from the following public agencies:

   Department of Public Health
   State Division of Forestry

   Road Department

   Written evidence of said permit or clearance from the above agencies shall be presented to the Land Use Division of the Department of Building and Safety at the time of the issuance of a building permit for the use contemplated herewith.

4. This approval shall be used within 2 years, after final proceedings before the Board of Supervisors, otherwise it shall become null and void and of no effect whatsoever. By "use" is meant beginning of construction of the hospital addition.

AGREEMENT

I accept and agree, prior to use of this permit ro approval, to comply with all of the conditions set forth, and understand that the Office of Building and Safety will not issue a Building Permit, or allow occupancy on the use permitted until this signed confirmation, in quadruplicate, has been received by the Planning Commission.

Date 11-14-69 Applicant's Signature Jean E. Reed Adm

Date 11-14-69 Owner's Signature [signature]

NOV 17 19

PUBLIC USE CASE NO. 225
Colonial Convalescent Hospital, Inc.
Expand a convalescent hospital
Zone A-1-5
Hemet-San Jacinto District
Fifth Supervisorial District

October 29, 1969

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Date 11-14-69 Applicant's Signature Jean E. Reed, Admn.

Date 11-14-69 Owner's Signature Irene Hahn

NOV 17 19[illegible]

PUBLIC USE CASE NO. 225
Colonial Convalescent Hospital, Inc.
Expand a convalescent hospital
Zone A-1-5
Hemet-San Jacinto District
Fifth Supervisorial District

October 29, 1969

1. The development of the premises shall conform substantially with that as shown on plot plan marked Exhibit "A" on file with Public Use Case No. 225 in the office of the Riverside County Planning Commission unless otherwise amended by the following conditions.

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   State Division of Forestry
   Road Department

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Date 11-14-69 Applicant's Signature Jean E. Reed, Cedm

Date 11-14-69 Owner's Signature _____

NOV 17

ML:39954

November 12, 1969

The Honorable Board of Supervisors
Court House
Riverside, California

Gentlemen: SUBJECT: Transmittal of Hearing Board Cases

The Planning Commission respectfully reports approval of the following items:

1. CONDITIONAL USE CASE NO. 1088
Pacific Western Industries, Inc.
3810 Wilshire Boulevard
Los Angeles, California 90005
Borrow Pit
Zone M-3
Glen Ivy Hot Springs Area
First Supervisorial District

Located on the southerly side of Highway 71 south and east of the access road to Glen Ivy Hot Springs

2. VARIANCE CASE NO. 1055
Benita Korn
Box 1745
Indio, California
Enlargement of Dwelling
Zone M-1
Lower Coachella Valley District
Fourth Supervisorial District

Located on the east side of Polk between Avenue 58 and Avenue 60 (known as 59-870 Polk)

3. PUBLIC USE CASE NO. 225
Colonial Convalescent Hospital, Inc.
39241 Seventh Street
San Jacinto, California
Expand Convalescent Hospital
Zone A-1-5
Hemet-San Jacinto District
Fifth Supervisorial District

Located at the rear of southwest corner of Seventh and Gilbert Streets

ORDERED FILED BY THE BOARD OF SUPERVISORS 11/17/69

APR 3 1970
RIVERSIDE COUNTY
PLANNING COMMISSION

4. CONDITIONAL USE CASE NO. 1093
John F. Brown
1210 Gramercy Place
Los Angeles, California 90019
Mobilehome Park
Zone M-3
Wildomar Area
First Supervisorial District

Located on the southerly side of Grand Avenue 670 feet east of Wesley Street and 397 feet west of Wilson Street

5. CONDITIONAL USE CASE NO. 1089
Owl Rock Products Company
P. O. Box 330
Arcadia, California 91006
Excavate and Process Aggregates
Zone M-3
Santa Ana Canyon Area
First Supervisorial District

Located on the southerly side of the Riverside Freeway approximately 1-1/4 miles east of Orange County Line known as Fresno Wash

Pursuant to Ordinance No. 348, these matters were considered before the Planning Commission Hearing Board. Copies of the Hearing Board Minutes, including summaries of testimony, findings, recommendations, and conditions of approval, are attached hereto.

No further action is required by your Board unless an appeal is filed by the applicant or some property owner within 300 feet of the exterior boundaries of the property under consideration within seven days of the date this report first appears on your Board Agenda, or the Board on its own motion orders the application transferred to it for further proceedings.

The above recommendations were by unanimous action of the Planning Commission at its adjourned regular meeting held on November 12, 1969.

Respectfully submitted,

RIVERSIDE COUNTY PLANNING COMMISSION

Wm. R. Livingstone - Planning Director

WRL:ml
Encls.
Minutes, Maps, Legals, Conditions
cc: Supervisors (by district)
Road Department (3)
Land Use Division (3)
Indio Office (Planning)
Air Pollution Control District
Department of Public Health
State Division of Highways
State Water Quality Control Board No. 8
State Division of Forestry
Metropolitan Water District
Clerk of the Board
Applicants_____(Mailed)_____(Initial)

R

PU 225

PUBLIC USE CASE NO. 225
Colonial Convalescent Hospital, Inc.
Expand a convalescent hospital
Zone A-1-5
Hemet-San Jacinto District
Fifth Supervisorial District

October 29, 1969

1. The development of the premises shall conform substantially with that as shown on plot plan marked Exhibit "A" on file with Public Use Case No. 225 in the office of the Riverside County Planning Commission unless otherwise amended by the following conditions.

   a. Use shall be limited to a 10/ bed convalescent hospital.

2. Prior to the issuance of a building permit or any use contemplated by this permit, a bond for the cost of curb and gutter and tie-in paving shall be deposited with the Road Commissioner By January 1, 1972 said curb and gutter and tie-in paving shall be installed at no cost to any government agency, at a grade and alignment approved by the Riverside County Road Commissioner on 7th Street.

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   Road Department

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AGREEMENT

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Date 11-14-69 Applicant's Signature Jean E. Reed, Adm.

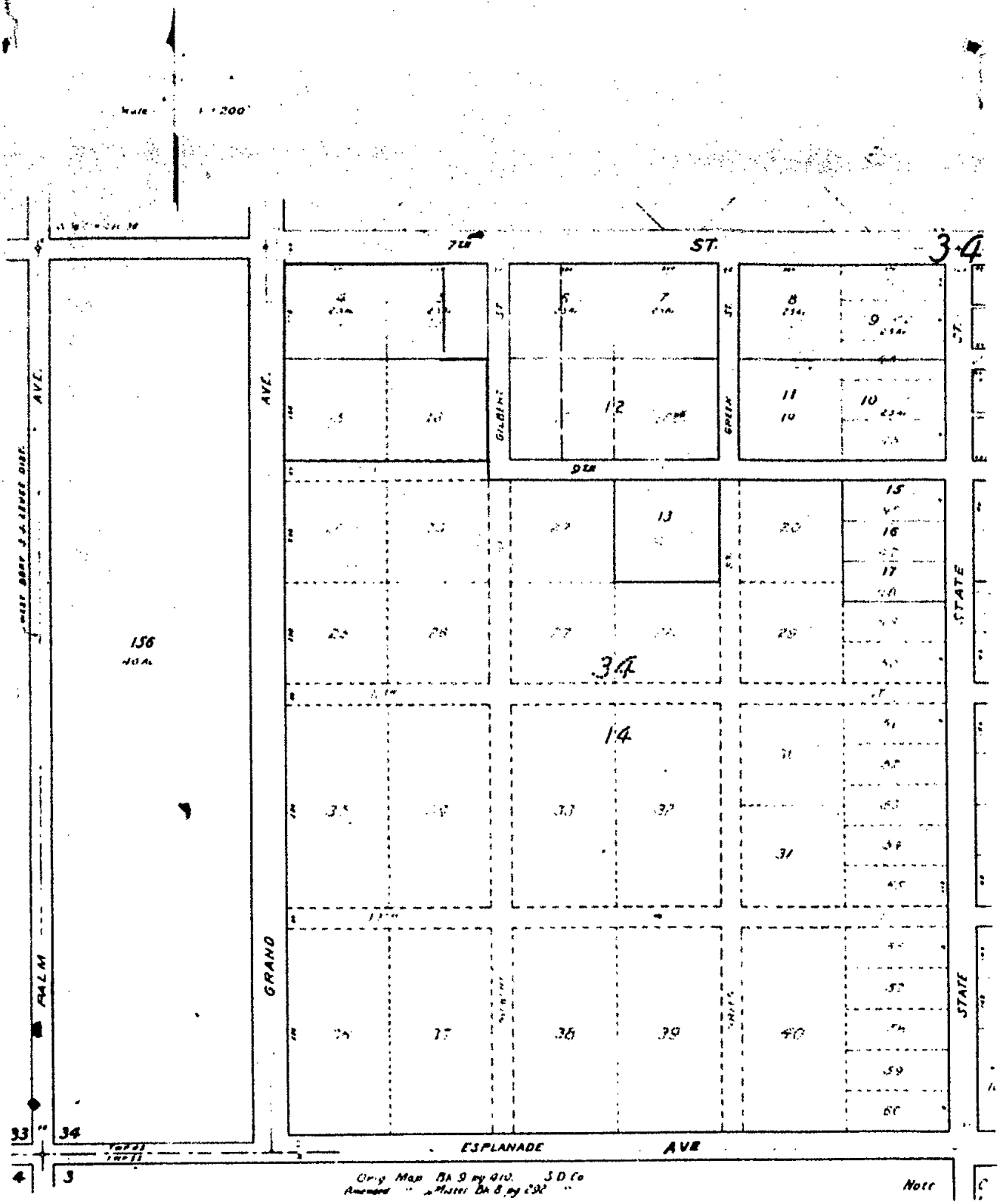
Date 11-14-69 Owner's Signature Irene Yokie

NOV 17 1969

3 Copies filed

CS-331

RIVERSIDE 21/22



"This plat ... for your aid in locating your land with reference to streets and other parcels. It is not a survey. While this plat is believed to be correct, the Company assumes no liability for any loss occurring by reason of reliance thereon."

SECURITY TITLE INSURANCE COMPANY

Lot 14 and that portion of Lot 13 of Estudillo Land and Water Company's Addition to San Jacinto as shown by Map on file in Book 9 page 410 of Maps, San Diego County Records, lying Westerly of a line drawn parallel with and distant Easterly 500 feet from the center line of Grand Avenue.

Farm Lots 15 and 16 of the Estudillo Land and Water Company's Addition to San Jacinto, as shown by Map on file in Book 9 page 410 of Maps, San Diego County Records.

RJS: 40256

December 22, 1969

Colonial Convalescent Hospital, Inc.
39241 Seventh Street
San Jacinto, California

SUBJECT: Public Use Case No. 225

Gentlemen:

Material contained in the subject case and evidence given at the Riverside County Planning Commission Hearing Board on October 29, 1969, would indicate that the approval of the permit was for a 107 bed convalescent hospital to include the case for the mentally ill.

Very truly yours,

RIVERSIDE COUNTY PLANNING COMMISSION

Wm. R. Livingstone - Planning Director

WRL:lep
cc: Land Use

NL:39957

November 12, 1969

COPY

Colonial Convalescent Hospital, Inc.
39241 Seventh Street
San Jacinto, California

Gentlemen: SUBJECT: Public Use Case No. 225

Enclosed please find a copy of our letter to the Board of Supervisors reporting approval of your application for the expansion of a convalescent hospital in Zone A-1-5 (Light Agriculture - 5 acre minimum lot area) in the Hemet-San Jacinto District.

Attached, also, are extra sets of conditions pertinent to your permit. Please sign the agreement, as indicated, and return to this office in quadruplicate.

Very truly yours,

RIVERSIDE COUNTY PLANNING COMMISSION

Wm. R. Livingstone - Planning Director

WRL:nl
Encls.

(558-728)
1:45 P.M. PUBLIC HEARING
PUBLIC USE CASE NO. 225
Colonial Convalescent Hospital, Inc.
Expansion of Convalescent Hospital
Zone A-1-5
Hemet-San Jacinto District
Fifth Supervisorial District

Property located at the rear of southwesterly corner of Seventh and Gilbert Street

(Hearing opened 1:45 p.m., closed 2:10 p.m.)

PRESENTATION: Mr. Stokes presented the subject application together with all maps pertinent thereto, surrounding property owners having previously been notified according to the provisions of Ordinance No. 348. The applicant plans and expansion of existing facilities because there is a need for long-term care and care for the mentally ill. The Land Use Map would indicate a few single-family dwellings and scattered agricultural uses across 7th Street from the facility. The area south of 7th Street, for the most part, is vacant. The existing facility has 45 beds. It is the applicant's intent to add 62 beds, making a total of 107 beds. The staff recommends approval. No

report has been received from the Hospital Planning Association as to need.

(Mr. Broiles administered oath to all persons wishing to present testimony.)

PROPONENTS: Jean E. Reed, 39410 West Seventh Street, West San Jacinto
(representing applicant)
Sam Kalfayan, City Manager, City of San Jacinto

OPPONENTS: None

Mrs. Reed, Administrator, Colonial Convalescent Hospital, Inc., said that she had a report from the State Department of Public Health as to need of the type of facilities for psychiatric, alcoholic, and long-term patients which they expected to offer. The estimated bed need for 1973 is 121; 15 beds are under construction , leaving future needed balance of 106. Of the 62 beds which they intended to add, 52 would be for mental and alcoholic patients; the other ten beds would be for extended care patients. They now had a turn-over of 45 beds each month. They had gone into rehabilitation and the high rate of turn-over made Social Security very happy in that it showed that they were doing a good job. She stated that they expected to work closely with Hemet Psychiatric which took patients for only a few days or weeks and then treated such persons on an out-patient basis. They could assist Hemet Psychiatric by releasing the patient load so that that facility might concentrate its attentions on the acutely ill. Last summer her hospital had had to turn down two or three patients each day. The mental hygiene section would be separated from the rest of the facility by a locked door. They employed between 30 and 40 people. She explained that Extended Care Facilities as required by Social Security, required that a registered nurse be the only one of its kind in San Jacinto. They cared for both Medical and Medicare patients. Seven letters and a petition with fifteen signatures were filed in favor of the use.

Mr. Kalfayan said that although the hospital was outside the formal boundaries of the City of San Jacinto, it was still within the City's area of influence. Last year the City had 250 arrests involving intoxicated persons. 160 of these were known alcoholics that invariably came back; these people were booked for 24 hours and then released. At the present time there was no institution of this type within driving distance of San Jacinto. He felt that the facility would be of great help to the City in dealing with this particular problem.

Mrs. Reed stated that the proposed conditions were satisfactory.

There being no further testimony, the Chairman declared the public hearing closed at 2:10 o'clock p.m.

FINDINGS: 1) The evidence presented by the Staff was correct. 2) The use was found to be necessary at this location. 3) With the conditions attached, the use will not be detrimental to the public welfare.

MOTION: It was regularly moved by Commissioner Katzenstein, seconded by Commissioner Miller and unanimously carried that the Hearing Board recommend that the Planning Commission approve Public Use Case No. 225 subject to the conditions as proposed.

- - - - - -

STAFF REPORT

October 23, 1969

TO: Riverside County Planning Commission

RE: PUBLIC USE CASE NO. 225
Colonial Convalescent Hospital, Inc.
Expand a Convalescent Hospital
Zone A-1-5
Hemet-San Jacinto District

STAFF RECOMMENDATION: The staff recommends APPROVAL of the expansion of the convalescent hospital to increase the number of beds from 45 to 62 providing the Riverside Hospital Planning Association finds there is a need for the additional beds.

APPLICANT'S REQUEST: The applicant is requesting expansion of the convalescent hospital, stating in his application that there is a need for long term patient care and care for the mentally ill. The applicant further states that the expansion will not damage or prejudice other property in the vicinity.

DESCRIPTION OF PROPERTY AND SURROUNDING AREA: The property on the south side of Seventh Street and the properties to the east and west are for the most part vacant with the exception of the convalescent hospital and several dwellings to the east. There are numerous lemon on the north side of Seventh Street having agricultural uses to the rear of the homes. The zone is A-1-5.

PLOT PLAN: The plot plan proposes the addition of 62 beds, bringing the total to 107 with 35 parking spaces. The new addition will be to the rear of the existing convalescent hospital. There is sufficient right of way on Seventh and, therefore, there will be no need to alter the present landscaping and parking adjacent to the present right of way.

CORRESPONDENCE: The City of San Jacinto has commented on the matter and generally have no objection to it.

RJS:lp

"HEART OF THE HEALTH BELT"

COUNCILMEN
WILLIAM J. YOUNG,
RAY A. BROOKS, Mayor
ALEXANDER SABEN
SID W. PATTERSON
R. J. STEVENS

CITY OF SAN JACINTO
INCORPORATED APRIL AD 1888

Hearing Board
10-29-69

SAM KALFAYAN
CITY MANAGER
Telephone (714)
654-9156
654-7358

308 EAST MAIN STREET
P. O. BOX 488, SAN JACINTO, CALIFORNIA 92383

27 October 1969

Mr. Elmer Katzenstein, Chairman
Riverside County Planning Commission
4080 Lemon Street
Riverside, California

Dear Mr. Katzenstein:

It has come to my attention that the owner-operators of the Colonial Convalescent Hospital on the outskirts of San Jacinto have applied for the Riverside County Planning Commission's approval to expand their present facilities.

The City of San Jacinto has neither an hospital or a convalescent home within its corporate limits. In housing elderly and ill citizens the Colonial Convalescent Hospital is our community's one local salvation. In addition to our normal need for such an institution there is a dire need for medical care of alcoholics and mental hygiene patients.

The applicants in this case are asking the permission of your august body to construct a building that will house 109 additional beds. On Thursday, October 23, the Hemet Valley Hospital Board of Directors proudly opened the doors to its Mental Health Center. Dr. Thomas, Director of the Center, took pains to explain that their institution will be geared to handle only acute mental cases - patients who may be assisted as much as possible during short periods of stay. Due to lack of quarters the Center must "farm out" long-term care patients to foster homes, nursing homes and half-way houses. The availability of additional 109 beds in the proposed expansion of our Colonial Convalescent Hosptial can become, in reality, an adjunct to the needs and pruposes of the Hemet Valley Community Mental Health Center. The Colonial Convalescent Hospital already has a psychiatrist, Dr. Phillip Lawlar, on its staff who will undoubtedly work in harmony with Dr. Thomas of the Hemet Mental Health Center. Enclosed is the informational literature the Center is distributing for the layman's knowledge.

As the Mayor of the City of San Jacinto, I implore the Commission's serious consideration of this community's medical and convalescent home needs. I am certain your study of our needs will convince you to approve the application as requested by the Colonial Convalescent Hospital, Inc. Thank you for your decisions.

Sincerely,

Ray A. Brooks

RAY A. BROOKS
MAYOR

RAB s
Encl.

Hearing Board
10-29-69

WHAT IS THE HEMET VALLEY COMMUNITY MENTAL HEALTH CENTER?

It is a public, non-profit psychiatric facility which provides a comprehensive coordinated program of mental health services located in a recent addition to the Hemet Valley District Hospital.

WHAT PURPOSE DOES IT SERVE?

1. The Center intends to provide a varied range of accessible and coordinated psychiatric services designed to help prevent mental illnesses and to diagnose and treat mental disorders.
2. Through the Center's service program provided within a specific geographic area, any person can find the type of care he needs, when he needs it, as close to his home as possible.
3. By evaluation and research, improved programs will evolve.

WHAT ARE THE ESSENTIAL ELEMENTS OF SERVICE TO BE PROVIDED?

As soon as sufficient staff can be recruited the following "essential" services will be developed:

1. Outpatient care which offers patients individual group or family therapy while permitting them to live at home and go about their daily work and social activities.
2. Partial hospitalization which offers either care for patients able to return home evenings or night care for patients able to work days but are in need of further therapy and are usually without suitable home arrangements. Week-end care may be developed later for patients with special problems.
3. Inpatient care will include provision of fifteen beds for patients who require 24-hour hospitalization. All modalities of treatment will be available.
4. Emergency "crisis-oriented" care which offers psychiatric services at any hour around-the-clock on a walk-in basis at first only in the Center, but subsequently through mobile teams it is planned to serve agencies, facilities and homes in communities within the "catchment service area".
5. Mental Health Consultation and Education services also will be made available by Center staff to community agencies and professional personnel, such as Family Service.
6. For a full and comprehensive program in the future, it is planned to develop the following additional services as staffing and funds permit: Evaluation and research to determine program effectiveness and to analyze needs of the area to be served; Diagnostic and screening services, plus pre-care and after care including patient follow-up in foster homes, nursing homes and half-way houses; Rehabilitation services of both social and vocational types; and University affiliated training for all types of mental health personnel who serve the Center's patients.
7. Special services - will ultimately be provided for children, the elderly, alcoholics, drug users, and potential suicides.
8. Continuity of care for patients in coordinating the above ten services represents the most advanced psychiatric thinking concerning the modern treatment of the mentally ill. It is probably the key concept of the Hemet Valley Community Mental Health Center's program. These coordinated services enable the patient to move easily from one type of treatment to another as his needs dictate. Treatment, therefore, at any time is appropriate to the course of his illness.

WHO IS ELIGIBLE FOR THESE SERVICES?

These services must be available and accessible to all persons in the Center's "catchment area" without regard to age, sex, race, creed, national origin, diagnosis or ability to pay for care.

A "Catchment area" is defined as a geographic area containing census tracts with a total population "not less than 75,000 nor more than 200,000 persons".

HOW MUCH DOES THE SERVICE COST?

In no event will the fee exceed the actual cost of providing the specific service required.

WHAT IS THE ORGANIZATIONAL STRUCTURE OF THE CENTER?

The Mental Health Center is administered by the Board of Directors of the Hemet Valley Hospital District. The Board consists of five members elected for four year term by public ballot of the registered voters of the geographical district which was determined by the Riverside County Board of Supervisors in 1946.

HOW WILL THE COMMUNITY PARTICIPATE?

1. In order to develop a Community Mental Health Center which will have a stable base in the community and be responsible to the needs for solving those problems which the community identifies as most urgent, the Hemet Valley Hospital District Board of Directors proposes to develop a Mental Health Advisory Council of twelve members to serve in an advisory capacity to both the Board and the Center Director. The Council will consist of a rotating membership which will be representing both the geographical locations within the catchment area and individual interests within these locations.

2. It is further proposed that a nine member Professional Advisory Council be appointed by the Board to advise on the technicial aspects of mental health program planning.

3. Finally, plans currently are being made to expand the opportunities for interested citizens to participate directly through the Hospital Auxiliary and other volunteer activities related to the Mental Health Center Program. For information call the Hospital. The number is (714) 658-9471.

WHAT IS THE APPLICATION PROCEDURE?

1. Requests for psychiatric services may be made initially from 8:30 to 5:00 P. M. daily through the Hemet Valley Hospital at 1116 East Latham Street in Hemet, California by calling (714) 658-9471.

2. Depending upon the staff available and the rate of inacituting the various essential service elements, appointments will be set up initially for both direct patient care and indirect patient care and indirect mental health consultation and education services according to priorities developed by the advisory council.

3. Emergency crisis-oriented psychiatric treatment and referral can be provided through the Hospital Emergency Room on a very limited basis from 8:30A.M. to 11:30P.M.

4. General information regarding community psychiatric researches including the HOT LINE can be obtained on a 24-hour basis by calling the Hospital (714) 658-9471.

Hearing Board
10-29-69

Riverside Planning Commission
4080 Lemon Street
Riverside, California 92502

October 27, 1969

Gentlemen:

It has come to my attention that the only convalescent hospital in our community, the "Colonial" has made plans for the expansion of its facilities.

We understand that this expansion will add 52 beds to the present 44 bed facility and make available accomodations and services to patients who to some degree are mentally deficient.

As a businessman in this community of retired people, I am well aware of the need for this addition. It should do much to serve our community and we respectfully ask that your department give favorable consideration to any requests which the Colonial people might make concerning this community improvement.

I am also familiar with the area surrounding the hospital property. You will no doubt observe that most of the property has appreciated in value to the extent that it is no longer practical to make agricultural use of the land. We, therefore, suggest that the hospital and its planned expansion will not only serve a need but also assist our community in making an orderly and desireable transition from the present zoning to a more desireable usage.

We, therefore, again respectfully ask and recommend approval of any request which the Colonial people may make in order that this expansion can be effected.

Sincerely,

Hale Leonard

Hale Leonard
566 Soboba Street
San Jacinto, California

"HEART OF THE HEALTH BELT"

COUNCILMEN
WILLIAM J. YOUNG,
RAY A. BROOKS, Mayor
ALEXANDER SABEN
SID W. PATTERSON
R. J. STEVENS

SAM KALFAYAN
CITY MANAGER
Telephone (714)
654-9156
654-7358

Harry Davis
10-29-69

308 EAST MAIN STREET
P. O. BOX 488, SAN JACINTO, CALIFORNIA 92383

27 October 1969

Riverside County Planning Commission
Riverside County Courthouse
Riverside, California

Attention: Mr. Katzenstein, Chairman

Gentlemen:

The County Planning Department's routine form letter requesting this City's point of view on Public Use Case No. 225 re: the application of Colonial Convalescent Hospital, Inc. for expansion passed over my desk recently. Although our Planning Commission conveyed its views through the office of the City Planning Director, I consider this particular case of sufficient importance to our community to express the position of this Office for your consideration.

The applicants of Case No. 225 had discussed with me on previous occasions our common problem of housing and caring for alcoholics and mental hygiene patients. I am sure you know that no medical institution rendering such specialized service exists within reasonable travelling distance from here. During 1968 our Police Department logged 212 drunk bookings. Of these there were 86 local residents apprehended and 88 out-of-towners who needed special care. In the absence of an institution geared for such alcoholics we had to release and allow them to fend for themselves. As the figures show the added problem of out-of-towners equalled our own alcoholic residents.

The need for housing and caring for alcoholics and mental hygiene patients in this area, for as many as 100 (and over) beds was verified early this calendar year through a letter by the State Department of Public Health. The Colonial Convalescent Hospital's present 44 beds present a very inadequate housing problem for our community's convalescent patients' needs. The June 1969 county-wide special census figures showed that 41% of San Jacinto's population is over 50 years of age. As the City Manager of the City of San Jacinto, I am in daily contact with the relationship between this abnormal age factor in our community and the inadequacy of beds for convalescing patients and emergency callers. In addition to our normal municipal services our police and fire departments render resuscitator and emergency call aid. The lack of housing facilities for such patients in our area is a matter-of-fact common knowledge to us.

Further substantiation of this acute problem is verified by the statement taken in toto from the Hemet-San Jacinto Area General Plan (adopted by the governments of Hemet, San Jacinto and Riverside County), Public Facilities chapter (page 74):

> "Long-term care hospital needs for the Valley by 1980 may be as many as 400 beds based on California State Department of Public Health standards because of the expected high per cent of population aged 65 and over. The 170 conforming beds available in 1967 do not meet current needs and,

therefore, expansion of these facilities is recommended. The General Plan recommends that new convalescent and long-term hospitals be located in quiet areas protected from heavy highway traffic and industrial or other possible noise generators."

With the above-noted facts brought to your attention we hope your decision will favor the needs of our community, namely, the expansion of the Colonial Convalescent Hospital.

Thank you in advance for your cooperation.

Respectfully,

Sam Kalfayan

SAM KALFAYAN
City Manager

SK s

STATE OF CALIFORNIA- HUMAN RELATIONS AGENCY

RONALD REAGAN, Governor

DEPARTMENT OF PUBLIC HEALTH

744 P STREET
SACRAMENTO 95814

February 24, 1969

Hearing Board
10-29-69

Jean E. Reed
Asst. Administrator
Colonial Nursing Home
39241 Seventh Street
San Jacinto, California

Dear Miss Reed:

PSYCHIATRIC LONG-TERM CARE

In reply to your request for estimates of long-term psychiatric care bed need, we are providing you with the following information taken from the 1968-69 California State Plan for Hospitals.

San Jacinto is in Catchment Area 139 as defined in the California State Plan for Community Mental Health Centers, 1968-69. Estimated need for long-term psychiatric care facilities and existing beds in this area are summarized below:

Estimated Bed Need - 1973	121
Total Existing Beds and Beds Under Construction - 12/31/67	15
Conforming	15
Nonconforming	0
ADDITIONAL BEDS NEEDED	106
Beds to be Modernized	0

The criteria for estimated need and the methods of inventory as to conforming or nonconforming are contained in the California State Plan for Hospitals, 1968-69.

This letter is not a Certificate of Need (FHA Form No. 2576) as required by the Federal Housing Administration as a prerequisite to application for mortgage insurance.

A Certificate of Need may be sent by this office directly to your local FHA office if you so desire. The Certificate would contain the same information shown above and would be sent in your name to FHA upon your written request.

For further information or assistance, please contact us and we will do whatever we can to be of service.

Very truly yours,

Robert C. Kimball, Chief
Bureau of Health Facilities
Planning and Construction

John Barr
Consultant in Hospital Planning

Form 434-105

COLONIAL CONVALESCENT HOSPITAL, INC.

39241 WEST SEVENTH STREET
SAN JACINTO, CALIFORNIA 92383
PHONE 654-9347

Planning Board
10-29-69

IRENE YORKS
ADMINISTRATOR

HOWARD H. PATTERSON
TREASURER

JEAN E. REED
SECRETARY

We the neighbors and property owners adjacent to and living in the immediate vicinity of the Colonial Convalescent Hospital are affirming our **previous letter** stating that we approve of the addition to the Convalescent Hospital 62 additional beds which are to be licensed for mental and alcoholic patients.

The Hospital has added in the past six years beauty and employment to our town and we know that it will continue to do so.

Name	Address	Date
Jean E. Reed	39410 W. 7th San Jacinto Cal	10-24-69
Mr + Mrs Lee Winters	23425 Hemet Ave Hemet Calif	10-24-69
It would be a great asset to the community		
Fred J Shideler	3910 W 7th St San Jacinto	
Ruth M Shideler	As much needed 3910 W 7th St San Jacinto Calif	
Nina K. Clark	3915 W. 7th St San Jacinto Calif	
I feel this is a good idea		
Mr + Mrs Lee Wilcox	39320 7th St San Jacinto	
Mr + Mrs Phillip Lawson	38607 7th St San Jacinto	
I feel this project	would be a great asset to the community	
S.H. Swenson	39252 7th St. I definitely approve of this project. It has been a benefit to our area.	
Mr + Mrs Debra	39247 7th St. This is much needed in our community and we are much in favor of this enlargement.	
(Mrs Vick)	25390 Terry Lane Hemet, Calif. There is a definite need for more rooms in the convalescent home. It is an asset to the community	
Ken Jabs	39196 West St San Jac	
I feel this project is an asset to the progress made in the community and to the people who are in great need of this Convalescent Hospital		
Mr + Mrs E Swenson		
I endorse & approve		

Hospital Designing & Engineering Co.

6442 COLDWATER CANYON • SUITE 211 • NORTH HOLLYWOOD, CALIFORNIA 91606 • (213) 766-7503 • 877-0561

M. W. ECKHAUS, President

June 6, 1969

Hearing Board
10-29-69

Colonial Convalescent Hospital, Inc.
39241 7th Street
San Jacinto, California 92383

Attention: Miss Irene Yokes
Mr. Howard H. Patterson

Reference: Colonial Convalescent Hospital, Inc.
Previously Colonial Nursing Home

Dear Miss Yokes and Mr. Patterson:

Several days ago I met with the State Department of Health and reviewed the plans for the Hospital expansion. We received an exceptionally fine reception for the plan as designed with the exception that we over-looked a central supply which is required. Therefore, we have assigned general storage room 64 for this purpose.

Consequently, I plan to submit the preliminary plans some time next week to the State Department of Health and the State Fire Marshall for their approvals.

Very truly yours,

HOSPITAL DESIGNING & ENGINEERING CO.

M. W. Eckhaus

MWE:bb

Hospital Designing & Engineering Co.

6442 COLDWATER CANYON • SUITE 211 • NORTH HOLLYWOOD, CALIFORNIA 91606 • (213) 766-7503 • 877-0561

M. W. ECKHAUS, President

August 11, 1969

Hearing Board
10-29-69

Miss Irene Yokes
Mr. Howard H. Patterson
Colonial Convalescent Hospital, Inc.
39241 7th Street
San Jacinto, California 92383

Reference: Proposed addition to:
Colonial Convalescent Hospital, Inc.
San Jacinto, California

Dear Miss Yokes and Mr. Patterson:

Several days ago, we received approval of the preliminary plans from the State Fire Marshal's office with an exception of a few minor changes that they requested. However, we had no word from the State Department of Health and I telephoned them and learned that they had written to you on July 14 requesting the completion of the license application, which they sent to you, that is now required before they will review the plans. Therefore, I wish to urge you to send the completed application to them as soon as possible.

I do not anticipate any difficulties in getting the Department's approval since I had a preliminary personal meeting with Mr. John Evans, who will be reviewing the plans, after they have been corrected.

I have been waiting for the financial information that you were going to send me prepared by your Accountant, giving the balance sheet and profit and loss for your Hospital operation for 1968, as well as an operational projection for the expanded Hospital. As I told you when we talked recently by phone, I have one lender that I would like to contact regarding financing for your project, however, I would need all the financial information to complete the loan package.

Just as soon as I hear from you, we will be able to move forward.

Very truly yours,

HOSPITAL DESIGNING AND ENGINEERING CO.

M. W. Eckhaus

MWE:bb

VAN'S HEATING & AIR CONDITIONING

Hearing Board
10-29-69

PHONE (714) 654-9341
38610 SEVENTH STREET
SAN JACINTO, CALIFORNIA 92383

October 27, 1969

To Whom It May Concern:

We are writing this letter on behalf of Colonial Convalescent Hospital Inc., which is down the street from us. We understand that they want to enlarge their facilities. The Colonial Convalescent Hospital has been an asset to our community. They have done a fine job of taking care of our olderly people. Their Building and Grounds are always kept neat and clean. We, as neighbors, would like to ask that you assist them in any way you can.

Sincerely yours

Philip Van Norman

Nora D. Van Norman

RIVERSIDE COUNTY PLANNING COMMISSION
4080 LEMON ST.
RIVERSIDE, CALIFORNIA

October 6, 1969

TO: STATE DIVISION OF FORESTRY

SUBJECT: PUBLIC USE CASE NO. 225 - Convalescent hospital (expansion) - Hemet-San Jacinto
Colonial Convalescent Hospital, Inc.
39241 Seventh Street
San Jacinto, California

Your comments and recommendations are requested prior to October 20, 1969

The public hearing on this matter will be held on October 29, 1969 should you wish to be present.

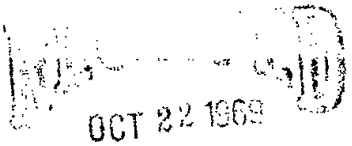
COMMENTS:

1. Provide one fire hydrant to serve the new addition. This hydrant should be within 500 feet of the new addition.

   (a) Hydrant minimum 6 inch barrel with multiple outlets.
   (b) Main should be minimum 8 inch diameter.
   (c) If there is an existing hydrant which meets the above requirements please so indicate on the Water Plan Map request below.

2. California Division of Forestry requests to approve the Water Plan Map before the case is finalized.

3. Hand the Developer the attached copy of the Fire Hydrant and Water Main Requirements.



J ELMER CHAMBERS
State Forest Ranger

DON RUSSELL
Associate State Forest Ranger

DR:jl

Date October 21, 1969 Signed _____

(Return original and one copy to Planning Dept., 4080 Lemon Street, Riverside, Calif.)

RJS:jb

RIVERSIDE COUNTY PLANNING COMMISSION
4080 Lemon Street
RIVERSIDE, CALIFORNIA

October 6, 1969

TO: ROAD DEPARTMENT

SUBJECT: PUBLIC USE CASE NO. 225 Expand a convalescent hospital - Hemet-San Jacinto
Colonial Convalescent Hospital, Inc.
39241 Seventh Street
San Jacinto, California

Your comments and recommendations are requested prior to October 20, 1969

The Public hearing on this matter will be held on October 29, 1969 should you wish to be present.

COMMENTS:

PLANNING:

All necessary right of way exists. No street improvements should be required at this time.

TRAFFIC: No Comment.

RECEIVED
OCT 23 1969
RIVERSIDE COUNTY
PLANNING COMMISSION

Date 10-22-69 Signed [signature]
OEM 10-23-69

(Return original to Planning Department, 4080 Lemon Street, Riverside, California 92501)

R.P.C. #2
(4-67) 69

2

RIVERSIDE COUNTY PLANNING COMMISSION
4080 Lemon Street
RIVERSIDE, CALIFORNIA

October 6, 1969

TO: LAND USE DIVISION

SUBJECT: PUBLIC USE CASE NO. 225 - Expand a convalescent hospital - Hemet-San Jacinto
Colonial Convalescent Hospital, Inc.
39241 Seventh Street
San Jacinto, California

Your comments and recommendations are requested prior to October 20, 1969

The Public hearing on this matter will be held on October 29, 1969 should you wish to be present.

COMMENTS:

No comments.

RECEIVED
OCT 16 1969
RIVERSIDE COUNTY
PLANNING COMMISSION

Date 10/14/69 Signed Chester Tifal
Chester Tifal, Land Use Adm.

Please return original to Planning Department, 4080 Lemon Street, Riverside, California 925

Rev. 9/67
(25-6)

RIVERSIDE COUNTY PLANNING COMMISSION
[illegible] Street
RIVERSIDE, CALIFORNIA

October 6, 1969

TO: CITY OF SAN JACINTO

SUBJECT: PUBLIC USE CASE NO. 225 - Convalescent hospital (expanaion) - Hemet-San Jacinto
Colonial Convalescent Hospital, Inc.
39241 Seventh Street
San Jacinto, California

Your comments and recommendations are requested prior to October 20, 1969

The Public hearing on this matter will be held on October 29, 1969 [illegible]

you wish to be present.

COMMENTS: The General Plan designates low medium density uses itemized for this particular area. Therefore, our interpretation of the Multiple Family Areas reads as follows: "The General Plan allocates low density multiple family uses in certain areas for the development of mobile homes, apartments and cluster housing. The General Plan indicates certain areas for multiple family use in order to stimulate apartment development with up to forty (40) units to the acre near the central business districts and shopping centers". The last paragraph on Page 45 reads as follows: "Additional multiple family zoning will be desirable within, and near, the City of Hemet and to a lesser extent in the City of San Jacinto. The large increase in single retired persons in the next decade will offer a continued market for small apartment developments in and near the cities".

Checking the smaller General Plan maps the low medium density covers a larger portion of the area while the large General Plan document shows low medium density in the particular area involved.

After due consideration by the Planning and the staff, they were [illegible] to the interpretation that the Convalescent Hospital use complies to standards and regulations as approved and adopted by the City of San Jacinto, City of Hemet and County of Riverside.

Thanking you for your consideration for the increased facilities for the Colonial Convalescent Hospital, Inc.

Date: October 14, 1969 Signed: Henry C. Kalbfleisch

Henry C. Kalbfleisch, Planning Director

(Return original to Planning Department, [illegible])

R-3:mp
1-23-65

OCT 16 1969

R

DEPARTMENT OF PUBLIC HEALTH

COUNTY OF RIVERSIDE

Health-Finance Building
Riverside, California 92501

Telephone
787-6543

Lloyd E. Irons, R.S. - Director
Division of Environmental Health

October 14, 1969

Riverside County Planning Commission
4080 Lemon Street
Riverside, California 92501

Attention: William Livingstone
Planning Director

Re: Public Use Case No. 225
Convalescent Hospital
Hemet-San Jacinto Area

Gentlemen:

The Department of Public Health of Riverside County has reviewed the application filed by Colonial Convalescent Hospital, Incorporated to expand a convalescent hospital on property located between Grand Avenue and Gilbert Street south of 7th Street in the Hemet San Jacinto area in the unincorporated territory of Riverside County.

If the occupancy contemplated is installed according to Exhibit A on file in the Planning Commission, and is maintained in accordance with all laws, rules, regulations and policies of this and other jurisdictions, it would not have any detrimental effect on the health, safety and general welfare of the persons residing in the nearby area.

This Department requests that information indicating that sewage and waste disposal are feasible in accordance with existing regulations of the State and County and that water is obtainable from an approved source, be furnished this Department prior to any construction.

Very truly yours,

HAROLD M. ERICKSON, M.D.
Director of Public Health

Lloyd E. Irons, Director
Environmental Health

LEI:ts
cc: Frank Paschal, R.S.
J. P. Begley, R.S.

OCT 15 19[illegible]

Mr. John Rose 1020 W. 10th St. Corona, California	Mr. Elmer M. Katzenstein Box 3097 Riverside, California	Mr. Harold Moyer 140 W. 12th St. Beaumont, California
Mr. Horace Miller P. O. Box 1199 Blythe, California	Mr. Robert O'Donnell Box 318 Nuevo, California	Mr. Maurice A. Perry 37833 Fruitvale Avenue Hemet, California
Mr. Kay H. Olesen c/o Imperial Motors 83-095 Highway 99 Indio, California	John F. Brown 1210 Gramercy Place Los Angeles, California 90019	Mr. J. Bryant Flood Control Engineer P. O. Box 1033 Riverside, California
Dr. Erickson Public Health Director 3575-11th Street Riverside, California	Land Use Division 4080 Lemon Riverside, California	Mr. A. C. Keith Road Commissioner 4080 Lemon St. Riverside, California
State Division of Forestry P. O. Box 248 Perris, California	City of San Jacinto City Hall San Jacinto, California	Riverside Health Planning Association 4175 Brockton Riverside, California
Colonial Convalescent Hospital 39241 Seventh St. San Jacinto, California	C. & A. Holstrom 39224 W. 7th St. San Jacinto, California	M. & N. Daniels Box 47 San Jacinto, California
V. & D. Wigley 39244 W. 7th St. San Jacinto, California	F. & R. Shideler 39110 1/2 W. 7th St. San Jacinto, California	Mary Caplinger 39150 7th St. San Jacinto, California
K. & A. Jass 39146 7th St. San Jacinto, California	H. Culbertson 39252 7th St. San Jacinto, California	G. Heyncke 1211 W. 7th St. San Jacinto, California
F. & [illegible]. Walter 213 Beaumont Vista, California	[illegible]	L. M. Ogburn 25390 Terry Lane Hemet, California
~~G. & [illegible] Hughes~~ ~~600 [illegible] Ocean Boulevard~~		

C. & S. Hughes
600 E. Ocean Blvd.
Long Beach, California

I. Yokes & H. Patterson
39241 W. 7th St.
San Jacinto, California

W. M. Ferrell
23501 State
San Jacinto, California

James Vohora
1219 W. 7th St.
San Jacinto, California

RJS:39756

October 16, 1969

Colonial Convalescent Hospital, Inc.
39241 Seventh Street
San Jacinto, California

SUBJECT: Public Use Case No. 225
Colonial Convalescent Hospital, Inc.
Addition to Convalescent Hospital

Gentlemen:

Enclosed please find a copy of legal notification in connection with your application.

It is suggested that you be present or represented at this hearing. Failure to do so may be construed as a waiver of your right to present additional evidence.

In the event you appoint someone to represent you at the hearing, a letter signed by yourself giving such authorization must be on file with the Planning Commission at the time of the hearing. Your attention is directed to the enclosed "Posting of Notice" and "Affidavit of Posting" instructions.

Very truly yours,

RIVERSIDE COUNTY PLANNING COMMISSION
Wm. R. Livingstone - Planning Director

Richard J. Stokes - Associate Planner

RJS:jb
Encls.

POSTING OF NOTICE

Riverside County Planning Commission

The applicant is hereby instructed to post the enclosed NOTICE OF PUBLIC HEARING no less than 3 feet above the ground in a conspicuous place on the front property line of the property involved in the zoning case under consideration for at least 10 days prior to the date of the hearing noted thereon. Failure to post or removal of this notice prior to date of hearing, shall constitute a violation of the Riverside County Board of Supervisors Order of April 26, 1965. The applicant shall sign the AFFIDAVIT OF POSTING below and return same in the enclosed envelope prior to the date of the public hearing.

Case No. PUBLIC USE CASE NO. 225

AFFIDAVIT OF POSTING

Colonial Convalescent Hospital, Inc., does under penalty of
(name)

perjury state:

That on the _____ day of _____, 19____ I did securely and conspicuously posted the enclosed notice, of which the attached is a full, true and correct copy.

SIGNED _____

Executed at _____ (City) _____ (State)

This _____ day of _____, 19____.

9-4-69:lh

RJS:39622

September 22, 1969

COPY

Colonial Convalescent Hospital, Inc.
39241 Seventh Street
San Jacinto, California

Gentlemen:

We are in receipt of your application to establish an addition to an existing convalescent hospital for the mentally ill at 39241 West Seventh Street, San Jacinto, California.

By Resolution of the Board of Supervisors it will be necessary for you to obtain a clearance from the Comprehensive Health Planning Association of Riverside County, 4175 Brockton Avenue, Riverside, California.

Very truly yours,

RIVERSIDE COUNTY PLANNING COMMISSION
Wm. R. Livingstone - Planning Director

Richard J. Stokes - Associate Planner

RJS:lp
cc:J. Brusstar

PUBLIC USE CASE NO. 225
Colonial Convalescent Hospital, Inc.
Expand a convalescent hospital
Zone A-1-5
Hemet-San Jacinto District
Fifth Supervisorial District

HEARING BOARD CONDITIONS (PROPOSED)
October 29, 1969

Approved

1. The development of the premises shall conform substantially with that as shown on plot plan marked Exhibit "A" on file with Public Use Case No. 225 in the office of the Riverside County Planning Commission unless otherwise amended by the following conditions.

   a. Use shall be limited to a 107 bed convalescent hospital.

2. Prior to the issuance of a building permit or any use contemplated by this permit, a bond for the cost of curb and gutter and tie-in paving shall be deposited with the Road Commissioner By January 1, 1972 said curb and gutter and tie-in paving shall be installed at no cost to any government agency, at a grade and alignment approved by the Riverside County Road Commissioner on 7th Street.

3. Prior to the issuance of a building permit for construction of any use contemplated by this approval, the applicant shall first obtain permits and/or clearance from the following public agencies:

   Department of Public Health
   State Division of Forestry
   Road Department

   Written evidence of said permit or clearance from the above agencies shall be presented to the Land Use Division of the Department of Building and Safety at the time of the issuance of a building permit for the use contemplated herewith.

4. This approval shall be used within 2 years, after final proceedings before the Board of Supervisors, otherwise it shall become null and void and of no effect whatsoever. By "use" is meant beginning of construction of the hospital addition.

Attached
I agree -
Contact Land Use
Please
Bill

Bill: PU Case #225

This attached article from the Enterprise of April 8th tells about how "Colonial Convalescent Hospital" is branching into other fields — "weight reduction, massage, physical therapy, dancing and exercise plus beauty care including new face."

Condition "1a" of PU #225 says use shall be limited to a 107 bed convalescent hospital.

I have a feeling that the new use does not fit the intention of the Commission + BS of S at time of approval of the PU case nor of the applicants as judging by their testimony before the Hearing Board.

It doesn't appear to me that the uses themselves would be permitted per-se in the A-1 zone nor would qualify for a Public Use Permit — or would be an accessory use for a convalescent hospital.

Harold





Sketch by Dave Strand

And health, too

File copy

PU 225

The program's purpose is to give beauty

By JOANNE NORRIS

SAN JACINTO — Eve bit into the apple and woman began the quest for youth and beauty.

The search often has led her to charlatans. But her desire for health, beauty and youth has been so compelling that she is often easy to deceive.

Today plastic surgery and facial rejuvenation remain controversial, although the stigma once attached to them is being lifted by operators with proper medical credentials.

Jean Reed, former school teacher and licensed vocational nurse, is including face lifts and exfoliation (face peels) in a program she has initiated at a new health and beauty complex near San Jacinto.

She and her partner, Dr. Howard L. Holt, a Hemet physician, are transforming a convalescent hospital at 39241 Seventh St. into a place to keep people healthy and beautiful as well as alive.

The Colonial Convalescent Hospital, started by Mrs. Reed's mother, Mrs. Irene Yokes, in 1964 will still accept geriatric patients.

But it's branching into other fields — weight reduction with help from shots, massage, physical therapy, dancing and exercise, plus beauty care including new faces.

Face peeling and lifts will be done by a Lancaster general surgeon who says medical ethics prevent his agreeing to the use of his name.

He's on call by the hospital, which has changed its name to San Jacinto Medical Center. Mrs. Reed arranges appointments for consultations with the doctor at the center.

Only about 10 per cent of plastic surgery must be performed in a hospital, the Lancaster doctor said. The rest can be done in a doctor's office under local anesthetic.

Face lifting and face peeling are separate procedures. The lifts, where tucks are taken in the loose skin of the face and neck, should be done first because the exfoliation can erase any tiny scars left over from the lift, explained the physician.

Incisions can be made behind the hairline, ears, near the eyebrows and in the folds under the chin, depending on where the wrinkles are. The skin is pulled as taut as possible.

that procedure requires about nine days of bed rest.

Chemical face peeling, he explained, was done by Cleopatra but despite its early origin has become popular only in about the past 10 or 15 years.

The chemical peeling was done in Europe after World War II and is performed principally in Heidelberg and Rome.

The physician became interested in chemosurgery in the early 1950s when a Hollywood actress was brought into a hospital emergency room where he was on duty.

"Her face looked wonderful, so I asked her where she had had it done.

"At that time a woman in Hollywood had done Gary Cooper and other stars.

"I went there to try to find out her technique, but when I said I was a doctor I wasn't admitted.

"She's in Mexico now and still doing the peeling, I guess. Her work was marvelous."

In 1956 a British physician outlined the exfoliation proc-

(See THE SEARCH, Page H-3)

Face peeling: what it's like

Face peeling begins when the patient checks into a hospital.

He or she takes a shower, washes his hair and cleans his skin thoroughly with an antiseptic soap. Male patients shave as closely as

eyes. A weaker solution is used on the eyelids.

The phenol application phase lasts 20 to 30 minutes. After it's completed, the face is taped to maintain a warm, liquid environment for two to three days.



MRS. JEAN REED, left, has converted a convalescent hospital in San Jacinto to a facility which will concentrate on health and beauty. She's putting James V. Reed, her brother-in-law, and LeVey Alexander through an exercise routine.

People

Betty Danfield Editor



VIOLET HARRISON, Hemet, a masseuse, pummels the fast-disappearing pounds of flesh on a patient at the San Jacinto Medical Center.

creaky is free to go about his business.

The doctor, who ghost wrote a chapter on exfoliation or chemosurgery in a recent paperback book, "Facial Rejuvenation" by Robert W. Prehoda (Three Penny, Inc.), said

The surgery is outlined in a book, "Facial Rejuvenation," by Robert W. Prehoda. A Lancaster general surgeon, who does face peeling and lifts at San Jacinto Medical Center, ghost wrote the chapter on face peeling (exfoliation or chemosurgery).

He says medical ethics prevent the use of his name.

A sedative is administered to keep the patient calm while the surgical team — doctor, nurse and trained cosmetologist — go to work.

Liquid phenol (carbolic acid) preparations have been prepared beforehand. The formulas are not secret, the doctor explained in the book. They are available to any qualified physician who seeks them, he said.

The phenol solution is applied to the skin with great care. An ointment is placed between the eyelids to assure that no phenol reaches the

[illegible] of tape are laid on like shingles on a roof in a 20- to 30-minute process.

The greatest amount of tissue rejuvenation will occur during the next 30 hours, according to the doctor.

After the taping is done, the patient is returned to his room where he must stay in bed.

Talking and facial movement are restricted because excessive moving of face muscles can cause the procedure to be less effective, the doctor points out.

No visitors are allowed and patients must communicate by pencil and paper. The diet is liquids and pureed foods.

The patient is plied with large amounts of hot tea and hot lemonade to maintain a flow of the plasma-like fluid under the tape mask.

After about 48 hours the mask becomes uncomforta-

(See FACE, Page H-2)

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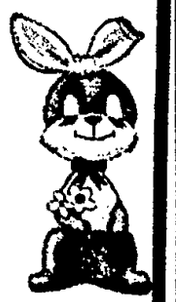

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Guest list problem



DEAR ABBY: My daughter is 18. She is marrying the boy she went steady with all through high school. He is 19. We are managing the wedding but must limit the number of guests to 125 because my husband has been out of work and we are not in very good shape financially.

I told the groom's mother that she could invite 63 people and we were inviting 62. She said that wasn't nearly enough for her as she is presently separated from her husband and she wants to invite her boyfriend and his family, which is very large. I told her in a nice way that she could invite whomever she wanted but not more than 63 people as we had to hold down the expense.

Guess what she said? "Either I have as many people as I want or I'll refuse to sign for my son!"

Abby, he is only 19 and he can't get married unless she signs for him. So what do I do now? — SAD MOM

DEAR MOM: Don't let her blackmail you. In some states the signature of only one parent (or guardian) is sufficient. Look into it. Also tell the lady (?) that if she wants to pay for her own guests she may have as many as she wants.

DEAR ABBY: A few weeks ago my husband died, and right after the funeral my children insisted that I go visit my sister in another town to get away for a while.

Today I came home to an immaculate, but very empty house. I have two wonderful daughters and I love them dearly, but sometimes I wish they wouldn't be so helpful.

They came in and cleaned my house from top to bottom. Every closet, every cupboard, every shelf had been scrubbed. My house shines from one end to another.

But what bothers me most is that they disposed of all their father's belongings! There is not a trace of him in this house. It's as though he never lived here. There are no socks to darn, no buttons to sew. My sons-in-law even divided up his tools. I suppose they did this so I wouldn't feel so bad sorting through his things and doing it myself.

I could say something, but the deed is done, however well-meaning it was. But now I have nothing to do except dust and wash my own few dishes.

Thanks for listening, Abby. I feel a little better now. — LOST AND LONELY

DEAR LOST: I understand your feeling of uselessness, but I assure you your daughters meant well. They spared you what is usually the most painfully heart-breaking task a widow must face.

The search for beauty

(Continued from Page H-1)

ess in Lancet, a British medical journal. It provided the doctor with information about the chemical formulas used.

Then in 1964, on a trip around the world, he saw the procedure performed in Japan and Hong Kong.

A few years later, he studied the process at the University of Heidelberg.

A general surgeon, he continues his regular practice, devoting about 35 per cent of his time to facial rejuvenation.

"I think this should be available to everyone," he said. He hopes eventually to do it fulltime.

"Doctors are strange about the whole subject," he continued. "Plastic surgeons are an elite group and they want to keep it that way."

Chemosurgery simply is the removal of the aging epidermis or outer skin layer by the use of chemicals instead of scalpel or abrasives, the doctor explained in "Facial Rejuvenation."

Skin aging is more apparent in the face and neck than in other parts of the body because, scientists say, those areas get more ultra violet sun rays.

When the wrinkled exterior skin layer is peeled away, new skin is possible again.

The doctor said that plastic surgeons tend to shy away from chemosurgery because it did not stem from a clinical discovery by a famous physician. Instead it was introduced in this country by lay operators with little or no training. And results were mixed.

Cases of scarring in the 1930s and 1940s caused many physicians to criticize the technique.

The scarring can be attributed to the lack of medical knowledge of the lay operators, the doctor said. He claims it's now as safe as any other form of cosmetic surgery.

Dr. Holt's part in the rejuvenation process is overseeing weight reduction based on the use of daily injections of chorionic gonadotrophin (HCG), derived from the urine of pregnant women.

According to the Lancet, HCG can be administered to the average patient for 40 days without harmful effects. It reduces the appetite so patients can exist on 500 calories a day without hunger or loss of energy.

After 40 days, as the body becomes immune to the HCG, a normal appetite returns. The HCG can be started again in about six weeks if further weight loss is desirable.

During the 40 days, most patients lose 20 to 30 pounds, Lancet said.

HCG acts on abnormal fat so if a patient is just five to 10 pounds overweight, results are not as dramatic

Lancet points out other effects.

"There was a great increase in libido in its broadest sense, and the frequency with which pregnancy took place during or soon after treatment was such, even in women who had hitherto considered themselves sterile, that it became an ethical obligation to warn women of childbearing age about this before treatment was started."

Lancet also claims HCG stops abnormal loss of head hair and improves brittle fingernails. Singers reported improvement in their voice quality, the journal reported.

The HCG shots are available at the San Jacinto Medical Center at a cost of $150 for a 40-day series, Mrs. Reed said. The fee includes a physical examination given before the shots are begun.

Cost for the chemosurgery is about $1,500 including the nine days of bed rest at the center, she added. Face lifts start at $750 and go up to several thousand dollars.

The center also has a beauty salon with two cosmetologists, a dance studio, massage parlor plus equipment for exercise and physical therapy.

Working women can stay at the center from Friday to Sunday for $59. This includes figure analysis, advice on diet, exercise and games, entertainment and room and board.

For $119, the weekend also will include massage and hairstyle among other things.

The staff of 38 includes three registered nurses and three vocational nurses. The director of nurses is Mrs. Ellen Hitzka, Mrs. Reed's daughter.

Mrs. Reed's husband Don, who has retired from the U.S. Air Force, does the cooking. His brother, Jim, works there too.

A former housewife and bank employe, Mrs. Reed, 51, went to college while her daughter was in high school. She taught in Ohio and San Diego before moving to the San Jacinto area.

She's had a face peel and a face lift.

"You can't believe how different I look. I had this awful neck, jowly, full of wrinkles. It was a real chicken neck. I rushed out and bought a low-cut gown first thing."

Eye for eye

BOSTON, Mass (AP) — Mrs. Angelia Hermenet, a social worker with the Springfield Child and Family Service, opened her testimony before the Joint Committee on Social Welfare in Spanish.

She told the committee she did this to let them "experience for an instance what 100,000 Spanish - Americans have experienced in Massachusetts."

She was testifying in support of a measure for a special commission study on the availability of Spanish-speaking medical personnel and social workers in mental health and retardation institutions.



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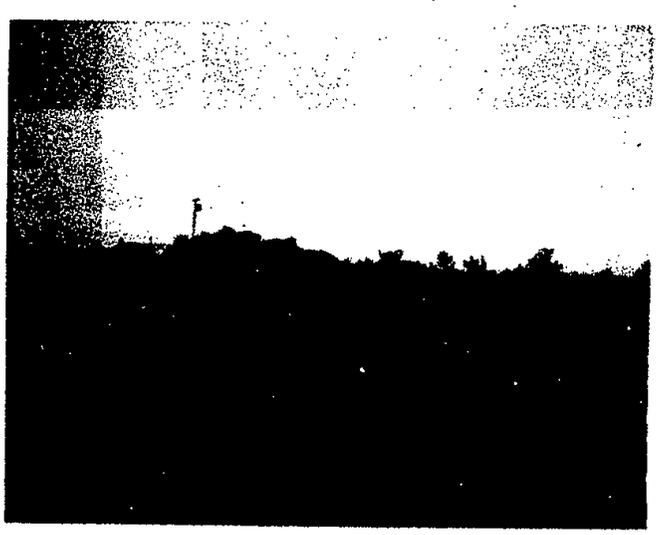
DATE: PU 225 SEC 34 T 4S. R 1W

ISSUE: ADD'N TO CONC. HOSP PHOTO BY: SOMMERS

AREA: HEMET - SAN JACINTO DATE: 16 Oct 69



REMARKS: PHOTO LOOKING S.E.

LIST OF PROPERTY OWNERS

DATE OCT. 17, 1969 FOR: PUBLIC USE NO 225

DATE OF HEARING: OCT. 29, 1969 JES.

BK. PG. 21-24	DESCRIPTION	NAME	ADDRESS
008	- 22	HULSTROM, CALVIN & ALICE	30224 W. 7TH ST. SAN JACINTO
"	26	DANIELS, MILTON & NAOMI	BOX 47, SAN JACINTO
"	02	WIGLEY, VIRGIL & DOVIE	30244 W. 7TH ST. SAN JACINTO
"	30	(HULSTROM)	
"	60	SHIDELER, FRED & RUTH	30110 1/2 W. 7TH ST. SAN JACINTO
"	80	CAPLINGER, MARY	30150 W. 7TH ST. SAN JACINTO
"	92	JABS, KENNETH & ANNA	30146 7TH ST. SAN JACINTO
	81	CULBERTSON, HERBERT	30252 7TH ST. SAN JACINTO
BK. PG. 21-22			
000	- 17	MEYNCKE, GLENN	1211 W. 7TH ST. SAN JACINTO
"	22	WALTER, FRANK & HAZEL	213 BEAUMONT, VISTA CAL.
"	19	OGBURN, E M (ETAL)	25390 TERRY LANE, HELMET
001	- 20	HUGHES, CHARLES & SARAH	600 E. OCEAN BLVD. STE. 100 LONG BEACH
"	40	PATTERSON, HOWARD (YOKES) IRENE &	30241 W. 7TH ST. SAN JACINTO
"	61	FERRELL, W. M. (ETAL)	23501 STATE SAN JACINTO
"	62	VOSBURG, JAMES	1217 W. 7TH ST. SAN JACINTO

I hereby certify under penalty of perjury that notices were mailed, postage prepaid, to those owners indicated by ✓ on the attached list on the 17 day of October 1969. (NOTE: A CHECK MARK TO BE PLACED BESIDE EACH NAME ON OWNER'S LIST AS NOTICES WERE MAILED.)

Jane Barnes
(Signature)

jb:9-12-69

REC AUG 2 1965

Case No. 225

APPLICATION FOR PUBLIC USE PERMIT

In Accordance with Article XVII of Ordinance No. 348,
Zoning Ordinance for the

COUNTY OF RIVERSIDE, CALIFORNIA

TO: THE RIVERSIDE COUNTY PLANNING COMMISSION

NAME OF APPLICANT JOLONI L CONVALESCENT HOSPITALS, INC.

Only the following persons may file. Applicant must indicate under what capacity he is filing by placing (x) in block provided.

1. The record owner of the property.

2. The purchaser of the property under a contract in writing duly acknowledged by both the buyer and the seller.

3. The lessee in possession of the property, with the written consent of the record owner to make this application.

4. The agent of any of the foregoing, duly authorized thereto in writing.

(If the application is filed by lessee or agent, evidence of written authorization must be submitted with this application.)

A map showing said real property and adjacent properties is attached hereto and made a part of this application.

The street address of this property is 39241 W. 7th St., San Jacinto, Cal 92383
Situated on the south side of said street between Gilbert and Grand

Legal description of real property located in the County of Riverside, must be accurately described as per Riverside County Records. Lot 14 and that portion of Lot 13 of Estudillo Land and Water Companys Addition to San Jacinto as shown by Map on file in Book 9 page 410 of Maps, San Diego County Records, lying Westerly of a line drawn parallel with and distant Easterly 500 feet from the center line of Grand Avenue. Farm Lots 15 and 16 of the Estudillo Land and Water Company's Addition to San Jacinto, as shown by Map on file in Book 9 page 410 of Maps, San Diego County Records.

Said property was acquired on or about the Original Escrow June 1, 1961 / Escrow March 17, 1966 day of March 21 1967 19____ and is now located in Zone _____ in the _____ District.

APPLICANT DESIRES A PUBLIC USE PERMIT OF THE FOLLOWING CHARACTER:

For the construction of an addition to an existing convalescent hospital, for the mentally ill.

If this Permit is granted, it shall be subject to the time limits set forth in the Riverside County Zoning Ordinance. Any permit granted pursuant to this application shall not affect deed restrictions of record.

133-7

1. **The following deed restrictions are in effect on the above property:**

NONE ARE KNOWN

2. **Describe briefly the type of use and improvement proposed:**

Long term patient care and the care of the mentally ill.

3. **State fully how the use requested is necessary at the location herein requested:**

In view of the existing facility which is located on the subject property and the indicated need for additional patient care for both convalescent and the mentally ill. The need for the additional beds is supported by the Medical Profession in the area.

4. **State fully how the granting of this Public Use Permit, as requested, will not result in material damage or prejudice to other property in the vicinity, nor be detrimental to the public safety or welfare.**

The existing facility has been in existence on the subject property for a number of years, it's presents has not created any damage or prejudice to other property in the vicinity.

5. Furnish plot plan showing boundaries and dimension of property, width of boundary streets, location and size of buildings on the site, roadways, walks, off-street parking and loading space, landscaping and the like, Architect's sketch showing elevation of any proposed building and complete plans for such building are also desirable, and, if available, should be filed with the application.

6. The undersigned, owners of property in the immediate vicinity of the above proposed use do not object to the granting of this permit as applied for:

Signature	Address
Philip Van Norman	38610 7th St San Jacinto
L. M. Lee	39030 West 7th San Jacinto
Ted J. Swindler	3911c W. 7th St. San Jacinto Calif.
Kenneth Oaks	39146 W 7th St San Jacinto Calif.
Mrs. M. Clark	39150 - 7th San Jacinto Calif
Celeste F. Vobora	39247 - 7th St. San Jacinto, Calif.
James Vobora	39247 7th St. San Jacinto, Calif.
Calvin E. Hubbard	39224 W 7th San Jacinto
Delbert A. Ackermich	39244 W 7th San Jacinto
[illegible]	39252 7th St. San Jacinto
[illegible]	25390 Tunny Lane Hemet, Calif
Lee E. Reed	39410 W. 7th San Jacinto Cal
Lenard E. Reed	39410 W 7th San Jacinto, Cal

AFFIDAVIT

STATE OF CALIFORNIA)
COUNTY OF RIVERSIDE) ss

I, Irene Vobora, being duly sworn, depose and say that I am the applicant herein named and that the foregoing statements and answers herein contained and the information herewith submitted are in all respects true and correct to the best of my knowledge and belief.

Signed Irene Vobora

39241 - Seventh St
(address)
San Jacinto Calif.

PHONE NO. 654-9347

Subscribed and sworn to before me this 18th day of September

1969.

Rita M. Thaanum
Notary Public)

OFFICIAL SEAL
RITA M. THAANUM
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
RIVERSIDE COUNTY
My Commission Expires Feb. 16, 1973

OFFICIAL SEAL
RITA M. THAANUM
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
RIVERSIDE COUNTY
My Commission Expires Feb. 16, 1973

HEARING BOARD

WORK SHEET
NOTICE OF PUBLIC HEARING

PUBLIC USE CASE NO. 225

NOTICE IS HEREBY GIVEN that a public hearing will be held before the Riverside County Planning Commission Hearing Board on the application of Colonial Convalescent Hospital Inc (Name of Applicant) made pursuant to Article XVII and Article XXe, Ordinance No. 348, Riverside County Zoning Ordinance for a public use permit to ~~establish~~ expand a Convalescent hospital

in Zone A-1-5 (Light Agriculture with 5 acre minimum lot area)
on property located at the ~~Southwesterly~~ Nely corner of SWly corner of 7th & Gilbert Street
(old case Var 496)

in the Heart - San Jacinto District ~~or Area~~ and more particularly described as follows:

Lot 14 & pcl of 13 of Estudillo Land & Water Co ~~Subdn~~ to San Jacinto, MAB 3 page 410, San Diego Co Records

Said public hearing will be held on Wed (day of week), Oct (month), 29, 1969 (year), at 1:45 o'clock ~~A~~ P.M., (in ~~the Board of Supervisor's Room, Court House~~), (Conference Room, Room 13, 4080 Lemon Street), Riverside, California, at which time and place pertinent testimony will be heard.

RIVERSIDE COUNTY PLANNING COMMISSION
4080 LEMON STREET, ROOM 101
RIVERSIDE, CALIFORNIA 92501
TYLER SUESS - PLANNING DIRECTOR
BY: Hazel I. Evensen - Secretary

5H

BOARD OF SUPERVISORS, RIVERSIDE COUNTY, CALIFORNIA — CASE NO. _____

1 The development of the premises shall conform substantially with that as shown on plot plan marked Exhibit "A" on file with PV case No. 225 in the office of the Riverside County Planning Department unless otherwise amended by the following conditions:

a. Use shall be limited to a 107 bed convalescent hospital.

Prior to the issuance of a building permit, ~~sufficient~~ right of way along the _____ frontage of the property shall be offered by the owner for ~~such~~ dedication to provide ~~road~~ ultimate ~~to provide for a~~ ~~full~~ ~~half~~ ~~width~~ ~~of~~ ~~the~~ ~~proposed~~ ~~road~~.

2 Prior to the issuance of a building permit or use ~~permit~~ contemplated by this permit, ~~plans~~ for the ~~road~~ and gutter ~~and~~ ~~tie-in~~ paving shall be deposited with the Road Commissioner. By Jan 1 1972 said curb and gutter and tie-in paving shall be installed in accord to any ~~ordinance~~ agency, as a grade and alignment approved by the Riverside County Road Commissioner on ~~the streets shown below:~~

~~(a) (Street Name)~~

~~(b)~~

~~(c)~~

7th Street

An encroachment permit shall be obtained from the Road Department for all work done within the right of way.

3 Prior to the issuance of a building permit for construction of any use contemplated by this approval, the applicant shall first obtain permits and/or clearance from the following public agencies:

Agricultural Department	Department of Public Health ✓
Air Pollution Control District	Road Department
Airport Director*	State Division of Forestry ✓
Coachella Valley County Water District	State Division of Highways
Riverside County Flood Control District	State Water Pollution Control Board No.

~~The~~ evidence of said permit or clearance from the above agencies shall be presented to the Land Use Division of the Department of Building and Safety at the time of the issuance of a building permit for the use contemplated herewith.

4 The use permitted hereby shall terminate on _____

4 This approval shall be used within 2 ~~one~~ (years), after final proceedings before the Board of Supervisors, otherwise it shall become null and void and of no effect whatsoever. By "use" is meant beginning of construction of the proposed addition

In any event the use permitted hereby ceases or ~~is~~ for a period of ~~one year~~ or more this permit shall become null and void.

PS:slw
1-23-69

CHECK SHEET
RIVERSIDE COUNTY PLANNING COMMISSION

NAME Colonial Convalescent Hospitals Inc.

ADDRESS 39241 Seventh St San Jacinto Calif

SUBJECT Add to Conv Hosp DATE 9-18-69 INTERVIEWED BY LP

1. Application Complete — DISTRICT OR AREA Venet - San Jacinto
2. Filing Fee Attached — ck 125.00 Zone A-1-5
3. Plot Plans Checked —
4. Assessor's Book No. 21 PAGE 22
5. Legal description complete and checked —
6. Legal description checked against plot plan —

- - - - -

7. Tentative Hearing Date Oct 29
8. Agency deadline date " 20
9. Assign Case No. Public Use Case No. 225 9-22-69 lp
10. Receipt for check Rec No 101605 9-22-69 lp
11. Assign place on agenda (date and hour) October 29 1969
12. Newspaper —
13. To be published not later than —
14. Notice to applicant mailed 10-17-69
15. Notices mailed 10-17-69 - 11 property owners - 14 interested agencies - 7 forms
16. Notice posted on property by DATE

SENT TO:

Forms sent out 10-10-69 lp

Agriculture Department	Riv. Co. Flood Control X
Air Pollution Control District	Health Department X
Airport Director	Land Use Division X
Chamber of Commerce	Road Department X
Planning Director of San Jacinto ✓	State Division of Highways
Desert Office	State Division of Forestry X
Coachella Valley Flood Control	Water Quality Control Board No.
E.M.W.D.	Dept. of Development
Parks Dept.	

Number of copies of case maps required 16

Commissioners: Perry

Other interested persons or organizations concerned:

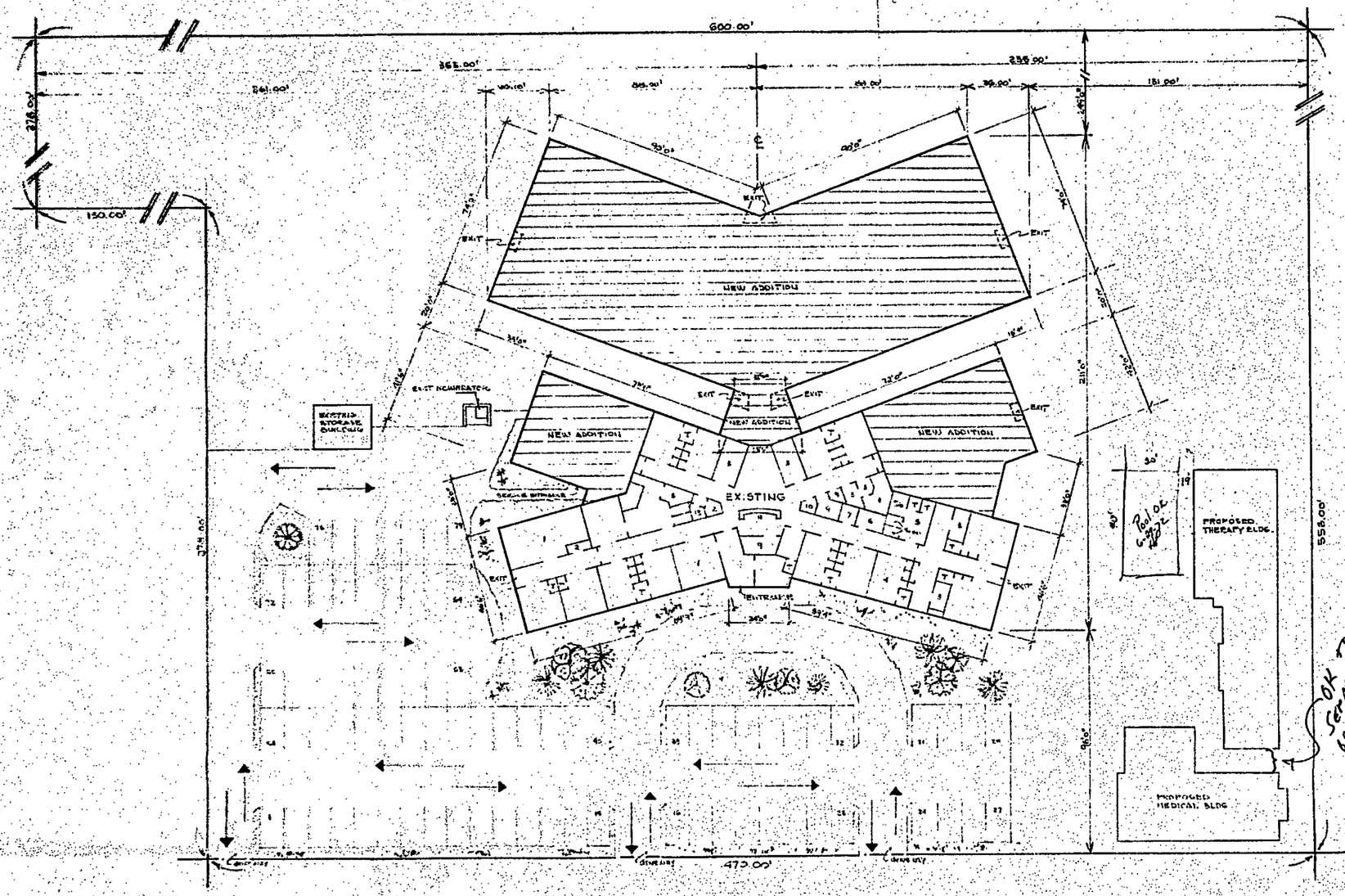
Pac Conv Hosp Assn Hosp Planning Assoc of Calif (RCHPA)
4175 Wilshire Blvd LA 5

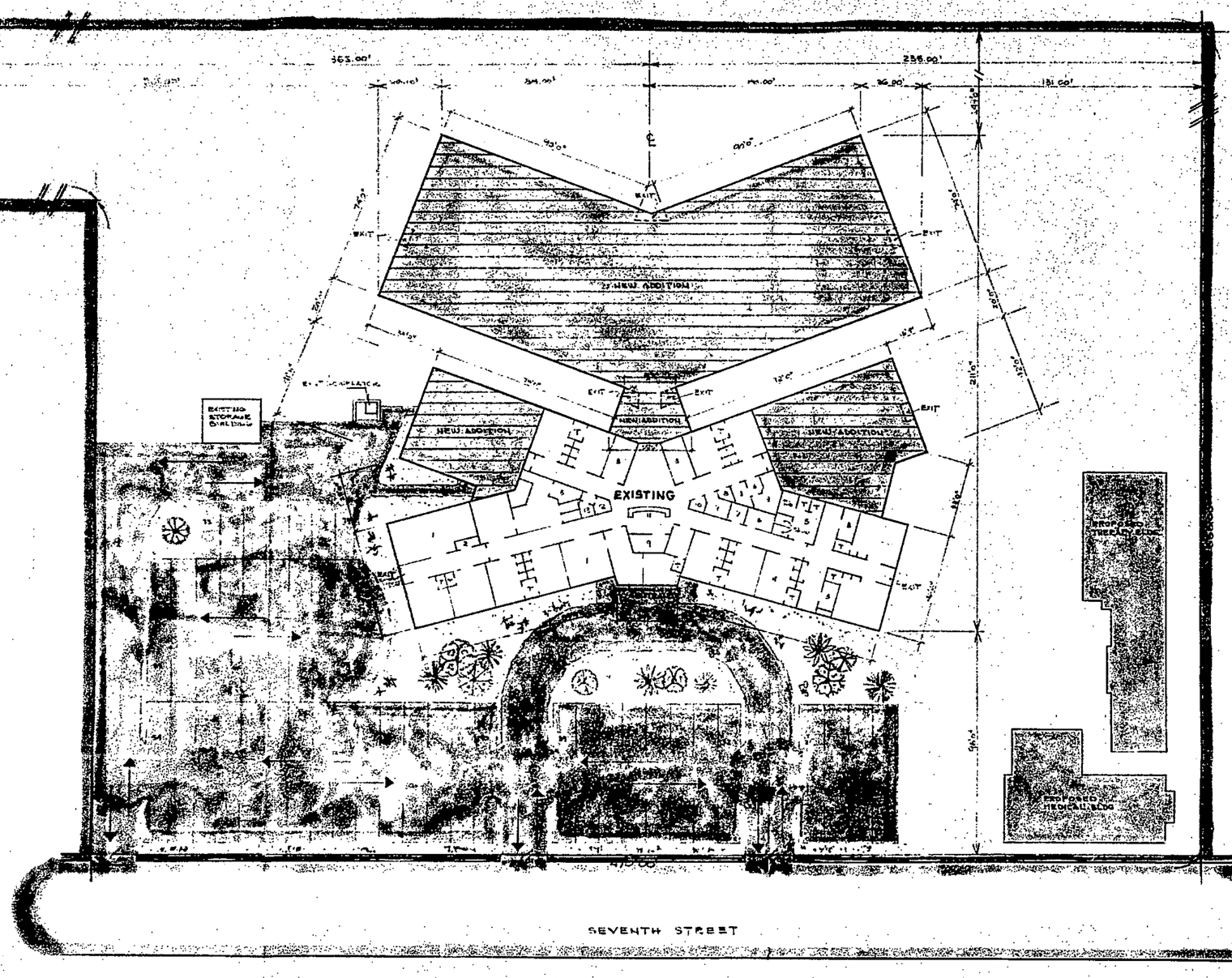
17. Entries made in Counter Book — Page 64 By LP Date 9-22-69

Case cleared for Commission by — Date —

RJS:lep
7-8-69

5th


600.00'
361.00'
218.00'
150.00'
365.00'
235.00'
181.00'
NEW ADDITION
NEW ADDITION
NEW ADDITION
EXISTING
EXIT
EXIT
EXIT



N

GENERAL NOTES

D-2 OCCUPANCY
FIRE ZONE 3
TYPE V CONSTRUCTION
AUTOMATIC SPRINKLER

CODES
DESIGN CONFORMS TO HOSPITAL LICENSING ACT AND REQUIREMENTS, MAY 4, 1968 TITLE 17/CAC
STATE FIRE MARSHAL TITLE 19
UBC 1968 BUILDING CODE
ADDITION WILL BE FIRE SPRINKLED ACCORDING TO CODE SPRINKLER CONTRACTOR WILL SUBMIT DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.

CONCRETE MIX
1:2½:3½ WITH MAXIMUM OF 7½ GALLONS OF WATER PER SACK OF CEMENT.
CONCRETE IS GRADE 'C' (2000 PSI AT 28 DAYS)

REINFORCING STEEL
INTERMEDIATE GRADE: A.S.T.M. A-15 & A-305

EXISTING ROOMS

T	Toilet
1	Recreation
2	Toilet & Shower
3	Storage
4	Isolation
5	Bath area
6	Linen Stor.
7	Soil. Linen
8	Male employ. Rm. & Lav.
9	Utility
10	Janitor's Closet
11	Nurses Station
12	Public Tel. Booth
13	Public Tel. Male

AREAS

EXISTING	10,118 SQ.FT.
NEW ADDITION	20,111 SQ.FT.
ALTERATION	724 SQ.FT.

STORAGE AREA

EXISTING	1,348 SQ.FT.
NEW ADDITION	425 SQ.FT.
TOTAL	1,773 SQ.FT.

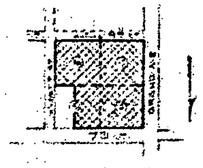
RECREATION AREA

EXISTING	1,243 SQ.FT.
NEW ADDITION	3,235 SQ.FT.
TOTAL	4,478 SQ.FT.

BED COUNT

EXISTING	45
NEW	62
TOTAL	107

PARKING SPACES
EXISTING — 79



LEGAL
LOT 14 AND THAT PORTION OF LOT 13 OF ESTUDILLO LAND AND WATER COMPANY'S ADDITION TO SAN JACINTO AS SHOWN BY MAP ON FILE IN BOOK 9 PAGE 410 OF MAPS, SAN DIEGO COUNTY RECORDS, LYING WESTERLY OF A LINE DRAWN PARALLEL WITH AND DISTANT EASTERLY 200 FEET FROM THE CENTER LINE OF GRAND AVENUE, FARM LOTS 15 AND 16 OF THE ESTUDILLO LAND AND WATER COMPANY'S ADDITION TO SAN JACINTO, AS SHOWN BY MAP ON FILE IN BOOK 9 PAGE 410 OF MAPS, SAN DIEGO COUNTY RECORDS.

EXHIBIT NO. A
CASE NO. 166

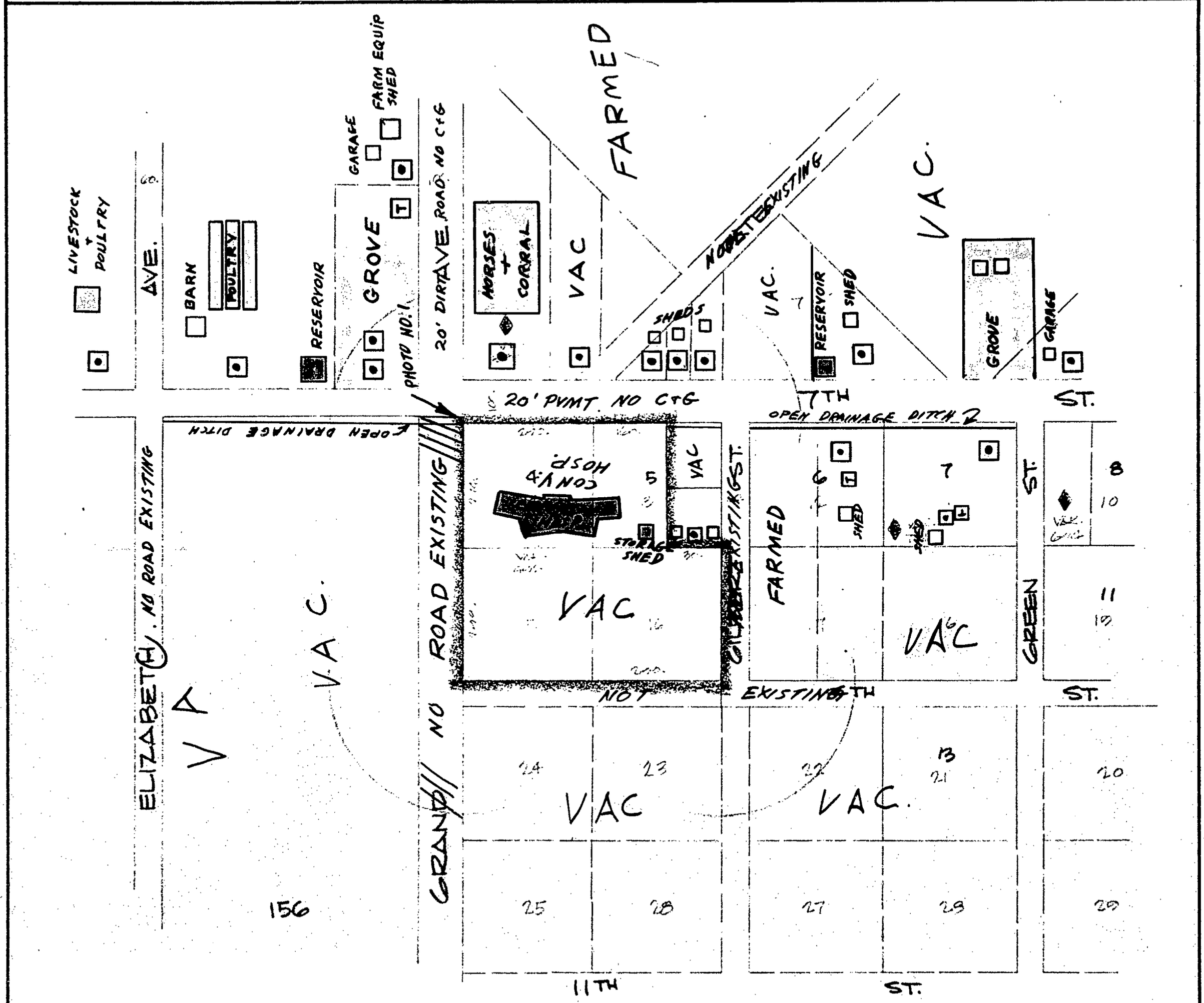
	DATE: MAY 26th - 69	HOSPITAL DESIGNING & ENGINEERING COMPANY 6442 COLDWATER CYN SUITE 211 NO. HOLLYWOOD CALIFORNIA - M.W. ECKHAUS C-1156	PLOT PLAN SCALE: 1" = 20'-0" JOB NO.	ADDITIONS & ALTERATIONS COLONIAL CONVALESCENT HOSPITAL FORMERLY COLONIAL NURSING HOME 812-41 7th ST. SAN JACINTO CALIFORNIA	SHEET NO. A-1

GENERAL PLAN OF HIGHWAYS:
GRAND AVE. - (NOTHING)
7TH ST. - SECONDARY 88.' WIDE

SEC. 34 T. 4S. R. 1W.
ASS'RS BK. 21 PG. 22
DRAWN BY: JES.
DATE 10-10-69

PU-225
LAND USE

1



COLONIAL CONVALESCENT HOSPITALS, INC. APPLICANT	ADDITION TO CONVALESCENT HOSPITAL USE	HEMET SAN JACINTO AREA

0 200 400

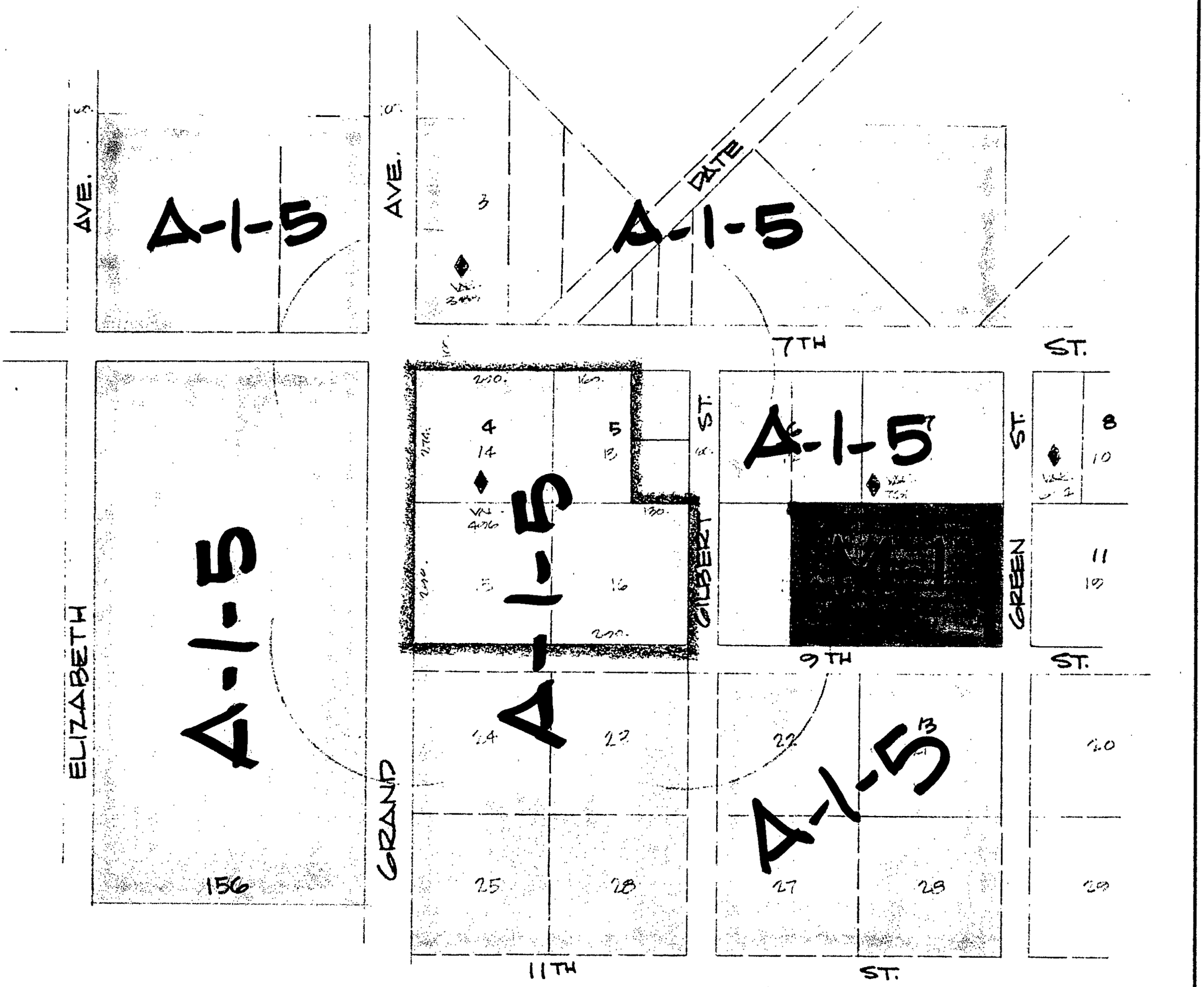
RIVERSIDE COUNTY PLANNING COMMISSION

GENERAL PLAN OF HIGHWAYS:
GRAND AVE. - (NOTHING)
7TH ST. - SECONDARY 88.' WIDE

SEC. 34 T. 4S. R. 1W.
ASS'RS BK. 21 PG. 22
DRAWN BY: JES.
DATE 10-10-69

PU-225
EXISTING ZONING

2



COLONIAL CONVALESCENT HOSPITALS, INC. — APPLICANT	ADDITION TO CONVALESCENT HOSPITAL — USE	HEMET SAN JACINTO — AREA

0 200 400

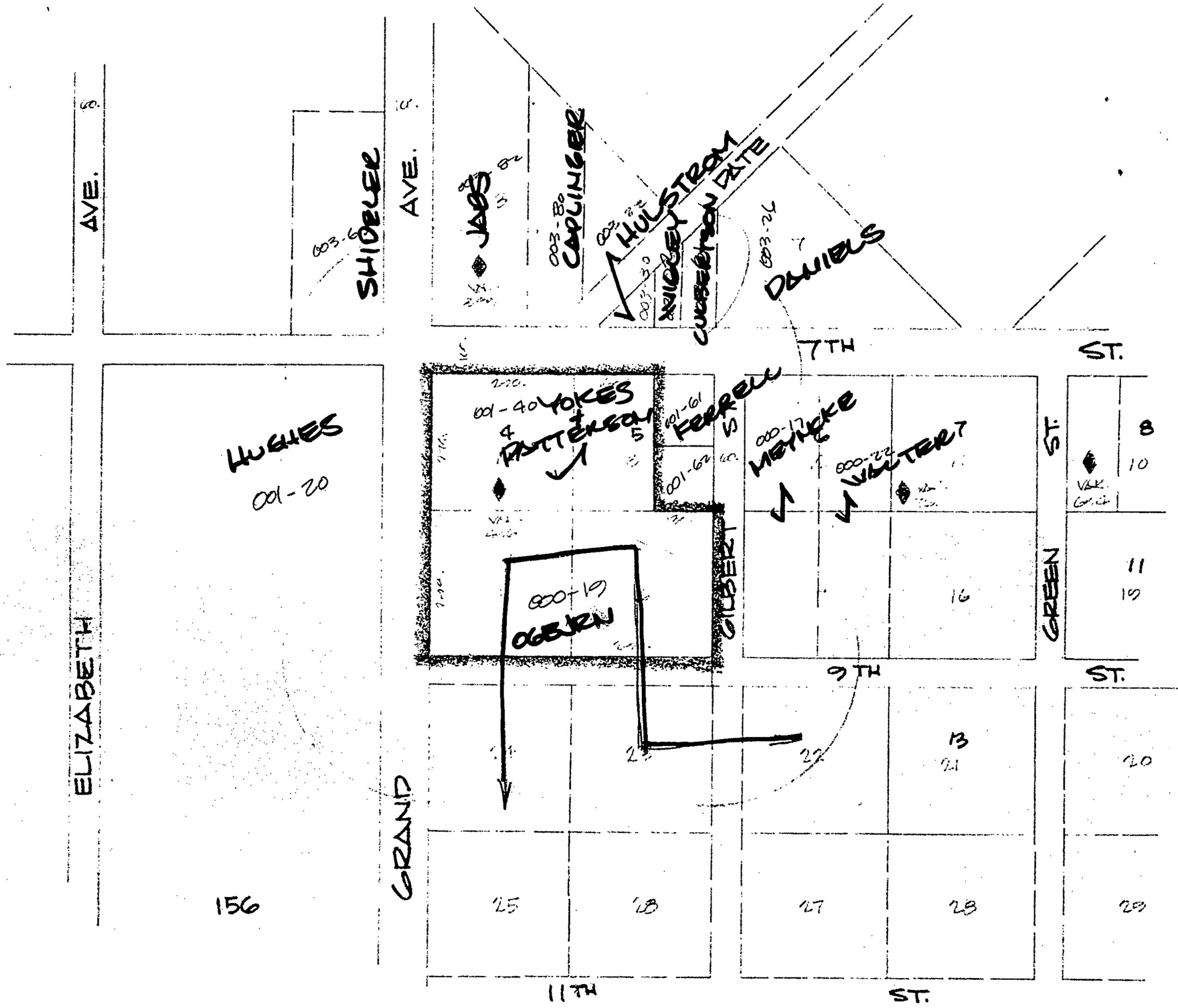
RIVERSIDE COUNTY PLANNING COMMISSION

GENERAL PLAN OF HIGHWAYS:
GRAND AVE. - (NOTHING)
7TH ST. - SECONDARY 88.' WIDE

SEC. 34 T. 4S. R. 1W.
ASS'RS BK. 21 PG. 22
DRAWN BY: JES.
DATE 10-10-69

PU-2 & 5
PROPERTY OWNERS

3



COLONIAL CONVALESCENT HOSPITALS, INC. — APPLICANT	ADDITION TO CONVALESCENT HOSPITAL — USE	HEMET SAN JACINTO — AREA

0 200 400

RIVERSIDE COUNTY PLANNING COMMISSION ®

HEADQUARTERS

BUILDING PERMIT
PERMIT NO. 315375

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

DIST. 7

CONSTRUCTION ESTIMATE			NO.	ELECTRICAL FEES			NO.	PLUMBING FEES		
1ST FL.	SQ. FT. @	$		UNITS				GREASE TRAP	5	00
2ND FL.	SQ. FT. @							YARD SPKLR SYSTEM		
POR.	SQ. FT. @			MOBILEHOME SVC.				BAR SINK		
GAR.	SQ. FT. @			POWER OUTLET				ROOF DRAINS		
CAR P.	SQ. FT. @							DRAINAGE PIPING		
WALL	SQ. FT. @							DRINKING FOUNTAIN		
	SQ. FT. @							URINAL		
ESTIMATED CONSTRUCTION VALUATION		$						WATER PIPING		
NOTE: Not to be used as property tax valuation				SWIM POOL, PVT				FLOOR DRAIN		
				SWIM POOL, COMM				WATER SOFTENER		
MECHANICAL FEES				SIGN				WASHER (AUTO) (DISH)		
VENT SYSTEM ☐ FAN ☐ EVAP. COOL ☐ HOOD								GARBAGE DISPOSAL		
APPLIANCE ☐ DRYER								LAUNDRY TRAY		
FURNACE ☐ UNIT ☐ WALL ☐ FLOOR ☐ SUSPENDED								KITCHEN SINK		
AIR HANDLING UNIT CFM				IDLE METER				WATER CLOSET		
ABSORPTION SYSTEM B.T.U.				TEMP USE PERMIT SVC				LAVATORY		
COMPRESSOR HP				POLE, TEMP/PERM				SHOWER		
HEATING SYSTEM ☐ FORCED ☐ GRAVITY				AMPERES SERV ENT				BATH TUB		
BOILER B.T.U.				SQ. FT @ ¢				WATER HEATER		
				SQ. FT @ ¢				SEWAGE DISPOSAL		
				SQ. FT. RESID @ 1½¢				HOUSE SEWER		
				SQ. FT. GAR @ ½¢				GAS PIPING		
PERMIT FEE				PERMIT FEE				PERMIT FEE	3	00

DBL.	TOTAL FEE	MOB HM FEE	MICRO FEE	MECH FEE	PL CK FEE	CONST FEE	ELECT FEE	SMI FEE	FEE	PLUMB. FEE
	3 00									8.00

PERMIT NO. 315375 Supp. Permit

MH Permit Fee		$	
Mobile Film Fee	Cos	$	
Mech. Fee	Dbl	$	
Pl. Ck. Fee		$	
Construction Fee	Dbl	$	
Electrical Fee	Dbl	$	
SMI Fee		$	
Plumbing Fee	Dbl	$ 8	00
Sp. Insp. Fee		$	
Demol. Fee		$	
Blgdr. Fee		$	
Mileage Fee		$	
Wireless Fee		$	
Reinsp. Fee		$	
Total Fees		$ 8	00

M.O. ☐ N.C. ☐ Cash ☐ Check ☒

Reviewed by: Gabe

Trees required:

Sewage System:

T R

Sewer District:

Form 284-208 (Rev 4-77) 21

Job Address: 39241 7TH ST Space: Zip: Owner: COLONIAL CONV HOSP INC.

Community: SAN JACINTO Valuation: 1000 Date: 11/16/77 Dist: 7 OH: H F.C.: —

Use of Permit: 1 IN DUST. GREASE TRAP. ON CONV. HOSP. Parcel No: 435-180-050 Use No: 0 Ch. by: LS

Legal Description: POR. SW¼ SEC 34 T4S R1W Set Backs: F S S R Lot Size:

Zone: R1-5 Grp: Type: Unit:

Bond Amt	Plan No	Plan Checker	Final Date	Inspector
$				

Const. Lender: Branch:

Address: City: Zip:

Owner/Agent: Hugh Rogers Tel: Zip:

Address: City: Zip:

Contractor: X Hugh O Rogers Tel: 654-7219 License #: 122004

Address: X 250 E. 3rd. City: SAN JACINTO Zip: Workers' Comp. yes ☒ no ☐

THIS PERMIT SHALL BECOME VOID UNLESS WORK IS COMMENCED WITHIN 180 DAYS OF ISSUANCE OF PERMIT OR IF WORK IS SUSPENDED OR ABANDONED FOR A PERIOD OF 180 DAYS. (SEC. 305 UBC)

I HEREBY AGREE THAT ALL WORK PERFORMED IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA.

I HEREBY CERTIFY THAT THE INDIVIDUAL WHO PREPARED THE PLANS AND SPECIFICATIONS HAS DONE SO IN ACCORDANCE WITH SECTION 5537 OF THE BUSINESS AND PROFESSIONS CODE OF THE STATE OF CALIFORNIA.

BUILDING PERMIT
PERMIT NO. 315375

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

FIELD DIST. 7

CONSTRUCTION ESTIMATE			NO.	ELECTRICAL FEES			NO.	PLUMBING FEES	
1ST FL.	SQ. FT. @	$		UNITS				GREASE TRAP	5 00
2ND FL.	SQ. FT. @							YARD SPKLR SYSTEM	
POR.	SQ. FT @			MOBILEHOME SVC.				BAR SINK	
GAR.	SQ. FT. @			POWER OUTLET				ROOF DRAINS	
CARP.	SQ. FT. @							DRAINAGE PIPING	
WALL	SQ. FT @							DRINKING FOUNTAIN	
	SQ. FT @							URINAL	
ESTIMATED CONSTRUCTION VALUATION		$						WATER PIPING	
NOTE: Not to be used as property tax valuation				SWIM POOL, PVT				FLOOR DRAIN	
				SWIM POOL, COMM				WATER SOFTENER	
				SIGN				WASHER (AUTO) DISHW	
								GARBAGE DISPOSAL	
								LAUNDRY TRAY	
				IDLE METER				KITCHEN SINK	
				TEMP USE PERMIT SVC				WATER CLOSET	
				POLE TEMP. PERM				LAVATORY	
				AMPERES SERV ENT				SHOWER	
				SQ FT @ ¢				BATH TUB	
				SQ FT @ ¢				WATER HEATER	
				SQ FT RESID @ 1½¢				SEWAGE DISPOSAL	
				SQ FT GAR @ ¾¢				HOUSE SEWER	
								GAS PIPING	
PERMIT FEE				PERMIT FEE				PERMIT FEE	3 00

DBL.	TOTAL FEE	MOBILE HOME FEE	MICRO FEE	MECH FEE	PL. CK FEE	CONST. FEE	ELECT. FEE	SMI FEE	FEE	PLUMB FEE
	3 00									8.00

PERMIT NO. 315375 Suppl. Permit

Plan Check Fee		$
Mech. Plan Fee	Dbl	$
Mech. Fee		$
Pl. Ck. Fee		$
Construction Fee	Dbl	$
Electrical Fee	Dbl	$
SMI Fee		$
Plumbing Fee	Dbl	$ 8 00
Sp. Insp. Fee		$
Electrical Fee		$
Mileage Fee		$
Witness Fee		$
Stamp. Fee		$
Total Fees		$ 8 00

M.O. ☐ N.C. ☐ Cash ☐ Check ☑

Received by: [illegible]
Trade required:
Sewage System:
T R
Sewer District:

Job Address: 39241 7TH ST Space Zip Name: COLONIAL CONV HOSP INC.
Community: SAN JACINTO Valuation: 1000/- Date: 11/16/77 Dist. 7 Off H FC
Use of Permit: INSTL GREASE TRAP ON CONV. HOSP. Parcel No. 435-180-030 Use No. Ck. by L.S.
Legal Description: POR. SW¼ SEC. 34 T4S R1W Set Backs F S R Lot Size
Zone Grp Type Unit
Bond Amt $ Plan No. Plan Checker Final Date 12-7-77 Inspector J Flores
Const. Lender Branch
Address City Zip
Owner / Agent: Virgil Rogers Tel Zip
Address City Zip
Contractor: Virgil Rogers Tel 654-7219 License # 122004
Address: 755 E. 3rd. City San Jac. Zip Workers' Comp. yes X no ☐

Issued by

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 120 DAYS CESSATION OF WORK FOR A PERIOD OF 180 DAYS ALSO CAUSE PERMIT TO BECOME VOID

NOTICE: I CERTIFY THAT ALL WORK IS IN CONFORMITY WITH AS BUILT PLANS AND WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA

I HEREBY CERTIFY THAT THE ABOVE [illegible] AND WILL BE DONE IN ACCORDANCE WITH SECTION [illegible] AND PROPERTY OWNER IN THE STATE OF CALIFORNIA

Form CBA-208 Rev. 4-77-3M

NO.	OPERATION	DATE	INSPECTOR
	BUILDING APPROVALS		
1	Set Back		
2	Pigs & Frms		
2A	Slab Grade		
3	Steel		
4	Grout Blocks		
5	Bond Beams		
6	Roof Deck		
7	Framing		
8	Vents		
9	Garage Fire Wall		
10	Fireplace P.L. ☐		
10A	Fireplace T.O. ☐		
11	Exterior Lath		
12	Internal Lath		
12A	Drywall		
13	Finish Grade		
	INSULATION / Thick / "R" Value		
7A	Walls (Batts)		
12B	Ceiling (Batts)		
12C	Ceiling (Blown)		
14	**Final**		
	PLUMBING APPROVALS		
15	Ground Plumb		
16	Water Piping		
17	Rough Plumb		
18	Vents		
19	Sewage Disposal	12-7-77	
20	Sewer		
21	Water Heater		
22	Water Softener		
23	Water Service		
24	Gas Test		
25	Final	12-7-77	
	ELECTRICAL APPROVALS		
26	Power Pole		
27	Conduit		
28	Service Entrance		
29	Wiring		
29A	Grounding Wire		
29B	Bonding		
30	Fixtures		
31	Service		
32	**Final**		

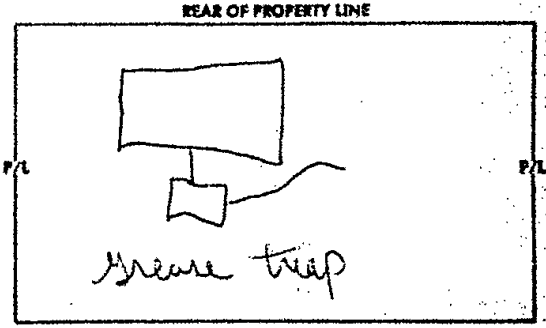
NO.	OPERATION	DATE	INSPECTOR
	MECHANICAL APPROVALS		
33	Ventilation System		
34	Plenums & Ducts		
35	Furnace Comport.		
36	Inlets & Outlets		
37	Combustion Air		
38	Compressor		
39	Appl. Clearance		
40	Fire Damper		
41	Smoke Detention Device		
42	Commercial Hood		
43	**Final**		

OPEN NO. **ADDITIONAL INFORMATION**

SEWAGE SYSTEM SIZE & LOCATION

Tank Pit L. Line

REAR OF PROPERTY LINE

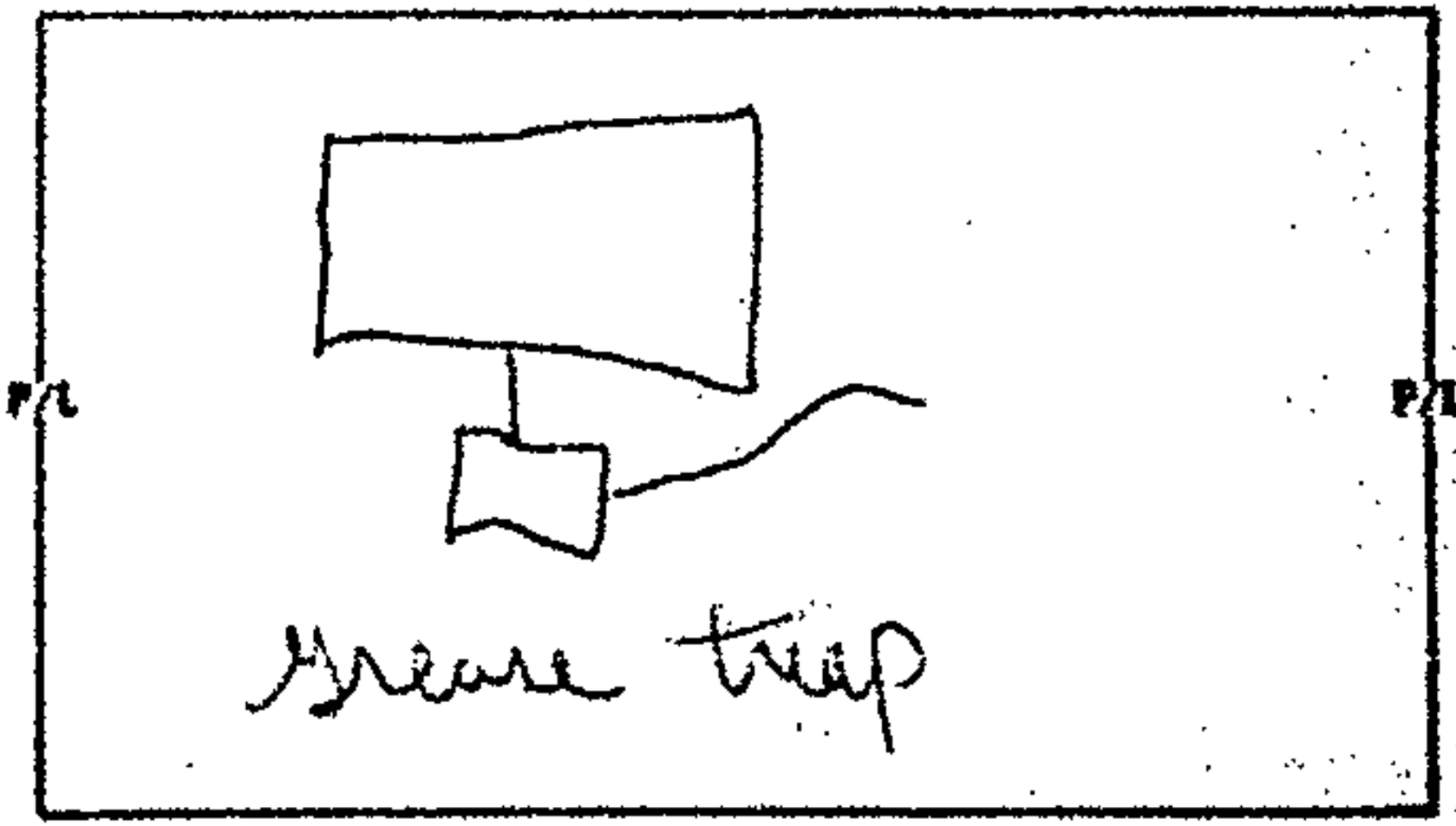


STREET NAME

SEWAGE SYSTEM SIZE & LOCATION

Tank Pit L Line

REAR OF PROPERTY LINE



STREET NAME

NOTICE: THIS IS NOT A BUILDING PERMIT

APPLICATION TO CONSTRUCT
DEPARTMENT OF BUILDING AND SAFETY
COUNTY OF RIVERSIDE

DISTRICT 7

Permit No. 315375

Colonial Conversions

OWNER

Owner Hospital LLC, Architect ____ Contractor Virgil Roberts
Address 39241 7th St Address ____ Address 250 E. 3rd St.
City San Jacinto Calif City ____ City San Jacinto Calif
Phone 654-9347 Phone ____ Phone 654-7219

I (we) the undersigned, hereby certify and acknowledge that I (we) have read the application and agree that if Curb and Gutter, and Paving, and/or Dedication of right of way is required by the County of Riverside, the Riverside County Department of Building and Safety shall not make a Final Inspection until said requirements have been met. I am also aware that no work is to be done within the County R/W without an encroachment permit.

NOW, therefore, it is agreed that I (we) will not occupy said property and will not cause said property to be occupied until I (we) have complied with all laws of the County of Riverside and the State of California governing said property.

DATE 11-16-77 SIGNATURE OF OWNER AND Virgil Roberts

Approval by Signature from the Following Departments Listed Below Must Be Obtained Prior to the Issuing of a Construction Permit.

LAND USE DIVISION BUILDING AND SAFETY

SPACE NO.

JOB ADDRESS 39241 7th St

LEGAL DESCRIPTION OF PROPERTY 435-150-025
POR SW¼ SEC 34 T4SR1W

COMMUNITY San Jacinto

USE OF STRUCTURE
SINGLE FAMILY ☐ DUPLEX ☐
APARTMENTS ☐ AGRIC. ☐
COMMERCIAL ☒ INDUSTRIAL ☐
ALTERATIONS ☐

NO. OF SUBMITTED PLANS ____ USE OF PERMIT grease trap

CASE NO. ____

NO. OF PARKING SPACES REQUIRED ____ NO. OF BUILDINGS NOW EXISTING ____

ZONE A-1-3 SETBACKS: FRONT ____ SIDE ____ REAR ____

GRADING PERMIT REQUIRED? YES ☐ NO ☐ LOT SIZE ____

SETBACK ORDINANCE # ____ OF ____ FEET REQUIRED ON ____ STREET

DATE 11-16-77 SIGNATURE OF LAND USE OFFICIAL ____

ROAD DEPARTMENT

DEDICATION REQUIRED: YES ☐ NO ☐ NO. OF FEET ____

CURB AND GUTTER REQUIRED YES ☐ NO ☐ ____ STREET

CAN CURB AND GUTTER FEASIBLY BE INSTALLED? YES ☐ NO ☐

HAS AN ACCEPTABLE APPLICATION BEEN MADE FOR ENCROACHMENT PERMIT FOR DRIVEWAY AND STREET IMPROVEMENT? YES ☐ NO ☐

DATE ____ SIGNATURE OF ROAD DEPT. OFFICIAL ____

HEALTH DEPT.

SWIMMING POOLS PUBLIC ____

SEWAGE DISPOSAL ____

FOOD ESTABLISHMENT ____

OTHER DEPARTMENTS

WATER POLLUTION ____ REMARKS ____

FLOOD CONTROL ____

AIR POLLUTION ____

DIV OF HWY ____

YOUR PROPERTY MAY BE SUBJECT TO FLOOD. RIVERSIDE COUNTY ASSUMES NO RESPONSIBILITY IN EVENT OF FLOOD.

284 199A 9/74

CANARY — FILE, PINK — APPLICANT

HEADQUARTERS

BUILDING PERMIT
PERMIT NO. 331103

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

DIST 7

CONSTRUCTION ESTIMATE			NO.	ELECTRICAL FEES		NO.	PLUMBING FEES	
1ST FL.	SQ. FT. @	$		UNITS				
2ND FL.	SQ. FT. @						YARD SPKLR SYSTEM	
POR.	SQ. FT. @			MOBILEHOME SVC			BAR SINK	
GAR.	SQ. FT. @			POWER OUTLET			ROOF DRAINS	
CAR P.	SQ. FT. @						DRAINAGE PIPING	
WALL	SQ. FT. @						DRINKING FOUNTAIN	
	SQ. FT. @						URINAL	
ESTIMATED CONSTRUCTION VALUATION		$				1	WATER PIPING	2 00
NOTE: Not to be used as property tax valuation				SWIM POOL, PVT			FLOOR DRAIN	
MECHANICAL FEES				SWIM POOL, COMM			WATER SOFTENER	
VENT SYSTEM ☐ FAN ☐ EVAP. COOL ☐ HOOD				SIGN			WASHER (AUTO) (DISH)	
APPLIANCE ☐ DRYER							GARBAGE DISPOSAL	
FURNACE ☐ UNIT ☐ WALL ☐ FLOOR ☐ SUSPENDED							LAUNDRY TRAY	
AIR HANDLING UNIT CFM				IDLE METER			KITCHEN SINK	
ABSORPTION SYSTEM B.T.U.				TEMP USE PERMIT SVC			WATER CLOSET	
COMPRESSOR HP				POLE, TEMP/PERM		3	LAVATORY	6 00
HEATING SYSTEM ☐ FORCED ☐ GRAVITY				AMPERES SERV ENT			SHOWER	
BOILER B.T.U.				SQ FT @ ¢			BATH TUB	
				SQ FT @ ¢			WATER HEATER	
				SQ FT RESID @ ¢			SEWAGE DISPOSAL	
				SQ FT GAR @ ¢		1	HOUSE SEWER	5 00
							GAS PIPING	
PERMIT FEE				PERMIT FEE		1	PERMIT FEE	3 00

DBL	TOTAL FEES	MOB HM FEE	MICRO FEE	MECH FEE	PL CK FEE	CONST FEE	ELECT FEE	SMI FEE	PER	PLUMB. FEE
	16.00									16.00

PERMIT NO. 331103 — Supp Permit —

MH Permit Fee		$	
Micro Film Fee	Cap	$	
Mech. Fee	Dbl	$	
Pl. Ck. Fee		$	
Construction Fee	Dbl	$	
Electrical Fee	Dbl	$	
SMI Fee		$	
Plumbing Fee	Dbl	$	16.00
Sp. Insp. Fee		$	
Demol. Fee		$	
Registr. Fee		$	
Mileage Fee		$	
Witness Fee		$	
Bkmp. Fee		$	
Total Fees		$	16.00

M.O. ☐ N.C. ☐ Cash ☐ Check ☑

Received by [signature]

Trees required

Sewage System

T LL P

Sewer District [signature]

Form 284-208 (Rev 4-77)

Job Address: 39241 7TH ST — Space — Zip — Owner: Colonial Nursing

Community: San Jacinto — Valuation $ — Date: 5/4/78 — Dist: 7 — QH: H — F.C.

Use of Permit: Add. of 3 Lavatory to Med Bldg

Parcel No: 435/180/003-8 — Use No — Ck. by: K.S.

Legal Description: Por SW¼ Sec 34 T4S R1W — San Symbol: A-2-H — Lot Size —

Zone: A-1-5 — Grp — Type — — Unit —

Bond Amt	Plan No.	Plan Checker	Final Date	Inspector
$				

Const. Lender — Branch

I certify that in the performance of the work for which this permit is issued I shall not employ any person in any manner so as to become subject to the workmen's compensation laws of California

Address — City — Zip

Owner Signature — Builder Signature [signature]

Owner/Agent: COLONIAL NURSING HOME — Tel: 654-9289

Address: 39241 ~~SAN~~ 7TH ST — City: SAN J — Zip

Contractor: VIRGIL ROGERS ASSC — Tel: 654-7219 — License #: 722002

Address: 250 E THIRD — City: SAN JACINTO — Zip — Workers' Comp. yes ☑ no ☐

verified by

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 120 DAYS CESSATION OF WORK FOR 120 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID

I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA

I HEREBY CERTIFY THAT THE INDIVIDUAL WHO PREPARED THE PLANS AND SPECIFICATIONS HAS DONE SO IN ACCORDANCE WITH SECTION 5541 OF THE BUSINESS AND PROFESSIONS CODE OF THE STATE OF CALIFORNIA

BUILDING PERMIT
PERMIT NO. 331103

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

FIELD
DIST 7

CONSTRUCTION ESTIMATE			NO.	ELECTRICAL FEES		NO.	PLUMBING FEES	
1ST FL.	SQ. FT. @	$		UNITS				
2ND FL.	SQ. FT. @						YARD SPKLR SYSTEM	
POR.	SQ. FT. @			MOBILEHOME SVC.			BAR SINK	
GAR.	SQ. FT @			POWER OUTLET			ROOF DRAINS	
CAR P	SQ. FT. @						DRAINAGE PIPING	
WALL	SQ. FT. @						DRINKING FOUNTAIN	
	SQ. FT. @						URINAL	
ESTIMATED CONSTRUCTION VALUATION		$				1	WATER PIPING	2 00
NOTE: Not to be used as property tax valuation				SWIM POOL, PVT			FLOOR DRAIN	
				SWIM POOL, COMM			WATER SOFTENER	
MECHANICAL FEES				SIGN			WASHER (AUTO) / DISH	
VENT SYSTEM ☐ FAN ☐ EVAP COOL ☐ HOOD							GARBAGE DISPOSAL	
APPLIANCE ☐ DRYER							LAUNDRY TRAY	
FURNACE ☐ UNIT ☐ WALL ☐ FLOOR ☐ SUSPENDED							KITCHEN SINK	
AIR HANDLING UNIT CFM				IDLE METER			WATER CLOSET	
ABSORPTION SYSTEM B.T.U.				TEMP USE PERMIT SVC			LAVATORY	
COMPRESSOR HP				POLE, TEMP/PERM		3		6 00
HEATING SYSTEM ☐ FORCED ☐ GRAVITY				AMPERES SERV ENT			SHOWER	
BOILER B.T.U.				SQ. FT @ ¢			BATH TUB	
				SQ. FT @ ¢			WATER HEATER	
				SQ. FT. RESID @ 1½¢			SEWAGE DISPOSAL	
				SQ. FT. GAR @ ¼¢		1	HOUSE SEWER	5 00
							GAS PIPING	
PERMIT FEE				PERMIT FEE		1	PERMIT FEE	3 00

DBL.	TOTAL FEES	BOOK MK. FEE	MICRO FEE	MECH. FEE	PL. CK. FEE	CONST FEE	ELECT. FEE	SMI FEE	FEE	PLUMB. FEE
	16.00									16.00

PERMIT NO. 331103 — Supp. Permit

Job Address	39241 7TH ST	Space	Zip
Owner	Colonial Nursing
Community	San Jacinto	Valuation $	Date 5/4/78	Dist 7	Ctl H	F.C.
Use of Permit	Add. of 3 Lavatory to Med Bldg	Parcel No 435/120/003	Use No	Ck. by CS
Legal Description	Por SW¼ Sec 34 T4S R1W	Set Backs F S R	Lot Size
		Zone A-1-5	Grp	Type —	Unit —
Bond Amt $	Plan No	Plan Checker	Final Date 5-30-78	Inspector

Bldg. Permit Fee		$		
Bldg. Plan Fee	Cap	$		
Mech. Fee	Dist	$		
Pl. Ck. Fee		$		
Construction Fee	Dist	$		
Electrical Fee	Dist	$		
SMI Fee		$		
Plumbing Fee	Dist	$	16 00	
Strong Mot. Fee		$		
Grading Fee		$		
Encroach. Fee		$		
Sewerage Fee		$		
Address Fee		$		
Misc. Fee		$		
Total Fees		$	16 00	

M.O. ☐ N.C. ☐ Cash ☐ Check ☐

Issued by: Patricia
Fees returned
Sewerage System

T — U — P

Water District

Form 284-208 (Rev. 4-77) BS

Corp. Lender — Branch

I certify that in the performance of the work for which this permit is issued I shall not employ any person in any manner so as to become subject to the workmen's compensation laws of California.

Address — City — Zip

Owner Signature
Builder Signature

Owner / Agent: COLONIAL NURSING HOME — Tel. 654-9347 — Zip

Address: 39241 7TH ST — City San Jacinto — Zip

Contractor: WILL ROGERS ABC — Tel. 654-7519 — License # 372002

Address: P O Box — City San Jacinto Zip — Workers' Comp. yes ☐ no ☐

THIS PERMIT BECOMES VOID IF WORK IS NOT COMMENCED WITHIN 180 DAYS, CESSATION OF WORK FOR A PERIOD OF 180 DAYS WILL ALSO RENDER VOID.

I HEREBY AFFIRM THAT I AM LICENSED UNDER PROVISIONS OF CHAPTER 9 (COMMENCING WITH SECTION 7000) OF DIVISION 3 OF THE BUSINESS AND PROFESSIONS CODE AND MY LICENSE IS IN FULL FORCE AND EFFECT. I AM EXEMPT FROM THE CONTRACTOR'S LICENSE LAW FOR THE FOLLOWING REASON (SEC. 7031.5, BUS. & PROF. CODE: ANY CITY OR COUNTY WHICH REQUIRES A PERMIT TO CONSTRUCT, ALTER, IMPROVE, DEMOLISH, OR REPAIR ANY STRUCTURE, PROHIBITS THE ISSUANCE OF SUCH PERMIT TO ANY PERSON WHO DOES NOT HOLD A VALID LICENSE UNDER THE PROVISIONS OF THIS CHAPTER): I AM EXEMPT UNDER SECTION ____ BUS. & PROF. CODE, FOR THIS REASON ____

I HEREBY AFFIRM THAT I HAVE A CERTIFICATE OF CONSENT TO SELF-INSURE FOR WORKMEN'S COMPENSATION, ISSUED BY THE DIRECTOR OF INDUSTRIAL RELATIONS, AS PROVIDED FOR BY SECTION 3700 OF THE LABOR CODE, FOR THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED.

I HEREBY AFFIRM THAT I HAVE A CERTIFICATE OF WORKMEN'S COMPENSATION INSURANCE, ISSUED BY THE STATE COMPENSATION INSURANCE FUND, AS PROVIDED FOR BY SECTION 3700 OF THE LABOR CODE, FOR THE PERFORMANCE OF THE WORK FOR WHICH THIS PERMIT IS ISSUED.

Issued by

BUILDING APPROVALS

NO.	OPERATION	DATE	INSPECTOR
1	Set Back		
2	Ftgs & Frms		
2A	Slab Grade		
3	Steel		
4	Grout Blocks		
5	Bond Beams		
6	Roof Deck		
7	Framing		
8	Vents		
9	Garage Fire Wall		
10	Fireplace P.L. ☐		
10A	Fireplace T.O. ☐		
11	Lath		
12	Internal Lath		
12A	Drywall		
13	Finish Grade		

	INSULATION	Thick	"R" Value		
7A	Walls (Batts)				
12B	Ceiling (Batts)				
12C	Ceiling (blown)				
14	Final				

PLUMBING APPROVALS

15	Ground Plumb		
16	Water Piping		
17	Rough Plumb	5-8-78	Poland
18	Vents		
19	Sewage Disposal		
20	Sewer	5-8-78	Poland
21	Water Heater		
22	Water Softener		
23	Water Service		
24	Gas Test		
25	Final	5-30-78	Poland

ELECTRICAL APPROVALS

26	Power Pole		
27	Conduit		
28	Service Entrance		
29	Wiring		
29A	Grounding Wire		
29B	Bonding		
30	Fixtures		
31	Service		
32	Final		

MECHANICAL APPROVALS

NO.	OPERATION	DATE	INSPECTOR
33	Ventilation System		
34	Plenums & Ducts		
35	Furnace Compart.		
36	Inlets & Outlets		
37	Combustion Air		
38	Compressor		
39	Appl. Clearance		
40	Fire Damper		
41	Smoke Detection Device		
42	Commercial Hood		
43	Final		

OPTN NO.	ADDITIONAL INFORMATION

SEWAGE SYSTEM SIZE & LOCATION

Tank Pit L Line

REAR OF PROPERTY LINE

P/L P/L

STREET NAME _____

NOTICE: THIS IS NOT A BUILDING PERMIT

APPLICATION TO CONSTRUCT
DEPARTMENT OF BUILDING AND SAFETY
COUNTY OF RIVERSIDE

DISTRICT 7
Permit No. 331103

OWNER

Owner COLONIAL NURSING	Architect	Contractor VIRGIL ROGERS INC
Address 39241 9TH ST	Address	Address 250 E THIRD ST
City SAN JACINTO	City	City SAN JACINTO
Phone 654-9347	Phone	Phone 654-2219

I (we) the undersigned, hereby certify and acknowledge that I have read the application and agree that if Curb and Gutter and Paving, and/or Dedication of right of way is required by the County of Riverside, the Riverside County Department of Building and Safety shall not make a Final Inspection until said requirements have been met. I am also aware that no work is to be done within the County right of way without an encroachment permit.

NOW, therefore, it is agreed that I (we) will not occupy said property and will not cause said property to be occupied until I (we) have complied with all laws of the County of Riverside and the State of California governing said property.

DATE 5-4-78 SIGNATURE OF OWNER AND/OR AGENT Virgil D. Rogers

Approval by Signature from the Following Departments Listed Below Must Be Obtained Prior to the Issuing of a Construction Permit.

LAND USE DIVISION BUILDING AND SAFETY

JOB ADDRESS 39241 7th St SPACE NO.
LEGAL DESCRIPTION OF PROPERTY 435-180-003 Parcel 2 Sec. 34 T5S R1W
COMMUNITY San Jacinto
NO OF SUBMITTED PLANS USE OF PERMIT install 3 units - medical bldg
CASE NO.
NO OF PARKING SPACES REQUIRED NO. OF BUILDINGS NOW EXISTING
ZONE A-1-5 SETBACKS: FRONT SIDE N/A REAR
GRADING PERMIT REQUIRED? YES NO LOT SIZE
SETBACK ORDINANCE # OF FEET REQUIRED ON STREET
DATE 5-4-78 SIGNATURE OF LAND USE OFFICIAL

USE OF STRUCTURE

SINGLE FAMILY	☐	DUPLEX	☐
APARTMENTS	☐	AGRIC.	☐
COMMERCIAL	☐	INDUSTRIAL	☐
		ALTERATIONS	☐

ROAD DEPARTMENT

DEDICATION REQUIRED: YES ☐ NO ☐ NO OF FEET
CURB AND GUTTER REQUIRED: YES ☐ NO ☐ STREET

CAN CURB AND GUTTER FEASIBLY BE INSTALLED? YES ☐ NO ☐
HAS AN ACCEPTABLE APPLICATION BEEN MADE FOR ENCROACHMENT PERMIT FOR DRIVEWAY AND STREET IMPROVEMENT? YES ☐ NO ☐
DATE SIGNATURE OF ROAD DEPT. OFFICIAL

HEALTH DEPT.

SWIMMING POOLS PUBLIC
SEWAGE DISPOSAL
FOOD ESTABLISHMENT

OTHER DEPARTMENTS

WATER POLLUTION
FLOOD CONTROL
AIR POLLUTION
DIV OF HWY
REMARKS

YOUR PROPERTY MAY BE SUBJECT TO FLOOD. RIVERSIDE COUNTY ASSUMES NO RESPONSIBILITY IN EVENT OF FLOOD.

284 199A 9.74

CANARY — FILE. PINK — APPLICANT

NOTICE TO APPLICANT

In conformity with the provisions of State of California Labor Code Section 3800, the applicant shall have on file or file with the Riverside County Department of Building and Safety a certificate as designated in Items I or II below, or shall indicate Item III, IV, or V, whichever is applicable.

CERTIFICATE OF APPLICANT

Please mark the appropriate block:

☐ I. Certificate of Consent to self-insure issued by the Director of Industrial Relations.
☐ Copy on file ☐ Copy submitted

☐ II. Certificate of Workers' Compensation Insurance issued by an admitted insurer.
☐ Copy on file ☐ Copy submitted

☐ III. The cost of the work to be performed is $100 or less.

☐ IV. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation laws of California, I further certify that, in the event I become subject to the Workers' Compensation provisions of the Labor Code that I will comply forthwith with the provisions of Labor Code Section 3700, et seq., and understand that, if I do not comply, the permit shall be deemed revoked.

☐ V. I certify as the owner (or the agent of the owner) that in the performance of the work for which this permit is issued I have engaged _____ contractor. (Contractor must have on file, or submit certificate required by I or II above.)

Applicant's Signature _____

Date _____ Permit No _____

Address and location where work is to be performed _____

284-141 REV. 6/77

BUILDING PERMIT
PERMIT NO. 472

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

HEADQUARTERS

DIST 7

CONSTRUCTION ESTIMATE			NO.	ELECTRICAL FEES		NO.	PLUMBING FEES	
1ST FL	SQ. FT. @	$		UNITS				
2ND. FL	SQ. FT. @						YARD SPRIN SYSTEM	
POR.	SQ. FT @			MOBILEHOME SVC			BAR SINK	
GAR.	SQ. FT. @			POWER OUTLET			ROOF DRAINS	
CAR P.	SQ FT @						DRAINAGE PIPING	
WALL	SQ. FT. @						DRINKING FOUNTAIN	
	SQ. FT @						URINAL	
ESTIMATED CONSTRUCTION VALUATION		$					WATER PIPING	
NOTE: Not to be used as property tax valuation				SWIM POOL PVT			FLOOR DRAIN	
MECHANICAL FEES				SWIM POOL COMM			WATER SOFTENER	
VENT SYSTEM FAN EVAP. COOL HOOD				SIGN			WASHER (AUTO)DISH.	
APPLIANCE DRYER							GARBAGE DISPOSAL	
FURNACE UNIT WALL FLOOR SUSPENDED				SERVICE	10 00		LAUNDRY TRAY	
AIR HANDLING UNIT CFM				IDLE METER			KITCHEN SINK	
ABSORPTION SYSTEM B.T.U				TEMP USE PERMIT SVC			WATER CLOSET	
COMPRESSOR HP				POLE. TEMP PERM			LAVATORY	
HEATING SYSTEM FORCED GRAVITY			25	AMPERES SERV ENT			SHOWER	
BOILER B.T.U.				SQ FT			BATH TUB	
				SQ FT			WATER HEATER	
				SQ FT RESID			SEWAGE DISPOSAL	
				SQ FT GAR			HOUSE SEWER	
							GAS PIPING	
PERMIT FEE			1	PERMIT FEE	3 00		PERMIT FEE	

DBL	TOTAL FEES	MOB HM FEE	MICRO FEE	MECH FEE	PL CK FEE	CONST FEE	ELECT FEE	SMI FEE	FEE	PLUMB FEE
	13 00						13 00			

PERMIT NO
402472

MH Permit Fee		$
Micro Film Fee	Cap	$
Mech Fee	Dbl	$
Pl Ck Fee		$
Construction Fee	Dbl	$
Electrical Fee	Dbl	$ 13 00
SMI Fee		$
Plumbing Fee	Dbl	$
Sp Insp Fee		$
Demol Fee		$
Regstr. Fee		$
Mileage Fee		$
Witness Fee		$
Reinsp. Fee		$
Total Fees		$ 13 00

M.O. No. _____ Cash ☐ Check ☒

Received by _____

Fees required _____

Sewage System _____

Septic Permit _____

Sewer Permit _____

Job Address 39241 7th St. Space _____ Tr. 9293 Owner Cal Conv. Hospital

Community San Jacinto Valley Area 9-10-80 Dist 7 Fee DC

Use of Permit REPLACE 200 AMP SER. Permit No. 435-180-0027 Low Cost Fee _____ Init. DC

Legal Description LOT 14 ESPUELLO INC. Set Backs N-A Lot Size —

Zone Restrictions R-1-5 Corner — Type —

Bond Amt. $ Plan No — Plan Checked Final Date Re Inspn Cost —

Const. Lender Branch Supplemental Permit Numbers

Address City Zip Valley Elec 6-1-81

Owner Agent Sweet Noelle Tel

Address 26685 Green ave City Hemet Zip

Contractor Valley Electric Tel 658-2193 Lic. No. 525779

Address 298 E Latham City Hemet Zip

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 120 DAYS. CESSATION OF WORK FOR 120 DAYS SHALL ALSO RENDER PERMIT TO BECOME VOID.

I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA.

I HEREBY AFFIRM THAT I AM LICENSED AND REGISTERED UNDER THE PROVISIONS OF CHAPTER 9 OF DIVISION 3 OF THE BUSINESS AND PROFESSIONS CODE OF THE STATE OF CALIFORNIA AND MY LICENSE IS IN FULL FORCE AND EFFECT.

Certified by _____

Date _____

6-77 283 2M Rev. 7-80

BUILDING PERMIT
PERMIT NO.
402472

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

FIELD

DIST
7

CONSTRUCTION ESTIMATE			NO.	ELECTRICAL FEES		NO.	PLUMBING FEES	
1ST FL.	SQ. FT. @	$		UNITS				
2ND FL.	SQ. FT. @						YARD SPKLR SYSTEM	
POR.	SQ. FT. @			MOBILEHOME SVC			BAR SINK	
GAR.	SQ. FT. @			POWER OUTLET			ROOF DRAINS	
CAR P.	SQ. FT. @						DRAINAGE PIPING	
WALL	SQ. FT. @						DRINKING FOUNTAIN	
	SQ. FT. @						URINAL	
ESTIMATED CONSTRUCTION VALUATION		$					WATER PIPING	
NOTE: Not to be used as property tax valuation				SWIM POOL PVT			FLOOR DRAIN	
MECHANICAL FEES				SWIM POOL COMM			WATER SOFTENER	
VENT SYSTEM	FAN EVAP. COOL HOOD			SIGN			WASHER (AUTO)(DISH)	
APPLIANCE	DRYER						GARBAGE DISPOSAL	
FURNACE	UNIT WALL FLOC SUSPENDED						LAUNDRY TRAY	
AIR HANDLING UNIT	CFM			METER			KITCHEN SINK	
ABSORPTION SYSTEM	B.T.U.			TEMP USE PERMIT SVC			WATER CLOSET	
COM'L	HP			POLE, TEMP. PERM			LAVATORY	
HEATING SYSTEM	FORCED GRAVITY			AMPERES SERV ENT			SHOWER	
BOILER	B.T.U.			SQ. FT. @			BATH TUB	
				SQ. FT. @			WATER HEATER	
				10 FT. RESID. @			SEWAGE DISPOSAL	
				SQ. FT. GAR. @			HOUSE SEWER	
							GAS PIPING	
PERMIT FEE				PERMIT FEE			PERMIT FEE	

DBL.	TOTAL FEES	MOB. HM. FEE	MICRO FEE	MECH. FEE	RE. CA FEE	CONST. FEE	ELECT. FEE	SMI FEE	FEE	PLUMB. FEE
	136.00						14.00			

PERMIT NO.
402472

MH Permit Fee		$
Micro Film Fee	Copy	$
Mech. Fee	Dbl	$
Pl. Ck. Fee		$
Construction Fee	Dbl	$
Electrical Fee	Dbl	$
SMI Fee		$
Plumbing Fee	Dbl	$
Sp. Insp. Fee		$
Demol. Fee		$
Report Fee		$
Mileage Fee		$
Witness Fee		$
Reinsp. Fee		$
Total Fees		$

M.O. ☐ M.C. ☐ Cash ☐ Check ☐

Received by

Issue requested

Sewage System

T R P

Sewer District

Job Address — Water Tap — Owner

Contractor — Valuation $ — Date — Permit No. — Plan Check No. — Ck. By

Use of Permit — Permit No. — Plan Check No. — Ck. By

Legal Description — Zone — Density — Type

Bond Amt $ — Plan No. — Rock Checked — Final Date — Inspector — Unit

Const. Lender — Branch — Supervisor — Permit Number

Address — City — Zip

Owner or Agent — Tel — Zip

Address — City — Zip

Contractor — Tel — License #

Address — City — Zip

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 120 DAYS. CESSATION OF WORK FOR 120 DAYS SHALL ALSO LEAVE PERMIT TO BECOME VOID.

I HEREBY AGREE THAT ALL WORK TO BE DONE UNDER THIS PERMIT WILL BE DONE ACCORDING WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA.

I HEREBY CERTIFY THAT THE PLANS, DATA AND INFORMATION SHOWN AND SPECIFICATIONS MADE FOR THIS APPLICATION ARE TRUE IN EVERY RESPECT AND IN CONFORMITY WITH SECTION 5538 OF THE BUSINESS AND PROFESSIONS CODE OF THE STATE OF CALIFORNIA.

Form 284-208 (Rev. 1/80)

BUILDING APPROVALS

MECHANICAL APPROVALS

ADDITIONAL INFORMATION

PLUMBING APPROVALS

ELECTRICAL APPROVALS

SEWAGE SYSTEM SIZE & LOCATION

YEAR OF PROPERTY LINE

9/11/80 Klyn
9/11/80 Allow

DEPARTMENT OF BUILDING AND SAFETY
COUNTY OF RIVERSIDE

APPLICATION CERTIFICATE
PERMIT #

Effective July 1, 1980, Chapter 1301, Section 19825 of the Health and Safety Code requires the execution of the following applicable declarations prior to the issuance of a building permit. Please print or type and sign below.

[X] LICENSED CONTRACTORS DECLARATION

I hereby affirm that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

License Class C-10 License No. 325779

Date Sept. 10, 1980 Contractor Valley Electric Co., Inc.

[ ] OWNER-BUILDER DECLARATION

Swede Nordlof

I hereby affirm that I am exempt from the Contractor's License Law for the following reasons:

[ ] I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale. If I sell within one year of completion, I understand I will have the burden of proving I did not build or improve for the purpose of sale (Sec. 7044.5, B.&P.C.).

[ ] I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, B.&P.C.).

[ ] I am exempt under Section _____, B.&P.C. for this reason:

Date _____ Owner _____

[ ] WORKERS' COMPENSATION DECLARATION

I hereby affirm that I have a certificate of consent to self-insure, or a Certificate of Workers' Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. Code).

Policy No. WC14-5857-79 Insurance Unigard Insurance Co.

[ ] Certified copy is hereby furnished.

[X] Certified copy is filed with the County of Riverside, Department of Building and Safety.

Date 9/10/80 Applicant Swede Nordlof

[ ] CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

(This section need not be completed if permit valuation is for $100.00 or less.)

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation laws of California. I further understand that if after making this Certificate of Exemption, I should become subject to the Workers' Compensation provisions of the labor code, I must forthwith comply with such provisions or this permit shall be deemed revoked.

Date _____ Applicant _____

CONSTRUCTION LENDING AGENCY

I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. Code).

Lender's Name _____

Lender's Address _____

DIVISION OF INDUSTRIAL SAFETY PERMIT CERTIFICATION

[X] I hereby certify that no excavation five (5) or more feet in depth into which a person is required to descend, will be made in connection with work authorized by this permit, and that no building, structure, scaffolding, falsework, or demolition or dismantling thereof, will be more than thirty-six (36) feet high. (Chap 3.2, Grp 2, Art 2, Sec 341, Title 8, C.A.C.)

[ ] As owner-builder, I will not employ anyone to do work which would require a permit from the Division of Industrial Safety, as noted above, unless such person has a permit to do such work from that division.

[ ] Division of Industrial Safety Permit No.

Date 9/10/80 Applicant Swede Nordlof

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION OF ENTRY

I certify I have read this application and state that the information given is correct. I agree to comply with all state laws and county ordinances relating to building construction, and authorize a representative of the County of Riverside, Department of Building and Safety to enter upon the property for which I have applied for this permit for the purpose of making inspections.

Swede Nordlof Sept. 10, 1980

Signature of Applicant/Agent Date

Swede Nordlof

Print Applicant/Agent Name

284-2000 7/80

200 Amp Service

NOTICE: THIS IS NOT A BUILDING PERMIT

APPLICATION TO CONSTRUCT
DEPARTMENT OF BUILDING AND SAFETY
COUNTY OF RIVERSIDE

DISTRICT 4
Permit No. 482472

OWNER

Owner Colonial Convalescent Hospital
Address 39241 - 7th St.
City San Jacinto, Ca.
Phone 654-9347

Address
City
Phone

Contractor Valley Electric
Address 298 E. Latham
City Hemet, Ca.
Phone 658-2193

I (we) the undersigned hereby certify and acknowledge that I (we) have read the application and agree that if Curb and Gutter, and Paving, and/or Dedication of right of way is required by the County of Riverside the Riverside County Department of Building and Safety shall not make a Final Inspection until said requirements have been met. I am also aware that I may not occupy or connect to the County R/W without an encroachment permit.

NOW, therefore, it is agreed that I (we) will not occupy said property, and will not cause said property to be occupied until I (we) have complied with all laws of the County of Riverside and the State of California governing said property.

DATE Sept. 10, 1980 SIGNATURE OF OWNER AND OR AGENT Swede Nordlof

Approval by Signature from the Following Departments Listed Below Must Be Obtained Prior to the Issuing of a Construction Permit.

LAND USE DIVISION BUILDING AND SAFETY

JOB ADDRESS 39241 7th St. SPACE NO.
LEGAL DESCRIPTION OF PROPERTY 425-180-005
Lot 14 Eglee Tract
COMMUNITY San Jacinto
NO. OF SUBMITTED PLANS USE OF PERMIT replace PCC-P
CASE NO. issued
NO. OF PARKING SPACES REQUIRED NO. OF BUILDINGS NOW EXISTING
ZONE R-1-5 SETBACKS: FRONT SIDE REAR
GRADING PERMIT REQUIRED? YES ☐ NO ☐ LOT SIZE
SETBACK ORDINANCE # OF FEET REQUIRED ON STREET
DATE 9-10-80 SIGNATURE OF LAND USE OFFICIAL L. Curry

USE OF STRUCTURE

SINGLE FAMILY ☐	DUPLEX ☐
APARTMENTS ☐	AGRIC. ☐
COMMERCIAL ☐	INDUSTRIAL ☐
	ALTERATIONS ☐

ROAD DEPARTMENT

DEDICATION REQUIRED: YES ☐ NO ☐ NO. OF FEET
CURB AND GUTTER REQUIRED. YES ☐ NO ☐ STREET

CAN CURB AND GUTTER FEASIBLY BE INSTALLED? YES ☐ NO ☐
HAS AN ACCERTABLE APPLICATION BEEN MADE FOR ENCROACHMENT PERMIT FOR DRIVEWAY AND STREET IMPROVEMENT? YES ☐ NO ☐
DATE SIGNATURE OF ROAD DEPT. OFFICIAL

HEALTH DEPT.

SWIMMING POOLS PUBLIC
SEWAGE DISPOSAL
FOOD ESTABLISHMENT

OTHER DEPARTMENTS

WATER POLLUTION
FLOOD CONTROL
AIR POLLUTION
DIV OF HWY

REMARKS

YOUR PROPERTY MAY BE SUBJECT TO FLOOD. RIVERSIDE COUNTY ASSUMES NO RESPONSIBILITY IN EVENT OF FLOOD.

284 199 9/74

CANARY — FILE, PINK — APPLICANT

NOTICE TO APPLICANT

In conformity with the provisions of State of California Labor Code Section 3800, the applicant shall have on file or file with the Riverside County Department of Building and Safety a certificate as designated in Items I or II below, or shall indicate Item III, IV, or V, whichever is applicable.

CERTIFICATE OF APPLICANT

Please mark the appropriate block:

☐ I. Certificate of Consent to self-insure issued by the Director of Industrial Relations.
☐ Copy on file ☐ Copy submitted

☐ II. Certificate of Workers' Compensation Insurance issued by an admitted insurer.
☑ Copy on file ☐ Copy submitted

☐ III. The cost of the work to be performed is $100 or less.

☐ IV. I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation laws of California. I further certify that, in the event I become subject to the Workers' Compensation provisions of the Labor Code that I will comply forthwith with the provisions of Labor Code Section 3700, et seq., and understand that, if I do not comply, the permit shall be deemed revoked.

☐ V. I certify as the owner (or the agent of the owner) that in the performance of the work for which this permit is issued I have engaged _____ contractor. (Contractor must have on file, or submit certificate required by I or II above.)

Applicant's Signature _____

Date _____ Permit No. _____

Address and location where work is to be performed _____

284-141 REV. 4/77

BUILDING PERMIT

PERMIT NO. 408715

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

HEADQUARTERS

DST 7

CONSTRUCTION ESTIMATE			NO.	ELECTRICAL FEES		NO.	PLUMBING FEES	
1ST FL.	SQ. FT. @	$		UNITS				
2ND FL.	SQ. FT. @						YARD SPKLR SYSTEM	
POR.	SQ. FT. @			MOBILEHOME SVC			BAR SINK	
GAR.	SQ. FT. @			POWER OUTLET			ROOF DRAINS	
CAR P.	SQ. FT @						DRAINAGE PIPING	
WALL	SQ. FT. @						DRINKING FOUNTAIN	
	SQ. FT. @						URINAL	
ESTIMATED CONSTRUCTION VALUATION		$					WATER PIPING	
NOTE: Not to be used as property tax valuation				SWIM POOL PVT			FLOOR DRAIN	
MECHANICAL FEES				SWIM POOL COMM			WATER SOFTENER	
VENT SYSTEM FAN EVAP. COOL HOOD				SIGN			WASHER (AUTO)(DISH)	
APPLIANCE DRYER							GARBAGE DISPOSAL	
FURNACE UNIT WALL FLOOR SUSPENDED				1 Elect Chng	1000		LAUNDRY TRAY	
AIR HANDLING UNIT CFM				IDLE METER			KITCHEN SINK	
ABSORPTION SYSTEM BTU				TEMP USE PERMIT SVC			WATER CLOSET	
COMPRESSOR HP				POLE TEMP PERM			LAVATORY	
HEATING SYSTEM FORCED GRAVITY				AMPERES SERV ENT			SHOWER	
BOILER B.T.U				SQ FT @ ¢			BATH TUB	
				SQ FT @ ¢			WATER HEATER	
				SQ FT RESID @ 1 ¢			SEWAGE DISPOSAL	
				SQ FT GAR @ ½¢			HOUSE SEWER	
							GAS PIPING	
PERMIT FEE				PERMIT FEE	300		PERMIT FEE	

DBL.	TOTAL FEES	MOB HM FEE	MICRO FEE	MECH FEE	PL CK FEE	CONST FEE	ELECT FEE	SMI FEE	FEE	PLUMB FEE
	1300						1300			

PERMIT NO 408715

MH Permit Fee		$
Micro Film Fee	Cap	$
Mech. Fee	Dbl	$
Pl. Ck Fee		$
Construction Fee	Dbl	$
Electrical Fee	Dbl	$ 1300
SMI Fee		$
Plumbing Fee	Dbl	$
Sp. Insp Fee		$
Demol. Fee		$
Regulr Fee		$
Mileage Fee		$
Witness Fee		$
Reinsp. Fee		$
Total Fees		$ 1300

M.O. N.C. Cash X Check 0784

Reviewed by _____

Trades Required _____

Sewage System 0

T SL R

Sewer District _____

Job Address 39041 7th ST Space Zip

Owner Colonel Comm. Hosp.

Community San Jacinto

Valuation $ 0

Date 9/24/80 Dist 7 Blk H F.C.C. N6

Use of Permit 1 Elect Svc Change.

Permit No 435/880/076-44 Use Case No Ck By L.S.

Legal Description For SW¼ Sec 34 T4S R1W.

Set Backs F — S N — S A — R

Lot Size

Zone Restrictions A-1-S Group — Type —

Bond Amt $ Plan No — Plan Checker

Final Date Inspector Unit —

Const. Lender Branch

Supplemental Permit Numbers Johnny Elect. 6/14/81

Address City Zip

Owner-Agent Tel Zip

Contractor John Luchuck City Zip

Applicant John Luchuck Tel 658-2193 License 525779

Agent John Luchuck City Hemet Zip 92343

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 120 DAYS. CESSATION OF WORK FOR 120 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID

I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA

I HEREBY CERTIFY THAT THE INDIVIDUAL WHO PREPARED THE PLANS AND SPECIFICATIONS HAS DONE SO IN [illegible] THE STATE OF CALIFORNIA

Issued by _____

BUILDING PERMIT
PERMIT NO.
408715

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

FIELD

DIST. NO. 7

CONSTRUCTION ESTIMATE			NO.	ELECTRICAL FEES			NO.	PLUMBING FEES		
1ST FL.	SQ. FT. @	$		UNITS						
2ND. FL.	SQ. FT. @							YARD SPKLR SYSTEM		
POR.	SQ. FT @			MOBILEHOME SVC				BAR SINK		
GAR.	SQ. FT. @			POWER OUTLET				ROOF DRAINS		
CAR P.	SQ. FT. @							DRAINAGE PIPING		
WALL	SQ. FT @							DRINKING FOUNTAIN		
	SQ. FT @							URINAL		
ESTIMATED CONSTRUCTION VALUATION		$						WATER PIPING		
NOTE: Not to be used as property tax valuation				SWIM POOL PVT				FLOOR DRAIN		
MECHANICAL FEES				SWIM POOL COMM				WATER SOFTENER		
VENT SYSTEM	FAN EVAP COOL HOOD			SIGN				WASHER (AUTO)(DISH)		
APPLIANCE	DRYER							GARBAGE DISPOSAL		
FURNACE UNIT WALL FLOOR SUSPENDED				1 EC Swing 100 A				LAUNDRY TRAY		
AIR HANDLING UNIT	CFM			IDLE METER				KITCHEN SINK		
ABSORPTION SYSTEM	B.T.U.			TEMP USE PERMIT SVC				WATER CLOSET		
COMPRESSOR	HP			POLE TEMP PERM				LAVATORY		
HEATING SYSTEM	FORCED GRAVITY			AMPERES SERV ENT				SHOWER		
BOILER	B.T.U.			SQ FT @				BATH TUB		
				SQ FT @				WATER HEATER		
				SQ FT RESID @				SEWAGE DISPOSAL		
				SQ FT GAR @				HOUSE SEWER		
								GAS PIPING		
PERMIT FEE			1	PERMIT FEE		30		PERMIT FEE		
BSMT	TOTAL MECH 130	MOBILHM FEE	MECHD FEE	MECH FEE	PL. CK. FEE	CONST FEE	ELECT FEE 130	SWR FEE	FEE	PLUMB FEE

PERMIT NO. 408715

Alt/ Repair Fee		$
Micro Film Fee	Copy	$
Mech. Fee	Dist	$
Pl. Ck. Fee		$
Construction Fee	Dist	$
Electrical Fee	Dist	$ 130
SMIP Fee		$
Plumbing Fee	Dist	$
Sp. Insp. Fee		$
Dental Fee		$
Repair Fee		$
Mileage Fee		$
Welfare Fee		$
Storage Fee		$
Total Fees		$ 130

M.O. N.C. Check

Received by

Truck required

Mileage System

T R P

Issue District

Job Address: 37341 7th ST — Space — Zip — Owner: Desert Hosp.

Comments: 200 Amp 1 ph — Valuation $ 0 — Date 12/4/80 — Dist 7 — Ord 4 — F.C.C. N/C

Use of Permit: 1 EC + 30 charge — Permit No. 433/80/DRC+1 — Use Code No. — CT 2.5

Legal Description: PT SW 1/4 SEC 34 T7S R5W — Lot — Block — Lot Size

Zone Restrictions: R-1-5 — Overlay — Type

Bond Amt. $ — Plan No. — Plan Checker — Date Issued 10-2-80 — Issued D — Date

Const. Lender — Branch — Contractor Name: Lee T.

Address — City — Tel — 6/14/81

Owner Agent — Tel — Zip

Address — City — Zip

Contractor — Tel — License

Address — City — Zip

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 180 DAYS. CESSATION OF WORK FOR 180 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID.

I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA.

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS CORRECT AND THAT THE PLANS AND SPECIFICATIONS HAVE BEEN APPROVED IN WHOLE OR PART BY THE BUILDING OFFICIAL AND THAT I AM DULY LICENSED UNDER THE LAWS OF THE STATE OF CALIFORNIA.

Form 284 (Rev. 1-80)

NO	OPERATION	DATE	INSPECTOR
	BUILDING APPROVALS		
1	Set Poles		
2	Tops & Piers		
2A	Floor Joists		
3	Floor		
4	Chase Block		
5	Band Beam		
6	Roof Joist		
7	Sheeting		
8	Roof		
9	Garage Fire Wall		
10	Framing		
10A	Insulation		
11	Exterior Lath		
12	Stucco Lath		
12A	Dryvit		
13	Porch Ceiling		
	INSULATION	Date	R Value
13A	Walls (Batt)		
13B	Ceiling (Batt)		
13C	Ceiling (Blown)		
14	Final		
	PLUMBING APPROVALS		
15	Underfloor Plumbing		
16	Water Piping		
17	Rough Plumbing		
18	Tank		
19	Sewage Disposal		
20	Drains		
21	Water Heater		
22	Water Softener		
23	Gas Piping		
24	Gas Test		
25	Final		
	ELECTRICAL APPROVALS		
26	Temp. Pole		
27	Service		
28	Service Entrance		
29	Wiring		
29A	Underground Wiring		
29B	Lighting		
30	Fixtures		
31	Service		
32	Final		

NO	OPERATION	DATE	INSPECTOR
	MECHANICAL APPROVALS		
33	Ventilation System		
34	Plenums & Ducts		
35	Furnace Compart.		
36	Vents & Grilles		
37	Combustion Air		
38	Compressor		
39	Appl. Clearances		
40	Fire Dampers		
41	Smoke Detection Device		
42	Connect Gas Appl.		
43	Final		

TIONAL INFORMATION

10-2-80 Davis

10-2-80 Davis

SEWAGE SYSTEM SIZE & LOCATION

REAR OF PROPERTY LINE

P.L. P.L.

RIVERSIDE COUNTY DEPARTMENT OF BUILDING AND SAFETY

CORRECTION NOTICE

To: _____ Permit No. 468115

Address: 39241 7th Date: 9-25-80

ROUGH WIRING INSPECTION

1975 Edition
National Electrical Code

1. Electric service main disconnect _____ amp rating is required. [230–79].
2. Size of service entrance conductors and/or conduit shall be as per 310-12 Chapt. 9, Table 1.
3. Service equipment shall be listed as raintight for exterior use. [373-2] [110-11].
4. Cables and flexible metal raceways shall be secured within 12" of a box or cabinet and 4½' thereafter. [334-8-(b)].
5. Install 1/16" thick steel plate over studs or joists notched for cable or where cable is less than 2" from nail surface. [300–4(a)(1)]
6. Box overloaded, maximum number of conductors _____ in boxes located _____ _____ [370-6].
7. All conductors shall terminate in an approved box or fitting. [300-15].
8. Protect cables within 6' of attic access opening. [334.13].
9. Bond wires shall be made up with pressure connectors in boxes. Connect bond conductors to metallic boxes and leave 6" free conductor in metallic or non-metallic boxes. [250-114], [250-74].
10. All non-metallic fixtures boxes shall be installed so that a ground connection is made when fixture mounting screws are installed. [250-42]
11. Install a minimum of 2 appliance circuits in the pantry, kitchen, breakfast room, dining room, family room. [220-3(b)].
12. Convenience outlet maximum spacing is 12' apart with a maximum of 6' from openings. Minimum wall space is 2' requiring an outlet and 1' for counter tops in kitchen and dining rooms. [210–25(b)].
13. Provide 30" of work clearance at panels. [110-16].
14. Provide convenience outlet at lavatory [210–25]
15. Install laundry appliance circuit [220–3(c)].

(16) Bond neutral bus

(17) Gr house side of gas line, not gas co side

(Inspector)

CORRECT THE ABOVE CIRCLED ITEMS AND CALL FOR RE-INSPECTION

DEPARTMENT OF BUILDING AND SAFETY
COUNTY OF RIVERSIDE

APPLICATION CERTIFICATE
PERMIT # 405225

Effective July 1, 1980, Chapter 1301, Section 19825 of the Health and Safety Code requires the execution of the following applicable declarations prior to the issuance of a building permit. Please print or type and sign below.

☐ LICENSED CONTRACTORS DECLARATION

I hereby affirm that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

License Class C-10 License No. 325779
Date 9/23/1980 Contractor VALLEY ELECTRIC

☐ OWNER-BUILDER DECLARATION

I hereby affirm that I am exempt from the Contractor's License Law for the following reasons:

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale. If I sell within one year of completion, I understand I will have the burden of proving I did not build or improve for the purpose of sale (Sec. 7044.5, B.&P.C.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, B.&P.C.).

☐ I am exempt under Section _____, B.&P.C. for this reason:

Date _____ Owner _____

☒ WORKERS' COMPENSATION DECLARATION

I hereby affirm that I have a certificate of consent to self-insure, or a Certificate of Workers' Compensation Insurance, or a certified copy thereof (Sec. 3800, Lab. Code).

Policy No. WC14-5857-79 Insurance UNIGARD INSURANCE

☐ Certified copy is hereby furnished.

☒ Certified copy is filed with the County of Riverside, Department of Building and Safety.

Date 9/23/80 Applicant VALLEY ELECTRIC INC

☐ CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

(This section need not be completed if permit valuation is for $100.00 or less.)

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation laws of California. I further understand that if after making this Certificate of Exemption, I should become subject to the Workers' Compensation provisions of the labor code, I must forthwith comply with such provisions or this permit shall be deemed revoked.

Date 9/23/80 Applicant John Luchuck

CONSTRUCTION LENDING AGENCY

I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. Code).

Lender's Name _____
Lender's Address _____

DIVISION OF INDUSTRIAL SAFETY PERMIT CERTIFICATION

☒ I hereby certify that no excavation five (5) or more feet in depth into which a person is required to descend, will be made in connection with work authorized by this permit, and that no building, structure, scaffolding, falsework, or demolition or dismantling thereof, will be more than thirty-six (36) feet high. (Chap 3.2, Grp 2, Art 2, Sec 341, Title 8, C.A.C.)

☐ As owner-builder, I will not employ anyone to do work which would require a permit from the Division of Industrial Safety, as noted above, unless such person has a permit to do such work from that division.

☐ Division of Industrial Safety Permit No. _____

Date 9/23/80 Applicant John Luchuck

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION OF ENTRY

I certify I have read this application and state that the information given is correct. I agree to comply with all state laws and county ordinances relating to building construction, and authorize a representative of the County of Riverside, Department of Building and Safety to enter upon the property for which I have applied for this permit for the purpose of making inspections.

John Luchuck 9/23/80
Signature of Applicant/Agent Date

John Luchuck
Print Applicant/Agent Name

284-2000 7/80

200 AMP SERVICE

NOTICE: THIS IS NOT A BUILDING PERMIT

APPLICATION TO CONSTRUCT
DEPARTMENT OF BUILDING AND SAFETY
COUNTY OF RIVERSIDE

DISTRICT 1

Permit No.

OWNER

Owner COLONIAL CONV. HOSPITAL
Address 32241 7TH ST
City SAN JAC.
Phone 654-9374

Address
City
Phone

Contractor VALLEY ELEC
Address 298 E LATHAM
City HEMET
Phone 658-2193

I (we) the undersigned, hereby certify and acknowledge that I (we) have read the application and agree that if Curb and Gutter, and Paving, and/or Dedication of right of way is required by the County of Riverside, the Riverside County Department of Building and Safety shall not make a Final Inspection until said requirements have been met. I am also aware that no work is to be done within the County R/W without an encroachment permit.

NOW, therefore, it is agreed that I (we) will not occupy said property, and will not cause said property to be occupied until I (we) have complied with all laws of the County of Riverside and the State of California governing said property.

DATE 9/23/80 OWNER AND OR AGENT John Lachuck

Approval by Signature from the Following Departments Listed Below Must Be Obtained Prior to the Issuing of a Construction Permit.

LAND USE DIVISION BUILDING AND SAFETY

JOB ADDRESS 32241 7th St SPACE NO.
LEGAL DESCRIPTION OF PROPERTY 435-180-026-4
Por SW¼ Sec 34 T4S R1W
COMMUNITY San Jacinto
NO. OF SUBMITTED PLANS
CASE NO.
USE OF PERMIT 200 amp serv

USE OF STRUCTURE
SINGLE FAMILY ☐ DUPLEX ☐
APARTMENTS ☐ AGRIC. ☐
COMMERCIAL ☐ INDUSTRIAL ☐
ALTERATIONS ☐

NO. OF PARKING SPACES REQUIRED NO. OF BUILDINGS NOW EXISTING
ZONE A-1-1 SETBACKS: FRONT SIDE N/A REAR
GRADING PERMIT REQUIRED? YES ☐ NO ☐ LOT SIZE
SETBACK ORDINANCE # OF FEET REQUIRED ON STREET
DATE 9-24-80 SIGNATURE OF LAND USE OFFICIAL

ROAD DEPARTMENT

DEDICATION REQUIRED. YES ☐ NO ☐ NO. OF FEET
CURB AND GUTTER REQUIRED. YES ☐ NO ☐ STREET

CAN CURB AND GUTTER FEASIBLY BE INSTALLED? YES ☐ NO ☐
HAS AN ACCEPTABLE APPLICATION BEEN MADE FOR ENCROACHMENT PERMIT FOR DRIVEWAY AND STREET IMPROVEMENT? YES ☐ NO ☐
DATE SIGNATURE OF ROAD DEPT. OFFICIAL

HEALTH DEPT.

SWIMMING POOLS PUBLIC
SEWAGE DISPOSAL
FOOD ESTABLISHMENT

OTHER DEPARTMENTS

WATER POLLUTION
FLOOD CONTROL
AIR POLLUTION
DIV OF HWY

REMARKS

YOUR PROPERTY MAY BE SUBJECT TO FLOOD. RIVERSIDE COUNTY ASSUMES NO RESPONSIBILITY IN EVENT OF FLOOD.

284 199 9/74

CANARY — FILE. PINK — APPLICANT

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

HEADQUARTERS

BUILDING INFORMATION

NEW ✓ ENLARGE ✓ RELOCATE REGISTER
ALTER REPAIR DEMOLISH SPECIAL
OWNER ✓ ARCHITECT MEMBRANE
DRAFTSMAN ENGINEER

WOOD CONCRETE ✓ FIREPLACE
CONCRETE ✓ PIERS

BLOCK	FRAME	STUCCO	BRICK	CONC.	METAL	OTHER
	✓					MRE.

PLASTER DRY WALL ROOF COVERING: Aluma SQ. FTS.

ZONE: A-1-5 | SCHOOL CHECK'D BY: [illegible] | VARIANCE APPROVED: B.H. 496

SET BACK	FRONT	SIDE	REAR
	100'	10'	10'

530 x 225

1st Fl. ____ Sq. Ft. @ ____
2nd Fl. ____ Sq. Ft. @ ____
Por. ____ Sq. Ft. @ ____
Gar. ____ Sq. Ft. @ ____
PATIO 256 Sq. Ft. @ 2.00 512
Wall ____ Sq. Ft. @ ____

ESTIMATED VALUATION $ 512

PLANS CHECKED BY ____ FEE $ 5.00

ELECTRICAL FEES

NO. ____

	SIGNS	
	YARDS AND/OR T. COA	
	MOTOR H.P.	
	MOTOR H.P.	
	MOTOR H.P.	
	MOTOR H.P.	
	MOTOR H.P.	
3	FIXTURES	90
9	OUTLETS	1 80
	RANGE AND/OR OVEN	
	WATER HEATER	
	SPACE HEATER	
	CONSTRUCTION POLE	
	SERVICE ENTRANCE	
	RESID. 1¢ SQ. FT.	
	GARAGE ½¢ SQ. FT.	
	PERMIT FEE	1 00

PLANS CHECKED BY ____ FEE $ 3 20

PLUMBING FEES

NO. ____

	DRINKING FOUNTAIN
	URINAL
	WATER PIPING
	FLOOR DRAIN
	WATER SOFTENER
	WASHER (AUTO) (DISH)
	GARBAGE DISPOSAL
	LAUNDRY TRAY
	KITCHEN SINK
	WATER CLOSET
	LAVATORY
	SHOWER
	BATH TUB
	WATER HEATER
	SEWAGE DISPOSAL
	HOUSE SEWER
	GAS PIPING
	PERMIT FEE

PLANS CHECKED BY ____ FEE $ ____

PLAN CHECK FEE	$
CONSTRUCTION FEE	$ 5 00
ELECTRICAL FEE	$ 3 20
PLUMBING FEE	$
TOTAL FEE	$ 8 20

CASH | CHECK 2 | M.O. | R.C.

RECEIVED BY: Tompkins DATE: 12-29-65

WATER VOLUME GPM | TANK | LEACH LINE | DISPOSAL PIT
___ | ___ | ___ Sq. Ft. | ___

REMARKS:

JOB ADDRESS: 39241 7th St
OWNER: Colonial Nursing Home
COMMUNITY: San Jacinto
SCHOOL DISTRICT: San Jacinto
DATE: 12-29-65
USE OF PERMIT: PATIO - SHELTER FOR CHICKS
SUPPLEMENT TO PERMIT:

DISTRICT	CODE AREA	F.C.	WHITE	VALUATION	OFFICE	PERMIT NUMBER
H	63	22		512	2	136913

DESCRIPTIVE ADDRESS: "M" PERMIT NO.

LEGAL DESCRIPTION: BOND $ | BOND | CODE

GROUP	TYPE	FIRE ZONE	PAGE	MAP	PART	LOT	RELEASE BOND
D-3	V						DATE

FINALED DATE | INSPECTOR | CERTIFICATE OF COMPLIANCE | CERT. SENT DATE

CONTRACTOR | LICENSE-TYPE | PLAN FILE 415 6

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 90 DAYS. CESSATION OF WORK FOR 180 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID.
I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA. I ALSO AGREE TO CARRY COMPENSATION INSURANCE UPON MY EMPLOYEES. COMPLIANCE WITH LAWS OF THE STATE OF CALIFORNIA COVERING CONTRACTORS IS ALSO GUARANTEED.

OWNER: Mrs. H. R. Cox | CONTRACTOR
MAILING ADD. 39241 - 7th St | MAILING ADD.
POST OFFICE San Jacinto Calif | POST OFFICE
TEL. 654-1933 BY | TEL. BY

FEB

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

FIELD

BUILDING INFORMATION

NEW: ✓ | ENLARGE: | RELOCATE: | REGISTER:
ALTER: | REPAIR: | DEMOLISH: | SPECIAL:

OWNER: ✓ | ARCHITECT: | REMARKS:
DRAFTSMAN: | ENGINEER:

WOOD: | CONCRETE: ✓ | FIREPLACE:
CONCRETE: ✓ | PIERS:

	BLOCK	FRAME	STUCCO	BRICK	CONC.	METAL	OTHER
EXT.		✓					METAL

	PLASTER	DRY WALL	ROOF COVERING	SD. SHG.
INT.			Asphalt	

ZONE: A-1-5 | ZONING CHECK'D BY: [illegible] | VARIANCE APPROVED: 1496

SET	FRONT	SIDE	REAR	LOT SIZE
BACK	1447	147	1-2	50' X 128'

1st Fl. ____ Sq. Ft. @ ____
2nd Fl. ____ Sq. Ft. @ ____
Bsmt. ____ Sq. Ft. @ ____
Other ____ Sq. Ft. @ ____
Patio 2.5 Sq. Ft. @ 2.50 = 512
Wall ____ Sq. Ft. @ ____
____ Sq. Ft. @ ____

ESTIMATED VALUATION: $ 512

PLANS CHECKED BY | FEE $ 5.00

ELECTRICAL FEES

NO.		
	SIGNS	
	TRANS. AMP. OR V. A.	
	MOTOR H.P.	
	MOTOR H.P.	
	MOTOR H.P.	
	MOTOR H.P.	
	MOTOR H.P.	
3	FIXTURES	.45
5	OUTLETS	1.50
	RANGE AMP. OR OVEN	
	WATER HEATER	
	SPACE HEATER	
	CONSTRUCTION POLE	
	SERVICE ENTRANCE	
	RESID. M SQ. FT.	
	GARAGE ½¢ SQ. FT.	
	PERMIT FEE	1.00

PLANS CHECKED BY | FEE $ 3.20

PLUMBING FEES

NO.		
	DRAINAGE PIPING	
	DRINKING FOUNTAIN	
	URINAL	
	WATER PIPING	
	FLOOR DRAIN	
	WATER SOFTENER	
	WASHER (AUTO) (DISH)	
	GARBAGE DISPOSAL	
	LAUNDRY TRAY	
	KITCHEN SINK	
	WATER CLOSET	
	LAVATORY	
	SHOWER	
	BATH TUB	
	WATER HEATER	
	SEWAGE DISPOSAL	
	HOUSE SEWER	
	GAS PIPING	
	PERMIT FEE	

PLANS CHECKED BY | FEE $

	$
PLAN CHECK FEE	$
CONSTRUCTION FEE	$ 5.00
ELECTRICAL FEE	$ 3.20
PLUMBING FEE	$
TOTAL FEE	$ 8.20

CASH | CHECK ✓ | M.O. | N.C.

RECEIVED BY: [signature] | DATE: 12-28-65

WATER HORSE DEPTH | TIMES | LENGTH LINES | DEEPEST PIT
Sq. Ft. | Sq. Ft. | Sq. Ft.

REMARKS:

JOB ADDRESS: 39241 7th St | OWNER: Colonial Nursing Home

COMMUNITY: San Jacinto | SCHOOL DISTRICT: San Jacinto | DATE: 12-29-65

USE OF PERMIT: Patio - Shelter for Trailer | SUPPLEMENT TO PERMIT

DISTRICT	CODE AREA	F.C.	UNITS	VALUATION	OFFICE	PERMIT NUMBER
H	63	22		512	2	136913

DESCRIPTIVE ADDRESS | 'H' PERMIT NO.

LEGAL DESCRIPTION | BOND $ | BOND | CASH

GROUP	TYPE	FIRE ZONE	BOOK	MAP	PAGE	LINE
D-3	V					

RELEASED BOND DATE

FINALED DATE: 2-3-66 | INSPECTOR: [signature] | CERTIFICATE OF COMPLIANCE | CERT. MERIT DATE

CONTRACTOR | LICENSE TYPE | PLAN FILE: H 1516

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 90 DAYS. CESSATION OF WORK FOR 120 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID. I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE CO NTY AND THE STATE OF CALIFORNIA. I ALSO AGREE TO CARRY COMPENSATION INSURANCE UPON MY EMPLOYEES. COMPLIANCE WITH LAWS OF THE STATE OF CALIFORNIA GOVERNING CONTRACTORS IS ALSO GUARANTEED.

OWNER	CONTRACTOR
MAILING ADD.	MAILING ADD.
POST OFFICE	POST OFFICE
TEL. ST	TEL. ST

APPROVALS	DATE	INSPECTION
SET BACKS	1-4-66	Bakkum
FND. FORMS	1-4-66	Bakkum
REIN. STEEL		
BOND BEAM		
FRAMING	2-3-66	Bentley
VENTS		
ROOF DECK		
LATH EXT.		
LATH INT.		
FINAL	2-3-66	Bentley

BUILDING NOTICES

Mud sill improperly fastened to slab 2-3-66 Bentley

APPROVALS		DATE	INSPECTION
TEMP. SERVICE POLE			
ROUGH	CONDUIT	2-3-66	Bentley
ROUGH	SERVICE ENT.		
ROUGH	WIRING	2-3-66	Bentley
FINAL	FIXTURES	2-3-66	Bentley
FINAL	SERVICE ENT.		
FINAL	GROUNDING		
UTIL. CO. NOTIF.			

ELECTRICAL NOTICES

APPROVALS	DATE	INSPECTION
GROUND PLUMBING		
ROUGH PLUMBING		
SEWER		
SEWAGE DISPOSAL		
FINAL GAS		
FINAL WATER		
FINAL FIXTURES		
UTIL. CO. NOTIF.		

PLUMBING NOTICES

BACK

FT. ONLY

☐ MASON / CARPENTER ☐ KEY

DEPARTMENT OF BUILDING & SAFETY

COUNTY OF RIVERSIDE

HEADQUARTERS

CONSTRUCTION ESTIMATE		ELECTRICAL FEES		PLUMBING FEES	
	Sq. Ft. @	NO.	-	NO.	
	Sq. Ft. @				
	Sq. Ft. @				
	Sq. Ft. @	POLES			
	Sq. Ft. @	SIGNS		DRAINAGE PIPING	
	Sq. Ft. @	TRANS. AND/OR M.S. SW.		DRINKING FOUNTAIN	
	Sq. Ft. @	MOTOR H.P.		GARBAGE DISP.	
ESTIMATED VALUATION	$ 30,000	MOTOR H.P.		WATER PIPING	
MECHANICAL FEES		MOTOR H.P.		FLOOR DRAIN	
HEAT APPLIANCE		MOTOR H.P.		WATER SOFTENER	
INLETS - OUTLETS		FIXTURES		WASHER (AUTO) DISH	
SQ. FT. - UNIT HEATS		OUTLETS		GARBAGE DISPOSAL	
SQ. FT. - PERF. CEILING MAT.		SUB-PANEL		LAUNDRY TRAY	
APPLIANCE VENT				KITCHEN SINK	
GAS PIPE		RANGE AND/OR OVEN		WATER CLOSET	
REPAIR OR ALTER		WATER HEATER		LAVATORY	
VENT SYSTEM ☐ HOOD ☐ EVAP. COOL ☐		SPACE HEATER		SHOWER	
COMPRESSOR		CONSTRUCTION POLE		BATH TUB	
COMPRESSOR		SERVICE ENTRANCE		WATER HEATER	
COMPRESSOR		RESID. 1¢ SQ. FT.		SEWAGE DISPOSAL	
		GARAGE ½¢ SQ. FT.		HOUSE SEWER	
PERMIT FEE		PERMIT FEE		GAS PIPING	
				PERMIT FEE	

PERMIT NUMBER	BLDG	DBL	PLN CHK FEE	CONSTR. FEE	HEAT & VENT	ELECT. FEE	PLUMB. FEE	TOTAL FEES	PLAN CHECKER
144147			45.25					45.25	

J	F	M	A	M	J	J	A	S	O	N	D

BUILDING INFORMATION

WOOD		CONCRETE	X	FIREPLACE	
CONCRETE	X	PIERS		MEMBRANE	

BLOCK	FRAME	STUCCO	BRICK	CONC.	METAL	OTHER
	X	X				

PLASTER	DRY WALL	ROOF COVERING	SPR. RMS.
		Compo	

ZONE	ZONING CHECKED BY	PERMIT USE NO.
R-1-5	B.H.	Use 496

SET BACK	FRONT	SIDE	REAR	LOT SIZE
	95	150	90	

PLAN CHECK FEE	$ 45.25
MECHANICAL FEE	$
CONSTRUCTION FEE	$
ELECTRICAL FEE	$
PLUMBING FEE	$
TOTAL FEE	$ 45.25

CASH ☐ CHECK ☐ M.O. ☐ N.C. ☐

RECEIVED BY: Laing

PLAN FILE #

WATER	VOLUME	SEPTIC TANK	LEACH LINE	SEEPAGE PIT
SEWER		GAL.	SQ. FT.	GAL.

LETTER ☐ FILE ☐

JOB ADDRESS: 39341 7TH ST

OWNER: Colonial Nursing Home

USE OF BUILDING: NURSING HOME

DATE: 12-2-66

COMMUNITY: SAN JACINTO | DISTRICT: 1/10 | UNITS | VALUATION | OFFICE: 2

LEGAL DESCRIPTION: LOT 485 ESTUDILLO

LAND & WATER

PERMIT NUMBER: 144147

SUPPLEMENT TO PERMIT

FINALED DATE	INSPECTOR	GROUP	TYPE	BOND $	BOND	CASH

CONTRACTOR

LICENSE-TYPE ☐ #

RELEASE BOND DATE

In accordance with Sec. 302-D of the Uniform Building Code, this permit shall expire if work is not commenced within 60 days. If work is suspended or abandoned for a period of 120 days, this permit shall automatically become null and void.

This permit is issued, and shall continue in effect, pursuant to the terms and conditions of Sec. 3800 of the Business and Professions Code and as a condition of the issuance hereof the following certificate is executed.

OWNER-BUILDER

I hereby certify that in performance of the work for which this permit is issued I shall not employ any person in any manner whatsoever as to become subject to the Workmen's Compensation Laws of the State of California.

Owner _____

Address _____

Telephone _____

CONTRACTOR

I hereby certify that in performance of the work for which this permit is issued I have complied with Title 8, Article 3, Sec. 3800 of the Labor Code, and a certificate or certified copy is on file with the Riverside County Building Department.

Contractor _____

Address _____

Tel. _____ Lic. # _____

DEPARTMENT OF BUILDING & SAFETY

COUNTY OF RIVERSIDE

FIELD

CONSTRUCTION ESTIMATE

Liv.	3263	Sq. Ft. @
Gar.		Sq. Ft. @
Por.		Sq. Ft. @
Sto.		Sq. Ft. @
Cov. P.		Sq. Ft. @
Wall		Sq. Ft. @
		Sq. Ft. @

ESTIMATED VALUATION $ 78,000

MECHANICAL FEES

NO.		
	HEAT APPLIANCE	
	OUTLETS — OUTLETS	
	SQ. FT. — UNIT HEATER	
	SQ. FT. — PERIM. CEILING HEAT.	
	APPLIANCE VENT	
	GAS PIPE	
	REPAIR OR ALTER	
	VENT SYSTEM ☐ POWER ☐ EVAP. COOL ☐	
	COMPRESSOR	
	COMPRESSOR	
	COMPRESSOR	
	PERMIT FEE	

ELECTRICAL FEES

NO.			
	POLES		
	SIGNS		
	TRANS. AND/OR T. CH.		
4	MOTOR 5 H.P.	8	—
8	MOTOR Fan H.P.	8	—
	MOTOR H.P.		
	MOTOR H.P.		
	MOTOR H.P.		
50	FIXTURES @ Incl	7	—
35	OUTLETS "	5	50
1	SUB-PANEL	2	00
	BANGE AND/OR OVEN		
	WATER HEATER		
	SPACE HEATER		
	CONSTRUCTION POLE		
	SERVICE ENTRANCE		
	RESID. 1¢ SQ. FT.		
	GARAGE ½¢ SQ. FT.		
1	PERMIT FEE	1	—

PLUMBING FEES

NO.			
	DRAINAGE PIPING		
	DRINKING FOUNTAIN		
	URINAL		
	WATER PIPING		
	FLOOR DRAIN		
	WATER SOFTENER		
	WASHER (AUTO) (DISH)		
	GARBAGE DISPOSAL		
	LAUNDRY TRAY		
	KITCHEN SINK		
5	WATER CLOSET 1.25	7	50
4	LAVATORY 1.50	6	—
1	SHOWER 1.50	1	50
	BATH TUB		
	WATER HEATER		
	SEWAGE DISPOSAL		
1	HOUSE SEWER	5	00
	GAS PIPING		
1	PERMIT FEE	2	—

PERMIT NUMBER	GEN.	ELEC.	PLAN CHK. FEE	CONSTR. FEE	HEAT & VENT	ELECT. FEE	PLUMB. FEE	TOTAL FEES	PLAN CHECKER
144147			45.25	90 50		31 50	22 00	193.25	

BUILDING INFORMATION

WOOD		CONCRETE		FIREPLACE	
CONCRETE	X	FIBER		MEMBRANE	

BLOCK	FRAME	STUCCO	BRICK	CONC.	METAL	OTHER
	X	X				

PLASTIC	DRY WALL	ROOF COVERING	SQ. FEET
		Comp	

DATE	ZONING CHECKED BY	PERMIT FEE BY
4-1-5	BH	Wm 446

SET BACK	FRONT	SIDE	REAR	LOT SIZE
	45	130	90	

PLAN CHECK FEE	$ 45 25
MECHANICAL FEE	$
CONSTRUCTION FEE	$ 90 50
ELECTRICAL FEE	$ 31 50
PLUMBING FEE	$ 22 00
TOTAL FEE	$ 144 00

CASH ☐ CHECK ☐ M.O. ☐ M.C. ☐

DIRECTIONS: Kendrick

PLAN FILE # 4362

WATER GALLONAGE SEPTIC TANK: SEWER GAL.

LEACH LINE SQ. FT.

SEEPAGE PIT GAL.

LETTER ☐ FILE ☐

JOB ADDRESS: 3944 7TH St

OWNER: Colonial Nursing Home

USE OF BUILDING: Nursing Home

DATE: 12-5-66

COMMUNITY: San Jacinto

DISTRICT: H

FINAL: 1/70

UNITS:

VALUATION:

OFFICE:

LEGAL DESCRIPTION: Lot #5 Extended

PERMIT NUMBER: 144147

SUPPLEMENT TO PERMIT:

Harold Winter

FINALED DATE	INSPECTOR	GROUP	TYPE	BOND	BOND	CASH
2-8-67	Felton			B		

CONTRACTOR:

RELEASE BOND DATE:

LICENSE-TYPE ☐ #

In accordance with Sec. 302-D of the Uniform Building Code, this permit shall expire if work is not commenced within 60 days. If work is suspended or abandoned for a period of 120 days, this permit shall automatically become null and void.

This permit is issued, and shall continue in effect, pursuant to the terms and conditions of Sec. 3800 of the Business and Profes[illegible] Code and as a condition of the issuance hereof the following certific[illegible] executed.

OWNER-BUILDER

I hereby certify that in performance of the work for which this permit is issued I shall not employ any person in any manner whatsoever so as to become subject to the Workmen's Compensation Laws of the State of California.

Owner

Address

Telephone

CONTRACTOR

I hereby certify that in performance of the work for which this permit is issued I have complied with Title 8, Article 3, Sec. 3800 of the Labor Code, and a certificate or certified copy is on file with the Riverside County Building Department.

Contractor

Address

Tel. Lic. #

MR MORAN TR 70561-213

NO.	OPERATION	DATE	INSPECTOR
	BUILDING APPROVALS		
1	Set Back		
2	FTUS & FRMS		
3	Steel		
4	Joist Blocks		
5	Band Beams		
6	Roof Deck		
7	Framing		
8	Vents		
9	Garage Fire Wall		
10	Fireplace P/L ☐ T/O ☐		
11	Exterior Lath		
12	Internal Lath		
13	Exterior Grade		
14	Final		
	PLUMBING APPROVALS		
15	Ground Plumb		
16	Water Piping		
17	Rough Plumb		
18	Vents		
19	Sewage Disposal		
20	Sewer		
21	Water Heater		
22	Water Softener		
23	Water Service		
24	Gas Test		
25	Final		
	ELECTRICAL APPROVALS		
26	Power Pole		
27	Conduit		
28	Service Entrance		
29	Wiring		
30	Fixtures		
31	Service		
32	Final		

NO.	OPERATION	DATE	INSPECTOR
	MECHANICAL APPROVALS		
33	Ovens		
34	Plenums & Ducts		
35	Furnace Compart.		
36	Inlets & Outlets		
37	Comb. & Ret. Air		
38	Compressor		
39	Appl. Clearance		
40	Final		

OPN NO.	PROGRESS CHECKS

DEPARTMENT OF BUILDING & SAFETY

COUNTY OF RIVERSIDE

HEADQUARTERS

CONSTRUCTION ESTIMATE		ELECTRICAL FEES		PLUMBING FEES	
	Sq. Ft. @	NO.	-	NO.	
	Sq. Ft. @				
	Sq. Ft. @				
	Sq. Ft. @	POLES			
	Sq. Ft. @	SIGNS		DRAINAGE PIPING	
	Sq. Ft. @	TRANS. AND/OR M.S. SW.		DRINKING FOUNTAIN	
	Sq. Ft. @	MOTOR H.P.		GARBAGE DISP.	
ESTIMATED VALUATION	$ 30,000	MOTOR H.P.		WATER PIPING	
MECHANICAL FEES		MOTOR H.P.		FLOOR DRAIN	
HEAT APPLIANCE		MOTOR H.P.		WATER SOFTENER	
INLETS - OUTLETS		FIXTURES		WASHER (AUTO) DISH	
SQ. FT. - UNIT HEATS		OUTLETS		GARBAGE DISPOSAL	
SQ. FT. - PERF. CEILING MAT.		SUB-PANEL		LAUNDRY TRAY	
APPLIANCE VENT				KITCHEN SINK	
GAS PIPE		RANGE AND/OR OVEN		WATER CLOSET	
REPAIR OR ALTER		WATER HEATER		LAVATORY	
VENT SYSTEM ☐ HOOD ☐ EVAP. COOL ☐		SPACE HEATER		SHOWER	
COMPRESSOR		CONSTRUCTION POLE		BATH TUB	
COMPRESSOR		SERVICE ENTRANCE		WATER HEATER	
COMPRESSOR		RESID. 1¢ SQ. FT.		SEWAGE DISPOSAL	
		GARAGE ½¢ SQ. FT.		HOUSE SEWER	
PERMIT FEE		PERMIT FEE		GAS PIPING	
				PERMIT FEE	

PERMIT NUMBER	BLDG	DBL	PLN CHK FEE	CONSTR. FEE	HEAT & VENT	ELECT. FEE	PLUMB. FEE	TOTAL FEES	PLAN CHECKER
144147			45.25					45.25	

J	F	M	A	M	J	J	A	S	O	N	D

BUILDING INFORMATION

WOOD		CONCRETE	X	FIREPLACE	
CONCRETE		PIERS		MEMBRANE	

BLOCK	FRAME	STUCCO	BRICK	CONC.	METAL	OTHER
	X	X				

PLASTER	DRY WALL	ROOF COVERING	GR. RMS.
		Compo	

ZONE	ZONING CHECKED BY	PERMIT USE NO.
R-1-5	B.H.	Use 496

SET BACK	FRONT	SIDE	REAR	LOT SIZE
	95	150	90	

PLAN CHECK FEE	$ 45.25
MECHANICAL FEE	$
CONSTRUCTION FEE	$
ELECTRICAL FEE	$
PLUMBING FEE	$
TOTAL FEE	$ 45.25

CASH ☐ CHECK ☐ M.O. ☐ N.C. ☐

RECEIVED BY: Laing

PLAN FILE #

WATER VOLUME SEPTIC TANK: SEWER GAL. | LEACH LINE SQ. FT. | SEEPAGE PIT GAL.

LETTER ☐ FILE ☐

JOB ADDRESS: 39341 7TH ST

OWNER: Colonial Nursing Home

USE OF BUILDING: NURSING HOME

DATE: 12-2-66

COMMUNITY: SAN JACINTO | DISTRICT: 1/10 | UNITS | VALUATION | OFFICE: 2

LEGAL DESCRIPTION: LOT 485 ESTUDILLO

PERMIT NUMBER: 144147

SUPPLEMENT TO PERMIT

LAND & WATER

FINALED DATE	INSPECTOR	GROUP	TYPE	BOND $	BOND	CASH

CONTRACTOR

LICENSE-TYPE ☐ #

RELEASE BOND DATE

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OWNER-BUILDER

I hereby certify that in performance of the work for which this permit is issued I shall not employ any person in any manner whatsoever as to become subject to the Workmen's Compensation Laws of the State of California.

Owner _____

Address _____

Telephone _____

CONTRACTOR

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Contractor _____

Address _____

Tel. _____ Lic. # _____

DEPARTMENT OF BUILDING & SAFETY

COUNTY OF RIVERSIDE

FIELD

CONSTRUCTION ESTIMATE

Liv.	3263	Sq. Ft. @
Gar.		Sq. Ft. @
Por.		Sq. Ft. @
Sto.		Sq. Ft. @
Cov. P.		Sq. Ft. @
Wall		Sq. Ft. @
		Sq. Ft. @

ESTIMATED VALUATION $ 78,000

MECHANICAL FEES

NO.		
	HEAT APPLIANCE	
	OUTLETS — OUTLETS	
	SQ. FT. — UNIT HEATER	
	SQ. FT. — PERIM. CEILING HEAT.	
	APPLIANCE VENT	
	GAS PIPE	
	REPAIR OR ALTER	
	VENT SYSTEM ☐ POWER ☐ EVAP. COOL ☐	
	COMPRESSOR	
	COMPRESSOR	
	COMPRESSOR	
	PERMIT FEE	

ELECTRICAL FEES

NO.			
	POLES		
	SIGNS		
	TRANS. AND/OR T. CH.		
4	MOTOR 5 H.P.	8	—
8	MOTOR Fan H.P.	8	—
	MOTOR H.P.		
	MOTOR H.P.		
	MOTOR H.P.		
50	FIXTURES @ Incl	7	—
35	OUTLETS "	5	50
1	SUB-PANEL	2	00
	BANGE AND/OR OVEN		
	WATER HEATER		
	SPACE HEATER		
	CONSTRUCTION POLE		
	SERVICE ENTRANCE		
	RESID. 1¢ SQ. FT.		
	GARAGE ½¢ SQ. FT.		
1	PERMIT FEE	1	—

PLUMBING FEES

NO.			
	DRAINAGE PIPING		
	DRINKING FOUNTAIN		
	URINAL		
	WATER PIPING		
	FLOOR DRAIN		
	WATER SOFTENER		
	WASHER (AUTO) (DISH)		
	GARBAGE DISPOSAL		
	LAUNDRY TRAY		
	KITCHEN SINK		
5	WATER CLOSET 1.25	7	50
4	LAVATORY 1.50	6	—
1	SHOWER 1.50	1	50
	BATH TUB		
	WATER HEATER		
	SEWAGE DISPOSAL		
1	HOUSE SEWER	5	00
	GAS PIPING		
1	PERMIT FEE	2	—

PERMIT NUMBER	GEN.	ELEC.	PLAN CHK. FEE	CONSTR. FEE	HEAT & VENT	ELECT. FEE	PLUMB. FEE	TOTAL FEES	PLAN CHECKER
144147			45.25	90 50		31 50	22 00	193.25	

BUILDING INFORMATION

WOOD		CONCRETE		FIREPLACE	
CONCRETE	X	FIBER		MEMBRANE	

BLOCK	FRAME	STUCCO	BRICK	CONC.	METAL	OTHER
	X	X				

PLASTIC	DRY WALL	ROOF COVERING	SQ. FEET
		Comp	

DATE	ZONING CHECKED BY	PERMIT FEE BY
4-1-5	BH	Wm 446

SET BACK	FRONT	SIDE	REAR	LOT SIZE
	45	130	90	

PLAN CHECK FEE	$ 45 25
MECHANICAL FEE	$
CONSTRUCTION FEE	$ 90 50
ELECTRICAL FEE	$ 31 50
PLUMBING FEE	$ 22 00
TOTAL FEE	$ 144 00

CASH ☐ CHECK ☐ M.O. ☐ M.C. ☐

DIRECTIONS: Kendrick

PLAN FILE # 4362

WATER GALLONAGE SEPTIC TANK: SEWER GAL.

LEACH LINE SQ. FT.

SEEPAGE PIT GAL.

LETTER ☐ FILE ☐

JOB ADDRESS: 3944 7TH St

OWNER: Colonial Nursing Home

USE OF BUILDING: Nursing Home

DATE: 12-5-66

COMMUNITY: San Jacinto

DISTRICT: H

FINAL: 1/70

UNITS:

VALUATION:

OFFICE:

LEGAL DESCRIPTION: Lot #5 Extended

PERMIT NUMBER: 144147

SUPPLEMENT TO PERMIT:

Harold Winter

FINALED DATE	INSPECTOR	GROUP	TYPE	BOND	BOND	CASH
2-8-67	Felton			B		

CONTRACTOR:

RELEASE BOND DATE:

LICENSE-TYPE ☐ #

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OWNER-BUILDER

I hereby certify that in performance of the work for which this permit is issued I shall not employ any person in any manner whatsoever so as to become subject to the Workmen's Compensation Laws of the State of California.

Owner

Address

Telephone

CONTRACTOR

I hereby certify that in performance of the work for which this permit is issued I have complied with Title 8, Article 3, Sec. 3800 of the Labor Code, and a certificate or certified copy is on file with the Riverside County Building Department.

Contractor

Address

Tel. Lic. #

MR MORAN TR 70561-213

NO.	OPERATION	DATE	INSPECTOR
	BUILDING APPROVALS		
1	Set Back		
2	FTUS & FRMS		
3	Steel		
4	Joist Blocks		
5	Band Beams		
6	Roof Deck		
7	Framing		
8	Vents		
9	Garage Fire Wall		
10	Fireplace P/L ☐ T/O ☐		
11	Exterior Lath		
12	Internal Lath		
13	Exterior Grade		
14	Final		
	PLUMBING APPROVALS		
15	Ground Plumb		
16	Water Piping		
17	Rough Plumb		
18	Vents		
19	Sewage Disposal		
20	Sewer		
21	Water Heater		
22	Water Softener		
23	Water Service		
24	Gas Test		
25	Final		
	ELECTRICAL APPROVALS		
26	Power Pole		
27	Conduit		
28	Service Entrance		
29	Wiring		
30	Fixtures		
31	Service		
32	Final		

NO.	OPERATION	DATE	INSPECTOR
	MECHANICAL APPROVALS		
33	Ovens		
34	Plenums & Ducts		
35	Furnace Compart.		
36	Inlets & Outlets		
37	Comb. & Ret. Air		
38	Compressor		
39	Appl. Clearance		
40	Final		

OPN NO.	PROGRESS CHECKS

DEPARTMENT OF BUILDING & SAFETY — HEADQUARTERS
COUNTY OF RIVERSIDE

CONSTRUCTION PERMIT

No. Fl. ¢	
No. Fl. ¢	
No. Fl. ¢	
2nd Fl. ¢	
No. Fl. ¢	38-2657
No. Fl. ¢	
No. Fl. ¢	

ESTIMATED VALUATION $

MECHANICAL FEES

ROOF APPLIANCE	
OUTLETS — OUTLETS	
+ UNIT HEATER	
M. SQ. FT. — PERP. CEILING MAT.	
APPLIANCE VENT	
GAS PIPE	
REPAIR OR ALTER	
VENT SYSTEM ☐ MECH ☐ EVAP. COOL ☐	
COMPRESSOR	
COMPRESSOR	
COMPRESSOR	
PERMIT FEE	

ELECTRICAL FEES

NO.	
POLES	
TEMP. SER. OR T. POLE	151156
MOTOR H.P.	
MOTOR H.P.	
MOTOR H.P.	
MOTOR H.P.	
MOTOR H.P.	
FIXTURES	
OUTLETS	
SUB-PANEL	
RANGE AMP/SO OVEN	
WATER HEATER	
SPACE HEATER	
CONSTRUCTION POLE	
SERVICE ENTRANCE	
UNDER 10 SQ. FT.	
GARAGE 10 SQ. FT.	
PERMIT FEE	

PLUMBING FEES

NO.	
	3.50
EVAPORATIVE FOUNTAIN	
URINAL	
WATER PIPING	
FLOOR DRAIN	
WATER SOFTENER	
GARBAGE (WITH) (WITH)	
GARBAGE DISPOSAL	
LAUNDRY TRAY	
KITCHEN SINK	
WATER CLOSET	
LAVATORY	
SHOWER	
BATH TUB	
WATER HEATER	
SEWAGE DISPOSAL	
MINER SEWER	
GAS PIPING	1.00
PERMIT FEE	2.50

151156	ACS	MISC.	PLAN CHK FEE	GRADING FEE	HEAT & VENT	ELECT. FEE	PLUMB. FEE	TOTAL FEES	PLAN CHECKED
							3.50	3.50	

BUILDING INFORMATION

WOOD		CONCRETE		FIREPLACE		
CONCRETE		PIERS		METAL FRAME		
BLOCK	FRAME	STUCCO	BRICK	CONC.	METAL	OTHER
PLASTER	DRY WALL	ROOF COVERING				SQ. MAS.

ZONE	TENTATIVE CLEARED BY		PERMIT FEE NO.	
SET BACK	FRONT	SIDE	REAR	LOT SIZE

PLAN CHECK FEE	$
MECHANICAL FEE	$
CONSTRUCTION FEE	$
ELECTRICAL FEE	$
PLUMBING FEE	$ 3 50
TOTAL FEE	$ 3 50

CASH ☐ CHECK ☐ M.O. ☐ N.C. ☐

RECEIVED BY: Bell

PLAN FILE #

WATER VOLUME SEPTIC TANK ____ GAL. LEACH LINE ____ SQ. FT. DESPOSE PIT ____ GAL.

WRITTEN ☐ FILE ☐

JOB ADDRESS: 3924 7th St. OWNER: Colonial Manor

USE OF BUILDING: Add gas line DATE: 7-21-67

COMMUNITY: Riverside DISTRICT: # P.C.: 35 UNITS: VALUATION: OFFICE: #

LEGAL DESCRIPTION: Lot 5 Westside Add. Co

PERMIT NUMBER: 151156

SUPPLEMENT TO PERMIT: 147546

FINALED DATE	INSPECTOR	GROUP	TYPE	BOND #	DOSE	CASH

CONTRACTOR

LICENSE-TYPE ☐ #

RELEASE BOND DATE

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This permit is issued, and shall continue in effect, pursuant to the terms and conditions of Sec. 3800 of the Business and Professions Code and as a condition of the issuance hereof the following certificate is executed.

OWNER-BUILDER

I hereby certify that in performance of the work for which this permit is issued I shall not employ any person in any manner whatsoever so as to become subject to the Workmen's Compensation Laws of the State of California.

Owner Howard A. Patterson

Address 3924 7th St Riv

Telephone 684-4929

CONTRACTOR

I hereby certify that in performance of the work for which this permit is issued I have complied with Title 3, Article 3, Sec. 3800 of the Labor Code, and a certificate or certified copy is on file with the Riverside County Building Department.

Contractor ____

Address ____

Tel. ____ Lic. # ____

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

FIELD ✓

CONSTRUCTION ESTIMATE		ELECTRICAL FEES		PLUMBING FEES	
	No. Fl. $	NO.		NO.	
	No. Fl. $				
	No. Fl. $				
	No. Fl. $	POLES			
	No. Fl. $	SIGNS			SQUARE PIPING
	No. Fl. $	TRANS. AND/OR S. C. CLR.			DRINKING FOUNTAIN
	No. Fl. $	MOTOR H.P.			URINAL
		MOTOR H.P.			WATER PIPING
ESTIMATED VALUATION	$	MOTOR H.P.			FLOOR DRAIN
MECHANICAL FEES		MOTOR H.P.			WATER SOFTENER
HEAT APPLIANCE		MOTOR H.P.			W.C.S.(S) (AFUS) (BIDET)
OUTLETS - OUTLETS		FIXTURES			GARBAGE DISPOSAL
No. SQ. FT. - UNIT HEATER		OUTLETS			LAUNDRY TRAY
No. SQ. FT. - PERM. CABLING MAT.		SUB-PANEL			KITCHEN SINK
APPLIANCE VENT					WATER CLOSET
GAS FIRE		RANGE AND/OR OVEN			LAVATORY
RECESS OR HEATER		WATER HEATER			SHOWER
VENT SYSTEM ☐ GRAV. ☐ SYST. DUCT. ☐		SPACE HEATER			BATH TUB
COMPRESSOR		CONSTRUCTION POLE			WATER HEATER
CONDENSER		SERVICE ENTRANCE			SEWAGE DISPOSAL
COMPRESSOR		RESID. TO SQ. FT.			HOUSE SEWER
		GARAGE 16 SQ. FT.		1	GAS PIPING 1.50
PERMIT FEE		PERMIT FEE			PERMIT FEE 2.00

PERMIT NO.	ECH	GAL.	PLAN CHK. FEE	CONSTR. FEE	HEAT & VENT	ELECT. FEE	PLUMB. FEE	TOTAL FEES	PLAN CHECKED
T51156							3.50	3.50	

BUILDING INFORMATION

WOOD		CONCRETE		FIREPLACE	
CONCRETE		PIERS		MEMBRANE	

FLOOR	FRAME	STUCCO	BRICK	CONC.	METAL	OTHER

PLASTER	DRY WALL	ROOF COVERING	SQ. FEET

USE	ZONING CHECKED BY	PERMIT USE NO.
A-1-5	JR	

SET BACK	FRONT	SIDE	REAR	LOT SIZE

PLAN CHECK FEE	$
MECHANICAL FEE	$
CONSTRUCTION FEE	$
ELECTRICAL FEE	$
PLUMBING FEE	$ 3 50
TOTAL FEE	$ 3 50

CASH 0 CHECK N.O. R.C.

RECEIVED BY Bill

PLAN FILE #

PER VOLUME SEPTIC TANK GAL. LEACH LINE SQ. FT. SEEPAGE PIT GAL.

LETTER ☐ FILE ☐

JOB ADDRESS 39241 9th St. OWNER Colonial Nursing Home

USE OF BUILDING Add gas line DATE 7-21-67

COMMUNITY San Jacinto DISTRICT 4 P.C. 35 UNITS VALUATION OFFICE H

LEGAL DESCRIPTION Lot 6 E.S. Tudilla L&W. Co PERMIT NUMBER T51156

SUPPLEMENT TO PERMIT 147546

FINALED DATE	INSPECTOR	GROUP	TYPE	BOND	BOND	CASH
1-11-68				$		

CONTRACTOR RELEASE BOND

LICENSE-TYPE ☐ No. DATE

In accordance with Sec. 302-D of the Uniform Building Code, this permit shall expire if work is not commenced within 60 days. If work is suspended or abandoned for a period of 1[illegible] days, this permit shall automatically become null and void.

This permit is issued, and shall continue in effect, pursuant to the terms and conditions of Sec. 3800 of the Business and Professions Code and as a condition of the issuance hereof the following certificate is executed.

OWNER-BUILDER

I hereby certify that in performance of the work for which this permit is issued I shall not employ any person in any manner whatsoever so as to become subject to the Workmen's Compensation Laws of the State of California.

Owner [illegible]

Address [illegible]

Telephone [illegible]

CONTRACTOR

I hereby certify that in performance of the work for which this permit is issued I have complied with Title 8, Article 3, Sec. 3800 of the Labor Code, and a certificate or certified copy is on file with the Riverside County Building Department.

Contractor _____

Address _____

Tel. _____ Lic. #

NO.	OPERATION	DATE	INSPECTOR
	BUILDING APPROVALS		
1	Footing		
2	Piers & Piles		
3	Slab		
4	Under Ground		
5	Rough Frame		
6	Rough Electric		
7	Rough Plumb		
8	Rough Heating		
9	Insul. Bat Roof		
10	Lather T/L ☐ T/G ☐		
11	Exterior Lath		
12	Internal Lath		
13	Concrete Grade		
14	Final		
	PLUMBING APPROVALS		
15	Ground Plumb		
16	Water Piping		
17	Rough Plumb		
18	Vents		
19	Sewage Disposal		
20	Septic		
21	Water Heater		
22	Water Softener		
23	Water Service		
24	Gas Test	8-29-68	
25	Final	1-4-68	
	ELECTRICAL APPROVALS		
26	Power Pole		
27	Conduit		
28	Service Entrance		
29	Wiring		
30	Fixtures		
31	Service		
32	Final		

NO.	OPERATION	DATE	INSPECTOR
	MECHANICAL APPROVALS		
33	Ovens		
34	Plenums & Ducts		
35	Furnace Compart.		
36	Inlets & Outlets		
37	Comb. & Re.		
38	Compressor		
39	Appl. Clearance		
40	Final		

NO.	PROGRESS CHECKS

DEPARTMENT OF BUILDING & SAFETY
COUNTY OF RIVERSIDE

HEADQUARTERS

CONSTRUCTION ESTIMATE

	Sq. Ft. @	
	Sq. Ft. @	
	Sq. Ft. @	
	Sq. Ft. @	
	Sq. Ft. @	
	Sq. Ft. @	
	Sq. Ft. @	
	Sq. Ft. @	
Porch Patio		2700
ESTIMATED VALUATION	$	2 800

MECHANICAL FEES

VENT SYSTEM ☐ FAN ☐ EVAP. COOL ☐ HOOD	
APPLIANCE	
☐ WALL ☐ FLOOR ☐ SUSPENDED	
AIR DUCT	
GAS PIPE ☐ NATURAL ☐ L.P.G. ☐ OIL	
COMPRESSOR HP	
APPLIANCE VENT	
ABSORPTION SYSTEM B.T.U.	
INCINERATOR DOMESTIC ☐ INDUS. ☐ COMM.	
HEATING SYSTEM ☐ FORCED ☐ GRAVITY	
BOILER B.T.U.	
RESIDENTIAL FEE SQ.FT. @	
PERMIT FEE	

ELECTRICAL FEES

NO.		
	POLES	
	TRANS. AMPS/ KV T. CLS.	
	MOTOR H.P.	
	MOTOR H.P.	
	MOTOR H.P.	
	MOTOR H.P.	
	MOTOR H.P.	
2	FIXTURES	40
2	OUTLETS	40
	SUB-PANEL	
	RANGE AND/OR OVEN	
	WATER HEATER	
	SPACE HEATER	
	CONSTRUCTION POLE	
	SERVICE ENTRANCE	
	REMOD. 12 SQ. FT.	
	GARAGE ½ SQ. FT.	
	PERMIT FEE	1 00

PLUMBING FEES

NO.		
3	BUILDING SEWER DRAINAGE PIPING	13 80
	DRINKING FOUNTAIN	
	URINAL	
	WATER PIPING	
	FLOOR DRAIN	
	WATER SOFTENER	
	WASHER (AUTO) (DISH)	
	GARBAGE DISPOSAL	
	LAUNDRY TRAY	
	KITCHEN SINK	
	WATER CLOSET	
	LAVATORY	
	SHOWER	
	BATH TUB	
	WATER HEATER	
	SEWAGE DISPOSAL	
	HOUSE SEWER	
	GAS PIPING	
	PERMIT FEE	

PERMIT NUMBER 159377 | BRN. | BRK. | TOTAL FEES 13.80 | HEAT & VENT FEE | PLN. CK. FEE Paid | CONST. FEE 12.00 | ELEC. FEE 1.80 | PLUMB. FEE

	P.		M.		A.		Repeat		N.		S.
	P.		M.		A.				N.		S.

KEY BACK	LOT SIZE	USE #	JOB ADDRESS					OWNER			
.50 B .50 R .50		VAR. 496	39241	7th	St			Patterson Howard			
PLAN CHECK FEE		ZONE	USE OF BUILDING								
		A-1-5	Portico Entrance								
MECHANICAL FEE		CHECKED BY	COMMUNITY		DISTRICT	F.C.	UNITS	VALUATION			
		R.H.	Hemet		H	22		2800			
CONSTRUCTION FEE 12.00		GROUP O	TYPE F	SPEC. INSP.	LEGAL DESCRIPTION						
			Por. Lots 4+5 Estudillo Land & Water Co.								
ELECTRICAL FEE 1.80		PLAN CHECKED	BOOK #	BOOK	SASH	PLAN FILE #	FINAL DATE	INSPECTOR			
						4914					
PLUMBING FEE											

TOTAL FEES $ 13.80

CASH | CHECK | M.O. | N.C.

RECEIVED BY

SEWAGE SYSTEM T LL P

INFORMATION

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 90 DAYS. CESSATION OF WORK FOR 120 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID.

I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA. I ALSO AGREE TO CARRY COMPENSATION INSURANCE UPON MY EMPLOYEES. COMPLIANCE WITH LAWS OF THE STATE OF CALIFORNIA COVERING CONTRACTORS IS ALSO GUARANTEED.

OWNER Howard Patterson	CONTRACTOR
ADDRESS 39241 Seventh St.	ADDRESS
TEL. NO. 654-2935	TEL. NO.
	LICENSE NO.

84-208 11/87

DEPARTMENT OF BUILDING & SAFETY

COUNTY OF RIVERSIDE

FIELD

CONSTRUCTION ESTIMATE

	Sq. Ft. @	
	Sq. Ft. @	
	Sq. Ft. @	
	Sq. Ft. @	
	Sq. Ft. @	
	Sq. Ft. @	
	Sq. Ft. @	

ESTIMATED VALUATION $ 2800

MECHANICAL FEES

HEAT SYSTEM ☐ GAS ☐ ELEC. ☐ OIL ☐ OTHER	
APPLIANCES	
FURNACE ☐ UNIT ☐ WALL ☐ FLOOR ☐ TRANSFORMER	
AIR CONDITIONING UNIT	
GAS PIPE ☐ NATURAL ☐ L.P.G. ☐ OIL	
VENT	
EVAPORATIVE COOLER	
REFRIGERATION SYSTEM	H.P.
REFRIGERATION EQUIPMENT ☐ CENTRAL ☐ OTHER	
HEATING SYSTEM ☐ FORCED ☐ GRAVITY	
BOILER	B.T.U.
MECHANICAL FEE	VALUE $
PERMIT FEE	

ELECTRICAL FEES

NO.		
	POLES	
	ARCS	
	TRANS. AMPS / KV. A.	
	MOTOR H.P.	
	MOTOR H.P.	
	MOTOR H.P.	
	MOTOR H.P.	
	MOTOR H.P.	
1	FIXTURES	40
1	OUTLETS	60
	SUB-PANEL	
	RANGE AND/OR OVEN	
	WATER HEATER	
	SPACE HEATER	
	CONSTRUCTION POLE	
	SERVICE ENTRANCE	
	OVER 10 SQ. FT.	
	GARAGE 30 SQ. FT.	
	PERMIT FEE	1.00

PLUMBING FEES

NO.	
	DRINKING FOUNTAIN
	URINAL
	WATER PIPING
	FLOOR DRAIN
	WATER SOFTENER
	WASHER (AUTO) (DISH)
	GARBAGE DISPOSAL
	LAUNDRY TRAY
	KITCHEN SINK
	WATER CLOSET
	LAVATORY
	SHOWER
	BATH TUB
	WATER HEATER
	SEWAGE DISPOSAL
	HOUSE SEWER
	GAS PIPING
	PERMIT FEE

159377 | BLDG. | MECH. | PLANS FEES | SEWER & WATER FEES | PLN. CK. FEE | CONST. FEE | ELEC. FEE | PLUMB. FEE

Paid | 12.00 | 1.80

SEC. | TWP. | RGE. | LOT SIZE | FIRE #

22 | 5S | 5E

PLAN CHECK FEE

MECHANICAL FEE

CONSTRUCTION FEE 12.00

ELECTRICAL FEE 1.80

PLUMBING FEE

TOTAL FEES $ 13.80

CASH | CHECK | M.O. | N.C.

RECEIVED BY

SEWAGE SYSTEM

INFORMATION

PLAN CHECKED

APPROVED BY | TYPE | OCC. GRP.

Yucca 496

A-1-5

B-H2

U F

JOB ADDRESS 39241 7th St

OWNER Patterson Harold

USE OF BUILDING Portico Entrance

ZONE | COMMUNITY | DISTRICT | P.C. | LOTS | VALUATION | OFFICE

H | Hemet | H | 22 | | 2800 | H

LEGAL DESCRIPTION Bonelake Hts Estudillo Land & Water Co.

PERMIT NUMBER 159377

BOARD # | DONE | CASH | PLAN FILE # | FINAL DATE | INSPECTOR

4914 | 8-6-68 | Pierce

THIS PERMIT SHALL BECOME VOID IF WORK IS NOT COMMENCED WITHIN 90 DAYS, CESSATION OF WORK FOR 180 DAYS SHALL ALSO CAUSE PERMIT TO BECOME VOID.

I HEREBY AGREE THAT ALL WORK IN CONNECTION WITH THIS PERMIT WILL BE DONE IN ACCORDANCE WITH THE LAWS OF RIVERSIDE COUNTY AND THE STATE OF CALIFORNIA. I ALSO AGREE TO CARRY COMPENSATION INSURANCE UPON MY EMPLOYEES, COMPLIANCE WITH LAWS OF THE STATE OF CALIFORNIA COVERING CONTRACTORS IS ALSO GUARANTEED.

OWNER

CONTRACTOR

ADDRESS

ADDRESS

TEL. NO. 714-7132

TEL. NO.

LICENSE NO.

665

BS-205 11/67

NO.	OPERATION	DATE	INSPECTOR
	BUILDING APPROVALS		
1	Set Back		
2	FTGS & PERS	4-5-68	Polanco
3	Steel		
4	Grout Blocks	6-13-68	Polanco
5	Bond Beams		
6	Roof Deck	6-5-68	Polanco
7	Framing	6-13-68	Polanco
8	Vents	—	—
9	Garage Fire Wall	—	—
10	Fireplace P/L ☐ T/G ☐	—	—
11	Exterior Lath	6-14-68	Polanco
12	Internal Lath	N/A	—
13	Exterior Grade	EXISTING, OK	Polanco
14	Final	7-6-68	Polanco
	PLUMBING APPROVALS		
15	Ground Plumb		
16	Water Piping		
17	Rough Plumb		
18	Vents		
19	Sewage Disposal		
20	Sewer		
21	Water Heater		
22	Water Softener		
23	Water Service		
24	Gas Test		
25	Final		
	ELECTRICAL APPROVALS		
26	Power Pole		
27	Conduit	6-13-68	Polanco
28	Service Entrance EXISTING		
29	Wiring	6-13-68	Polanco
30	Fixtures	6-6-68	Polanco
31	Service	6-6-68	Polanco
32	Final	7-2-68	Polanco

NO.	OPERATION	DATE	INSPECTOR
	MECHANICAL APPROVALS		
33	Ventilation System		
34	Plenums & Ducts		
35	Furnace Compart.		
36	Inlets & Outlets		
37	Combustion Air		
38	Compressor		
39	Appl. Clearances		
40	Fire Damper		
41	Smoke Detection Device		
42	Commercial Hood		
43	Final		
OPEN No.	**PROGRESS CHECKS**		
3/15	CONCRETE + STEEL INCL COLUMNS OK 6-19-68		

Tank Ft Line

SEWER DISPOSAL LOCATION

BACK FRONT

☐ INSIDE ☐ OUTSIDE ☐ CRV

Ownership Information

City of San Jacinto

N

Scale: 1 in = 400 ft.

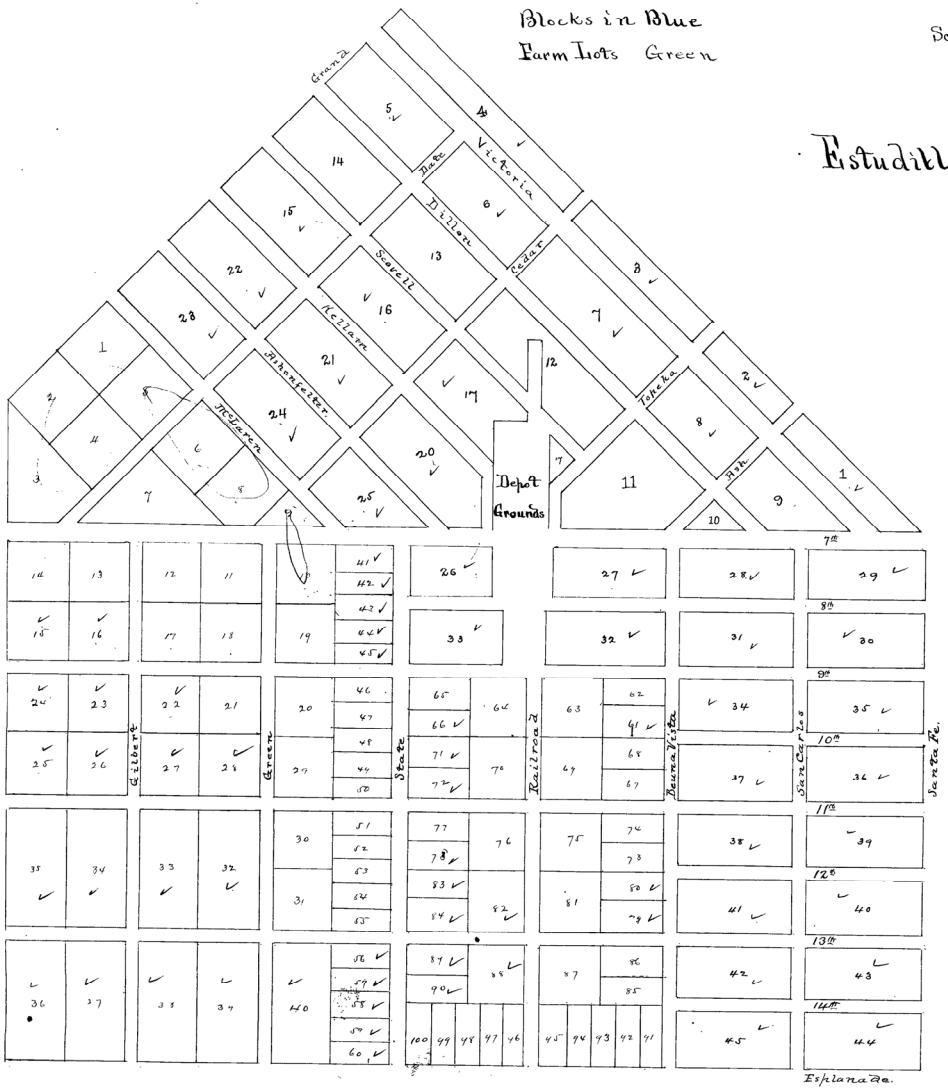
Estudillo L. & W. Co.

Old Map.

Map showing old Numbers.

Blocks in Blue

Farm Lots Green

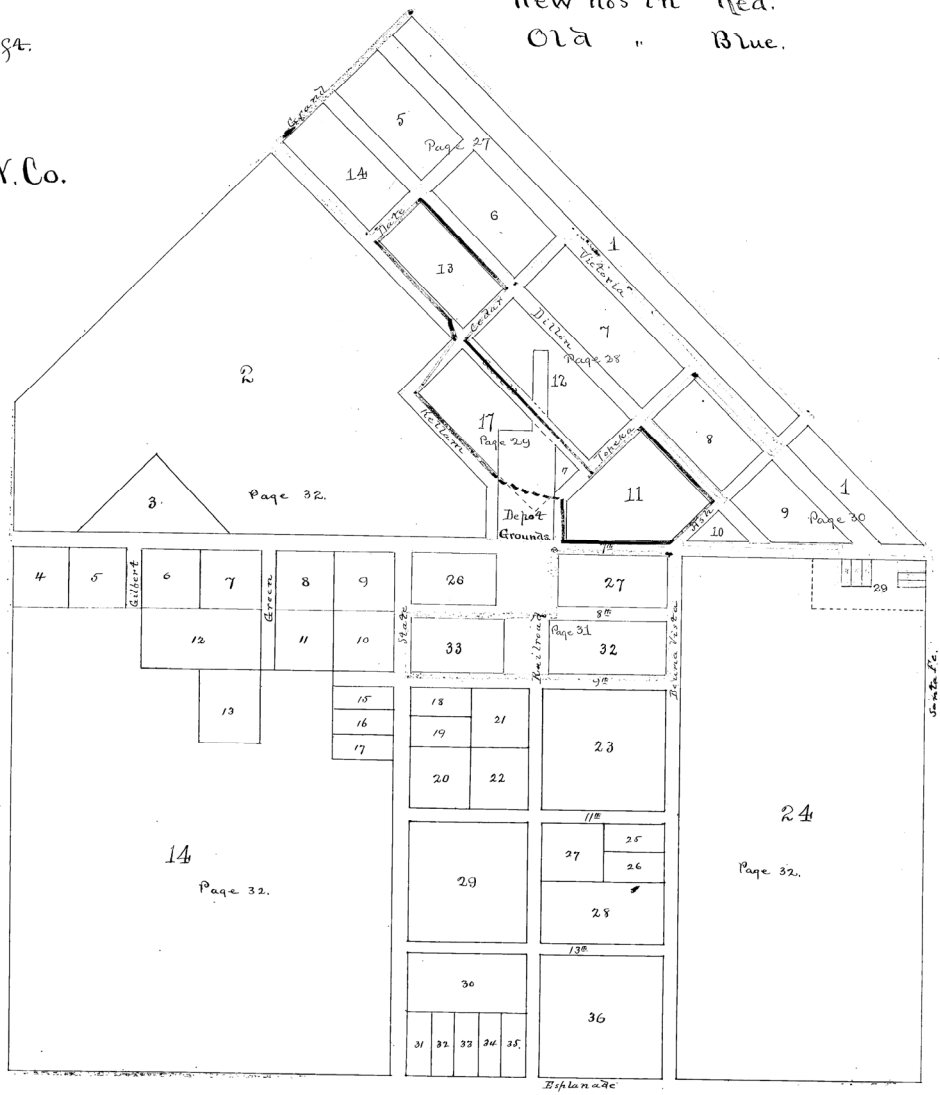


New Map.

Map of re-no's.

New No's in Red.

Old " Blue.



32

City of San Jacinto.

Scale: 1 in = 200 ft.

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18

26

2

Grand

Kellam

3

14

4 5 6 7 8 9 10 11 12 13 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 61 62 63 65 67 68 69

Gilbert

Green

State

Railroad

Buena Vista

Santa Fe.

9th

11th

13th

For 28 see

Estudillo L. & W. Co.

New no's.

Lots 4, 5, 6
Blk 29, Sec
Page

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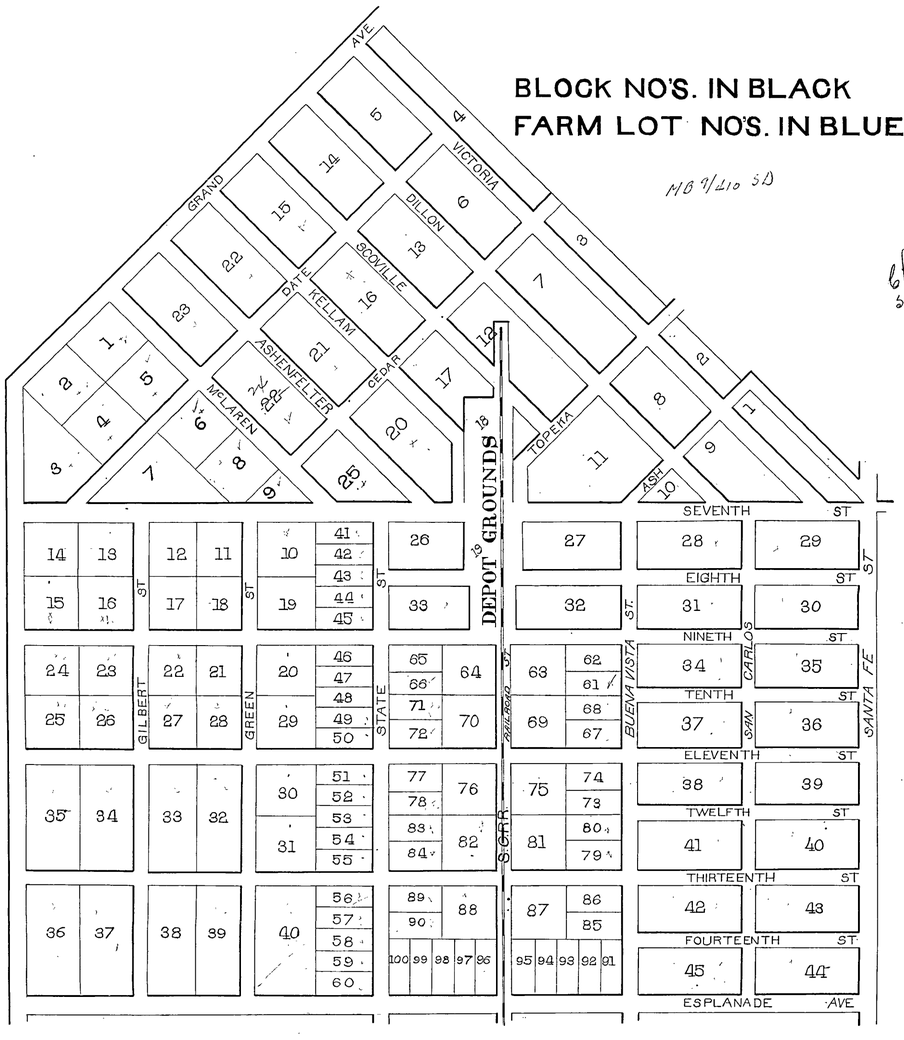
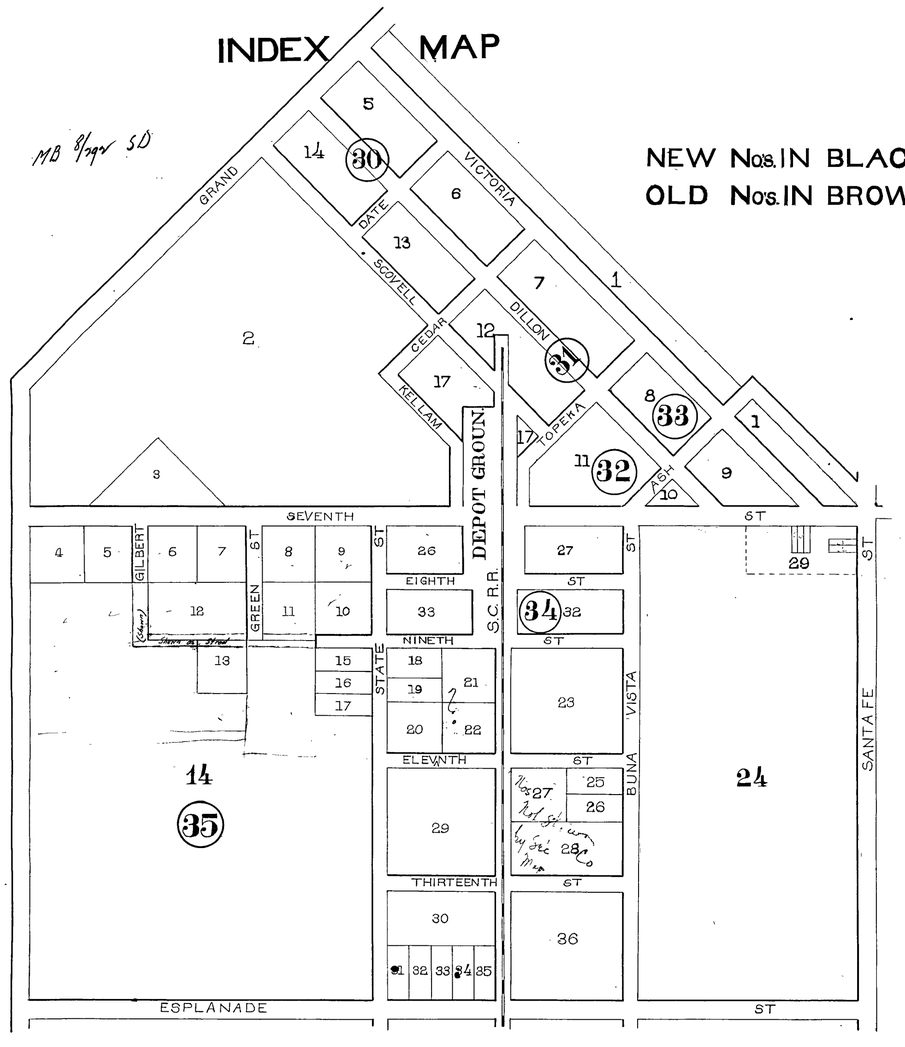
No.	OWNER	DESCRIPTION	Mrtg.	Sec. or Lot (New Numbers)	Twp. or Block	Range	Acres	Surface	Quality	S.D. County Value 1892	LAND Value 1893	Value 1894	Value 1895	BUILDINGS Kind	Value 1892	Value 1893	Value 1894	Value 1895	TREES Citrus Buds	Citrus Seeds	Dec'd	Value 1892	Value 1893	Value 1894	Value 1895	VINES Kind	Value 1892	Value 1893	Value 1894	Value 1895	ALFALFA Acres	Value 1892	Value 1893	Value 1894	Value 1895	OTHER IMPROVEMENTS Kind	Value 1892	Value 1893	Value 1894	Value 1895	TRANSFERRED TO Date	Name	Consid-eration	TRANSFERRED TO Date	Name	Consid-eration
	F. Estudillo			2			64.69		Split R.	3230	3230	3230	3230																																
	Aub. Kreider			3			3.125	Level	S.mixed	114	114	114	105																																
	F. Estudillo			4			2.5			75	75	75	75																																
	A. N. Bond			5			2.5			75	75	75	75																																
	C. S. Kempstreet			6			2.5	Level	mixed pasture	75	30	30	75																																
	"			7			2.5	Level	pasture mixed	75	30	30	75																																
	F. Estudillo			8			2.5			75	75	75	75																																
	"			9			2.5			75	75	75	75																																
	"			10			2.5			75	75	75	75																																
	H. F. Goble			11			2.5	"	"	75	75	75	75																																
	F. Estudillo			12			5.			150	150	150	150																																
	F. F. Woodford			13			2.5			75	75	75	75																																
	F. Estudillo			14			89.5			1218	2235	1995	2640																																
	H. Hughes			15			1.	Level	Pasture S.mixed	25	30	80	30																																
	"			16			1.	"	"	25	30	80	30																																
	"			17			1.	"	"	25	30	30	30																																
	John Whalen			18			1.25	"	"	31	37	35	35																																
	F. Estudillo			19			1.25			37	37	37	40																																
	"			20			2.5			75	75	75	75																																
	"			21			2.27			68	68	68	70																																
	"			22			2.27			68	68	68	70																																
	"	NE¼ (old lots nos 61+62)		23			2.5			75	70	70	70																																
	"	S½ (old lots nos 67, 68+69)		23			5.			150	140	140	150																																
	F. S. Alimpton	NW¼ (old lots no. 63)		23			2.5	Level	pasture mixed	75	75	75	75																																
	F. Estudillo			24			78.50			2355	2355	2355	2355																																
	F. Estudillo			25			1.25			37	37	37	37																																
	"			26			1.25			37	38	38	38																																
	"			27			2.28			68	68	68	68																																
X	"	W½ to A. MacBeath		28			5.22	Level	Sandy Loam	150	75	45	60																													12-94	A MacBeath W½	1-157			
	"			29			10.			286	286	286	286																																
	"			30			5.			136	136	136	136																																
X	P.B. Weber			31			1.			30	30	80	25																													33.95	A M Sturdevant	1-142			
X	Laurence Gerber			32			1.	"	"	30	25	25	25																													12-94	A M Sturdevant	108		80	
	H. D. Compton			33			1.	Level	Sandy Loam	30	30	30	30																																
	"			34			1.	"	"	30	30	30	30																																
	"			35			1.	"	"	30	30	30	30																																
	F. Estudillo	N½ (old lots Nos 85, 86, +87)		36			5.			150	150	150	150																																
	A. P. Jones	S½ (old lots nos 91, 92, 93, 94, +95)		36			5.			150	150	150	150																																
	F. Estudillo	Old Block (old numbers)		26																																								
	"			1						10	10	10	12																																
	"			2						10	10	10	12																																
	"			3						10	10	10	12																																
	"			4						10	10	10	12																																
	"			5						10	10	10	12																																
	"			6						10	10	10	12																																
	"			7						10	10	10	12																																
	"			8						10	10	10	12																																
	"			9						10	10	10	12																																
	"			10						10	10	10	12																																
	"			11						10	10	10	12																																
	"			12						10	10	10	12																																
	"			13						10	10	10	12																																
	"			14						10	10	10	12																																
	"			15						10	10	10	12																																
	"			16						10	10	10	12																																
	"			17						10	10	10	12																																
	"			18						10	10	10	12																																

ESTUDILLO LAND AND WATER CO'S.
SUBDIVISION



OLD MAP RECORDED



NEW MAP-CHANGES GRANTED

SAN JACINTO

ESTUDILLO L.& W. CO'S SUB.

1" = 300'

SEVENTH ST.

GILBERT ST.

GALEN ST.

STATE ST.

A ST.

BUENA VISTA ST.

SANTA FE ST.

BLK 26 (OLD)

BLK 29 (OLD)

Part old MVS on new map 11-12-97 BMB

CITY OF SAN JACINTO S.D.

MORSE'S SYSTEM OF PROPERTY INDEX TO MAPS FOR ASSESSORS OR ABSTRACTORS
Patent Applied for
BRADFORD MORSE, RIVERSIDE, CALIFORNIA

RIVERSIDE COUNTY.

No.	OWNER	TRANSFERRED TO DATE	TRANSFERRED TO NAME	TRANSFERRED TO AMT.	TRANSFERRED TO DATE	TRANSFERRED TO NAME	TRANSFERRED TO AMT.	DESCRIPTION	School District	Sec. or Lot	Twp. or Block	RANGE	ACRES	SURFACE: Level Rolling Broken Hilly Mounts	QUALITY: Fruit Grain Pasture Timber Rocks	WATER RT.: Wet Dry Semi-moist Water Rt	LAND VALUE 1896	LAND VALUE 1897	LAND VALUE 1898	LAND VALUE 1899	BUILDINGS KIND	BUILDINGS VALUE 1896	BUILDINGS VALUE 1897	BUILDINGS VALUE 1898	BUILDINGS VALUE 1899	TREES Citrus	TREES Decid	VINES VALUE 1896	VINES VALUE 1897	VINES VALUE 1898	VINES VALUE 1899	OTHER IMPROVEMENTS KIND	OTHER IMPROVEMENTS VALUE 1896	OTHER IMPROVEMENTS VALUE 1897	OTHER IMPROVEMENTS VALUE 1898	OTHER IMPROVEMENTS VALUE 1899
1	J. Estudillo						(2570)	Estudillo Land & Water Co Sub less 50 x 150 in SE cor		2			64.69				3230	1950	1460	1315															
2	A.L. Snider									3			3.125				105	105	65	60															
3	J. Estudillo									4			2.6				75	75	60	55															
4	A.W. Bond									5			2.5				75	75	60	55															
5	C.C. Hempstead	4/8-97	Annie Ellsworth	1/3 70			(307)			6			2.5				75	75	60	55															
6	"		"				(307)			7			2.5				75	75	60	55															
7	J. Estudillo						(2570)			8			2.5				75	75	60	55															
8	"						(2570)			9			2.5				75	75	60	55															
9	"						(2570)			10			2.5				75	75	60	55															
10	H. J. Gable						1280			11			2.5				75	75	60	55															
11	J. Estudillo						1280			12			5				150	150	112	110															
12	J. J. Woodford									13			2.5				75	75	60	55															
13	J. Estudillo						(2578)			14			89.5				2640	1350	1012	910															
14	H. Hughes									15			1				30	30	27	25															
15	"									16			1				30	30	27	25															
16	"									17			1				30	30	27	25															
17	John Whalen									18			1.25				35	40	30	27															
18	J. Estudillo						(2578)			19			1.25				40	40	30	27															
19	"						(2578)			20			2.5				75	75	60	55															
20	"						(2578)			21			2.27				70	70	55	50															
21	"		Jose A. Estudillo	893				(Old Lot No. 70)		22			2.27				70	70	55	50															
22	"						on 61 (2578)	E½ E½ (Old Lot Nos 61+62)		23			2.5				70	70	55	50															
23	"							E½ W½ (Old Lot Nos 67-68+69)		23			5				150	150	112	100															
24	J.S. Plimpton							W½ W½ (Old Lot No 63)		23			2.5				75	75	70	65															
25	J. Estudillo						(2578)			24			78.5				2355	1185	890	800															
26	"		Daisey Andrus	2/87		John W. Woodward				25			1.25				37	37	30	27															
27	"					" " "				26			1.25				38	38	30	27															
28	"					" " "				27			2.28				68	68	50	45															
29	"						(2578)	E½		28			2.2				60	60	45	40															
30	Donald MacBrath							W½		28			2.2				60	60	55	50															
31	J. Estudillo						(2578)			29			10				286	286	220	200															
32	"						(2578)			30			5				136	136	100	90															
33	S.M. Sturdevant		Arza & Sarah A. Cole	3/14				Old Lot Nos 99+100		31			1				25	25	20	18	House	50	50	50	50											
34	"		"							32			1				25	25	20	18															
35	L. W. Compton									33			1				30	30	23	20															
36	"									34			1				30	30	23	20															
37	"									35			1				30	30	23	20															
38	J. Estudillo									36			5				150	150	112	100															
39	J.P. Jones							S½ (Old Lots Nos 91-92-93-94+495)		36			5				150	150	120	110															
40																																			
41																																			
42	J. Estudillo							All		1 = 26	old 26		233				12	100	75	70															
43	"									2							12	=																	
44	"									3							12	=																	
45	"									4							12	=																	
46	"									5							12	=																	
47	"									6							12	=																	
48	"									7							12	=																	
49	"									8							12	=																	
50	"									9							12	=																	
51	"						(2578)			10							12	=																	
52	"									11							12	=																	
53	"									12							12	=																	
54	"									13							12	=																	
55	"									14							12	=																	
56	"									15							12	=																	
57	"									16							12	=																	
58	"									17							12	=																	
59	"						(2578)			18							12	=																	
60																																			
61																																			
62																																			
63																																			
64																																			
65	A.J. Meade									4	old 29						15	15	12	10															
66	Wm Easterline									5							15	15	12	10															
67	"									6							15	15	12	10															
68	J. Estudillo									21							15	15	12	10															
69	"									22							15	15	12	10															
70	Harlan Kinney							Com 50 ft N from S.E. cor W 150 ft N 50 ft E 150 ft S 50 ft		New 2																												
71	"																																			
72	"																	10	9	8															
73																																			
74																																			
75																																			
76																																			
77																																			
78																																			
79																																			
80																																			

Ranches to acreage

SAN JACINTO

ESTUDILLO L. & W. Co's SUB.

1" = 300'

7TH

ST

BUENA VISTA

STATE

S.P.R.R.

SANTA FE ST

BLK 28 (OLD)

BLK 29 (OLD)

RIVERSIDE COUNTY.

	ASSESSED TO	ASSESSED TO	ASSESSED TO	ASSESSED TO	DESCRIPTION — CITY OF SAN JACINTO — ESTUDILLO L. & W. CO'S SUB.	SCHOOL DISTRICT	MTG. ABST. NO.	SEC. OR LOT (New Nos.)	TWP. OR BLOCK	RANGE	ACRES	SURFACE (Level, Broken, Rolling, Hilly, Mountains)	QUALITY (Fruit, Grain, Pasture, Timber, Rocks)	Water Rt. (Wet, Dry, Moist, semi-moist, Water Rt.)
1	F. Estudillo	Sec. Loan + Trust Co. 4104			Except lot 50'x150' in S.E. Cor.	San Jacinto	x	2			64 69	✓		
2	A.L. Greider	Annie Hardy 5036	Jas. M. Sheppherd 5476	Allen C. Glover 6497			4721	3			3 13	✓		
3	F. Estudillo	Sec. Loan + Trust Co. (STATE) F.E.	J. A. Estudillo					4			2 50	✓		
4	A.W. Bond							5			2 50	✓		
5	Annie Ellsworth 4097	Salvador Nicochea 4156	C. B. Bayley 4780				4997	6			2 50	✓		
6	"	"	"				4994	7			2 50	✓		
7	F. Estudillo	Sec. Loan + Trust Co. 4104			(Old No. 10)			8			2 50	✓		
8	"	"			(" " 41-42-43-44-45)			9			2 50	✓		
9	"	"						10			2 50	✓		
10	H.F Gable							11			2 50	✓		
11	F. Estudillo (STATE)	J. A. Estudillo,						12			5	✓		
12	F.F. Woodford							13			2 50	✓		
13	F. Estudillo	Sec. Loan + Trust Co. 4104			(Except Old Lot Nos. 20-29-30-31-46 to 55)			14			72 50	✓		
14	H. Hughes	Ferd. Snyder 4777					2439 4870	15			1	✓		
15	"	"						16			1	✓		
16	"	"					2439 4870	17	—		1	✓		
17	John Whalen							18			1 25	✓		
18	F. Estudillo	Sec. Loan + Trust Co. 4104			(Old No. 66)			19			1 25	✓		
19	"	"			(" " 71 + 72)			20			2 50	✓		
20	"	(STATE) F.E.	J. A. Estudillo					21			2 27	✓		
21	Jose A. Estudillo (STATE)				(Old Lot No. 70)			22			2 27	✓		
22	F. Estudillo	Sec. Loan + Trust Co. 4104			S½ of NE¼ (Old Lot Nos. 61		*	23			1 25	✓		
23	" (STATE)	" F.E.	J. A. Estudillo		S½ (" " " 67-68-69)			23			5	✓		
24	F.S. Plimpton				N.W.¼ (" " " 63)			23			2 50	✓		
25	F. Estudillo	Sec. Loan + Trust Co. 4104			(Except Old Lots 4-5-6-7-10-19-20-21-22 Blk 29)	Less S. 50 ac.	*	24			28 50	✓		
26	John W. Woodward (STATE)	Clara B. Harvey 6485						25			1 25	✓		
27	" (STATE)	"						26			1 25	✓		
28	" (STATE)	"						27			2 28	✓		
29	F. Estudillo	Sec. Loan + Trust Co. 4104			E½ (Old Nos. 79 + 80)			28			2 20	✓		
30	D. MacBeath				W½			28			2 20	✓		
31	F. Estudillo	Sec. Loan + Trust Co. 4104			S½ + S½ of NW¼ (old Nos. 78-82-83-84)		*	29			6 25	✓		
32	"	"			(old Nos. 88-89-90)			30			5	✓		
33	Arza + Sarah Cole				(old Lot Nos. 99 + 100)		4201 4983	31			1	✓		
34	"							32			1	✓		
35	G.D. Compton	Arza Cole 4483					4497	33			1	✓		
36	"	"						34			1	✓		
37	"	"					4497	35			1	✓		
38	F. Estudillo	Sec. Loan + Trust Co. STATE F.E.			N½ (Old Nos. 85-86-87)			36			5	✓		
39	S.P. Jones	Josephine A Jones 4516	Ella Johnson 5107		S½ (" " 91-92-93-94-95)			36			5	✓		
40	Harlow Kinney	~~H.H.~~ Jennie E. Holmes (Stay)			Com. 50' N. from SE. Cor. Lot 2, N. 50'		✓	2.				✓		
41	"	"			W. 150' S. 50' E. 150'									
42	F. Estudillo STATE	Sec. Loan + Trust Co. F.E.	Unknown (STATE) (STATE)	J. A. Estudillo 6607	N½ of NE¼ (Old No. 62)		✓	23			1 25	✓		
43	" STATE	"	"	"	NE¼ + N½ of NW¼ (Old Nos 76 + 77)		✓	29			3 75	✓		
44	Rudesinda P. de Aguirre 5776 (Stay)				S. 50 ac.		✓	24			50	✓		
45														
46								—						
47														
48								Old Nos.						
49	F. Estudillo	Sec. Loan + Trust Co. (STATE) F.E.	J. A. Estudillo		Lots 1 to 9		*		26		1 18	✓		
50	A.J. Mead STATE						*	4	29			✓		
51	Wm M. Casterline	P. L. Shideler	Seeling Tr.		Und. ½ int.			5				✓		
52	"	"			"			6				✓		
53	F. Estudillo	Sec. Loan + Trust Co. (STATE) F.E.	J. A. Estudillo					21				✓		
54	"	" (STATE)	"					22				✓		
55	Sec. Loan + Trust Co. 4104				Lots 10 to 18		✓		26		1 18	✓		
56	F. Estudillo STATE	Sec. Loan + Trust Co. F.E.	Unknown (STATE)	J. A. Estudillo (STATE)			✓	7	29			✓		
57	" STATE	"	"	"			✓	10				✓		
58	" STATE	"	" (STATE)	"			✓	19				✓		
59	" STATE	"	" (STATE)	"			✓	20				✓		
60								Old Nos Farm Lots						
61	"	" F.E.	Unknown (STATE)	J. A. Estudillo 6637				20			2 50			
62	"	"	" (STATE)	"				29			2 50			
63	"	"	" (STATE)	"				30			2 50			
64	"	"	" (STATE)	"				31			2 50			
65	"	"	" (STATE)	"				49			1			
66	"	"	" (STATE)	"				50			1			
67	"	"	" (STATE)	"				51			1			
68	"	"	" (STATE)	"				52			1			
69	"	"	" (STATE)	"				53			1			
70	"	"	" (STATE)	"				54			1			
71	"	"	" (STATE)	"				55			1			
72	Perry L. Shideler 5510				All ~~Und. ½ int.~~		✓	Old Nos. 5	29			✓		

	LAND VALUE 1899	1900	1901	1902	1903	1904	1905	1906	1907	BUILDINGS 1899	1900	1901	1902	1903	1904	1905	1906	1907	TREES AND OTHER IMPROVEMENTS 1899	1900	1901	1902	1903	1904	1905	1906	1907
1	1315	1290	1060	970	970	970	970	970	970																		
2	60	60	50	50	50	50	50	50	60									50									
3	55	50	40						45																		
4	55	50	40	40	40	40	40	40	40																		
5	55	50	40	40	40	40	40	40	40																		
6	55	50	40	40	40	40	40	40	40																		
7	55	50	40	40	40	40	40	40	40																		
8	55	50	40	40	40	40	40	40	40																		
9	55	50	40	40	40	40	40	40	40																		
10	55	50	40	40	40	40	40	40	40																		
11	110	100							100																		
12	55	50	40	40	40	40	40	40	40																		
13	910	1450	1160	1085	1085	1085	1085	1085	1085																		
14	25	25	20	15	15	15	15	15	15																		
15	25	25	20	15	15	15	15	15	15																		
16	25	25	20	15	15	15	15	15	15																		
17	27	30	25	20	20	20	20	20	20																		
18	27	25	20	20	20	20	20	20	20																		
19	55	50	40	40	40	40	40	40	40																		
20	50	50							45																		
21	50	50							45																		
22	50	30	25	20	20	20	20	20	20																		
23	100	110	90	75	75				100																		
24	65	60	50	40	40	40	40	40	40																		
25	800	570	455	430	430	430	430	430	430																		
26	27	25						25	25																		
27	27	25						25	25																		
28	45	45						40	40																		
29	40	45	35	35	35	35	35	35	35																		
30	50	45	35	35	35	35	35	35	35																		
31	200	120	100	95	95	95	95	95	95																		
32	90	100	80	75	75	75	75	75	75																		
33	18	20	15	15	15	15	15	15	15	50	50	100	100	100	100	100	100	100									
34	18	20	15	15	15	15	15	15	15																		
35	20	20	15	15	15	15	15	15	15																		
36	20	20	15	15	15	15	15	15	15																		
37	20	20	15	15	15	15	15	15	15																		
38	100	100																									
39	110	100	80	75	75	75	75	75	100																		
40	8	10	10	10	10	10	10	10	10																		
41																											
42		25	20	20	20	20	20	20	20																		
43		75	60	60	60	60	60	60	60																		
44		1000	800	750	750	750	750	750	800		300	300	300	300	300	300	300	300									
45																											
46																											
47																											
48																											
49	70	35							30																		
50	10	10	10																								
51	10	10	10	10	5	5	X																				
52	10	10	10	10	5	5	X																				
53	10	10							20																		
54	10	10							20																		
55		35	30	30	30	30	30	30	30																		
56		10	10	10	5	5	5	5	5																		
57		10	10	10	5	5	5	5	5																		
58		10	10	10	5	5	5	5	5																		
59		10	10	10	5	5	5	5	5																		
60																											
61		50	40	40	40	40	40	40	40																		
62		50	40	40	40	40	40	40	40																		
63		50	40	40	40	40	40	40	40																		
64		50	40	40	40	40	40	40	40																		
65		20	15	15	15	15	15	15	15																		
66		20	15	15	15	15	15	15	15																		
67		20	15	15	15	15	15	15	15																		
68		20	15	15	15	15	15	15	15																		
69		20	15	15	15	15	15	15	15																		
70		20	15	15	15	15	15	15	15																		
71		20	15	15	15	15	15	15	15																		
72							5	5	5																		

note

41

SAN JACINTO

1" = 100' 1" = 300'

Make blue print for new map, as new map

ESTUDILLO L. & W. Co's. SUB.

Add Ave, Streets in Pencil

7 TH

ST

BLK 28 (OLD)

BLK. 29 (OLD)

STATE ST.

R. R. ST.

BUENA VISTA ST.

SANTA FE ST.

Esplanada

Ave.

Blk. 20.

Book 12. Page 16

RIVERSIDE COUNTY

Line	Assessed To	Assessed To	Assessed To	Assessed To	Assessed To	Assessed To	Assessed To	Description	School District	Mtg. Abst No.	Sec. or Lot	Twp. or Block	Range	Acres	Surface	Quality	Water Rt
								CITY OF SAN JACINTO ESTUDILLO L. & W. CO'S SUB.		Old Nos.							
1	Sec Loan Trust Co.	Bowler R.L. 564 597		Estep W.G. 1051			3 →	Lots 1 to 6-8 & 9 and Blocks 15-16, 20 to 25, except lot 14 Blk 20	San Jacinto	2464 / 5340-1				64.19			
2	Holmes Jennie E.										14	20					
3	Glover Allen C.	Sheppherd J.M. 584			Walkinshaw D.W. & Roberds A.E. 1256	✓ Walkinshaw D.W.				(oval)	7			3.13			
4	Estudillo J.A.	Davenport N. 441									14			2.50			
5	Bond A.W.	Cawston Ostrich Farm 621				✓					13			2.50			
6	Bayley C.B.	Brown Jas. S. 376		Thompson O.P. 1113 1101							12			2.50			
7	"	"		"		✓					11			2.50			
8	Sec Loan Trust Co	Tripp O.C. 593								2466 / 5346	10			2.00			
9	"	"						Lots 41 & 42						2.00			
10	"	Tripp O.C. 593						" 43-44-45						2.50			
11	Gable H.F.	Tripp O.C. 587								2466 / 5346	19			2.00			
12	Estudillo J.A.	Middlecoff W.W. 595									17 & 18			5			
13	Woodford F.F.										21			2.00			
14	Sec Loan Trust Co	Newenham J.W. 598		Stansbury Chas. 1013	Anderson W.C. 1404	✓		Lots 15 & 16, 22 to 28, 32 to 40, 56 to 60		~~5346-5308~~				73.50			
15	Snyder Ferd.				Walker Johanna T. 1380	✓				785-~~2447~~	46			1			
16	"				"						47			1			
17	"				"	✓				785-~~2447~~	48			1			
18	Whalen John										65			1.25			
19	Sec Loan Trust Co	Reiley C.W. 578 639									66			1.25			
20	"	"									71 & 72			2.50			
21	Estudillo J.A.										64			2.27			
22	"										70			2.27			
23	"	Munn A.G. 633			Stahl L.A. 1295	Jackson L.H. & L.M. 1777					62			1.25			
24	Sec Loan Trust Co	" 564			"	✓ "					61			1.25			
25	Estudillo J.A.							Lots 67-68-69						5			
26	Plimpton F.S	Newell Clara 145 560		Munn A.G. 988	Stahl L.A. 1295	Jackson L.H. & L.M.	—				63			2.50			
27	Sec Loan Trust Co.	Hicks Wm et al						Blocks (except lots 4-5-6-7-10-19-20-21-22 Blk 29)		5779							
28	Aguirre Rudesinda P. de							Blocks 36 to 45						50			
29	Harvey Clara B.										74			1.20			
30	"										73			1.20			
31	"										75			2.28			
32	Sec Loan Trust Co.	Hicks Wm et al 245	Jackson J.S. 797 884		San Jacinto Land Co. 1260 1403	✓ Citizens Water Co.					79 & 80			2.20			
33	MacBeath D.	MacBeath Cornelia R.									81			2.20			
34	Estudillo J.A.										76 & 77			3.75			
35	Sec Loan Trust Co.	Tripp O.C.		Kehl W.M. 1015				Lots 78-82-83-84		2466 / 5346				6.50 }			
36	"	"		"				Lots 88-89-90		"				5			
37	Cole Arza & Sarah	Barnes A.C. 218		Jackson Elizabeth V. 936	San Jacinto Land Co. 1260 1403	✓				(oval)	100			1			
38	"	"		"	"						99			1			
39	Cole Arza	"		"	"						98			1			
40	"	"		"	"						97			1			
41	"	"		"	"	✓				(oval)	96			1			
42	Sec Loan Trust Co (STATE)	Estudillo J.A.						Lots 85-86-87						5			
43	Johnson Ella 633	Jackson J.S. 720			San Jacinto Land Co. 1260 1403	Citizens Water Co. 1777		" 91 to 95		3709				5			
44	Munn A.G. 993			Vollmer Lillie 1080	Stahl L.A. 1295	Jackson L.H. & L.M.		Blocks 28-29-30-31-34 & 35, ~~[struck out]~~						22.50			
45	Hicks Wm			Stansbury Chas. 1013				" 26 & 33 (See line 14)						7.50			
46							3 →										
47	Estudillo J.A.	Middlecoff W.W. 594		Hicks Wm et al		✓		Lots 1 to 9				26		2.36 / 1.18			
48	Sec Loan Trust Co	Hicks Wm et al						" 10 to 18						~~1.18~~			
49																	
50																	
51	Mead A. J. (STATE)	Middlecoff W.W.	Munn A.G. 633					See line 14			4	29					
52	Shideler Perry L	Middlecoff W.W. 596	" 932				Out	" " "			5						
53	"	"	"					" " "			6						
54	Estudillo J.A.	Middlecoff W.W. 595	" 988					Lots 7-10-19-20 See line 14									
55	Munn A.G. 633	"					4 →	Lots 21-22 " " "									
56																	
57																	
58																	
59																	
60																	
61																	
62																	
63	Estudillo J.A.										20			2.50			
64	"										29			2.50			
65	"										30			2.00			
66	"										31			2.00			
67	"										49			1			
68	"										50			1			
69	"										51			1			
70	"										52			1			
71	"										53			1			
72	"										54			1			
73	"										55			1			
74																	
75																	

Line	Land Value 1907	1908	1909	1910	1911	1912	1913	Buildings 1907	1908	1909	1910	1911	1912	1913	Trees, Vines, Etc. 1907	1908	1909	1910	1911	1912	1913
1	970	970	1600	2100	2350	DO.	DO.														
2	10	10	10	15	20	DO.	DO.														
3	60	60	60	80	170	DO.	DO.	50	50	50	—										
4	45	45	60	80	90	DO.	DO.														
5	40	40	60	80	90	DO.	DO.														
6	40	40	60	80	90	DO.	DO.														
7	40	40	60	80	90	DO.	DO.														
8	40	40	60	80	90	DO.	DO.														
9	40	40	50	70	90	DO.	DO.														
10	40	40	75	100	100	DO.	DO.														
11	40	40	60	80	90	DO.	DO.														
12	100	100	175	175	175	200	DO.														
13	40	40	60	80	90	DO.	DO.														
14	1085	1085	1800	2100	2530	4300	DO.							300							
15	15	15	25	35	35	DO.	DO.														
16	15	15	25	35	35	DO.	DO.														
17	15	15	25	35	35	DO.	DO.														
18	20	20	25	35	40	DO.	DO.														
19	20	20	25	35	40	DO.	DO.														
20	40	40	50	70	90	DO.	DO.														
21	45	45	50	70	70	DO.	DO.														
22	45	45	50	70	70	DO.	DO.														
23	20	20	25	35	40	DO.	DO.														
24	20	20	25	35	40	DO.	DO.														
25	100	100	100	130	130	DO.	DO.														
26	40	40	50	70	90	DO.	DO.														
27	430	430	—																		
28	800	800	1000	1300	1500	2000	DO.	300	300	300	300	DO.	300	DO.							
29	20	25	25	35	40	80	DO.														
30	20	25	25	35	40	80	DO.														
31	40	40	40	55	75	80	DO.														
32	30	35	40	60	70	140	DO.														
33	35	35	55	75	75	DO.	DO.														
34	60	60	60	80	130	DO.	DO.														
35	95	95	60	80 }																	
36	70	75	250	250 }	450	DO.	DO.														
37	15	15	15	20	40	70	DO.	100	100	100	100	DO.	100	DO.							
38	15	15	15	20	40	70	DO.														
39	15	15	15	20	40	70	DO.														
40	15	15	15	20	40	70	DO.														
41	15	15	15	20	40	70	DO.														
42			125	175	175	DO.	DO.														
43	100	100	175	175	175	350	DO.				2000	DO.	400	DO.							
44			490	640	850	DO.	DO.														
45				150	—																
47	30	30	25	35	85	DO.	DO.														
48	30	30	25	35	—	85	DO.														
51			5	10	—																
52	5	5	5	10	—																
53	5	5	5	10	—																
54	5	5	5	30	—																
55				20	—																
63	40	40	50	70	80	D	DO.														
64	40	40	50	70	80	D	DO.														
65	40	40	50	70	80	D	DO.														
66	40	40	50	70	80	DO.	DO.														
67	15	15	20	30	35	DO.	DO.														
68	15	15	20	30	35	DO.	DO.														
69	15	15	20	30	35	DO.	DO.														
70	15	15	20	30	35	DO.	DO.														
71	15	15	20	30	35		DO.														
72	15	15	20	30	35		DO.														
73	15	15	20	30	35		DO.														

41


1" = 300'
SAN JACINTO
ESTUDILLO LAND & WATER CO.
THE GARDEN SUBDIVISION
AVE.
GRAND
DATE
CEDAR
ST.
7th
9th
11th
12th
13th
14th
ESPLANADA
GILBERT
GREEN
STATE
CALIFORNIA
SENTA FE RAILROAD
BUENA VISTA
SAN CARLOS
SANTA FE
AVE.
34
38 A.
26
33

RIVERSIDE COUNTY

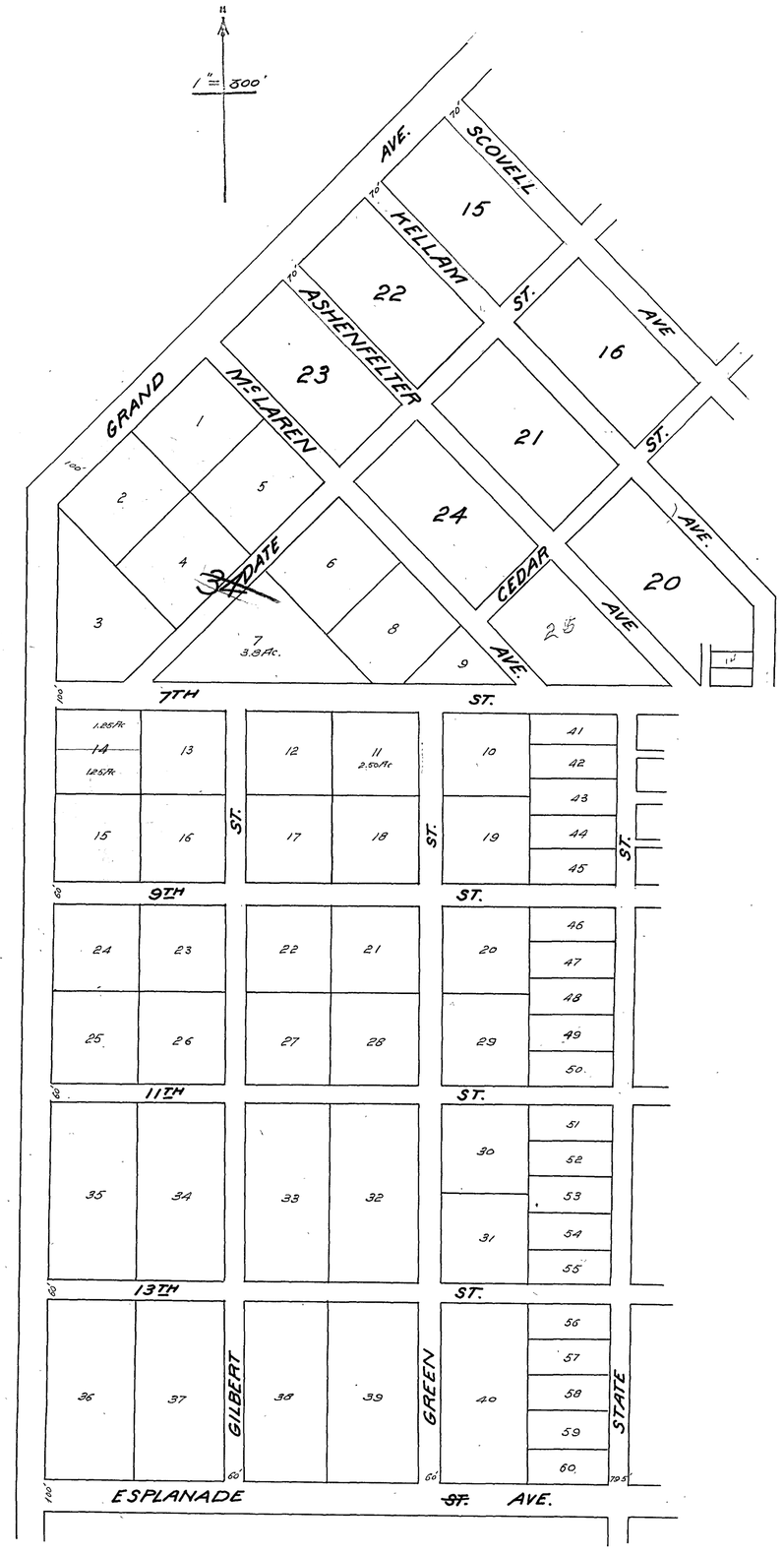
	1913 ASSESSED TO	1914 ASSESSED TO	1915 ASSESSED TO	1916 ASSESSED TO	1917 ASSESSED TO	1918 ASSESSED TO	1919 ASSESSED TO	DESCRIPTION CITY OF SAN JACINTO ESTUDILLO L. & W. CO'S SUB.	SCHOOL DISTRICT	Sec. or Lot	Twp. or Block	Range	Acres	Surface	Quality	Water Rt.
1	Estep W.G. 1051		Shields Robt. J. 2200	✓	Sparling Homer L. 3393		Rohde Wm 3339	Lots 1 to 6 - 9 to 13 Blk 15-16, 20 to 25 & 28 to 32 Blk 14 Blk 20	✓	Blocks			6.46			
2																
3						Sevier M.L. 3340		All	✓	14			1.25			
4									✓	14	20					
5	Holmes Jennie E.								✓	7	7		3.13			
6	Watkinshaw D.W.	Schain J.H. 1946 ✓							✓	10	14		~~3.50~~			
7	Davenport N.		Barnes W.E. 2169 ✓		Fletcher Alfred 2163 2191	Cook Geo P 3383	✓	5 AC	✓	13	13		7.50			
8	Canston Ostrich Farm								✓	14	13		7.50			
9	Thompson O.P. "								✓	11	11		7.50			
10	"								✓	15	10		7.50			
11	Tripp O.C.		Harm Emil 2168		Harm Bertha Estate 2169			Lots 11 to 17	✓				7.50			
12	"		"	✓				" 23-24-25	✓				3.00			
13	"		"	✓	"				✓	19			7.50			
14	"		"	✓	Estudillo Felicitas 2463				✓	17, 18			.5			
15	Middlecoff W.W.	Estudillo J.A. ✓							✓	21			7.50			
16	Woodford I.F.								✓				7.50			
17	Anderson W.C. 1060		Stansbury Chas. 2549 2568		Wiegand Geo 2689 2681A			Lots 16 to 18, 23 - 38 to 40, 56 to 60	✓							
18	Walker Johanna T 1380				Walker Joanna T 2681A				✓	46			1			
19	"				"				✓	47			1			
20	"				"				✓	48			1			
21	Whalen John.			✓					✓	65			1.25			
22	Reiley C.W.								✓	66			1.25			
23									✓	67			7.50			
24	Estudillo J.A.			Estudillo Felicitas 2463					✓	68			7.27			
25	"			"					✓	69			7.27			
26	Jackson L.H. & M. 1777			Subpage 39 ✓					✓	67			1.25			
27	"			"					✓	61			1.25			
28	Estudillo J.A.			Estudillo Felicitas 2463				Lots 67-68-69	✓				.5			
29	Jackson L.H. & M.			Subpage 39					✓	63			7.50			
30	Aguirre Rudesindo Tac							Blocks 36 to 45	✓				.50			
31	Harvey Clara D.								✓	74			1.25			
32	"								✓	73			1.25			
33									✓	75			7.28			
34	Citizens Water Co.								✓	78 80			7.20			
35	MacBeam Cornelia R 2241								✓	81			7.20			
36	Estudillo J.A. ~~1915~~ 1916			Estudillo Felicitas 2463					✓	76 77			3.75			
37	Kehl W.M. 1003								✓				11.75			
38	SAN JACINTO LAND CO.				Calif. Orchard Dev. Co 3036 3149	Knowlton E.W. 3111	Armour F.W. 3644	Lots 78-87-82-84-88-89-90	✓	100			1			
39	"				"	"	"		✓	99			1			
40									✓	98			1			
41	"				"	"	"		✓	97			1			
42	"				"	"	"		✓	96			1			
43	Estudillo J.A.			Estudillo Felicitas 2463				Lots 85-86-87	✓				.5			
44	Citizens Water Co.			✓				" 91 to 95	✓				.5			
45	Jackson L.H. & M. 1777			Sub page 39				Blocks 28-29-30-31-34 to 38 X	✓				7.50			
46																
47																
48																
49	Hicks Wm. et al.		Oles Ulysses S. 2297 ✓		Bergman O.A. 2390			Lots 1 to 9	✓		26		7.36			
50	"		"	✓	"			" 10 to 18	✓							
51																
52																
53																
54																
55	Estudillo J.A.			Estudillo Felicitas 2463					✓	70			7.50			
56	"			"					✓	29			7.50			
57	"			"					✓	30			7.50			
58	"			"					✓	31			7.50			
59	"			"					✓	49			1			
60	"			"					✓	50			1			
61	"			"					✓	51			1			
62	"			"					✓	52			1			
63	"			"					✓	53			1			
64	"			"					✓	54			1			
65	"			"					✓	55			1			
66																
67																
68																
69																
70																
71																
72																
73																
74																
75																

LAND VALUE 1913	1914	1915	1916	1917	1918	1919	BUILDINGS 1913	1914	1915	1916	1917	1918	1919	TREES, VINES, ETC. 1913	1914	1915	1916	1917	1918	1919
770	DO.	410	2100	2100	2100	2100														
					60	60														
70	DO.	40	20	20	20	20														
170	DO.	170	120	120	120	120														
90	DO.	90	90	90	50	50														
"	DO.	90	90	90	90	90														
"	DO.	90	90	90	90	90														
"	DO.	90	90	90	90	90														
"	DO.	90	90	90	90	90														
100	DO.	100	100	100	100	100				150	150	150	150							
90	DO.	90	90	90	90	90														
200	DO.	200	200	200	220	200														
90	DO.	90	90	90	90	90														
4300	DO.	4300	4300	4300	4300	4300	300	DO.	300	300	300	300	300							
35	DO.	35	50	50	50	50														
"	DO.	35	50	50	50	50														
"	DO.	35	50	50	50	50														
40	DO.	40	60	60	60	60														
90	DO.	90	60	60	60	60														
90	DO.	90	130	130	130	130														
70	DO.	90	~~90~~	90	90	90														
"	DO.	70	~~90~~	90	90	90														
40	DO.	40	—																	
"	DO.	40	—																	
130	DO.	130	200	200	200	200														
90	DO.	90	—																	
2000	DO.	2000	2000	2000	2000	2000	300	DO.	300	300	300	300	300							
80	DO.	50	50	50	50	50														
"	DO.	-	50	50	50	50														
"	DO.	110	110	110	110	110														
110	DO.	110	110	110	110	110														
75	DO.	75	80	80	80	80														
130	DO.	130	150	150	150	150														
450	DO.	450	500	500	500	500														
70	DO.	70	70	70	70	70	100	DO.	100	100	100	100	100							
"	DO.	70	70	70	70	70														
"	DO.	70	70	70	70	70														
"	DO.	70	70	70	70	70														
"	DO.	70	70	70	70	70														
175	DO.	175	200	200	200	200														
350	DO.	250	250	250	250	250	400	DO.	400	400	400	400	400							
850	DO.	850	—																	
85	DO.	85	120	120	120	120														
80	DO.	80	100	100	100	100														
"	DO.	80	100	100	100	100														
"	DO.	80	100	100	100	~~100~~														
"	DO.	80	100	100	100	~~100~~														
35	DO.	35	50	50	50	50														
"	DO.	35	50	50	50	50														
"	DO.	35	50	50	50	50														
"	DO.	35	50	50	50	~~50~~														
"	DO.	35	50	50	50	~~50~~														
"	DO.	35	50	50	50	50														

SAN JACINTO.

PORTION OF

ESTUDILLO LAND & WATER CO. ADD.



	1920 ASSESSED TO	1921 ASSESSED TO	1922 ASSESSED TO	1923 ASSESSED TO	1924 ASSESSED TO	1925 ASSESSED TO	1926 ASSESSED TO	DESCRIPTION	SCHOOL DISTRICT	Sec. or Lot	Twp. or Block	Range	Acres	LAND VALUE 1920	1921	1922	1923	1924	1925	1926	BUILDINGS 1920	1921	1922	1923	1924	1925	1926	TREES, VINES, ETC. 1920	1921	1922	1923	1924	1925	1926
1	Rohde Wm 3726		Hooper HR 4517 Zens LE			Hooper Isabelle et Zens M E 7506	Beck Alber 11498 dis Hagen Hiv 1004 Eggert Gerald 11501	Subd of Lots 1 to 6 & 9 to 24 Blk 32 & Lots 1 to 6 & 9 to 24 Blk 33 Hobbs Blks	San Jacinto	Lots 1 to 6 & 9 to 24 Blk 32 & Lots 1 to 6 & 9 to 24 Blk 33 Hobbs Blks	21	4S	3W	6	64	2300	2300	2300	2300	2300	2300	2300													
2	Schain Cora 3728												3	13	150	150	150	150	150	150	150													
3	Harm Emil 3729									7																								
										10			2	50	90	90	90	90	90	90	90													
4	Thompson O W 451									N			2	50	100	100	100	100	100	100	100													
5	"									12			2	50	100	100	100	100	100	100	100													
6	Cameron Orchards 3730									13			2	50	150	150	150	150	150	150	150													
7	Cook Geo T 3240						State 7593		S½	14			1	25	100	100	100	100	100	—														
8	Sevier M L 4611	Allen Beatrice 4194	Pezzel O L 8579			6699			N½	12			1	25	80	80	80	80	80	80	80													
9	Wiegand Geo 3246		National Bank of the Southern Counties 4479	Moss A 4646				Lots 15 to 16, 27 to 28 & 37 to 40 Blk 56 Tabo					72	50	4300	4300	4300	4300	4300	4300	4300	800	800	800	800	1060	1060	1060					200	200	200
10	Estudillo Felicitas 3242									17 to 18			5		250	250	250	250	250	250	250													
11	Harm Emil 3243									19			2	50	90	90	90	90	90	90	90													
12	Estudillo Felicitas 3244									20			2	50	150	150	150	150	150	150	150													
13	Woodford F F	Walter Jeanna T 3170		Sheppard James 4621		Sheppard C Z 7474				21			2	50	110	110	110	110	110	110	110													
14	Estudillo Felicitas 3245									29			2	50																				
15	"									30			2	50	450	450	450	450	450	450	450													
16	"									31			2	50																				
17	Harm Emil 3169							Lots 41 + 42					2	00	90	90	90	90	90	90	90													
18	"							" 43-44 + 45					3	00	100	100	100	100	100	100	100	200	200	200	200	270	270	270						
19	Wetherbee Mrs T 574			Sheppard James 4621						46			1		60	60	60	60	60	60	60													
20	"			"						47			1		60	60	60	60	60	60	60													
21	"			"						48			1		60	60	60	60	60	60	60													
22	Estudillo Felicitas 3163									49			1																					
23	"									50			1																					
24	"									51			1		450	450	450	450	450	450	450													
25	"									52			1																					
26	"									53			1																					
27	"									54			1																					
28	"									55			1																					
29	Holmes Geo E			Holmes Alice E 4753						12	20				40	40	40	40	40	40	40													
30																																		
31							Wiley Miss B 10622	Farm lot 3			13																									
32																																		
33							Crelly Mrs Vera 10621	Farm lot 1																												
34							Engle E W 11789	Lots 21-22 Blk 23			23																									
35							Taylor Miss A 10622	~~Farm lots~~, also lots 23+24 Blk 23			23																									
36							Forbach Eliza K 10623	Farm lots					3	00																						
37																																		
38																																		
39							Matthews Bldg Corp 11698 dec 11025	Lots 7-8-9-10-11-12 Blk 16			11																									
40																																		
41																																		
42							Guardian Inv Corp of Calif 11496	Lots 1 to 12 incl Blk 2 also lots 1 to 12 incl Blk 24 also lots 1 to 12 Blk 24			2-1 2-2-24																									
43																																		
44																																		
45																																		
46																																		
47																																		
48							Holmes Hve Roof Co 11498	Lot 7 Blk 16			7	16																								
49																																		
50																																		
51																																		
52																																		
53																																		
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73																																		
74																																		
75																																		

22

SAN JACINTO CITY

Scale 1" = 200'

34 T4S, R1W

THE GARDEN SUBDIVISION

1 37 Ac. | 2 10.85 Ac. | 3 10.56 Ac. | 4 10.63 Ac. | 5 11.13 Ac.

DEPOT GROUNDS

156 40 Ac

14

W 1/4 Cor. Sec. 34.

E 1/4 Cor. Sec. 34.

7TH | 9TH | 11TH | 12TH | 13TH | 14TH | ST. | AVE.

GILBERT | GREEN | STATE | GRAND | PALM | BUENA VISTA | SAN CARLOS | SANTA FE | AT & SF RY.

WEST BDRY. S.J. LEVEE DIST.

WEST CITY LIMITS SAN JACINTO

TWP. 4S
TWP. 5S

ESPLANADE

SO. CITY LIMITS SAN JACINTO

SO. BDRY. S.J. LEVEE DIST.

Orig Map Bk 9 pg 410. S.D. Co.
Amended " Miscel Bk 8 pg 292. "

Note:-
Original Block numbers shown dotted
Amended " " " solid

Orig Map not accepted by Board
See R.A. 327-8-9
" 552 3-4

ESTUDILLO LAND & WATER CO. ADD. TO SAN JACINTO

Assessor's Map 21-22
Riverside County
Cal.

F.W.H.

RIVERSIDE COUNTY

1932 REAL ESTATE VALUES-100% HIGH

	1926 ASSESSED TO	1927 ASSESSED TO	1928 ASSESSED TO	1929 ASSESSED TO	1930 ASSESSED TO	1931 ASSESSED TO	1932 ASSESSED TO	DESCRIPTION ESTUDILLO L. & W. CO'S SUB.	SCHOOL DISTRICT	SEC OR LOT	TWP. OR BLOCK	RANGE	ACRES	LAND VALUE 1926	1927	1928	1929	1930	1931	1932	BUILDINGS 1926	1927	1928	1929	1930	1931	1932	TREES, VINES, ETC. 1926	1927	1928	1929	1930	1931	1932
1								Cnty. Map L.A. Supply Co. C.D.Co.	San Jacinto Levee District Old City																									
2	Dairyman's Feed & Supply Co. 8962										26																						
3	"																																
4																																	
5																																	
6																																	
7																																	
8																																	
9																																	
10																																	
11														200	200	200	200	200	200	200													
12																																	
13																																	
14																																	
15																																	
16																																	
17																																	
18																																	
19																																	
20																																	
21																																	
22	Dairyman's Feed & Supply Co. 1962										33																						
23	"																																
24																																	
25																																	
26																																	
27																																	
28																																	
29																																	
30																																	
31																																	
32														230	230	230	230	230	230	230													
33																																	
34																																	
35																																	
36																																	
37																																	
38																																	
39																																	
40																																	
41																																	
42																																	
43	Harm Emil 2909													90	90	90	200	200	200	120													
44	Thompson O.R. 4481													100	100	100	200	200	150	150													
45	"													100	100	100	200	200	150	150													
46	Lawsten Ostrich Farm 7573		Snow R.K. 13305											120	120	150	200	200	200	180													
47	State 4446													—			—																
48	Guar. Tr. & Savs. Bank.													4300	4300	4300	4300	4300	4300	4300	1100	1100	1100	800	800	800	200	200	—					
49	"																																
50	Estudillo Felicitas							Estudillo Joseph A Tr 21260-21061						120	120	200	200	200	200	120													
51	"							do						120	120																		
52	Harm Emil													90	90	90	150	150	150	120													
53	Estudillo Felicitas							Estudillo Joseph A Tr 21260-21061						150	150	150	500	600	600	Same													
54	Sheppherd C.Z.		Button E.G. 14322											110	110	110	110	110	110	100													
55	Guar. Tr. & Sav. Bank. 4446																																
56	"																																
57																																	
58																																	
59																																	
60																																	
61	"																																
62	Estudillo Felicitas							Estudillo Joseph A Tr 21260-21061						120	120	150	Com 20	Com 20	Com 20	Com													
63	"							do						120	120	150	"	"	"	"													
64	"							do						120		150	"	"	"	"													
65	Guar. Tr. & Savs. Bank. 4446																																
66	"																																
67	"																																
68	"																																
69	"																																
70	"																																
71	"																																
72	"																																
73	"																																
74	Moss A. 6699		State 15710																														
75																																	

22-a

RIVERSIDE COUNTY

1932 REAL ESTATE VALUES 10% HIGH

	1926 ASSESSED TO	1927 ASSESSED TO	1928 ASSESSED TO	1929 ASSESSED TO	1930 ASSESSED TO	1931 ASSESSED TO	1932 ASSESSED TO	DESCRIPTION	SCHOOL DISTRICT	SEC OR LOT	TWP. OR BLOCK	RANGE	ACRES	LAND VALUE 1926	1927	1928	1929	1930	1931	1932	BUILDINGS 1926	1927	1928	1929	1930	1931	1932	TREES, VINES, ETC. 1926	1927	1928	1929	1930	1931	1932
1								ESTUDILLO L. & W. CO'S SUB.	San Jacinto Lee District Old City	15																							
2	Harm Emil 2749							Orig Map 1886 Surv'g 4R S.D. Co.			34			90	90	90	140	140	140	140													
3	"																																	
4	"																																	
5	"													100	100	100	180	180	180	180	270	270	270	270	270	270	270							
6	"																																	
7	Sheppherd James 4621													60	60	60	60	60	60	60													
8	"													60	60	60	60	60	60	60													
9	"																60	60	60														
10	Estudillo Felicitas 2463							Estudillo Joseph A Tr 21660-21661																									
11	"							do																									
12	"							do																									
13	"							do						420	420		420	420	420	420													
14	"							do																									
15	"							do																									
16	"							do																									
17	Guar. Tr. & Sav. Bank 1496													See page 22			See Page 24																
18	"																																
19	"																																
20	"																																
21	"																																
22																																	
23																																	
24	Aguirre Rosa E. 4450							Lot 8 Blk C.																									
25	"							" " 24 "																									
26	"							" " 24 "																									
27	"							" " 28 "																									
28	"							" " 28 "						1000	1000	2000	2000	2000	1500	1500													
29	"							" " 24 "																									
30	"							" " 24 "																									
31	"							" " 28 "																									
32	"							" " 28 "																									
33	"							" " 24 "																									
34																																	
35																																	
36																																	
37																																	
38																																	
39	Estudillo Felicitas 2463							Estudillo Joseph A Tr 21660-21661			30			480	480	480	480	480	480	480													
40	Whalen John													80	80	80	80	80	80	80													
41	Reilly C.W.													100	100	100	80	80	80	80													
42	Estudillo Felicitas 2463							Estudillo Joseph A Tr 21660-21661					1.24				inc 64	inc 64	inc 64	inc 64													
43	"							do									inc	"	"	"													
44	"							do						120	120	64	"	"	"	"													
45	"							do								"	"	"	"	"													
46	Reilly C.W.												2.50	250	250	250	160	160	160	160													
47	"																																
48	Garnier Rosa E. 5860-1856												1.25	50	50	50	50	50	50	50													
49	"												1.25	50	50	50	50	50	50	50													
50	"												2.25	110	110	110	110	110	110	110													
51	Estudillo Felicitas 2463							Estudillo Joseph A Tr 21660-21661						100	100	100			200	200													
52	"							do						100	100	100	200																
53	Kehl W.M. 1015							Lots 78-82-83-84-85-89-90						650	650	650	640	640	640	640													
54	Fruitvale Mut. Water Co.												7.20	120	120	120	120	120	120	120													
55	"																																
56	MacBeath Alexander E. 7020-6855													50	80	80	120	120	120	120													
57	Kehl W.M. 1015																																
58	"																See 78	See 78															
59	"																																
60	Estudillo Felicitas 2463							Estudillo Joseph A Tr 21660-21661																									
61	"							do						100	100	100	160	160	160	160													
62	"							do																									
63	Kehl W.M. 1015																																
64	"																See 78	See 78															
65	"																																
66	Fruitvale Mut. Water Co.																																
67	"																																
68	"													100	200	300	350	160	160	160	500	500	500	500	530	530							
69	"																																
70	"													70	70																		
71	Embry C.R. 3723													70	70	70	70	70	70	70													
72	"															70	70	70	70	70													
73	"															70	70	70	70														
74	"															70	70	70	70														
75	"															70	70	70	70														

FORM JHK 10

RIVERSIDE COUNTY Real Property Ownership Record

	1932 ASSESSED TO	1933 ASSESSED TO	1934 ASSESSED TO	1935 ASSESSED TO	1936 ASSESSED TO	1937 ASSESSED TO	1938 ASSESSED TO
1							
2							
3	Dairyman's Feed & Supply Co 8962						
4							
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24	Dairyman's Feed & Supply Co 8962						
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45							
46							
47							
48	Harm Emil 2909			Lamb James W. (Nellie) dec'd 28056			
49	Thompson O P 491			Des.			
50	do			do			
51	Snow R K 133305			State dec'd 89			30537-38512
52	State 7593			re statement Des.			
53	Security First Natl Bank of LA			Security Company, Corp. 27697 do			
54	do			do. do			
55	Estudillo Joseph A Tr 21660			do		Jones L S (Sep) 33937	
56	do			do		do	
57	Harm Emil			Lamb James W. (Nellie) dec'd 28056 do			
58	Estudillo Joseph A Tr 21660			Des.			
59	Button E G 16322			do			
60	Security First Natl Bank of LA			Security Company, Corp. 27697 do			
61				do			
62				do do			
63				do do			
64				do do			
65				do do			
66				do do			
67	Estudillo Joseph A Tr 21660			do			
68	do			do			
69	do			do			
70							
71							
72							
73							
74							
75							

	DESCRIPTION	SEC. OR LOT	TWP. OR BLOCK	RANGE	ACRES	SCHOOL DISTRICT	LAND VALUE 1933	1934	1935	1936	1937	1938	BUILDINGS 1933	1934	1935	1936	1937	1938	TREES, VINES, ETC. 1933	1934	1935	1936	1937	1938
1	Estudillo's Land & Water Co Add M13 3/41	SD				S. JAC. OUT Levee District Old City																		
2																								
3		1	26																					
4		2																						
5		3																						
6		4																						
7		5																						
8		6																						
9		7																						
10		8																						
11		9					180	180	270 ~~180~~	270	270	270												
12		10																						
13		11																						
14		12																						
15		13																						
16		14																						
17		15																						
18		16																						
19		17																						
20		18																						
21																								
22																								
23																								
24		1	33																					
25		2																						
26		3																						
27		4																						
28		5																						
29		6																						
30		7																						
31		8																						
32		9																						
33		10					210	210	375 ~~210~~	310	300	300												
34		11																						
35		12																						
36		13																						
37		14																						
38		15																						
39		16																						
40		17																						
41		18																						
42		19																						
43		20																						
44																								
45																								
46																								
47																								
48	Farm Lot	10 ~~Sec~~				Sold to State Jan 27, 1937	180	180	270 ~~180~~	270	150	150												
49	do	11					120	120	180 ~~120~~	180	150	150												
50	do	12					120	120	180 ~~120~~	180	150	150												
51	do	13				Sold to State June 27, 1930	140	140	210 ~~140~~	—														
52	do	14																						
53	do	15					Line 63	30 V																
54	do	16					Line 62																	
55	do	17				R 1936	90	90	135 ~~90~~	270	230	230												
56	do	18				SD 1936	90	90	135 ~~90~~	—														
57	do	19				Sold to State Jan 27, 1937	130	130	150 ~~130~~	190	150	150												
58	do	20				R 1936	100	100	150 ~~100~~	150	line 68	468												
59	do	21					100	100	135 ~~90~~	130	130	130												
60	do	22																						
61	do	23																						
62	do	24																						
63	Misc Lots 13 blk - 32 to 40 - 56 to 60	25					2900	2900	4350 ~~2900~~	3270	3270	530	530	795 ~~530~~	800	800	800							
64	Farm Lot	26																						
65	do	27																						
66	do	28																						
67	do	29				R 1936	100	100	150 ~~100~~	150														
68	do	30				SD 1936	100	100	150 ~~100~~	150	450	450												
69	do	31				R 1936	100	100	150 ~~100~~	150														
70																								
71																								
72																								
73																								
74																								
75																								

FORM JHK 10

RIVERSIDE COUNTY Real Property Ownership Record

	1932 ASSESSED TO	1933 ASSESSED TO	1934 ASSESSED TO	1935 ASSESSED TO	1936 ASSESSED TO	1937 ASSESSED TO	1938 ASSESSED TO
1							
2							
3	Security First Natl Bank of LA 4646			Security Company, Corp 27697			
4							
5							
6							
7							
8							
9							
10							
11							
12	Harm Emil 2909				Lamb James W (Nellie) 1057 23056		
13					do 1057		
14					do 1057		
15					do 1057		
16					do		
17	Sheppherd James 4621				Des		
18	do				do		
19	do				do		
20	Estudillo Joseph A Tr 27660				do		
21					do		
22					do		
23					do		
24					do		
25					do		
26					do		
27	Security First Natl Bank of LA 4646			Security Company, Corp 27697			
28							
29							
30							
31							
32							
33	Estudillo Joseph A Tr 27660				Des		
34	Whalen John				do		STATE 102
35	Reilly C W				do		
36	Estudillo Joseph A Tr 27660				do		
37					do		
38					do		
39					do		
40	Reilly C W				do		
41	do				do		
42	Aguirre Rosa E 5960				do		
43	do				do		
44	do				do		
45	Estudillo Joseph A Tr 27660				do		
46	do				do		
47	Kehl W M 1015				Fruitvale Mutual Water Co		
48	Fruitvale Mutual Water Co				Des		
49	do				do		
50	MacBeath Alexander E 7020		State 25639		no statement do		
51	Kehl W M 1015				do		
52	do				do		
53	do				do		
54	Estudillo Joseph A Tr 27660				do		
55	do				do		
56	do				do		
57	Kehl W M 1015						
58	do						
59	do						
60	Fruitvale Mutual Water Co				Des		
61					do		
62					do		
63					do		
64					do		
65	Embry C R 3723				do		
66					do		
67					do		
68					do		
69					do		
70							
71							
72							
73							
74							
75							

	DESCRIPTION	SEC. OR LOT	TWP. OR BLOCK	RANGE	ACRES	SCHOOL DISTRICT	LAND VALUE 1933	1934	1935	1936	1937	1938	BUILDINGS 1933	1934	1935	1936	1937	1938	TREES, VINES, ETC. 1933	1934	1935	1936	1937	1938
1	Estudillo's Land & Water Co Add MB 9/410	SD				S. JAC OUT Levee District Old City																		
2																								
3		37	=																					
4		33																						
5		34																						
6		35																						
7		36					Appld Lands	Appld Lands	8	80	80													
8		37																						
9		38																						
10		39																						
11		40																						
12	Farm Lot	41				Public State Act, 1931	130	130	195 130	190	120	120												
13	do	42				R																		
14	do	43				R																		
15	do	44				R	160	160	240 160	240	180	180		50	75 50	80	80	160						
16	do	45				R																		
17	do	46				State Act, 1934	50	50	75 50	70	70	70												
18	do	47				R	50	50	75 50	70	70	70	30	30	45 30	50	50	50						
19	do	48				R	50	50	75 50	70	70	70												
20	do	49				R 1936	30	30	45 30															
21	do	50				R 1936	30	30	45 30															
22	do	51				R 1936	30	30	45 30	310	310	310												
23	do	52				R 1936	30	30	45 30															
24	do	53				R 1936	30	30	45 30															
25	do	54				R 1936	30	30	45 30															
26	do	55				R 1936	30	30	45 30															
27		56																						
28		57																						
29		58					Appld Lands	Appld Lands	8															
30		59																						
31		60																						
32																								
33	Farm Lot	64				Sold 1936	70	70	105 70	564 L 37	137	137												
34	do	65				Sold to State June 28, 1932	70	70	105 70	100	80	—												
35	do	66				Sold to State Aug. 25, 1933	70	70	105 70	100	80	80												
36	do	67				Sold 1936																		
37	do	68				Sold 1936	210	210	315 210	420	430	430												
38	do	69				Sold 1936																		
39	do	70				Sold 1936																		
40	do	71				Sold to State Aug. 25, 1933	70	70	105 70	210	150	150												
41	do	72				Sold to State Aug. 25, 1933	70	70	105 70															
42	do	73			1.25		40	40	60 40	60	60	60												
43	do	74			1.25		40	40	60 40	60	60	60												
44	do	75			2.28		90	90	135 90	130	100	100												
45	do	76				Sold 1936	60	60	90 60	90	160	160												
46	do	77				Sold 1936	60	60	90 60	90														
47	See line 52	78					Line 52			See L 52		L 52												
48	Farm Lot	79					110	110	165 110	160	100	100												
49	do	80																						
50	do	81				Sold to State June 28, 1929	110	—																
51	do	82																						
52	Also Lot 78? 88 to 90	83					340	340	510 340	510	500	500												
53	Farm Lot	84																						
54	do	85				Sold 1936																		
55	do	86				Sold 1936	140	140	210 140	210	230	230												
56	do	87				Sold 1936																		
57		88																						
58	See Line 52	89					Line 52			L 52	See L 52	L 52												
59		90																						
60	Farm Lot	91																						
61	do	92																						
62	do	93					140	140	210 140	210	220	220												
63	do	94																						
64	do	95																						
65	do	96				Public State Act, 1933 Sold 1936	60	60	90 60	90														
66	do	97				Sold 1936	60	60	90 60	90														
67	do	98				Sold 1936	60	60	90 60	90														
68	do	99				Sold 1936	60	60	90 60	90	670	670	550	350	525 350	530	530	530						
69	do	100				Sold 1936	60	60	90 60	90														
70																								
71																								
72																								
73																								
74																								
75																								

FORM JHK 10

RIVERSIDE COUNTY Real Property Ownership Record

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	1932 ASSESSED TO	1933 ASSESSED TO	1934 ASSESSED TO	1935 ASSESSED TO	1936 ASSESSED TO	1937 ASSESSED TO	1938 ASSESSED TO
3	Aguirre Rosa E 4430						
32	Martindale L S & Sallee FM 18963						
33	Martindale L S 4523						
34	do						
35	Jackson L M & Sallee FM 18963						
36	do						
48	Security First Natl Bank of L A 4646			Security Company, Corp. 27697			
54				A.T. & S.F.R.R.			
55				do			
56				do			
57				do			
58				do			

	DESCRIPTION	SEC. OR LOT	TWP. OR BLOCK	RANGE	ACRES	SCHOOL DISTRICT	LAND VALUE 1933	1934	1935	1936	1937	1938	BUILDINGS 1933	1934	1935	1936	1937	1938	TREES, VINES, ETC. 1933	1934	1935	1936	1937	1938
1	Estudillo's Land & Water Co Add MB 9/414		4 S			S. JAC. OUT Levee District Old City																		
3	Lots 1 to 28		36																					
5	Lots 1 to 24		37																					
7	Lots 1 to 24		38																					
9	Lots 1 to 28		39																					
11	Lots 1 to 28		40				1250	1250	1875 1250	1870	2000	2000	360	360	540 360	540	540	540						
13	Lots 1 to 24		41																					
15	Lots 1 to 24		42																					
17	Lots 1 to 28		43																					
19	Lots 1 to 28		44																					
21	Lots 1 to 24		45																					
30	The Garden Subdivision MB 9/84																							
32		1			37	Sold to State June 29, 1936 Sold 1936	70	70	105 70	100	100	100	230	230	345 230	350	350	150						
33		2			10 85	Sold to State June 22, 1936	580	580	870 580	870	760	760												
34		3			10 56	Sold to State Oct 14, 1936	520	570	855 570	850	750	750	20	20	30 20	30	30	30						
35		4			10 63	Sold 1938	580	580	870 580	870	860	860						500						
36		5			11 13	Sold 1938	580	580	870 580	870	660	660												
45	SJLA Farm Lots																							
48	Exc 50' strip on E	156			40		1600	1600	2400 2400	2400	1800	1800												
54	804-33-23 Parcel 8				3 40				190	190	190	190												
55	" " 9				50				45	50	50	50												
56	" " 10				30				45	40	40	40							1745	1750	1770	1730		
57	" " 11				90				80	80	80	80												
58	" " 12				40				45	40	40	40												

RIVERSIDE COUNTY Real Property Ownership Record

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	1938 ASSESSED TO	1939 ASSESSED TO	1940 ASSESSED TO	1941 ASSESSED TO	1942 ASSESSED TO	1943 ASSESSED TO	1944 ASSESSED TO
1							
2	8962 Dairyman's Feed & Supply Co	34254 McClintock Arthur P (Margaret C.)					
3							
4							
5							
6	do	do					
7							
8							
9	4450 Aguirre Rosa E				Aguirre, Anita A. & Rosa E. 41742		
10							
11							
12							
13							
14							
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22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32	28056 Lamb James W (Nellie)						
33	481 Thompson O P					Scranton Enoch L. 43325	
34	do					do	
35	13305 Snow R K	Tax D-34119 Buckley Austin H (Eliz M)					
36	STATE	do				43736	
37	27697 Security Company, Corp.						
38	do						
39	33337 Jones L S (Sep)	33683 Lamb James W (Nellie E)					
40	do	do					
41	28056 Lamb James W (Nellie)						
42	21660 Estudillo Joseph A Tr.		Crow B H 36751				
43							
44	16322 Button E G						
45							
46	28056 Lamb James W (Nellie)						
47							
48	do						
49							
50	4621 Sheppherd James						
51	do						
52	do						
53	21660 Estudillo Joseph A Tr.		Crow B H 36751				
54							
55	do	Tax D 37280	dos		do		Hilton Clarence E & Mary O. 44039
56	STATE Whalen John		Sheppherd J M (Winona)				
57	Reilly C W	State 54	do				
58							
59	do	State 54	do				
60							
61	5060 Aguirre Rosa E				Aguirre, Anita A. & Rosa E. 41742		
62	do				do		
63	do				do		
64	21660 Estudillo Joseph A Tr.		dos Aguirre Rosa E 38275		Aguirre, Anita A. & Rosa E. 41742		
65							
66							
67							
68							
69							
70							
71							
72							
73							
74							
75							

	DESCRIPTION	SEC. OR LOT	TWP. OR BLOCK	RANGE	ACRES	SCHOOL DISTRICT	LAND VALUE 1939	1940	1941	1942	1943	1944	BUILDINGS 1939	1940	1941	1942	1943	1944	TREES, VINES, ETC. 1939	1940	1941	1942	1943	1944
1	ESTUDILLO'S LAND & WATER CO ADD MB 9/410 SD					Old City S. JAC. O.R. 5 Levee District																		
2		1 to 18	26		2 36		270	270	270	270	270													
3																								
4																								
5																								
6		1 to 20	33		3		300	300	300	300	300													
7																								
8																								
9		1 to 28	36				2000	2000	1500	1500	2400		540	540	540	540	540							
10																								
11		1 to 24	37																					
12																								
13		1 to 24	38																					
14																								
15		1 to 28	39																					
16																								
17		1 to 28	40																					
18																								
19		1 to 24	41																					
20																								
21		1 to 24	42																					
22																								
23		1 to 28	43																					
24																								
25		1 to 28	44																					
26																								
27		1 to 24	45																					
28																								
29																								
30																								
31																								
32	FARM LOT	10			2 50		100	100	80	80	80													
33	do	11			2 50		100	100	80	80	80													
34	do	12			2 50		100	100	80	80	80													
35	do	13			2 50	Sold 1939	200	200	150	150	150													
36	do	14			2 50																			
37	FARM Lots 15 & 16 - 22 to 28 - 32 to 40 - 56 to 60				72 50		2170	2170	1810	1810	1810		640	510	510	510	200							
38																								
39	FARM LOT	17			2 50		200	200	130	130	130													
40	do	18			2 50																			
41	do	19			2 50		100	100	70	70	70													
42	FARM Lots 20 & 29 to 31				10	Sold 1939	400	400	250	250	250													
43																								
44	FARM LOT	21				Sold 1940	100	100	70	70	70													
45																								
46	FARM LOTS	41 & 42			2		80	80	60	60	60													
47																								
48	do	43 to 45			3		120	120	90	90	90		160	160	160	160	160							
49																								
50	FARM LOT	46					40	40	30	30	30													
51	do	47					40	40	30	30	30		50	50	50	50	50							
52	do	48					40	40	30	30	30													
53	FARM LOTS	49 to 55			7	Sold 1939	280	280	210	210	210			200	200	200	200							
54																								
55	FARM - 70 - 71 - 71. Lots 68 & 69 - 70 - 70		9	06 54		Sold 1936	380	360	230	230	230			50	50	—								
56	FARM LOT	65				Sold 1932		40	30	30	30													
57	do	66				Sold 1933	—	40	30	30	30													
58																								
59	FARM LOTS	71 & 72				Sold 1933	—	80	60	60	60													
60																								
61	FARM Lot	73			1 25		60	60	40	40	40													
62	do	74			1 75		60	60	40	40	40													
63	do	75			2 28		100	100	70	70	70													
64	FARM LOTS 67-68-69	76 & 77			4 77		150	190	120	120	120													
65																								
66																								
67																								
68																								
69																								
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RIVERSIDE COUNTY Real Property Ownership Record

PRINTED BY CARLISLE, S. F. 17420

	1938 ASSESSED TO	1939 ASSESSED TO	1940 ASSESSED TO	1941 ASSESSED TO	1942 ASSESSED TO	1943 ASSESSED TO	1944 ASSESSED TO	DESCRIPTION	SEC. OR LOT	TWP. OR BLOCK	RANGE	ACRES	SCHOOL DISTRICT	LAND VALUE 1939	1940	1941	1942	1943	1944	BUILDINGS 1939	1940	1941	1942	1943	1944	TREES, VINES, ETC. 1939	1940	1941	1942	1943	1944
1								ESTUDILLO'S LAND & WATER CO ADD MB 9/410	SD				Old City S. JAC. O.R. 5 Levee District																		
2																															
3	Kehl W M 1015				Brown Romeo A (Blanche) 42574 42084			FARM LOTS 78-82 to 84-88 to 90						450	450	340	340	340							450						
4	Fruitvale Mutual Water Co							do	79 & 80					90	90	60	60	60													
5	STATE 1020 Mac Beath Alexander E		Tax D-37658 Sturbaum Geo. E.					FARM LOT	81				Sold 1943 ~~1925~~	—	40	30	80	80													
6																															
7	Estudillo Joseph A 21660 Tr.	Quaffin J		Aguirre Rosa E 38215	Aguirre, Anita A & Rose E 41742			FARM LOTS	85 to 87			5	R 1926	200	200	130	130	130													
8																															
9	Fruitvale Mutual Water Co							do	91 to 95					200	200	130	130	130													
10																															
11	Embry C R 3723	Citizens Nat'l Tr & Svgs Bk of L.A. 34885		Bennett J A (Laura) 39748	Dunber, Adeline V. 42048			do	96 to 100				Sold 1938 sold 1942	600	600	500	500	500		530	530	530	530	530							
12																															
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25								THE GARDEN SUBDIVISION MB 9/84																								
26	18965 Martindale L S & Sallee F M 4523	34723-33668-33501 Sallee F M & Hansen A Vernon 34723-33668-33501				44009 43010 Hansen A. Vernon & Mainzer Beatrice M. 44004-43910		1						100	100	100	100	100		150	150	150	150	150							
27	Martindale L S	Hansen A Vernon				Mainzer Beatrice M.		2				10 85		650	650	440	440	440													
28	do 18965	do				do Des 42742		E 453' of Lot 3.				10 22 56		630	630	430	430	420		30	30	30	30	30							
29	Jackson L M & Sallee F M							4				10 63	R 1938	740	740	610	610	610		500	500	500	500	500							
30	do							5				11 13	R 1938	360	560	450	450	450													
31						Sallee, Frazier M. (Mary A) 42742		W 15' of Lot 3.	3			34						20													
32																															
33																															
34																															
35																															
36																															
37																															
38																															
39																															
40								SJLA FARM LOTS MB 8/357 SD																								
41	27697 Security Company, Corp.							Exc 50' Strip on E	156			40		1200	1200	1000	1000	1000													
42																															
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47																															
48																															
49	AT & SF RR Co							SBE 804-33-23 Parcel 8						190	190	170	170														
50	do							" " 9						50	50	40	40														
51	do							" " 10						40	40	20	20														
52	do							" " 11						80	80	130	130														
53	do							" " 12						40	40	60	60														
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RIVERSIDE COUNTY Real Property Ownership Record

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	1943 ASSESSED TO	1944 ASSESSED TO	1945 ASSESSED TO	1946 ASSESSED TO	1947 ASSESSED TO	1948 ASSESSED TO	1949 ASSESSED TO	DESCRIPTION	SEC. OR LOT	TWP. OR BLOCK	RANGE	ACRES	SCHOOL DISTRICT	LAND VALUE 1944	1945	1946	1947	1948	1949	BUILDINGS 1944	1945	1946	1947	1948	1949	TREES, VINES, ETC. 1944	1945	1946	1947	1948	1949
								ESTUDILLO LAND & WATER CO ADD MB 9/410 SBT					SAN JAC. OUT																		
1													Old City San Jacinto Levee District																	
2	34254 McClintock Arthur P (Margaret C)	45938 Ferrell, Wm. M (Hertha)				AR 7/48		Lots 1 to 18		26		2 36	R 1945 91-1	270	270	270	270	270	900			350	350	1880	13420						
3																														
4																														
5																														
6	do	do				AR 7/48 des 287-12/47		Lots 1 to 20 Exc. N 100' of Lots 1 to 10		33		1 87	R 1945 R48	300	300	300	300	200	200						200						
7						AR 7/48 287-12/47		N 100' of Lots 1 to 10				1 13	R48					110	300												
8						Ferrett Charles E & Frederick A																									
9																														
10	41742 Aguirre Anita A & Rose E	des	49240 Ferrell, Wm M (Hertha S)			AR 7/48	des 920-7/46 des 57/1846-7/48	Blocks 36 to 45 & Lots 8-9 ~~17 to 20~~ of Blks 36 & 39	19,20,21,22,23			25	R 1945 R48	2400	2400	2400	2400	2400	9500	1170	1170	1170	1170	3310	5290						
11							1346-7/48 Davis Edward H (Bertha A)	Blks 37 & 38 & Lots 1 to 7, 10 to 16 of Blks 36 & 39				25						1500						200						
12							920-7/48 Novak Frank L (Anna A)	Lots 17, 18, 24 to 28 inc Block 36		36								820						200						
13																														
14																														
15	28056 Lamb James W (Nellie)							Farm Lot	10			2 50		80	80	80	80	80	130											
16	43223 Scranton Susie L				Lamb, James W. (Nellie B) 4235-7/44		des 1869-1/48	" "	11			2 50		80	80	80	80	80	80											
17	do 36119				do 3410-5/14-7/44			W² " "	12			2 50		80	80	80	80	40	50					80	120					
18	Buckley Austin H (Eliz)			Pope, Clarence, (Myrtle E.) 700-3/1454	Torkelson, Otis R (Nancy L)	Vobora James V. 1351-1/49		" "	13 & 14			5		150	150	150	150	150	250		50	50	50	170	270					
19	47497 Security Company Corp	McEuen Clark (Agnes L) 47517 45035						Farm Lots 15-16-22 to 28-32 to 40-56 to 60				72 50		1810	2330	2330	2330	2330	5200	200	200	200	200	200	320					
20																														
21																														
22	33683					Brickey James B (Gertrude E) 1869-1/48 des 1869-1/48		E² of Lots 12 & 17	12 & 17			2 5						80	120					80	120					
23	Lamb James W (Nellie B)							Farm Lots 18 & W² Lot 17	17 & 18			3 75		130	130	130	130	100	200											
24	do 28056							" "	19			2 50		70	70	70	70	70	120											
25	Crow B H 36751			VanWinkle, Luther, (Elsie) 4052-9/45		VanWinkle Luther 3228-9/47	PO Box 172 Hemet	" " 20 & 29 to 31				10		250	250	250	250	150	600											
26																														
27																														
28	16322 Butler E G		McEuen, Clark 49572					Farm Lot	21			2 50		70	70	70	70	70	180				160	100	160					
29																														
30	28056 Lamb James W (Nellie)							Farm Lots	41/2 & 42			2		60	60	60	60	60	100											
31	do							" " 43 to 45				3		90	90	90	90	90	150	120	120	120	120	120	190					
32																														
33	4521 Sheppherd James					PM 5:17	1757-7/48-2149-11/48 Sheppherd Winona L.	Farm Lot	46					30	30	30	30	30	50											
34	do						do	" "	47					30	30	30	30	30	50	170	170	170	170	170	270					
35	do						do	" "	48					30	30	30	30	30	50											
36	Crow B H 36751			VanWinkle, Luther (Elsie) 4052-9/45		VanWinkle Luther 3228-9/47		Farm Lots 49 to 55				7		210	210	210	210	210	420	640	640	640	640	640	1020					
37																														
38	44039 Hilton Clarence E & Mary O Pope, Ben F (Barbara) 47792				Kuhns, Herman R (Laverne M) 1479-4/46		Box 541 - San Jacinto	" " 64-70-76-77				9 06		230	250	230	230	230	540		30	30	30	1190	1900					
39																														
40	39280 Sheppherd J M (Winona)				do 092-12/46			Farm Lot	65					30	30	30	30	30	80											
41	do				do			" "	66					30	30	30	30	30	80											
42																														
43	do				do			Farm Lots	71/2 & 72					60	60	60	60	60	160											
44	41742 Aguirre Anita A Rose E		49246 Ferrell, Wm M (Hertha S)			AR 7/48	Davis Edward H (Bertha A) 1846-7/48	" "	73			1 25	R 1945 RH8	40	40	40	40	40	80											
45	do	do				AR 7/48	do	" "	74			1 25	R 1945 RH8	40	40	40	40	40	80											
46	do	do				AR 7/48	do	" "	75			2 28	R 1945 RH8	70	70	70	70	70	130											
47	do	do				AR 7/48	do	" " 67-68-69				4 77	R 1945 RH8	150	150	150	150	150	300											
48																														
49	42514 Brown Romeo A (Blanche)						des 542-3/48 3567 - 3565-3/48 des	~~H~~ " " ~~78~~ 82 & ~~79~~ 84 - 88 to 90				~~8 70~~ 11 26		340	340	340	340	340	500	780	780	780	780	780	1240					
50							3565-3/48 Leatherman T. G.	S² " " 78	78			63							100											
51	Fruitvale Mutual Water Co							" "	79 & 80					60	60	60	60	60	130											
52	37658 Sturbaum Geo E							Farm Lot	81				SBE 1943	80	80	80	80	80	150											
53							Sunne Marie 542-3/48		83			1 25							150						300					
54	41742 Aguirre Anita A & Rose E		49246 Ferrell, Wm M (Hertha S)					Farm Lots 85 to 87				5	SBE 1945 SBE 1943	150	150	150	150	150	300											
55																														
56	Fruitvale Mutual Water Co							" " 91 to 95						130	130	130	130	130	300											
57																														
58	42049 Dunbar Adeline V				Bailey Samuel T. (Alma L) 3440-4/47			" " 96 to 100					SBE 1945 SBE 1942	500	500	500	500	500	600	SBE 30 1110	SBE 30 1110	SBE 30 1110	1140	1140	1820					
59																														
60																														
61						(Newby)	2038-1/48 2179-11/48 3561-3/48 Leatherman T G & Puckett Tiny E Trs	N² of Farm Lot 78	78			63							100						500					
62																														
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RIVERSIDE COUNTY Real Property Ownership Record

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	~~1933~~ 1943 ASSESSED TO	~~1939~~ 1944 ASSESSED TO	~~1940~~ 1945 ASSESSED TO	~~1941~~ 1946 ASSESSED TO	~~1942~~ 1947 ASSESSED TO	~~1943~~ 1948 ASSESSED TO	~~1944~~ 1949 ASSESSED TO
1							
2							
3	Hansen A Vernon 44009 & Mainzer Beatrice M	Clary W M (Edna)					3609-3/48 des
4	Mainzer Beatrice 44009	des 47660	des 49807	Pavlick, Richard Paul 2960-3/45 des 2960-8/45	Priest, Milton K (Helen L) 1783-3/48 corr - des	Wilson Jack A (Thelma A) des 249-12/47 - 2307-9/48	" " Joint Tenancy
5	do 42742	des 47660	des 49807				
6	Sallee Frazier M (Mary E) corr	des 46740 Combined line 7					
7	Jackson L M & Sallee 10965	FM Sallee FM (Mary E) 46740				des 2369-7/48 - 923-1/48 - oc 2460-7/48	
8	do	Ferrell, Wm. M. (Hertha) 46746					Johannsen Louis J
9		do	Hancock, A.J. 49807				do
10				Pavlick, Richard Paul des 2960-8/45	Combined on line 4		
11						248-12/47	
12						Johnson Richard C (William M) 246-12/47	Beam Chester R (Louise) 22/52/2
13						Wilson E H (Cecile)	
14							
15							Clary James L. (Sarah M.) 3609-3/48 oc 2458-7/48
16							6" Dump R.R. Security Title Ins. & Guar. Co 1369-1/49
17							Carlin James J (Eva N)
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19							
20	Security Company Corp 27697	Mc Even Clark (Agnes L) 47517 45025					
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27	AT & S F R R Co						
28	do						
29	do						
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31	do						2458-7/48
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	DESCRIPTION	SEC. OR LOT	TWP. OR BLOCK	RANGE	ACRES	SCHOOL DISTRICT	LAND VALUE 1944	1945	1946	1947	1948	1949	BUILDINGS 1944	1945	1946	1947	1948	1949	TREES, VINES, ETC. 1944	1945	1946	1947	1948	1949
1	THE GARDEN SUBDIVISION MB 9/84					SAN JAC. OUT Old City San Jacinto Levee District																		
2	70' W of NE Cor Lot 3, S 150' x W 63'				3 88																			
3	Lot 1 & per Lots 2 & 3 beg NE Cor Lot 1 S 300' x W 63' Exc beg	1			4 34	91-11	170	170	170	170	150	300	240	240	240	840	1340	2140						
4	~~Exc N 300'~~ 101' S 303' of lots 2 & 3 exc W 15' of lot 3	2			2 13		390	190	190	260	80	150					170	270						
5	E 453' Exc N 300' 150' of E 143' & Exc S 303'	3			4 53		310	260	140	140	140	230					870	1390						
6	~~W 15' Exc S 246.77~~				94																			
7	N 606.23' of Lot 4 & W 15' of N 606.23' of Lot 3	3 & 4			7 27		400	400	400	400	400	510	670	670	670	670	670	1070						
8	Exc E 306' of N 297.70' Exc por in St	5			9 30	SJR 1945 R#8	450	480	450	450	450	600					320	—						
9	S 346.77' & W 15' of S 346.77' of Lot 3	3 & 4 of Lots			3 70	SJR 1945 R#8	230	230	230	230	230	240												
10	Beg 330' S of t & Santa Fe Ave & 7th St S 350' x W 660'	2 & 3			6 30			250	250	250	250	450				400	400	640						
11	~~S 303' of E 453' of lot 3 Exc W 15'~~	~~3~~			~~5 46~~				120	—														
12	N 101' of S 303' of lots 2 & 3 Exc W 15' of lot 3	2 - 3			2 13						80	150					150	240						
13	N 101' of S 202' of lots 2 & 3 Exc W 15' of lot 3				2 13						80	150					300	480						
14																								
15	Por Lot 3 beg 70' W of NE cor th S 150' x W 100'	3			35							50						2000						
16	Por Lot 3 formerly SBE 804-33-23 Parcel 12				57							80												
17	E 300' of N 297.70' Exc por in St	5			1 83							200												
18	S J L A FARM LOTS MB 8/357 SD																							
19																								
20	Exc 50' Strip on E	156			40		1000	1000	1000	1000	1000	1200												
21																								
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27	SBE 804-33-23 Parcel 8																							
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29	" " " " 10																							
30	" " " " 11																							
31	SBE 804-33-23A " 12																							
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ESTUDILLO LAND AND WATER CO ADD MB 9/410 SD — SAN JACINTO OUT Old City San Jacinto Levee District

LINE NO.	1949 ASSESSED TO	1950 ASSESSED TO	1951 ASSESSED TO	1952 ASSESSED TO	1953 ASSESSED TO	1954 ASSESSED TO	LINE NO.	DESCRIPTION	SECTION OR LOT	TWP. OR BLOCK	SCHOOL DIST. CODE AREA	DATE SOLD FOR TAXES	1950 LAND	1950 IMP.	1951 LAND	1951 IMP.	1952 LAND	1952 IMP.	1953 LAND	1953 IMP.	1954 LAND	1954 IMP.
2	Ferrell Wm M (Hertha) 45938					PP 11/53	2	LOTS I TO 18, 2.36 AC		26	91 11	SOLD 1951	900	13,420	900	13420	900	13,620	900	13,620	900	13,620
6	do		Des 3146 5/50		AR 6/53	23421-5/53 Freeman Chas A (Beulah V)	6	LOTS I TO 20 EXC N 100 FT OF LOTS I TO 10 * .87 AC: & Exc S92.5' Lots 11 to 20.		33	91 11	SOLD 1951	200	200	120	200	120	100	120	100	120	100
7	287-12/47 Ferrett Charles E & Frederick A.						7	N 100 FT OF LOTS I TO 10, I.13 AC		33	91 11		240		240		240	200	240	200	240	200
10	49246 Ferrell Wm M (Hertha)	des 66-des 67-1/50	des 8492-2/51	See Below:-			10	(Exc beginning ... W line Lot 8 ... Exc pors in Sts. & Exc Lots 8-9-19 to 23 inc Blk 40 & Exc Lots 8-9-19 to 23 Blk 43) BLKS 40 & 41 ~~TO 45~~ 4/59 AND LOTS 8, 9 AND LOTS 19 to 23 ~~20, 21, 22, 23~~ of BLKS 36 AND ~~39~~, ~~25~~ AC Also Lots 8-9-17 to 28 of Blk 39 28.65 AC ~~29.75 AC~~			91 ~~11~~		2100	5290	2000	5290	740	3960	See Below		—	
11	1846-7/48 Davis Edward H (Bette H)	3327-12/49 Reimer James F (Lillian A)		28933-4/51 Reynolds J Charles (Irene K)			11	BLKS 37, 38 AND LOTS I TO 7 AND LOTS 10 TO 16 OF BLKS 36 AND ~~39~~, ~~25 AC~~ Lots 1 to 7 & 10 to 16 of Blk 39 13.8 Ac			91 ~~11~~		850	200	850	200	850	3500	850	3500	850	3500
12	920-12/48 Novak Frank L (Anna A)		3168-11/50 Kisaka James T (Mitsuko S)				12	LOTS 17, 18, 24, 25, 26, 27, 28		36	91 ~~11~~		220	200	220	200	220	200	220	200	220	530
15	28056 Lamb James W (Nellie)						15	FARM LOT, 2.50 AC	10		91 05 (~~11~~)		130		130		130		130		130	
16	4256-7/46 do	1751-des 1750-8/49	2716-12/50 Ennis Wesley L	AR 12/51	19459-7/52	36839-7/53 Kidwell Charles N	16	FARM LOT, 2.50 AC	11		91 ~~11~~	SOLD 1951	80		80		80		80		80	860
17	do	Meyncke Z Glenn (Mabel G)					17	W 1/2 OF FARM LOTS 12 & 17 2.50 ~~1.25~~ AC	12		91 ~~11~~		100	200	100	200	100	1300	100	1300	100	2010
18	1251-4/47 Vobora James V						18	FARM LOTS 13 AND 14, 5 AC			91 ~~11~~		250	270	250	270	250	300	250	300	250	390
19	47517-45025 McEuen Clark (Agnes L)						19	FARM LOTS 15, 16, 22 TO 28, 32 TO 40, 56 TO 60* 72.50 AC			91 ~~11~~		5200	320	5200	320	5200	320	5200	320	5200	320
22	1869-1/48 Brickey James B (Gertrude E)						22	E 1/2 OF LOTS 12 AND 17, 2.5 AC			91 ~~11~~		120	120	120	310	120	310	120	310	120	310
23	33683 Lamb James W (Nellie B)	des 1750-8/49	2716-12/50 Ennis Wesley L	AR 12/51	19459-7/52	36839-7/53 Kidwell Charles N	23	FARM LOT 18 ~~AND W 1/2 LOT 17~~, 2.50 ~~3.75~~ AC			91 ~~11~~	SOLD 1951	130		130		130	900	130	900	130	
24	28056 do						24	FARM LOT, 2.50 AC	19		91 ~~11~~		120		120		120		120		120	
25	3228-9/47 Van Winkle Luther						25	FARM LOTS 20, 29, 30, 31, 10 AC			91 ~~11~~		600		600		600		600		600	
28	49572 McEuen Clark						28	FARM LOT, 2.50 AC	21		91 ~~11~~		130	160	130	160	130	160	130	—	130	
30	28056 Lamb James W (Nellie)						30	FARM LOTS 41 AND 42, 2 AC			91 ~~11~~		100		100		100		100		100	
31	do						31	FARM LOTS 43, 44, 45, 3 AC			91 ~~11~~		150	190	150	300	150	300	150	400	150	400
33	1757-7/48-2491-4/48 Sheppherd Winona L						33	FARM LOT, I AC	46		91 ~~11~~		50		50		50		50		50	
34	do			M 8205-4/51 Sheppherd William & Venice			34	I AC	47		91 ~~11~~		50	270	50	270	50	270	50	270	50	270
35	do			do			35	I AC	48		91 ~~11~~		50		50		50		58		50	
36	3228-9/47 Van Winkle Luther						36	FARM LOTS 49 TO 55, 7 AC			91 ~~11~~		420	2980	420	6760	420	6760	420	7760	420	7760
38	1479-4/46 Kuhns Herman R (La Vern N)	des 370-11/49					38	FARM LOTS S144' of 64, 70, 76 AND 77, 8.06 (~~9~~) AC			91 ~~11~~ (12)		500	1900	500	3340	500	3340	500	3340	500	2320
40	992-12/46 do	des 2144 des 370-11/49 Moreland Elvis A (Eva May)		35660-8/51 Alley Dewey K (Alta M)	27689-7/52 Quarantillo Augustine G (Jean) cor des des 22166-7/52	6933-7/54 Larsen Paul V (Jessie)	40	FARM LOT 65 - N5' of lot 66 & N154' of lot 64	~~55~~		91 ~~11~~	SOLD 1950	100	470	100	520	100	520	100	820	160	1620
41	do	des 2144 des 370-11/49					41	FARM LOT ~~S95'~~ S144' exc ~~S95'~~ N200'	66		91 ~~11~~		70		70		70		50		50	
43	do	des			cor des des 22166-7/52		43	FARM LOTS 71, 72 exc N144' N8.87 of N200 of Lot 71.	~~56~~		91 ~~11~~		160	200	160	200	160	200	140	200	140	
44	1846-7/48 Davis Edward H (Bette H)	Take off lot 66; 3327-12/49 Reimer James F (Lillian A)		23933-6/51 Reynolds J Charles (Irene K)			44	FARM LOT, I.25 AC	73		91 ~~11~~		80		80		80		80		80	
45	do	do		do			45	FARM LOT, I.25 AC	74		91 ~~11~~		80		80		80		80		80	
46	do	do		do			46	FARM LOT, 2.28 AC	75		91 ~~11~~		130		130		130		130		130	
47	do	do		do			47	FARM LOTS 67, 68, 69, 4.77 AC			91 ~~11~~		300		300		300		300		300	
49	42514 Brown Romeo A (Blanche)						49	FARM LOTS 82, 84, 88, 89 AND 90, 8.29 AC			91 ~~11~~		500	1240	500	1240	500	1240	500	1240	500	1240
50	3565-3/48 Leatherman T G					des 4307-1/54	50	~~S~~ N I/2 of S1/2 of FARM LOT 78			91 ~~11~~		100		100		100		100		50	
51	Fruitvale Mutual Water Co.						51	FARM LOTS 79, 80, 2.20 AC			91 ~~11~~		130		130		130		130		130	
52	37658 Sturbaum Geo E	3102-8/49 Blome James G					52	FARM LOT	81		91 ~~11~~		150		150		150		150		150	
53	542-3/49 Sunne Marie	287-6/49 Duede Marie	Cor. 2197-9/49 Duede Frank H (Marie)				53	I.25 AC	83		91 ~~11~~		150	810	150	1040	150	1040	150	1100	150	1400
54	49246 Ferrell Wm M (Hertha S)			3010-1/52 Childs Charles J (Alida)			54	FARM LOTS 85, 86, 87, 5 AC			91 11	SOLD 1950	300		300		300		300		300	
56	Fruitvale Mutual Water Co						56	FARM LOTS 91 TO 95, 5 AC			91 11		300		300		300		300		300	
58	3860-2/47 Bailey Samuel T (Alma L)						58	FARM LOTS 96, 97, 98, 99, 100, 5 AC			91 11		600	1820	600	1820	600	1820	600	1820	600	1820
61	3567-3/48-2159-11/48 2038-1/49 Leatherman T G & Pickett T E Trs.			des 17644-4/52			61	N 1/2 OF FARM LOT 78 exc E140'			91 11		100	500	100	500	50 (~~100~~)	500	50	500	50	980
62		66-1/50 Whiting Earl L (Jennie T Z)		corr des AR 9/52			62	Por Town Blk 40 & 41 - Beg at int ℄ 12th St & W line Lot 8 Blk 40 Ext N - th W 1040' x S209.42' Exc pors in Sts. 5 Ac.	~~40-41~~	40, 41	91 05	SOLD 1952	300	300	300	300	300	600	300	40	300	40
63		57-1/50 Whiting Bert L (Sadie M)		des AR 10/52			63	Lots 8-9-19 to 23 inc. Town Blk 40	~~40~~	40	91 05	SOLD 1953 SOLD 1952	50		50		50		50	600	50	600
64			3146-5/50 Loring Edward C				64	S92.5' Lots 11 to 20 1 Ac ±		33	91 12				150	400	150	400	150	400	150	860
65			8492-2/51 Miranda Minnie R				65	Lots 8, 9, 19 to 23 incl		43	91-12	SOLD 1953			200	200	200	200	200	200	200	400
66				17644-4/52 Kuhns Herman R (LaVern N)	corr des		66	E140' of N½ of Farm Lot	78		91-12						80		80	1000	80	1280
10				des 3010-1/52 Ferrell Wm M (Hertha S)		des 18452-17080-16608-4/53	(10)	Lots 8, 9, 19 to 23, Blk 36 - ~~Lots 8, 9, 17 to 28 (24) Blk 39 - Lots 17, 18, 24 to 28 Blk 40. 7 inc.~~			91 12								~~740~~	~~3960~~	260	500
67				3010-1/52 Childs Charles J (Alida F)			67	Blks 42-44-45 & Lots 1 to 7, 10 to 18, 24 to 28 Blk 43. 19 Ac ±			91-12						1900	1330	1900	1330	1900	1330
68					cor des 22166-7/52 Daniels Melton T (Naomi D)		68	Pors Lots 66 ~~+67~~ 71 beg 5' S of NW Cor Lot 66, S263.87 ~~Beg 263.13' N of SW Cor Lot 66, th E200' x S144'~~ x E200	66-67		91-12								180	1200	180	1200
						18452-4/53 Curtis M T (Florence V)	69	Lots 17 & 18 & 24 to 28		39	91-12										260	600
						17080-4/53 Ryker Mabel A	70	Lots 17 & 18 & 24 to 28		40	91-12										260	600
						16608-4/53 Hyer Roy J & McWilliams F W	71	Lots 8, 9, 19 to 23		39	91-12										260	700
						4307-1/54 Batteen Theo. J. (Lucille)	72	S½ of S½ Farm Lot 78		78	91-12										50 (~~100~~)	

BK. -- MAP -- PAGE
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RIVERSIDE COUNTY Real Property Ownership Record

LINE NO.	1949 ASSESSED TO	1950 ASSESSED TO	1951 ASSESSED TO	1952 ASSESSED TO	1953 ASSESSED TO	1954 ASSESSED TO	LINE NO.	DESCRIPTION	SECTION OR LOT	TWP. OR BLOCK	RANGE	SCHOOL DIST. CODE AREA	DATE SOLD FOR TAXES	1950 LAND	1950 IMP.	1950 T&V	1951 LAND	1951 IMP.	1951 T&V	1952 LAND	1952 IMP.	1952 T&V	1953 LAND	1953 IMP.	1953 T&V	1954 LAND	1954 IMP.	1954 T&V
								THE GARDEN SUBDIVISION MB 9/84				SAN JACINTO OUT Old City San Jacinto Levee District																
2			3785-1/51				2	Por lot 2 Beg 286' S of int ℄ 7th & Santa Fe W 185 S 50	5	2		91 11					80			80	250a		80	2250		80	2250	
3	Clary W M (Edna) 47660		Markham Grocery 7/51 des 3785-1/51	des M798-1/51			3	LOT 1 AND POR LOTS 2 AND 3 BEG NE COR LOT I S 300 FT X W 630 FT EXC BEG 70 FT W OF				91 11		300	2140		290	2140		290	2140		298	2148		290	1780	
4	Wilson Jack A (Thelma A) 2907-3/47				AR 152		4	NE COR LOT 3, S 150 FT X W 100 FT, 3.58 AC S 101 FT OF LOTS 2 AND 3 EXC W 15 FT OF LOT 3, 2.13 AC				91 11	SOLD 1951	150	270		150	1190		150	1190		150	1190		150	1050	
5	Priest Milton K (Helen L) 1183-3/46	des Cor. Ac					5	E 453 FT EXC N 650 FT OF E 163 FT AND EXC S 303 FT, 3.25 AC 4.30 Ac.	3			91 11		230	1390		230	1390		230	1390		230	1390		230	1390	
7	Sallee F M (Mary E) 46740	des Cor Ac 3789-3/49	Witmer Hubert E				7	N 606.23 FT OF LOT 4 AND W 15 FT OF N 606.23 FT OF LOT 3, 2.17 AC				91 11		450	1070		450	1070		450	1070		450	1070		450	1070	
8	Johannsen Louis V 923-12/48			53236-12/51 Johannsen Victor A (Power of Atty E)			8	EXC E 300 FT OF N 297.70 FT EXC POR IN ST 9.30 AC	5			91 11		600			600			600			600			600		
9	do			do			9	W 15 FT OF S 346.77 FT OF LOT 3 AND S 346.77 FT OF LOT 4, 3.70 AC				91 11		240			240			240			240			240		
10	Hancock A J 49807						10	BEG 330 FT S OF INT CL SANTA FE AVE AND 7TH ST S 350 FT X W 660 FT, LOT 2 AND 3 6.30 AC				91 11		450	640		450	1040		450	1040		450	1040		450	1040	
12	Beam Chester R (Louise) 2218-8/48						12	N 101 FT OF S 303 FT OF LOTS 2 AND 3 EXC W 15 FT OF LOT 3, 2.13 AC				91 11		150	300		150	720		150	720		150	810		150	810	
13	Wilson E H (Cecile) 246-12/47						13	N 101 FT OF S 202 FT OF LOTS 2 AND 3 EXC W 15 FT OF LOT 3, 2.13 AC				91 11		150	480		150	850		150	850		150	850		150	850	
15	Clary James L (Sarah M) 3609-3/48			des 1394-4/51, 1432-4/51 Johnson J Fred (Cora M)			15	POR LOT 3 BEG 70 FT W OF NE COR TH S 150 FT X W 100 FT	3			91 11		50	2000		50	3000		100	2000		100	2000		100	1580	
16	Sec Title Ins & Guar Co 2458-7/48	Cancel - This Included in line 8					16	POR LOT 3 FORMERLY SBE 804 33 23 PARCEL 11				91 11		—														
17	Carlin James V (Eva N) 3149-1/49	Farrell Wm M (Hortha S)	des 3485-8/50		Clary James L	Clary W M (Edna M) 29632-21-6/53	17	E 300 FT OF N 297.70 FT EXC POR IN ST 1.83 AC	5			91 11	SOLD 1951	200	300		180	300		180	—		190			90		
18		Willard Galen (Marie) 966-2/49			AR 452		18	E 75' of N 297.7' .50 Ac	5			91-05	SOLD 1954	100	100		100	100		100	100		100	100		100	100	
19			3485-8/50 Clary James J (Jessie M)		AR 452		19	W 75' of E 225' of N 297.7' .50 Ac	5			91 12	1954				100			100	600		100	600		100	690	
								S J L A FARM LOTS MB 8/357 SD				91 11																
20	Mc Euen Clark (Agnes L) 47517-45023						20	EXC 50 FT STRIP ON E, 40 AC				91 11		1200			1200			1200			1200			1200		
27	AT & SF RR						X 27	SBE 804 33 23 PARCEL 8	I 56 I 50			91 11																
28	do						X 28	SBE 804 33 23 PARCEL 9	I 50			91 11																
29	do						X 29	SBE 804 33 23 PARCEL 10	I 50			91 11																
30	do						X 30	SBE 804 33 23 PARCEL 11	I 50			91 11																
31	do						X 31	SBE 804 33 23 A PARCEL 1	I 50			91 11																
						Farrell Wm M (Hortha S) cor 5137-9/52	1/32	THE GARDEN SUB MB 9/84 W 75' of E 150' of N 297.7' Exc St	5			91-12											100			100		

RIVERSIDE COUNTY Real Property Ownership Record

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LINE NO.	1954 ASSESSED TO	1955 ASSESSED TO	1956 ASSESSED TO	1957 ASSESSED TO	1958 ASSESSED TO	1959 ASSESSED TO	DESCRIPTION	SECTION OR LOT	TWP. OR BLOCK	RANGE		LINE NO.	SCHOOL DIST. CODE AREA	DATE SOLD FOR TAXES	1955 LAND	1955 IMP.	1955 T&V	1956 LAND	1956 IMP.	1956 T&V	1957 LAND	1957 IMP.	1957 T&V	1958 LAND	1958 IMP.	1958 T&V	1959 LAND	1959 IMP.	1959 T&V
							SAN JACINTO OUT																						
							ESTUDILLO LAND AND WATER CO ADD MB 9/410 SD																						
2	Ferrell Wm M (Hertha) 45938						LOTS I TO 18 2.36 AC		26			2	91 12	Sold 1958 1957	940	13580		940	13580		940	14580		940	17080		880	17,770	
6	Freeman Chas A (Beulah V) 23421-5/23						LOTS I TO 20 EXC N 100 FT OF LOTS I TO 10 AND EXC S 92.5 FT OF LOTS 11 TO 20		33			6	91 12	SOLD 1955	60	520		150	520		150	1450		150	1450		150	1460	
7	Ferrett Charles E & Frederick A 237-1/49						N 100 FT OF LOTS I TO 10. 1.13 AC		33			7	91 12		140	100		200	100		200	100		200	100		200	100	
10	Ferrell Wm M (Hertha S) dec 3010-1/52						LOTS 8, 9 AND 19 TO 23 OF BLK 36		21			10	91 12	SOLD 1955	260	500		260	830		260	1620		210	1500		150	530	
11	Reynolds J Charles (Irene K)						BLKS 37, 38 AND LOTS I TO 7 AND LOTS 10 TO 16 OF BLK 36 AND LOTS I TO 7 AND LOTS 10 TO 16 OF BLK 39. 13.8 AC		13			11	91 12		1380	3500		1380	3500		1300			1300	3500		1300	3500	
12	Kisakabmes Ti Mitsukos) 3168-1/50						LOTS 17, 18, 24, 25, 26, 27, 28		36			12	91 12		220	530		220	530		220	530		220	530		220	530	
15	Lamb James W (Wellie) 28356 34357-8/58	Ferrell Wm M					E 30' of Lot 10 & W 100' of Lots 41 & 42 FARM LOT. 2.50 AC not incl in #200		10			15	91 05	1958	130	1070		80	—		—			180	2030		180	2030	
16	Kidwell Charles M 1951-8/51		Kidwell Joseph P (Arlene M)	Martinez Ol. C (Dolores R)	Hughes Gibbons C (Celia V)		FARM LOT. 2.50 AC		11			16	91 05		80	860		150	910		150	910		150	910		150	910	
17	Meyncke Glenn (Mabel G)						W 1/2 OF FARM LOTS 12 AND 17. 2.50 AC		12			17	91 05		100	1820		150	1820		150	1820		150	1820		150	1820	
18	Vavora James V 1251-6/49						FARM LOTS 13 AND 14. 5 AC					18	91 05		250	390		250	390		250	390		250	390		250	390	
19	McEuen Clark (Agnes L) 47525				McEuen Forrest total		FARM LOTS 15, 16, 22 TO 28 32 TO 40. 56 TO 60 72.50 AC					19	91 05		7250	400		7250	400		7250	400		7250	400		7250	400	
22	Brickey James E (Gertrude E) 1280-1/48 36397-9/58				Brickey Gertrude E	Haubert Grace W	E 1/2 OF LOTS 12 AND 17. 2.5 AC					22	91 05		120	310		150	310		150	310		150	310		150	310	
23	Kidwell Charles M 38056		Kidwell Joseph P (Arlene M)	Martinez Ol. C (Dolores R)	Hughes Gibbons C (Celia V)		FARM LOT 18. 2.50 AC					23	91 05		130			150			150			150			150		
24	Lamb James W (Wellie B) 3223-1/49			Ferrell William M		Craig Douglas L (Madeline J)	FARM LOT. 2.50 AC		19			24	91 05	SOLD 1957	120			120			120	1400		120	1400		170	1810	
25	Van Winkle Luther 47572						FARM LOTS 20, 29, 30, 31. 10 AC					25	91 05		1000			1000			1000			1000			1000		
28	McEuen Clark 28056				McEuen Agnes L		FARM LOT. 2.50 AC		21			28	91 05		250	100		250	100		250	100		250	100		250	100	
30	Lamb James W (Wellie)				Ferrell William	Ferrell Carl W & Kline Shirley	FARM LOTS 41 AND 42. 2 AC				.7 Ac	30	91 05	SOLD 1957	200	150		200			350			350			350		
31	Lamb James W (Wellie) 1787-7/48				Gardner Sidney E (Sue)	Ferrell Carl W & Kline Shirley	FARM LOTS 43. 44. 45. 3 AC		43		.5 Ac	31	91 05		80	400		80	400		150	400		150	400		150	50	
33	Sheppherd Winzra L 2283-1/46	Ferrell Wm M (Hertha S)					FARM LOT. 1 AC		46		.62 Ac	33	91 05	Sold 1956	160	1740		160	1820		300	1820		160	100		160	100	
34	Sheppherd William & Venice			Ferrell Wm (Hertha)		Hornlawrence E (Charlie G)	1 AC S 64' of 1st		47		.62 Ac	34	91 05	SOLD 1958	160	270		160	270		300	1100		160	3470		160	3470	
35	Sheppherd William & Venice 3223-1/49			Sheppherd William & (Venice M)			1 AC S 55'		48		.35 Ac	35	91 05	SOLD 1957	120			160			300	1080		300	820		170	870	
36	Van Winkle Luther 2697-9/46						FARM LOTS 49 TO 55, 7 AC					36	91 05		700	8870		700	8870		700	8870		700	8870		700	8870	
38	Kuhns Herman R (LaVern N)						FARM LOTS 70, 76 AND 77 AND S 144 FT OF LOT 64. 18.06 AC		65		7.63 Ac	38	91 12	SOLD 1955 1954	500	2320		500	5700		720	7770		1060	5490		1050	5490	
40	Larson Paul V (Jessie) 6933-3/61				Cazazza Philip J (Lillian)		FARM LOT 65. N 5 FT OF LOT 66 AND N 154 FT OF LOT 64		65			40	91 12		180	1620		450	1620		640	1620		640	1620		640	1620	
41	Kuhns Herman R (LaVern N) 772-12/46						S 144 FT EXC W 200 FT		66		1.51 Ac	41	91 12	SOLD 1955 1954	50			50			90	570		90	570		90	570	
43	Kuhns Herman R (LaVern N)						FARM LOTS 71 AND 72 EXC N 118.87 FT OF W 200 FT OF LOT 71					43	91 12	SOLD 1955 1954	140			140			510	990		260	990		260	990	
44	Reynolds J Charles (Irene K) 23333-4/61						FARM LOT. 1.25 AC		73			44	91 12		120			120			120			120			170		
45	Reynolds J Charles (Irene K)						FARM LOT. 1.25 AC		74			45	91 12		120			120			120			120			170		
46	Reynolds J Charles (Irene K)						FARM LOT. 2.28 AC		75			46	91 12		230			230			230			230			230		
47	Reynolds J Charles (Irene K) 41514						FARM LOTS 67, 68, 69, 4.77 AC					47	91 12		470			470			470			470			470		
49	Brown Ramon A (Blanche) 3565-1/46						FARM LOTS 82, 84, 88, 89 AND 90, 8.29 AC					49	91 12		500	1240		830	1240		830	1240		830	1240		830	1240	
50	Leatherman T G					Dalleen Theodore J (Lucille A)	N 1/2 OF S 1/2 FARM LOT 78					50	91 12		50			50			190			190			190		
51	Fruitvale Mutual Water Co 3102-8/49						FARM LOTS 79, 80, 2.20 AC					51	91 12		220			220			220			220			220		
52	Blume James G 2117-9/49				Sturbaum George E		FARM LOT		81			52	91 12		250			250			250			250			250		
53	Deade Frank H (Marie) 3413-1/52						I.25 AC		83			53	91 12		150	1630		150	1630		150	1630		150	1630		150	1630	
54	Childs Charles J (Alida)						FARM LOTS 85, 86, 87, 5 AC					54	91 12		500			500			500			500			520		
56	Fruitvale Mutual Water Co 3243-9/49						FARM LOTS 91 TO 95. 5 AC					56	91 12		500			500			500	2580		500	2580		500	2580	
58	Bailey Samuel T (Alma L) 2238-7/49						FARM LOTS 96, 97, 98, 99, 100, 5 AC					58	91 12		600	1820		600	1820		600	1820		600	1820		600	1820	
61	Leatherman T G & Pinkett ET ETs						N 1/2 OF FARM LOT 78 EXC E 140 FT					61	91 12	SOLD 1955	50	980		100	980		190	980		190	980		190	980	
59		Stout James E (Ruth E)			Contreras Chrence S (Clara N)		E 100' of W 200' .8 Ac		10			59	91 05		130	1500		130	1590		250	1590		250	1590		250	1590	
60		Ferrell Wm M (Hertha S)				Ferrell Carl W & Kline Shirley	S 69' of E 200' .37 Ac.		42			60	91 05	SOLD 1957	100	1500		100	1800		150	1800		150	1800		150	1800	

See Next Page

BOOK 21 MAP 22 PAGE ~~00~~ 000

RIVERSIDE COUNTY Real Property Ownership Record

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LINE NO.	1954 ASSESSED TO	1955 ASSESSED TO	1956 ASSESSED TO	1957 ASSESSED TO	1958 ASSESSED TO	1959 ASSESSED TO	DESCRIPTION	SECTION OR LOT	TWP. OR BLOCK	RANGE		LINE NO.	SCHOOL DIST. CODE AREA	DATE SOLD FOR TAXES	1955 LAND	1955 IMP.	1955 T & V	1956 LAND	1956 IMP.	1956 T & V	1957 LAND	1957 IMP.	1957 T & V	1958 LAND	1958 IMP.	1958 T & V	1959 LAND	1959 IMP.	1959 T & V
							SAN JACINTO OUT																						
							ESTUDILLO LAND AND WATER CO ADD MB 9/410 SD																						
62	Whiting Earl L Jennie T Z	Wheeler Lake & Wiroma		Young Ted			POR TOWN BLK 40 AND 41 BEG AT INT C/L 12TH ST AND W LINE LOT 8 BLK 40 EXT N TH W 1040 FT X S 209.42 FT EXC POR IN STS. 5 AC		91	12		62	91 12	SOLD 1958	300	40		500	120		500	120		500	120		500	120	
63	Whiting Bert L (Sadie M)						LOTS 8, 9, ~~19 TO 23~~ INCL TOWN BLK 40		91	12	SOLD 1953	63	91 12	SOLD 1953	150	600		60	20		60	20		60	20		60	20	
64	Loring Edward C	Loring Edward C					S 92.5 FT OF LOTS 1 TO 20. 1 AC M/L		91	12		64	91 12		120	860		210	430		210	430		210	430		210	430	
65	Miranda Minnie R						ESTUDILLO LAND & WATER CO ADD MB 9/410 SD / LOTS 8, 9 AND 19 TO 23		~~33~~ 43			65	91 12	1953	210	400		210	400		210	400		210	400		210	440	
66	Kuhns Herman R (Lavarn N)						E 140 FT OF N 1/2 OF FARM LOT 78		78			66	91 12	SOLD 1954 SOLD 1955 SOLD 1957	80	1280		80	1280		80	1280		80	1280		80	1280	
67	Childs Charles J (Alida F)						BLKS 42, 44, 45 AND LOTS 1 TO 7, 10 TO 18, 24 TO 28 OF BLK 43, 19 AC M/L					67	91 12		1900	1330		1900	630		1900	630		1900	630		1900	630	
68	Daniels Melton T (Naomi D)						POR LOTS 66 AND 71 BEG 5 FT S OF NW COR LOT 66 S 262.87 FT X E 200 FT					68	91 12		260	1720		290	1720		650	1720		650	1720		650	1720	
69	Curtis M T (Florence V)						LOTS 17, 18 AND 24 TO 28		39			69	91 12	SOLD 1957	260	600		260	600		260	600		260	600		260	600	
70	Ryker Mabel						LOTS 17, 18 ~~AND 24~~ TO 28		40			70	91 12		120	—		140			140			140			140		
71	Hyer Ray J & M H (Williams F W)						LOTS 8, 9, 19 TO 23		39			71	91 12		260	700		260	700		260	700		260	2760		260	2760	
72	Batteen Thos J (Lucille)						S 1/2 OF S 1/2 FARM LOT 78					72	91 12		50			50			190			190			190		
73		Phillipsen Jennie R	Phillipsen William G (Imogene)				lots 24, 25 & 26		40			73	91-12		90	600		90	600		90	600		90	600		90	600	
74		Whiting Jennie T Z					Lots 22-23		40			74	91 12		60	300		80	300		80	300		80	300		80	300	
75		Farrell Wm M					W 100' of Lots 41 & 42					75	91-05	SOLD 1958	240			240			250			150			150		
76		Snider Hiram V (Audrey C)					S 60'	43	~~40~~			76	91-05		80	500		80	750		150	750		150	750		150	750	
77		Cain James E					E 100' of W 593.5' & 150' of S 305' of E 150' of Lot 44 Lots 44 & 45 exc the S 539.5' of E 80' exc W 446'	45			.20Ac ±	77	91-05	SOLD 1957	180	900		180	1650		530	1770		150	2360		120	2740	
78		Hickey Luther F (Deborah)	Caruthers Joseph A (Marion L)		Caruthers Joseph A	Robertson Tom (Amy Mae)	S 539.5' of E 80'	.2 Ac	45	~~45~~		78	91-05		80	1500		100	1680		150	1680		150	1680		150	1640	
79			Ash Kenneth D (Betty L)				Lots 19-20-21		40			79	91-12					120	580		120	580		120	580		120	580	
80			Barton JC (Zella M)				W 100' Farm Lot		10			80	91-05								250	1070		250	1070		250	1070	
81			Harwil Corp				lots 1 to 5 incl	.75 Ac ±	36			31	91-12	SOLD 1958							250	3500		250			250		
82			Hyer Ray J (Faye)				E 70' of W 270'	.4 Ac ±	10			82	91-05								180	1540		180	1540		180	1540	
83			Gitchel Calvin L (Cheryl)		Gitchel Calvin L (Cheryl)		Portion of Blk 72 Beg 292.87 S & 14 W Cor of Blk 66 N 5.5 E 129		72	71	.15 Ac	83	91-12								100	2240		100	2240		100	2240	
84			Lynch Lonzo O (Mamie L)				Portion of Blk 72 Beg 34.37 S of NW Cor of Blk 66 S 5.5 E 129		72		.1 Ac ±	84	91-12								100	2360		100	2360		100	2360	
85					Adams Lawrence (Helen)	Winter Lucile M	Lots 22 & 23		36		.38 Ac	85	91-12	1955										100	900		100	900	
86					Nalley H C (Marjorie)		N 55' Farm lot	47	~~49~~ 49		.38 Ac	86	91-05											140	1550		140	1550	
87					Ferrell Carl A		N 55'	46	~~46~~		.38 Ac	87	91-05	1956										140	1820		140	1820	
88					Long Gilbert S (Mae)		E 75' of W 150' Blk 72 2.45				.41 Ac ±	88	91-05	SOLD 1957										190	990		190	990	
89					Bustos John R (Salome P)		W 75' of Blks 44 & 45				.41 Ac ±	89	91-05	SOLD 1957										190	890		190	840	
90					Maddox Samuel (Dillard A)			9	36		.15 Ac ±	90	91-12											50	400		50	400	
91					Bane G S (Gwendolyn E)		E 150' ex S 10.5'	44	~~44~~		.50 Ac ±	91	91-05											300			270	900	
92						Mathes Norman J D (Bettylou)		8	36			92	91-12														80	120	
							Estudillo Land & Water Co Add MB 9/410 SD																						
94						Kline Chester M Jr (Shirley R)	N 64'	.62 Ac	48	~~48~~		94	91-05	SOLD 1958													130			
95						Ferrell Hertha S			7	26	.13 Ac	95	91-12														80	320	

RIVERSIDE COUNTY Real Property Ownership Record

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LINE NO.	1954 ASSESSED TO	1955 ASSESSED TO	1956 ASSESSED TO	1957 ASSESSED TO	1958 ASSESSED TO	1959 ASSESSED TO	DESCRIPTION	SECTION OR LOT	TWP. OR BLOCK	RANGE	LINE NO.	SCHOOL DIST. CODE AREA	DATE SOLD FOR TAXES	1955 LAND	1955 IMP.	1955 T&V	1956 LAND	1956 IMP.	1956 T&V	1957 LAND	1957 IMP.	1957 T&V	1958 LAND	1958 IMP.	1958 T&V	1959 LAND	1959 IMP.	1959 T&V
												SAN JACINTO OUT																
							THE GARDEN SUBDIVISION MB 9/84																					
2	Markham Orman 3985-1/51				Hendershott Hendrum M Caroline L	439-1/15	POR LOT 2 BEG 280 FT S OF INT C/L 7TH AND SANTA FE W 150 FT X S 50 FT EXC ST	2			2	91	12		80	2250		100	2250		100	2250		100	2250		100	2250	
3	Clary W M (Edna) 47660	des 63338-1/55	des $2306-10/54			des 173478-5/59	LOT 1 AND POR LOT$ 2 AND 3 BEG NE COR LOT 1 S 300 FT X W 530 FT EXC BEG 280 FT S OF C/L 7TH AND SANTA FE W 150 FT X S 50 FT EXC BEG 70 FT W OF NE COR LOT 3, S 150 FT X W 100 FT AND EXC N 30 FT IN 7TH ST 3.81 AC	3			3	91	12		230	4040		440	4040		600	5250		600	6730		440	6610	
4	Wilson Jack A (Thelma A) R7960 2907-3/57	R1156	des 318865-5/56 R1157				S 101 FT OF LOT$ 2 AND 3 EXC W 15 FT OF LOT 3. 2.13 AC				4	91	12	SOLD 1954 SOLD 1957	150	1050		160	1050		160	1050		160	1050		160	1050	
5	Priest Milton K (Helen L) 1183-3/46						E 453 FT EXC N 650 FT OF E 163 FT AND EXC S 303 FT. 4.30 AC	3			5	91	12		230	1390		430	1390		430	1390		430	1390		430	1390	
7	Witmer Hubert E 3959-3/47						N 606.23 FT OF LOT 4 AND W 15 FT OF N 606.23 FT OF LOT 3. 6.77 AC				7	91	12		450	1070		670	1070		670	1070		670	1070		670	1070	
8	Johannsen Victor A (Dorothy E) 53236-1/51	des 64912-12/54					EXC E 300 FT OF N 297.70 FT EXC POR IN ST 9.30 AC	5			8	91	12		240			350			350			350			350		
9	Johannsen Victor A (Dorothy E)						W 15 FT OF S 346.77 FT OF LOT 3 AND S 346.77 FT OF LOT 4. 3.70 AC				9	91	12		240			330			330			330			330		
10	Hancock A J 47877	des 64912-12/54	Thomas Allan B. (Mt Ferry)				BEG 330 FT S OF INT CL SANTA FE AVE AND 7TH ST S 350 FT X W 660 FT. LOT 2 AND 3 6.30 AC				10	91	12		450	1110		450	1110		450	1110		450	1110		450	1110	
12	Beam Chester R (Louise) 2218-3/46	R1156		Whitrock Alton (Athalbine) 70 Eq. 1957		Bashore Geo D (Marion F) R1156	N 101 FT OF S 303 FT OF LOTS 2 AND 3 EXC W 15 FT OF LOT 3. 2.13 AC				12	91	12	SOLD 1955 SOLD 1957	150	810		350	810		350	810		350	810		350	810	
13	Wilson E H (Cecile) 246-12/47		des 318865-5/56				N 101 FT OF S 202 FT OF LOT$ 2 AND 3 EXC W 15 FT OF LOT 3. 2.13 AC				13	91	12		150	900		160	900		160	900		160	800		160	900	
15	Johnson J Fred (Cora M) 15939-9/51				Johnson J. Fred T.S.T. 352285-7/47		POR LOT 3 BEG 70 FT W OF NE COR TH S 150 FT X W 100 FT EXC N 30 FT IN ST	3			15	91	12		100	1590		200	1590		200	1590		200	1590		200	1590	
17	Clary W M (Edna M) 23632-31-4/63			Ramirez Sofia 13333-3/57 Gr 68-07-9/57 R3156		10/59 Oriol Anita P 1933C-3/58	W 75 FT OF E 300 FT OF N 297.70 FT EXC POR IN ST	5			17	91	12	SOLD 1958 SOLD 1957	90			170			170	1770		170	1770		170	1770	
18	Willard Glen (Myrtle) 466-6/41						E 75 FT OF N 297.7 FT	5			18	91	12		100	1480		170	1560		170	1710		170	1760		170	1760	
19	Clary James J (Jessie M) 3681-6/55						W 75 FT OF E 225 FT OF N 297.70 FT				19	91	12		100	910		170	1180		170	1180		170	1180		170	1180	
16	Marquez-V Joaquin (Grace)		5236C-10/57			Cor 4/59	Pcl Lot 2 & 3 Beg 150 W of NE Cor Lot 3 S 230 x E 400' x W 330' E to W'ly line of N 150' S J L A FARM LOTS MB 8/357 SD	163			16	91-12		200	40		600	40		750	40		750	40		750	40	
20	McEuen Clark (Agnes L) 49519 45045				McEuen Forest et al	AC 2.57 Ft 3-29-59 Ins 73811 39-11-59	EXC 50 FT STRIP ON E. 40 AC	156			20	91	05		4000			4000			4200			4000			4000		
27	AT & SF RR						SBE 804 33 23 PAR 8				27	91	12								—			—				
28	AT & SF RR						SBE 804 33 23 PAR 9				28	91	12								—			—				
29	AT & SF RR						SBE 804 33 23 PAR 10				29	91	12								—			—				
30	AT & SF RR						SBE 804 33 23 PAR 11				30	91	12								—			—				
31	AT & SF RR 51340-14/52						SBE 804 33 23A PAR 1				31	91	12								—			—				
32	Farrell Wm M Uhertha S	Hubbard Alta (Alma) 30872-6/54	R3156				W 75 FT OF E 150 FT OF N 297.70 FT EXC POR IN ST	5			32	91	12	1961	100			170			170			170	440		170	440	
33		Morgan Melvin H (Dorothy M) 64912-11/54			Minor James (Jessie) 25539-4/55	C by B of S 59	Lot 5 exc E 300 of N 297.7 & exc S 320	5			33	91	12	SOLD	520	2980		730	2900		730	7750		730	7950		730	7950	
		Hendershott Woodrow N (Caroline L) 6588-1/57					Pcl lots 2 & 3 beg 230' S of int & Santa Fe & 7th St, W 660' S 100' E 510' N 30' E 150' N to POB 1.3 Ac ±				34	91-12		200			200			200			200	720		200	720	
		Howerton Franklin F (Marjoan) 31886-6/56			Malara Vincent B (Anne Belle) 49854-11/56		S. 202' of lots 2 & 3 exc E 300' & exc W 15' of Lot 3 2.78 Ac. ±	2,3			35	91-12					250	50		250			250			250		
37		AT & SF R/R				Peterson Richard L & Clary W. M. AC 7357-3/59	SBE 804-33-23 Pcl Par 3 Min R/R only Gardena Sub MB 8/84 Beg 90 W of int of E'ly R/W of SF & Santa Fe Ave, Th W 65' x S 140' exc ST being Pcl Lots 1 & 2				36	91-12									—			—				
											37	91-12															160	830

RIVERSIDE COUNTY Real Property Ownership Record

BOOK 21 MAP 22 PAGE 000

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DESCRIPTION	SECTION OR LOT	TWP. OR BLOCK	RANGE	SCHOOL DISTRICT CODE AREA	YEAR SOLD FOR TAXES	LINE NO.	1960 ASSESSED TO	ASSESSED TO 1961	ASSESSED TO 1962	ASSESSED TO 1963	ASSESSED TO 1964	1960 LAND	1960 IMP.	1960 T&V	1961 LAND	1961 IMP.	1961 T&V	1962 LAND	1962 IMP.	1962 T&V	1963 LAND	1963 IMP.	1963 T&V	1964 LAND	1964 IMP.	1964 T&V
FERRELL WM M & HERTHA ESTUDILLO LD & WATER CO ADD MB 9/410 SD LOTS ~~A~~ TO 18 ~~EXC LOT 7 2.23 AC~~		26		9112-21-22-000-02 SOLD 1962 1958								880	17770		350	900										
FREEMAN CHAS A & BEULAH V ESTUDILLO LD & WATER CO ADD MB 9/410 SD LOTS 1 TO 20 EXC N 100' OF LOTS 1 TO 10 & EXC S 92.5' OF LOTS 11 TO 20		33		9112-21-22-000-06								150	1650		150	1650										
FERRETT CHARLES E & FREDERICK A ESTUDILLO LD & WATER CO ADD MB 9/410 SD N 100' OF LOTS 1 TO 10, 1.13 AC		33		9112-21-22-000-07								200	100		200	100										
FERRELL WM M & HERTHA S ~~ESTUDILLO LD & WATER CO ADD MB 9/410 SD~~ LOTS 19 TO 21 OF BLK 36 ~~9/410 SD EXC W 50' Theref~~				~~9112~~-21-22-000-10 SOLD 1959				Ferrell Herthas				150	550		150	550										
REYNOLDS J CHARLES & IRENE K ESTUDILLO LD & WATER CO ADD MB 9/410 SD BLKS 37 & 38 & LOTS 6 & 7 & LOTS 10 TO 16 OF LBK 36 & LOTS 1 TO 7 & LOTS 10 TO 16 OF BLK 39 13.05 AC M/L				9112-21-22-000-11						Reynolds Irene K Sep		1300	3500		1300	3500										
KISAKA JAMES T & MITSUKO S ESTUDILLO LD & WATER CO ADD MB 9/410 SD LOTS 17, 18, 24, 25, 26, 27 & 28		36		~~9112~~-21-22-000-12								220	530		220	530										
MC WILLIAMS F W & UNDINE ESTUDILLO LD & WATER CO ADD MB 9/410 SD E 30' OF LOT 10 & W 40' OF LOTS 41 & 42	10			9105-21-22-000-15				Grabler Laurence				180	2030		180	2030										
HUGHES GIBBONS C & LETA V ESTUDILLO LD & WATER CO ADD MB 9/410 SD FARM LOT, 2.50 AC	11			9105-21-22-000-16				Graham Stanley D (Loretta E)				150	910		150	1090										
MEYNCKE Z GLENN & MABEL G ESTUDILLO LD & WATER CO ADD MB 9/410 SD W 1/2 OF FARM LOTS 12 & 17, 2.50 AC	12			9105-21-22-000-17				Meyncke Z Glenn				160	1820		150	1820										
~~VOBORA JAMES V~~ ~~ESTUDILLO LD & WATER CO ADD MB 9/410 SD~~ ~~FARM LOTS 13 & 14, 5 AC~~				~~9105-21-22-000-18~~					to 21-22-001-41			250	390		250	390										
MC EUEN FOREST ET AL ESTUDILLO LD & WATER CO ADD MB 9/410 SD FARM LOTS 15, 16, 22 TO 28, 32 TO 40, 56 TO 60 72.50 AC				9105-21-22-000-19						Ogburn E M et al		7250	400		7250	400										
HAUBERT GRACE W ESTUDILLO LD & WATER CO ADD MB 9/410 SD E 1/2 OF LOTS 12 & 17, 2.5 AC				9105-21-22-000-22				Graham Stanley D (Loretta E)				160	310		150	310										
HUGHES GIBBONS C & LETA V ESTUDILLO LD & WATER CO ADD MB 9/410 SD FARM LOT 18, 2.50 AC				9105-21-22-000-23				Graham Stanley D (Loretta E)				150			150											
CRAIG DOUGLAS L & MADELINE J ESTUDILLO LD & WATER CO ADD MB 9/410 SD FARM LOT, 2.50 AC	19			9105-21-22-000-24								120	1810		120	1810										
VAN WINKLE LUTHER ESTUDILLO LD & WATER CO ADD MB 9/410 SD FARM LOTS 20, 29, 30 & 31, 10 AC				9105-21-22-000-25				Oswald Charles et al				1000			1000											
MC EUEN AGNES L ESTUDILLO LD & WATER CO ADD MB 9/410 SD FARM LOT, 2.50 AC	21			9105-21-22-000-28						Ogburn E M et al		250	100		250	100										
FERRELL CARL N & KLINE SHIRLEY ESTUDILLO LD & WATER CO ADD MB 9/410 SD E 200' OF LOT 41 & E 200' OF N 50' OF LOT 42				9105-21-22-000-30 1957								550			550											
FERRELL CARL N & KLINE SHIRLEY ESTUDILLO LD & WATER CO ADD MB 9/410 SD N 59'	43			9105-21-22-000-31 1957								150	50		150											
Estudillo Ld & Water Co Add MB 9/410 SD S 85' of Lots 10 To 16 BLK 40 Also S 85' of Lots 13 To 24 BLK 41				91-12 32 SOLD 1962				Ferrell William M.	Childs Charles J (Alice F) N																	

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RIVERSIDE COUNTY Real Property Ownership Record

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DESCRIPTION	SECTION OR LOT	TWP. OR BLOCK	RANGE	SCHOOL DISTRICT CODE AREA	YEAR SOLD FOR TAXES	LINE NO.	1960 ASSESSED TO	ASSESSED TO 1961	ASSESSED TO 1962	ASSESSED TO 1963	ASSESSED TO 1964	1960 LAND	1960 IMP.	1960 T&V	1961 LAND	1961 IMP.	1961 T&V	1962 LAND	1962 IMP.	1962 T&V	1963 LAND	1963 IMP.	1963 T&V	1964 LAND	1964 IMP.	1964 T&V
FERRELL WILLIAM E & HERTHA S ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9105-21-22-000-33	SOLD 1962 EXMPT			F1/60		F1/63		160	100		160	100										
FARM LOT EXC N 55'	46				1956																					
HORN LAWRENCE E & CHARLES S ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9105-21-22-000-34					23745-3/61 Claus Evelyn M			160	3470		160	3470									
S 64' OF LOT	47																									
SHEPHERD WILLIAM F & VENICE M ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9105-21-22-000-35			R 1/60		73951-9/61 Ferrell WM			110	820		110	820									
S 55'	48				1958																					
VAN WINKLE LUTHER ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9105-21-22-000-36				68112-65-1111-7/60 Oswald Charles et al	44448-64-44497-7/64			700	8870		700	8870									
FARM LOTS 49 TO 55, 7 AC																										
KUHNS HERMAN R & LA VERN N ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-38			R 1/59 40 AC 1/2					990	7880		990	10700									
exc beg NE NW NW cor th N 165' X E 270' E, FARM LOTS 70, 76 & 77 & S 144' OF LOT 64 EXC BEG																										
also S 1/2 of Lot 71 & S 45' of Lot 72 NW COR OF S 144' OF LOT 64 S 262.87' X E 170' M/L,																										
6.87 ~~7.03~~ AC					1958																					
CASAZZA PHILIP J & LILLIAN ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-40			76355-7/63 Roper Floyd (Esther M)					640	1620		640	1620									
FARM LOT 65, N 5' OF LOT 66 & N 154' OF LOT 64																										
ALSO LOT 2 AMD MAP ESTUDILLO LD & WATER CO ADD																										
MB 29/37																										
RAINEY RICHARD H & MARGIE ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-41								90	590		90	590									
POR LOTS 64, 66, 70 & 71 BEG 5' S & 200' E OF NW COR																										
LOT 66 E 250' X S 262.87', 1.51 AC																										
KUHNS HERMAN R & LA VERN N ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-43			414-5m435-1/60 Lynch L O (Married)					230			230											
Br FARM LOTS ~~71~~ 72 & ~~72~~ 71 EXC N 118.87' OF LOT 71 & Beg 129' E of NW cor Lot 72, th E 430' E X S 115'																										
EXC BEG 292.87' S OF NW COR LOT 66 TH S 105' X E 129' 1.14 AC I																										
REYNOLDS J CHARLES & IRENE K ESTUDILLO LD & WATER CO ADD MB 9/410 SD				1002-21-22-000-44						Reynolds J Charles sep 41198 5/63		120			120											
FARM LOT, 1.25 AC	73																									
REYNOLDS J CHARLES & IRENE K ESTUDILLO LD & WATER CO ADD MB 9/410 SD				1002-21-22-000-45						Reynolds J Charles sep 41198 5/63		120			120											
FARM LOT, 1.25 AC	74																									
REYNOLDS J CHARLES & IRENE K ESTUDILLO LD & WATER CO ADD MB 9/410 SD				1002-21-22-000-46						Reynolds J Charles sep 41198 5/63		230			230											
FARM LOT, 2.28 AC	75																									
REYNOLDS J CHARLES & IRENE K ESTUDILLO LD & WATER CO ADD MB 9/410 SD				1002-21-22-000-47						Reynolds J Charles sep 41198 5/63		470			470											
FARM LOTS 67, 68 & 69, 4.77 AC																										
BROWN ROMEO A & BLANCHE ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-49								830	1240		830	1240									
FARM LOTS 82, 84, 88, 89 & 90, 8.29 AC																										
BATTEEN THEODORE J & LUCILLE A ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-50				Batteen Theodore J 7255-5/63	Comb to 23357-72 & 3 41198.32 Y 65-66 Manbee Geo E (Jean)			190			190										cancel	
N 1/2 OF S 1/2 FARM LOT 78																										
FRUITVALE MUTUAL WATER CO ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-51								220			220											
FARM LOTS 79 & 80, 2.20 AC																										
STURBAUM GEORGE E ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-52								250			250											
FARM LOT	81																									
DUEDE FRANK H & MARIE ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-53								150	1630		150	1630										
1.25 AC	83																									

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DESCRIPTION	SECTION OR LOT	TWP. OR BLOCK	RANGE	SCHOOL DISTRICT CODE AREA	YEAR SOLD FOR TAXES	LINE NO.	1960 ASSESSED TO	ASSESSED TO 1961	ASSESSED TO 1962	ASSESSED TO 1963	ASSESSED TO 1964	1960 LAND	1960 IMP.	1960 T&V	1961 LAND	1961 IMP.	1961 T&V	1962 LAND	1962 IMP.	1962 T&V	1963 LAND	1963 IMP.	1963 T&V	1964 LAND	1964 IMP.	1964 T&V
CHILDS CHARLES J & ALIDA ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-54								500			520											
FARM LOTS 85, 86 & 87, 5 AC																										
FRUITVALE MUTUAL WATER CO ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-56								500	7780		560	12850										
FARM LOTS 91 TO 95, 5 AC																										
JOHANNSEN LOUIS J & GWENDOLYN H ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-58				Hards Mildred B 59.58%				600	1820		600	1820										
FARM LOTS 96, 97, 98, 99 & 100, 5 AC																										
CONTRERAS CLARENCE S & CLARA M ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9105-21-22-000-59						Marsh Thurston E (Frankie J) 22.846%		250	1540		250	1570										
E 100' OF W 200'	10																									
FERRELL CARL N & KLINE SHIRLEY ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9105-21-22-000-60								150	1800		150	1840										
S 69' OF E 200'	42				1958																					
LEATHERMAN T G & PUCKETT TINY E TRS ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-61					Cor N 2038-1/49 United Pentecostal Church of Am et al			190	980		190	980										
N 1/2 OF FARM LOT 78 EXC E 140'																										
YOUNG TED ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-62								500	220		550	220										
POR TOWN BLK 40 & 41 BEG AT INT CL 12TH ST & W LN																										
LOT 8 BLK 40 EXT N TH W 1040' X S 209.42'																										
EXC POR IN STS, 5 AC																										
WHITING BERT L & SADIE M ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-63 SOLD 1960								60	20		60	20										
LOTS 8 & 9 TOWN BLK 40																										
LORING EDWIN C AMD MAP POR ESTUDILLO LD & WATER ADD MB 29/37	1			9112-21-22-000-64								210	430		210	430										
MIRANDA MINNIE R ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-65 SOLD 1959								210	400		210	400										
LOTS 8 & 9, 19 TO 23		43																								
KUHNS HERMAN R & LA VERN N ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-66	1969							80	2280		80	2260										
E 140' OF N 1/2 OF FARM LOT 78																										
CHILDS CHARLES J & ALIDA F ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-67								1900	630		1900	630										
BLKS 42, 44 & 45 & LOTS 1 TO 7, 10 TO 18, 24 TO 28 OF BLK 43, 19 AC M/L																										
DANIELS MELTON T & NAOMI ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-68								650	1890		650	1890										
POR LOTS 66 & 71 BEG 5' S OF NW COR LOT 66																										
S 262.87' X E 200'																										
CURTIS M T & FLORENE V ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-69								260	790		260	790										
LOTS 17 & 18 & 24 TO 28		39																								
KIRKBY SAMUEL E & RUTH A ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-70								140			140											
LOTS 17, 18, 27 & 28		40																								
MARKHAM ORMAN & IRENE B ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-71 SOLD 1962						Welch Eugene (Carol J)		260	3400		150	1340										
LOTS 8, 9, 19 TO 23		39																								
BATTEEN THEODORE J & LUCILLE ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-72				Batteen Theodore		Mabee Geo E (Jean)		190			190											
S 1/2 OF S 1/2 FARM LOT 78																										
MULLIGAN WILLIAM G & IMOGEN D ESTUDILLO LD & WATER CO ADD MB 9/410 SD				9112-21-22-000-73								90	600		90	600										
LOTS 24, 25 & 26		40																								

BOOK 21 MAP 22 PAGE 000

RIVERSIDE COUNTY Real Property Ownership Record

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DESCRIPTION	SECTION OR LOT	TWP. OR BLOCK	RANGE	SCHOOL DISTRICT CODE AREA	YEAR SOLD FOR TAXES	LINE NO.	1960 ASSESSED TO	ASSESSED TO 1961	ASSESSED TO 1962	ASSESSED TO 1963	ASSESSED TO 1964	1960 LAND	1960 IMP.	1960 T&V	1961 LAND	1961 IMP.	1961 T&V	1962 LAND	1962 IMP.	1962 T&V	1963 LAND	1963 IMP.	1963 T&V	1964 LAND	1964 IMP.	1964 T&V
WHITING JENNIE T Z ESTUDILLO LD & WATER CO ADD MB 9/410 SD LOTS 22 & 23		40		9112-21-22-000-74								80	300		80	300										
FERRELL WILLIAM M ESTUDILLO LD & WATER CO ADD MB 9/410 SD E 60' OF W 100' OF BLKS 41 & 42				9105-21-22-000-75 SOLD 1959						P 63		150			150											
SHEPPHERD WINONA L ESTUDILLO LD & WATER CO ADD MB 9/410 SD S 60'	43			9105-21-22-000-76								150	750		150	750										
HARPER ELDEN E & ALICE J ESTUDILLO LD & WATER CO ADD MB 9/410 SD E 150' OF N 59.5' ALSO S 10.5' OF E 150' OF LOT 44 .20 AC M/L	45			9105-21-22-000-77						Harper Elden E 737 D 0631-1/63 ✓		120	2740		120	3150										
ROBERSON TOM & AMY MAE ESTUDILLO LD & WATER CO ADD MB 9/410 SD S 59.5' OF E 150'	45			9105-21-22-000-78 SOLD 1962			Margaret Maria L 87425-9/62 ✓					150	1680		150	1680											
ASH KENNETH D & BETTY L ESTUDILLO LD & WATER CO ADD MB 9/410 SD LOTS 19, 20 & 21		40		9112-21-22-000-79 SOLD 1959					R 1/62	Cooper J.F. & Philippi Marian E 41-0548-44-555-7/62 ✓		120	580		120	580											
BARTON J C & ZELLA M ESTUDILLO LD & WATER CO ADD MB 9/410 SD W 100' FARM LOT	10			9105-21-22-000-80								250	1070		250	1070										
WARWIL CORP ESTUDILLO LD & WATER CO ADD MB 9/410 SD LOTS 1 TO 5 INCL		36		1002 12 ~~9112~~-21-22-000-81 SOLD 1951 1958				E 5/61	R 1/62 Reynolds J. Charles (Irene K)	Reynolds Irene K. 41189 9/62 ✓		250			250											
HYER ROY J & FAYE ESTUDILLO LD & WATER CO ADD MB 9/410 SD E 70' OF W 270'	10			9105-21-22-000-82						Allison Clarence S (Merle O) 95053 9/62 ✓		180	1540		180	1540										
GITCHEL CALVIN L & BEATRICE B ESTUDILLO LD & WATER CO ADD MB 9/410 SD POR BLKS 71 & 72 BEG 292.87' S OF NW COR BLK 66 TH S 52.5' X E 129'				9112-21-22-000-83								100	2240		100	2240										
LYNCH LONZO O & MAMIE L ESTUDILLO LD & WATER CO ADD MB 9/410 SD POR BLK 72 BEG 345.37' S OF NW COR BLK 66 TH S 52.5' X E 129'				9112-21-22-000-84								100	2360		100	2360										
WINTER LUCILE M ESTUDILLO LAND & WATER CO ADD MB 9/410 SD LOTS 22 & 23		36		1002 17 ~~9112~~-21-22-000-85								100	900		100	900										
NALLEY H C & MARJORIE ESTUDILLO LAND & WATER CO ADD MB 9/410 SD N 55' FARM LOT	47 ✓	~~47~~		9105-21-22-000-86 148			R 7/60 Kline Chester (Shirley) 19796 3/60 ✓					140	1550		140	1550											
FERRELL CARL N ESTUDILLO LAND & WATER CO ADD MB 9/410 SD N 55'	46 ✓	~~46~~		9105-21-22-000-87 1956					R 60			140	2250		140	2250										
LONG GILBERT S & MAE ESTUDILLO LD & WATER CO ADD MB 9/410 SD E 75' OF W 150' BLKS 44 & 45				9105-21-22-000-88								190	890		190	890										
BUSTOS JOHN R & SALOME R ESTUDILLO LD & WATER CO ADD MB 9/410 SD W 75' OF BLKS 44 & 45				9105-21-22-000-89								190	890		190	890										
MADDOX SAMUEL D & HARRIETT A ESTUDILLO LD & WATER CO ADD MB 9/410 SD	9	36		1002 27 ~~9112~~-21-22-000-90			Gene Minnie M. 75284 9/59 ✓			Allen Fred W 103436-11/62 ✓		50	530		50	530										
BONE G S & GWENDOLYN E ESTUDILLO LD & WATER CO ADD MB 9/410 SD E 150' EXC S 10.5' .80 AC	44 ✓	~~44~~		9105-21-22-000-91								270	900		270	900										
MATHES NORMAN J D & BETTY LOU ESTUDILLO LAND & WATER CO ADD MB 9/410 SD	8	36		1002 27 ~~9112~~-21-22-000-92 1959			E 9/59					80	1210		80	1430										

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DESCRIPTION	SECTION OR LOT	TWP. OR BLOCK	RANGE	SCHOOL DISTRICT CODE AREA	YEAR SOLD FOR TAXES	LINE NO.	1960 ASSESSED TO	ASSESSED TO 1961	ASSESSED TO 1962	ASSESSED TO 1963	ASSESSED TO 1964	1960 LAND	1960 IMP.	1960 T&V	1961 LAND	1961 IMP.	1961 T&V	1962 LAND	1962 IMP.	1962 T&V	1963 LAND	1963 IMP.	1963 T&V	1964 LAND	1964 IMP.	1964 T&V
KLINE CHESTER M JR & SHIRLEY R ESTUDILLO LAND & WATER CO ADD MB 9/410 SD N 64'	48 ✓	43		9105-21-22-000-94	1958		R 1/60	R 1/61 4238-3/61 Ferrell Wm ✓				130			130	1500										
FERRELL HERTHA S ESTUDILLO LAND & WATER CO ADD MB 9/410 SD	7	26		9112-21-22-000-95	1958		R 1/60	17651-3/61 Ferrell Carl N (Julia) ✓		R 1/63		80	320		80	5370									
SOLD 1961																										
Estudillo Land & Water Co Add MB 9/410 SB Lots 1, 2, 3 & 10 to 18 E 8.5' of Lot 3		26		91-12-21-22-000-96				dec 40182-dec 40179-40881-3/60 Ferrell William M (Sep) ✓		R 1/63					30											
SOLD 1962																										
Estudillo Land & Water Co Add MB 9/410 SB Lots 10 to 18		26		91-12-21-22-000-97				40179-3/60 Stone Charles E (Genevieve H) ✓							640	9600									
Estudillo Land & Water Co Add MB 9/410 SB Lots 1 & 2 & 38.5' of Lot 3		26		91-12-21-22-000-98				40182-3/60 McOwen Sherwood & Hathaway R ✓							360	2600									
Estudillo Ld & Water Co Add M.B. 9/410 S.B. S 66' of Lots 8 & 9, S 16' of Lot 21, Lots 22 & 23		39		1002 91-12-21-22-000-99				3942-3/61 English Roy E (Margaret E) ✓							180	2060									

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HENDERSHOTT WOODROW M & CAROLINE L GARDEN SUB MB 9/84				9112-21-22-001-02								100	2250		100	2250										
POR LOT 2 BEG 280' S OF INT CL 7TH & SANTA FE																										
W 150' X S 50' EXC ST	2																									
Parlets 182 of CLARY W M & EDNA GARDEN SUB MB 9/84				9112-21-22-001-03			Clary Edna					440	6010		870	5200										
~~LOT 1 & POR LOT 2 BEG NE COR LOT 1, S 230' X W 260'~~ N 70', E 170', N 160' E to POB exc ST'S ~~EXC BEG 90' W OF INT CL 7TH ST & SANTA FE AVE~~ ~~TH W 65' X S 160', .95 AC M/L~~																										
WILSON JACK A & THELMA A GARDEN SUB MB 9/84				9112-21-22-001-04								160 ~~80~~	1050		160	1050										
S 101' OF E ~~300'~~ 150' OF LOT 2																										
PRIEST MILTON K & HELEN L GARDEN SUB MB 9/84				9112-21-22-001-05								430	1800		430	1800										
E 453' EXC N 650' OF E 163' & EXC S 303', 4.30 AC	3																									
WITMER HUBERT E GARDEN SUB MB 9/84				9112-21-22-001-07						Wilmer Eva J		670	1070		670	1070										
N 606.23' OF LOT 4 & W 15' OF N 606.23' OF LOT 3																										
6.77 AC																										
JOHANNSEN VICTOR A & DOROTHY E GARDEN SUB MB 9/84				9112-21-22-001-08								350			350											
S 320', 3.9 AC	5																									
JOHANNSEN VICTOR A & DOROTHY E GARDEN SUB MB 9/84				9112-21-22-001-09								330			330											
W 15' OF S 346.77' OF LOT 3 & S 346.77' OF LOT 4																										
3.70 AC																										
THOMAS ALLAN B & M FAYE GARDEN SUB MB 9/84				9112-21-22-001-10								450	1110		450	1110										
BEG 330' S OF INT CL SANTA FE AVE & 7TH ST																										
S 350' X W 660', LOTS 2 & 3, 6.30 AC																										
~~BASHORE GEO D & MARION F~~ ~~GARDEN SUB MB 9/84~~				9112-21-22-001-12					To 21-22-001-43			350	810		350	810										
~~N 101' OF S 303' OF LOTS 2 & 3 EXC W 15' OF LOT 3~~ ~~2.13 AC~~																										
WILSON E H & CECILE GARDEN SUB MB 9/84				9112-21-22-001-13			Kellmann Walkemar (Eugenie)					160	900		160	900										
N 101' OF S 202' OF E 300' OF LOT 2																										
JOHNSON J FRED GARDEN SUB MB 9/84				9112-21-22-001-15					Johnson Mary S			200	1590		200	1590										
POR LOT 3 BEG 63' W OF NE COR TH S 150' X W 100'																										
EXC N 30' IN ST	3																									
MARQUEZ V JOAQUIN & GRACE GARDEN SUB MB 9/84				9112-21-22-001-16								750	40		750	40										
POR LOTS 2 & 3 BEG 163' W OF NE COR LOT 3 S 230'																										
X E 400' EXC N 30' & EXC W 100' OF N 150', 1.56 AC																										
ORIOL ANITA P GARDEN SUB MB 9/84				9112-21-22-001-17 SOLD 1961				Oriol Anita P & Ferrell W M	Ferrell Wm M		Chagolla Luis (Juana)	170	1770		170	1770										
W 75' OF E 300' OF N 297.70' EXC POR IN ST	5																									
WILLARD GLEN & MARIE GARDEN SUB MB 9/84				9112-21-22-001-18								170	1760		170	1760										
E 75' OF N 297.7'	5																									
CLARY JAMES J & JESSIE M GARDEN SUB MB 9/84				9112-21-22-001-19				Clary Jessie M			Johnston Art M (sep)	170	1180		170	1180										
W 75' OF E 225' OF N 297.70'	5																									
MC EUEN FOREST ET AL SJLA FARM LOTS MB 8/357 SD				9105-21-22-001-20								4000			4000											
EXC 50' STRIP ON E, 40 AC	156																									
Estudillo Ld & Water Co Add M.B. 9/410 S.D.				91-12-21-22-001-21				Fm 21-22-000-72	Mabee George E (Jean)																	
S 1/2	78																									

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DESCRIPTION	SECTION OR LOT	TWP. OR BLOCK	RANGE	SCHOOL DISTRICT CODE AREA	YEAR SOLD FOR TAXES	LINE NO.	1960 ASSESSED TO	ASSESSED TO 1961	ASSESSED TO 1962	ASSESSED TO 1963	ASSESSED TO 1964	1960 LAND	1960 IMP.	1960 T&V	1961 LAND	1961 IMP.	1961 T&V	1962 LAND	1962 IMP.	1962 T&V	1963 LAND	1963 IMP.	1963 T&V	1964 LAND	1964 IMP.	1964 T&V
A T & S F RR				9112-21-22-001-27																						
SBE 804 33 23 PAR 8																										
A T & S F RR				9112-21-22-001-28																						
SBE 804 33 23 PAR 9																										
A T & S F RR				9112-21-22-001-29																						
SBE 804 33 23 PAR 10																										
A T & S F RR				9112-21-22-001-30																						
SBE 804 33 23 PAR 11																										
A T & S F RR				9112-21-22-001-31																						
SBE 804 33 23A PAR 1																										
WILLARD GLEN & MARIE GARDEN SUB MB 9/84				9112-21-22-001-32								170	440		170	490										
W 75' OF E 150' OF N 297.70' EXC POR IN ST	5																									
MINOR JAMES & JESSIE GARDEN SUB MB 9/84				9112-21-22-001-33			3712-1/20 Minor James (Jessie F)					730	7950		730	7950										
LOT 5 EXC E 300' OF N 297.7' & EXC S 320'																										
5.2 AC M/L	5				1958																					
HENDERSHOTT WOODROW M & CAROLINE L ~~THE GARDEN SUB MB 9/84~~				9112-21-22-001-34	SOLD 1959				R 7/62 R 9/62	des 11-15-63 1/2 int to Sylvia Sanchez 76986-1/2 Hendershott Woodrow	IC 253-7/63 76986-1/2 Dismissed	200	720		200	720										
POR LOTS 2 & 3 BEG 230' SW OF INT CL SANTA FE & 7TH ST W ~~660'~~ 330' X S 100', ~~E 510', N 50', E 150'~~ N TO POB, ~~1.3 AC~~ .27 AC					1962																					
MALARA VINCENT B & ANNA BELL J GARDEN SUB MB 9/84				9112-21-22-001-35								250			250											
S 202' OF LOTS 2 & 3 EXC E 300' & EXC W 15' OF LOT 3																										
2.78 AC																										
A T & S F RR				9112-21-22-001-36																						
SBE 804 33 23B PAR 3 MIN RTS ONLY																										
PETERSON RICHARD L & CLARY W M GARDEN SUB MB 9/84				9112-21-22-001-37	SOLD 1960		Peterson Richard L & Clary Edna	Clary Edna	int 2642-63/64 3/4 1/4	AC 9/250-1/4 1/2	Sanzberro Ronald L (Jacqueline M) 74837 1/2	160	830		160	830										
BEG 90' W OF INT CL 7TH ST & SANTA FE AVE																										
TH W 65' X S 160' EXC ST, BEING POR LOTS 1 & 2																										
Garden Sub M.B 9/84. S 101' of W 150' of E 300'	2			91-12-21-22-001- 38			Colyer Herbert B. 56458 9/59					100	590		100	590										
Garden Sub M.B. 9/84				91-12-21-22-001- 39				Power Maurice (Gladys) 1332 31-3/4; #42572-1/4							100	810										
Beg 208' W of Int & 7th St & Santa Fe Ave, th W 52' X S 160' exc St	2																									
Estudillo Ld & Water Co Add M.B. 9/410 S.D.				91-05-21-22-001-40						Patterson Howard M (Helen F Gail) Deed 46219-1/4																
Lot 14 & W 160' of Lot 13	287 Ac																									
Estudillo Ld & Water Co Add M.B. 9/410 S.D.				91-05-21-22-001-41				Fm 21-22-000-12		Vabara James Deed 46219-1/4																
E 130'	.83 Ac	13																								
Garden Sub M.B. 9/84				91-12-21-22-001-42						Urias Jose (Sara R) 62238-1/4																
Beg 202' N of SE cor meas alg W ln Santa Fe Ave, th N 75' X W 200'	.34 Ac	2																								
Garden Sub M.B. 9/84				91-12-21-22-001-43				Fm 21-22-001-12		Urias Jose (Sara R) 11-21-63 1/2 int to Sara R 62238-1/2																
Beg 277' N of SE cor th N 26', W 950', S 101', E 750', N 75', E 200' To P/B exc St Being por Lots 2 & 3	1.79 Ac																									
W ~~50~~ 40' of Lots 19, 20 & 21 Blk 36 of Estudillo Ld & Water Co Add M/B 9/410 S.D.				10-02-21-22-001- 44						des 1/2 int 38523 1/2 Barley William A (Rhea)																

— For line 45 see next page

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Por of Lot 2 of Garden Sub MB 9/84 beg 200'S & 120' W of SW Cor 7th St & Santa Fe Ave W 160'X S 100' .37 Ac±				9112-21-22-001		45			R 62	Gordon Clarence R (Ophelia) 78366-9/62																
Por of Lot 2 of Garden Sub MB 9/84 beg 200'S of SW Cor 7th St & Santa Fe Ave S 50'X W 120'				9112-21-22-001		46			R 62 (001-34)	Hendershott Woodrow M (Caroline L) Ref 1-62																
Por Lots 2 & 3 of Garden Sub MB 9/84, beg 230'S 2470' W of Int & Santa Fe & 7th St, W 120'X S 100'				91-12-21-22-001		47				Atkinson Kermit R (Barbara L) 115364 15363-1962																
Por Lot 3 of Garden Sub MB 9/84, beg 230' S & 590' W of Int & Santa Fe & 7th St, W 70'X S 100'				91-12-21-22-001		48				Hendershott Woodrow M (Caroline L) Reg dec																
Por Lot 2 of Garden Sub MB 9/84 Beg 155' W & 30' S of NE Cor Lot 1 th S 130' X W 53'				91-12-21-22-001		49				Cooper J F & Mary Jo 13235																

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DESCRIPTION	SECTION OR LOT	TWP. OR BLOCK	RANGE	YEAR SOLD FOR TAXES	CODE AREA	PARCEL NUMBER	ASSESSED TO 1964
A T & S F RR						✓ 9/32 68 9112-21-22-001-28	
SBE 804 33 23 PAR 9						✓ 9/32 68 9112-21-22-001-29	
A T & S F RR							
SBE 804 33 23 PAR 10						✓ 9/32 68 9112-21-22-001-30	
A T & S F RR							
SBE 804 33 23 PAR 11						✓ 9/32 68 9112-21-22-001-31	
A T & S F RR							
SBE 804 33 23A PAR 1						✓ 9/32 68 9112-21-22-001-32	
WILLARD GLEN & MARIE							
GARDEN SUB MB 9/84							
W 75 FT OF E 150 FT OF N 297.70 FT EXC POR IN ST	5					✓ 9/32 68 9112-21-22-001-33	
MINOR JAMES & JESSIE F							
GARDEN SUB MB 9/84							
LOT 5 EXC E 300 FT OF N 297.7 FT & EXC S 320 FT							
5.2 AC M/L	5					✓ 9/32 68 9112-21-22-001-34	✓ Hendershott Woodrow & Caroline L (Carol) 85/11269-11/85
HENDERSHOTT WOODROW & DINWIDDIE JONATHAN							
POR ~~LOTS 2 & 3~~ Lot 2 OF GARDEN SUB MB 9/84 BEG 230 FT S &							
310 FT W OF INT CL SANTA FE & 7TH ST, W ~~160~~ TH 10 FT X							
S 100 FT						✓ 9/32 68 9112-21-22-001-35	
MALARA VINCENT B & ANNA BELL J							
GARDEN SUB MB 9/84							
S 202 FT OF LOTS 2 & 3 EXC E 300 FT & EXC W 15 FT OF							
LOT 3 2.78 AC						✓ 9/32 68 9112-21-22-001-36	
A T & S F RR							
SBE 804 33 23B PAR 3 MIN RTS ONLY						✓ 9/32 68 9112-21-22-001-37	
SANZBERRO RONALD L & JACQUELINE M							
GARDEN SUB MB 9/84							
BEG 90 FT W OF INT CL 7TH ST & SANTA FE AVE							
TH W 65 FT X S 160 FT EXC ST, BEING POR LOTS 1 & 2						✓ 9/32 68 9112-21-22-001-38	
COLYER HERBERT B							
GARDEN SUB MB 9/84							
S 101 FT OF W 150 FT OF E 300 FT	2					✓ 9/32 68 9112-21-22-001-39	
POWER MAURICE & GLADYS							
GARDEN SUB MB 9/84							
BEG 208 FT W OF INT C/L 7TH ST & SANTA FE AVE							
TH W 52 FT X S 160 FT EXC ST	2					✓ 9/35 68 ~~9181 68~~ ~~9105~~-21-22-001-40	
PATTERSON HOWARD H & YOKES IRENE							
~~ESTUDILLO LD & WATER CO ADD MB 9/410 SD~~							
LOT 14 & W 160 FT OF LOT 13, ~~2.87 AC M/L~~ of Estudillo Ld & Water Co Add MB							
9/410 SD also E 17 FT Vac ST adj To Lot 14 2.98 Ac M/L						~~9181 68~~ ~~9105~~-21-22-001-41	
VOBORA JAMES V							
ESTUDILLO LD & WATER CO ADD MB 9/410 SD							
E 130 FT	13					✓ 9/32 68 9112-21-22-001-42	
URIAS JOSE & SARA R							
GARDEN SUB MB 9/84							
BEG 202 FT N OF SE COR MEAS ALG W LN SANTA FE AVE							
TH N 75 FT X W 200 FT	2					✓ 9/32 68 9112-21-22-001-43	
URIAS JOSE & SARA R							
GARDEN SUB MB 9/84							
BEG 277 FT N OF SE COR TH N 26 FT W 950 FT S 101 FT							
E 750 FT N 75 FT E 200 FT TO POB EXC ST							
BEING POR LOTS 2 & 3 1.79 AC							
BAILEY WILLIAM A & RHEA						1002-21-22-001-44	
W 60 FT OF LOTS 19, 20 & 21 BLK 36 OF							
ESTUDILLO LD & WATER CO ADD MB 9/410 SD							

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ASSESSED TO 1965	ASSESSED TO 1966	ASSESSED TO 1967	ASSESSED TO 1968	ASSESSED TO 1969	ASSESSED TO 1970

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DESCRIPTION	SECTION OR LOT	TWP. OR BLOCK	RANGE	YEAR SOLD FOR TAXES	CODE AREA	PARCEL NUMBER	ASSESSED TO 1970
HENDERSHOTT WOODROW M & CAROLINE L GARDEN SUB MB 9/84 POR LOT 2 BEG 280 FT S OF INT CL 7TH & SANTA FE W 150 FT X S 50 FT EXC ST LOT 2						435-200-047 (72) 9132-~~21-22-001-02~~	
CLARY EDNA POR LOTS 1 & 2 OF GARDEN SUB MB 9/84 BEG NE COR LOT 1 S 160 FT X W 90 FT EXC STS						435-200-039 (72) 9132-~~21-22-001-03~~	11437-7/73 3758-8/67 Markham James V Irene M
METZGER ROMAN J & THERESA GARDEN SUB MB 9/84 S 101 FT OF E 150 FT OF LOT 2		036140	04/68			435-200-054 (72) 9132-~~21-22-001-04~~	
PRIEST MILTON K & HELEN L GARDEN SUB MB 9/84 E 453 FT EXC N 650 FT OF E 163 FT & EXC S 303 FT 4.30 AC LOT 3						435-200-033 (72) 9132-~~21-22-001-5~~	
CROWELL MARY S GARDEN SUB MB 9/84 N 606.23 FT OF LOT 4 & W 15 FT OF N 606.23 FT OF LOT 3 ~~6.77 AC~~ of Garden Sub MB 9/84 exc por in st 6.44Ac m/l						435-200-031 (72) 9132-~~21-22-001-07~~	
MINOR JAMES & SIMMONS RAY L GARDEN SUB MB 9/84 S 320 FT, 3.9 AC LOT 9						435-200-030 (72) 9132-~~21-22-001-08~~	
MINOR JAMES & SIMMONS RAY L GARDEN SUB MB 9/84 W 15 FT OF S 346.77 FT OF LOT 3 & S 346.77 FT OF LOT 4 3.70 AC						435-200-032 (72) 9132-~~21-22-001-09~~	
~~PACE JOHN B & MARY A~~ Chg Order 11/6/91 ~~GARDEN SUB MB 9/84~~ ~~BEG 330 FT S OF INT CL SANTA FE AVE & 7TH ST~~ ~~S 350 FT X W 660 FT; LOTS 2 & 3, 6.30 AC~~						~~435-200-048~~ (72) ~~9132-21-22-001-10~~	
URIAS JOSE & SARA R GARDEN SUB MB 9/84 N 101 FT OF S 202 FT OF E 300 FT OF LOT 2		116675	10/65			435-200-052 (72) 9132-~~21-22-001-13~~	
POLHAMUS SERAFINA C GARDEN SUB MB 9/84 POR LOT 3 BEG 63 FT W OF NE COR TH S 150 FT X W 100 FT EXC N 30 FT IN ST LOT 3		069446	07/68			435-200-034 (72) 9132-~~21-22-001-15~~	
LEMANN MARY GARDEN SUB MB 9/84 POR LOTS 2 & 3 BEG 163 FT W OF NE COR LOT 3 S 230 FT X E 400 FT EXC N 30 FT & EXC W 100 FT OF N 150 FT 1.56 AC		073736	06/65			435-200-035 (72) 9132-~~21-22-001-16~~	
CHAGOLLA LUIS & JUANA GARDEN SUB MB 9/84 W 75 FT OF E 300 FT OF N 297.70 FT EXC POR IN ST LOT 5		030034	04/67			435-200-026 (72) 9132-~~21-22-001-17~~	
WILLARD GLEN & MARIE ~~GARDEN SUB MB 9/84~~ E 75 FT OF N 297.7 FT LOT 5 of Garden Sub MB 9/84 exc por in st						435-200-029 (72) 9132-~~21-22-001-18~~	
JOHNSTON ART M GARDEN SUB MB 9/84 W 75 FT OF E 225 FT OF N 297.70 FT						435-200-027 (72) 9132-~~21-22-001-19~~	
HUGHES CHARLES F & SARAH R LOT 156 OF SJLA FARM LOTS MB B/357 SD EXC 33 FT STRIP ON E 41 AC M/L						9135-21-22-001-20	
SELLERS WARREN G ESTUDILLO LD & WATER CO ADD MB 9/410 SD S 1/2 LOT 78		098418 039635	10/68 04/65	R&S 1987		435-210-004 (72) 9132-~~21-22-001-21~~	53375-5/69 Wixom Alma D/Shirley S J+
~~A T & S F RR CO~~ ~~SBE 804 33 23 PAR 8~~ A T & S F RR CO SBE 804 33 23 PAR 9 A T & S F RR CO SBE 804 33 23 PAR 10 A T & S F RR CO SBE 804 33 23 PAR 11 A T & S F RR CO SBE 804 33 23A PAR 1						9132-21-22-001-27 9132-21-22-001-28 9132-21-22-001-29 9132-21-22-001-30 9132-21-22-001-31	
WILLARD GLEN & MARIE GARDEN SUB MB 9/84 W 75 FT OF E 150 FT OF N 297.70 FT EXC POR IN ST LOT 5						435-200-028 (72) 9132-~~21-22-001-32~~	
MINOR JAMES & JESSIE F GARDEN SUB MB 9/84 LOT 5 EXC E 300 FT OF N 297.7 FT & EXC S 320 FT 5.2 AC M/L LOT 5						435-200-025 (72) 9132-~~21-22-001-33~~	11908 7/70 Agri-Empire
HENDERSHOTT WOODROW POR LOT 2 OF GARDEN SUB MB 9/84 BEG 230 FT S & 310 FT W OF INT CL SANTA FE & 7TH ST TH W 10 FT X S 100 FT						435-200-044 (72) 9132-~~21-22-001-34~~	
PACE JOHN B & MARY A GARDEN SUB MB 9/84 S 202 FT OF LOTS 2 & 3 EXC E 300 FT & EXC W 15 FT OF LOT 3 2.78 AC		030981	03/65			435-200-051 (72) 9132-~~21-22-001-35~~	
A T & S F RR SBE 804 33 23B PAR 3 M R ONLY SANZBERRO RONALD L & CLAUDIA A GARDEN SUB MB 9/84 BEG 90 FT W OF INT CL 7TH ST & SANTA FE AVE TH W 65 FT X S 160 FT EXC ST, BEING POR LOTS 1 & 2		093039	09/68			435-200-923 (72) 9132-~~21-22-001-36~~ 435-200-038 9132-~~21-22-001-37~~	
COLYER HERBERT B GARDEN SUB MB 9/84 S 101 FT OF W 150 FT OF E 300 FT LOT 2						9132-21-22-001-38	
POWER EDWARD J & MAYNARD ANNE E P GARDEN SUB MB 9/84 BEG 208 FT W OF INT C/L 7TH ST & SANTA FE AVE TH W 52 FT X S 160 FT EXC ST LOT 2						435-200-036 (72) 9132-~~21-22-001-39~~	
PATTERSON HOWARD H & YOKES IRENE LOT 14 & W 160 FT OF LOT 13 OF E ESTUDILLO LD & WATER CO ADD MB 9/14 SD ALSO E 17 FT VAC ST ADJ TO LOT 14 2.98 AC M/L		020400 098418	03/67 10/68			435-180-002 (72) 9135-~~21-22-001-40~~	

ASSESSED TO 1971	ASSESSED TO 1972	ASSESSED TO 1973	ASSESSED TO 1974	ASSESSED TO 1975	ASSESSED TO 1976
TFI 3075 Vol HENDERSHOTT CAROLINE L.					
	Cor des				
	Cor des				
	Cor des & Ac				
	Cor des Ac				
Cor Des & Cor Ac 116675-11/65 (002-33)					
	Cor des				
	183601-9/71 120347 8/71 Chagolla Juana C & Fredonica				
	Cor des				
	54493-6/71 Anderson Harold J				
(71) (72) Dcs 85363-9/70 RC 121579 12/71 Wixom, Alma D.					
	(90) (91) Cancel (27) Cancel (27) Cancel (27) Cancel (27)				
	Cor des				
(73) (74)	Rel Des D3522 - 11/70				
Colonial Convalescent Hospital	69318 - 7/72				

Chain of Title

Title Records for 980 West Seventh Street (APN 435-330-003)

Year	Seller	Buyer
1964	Estudillo Ld and Water C Add M.B.	Howard Patterson and Irene Yokes (Colonial Convalescent Hospital)
1988	Colonial Convalescent Hospital	Care Net, Inc. (Care Net Ltd)
1997	Care Net Ltd	Healthcare Management Systems, Inc.
2024	Healthcare Management Systems, Inc.	San Jacinto Real Estate LLC

Assessor - County Clerk - Recorder
Riverside County, CA

Property Detail

980 W 7TH ST SAN JACINTO CA 92582

Assessment No.	435330003
APN	435330003
Property Type	CT-Convalescent Hospital
Neighborhood	C-010
Acreage	2.98

Legal Description

2.98 ACRES M/L IN POR LOT 13 AND LOT 14 MB 009/410 SD ESTUDILLO LAND & WATER CO ADD Lot 13 SubdivisionName ESTUDILLO LAND & WATER CO ADD Acres 002.98 M/L LotType Lot RecMapType Map Book RecordedCOCode SD MapPlatB 009 MapPlatP 410 PortionLot Portion Lot 14 LotType Lot

Value History (Part 1)

Year	Reason Date	Market Value				Factored Base Year Value			
		Land	Improvement	Living Improvement	Total	Land	Improvement	Living Improvement	Total
2022	01/01/2022					$489,003	$827,558		$1,316,561
2023	01/01/2023					$498,783	$844,109		$1,342,892
2023	Transfer 01/04/2024								
2024	01/01/2024					$508,758	$860,991		$1,369,749
2024	Transfer 01/04/2024					$2,600,000	$7,018,000		$9,618,000
2025	01/01/2025					$1,326,000	$3,579,180		$4,905,180

Value History (Part 2)

Year	Restricted Value				Assessed Value				Penalty	Exemption	Net Taxable Value
	Land	Improvement	Living Improvement	Total	Land	Improvement	Living Improvement	Total			
2022					$489,003	$827,558		$1,316,561			$1,316,561
2023					$498,783	$844,109		$1,342,892			$1,342,892
2023					$801,217	$2,664,891		$3,466,108			$3,466,108
2024					$508,758	$860,991		$1,369,749			$1,369,749
2024					$791,242	$2,648,009		$3,439,251			$3,439,251
2025					$1,326,000	$3,579,180		$4,905,180			$4,905,180

Transfer History

Doc #	Sales Price	Date	Vacant Land
2024-0094633	$4,809,000	4/1/2024	False
1997-0471697	$875,000	12/24/1997	False
1997-0189886	$0	5/30/1997	False
1988-0210601	$0	7/28/1988	False
1988-0210602	$1,250,000	7/28/1988	False
1979-0000098-D	$0	3/1/1979	False
1976-0000014-D	$0	1/5/1976	False

Features

Code	Code Descr.	Year	Building	Size	Size Descr.	Units	Cond. Details	Percent
MISC STRUCT RCN	Miscellaneous Structure (RCN) [R]	1963	435330003	480.00	Actual Area	N/A	0.00 Average	100.00
CLFenceWRails	Chain Link Fence (6 foot) with Rails	1963	435330003	950.00	Length	N/A	0.00 Average	100.00
MISC STRUCT RCN	Miscellaneous Structure (RCN) [R]	1967	435330003	240.00	Actual Area	N/A	0.00 Average	100.00
PavConc6	Paving (6 inch), Concrete	1963	435330003	920.00	Actual Area	N/A	0.00 Average	100.00
MISC STRUCT RCN	Miscellaneous Structure (RCN) [R]	1963	435330003	480.00	Actual Area	N/A	0.00 Average	100.00
Canopy	Canopy - Metal	1963	435330003	696.00	Actual Area	N/A	0.00 Average	100.00
MISC STRUCT RCN	Miscellaneous Structure (RCN) [R]	1963	435330003	24.00	Actual Area	N/A	0.00 Average	100.00
ConPool	Pool - Concrete	1972	435330003	450.00	Actual Area	Average	0.00 Average	100.00
CLFenceWRails	Chain Link Fence (6 foot) with Rails	1972	435330003	150.00	Length	N/A	0.00 Average	100.00
MISC STRUCT RCN	Miscellaneous Structure (RCN) [R]	1972	435330003	2.00	Actual Area	N/A	0.00 Average	100.00

Land Details

Primary Use	Land Type	Acres	Eff. Frontage	Eff. Depth
Commercial	LandLine 01 / 435330003 / Commercial	2.98	0.00	0.00

Bradley Gardens Convalescent Center - Building Details

Address 980 W 7TH ST
Type CT-Convalescent Hospital
Year Built 1964

Image: Sketch Image

Structural Elements

Use	Detail
Marshall & Swift Exterior Walls	Block with Stucco
Plumbing	Good
Roof Type	Flat
Roof Cover	Rock/Composite
Foundation	Concrete
Lighting	Average
Sprinkler System	None
HVAC	Controlled Atmosphere, Warmed and Cooled Air
Marshall and Swift Shape Type	Irregular

Floor Areas

Description	Level	Gross Area	Finished Area	Construction Type
Offices, Medical & Public Buildings (MS15)	Ground	0.00	0.00	Wood or Light Steel (D)

Medical Offices - Building Details

Address 980 W 7TH ST
Type CT-Convalescent Hospital
Year Built 1971

Image: Sketch Image

Floor Areas

Description	Level	Gross Area	Finished Area	Construction Type
Offices, Medical & Public Buildings (MS15)	Ground	0.00	0.00	Wood or Light Steel (D)

Riverside County is not liable for erroneous or incomplete data.
California Revenue and Taxation Code Sec. 408.3 (d)

Date Printed: 2/11/2026

RECORDING REQUESTED BY

AND WHEN RECORDED MAIL THIS DEED AND UNLESS OTHERWISE SHOWN BELOW MAIL TAX STATEMENT TO

Name CARE NET, INC.

Street Address 5325 PEACOCK LANE

City & State RIVERSIDE CA 92505

MAIL TAX STATEMENTS TO

Name SAME AS ABOVE

Street Address

City & State

TITLE ORDER NO N34-103380 ESCROW NO 5208-JG

210601

RECEIVED FOR RECORD
AT 8:30 O'CLOCK A.M.
At Request of
TICOR TITLE INSURANCE CO

JUL 28 1988

Recorded in Official Records of Riverside County, California
RECORDER

Fees $ 11

SURVEYORS Monument Fund $10.00

SPACE ABOVE THIS LINE FOR RECORDER'S USE

11/3

GRANT DEED

435-180-016

THE UNDERSIGNED GRANTOR(S) DECLARE(S)

THIS IS AN INTERIM EXCHANGE DEED

DOCUMENTARY TRANSFER TAX is $ NONE 1,273.00/

- ☐ computed on full value of property conveyed, or
- ☒ computed on full value less value of liens or encumbrances remaining at time of sale.
- ☐ unincorporated area
- ☒ city of San Jacinto , AND

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

COLONIAL CONVALESCENT HOSPITAL, a California corporation,

hereby GRANT(s) to

CARE NET, INC., a California corporation

the following described real property in the City of San Jacinto, State of California:
County of Riverside

LOT 14 AND THAT PORTION OF LOT 13 OF ESTUDILLO LAND AND WATER COMPANY'S ADDITION TO SAN JACINTO AS SHOWN BY MAP ON FILE IN BOOK 9, PAGE 410 OF MAPS, RECORDS OF SAN DIEGO COUNTY OF CALIFORNIA LYING WESTERLY OF A LINE DRAWN PARALLEL TO AND DISTANT 500 FEET FROM THE CENTER LINE OF GRAND AVENUE.

SEE EXHIBIT "A" ATTACHED FOR MORE COMPLETE LEGAL DESCRIPTION.

Dated May 16, 1988

COLONIAL CONVALESCENT HOSPITAL
a California corporation

BY: Secretary/Treasurer

BY:

STATE OF CALIFORNIA }
COUNTY OF Riverside } SS

On this 24 day of May, in the year 1988, before me, the undersigned, a Notary Public in and for said State, personally appeared Jean E. Reed, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name subscribed to the within instrument, and acknowledged to me that he executed it.

WITNESS my hand and official seal.

Signature

NOTARY PUBLIC IN AND FOR SAID STATE

(This area for official notarial seal)

CO-441 (REV 4/85)

MAIL TAX STATEMENTS AS DIRECTED ABOVE.

July 28, 1988

Photographed By TICOR

21 1

23567K

EXHIBIT "A"

D E S C R I P T I O N

The land referred to in this report is situated in the County of Riverside, State of California, and is described as follows:

Lot 14 and that portion of Lot 13 of Estudillo Land and Water Company's Addition to San Jacinto, in the County of Riverside, State of California, as per map recorded in Book 9, Page 410 of Maps, in the Office of the County Recorder of San Diego County, California lying Westerly of a line drawn parallel with and distant 500.00 feet from the centerline of Grand Avenue and that portion of Grand Avenue lying adjacent to said Lot 14 abandoned by Resolution recorded October 11, 1960 as Instrument No. 98418 which would pass by Operation of Law with conveyance of said land.

Jul 28, 1988

Photographed By TICOR

210601

STATE OF CALIFORNIA
COUNTY OF Riverside

On May 24, 1988 before me, the undersigned, a Notary Public in and for said State, personally appeared Joan E. Reed and _____, personally known to me (or proved to me on the basis of satisfactory evidence) to be the persons who executed the within instrument as _____ President and _____ Secretary, on behalf of Colonial Convalescent Hospital the corporation therein named, and acknowledged to me that such corporation executed the within instrument pursuant to its by-laws or a resolution of its board of directors.

WITNESS my hand and official seal.

Signature Kathleen T. Mason

OFFICIAL SEAL
KATHLEEN T. MASON
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
RIVERSIDE COUNTY
My Commission Expires Oct. 17, 1989

(This area for official notarial seal)

(CA-6/82) — (Corporation) First American Title Insurance Company

CO-441 (REV 4/85)

MAIL TAX STATEMENTS AS DIRECTED ABOVE.

SPRING MOUNTAIN ESCROW CORPORATION

801 E. Chapman Avenue, Suite 109
Fullerton, Ca 92631
714-879-8490

TO WHOM IT MAY CONCERN:
TITLE ORDER NO: M34-10 3 3 8 0
EXCHANGE ESCROW NO: 5214-25 and 5209-93

There is to be no transfer tax on the Deed from:

Colonial Convalescent Hospital, Inc.

to

Case Ltd, Inc.,

This transaction is in connection with a tax deferred exchange with the transfer tax paid on the concurrent deed to the ultimate purchaser.

SPRING MOUNTAIN ESCROW CORPORATION
Fullerton Branch

by: Judy Goss
Judy Goss, Escrow Officer

July 28,1988 Photographed By TICOR 21 1

STATE OF CALIFORNIA
COUNTY OF Riverside } ss.

On May 24, 1988 before me, the undersigned, a Notary Public in and for said State, personally appeared Jean E. Reed and

, personally known to me (or proved to me on the basis of satisfactory evidence) to be the persons who executed the within instrument as President and Secretary, on behalf of Colonial Convalescent Hospital the corporation therein named, and acknowledged to me that such corporation executed the within instrument pursuant to its by-laws or a resolution of its board of directors.

WITNESS my hand ~~and official seal~~.

Signature Kathleen T. Mason

OFFICIAL SEAL
KATHLEEN T. MASON
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
RIVERSIDE COUNTY
My Commission Expires Oct. 17, 1988

(This area for official notarial seal)

~~CO-441 (6/82)~~ — (Corporation) First American Title Insurance Company

CO-441 (REV 4/85)

MAIL TAX STATEMENTS AS DIRECTED ABOVE.

SPRING MOUNTAIN ESCROW CORPORATION

801 E. Chapman Avenue, Suite 109
Fullerton, Ca 92631
714-879-8490

TO WHOM IT MAY CONCERN:
TITLE ORDER NO: N34-10 334 0
EXCHANGE ESCROW NO: 5214-JG5 and 5209-JG

There is to be no transfer tax on the Deed from:

Colonial Convalescent Hospital, Inc.

to

Care Net, Inc.,

This transaction is in connection with a tax deferred exchange with the transfer tax paid on the concurrent deed to the ultimate purchaser.

SPRING MOUNTAIN ESCROW CORPORATION
Fullerton Branch

by: Judy Goss
Judy Goss, Escrow Officer

Photographed By TICOR
July 28, 1988
21 1

July 28, 1988
Photographed By TICOR
21 2

RECORDING REQUESTED BY

AND WHEN RECORDED MAIL THIS DEED AND UNLESS OTHERWISE SHOWN BELOW MAIL TAX STATEMENT TO:

Name Care Net, Ltd.
Street Address 5325 Peacock Lane
City & State Riverside, Ca 92505

MAIL TAX STATEMENTS TO

Name SAME AS ABOVE
Street Address
City & State

TITLE ORDER NO N35-103380 ESCROW NO 5208-JG

210602

RECEIVED FOR RECORD
AT 8:30 O'CLOCK A.M.
At Request of
TICOR TITLE INSURANCE CC
JUL 28 1988
Recorded in Official Records of Riverside County, California
RECORDER
Fees $

PAID
Doc. Transfer Tax
WILLIAM E. CONERLY
Riv. Co. Recorder

9/7

SPACE ABOVE THIS LINE FOR RECORDER'S USE

GRANT DEED

THE UNDERSIGNED GRANTOR(S) DECLARE(S)

DOCUMENTARY TRANSFER TAX is $ 1,375.00
- [X] computed on full value of property conveyed, or
- [ ] computed on full value less value of liens or encumbrances remaining at time of sale.
- [ ] unincorporated area
- [ ] city of , AND

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

CARE NET, INC., a California corporation,

hereby GRANT(s) to

CARE NET, LTD., a California Limited Partnership,

the following described real property in the City of San Jacinto
County of Riverside , State of California:

LOT 14 AND A PORTION OF LOT 13 OF ESTUDILLO LAND AND WATER COMPANY'S ADDITION TO SAN JACINTO.

SEE EXHIBIT "A" ATTACHED HERETO, FOR A MORE COMPLETE LEGAL DESCRIPTION.

4942 356

Dated July 26, 1988

CARE NET, INC.,
a California corporation

by: _____

STATE OF CALIFORNIA
COUNTY OF Orange } SS.

On this _____ day of _____, in the year 19____, before me, the undersigned, a Notary Public in and for said State, personally appeared _____

_____, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person___ whose name_____ subscribed to the within instrument, and acknowledged to me that___ he____ executed it.

WITNESS my hand and official seal.

Signature _____
NOTARY PUBLIC IN AND FOR SAID STATE

(This area for official notarial seal)

CO-441 (REV 4/85)

MAIL TAX STATEMENTS AS DIRECTED ABOVE.

RECORDING REQUESTED BY

AND WHEN RECORDED MAIL THIS DEED AND UNLESS OTHERWISE SHOWN BELOW MAIL TAX STATEMENT TO:

Name: Care Net, Ltd.
Street Address: 5325 Peacock Lane
City & State: Riverside, Ca 92505

MAIL TAX STATEMENTS TO

Name: SAME AS ABOVE
Street Address:
City & State:

TITLE ORDER NO. N35-103380 ESCROW NO. 5208-JG

210602

RECEIVED FOR RECORD
AT 8:30 O'CLOCK A.M.
At Request of
TICOR TITLE INSURANCE CO

JUL 28 1988

Recorded in Official Records of Riverside County, California
RECORDER
Fees $

PAID
Doc. Transfer Tax
WILLIAM E. CONERLY
Riv. Co. Recorder

SPACE ABOVE THIS LINE FOR RECORDER'S USE

9/2

GRANT DEED

THE UNDERSIGNED GRANTOR(S) DECLARE(S)

DOCUMENTARY TRANSFER TAX is $ 1,375.00
☒ computed on full value of property conveyed, or
☐ computed on full value less value of liens or encumbrances remaining at time of sale.
☐ unincorporated area
☐ city of , AND

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

CARE NET, INC., a California corporation,

hereby GRANT(s) to

CARE NET, LTD., a California Limited Partnership,

the following described real property in the County of Riverside, City of San Jacinto, State of California:

LOT 14 AND A PORTION OF LOT 13 OF ESTUDILLO LAND AND WATER COMPANY'S ADDITION TO SAN JACINTO.

SEE EXHIBIT "A" ATTACHED HERETO, FOR A MORE COMPLETE LEGAL DESCRIPTION.

CARE NET, INC.,
a California corporation

STATE OF CALIFORNIA
COUNTY OF Orange } ss.

On July 26, 1988, before me, the undersigned, a Notary Public in and for said State, personally appeared Marilynn S. Smith and , personally known to me (or proved to me on the basis of satisfactory evidence) to be the persons who executed the within instrument as President and Secretary, on behalf of CARE NET, INC., the corporation therein named, and acknowledged to me that such corporation executed the within instrument pursuant to its by-laws or a resolution of its board of directors.

WITNESS my hand and official seal.

Signature

OFFICIAL SEAL
JUDY GOSS
NOTARY PUBLIC - CALIFORNIA
SAN BERNARDINO COUNTY
My Comm. Expires Sept. 15, 1989

(This area for official notarial seal)

(Seal)

3002 (6/82) — Corporation) First American Title Insurance Company

Photographed By TICOR

July 28, 1988

210602

EXHIBIT "A"

D E S C R I P T I O N

The land referred to in this report is situated in the County of Riverside, State of California, and is described as follows:

Lot 14 and that portion of Lot 13 of Estudillo Land and Water Company's Addition to San Jacinto, in the County of Riverside, State of California, as per map recorded in Book 9, Page 410 of Maps, in the Office of the County Recorder of San Diego County, California lying Westerly of a line drawn parallel with and distant 500.00 feet from the centerline of Grand Avenue and that portion of Grand Avenue lying adjacent to said Lot 14 abandoned by Resolution recorded October 11, 1968 as Instrument No. 98418 which would pass by Operation of Law with conveyance of said land.

July 28, 1988
By TICOR
Photographed
210602

COMMONWEALTH LAND TITLE CO.

189886

WHEN RECORDED, PLEASE MAIL THIS INSTRUMENT TO:

HEMET FEDERAL SAVINGS
AND LOAN ASSOCIATION
P O BOX 12006
HEMET, CA 92546-8006

RECEIVED FOR RECORD
AT 8:00 O'CLOCK

MAY 30 1997

Recorded in Official Records of Riverside County, California
Recorder
Fees $ 9

TRUSTEE NO. 1811
LOAN NO. 613864-6

SPACE ABOVE FOR RECORDER'S USE ONLY

MAIL TAX STATEMENTS TO:

SAME AS ABOVE

Documentary Transfer tax $ N/A
XX Grantee was the foreclosing beneficiary;
consideration $853,353.90; unpaid debt $853,353.90;
non exempt amount $ N/A .
__ Computed on the consideration or value of property conveyed.
__ Computed on the consideration or value less liens or encumbrances remaining at time of sale.

Signature of Declarant or Agent

APN 435-180-076-4
TRA# 010-019

TRUSTEE'S DEED UPON SALE

FIRST HEMET CORPORATION, a California Corporation, (herein called Trustee) does hereby grant and convey, but without covenant or warranty, express or implied, to HEMET FEDERAL SAVINGS AND LOAN ASSOCIATION, A CORPORATION (herein called Grantee) the real property in the County of Riverside, State of California, described as follows:

Lot 14 and that portion of Lot 13 of Estudillo Land and Water Company's Addition to San Jacinto, in the County of Riverside, State of California, as per map recorded in Book 9, page 410 of Maps, in the office of the County Recorder of San Diego County, California lying Westerly of a line drawn parallel with and distant 500.00 feet from the centerline of Grand Avenue and that portion of Grand Avenue lying adjacent to said Lot 14 abandoned by Resolution recorded October 11, 1968 as Instrument No. 98418 which would pass by Operation of Law with conveyance of said land.

This conveyance is made pursuant to the authority and powers vested in said Trustee, or Successor Trustee, or Substituted Trustee, under that certain Deed of Trust executed by CARE NET, LTD., A CALIFORNIA LIMITED PARTNERSHIP as Trustor, recorded JULY 28, 1988, as Document No. 210604 in Book N/A, page N/A, of Official Records in the Office of the recorder of RIVERSIDE County, California; and pursuant to the Notice of Default recorded JANUARY 24, 1997, as Document No. 024940 in Book N/A, page N/A of Official Records of said County, Trustee having complied with all applicable statutory requirements of the State of California and performed all duties required by said Deed of Trust, including, among other things, as applicable, the mailing of copies of notices or the publication of a copy of the notice of default or the personal delivery of the copy of the notice of default or the posting of copies of the notice of sale or the publication of a copy thereof.

THIS MICROFILM COPYRIGHTED 1997 BY SECURITY UNION TITLE INSURANCE COMPANY MICROGRAPHICS DIVISION

RIVERSIDE

,TEE NO. 1811 TRUSTEE'S DEED UPON SALE LOAN NO. 613864-6

.t the time and place fixed in the Notice of Trustee's Sale, said Trustee did sell said property above described at public auction on MAY 28, 1997 to said Grantee, being the highest bidder therefor, for $853,353.90 cash, lawful money of the United States, in full satisfaction of the indebtedness then secured by said Deed of Trust.

Dated: MAY 28, 1997

FIRST HEMET CORPORATION

By _____
PETER J. HARRISON, VICE PRESIDENT

STATE OF CALIFORNIA }
COUNTY OF RIVERSIDE } SS.

On May 28, 1997 before me, a notary public in and for said State, personally appeared PETER J. HARRISON, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he or she executed the same in the capacity(ies) indicated at the signature point.

WITNESS my hand and official seal.

Signature _____
CAROLYNN J. FLUENT

CAROLYNN J. FLUENT
COMMISSION #1041922
Notary Public - California
RIVERSIDE COUNTY
My Commission Expires
OCTOBER 9, 1998

(seal)

1-00 07 00 6

5 [illegible] 97

THIS MICROFILM COPYRIGHTED 1997 BY SECURITY UNION TITLE INSURANCE COMPANY MICROGRAPHICS DIVISION

RIVERSIDE

471697

RECEIVED FOR RECORD
AT 8:00 O'CLOCK

DEC 24 1997

Recorded in Official Records
Recorder

Fee $

SPACE ABOVE THIS LINE FOR RECORDER'S USE

RECORDING REQUESTED BY:
COMMONWEALTH LAND TITLE COMPANY
97.12547D 3706110-5

WHEN RECORDED MAIL THIS DEED AND, UNLESS OTHERWISE SHOWN BELOW, MAIL TAX STATEMENTS TO:

HEALTHCARE MANAGEMENT SYSTEMS, INC.

980 W. 7TH STREET
SAN JACINTO, CALIFORNIA 92582

PAID
Doc. Transfer Tax
Riv. Co. Recorder

APN: 435-180-076
TRA. 010 019

GRANT DEED

The undersigned grantor(s) declare(s).
Documentary transfer tax is $962.50
(XXX) Computed on full value of property conveyed, or
( ) Computed on full value less liens and encumbrances remaining at time of sale.
( ) Unincorporated area: (X) City of SAN JACINTO, and

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

HEMET FEDERAL SAVINGS AND LOAN ASSOC., a Corporation established and existing under the laws of the United States of America

hereby GRANT(S) to

HEALTHCARE MANAGEMENT SYSTEMS, INC., A CALIFORNIA CORPORATION

the real property in the City of SAN JACINTO, County of Riverside, State of California, described as:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

3706110-5

Dated December 22, 1997

State of California
County of Riverside) S.S.
On December 23, 1997
before me, Joan Thaning
, personally appeared
Jack A. Sanden & Robert J. Armstrong

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature Joan Thaning
Joan Thaning

MAIL TAX STATEMENTS TO:

HEMET FEDERAL SAVINGS AND LOAN ASSOC.
a Corporation established and existing under the laws of the United States of America

BY Jack A. Sanden
Jack A. Sanden, Sr. Vice President

BY Robert J. Armstrong
Robert J. Armstrong, Sr. Vice President

JOAN THANING
COMMISSION #1148071
Notary Public - California
RIVERSIDE COUNTY
My Commission Expires
AUGUST 18, 2001

(This area for official notarial seal)

97-0471697 12 24 97 RIVERSIDE

471697

EXHIBIT A

LOT 14 AND THAT PORTION OF LOT 13 OF ESTUDILLO LAND AND WATER COMPANY'S ADDITION TO SAN JACINTO, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 9, PAGE 410 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, CALIFORNIA LYING WESTERLY OF A LINE DRAWN PARALLEL WITH AND DISTANT 500.00 FEET FROM THE CENTERLINE OF GRAND AVENUE AND THAT PORTION OF GRAND AVENUE LYING ADJACENT TO SAID LOT 14 ABANDONED BY RESOLUTION RECORDED OCTOBER 11, 1968 AS INSTRUMENT NO. 98418 WHICH WOULD PASS BY OPERATION OF LAW WITH CONVEYANCE OF SAID LAND.

97-460077
12 24 97
RIVERSIDE

DOC # 2024-0094633
04/01/2024 04:03 PM Fees: $23.00
Page 1 of 4
Recorded in Official Records
County of Riverside
Peter Aldana
Assessor-County Clerk-Recorder

This document was electronically submitted to the County of Riverside for recording
Receipted by: AMINAH #6123

RECORDING REQUESTED BY
FIDELITY NATIONAL TITLE

Recording Requested By
and when Recorded Mail To:

San Jacinto Real Estate, LLC
c/o Generations Healthcare
6 Hutton Centre Drive, Suite 400
Santa Ana, CA 92707

Attention: Lois Mastrocola, CFO

30112496-AM

Above Space for Recorder's Use Only

APN: 435-330-003
TRA: 010-009

Ⓓ City of San Jacinto

GRANT DEED

THE UNDERSIGNED GRANTOR(S) DECLARE(S)

DOCUMENTARY TRANSFER TAX in County is $ 5,289.90 and the City transfer tax is: $ 0.00 _____.

[x] computed on full value of property conveyed, or
[ ] computed on full value less value of liens or encumbrances remaining at time of sale.

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, HEALTHCARE MANAGEMENT SYSTEMS, INC., a California corporation, hereby grants to SAN JACINTO REAL ESTATE, LLC, a California limited liability company ("Grantee"), the real property in the County of Riverside, State of California described on Exhibit "A" attached hereto and incorporated herein by reference.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

Mail Tax Statements To: Same As Above

IN WITNESS WHEREOF, the Grantor has caused these presents to be executed in its name, by its proper officers thereunto duly authorized.

DATED: March 28, 2024

SELLER:

HEALTHCARE MANAGEMENT SYSTEMS, INC.,
a California corporation

By: _____
Name: Erwin Cablayan
Title: CEO, CFO and Secretary

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT CIVIL CODE § 1189

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF San Diego

On March 28, 2024, before me, T. Scher, Notary Public, personally appeared Erwin Cablayan, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

ANP1 T. SCHER Commission No. 2333156 NOTARY PUBLIC • CALIFORNIA SAN DIEGO COUNTY Commission Expires September 3, 2024 ANP1

_____
Signature

Exhibit A to Grant Deed

EXHIBIT A

LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF SAN JACINTO COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

LOT 14 AND THAT PORTION OF LOT 13 OF ESTUDILLO LAND AND WATER COMPANY'S ADDITION TO SAN JACINTO, IN THE CITY OF SAN JACINTO, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 9, PAGE 410 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, CALIFORNIA, LYING WESTERLY OF A LINE DRAWN PARALLEL WITH AND DISTANT 500.00 FEET FROM THE CENTERLINE OF GRAND AVENUE AND THAT PORTION OF GRAND AVENUE LYING ADJACENT TO SAID LOT 14 ABANDONED BY RESOLUTION RECORDED OCTOBER 11, 1968 AS INSTRUMENT NO. 98418 OFFICIAL RECORDS, WHICH WOULD PASS BY OPERATION OF LAW WITH CONVEYANCE OF SAID LAND.

APN: **435-330-003**

ILLEGIBLE NOTARY SEAL DECLARATION
GOVERNMENT CODE SECTION 27361.7

I CERTIFY UNDER PENALTY OF PERJURY THAT THE NOTARY SEAL ON THE DOCUMENT TO WHICH THIS STATEMENT IS ATTACHED READS AS FOLLOWS:

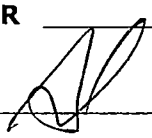
NAME OF NOTARY T. SCHER

NAME OF COUNTY SAN DIEGO

DATE COMMISSION EXPIRES 9-3-2024

COMMISSION NUMBER 2333156

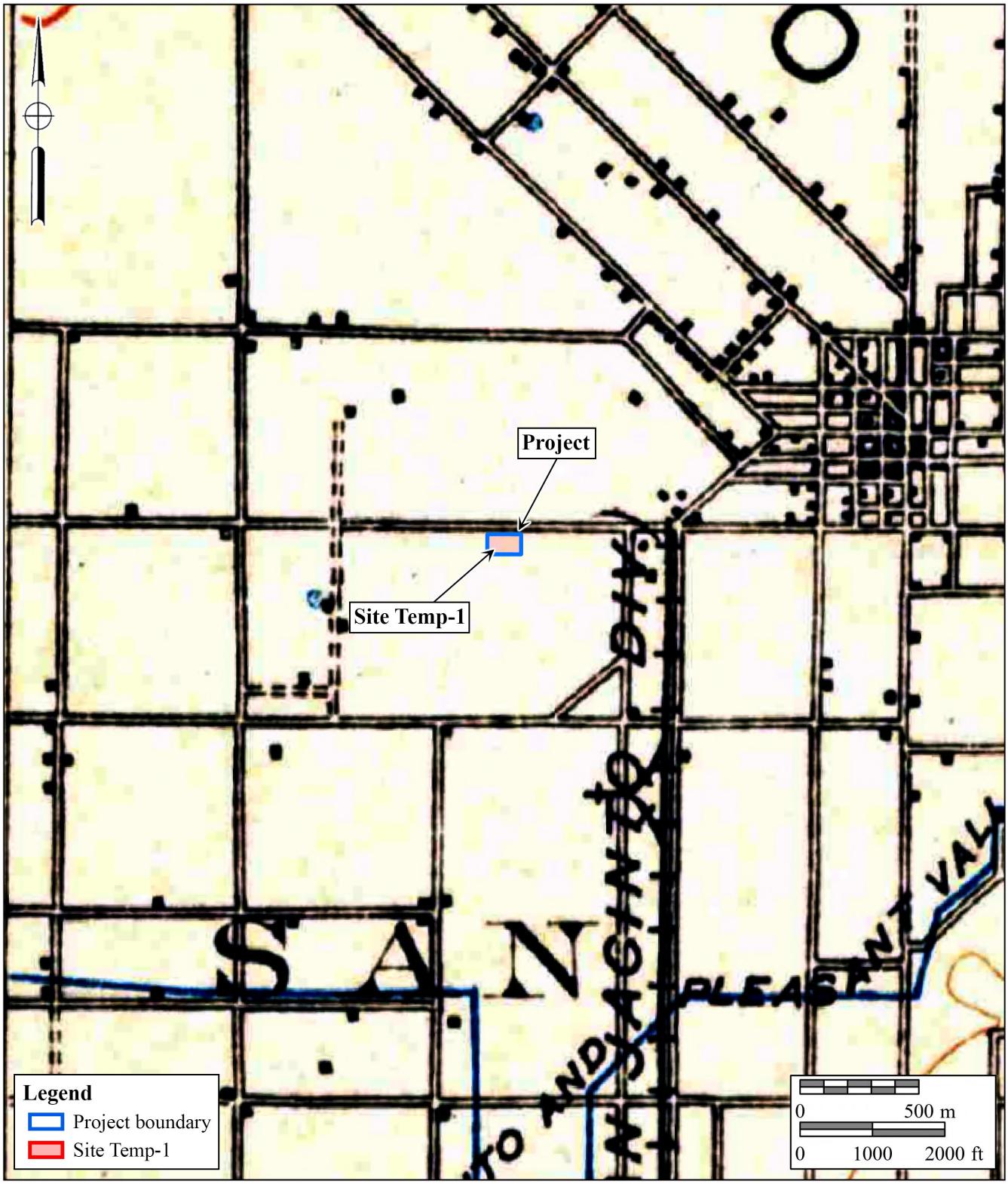
VENDOR NUMBER ANP1

SIGNED 

PLACE OF EXECUTION RIVERSIDE, CA

DATE 4/1/24

Maps



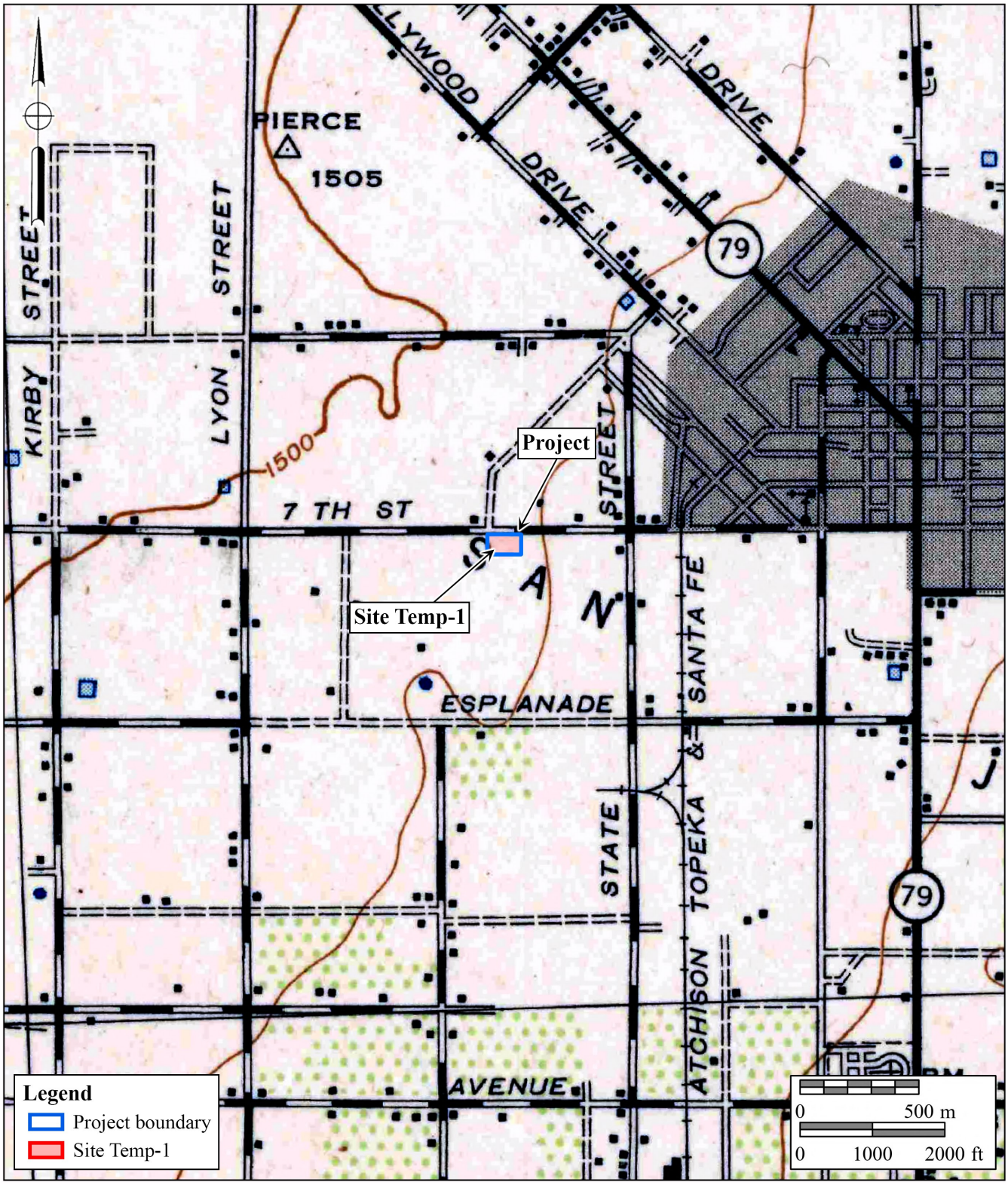
BFSA Environmental Services
A Perennial Company

Figure 1

1901 USGS Map

The Bradley Gardens Project

USGS *San Jacinto* Quadrangle (1:125,000-foot scale)



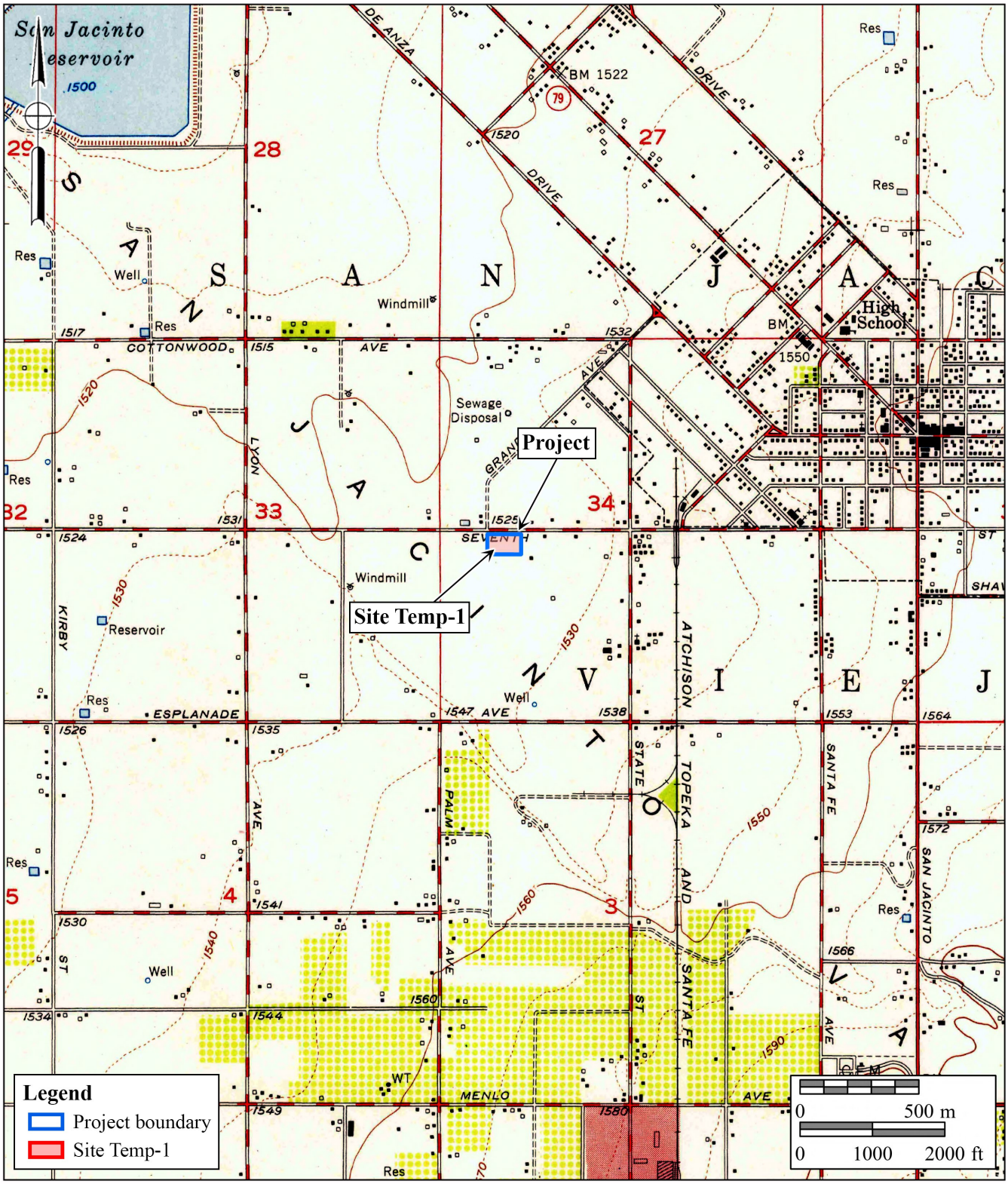
BFSA Environmental Services
A Perennial Company

Figure 2

1943 USGS Map

The Bradley Gardens Project

USGS *Banning* Quadrangle (1:62,500-foot scale)



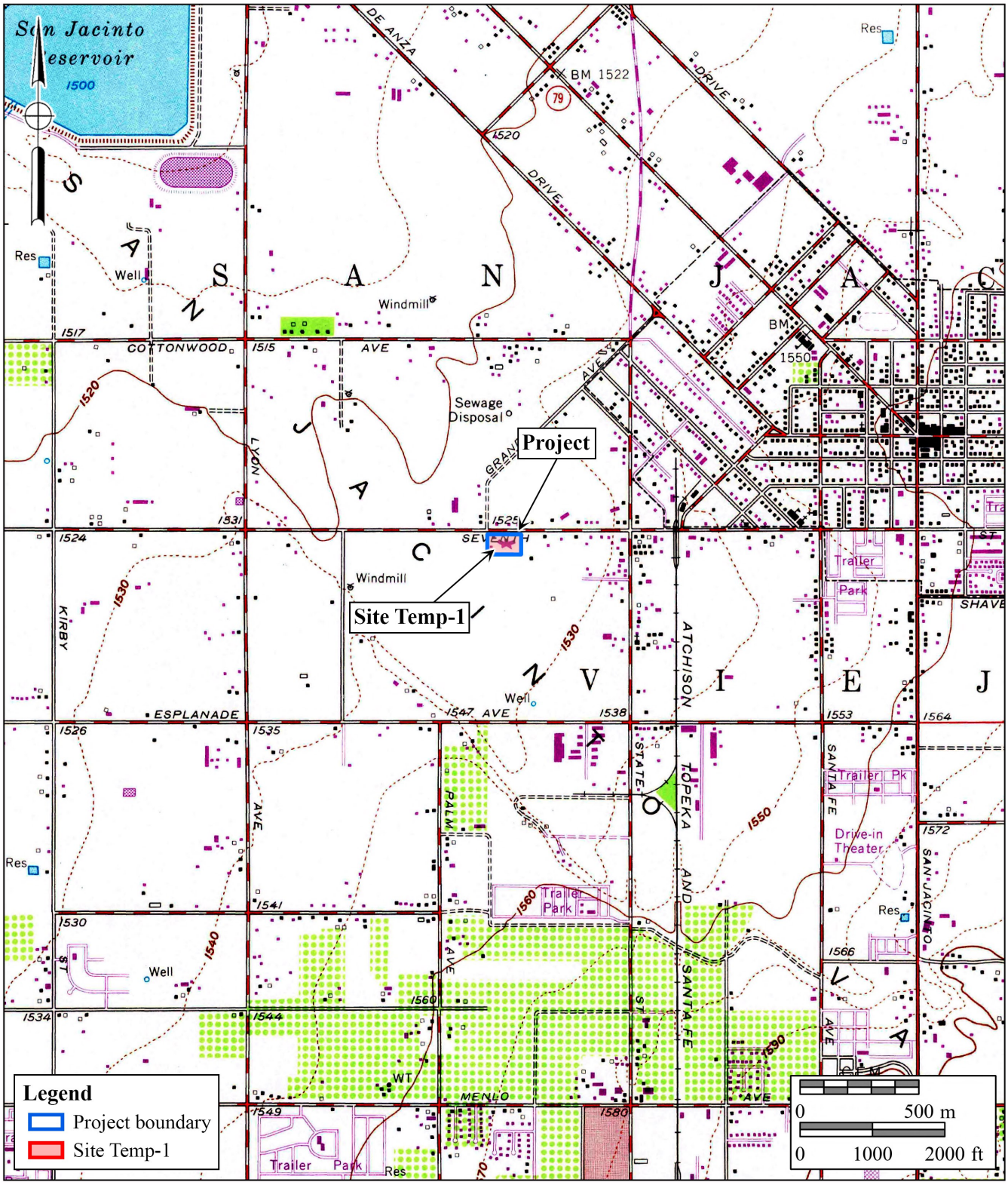
BFSA Environmental Services
A Perennial Company

Figure 3

1954 USGS Map

The Bradley Gardens Project

USGS *San Jacinto* Quadrangle (7.5-minute scale)



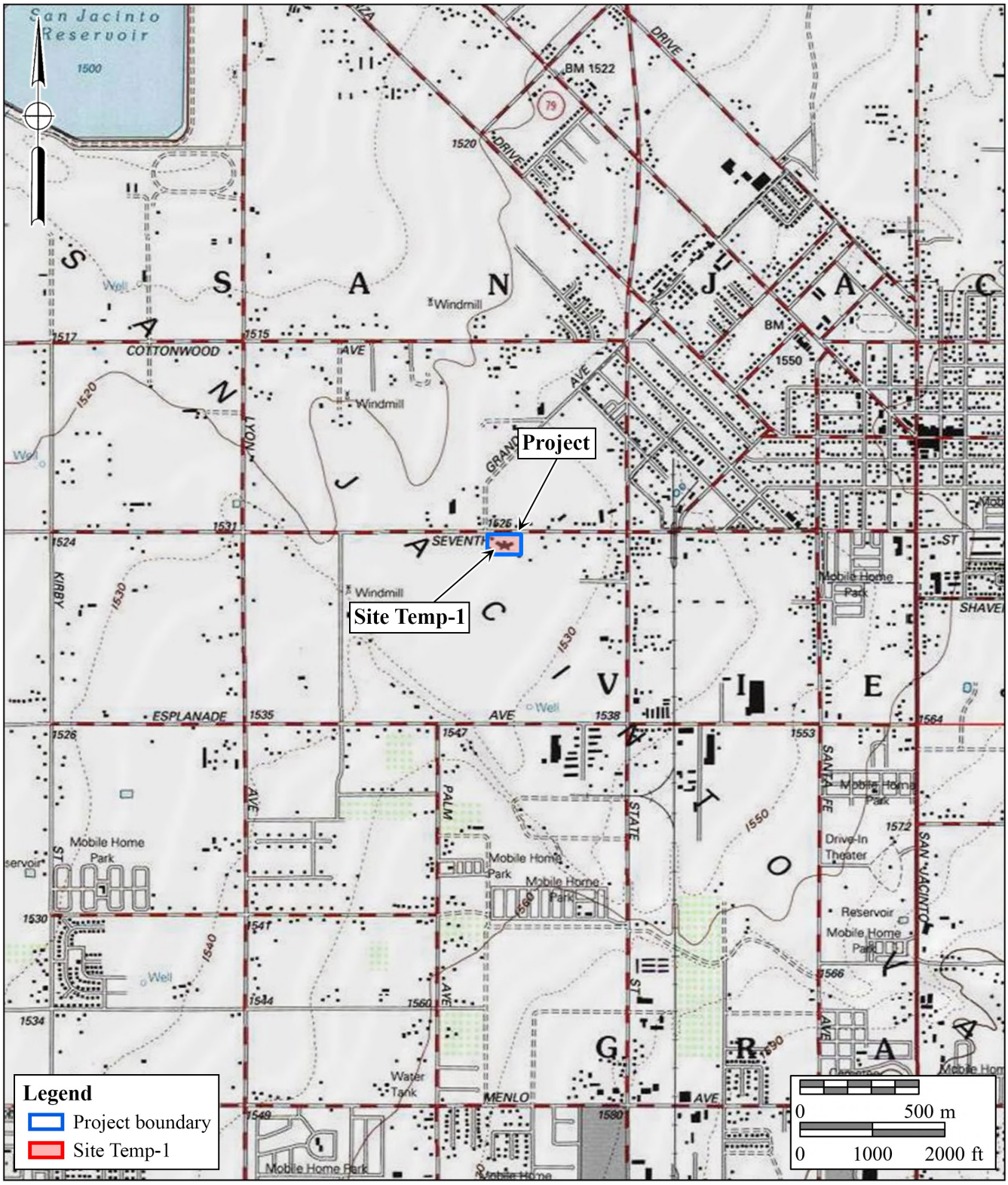
BFSA Environmental Services
A Perennial Company

Figure 4

1973 USGS Map

The Bradley Gardens Project

USGS *San Jacinto* Quadrangle (7.5-minute scale)



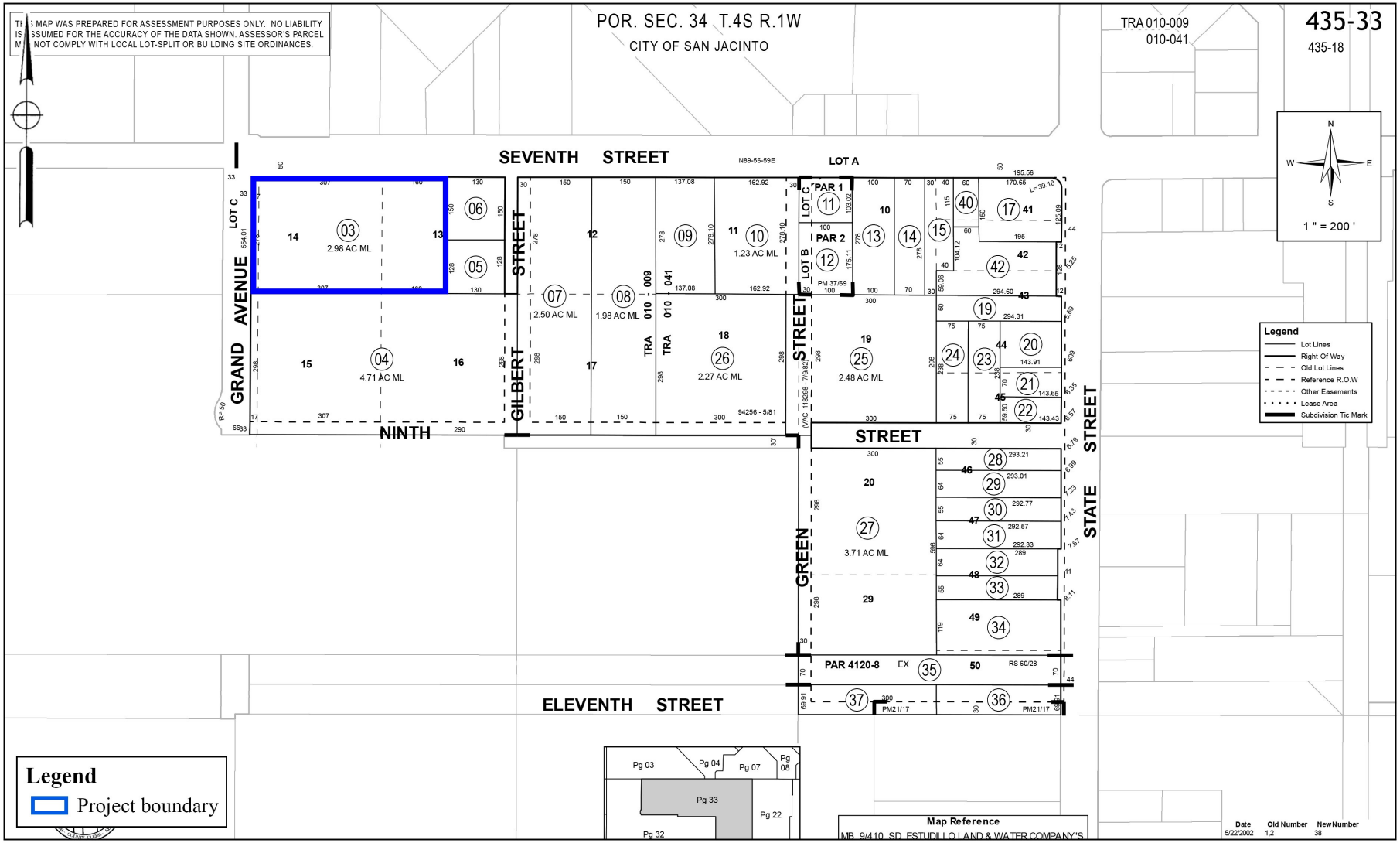
BFSA Environmental Services
A Perennial Company

Figure 5

1999 USGS Map

The Bradley Gardens Project

USGS *San Jacinto* Quadrangle (7.5-minute scale)

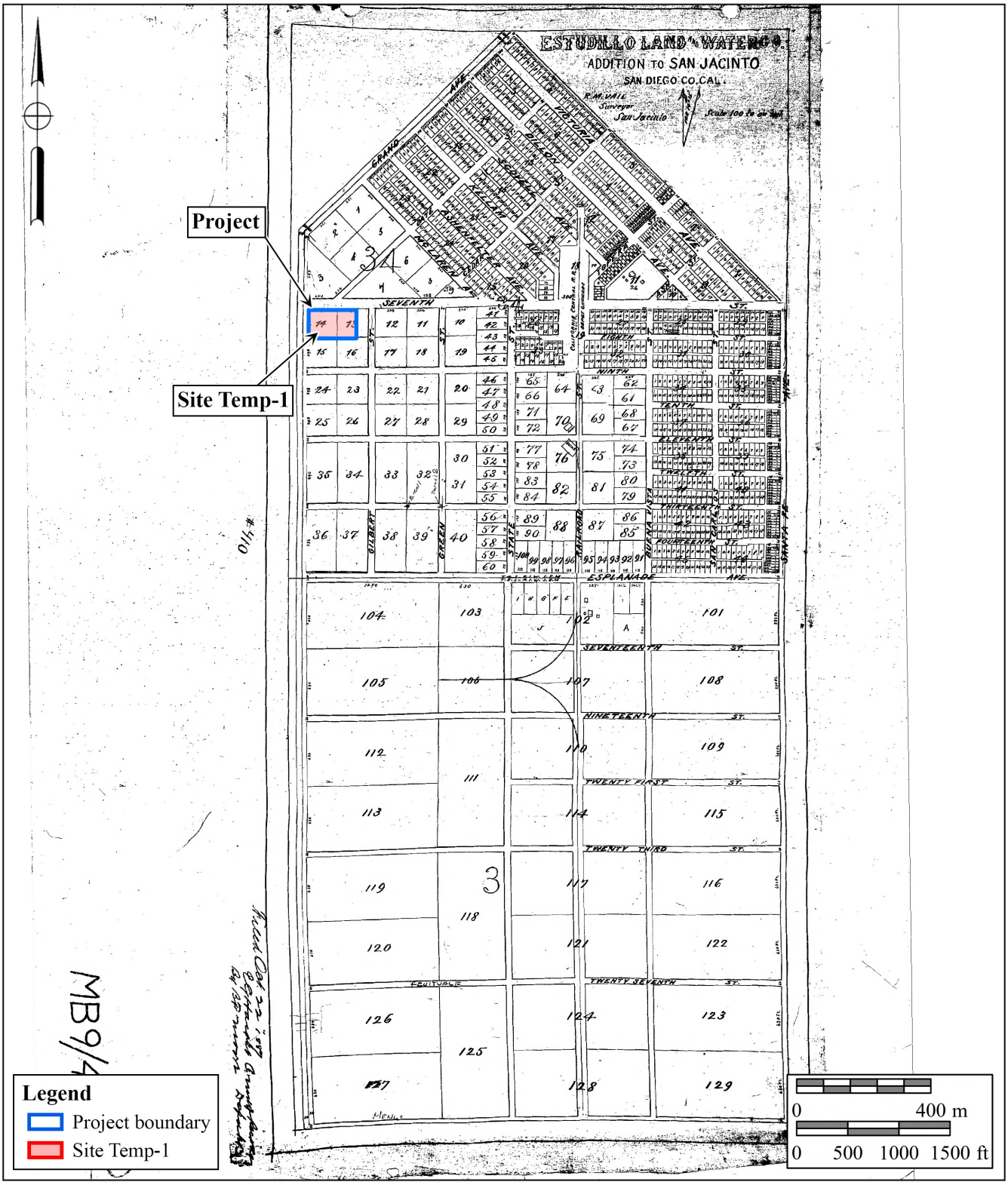


BFSA Environmental Services
A Perennial Company

Figure 6

Current Assessor's Parcel Map

The Bradley Gardens Project



BFSA Environmental Services
A Perennial Company

Figure 7

Original Subdivision Map

The Bradley Gardens Project

1887 Estudillo Land and Water Addition to San Jacinto

SUPPLEMENTAL INFILTRATION FEASIBILITY TESTING
PROPOSED BRADLEY GARDENS SKILLED NURSING FACILITY
BUILDING ADDITION, 980 W. 7TH STREET
CITY OF SAN JACINTO, RIVERSIDE COUNTY
CALIFORNIA 92582 (APN 435-330-003)

FOR

CORCORAN CONSTRUCTION, INC.
26590 MADISON AVENUE
MURRIETA, CALIFORNIA 92562

W.O. 9071-A1-IE AUGUST 14, 2026

GeoSoils, Inc.

GeoSoils, Inc.
Geotechnical · Geologic · Coastal · Environmental
18451 Collier Avenue, Suite A, Lake Elsinore, California 92530
TEL: (951) 471-0700 - FAX: (951) 471-0702
www.geosoils.com

August 14, 2026

W.O. 9071-A1-IE

Corcoran Construction, Inc.
26590 Madison Avenue
Murrieta, California 92562

Attention: Ms. Kim Corcoran

Subject: Supplemental Infiltration Feasibility Testing, Proposed Bradley Gardens Skilled Nursing Facility Building Addition, 980 W. 7th Street, City of San Jacinto, Riverside County, California 92582 (APN 435-330-003)

Dear Ms. Corcoran:

In accordance with the City of San Jacinto review comments received, and your request and authorization, GeoSoils, Inc. (GSI) is presenting the results of our supplemental infiltration feasibility testing for the proposed Bradley Gardens skilled nursing facility in the City of San Jacinto, Riverside County, California. The purpose of this study was to further evaluate the onsite soils and geologic conditions and conduct feasibility infiltration testing within the areas of the proposed pervious paver access driveway onsite, for use in water quality Best Management Practice (BMP) design by the water quality engineer of record for the project.

The scope of our services has included a review of the referenced reports and documents (see Appendix A), the advancement of four (4) hand-excavated exploratory borings onsite, which were excavated to a depth of 2 feet below the existing surface (bgs), geologic logging (Appendix B), field infiltration testing (Appendix C), analysis of field test data obtained, and preparation of this summary infiltration feasibility testing report.

SITE DESCRIPTION AND CURRENT SITE CONDITIONS

The overall site consists of an approximately 2.98-acre, rectangular-shaped area of developed land. The site is located on the southeast corner of the intersection of W 7th Street and S. Grand Avenue, in the City of San Jacinto, Riverside County, California. The property is bounded by undeveloped land on the south, east and west, by residential development to the southwest, and commercial development to the north, across W 7th Street. In general, the site is flat-lying to very gently sloping in a southeasterly direction. According to Google Earth Pro (GEP, 2026), site elevations vary between approximately 1,527 and 1,525 feet Mean Sea Level (MSL), for an overall relief of about 2 feet. The site is sparsely vegetated and has localized shrubs and trees within and surrounding the existing facility.

PROPOSED DEVELOPMENT

Based on our review of the overall site plan, dated September 18, 2025, prepared by Gregg Maedo & Associates (GMA, 2025), we understand that continued development of the property would consist of the construction of a 43-bed skilled nursing facility (Building A1), as well as the installation of underground utility and roadway infrastructure. The newly provided storm water quality control plan by Guide Engineering (GE, 2026) indicates the development of a pervious paver access roadway on the east and south side of the project site. It is our understanding the pervious paver access roadway will be used as a relatively shallow water quality Best Management Practice (BMP) feature onsite.

SITE GEOLOGY

Based on our previous onsite preliminary geotechnical investigation (GSI, 2025) and published geologic mapping by Dibblee (2003), the site is underlain by Holocene- to late Pleistocene-age alluvial sand and clay of valley areas (Qa), although no significant clay layers were encountered during this, or our previous subsurface investigation (GSI, 2025). As encountered during our previous subsurface investigation the site soils were mostly sandy (e.g., silty sands) with minor silt layers encountered at depth. The observed alluvial deposits extend to depths beyond 60 feet, and are estimated to be hundreds of feet in thickness based on the data reviewed (GSI, 2025).

The near surface alluvial deposits encountered during this study generally consist of light brown silty sands that were generally loose to medium dense with depth, with the exception of hand auger P-4, near the dumpster area, which was medium dense to very dense with depth. The near surface soils were also found to be dry to damp, very fine to coarse grained sands, and somewhat to locally friable near the surface.

GROUNDWATER

Regional or perched groundwater was not encountered during this study or within the subsurface excavations (Borings and Cone Penetration Testing [CPT]), up to approximately 60 feet in depth, advanced during our previous field work (GSI, 2025). Likewise, seeps, springs, or other indications of a high groundwater level were not noted on the subject property during the time of this or our previous field investigation (GSI, 2025).

Based on our review of the California Department of Water Resources (CDWR) Water Data Library (2026), nearby well measurements reviewed appear to be regional groundwater measurements at depths of approximately 170 and 155 feet (State Well No. 04S01W27P005S [March 7, 1991], and Site Code No. 337748N1169760W001 [December 6, 2011], respectively) at sites with similar ground surface elevations. However,

our review of historic groundwater measurements in the San Jacinto and Temecula basins (U.S. Geological Survey, 1919, Water Supply Paper 429) indicates groundwater near the center of the basin may have been as shallow as 40 feet bgs. However, in California, the legislature passed the Sustainable Groundwater Management Act (SGMA), creating a statewide framework for groundwater regulation. The Eastern Municipal Water District (EMWD), and several other water purveyors, have been actively managing the San Jacinto basin as part of a voluntary Assembly Bill 3030 effort passed in 1992. As such, it is unlikely the groundwater will reach historic levels as the basin is now adjudicated. These observations reflect site conditions at the time of our field work and do not prevent future changes in local groundwater conditions from excessive irrigation, precipitation, or that were not evident at the time of this, or our original preliminary investigation (GSI, 2025).

INFILTRATION FEASIBILITY TESTING

In accordance with Riverside County Flood Control - Low Impact Development (LID) BMP Design Handbook (RCFC, 2011) guidelines for infiltration testing, four (4) tests were conducted within the proposed location of the pervious paver access driveway, as requested by the design engineer. The approximate locations of the infiltration tests for this study are provided on Figure 1 (Percolation-Infiltration Test Location Map). The infiltration testing was performed to further evaluate site conditions with respect to the proposed pervious paver BMP system that would retain and filter onsite storm water. The infiltration testing was performed in conformance with the RCFC (2011) design handbook for such testing. The infiltration testing was performed by a senior field technician under the direct supervision of a principal geologist from GSI. Logs of the borings advanced for this study are presented in Appendix B, and the Field Infiltration Data Sheets are presented in Appendix C. Procedures for testing are outlined briefly below:

Percolation Test Procedures

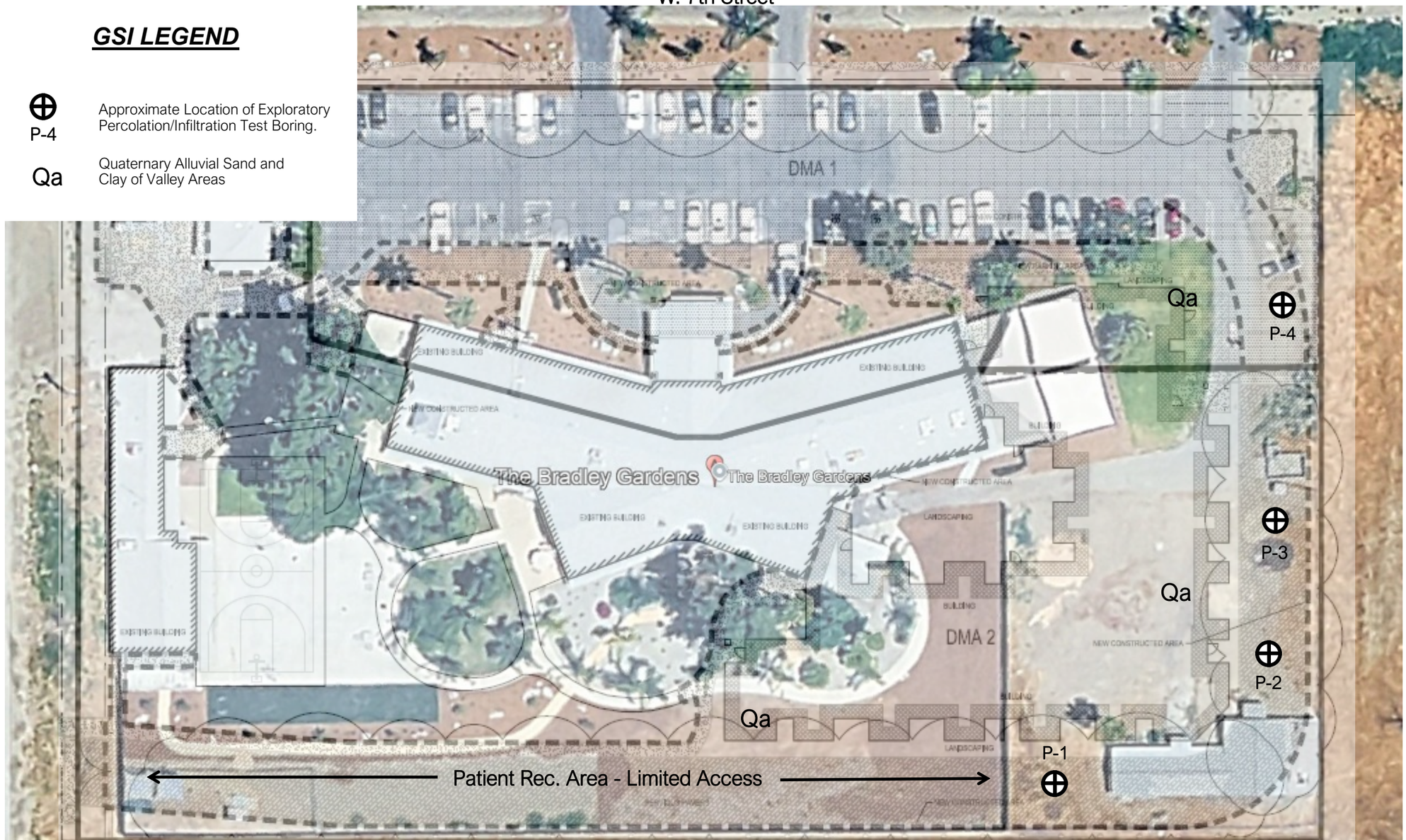
Test Borings:

1. Hand excavated to a depth of approximately 2 feet
2. Diameter - 8 inches.
3. After the removal of loose materials, 2 inches of gravel was placed on the bottom of each test boring.
4. A perforated pipe was then installed within each test boring to facilitate accurate field measurements and prevent caving during the pre-soak period and infiltration testing.

GSI LEGEND

⊕ P-4 — Approximate Location of Exploratory Percolation/Infiltration Test Boring.

Qa — Quaternary Alluvial Sand and Clay of Valley Areas



ALL LOCATIONS ARE APPROXIMATE

This document or e-file is not part of the Construction Documents and should not be relied upon as being an accurate depiction of design.

Figure adapted from the Storm Water Quality Control Plan by Guide Engineering (GE, 2026) and Google Earth Pro Aerial Imagery (GEP, 2026).

Guide ENGINEERING
LAND ENGINEERING AND PLANNING
5930 GRANITE LAKE DR, #150
GRANITE BAY, CA 95746
PHONE: 916-787-0248
projects@guide-engineering

GSI GeoSoils, Inc.

Figure 1

PERCOLATION/INFILTRATION TEST LOCATION MAP

W.O. 9071-A1-IE	DATE: 08/26	SCALE: NTS

Pre-Soaking: After the installation of the perforated pipes, the boring was filled with a minimum of 5-gallons of clear water. The test period for the percolation testing commenced immediately, as all the water seeped away while the tester was present and sandy soils were known to exist onsite.

Sandy Soil Test: Following the pre-soak period, sandy soil criteria testing was conducted. Two (2) consecutive measurements were made at each test location at intervals of approximately 25 minutes. Greater than 6 inches of water seeped away during each of the two (2) test measurements at each location, therefore the testing began using the criteria for "sandy soils" testing at all locations.

Testing: After required pre-soak period and sandy soil test periods, infiltration testing started at all locations. A column of clear water was re-established within each of the test locations. The drop in water level was measured from a fixed reference point, refilling after each test measurement. Within the test locations, a series of test measurements were taken for an additional hour, at time intervals of 10 minutes.

Precision: All test measurements were read to the nearest ¼-inch.

Test Results: Calculations from our field testing indicate percolation rates between approximately 0.97 and 0.42 minutes/inch. Per the RCFC (2011) guidelines, the percolation rates obtained were then converted to infiltration rates using the "Porchet Method," to be used by the design engineer for appropriate sizing of the BMP systems (RCFC, 2011). The converted infiltration rates obtained varied between approximately 5.9 inches/hour and 11.1 inches/hour. Typically, the lowest infiltration rate obtained is applied to the design; therefore, an unfactored (no factor of safety applied) infiltration rate (UIR) of 5.9 inches/hour was obtained. Using an appropriate Factor of Safety (FOS) of 3, per the RCFC (2011) guidelines, a Design Infiltration Rate of 1.97 inches/hour may be used for design. The converted infiltration rates, along with the formulas used are presented in Figure 2 (Percolation Rate to Infiltration Rate Conversion).

USDA Site Soil Group, Soil Units, and Ksat Values

Our review of the United States Department of Agriculture (USDA, 2026) Web Soil Survey (https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm), indicates that two (2) major soil units underlie the site. The Grangeville sandy loam, 0 to 5 percent slopes (GrB) and the Grangeville fine sandy loam, 0 to 5 percent slopes (GvB) are mapped onsite (USDA, 2026). The USDA (2026) indicates that the capacity of the most limiting layer to transmit water

Percolation Rate to Infiltration Rate Conversion

* $$\text{Infiltration Rate } (I_t) = \frac{\Delta H\ \pi r^2\ 60}{t(\pi r^2 + 2\pi r H_{av}} = \frac{\Delta H\ 60\ r}{\Delta t(r+2H_{avg})}$$

Where:
- I_t = tested infiltration rate, inches/hour
- ΔH = change in head over the time interval, inches
- Δt = time interval, minutes
- r = effective radius of test hole
- H_{avg} = average head over the time interval, inches

		Δt	Init Level	Fnl Level	ΔH	H_{avg}	I_t	
Infiltration Test Numbers	P-1	10	24	24	24	24	11.08	
	P-2	10	24	9	15	16 1/2	9.73	High = 12.70
	P-3	10	24	6	18	15	12.71	Low = 5.90
	P-4	10	24	13 3/4	10 1/4	18 7/8	5.89	Average = 9.85
								**UIR = 5.90

* Conversion per the "Porchet Method" (RCFC, 2011)

**UIR = Unfactored Infiltration Rate (Inches/Hour)

Factor of Safety (FOS) = 3.0 = 5.9/3.0 = **1.97** = DIR**

**DIR = Design Infiltration Rate (Inches/Hour)

W.O. 9071-A1-IE

Figure 2

(Ksat) within the Grangeville sandy loam, is high (1.98 to 5.95 inches per hour [in/hr]) and falls into hydrologic soil groups (HSGs) "A/D." The USDA (2026) also indicates that capacity of most limiting layer to transmit water (Ksat) within the Grangeville fine sandy loam is moderately high to high (0.57 to 1.98 in/hr) and falls into hydrologic soil groups (HSGs) "B/D." Based on our review, the results of our onsite infiltration feasibility testing appear to correlate well with the USDA (2026) Ksat values for the major soil units mapped onsite.

Infiltration Siting Requirements

Our review of the general infiltration siting requirements and limitations provided by the California Stormwater Quality Association (CASQA, 2003), indicates sites characterized as belonging to Hydrologic Soil Group "A," "B," and "C" may be suitable for infiltration, requiring a minimum soil infiltration rate of 0.5 inches/hour. However, the County of Riverside water pollution prevention Water Quality Management Plan (WQMP, 2012), guidance document for the Santa Ana Region states: "the minimum long-term post-development infiltration rate must be at least 0.83 inches per hour." Furthermore, based on our review of historic regional groundwater levels and our previous onsite subsurface investigation (GSI, 2025), a minimum 10-foot vertical separation from the bottom of the BMP systems to the top of historic high groundwater levels will be maintained.

The design engineer will need to review BMP requirements by the RCFC (2011) and the converted infiltration rates obtained during this study with respect to the proposed water quality BMP systems. An appropriate factor of safety (FOS), per the RCFC (2011) technical guidance document, has been applied herein. The design infiltration rates, general BMP design parameters, and recommendations provided herein are based on our experience with earth materials within the City of San Jacinto, RCFC (2011) and State criteria (CASQA, 2003), and our experience on adjacent sites with similar geologic conditions. Based on our review of the USDA data and our subsurface explorations, similar soil conditions prevail throughout the site, including sandy fine-grained surficial soils.

CONCLUSIONS AND RECOMMENDATIONS

Based on the onsite infiltration testing conducted, it is our opinion that the proposed commercial development and BMP development onsite is feasible from a geologic and geotechnical viewpoint, provided the recommendations presented herein, and within the previous report by GSI (2025) are properly implemented during project planning, design, and construction, as warranted. General recommendations for storm water quality BMP systems are presented in GSI (2025); however, for convenience are reiterated below.

Onsite Storm Water Quality Best Management Practice (BMP) Systems

Should onsite infiltration-systems be planned for Best Management Practices (BMP's) or Low Impact Development (LID) principles for the project, certain guidelines must be followed in the planning, design, and construction of such systems. Such systems, if improperly designed or implemented without consideration of the geotechnical aspects of site conditions, can contribute to flooding, saturation of bearing materials beneath site improvements, slope instability, and possible concentration and contribution of pollutants into the groundwater or storm drain or utility trench systems.

A key factor in these systems is the infiltration rate (often referred to as the percolation rate) which can be ascribed to, or determined for, the earth materials within which these systems are installed. Additionally, the infiltration rate of the designed system (which may include gravel, sand, mulch and topsoil, or other amendments) will need to be considered. Locally, relatively impermeable formations include: clayey surficial soils, igneous and metamorphic bedrock, as well as future fine grained fill soils.

Some of the methods which are used for onsite infiltration include percolation basins, dry wells, bio-swale or bio-retention, permeable pavers and pavement, infiltration trenches, filter boxes and subsurface infiltration galleries or chambers. Some of these systems are constructed using native and import soils, perforated piping, and filter fabrics while others employ structural components such as stormwater infiltration chambers and filters or separators. Every site will have characteristics which should lend themselves to one or more of these methods, but not every site is suitable for BMPs. In practice, BMPs are usually initially designed by the project design civil engineer. Applicable governing agency requirements should be reviewed and included in design considerations.

The following geotechnical guidelines should be considered when designing onsite BMP systems:

- It is not good engineering practice to allow water to saturate soils, especially near slopes or improvements; however, the controlling agency may now require the use of stormwater BMPs.

- Areas adjacent to, or within, the BMP that are subject to inundation should be properly protected against scouring, undermining, and erosion, in accordance with the recommendations of the design engineer.

- Where infiltration BMP systems are located near buildings or improvements, impermeable liners and subdrains should be used along the bottom or sides of bioretention swales or basins located within the influence of structures. Impermeable liners used in conjunction with BMP basins should consist of a 30-mil polyvinyl chloride (PVC) membrane that is covered by a minimum of 12 inches of clean soil, free from rocks and debris, with a maximum 4:1 (h:v) slope inclination, or flatter, and meets the following minimum specifications:

Solid Soils Specific Gravity (ASTM D792): 1.2 (g/cc, min.); Tensile (ASTM D 882): 73 (lb/in-width, min); Elongation at Break (ASTM D882): 380 (%, min); Modulus (ASTM D882): 32 (lb/in-width, min.); and Tear Strength (ASTM D1004): 8 (lb/in, min); Seam Shear Strength (ASTM D882) 58.4 (lb/in, min); Seam Peel Strength (ASTM D882) 15 (lb/in, min).

- Subdrains should consist of at least 4-inch diameter Schedule 40 or SDR 35 drain pipe with perforations oriented down. The drain pipe should be sleeved with a filter sock.

- Storm drain, standpipes, and utilities that cross BMPs should be slurried with a 3-sack slurry mix, to 5 feet outside the structure.

- Infiltrations systems should not be installed within approximately 8 feet of building foundations utility trenches, and walls, or a 1:1 (horizontal to vertical [h:v]) slope (down and away) from the bottom elements of these improvements. Alternatively, deepened foundations may be used.

- Infiltration systems should not be installed adjacent to rigid pavements or hardscape improvements. Alternatively, deepened or thickened edges and curbs or impermeable liners may be used in areas adjoining the BMP.

- As with any infiltration BMP, localized ponding and groundwater seepage should be anticipated. The potential for seepage or perched groundwater to occur after site development should be disclosed to all interested or affected parties.

- Installation of infiltration BMP systems should avoid expansive soils (Expansion Index [E.I.] ≥51) or soils with a relatively high plasticity index (P.I. > 20).

- Infiltration BMP systems should not be installed where the vertical separation of the groundwater level is less than approximately 10 feet from the base of the system.

- Infiltration BMP systems should be designed using a suitable factor of safety (FOS) to account for uncertainties in the known infiltration rates (as generally required by the controlling authorities), and reduction in performance over time.

- As with any infiltration system, proper care will need to be provided. Best management practices should be followed at all times, especially during inclement weather. Provisions for the management of any siltation, debris within the BMP, or overgrown vegetation (including root systems) should be considered. An appropriate inspection schedule will need to adopted and provided to all interested or affected parties.

- Any designed system will require regular and periodic maintenance, which may include rehabilitation or complete replacement of the filter media (e.g., sand, gravel, filter fabrics, topsoil, or mulch) or other components used in construction, so that the design life exceeds 15 years. Due to the potential for piping and adverse seepage conditions, a burrowing rodent control program should also be implemented onsite.

- Newly established vegetation or landscaping (including phreatophytes) may have root systems that will influence the performance of the BMP or nearby LID systems.

- The potential for surface flooding, in the case of system blockage, should be evaluated by the design civil engineer.

- Any proposed utility backfill materials (e.g., inlet or outlet piping or other subsurface utilities) located within or near the proposed area of the BMP may become saturated. This is due to the potential for piping, water migration, and seepage along the utility trench line backfill. If utility trenches cross or are proposed near the BMP, cut-off walls or other water barriers will need to be installed to mitigate the potential for piping and excess water entering the utility backfill materials. Planned or existing utilities may also be subject to piping of fines into open-graded gravel backfill layers unless separated from overlying or adjoining BMP by geotextiles or slurry backfill.

LIMITATIONS

The materials encountered on the project site and used for our analysis are believed representative of the area; however, soil and bedrock materials vary in character between excavations and natural outcrops or conditions exposed during mass grading. Site conditions may vary due to seasonal changes or other factors.

Inasmuch as our study is based upon our review and engineering analyses and field test data, the conclusions and recommendations are professional opinions. These opinions have been derived in accordance with current standards of practice, and no warranty, either express or implied, is given. Standards of practice are subject to change with time. GSI assumes no responsibility or liability for work or testing performed by others, or their inaction; or work performed when GSI is not requested to be onsite, to evaluate if our recommendations have been properly implemented. Use of this report constitutes an agreement and consent by the user to all the limitations outlined above, notwithstanding any other agreements that may be in place. In addition, this report may be subject to review by the controlling authorities. Thus, this report brings to completion our scope of services for this portion of the project.

The opportunity to be of service is sincerely appreciated. If you should have any questions, please do not hesitate to contact our office.

Respectfully submitted,

GeoSoils, Inc.





Todd A. Greer
Engineering Geologist, CEG 2377

Jorge F. Meneses, PhD, PE, GE, BC. GE, F.ASCE
Geotechnical Engineer, GE 3041

TAG/JFM/ek

Enclosures: Appendix A - References
Appendix B - Hand Auger Boring Logs
Appendix C - Field Infiltration Data Sheets

Distribution: (1) Addressee (via email pdf)

APPENDIX A

REFERENCES

APPENDIX A

REFERENCES

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APPENDIX B

HAND AUGER BORING LOGS

UNIFIED SOIL CLASSIFICATION SYSTEM

Major Divisions			Group Symbols	Typical Names
Coarse-Grained Soils More than 50% retained on No. 200 sieve	Gravels 50% or more of coarse fraction retained on No. 4 sieve	Clean Gravels	GW	Well-graded gravels and gravel-sand mixtures, little or no fines
			GP	Poorly graded gravels and gravel-sand mixtures, little or no fines
		Gravel with	GM	Silty gravels gravel-sand-silt mixtures
			GC	Clayey gravels, gravel-sand-clay mixtures
	Sands more than 50% of coarse fraction passes No. 4 sieve	Clean Sands	SW	Well-graded sands and gravelly sands, little or no fines
			SP	Poorly graded sands and gravelly sands, little or no fines
		Sands with Fines	SM	Silty sands, sand-silt mixtures
			SC	Clayey sands, sand-clay mixtures
Fine-Grained Soils 50% or more passes No. 200 sieve	Silts and Clays Liquid limit 50% or less		ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL	Organic silts and organic silty clays of low plasticity
	Silts and Clays Liquid limit greater than 50%		MH	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts
			CH	Inorganic clays of high plasticity, fat clays
			OH	Organic clays of medium to high plasticity
Highly Organic Soils			PT	Peat, mucic, and other highly organic soils

CONSISTENCY OR RELATIVE DENSITY

CRITERIA

Standard Penetration Test

Penetration Resistance N (blows/ft)	Relative Density
0 - 4	Very loose
4 - 10	Loose
10 - 30	Medium
30 - 50	Dense
> 50	Very dense

Standard Penetration Test

Penetration Resistance N (blows/ft)	Consistency	Unconfined Compressive Strength (tons/ft^2)
<2	Very Soft	<0.25
2 - 4	Soft	0.25 - .050
4 - 8	Medium	0.50 - 1.00
8 - 15	Stiff	1.00 - 2.00
15 - 30	Very Stiff	2.00 - 4.00
>30	Hard	>4.00

3" 3/4" #4 #10 #40 #200 U.S. Standard Sieve

Unified Soil Classification	Cobbles	Gravel		Sand			Silt or Clay
		coarse	fine	coarse	medium	fine	

MOISTURE CONDITIONS

Dry	Absence of moisture: dusty, dry to the touch
Slightly Moist	Below optimum moisture content for compaction
Moist	Near optimum moisture content
Very Moist	Above optimum moisture content
Wet	Visible free water; below water table

MATERIAL QUANTITY

trace	0 - 5 %
few	5 - 10 %
little	10 - 25 %
some	25 - 45 %

OTHER SYMBOLS

C Core Sample
S SPT Sample
B Bulk Sample
__ Groundwater
Qp Pocket Penetrometer

BASIC LOG FORMAT:
Group name, Group symbol, (grain size), color, moisture, consistency or relative density. Additional comments: odor, presence of roots, mica, gypsum, coarse grained particles, etc.

EXAMPLE:
Sand (SP), fine to medium grained, brown, moist, loose, trace silt, little fine gravel, few cobbles up to 4" in size, some hair roots and rootlets.

GeoSoils,Inc.

W.O. 9071-A1-IE
Corcoran Construction, Inc.
Bradley Gardens, San Jacinto
Logged by: TAG
August 5, 2026

LOG OF EXPLORATORY HAND AUGER BORINGS

TEST PIT NO.	ELEV. (ft.)	DEPTH (ft.)	GROUP SYMBOL	SAMPLE DEPTH (ft.)	MOISTURE (%)	FIELD DRY DENSITY (pcf)	DESCRIPTION
P-1	1,527	0-2	SM				<u>QUATERNARY-AGE ALLUVIAL SAND OF VALLEY AREAS (Qa):</u> Silty SAND, light brown, dry to damp, loose to medium dense at depth; very fine to coarse grained sands.
							Total Depth = 2', no caving, no seepage. Backfilled on August 5th, 2026 after infiltration testing.
P-2	1,526	0-2	SM				<u>QUATERNARY-AGE ALLUVIAL SAND OF VALLEY AREAS (Qa):</u> Silty SAND, light brown, damp, loose to medium dense with depth; few rootlets, very fine to coarse grained sands; somewhat friable.
							Total Depth = 2', no caving, no seepage. Backfilled on August 5th, 2026 after infiltration testing.
P-3	1,526	0-2	SM				<u>QUATERNARY-AGE ALLUVIAL SAND OF VALLEY AREAS (Qa):</u> Silty SAND, very light brown, dry to damp, loose to medium dense at depth; friable near surface, few rodent burrows.
							Total Depth = 2', no caving, no seepage. Backfilled on August 5th, 2026 after infiltration testing.
P-4	1,526	0-2	SM				<u>QUATERNARY-AGE ALLUVIAL SAND OF VALLEY AREAS (Qa):</u> Silty SAND, light brown, damp, medium dense to very dense at depth (near dumpster); fine to coarse grained sands.
							Total Depth = 2', no caving, no seepage. Backfilled on August 5th, 2026 after infiltration testing.

APPENDIX C

FIELD INFILTRATION DATA SHEETS

P1

Leach Line Percolation Data Sheet

Project: Bradley Gardens, San Jacinto		W.O. Number: 9071-A1-IE	
Test Hole No.: P1		Date Excavated: Aug 5, 2026	
Depth of Test Hole: 2'		Soil Classification: SM	
Check for Sandy Soil Criteria Tested by: TAG/JVM		Date: Aug 5	Presoak: 8:49 aug5
Actual Percolation Tested by: JVM		Date: Aug. 5, 2026	

>5 gal used

Sandy Soil Criteria Test

Trial No.	Time	Time Interval (Min.)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ in Water Level (Inches)
1	9:47	25	24"	0"	24" JVM
	10:12				
2	10:32	25	24"	0"	24" JVM
	10:57				

Use: Normal/Sandy (Circle One) Soil Criteria

Time	Time Interval (min)	Total Elapsed Time (Min.)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ in Water Level (Inches)	Percolation Rate (min/inch)
12:54	10	10	24"	0	24	0.416
01:04						
01:06	10	10	24"	0	24	
01:16						
01:18	10	10	24"	0	24	
01:28						
1:30	10	10	24"	0	24	
1:40						
1:45	10	10	24"	0	24	
1:55						
1:58	10	10	24"	0	24	
2:08						

Plate No. C-1

Leach Line Percolation Data Sheet

P2

Project:	Bradley Gardens, San Jacinto	W.O. Number:	9071-A1-IE
Test Hole No.:	P2	Date Excavated:	Aug 5, 2026
Depth of Test Hole:	2'	Soil Classification:	SM
Check for Sandy Soil Criteria Tested by:	TAG / JVM	Date: Aug 5	Presoak: 8:43 Aug 5
Actual Percolation Tested by:	JVM	Date:	Aug. 5, 2025

>5 gal used

Sandy Soil Criteria Test

Trial No.	Time	Time Interval (Min.)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ in Water Level (Inches)
1	9:38 10:03	25	24"	0"	24"
2	10:42 10:42	25	24	0"	24

Use: Normal Sandy (Circle One) Soil Criteria

Time	Time Interval (min)	Total Elapsed Time (Min.)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ in Water Level (Inches)	Percolation Rate (min/inch)
JVM 10:14 JVM 10:24	10	10	24"	10"	14	0.71
JVM 10:28 JVM 10:38	10	10	24"	9"	15	0.67
11:42 11:52	10	10	24"	9.75"	14.25	0.70
11:55 12:05	10	10	24"	9.25"	14.75	0.68
12:09 12:19	10	10	24"	9.50"	14.5	0.69
12:22 12:32	10	10	24"	10.25"	13.75	0.73

Plate No. C-2

Leach Line Percolation Data Sheet

P3

Project:	Bradley Gardens, San Jacinto	W.O. Number:	9071-A6-SF
Test Hole No.:	P3	Date Excavated:	AUG 5, 2026
Depth of Test Hole:	2'	Soil Classification:	SM
Check for Sandy Soil Criteria Tested by:	25mm penetrometer	Date: Aug 5	Presoak: 8:17 Aug 5
Actual Percolation Tested by:	JVM TAG/JVM	Date: Aug. 5, 2026	

Sandy Soil Criteria Test

Trial No.	Time	Time Interval (Min.)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ in Water Level (Inches)
1	9:33 9:58	25	24"	0"	24"
2	10:16 10:41	25	24"	0"	24"

Use: Normal Sandy (Circle One) Soil Criteria

Time	Time Interval (min)	Total Elapsed Time (Min.)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ in Water Level (Inches)	Percolation Rate (min/inch)
JVM 10:16 JVM 10:26	10	10	24"	10	14	0.71
JVM 10:33 JVM 10:43	10	10	24"	5.25	18.75	0.53
JVM 11:55 12:05	10	10	24"	6.0	18	0.56
12:08 12:18	10	10	24"	6.75	17.25	0.58
12:20 12:30	10	10	24"	6.50	17.5	0.57
12:32 12:42	10	10	24	6.75	17.25	0.58

Plate No. C-3

P4

Leach Line Percolation Data Sheet

Project: Bradley Gardens, San Jacinto		W.O. Number: 9071-A1-IE	
Test Hole No.: P4		Date Excavated: AUG 5, 2026	
Depth of Test Hole: 2'		Soil Classification: SM	
Check for Sandy Soil Criteria Tested by: TAG/JVM		Date: Aug 5	Presoak: 9:28
Actual Percolation Tested by: JVM		Date: Aug. 5, 2026	

>5 gal used

Sandy Soil Criteria Test

Trial No.	Time	Time Interval (Min.)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ in Water Level (Inches)
1	9:53 10:18	25	24"	0"	24"
2	10:20 10:53	25	24"	0"	24"

Use: Normal Sandy (Circle One) Soil Criteria

Time	Time Interval (min)	Total Elapsed Time (Min.)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ in Water Level (Inches)	Percolation Rate (min/inch)
12:49 12:59	10	10	24"	10"	10	1
1:00 1:10	10	10	24"	11.5"	12.5	0.8
1:12 1:22	10	10	24"	12.0	12	0.83
1:25 1:35	10	10	24"	12.25	11.75	0.85
1:38 1:48	10	10	24"	13.25	10.75	0.93
1:51 2:01	10	10	24"	13.75	10.25	0.976

Plate No. C-4

PRELIMINARY GEOTECHNICAL INVESTIGATION
PROPOSED BRADLEY GARDENS SKILLED NURSING FACILITY
BUILDING ADDITION, 980 W. 7TH STREET
CITY OF SAN JACINTO, RIVERSIDE COUNTY
CALIFORNIA 92582 (APN 435-330-003)

FOR

CORCORAN CONSTRUCTION, INC.
26590 MADISON AVENUE
MURRIETA, CALIFORNIA 92562

W.O. 9071-A-IE DECEMBER 19, 2025

GeoSoils, Inc.

GeoSoils, Inc.
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TEL: (951) 471-0700 - FAX: (951) 471-0702
www.geosoils.com

December 19, 2025

W.O. 9071-A-IE

Corcoran Construction, Inc.
26590 Madison Avenue
Murrieta, California 92562

Attention: Ms. Kim Corcoran

Subject: Preliminary Geotechnical Investigation, Proposed Bradley Gardens Skilled Nursing Facility Building Addition, 980 W. 7th Street, City of San Jacinto, Riverside County, California 92582 (APN 435-330-003)

Dear Ms. Corcoran:

In accordance with your request and authorization, GeoSoils, Inc. (GSI), has performed a preliminary geotechnical investigation of the subject site. The purpose of our study was to evaluate the general geologic and geotechnical conditions at the existing skilled nursing facility, relative to the currently proposed development thereon, and to present preliminary recommendations for grading and the design, and construction of foundations, earth retaining structures, pavements, and hardscape from a geotechnical viewpoint.

Our evaluation primarily focuses on the proposed 43-bed skilled nursing facility (Building A1) depicted on the overall site plan, dated September 18, 2025, prepared by Gregg Maedo & Associates ([GMA], 2025 [see Appendix A]). It is our understanding that the existing office building renovation into a 16-bed facility (Building C) is still being contemplated, and based on the type of construction (building renovation) is not specifically addressed herein. If necessary, geotechnical recommendations for the proposed building renovation can be provided, once the planning for the proposed renovation is better understood.

Proposed Building A1 on the east side of the existing facility will be constructed in the open area, and will include demolition of a building in the southeast corner of the site. The need for retaining walls is unknown at this time; however, GSI has included recommendations for conventional retaining walls herein, if needed.

EXECUTIVE SUMMARY

Based on our review of the available data (see Appendix A), field exploration, laboratory testing, geologic and geotechnical engineering analyses, as well as our past experience on nearby sites, the proposed development of the skilled nursing facility building addition appears to be feasible from a geotechnical viewpoint, provided the recommendations presented in the

text of this report are properly incorporated into the design and construction of the project. Based on the existing body of geotechnical data accumulated during our recent subsurface exploration and laboratory testing, and from previous geotechnical work on nearby projects, the most significant elements of this study are summarized below:

- The subsurface data obtained, and regional geologic mapping by Dibblee (2003) indicate that the site is mantled by a thin layer of topsoil and disturbed fill, which is underlain by Holocene- to late Pleistocene-age alluvial sand and clay of valley areas (Qa). The topsoil and disturbed fill thickness was relatively thin (approximately 2 to 3 feet). Underlying the topsoil and disturbed fill, Quaternary-age (Holocene- to late Pleistocene-age) alluvial sand and clay of valley areas extend to the depths explored (between 30 and 60 feet below existing grades), although no significant clay layers were encountered during our subsurface investigation. Provided that the recommended remedial earthwork techniques are incorporated into the proposed development plans, the support of new fills and settlement-sensitive improvements by the onsite earth materials is considered feasible. However, proposed settlement-sensitive improvements that do not receive mitigation in the form of remedial earthwork may be subject to ground deformations and associated distress.

- No groundwater was encountered during our site exploration to a depth in excess of 60 feet below the ground surface (bgs). Based on our review of the California Department of Water Resources Water Data Library (CDWR; 2025), nearby well measurements reviewed appear to be regional groundwater measurements at depths of approximately 170 and 155 feet (State Well No. 04S01W27P005S [March 7, 1991], and Site Code No. 337748N1169760W001 [December 6, 2011], respectively) at sites with similar ground surface elevations. However, our review of historic groundwater measurements in the San Jacinto and Temecula basins (U.S. Geological Survey, 1919, Water Supply Paper 429) indicates groundwater in the basin may have been as shallow as 40 feet bgs. Groundwater conditions are subject to change as a result of climatic variations, rainfall, up-gradient irrigation practices, broken or damaged underground utilities.

- While site soils are potentially erodible, based on the flat laying nature of the site the presence of landslide deposits, slumps, or other significant forms of mass wasting were not observed within the proposed development area during fieldwork nor during our geologic map reviews.

- The site is situated in an area of active faults. The nearby San Jacinto and Casa Loma fault zones are considered active and are included within Alquist-Priolo Earthquake Fault Zones. Our review of published data indicates that there are no known active faults crossing the site (Jennings and Bryant, 2010), and the site is not located within an Alquist-Priolo Earthquake Fault Zone (California Geological Survey [CGS], 2018). In

addition, our review of the Riverside County Information Technology (RCIT) Map My County website (2025) indicates no County faults are mapped onsite and site is not located within a County fault zone. Therefore, surface fault rupture to adversely affect the proposed development is considered low. Due to the proximity of regional faults with documented Holocene movement, the proposed development could experience moderate to strong ground motions over its design life, as with all development in southern California. Therefore, the seismic ground motion values and design parameters provided herein should be incorporated into project planning. Further discussions of our fault activity review and photolineament analysis are presented herein.

- Our review indicates that the subject site is susceptible to secondary seismic hazards, including ground deformations from seismically-induced liquefaction or densification. Our review of the RCIT (2025) Map My County website indicates the site is mapped within an area designated as having a "moderate" potential for liquefaction, and is located in a zone of "Active" subsidence (RCIT, 2025). As such, liquefaction and settlement analyses were conducted, and are further discussed herein. However, these secondary seismic hazards can be mitigated to acceptable levels through the proposed site earthwork and foundation design recommended herein.

- Site soils are considered to exhibit a very low expansion potential (Expansion Index [E.I.] ranging between 0 and 20). The design of building foundations and other proposed site improvements should consider these expansive characteristics of the onsite soils.

- GSI conducted sampling of the near-surface onsite earth materials for general soil corrosivity testing. The corrosivity testing included the evaluation of pH, soluble sulfates, chlorides, and saturated resistivity. The test results indicate that the tested sample is moderately alkaline with respect to soil acidity or alkalinity, are is moderately corrosive to ferrous metals when saturated, presents negligible sulfate exposure to concrete (Exposure Class "S0" per Table 19.3.1.1 of American Concrete Institute [ACI] 318-14), and exhibits relatively low concentrations of soluble chlorides. On a preliminary basis, reinforced concrete mix design should minimally conform to Exposure Classes "S0," "C1," and "W0" outlined in Table 19.3.2.1 of ACI 318-14, as the foundations would likely be exposed to moisture. It should be noted that GSI does not practice in the field of corrosion engineering. Therefore, additional recommendations may be obtained from a qualified corrosion engineer should corrosion mitigation be necessary, as determined by the project architect, civil engineer, or structural engineer, as warranted.

- The underlying alluvium has some potential to consolidate due to foundation and fill loading during a seismic event based on historic groundwater levels. Our evaluation of settlement potential (both static and seismic), has considered settlement due to structural loads on footings, subsurface geometry, and historic groundwater levels.

- The minimum depth of remedial earthwork excavations across the area of proposed development are anticipated to be on the order of 5 to 7 feet. The actual depth of remedial grading excavations would be based on the conditions exposed inside the excavation during remedial grading. In areas to receive proposed ancillary surface improvements, such as pavements and flatwork, a minimum 2-foot thick layer of recompacted fill should be provided beneath these improvements. In addition, all footings should be supported by at least 3 feet of recompacted fill, which can be further evaluated once the proposed structural loads are provided for GSI's review.

- Assuming wall loads of 1 to 3 kips/foot, and column loads of 20 to 100 kips, the use of a structural mat foundation, or other foundation designed to tolerate the site's soil conditions and seismic settlement potential may be used. These assumptions should be revisited once the final plans and structural loads are made available to GSI.

- Recommendations for Portland cement concrete (PCC) and asphaltic concrete (AC) pavements are provided herein. Due to the relatively sandy nature of the near-surface soils onsite , pavement subgrades composed of these earth materials are anticipated to perform adequately under anticipated traffic loads.

- Temporary slopes for excavations less than 10 feet deep should not be constructed steeper than a 1:1 horizontal to vertical (h:v) gradient, provided that running sands or groundwater seepage are not present. Based on the proximity of existing building improvements, which will remain in-service adjacent to recommended remedial grading, the use of slot-cutting techniques or localized shoring may be necessary. All temporary slopes should be observed by GSI prior to workers entering excavations.

- The recommendations presented herein should be incorporated into the design and construction considerations of the project.

The opportunity to be of service is sincerely appreciated. If you should have any questions, please do not hesitate to contact our office.

Respectfully submitted,

GeoSoils, Inc.





Todd A. Greer
Engineering Geologist, CEG 2377

Jorge F. Meneses, PhD, PE, GE, BC. GE, F.ASCE
Geotechnical Engineer, GE 3041

TAG/JFM/ek

Distribution: (1) Addressee (email PDF)

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PRELIMINARY GEOTECHNICAL INVESTIGATION
PROPOSED BRADLEY GARDENS SKILLED NURSING FACILITY
BUILDING ADDITION, 980 W. 7TH STREET
CITY OF SAN JACINTO, RIVERSIDE COUNTY
CALIFORNIA 92582 (APN 435-330-003)

SCOPE OF SERVICES

The scope of our services has included the following:

1. Review of in-house geologic and geotechnical literature, maps, and aerial photos of the site and vicinity (text and Appendix A).

2. Geologic reconnaissance mapping and subsurface exploration consisting of the advancement of four (4) exploratory hollow-stem auger borings (B-1 through B-4), with a truck-mounted drill rig, and four (4) Cone Penetration Test (CPT) soundings (CPT-1 through CPT-4), for geotechnical logging and soil sampling (text and Appendix B).

3. Evaluation of geologic, seismic hazards and regional seismicity (text and Appendix C).

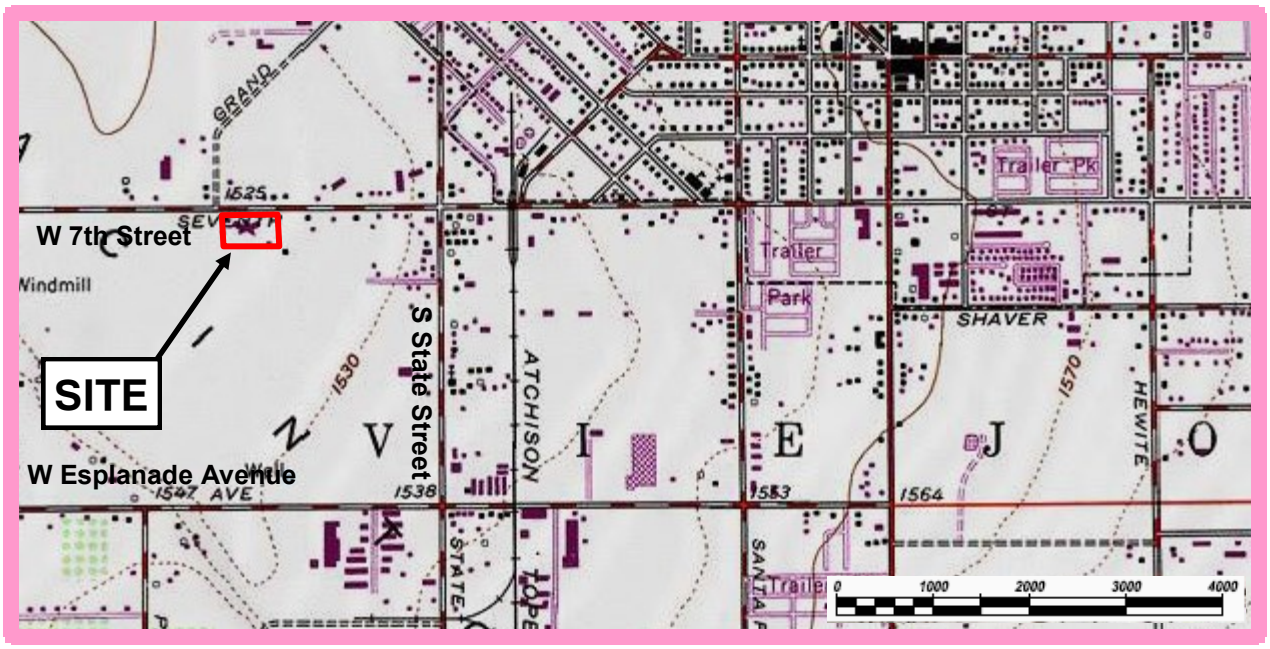
4. Appropriate laboratory testing of representative bulk and relatively undisturbed soil samples collected during our subsurface exploration program (text and Appendix D).

5. Engineering and geologic analyses of data collected (text and Appendix E).

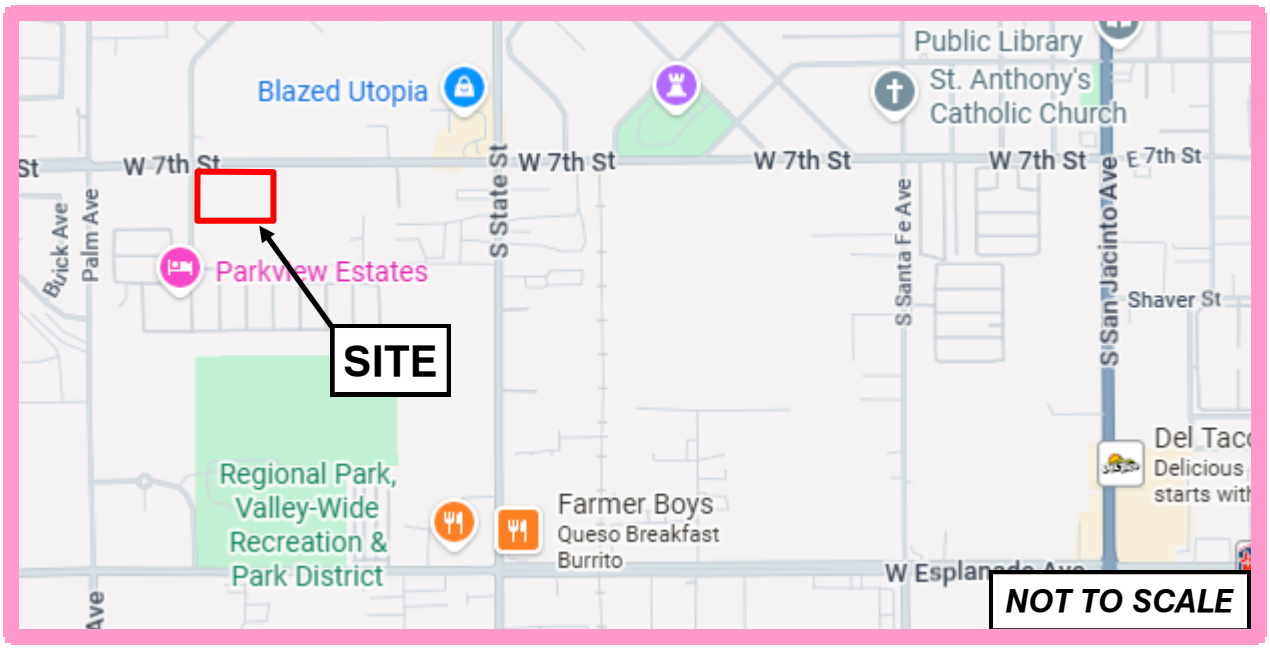
6. Preparation of this geotechnical report, accompaniments, and general grading guidelines (text and Appendix F).

SITE DESCRIPTION AND PROPOSED DEVELOPMENT

The overall site consists of an approximately 2.98-acre, rectangular-shaped area of developed land. The proposed Building A1 is located on the east side of the existing health care facility. The site is located on the southeast corner of the intersection of W 7th Street and S. Grand Avenue, in the City of San Jacinto, Riverside County, California (see Figure 1 - Site Location Map). The physical address of the existing facility is 980 W. 7th Street, City of San Jacinto, Riverside County, California 92582. As discussed herein, the overall care facility is referred to as site, project site, or property.



Base Map: TOPO! Copyright 2003 National Geographic, USGS San Jacinto Quadrangle, 7.5 Minute, Riverside Co., California -- dated 1953, photo-revised 1972.



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SITE LOCATION MAP

Figure 1

The geographic coordinates of the approximate centroid of Building A1 is at a latitude of 33.77956 degrees and a longitude of -116.97718 degrees. The property is bounded by undeveloped land on the south, east and west, by residential development to the southwest, and commercial development to the north, across W 7th Street. In general, the site is flat-lying to very gently sloping in a southeasterly direction. According to Google Earth Pro (GEP, 2025), site elevations vary between approximately 1,527 and 1,525 feet Mean Sea Level (MSL), for an overall relief of about 2 feet. The site is sparsely vegetated and has shrubs and trees surrounding the existing facility. Within the proposed building footprint, the western margin is currently used for an exercise yard by the patients. Elsewhere, it is earthen or covered with gravel (driveway area).

Existing site improvements primarily consist of several single-story buildings with an asphaltic concrete (AC) parking lot to the north. A U-shaped drive aisle exists near the entrance to the site from W 7th Street. Existing underground utilities are present beneath the pavements. There are also improvements in the area of the proposed building which consist of various sidewalks, a basketball court, and exercise yard fences. The proposed development (Building A1) is planned to be a single-story health care building with an improved fire access lane and small parking lot. Building loads are assumed to be typical for these types of structures. Sewage disposal is proposed to tie into the regional municipal system.

BACKGROUND

The facility was first approved to provide Medicare and Medicaid services on May 29, 1968 (Nursing Home Report, 2025). Existing onsite buildings appear to be primarily wood-frame construction and stucco exteriors, with shallow concrete slabs and foundations. The exercise yard area was added sometime between 2011 and 2012. Since that time, the site has been maintained and slightly modified to its current configuration. Construction records of the existing facility were not available at the time of this report and it is believed that most of the single-story facility buildings were constructed upon relatively shallow fill soils (less than 3 feet in thickness). Records of the initial grading on this site were not available for GSI's review. Given the age of the existing development (circa 1968), it is unlikely that a geotechnical report for the development of this site is currently available.

SITE EXPLORATION

Surface observations and subsurface explorations were performed by GSI representatives on November 26, 2025. Near-surface soil and geologic conditions were explored with four (4) exploratory hollow-stem auger borings (B-1 through B-4), advanced with a truck-mounted drill rig. In addition, four (4) supplemental Cone Penetration Test (CPT) soundings (CPT-1 through CPT-4) were also advanced in the footprint of Building A1. The borings and CPT soundings were logged or observed by a geologist from this office who also

collected representative bulk and relatively undisturbed soil samples for appropriate laboratory testing. Logs of the borings and CPT soundings are presented in Appendix B. The approximate locations of the borings and CPT soundings are shown on the attached Geotechnical Map (see Plate 1), which uses the overall site plan by GMA (2025) as a base.

GEOLOGY

Regional Geologic Setting

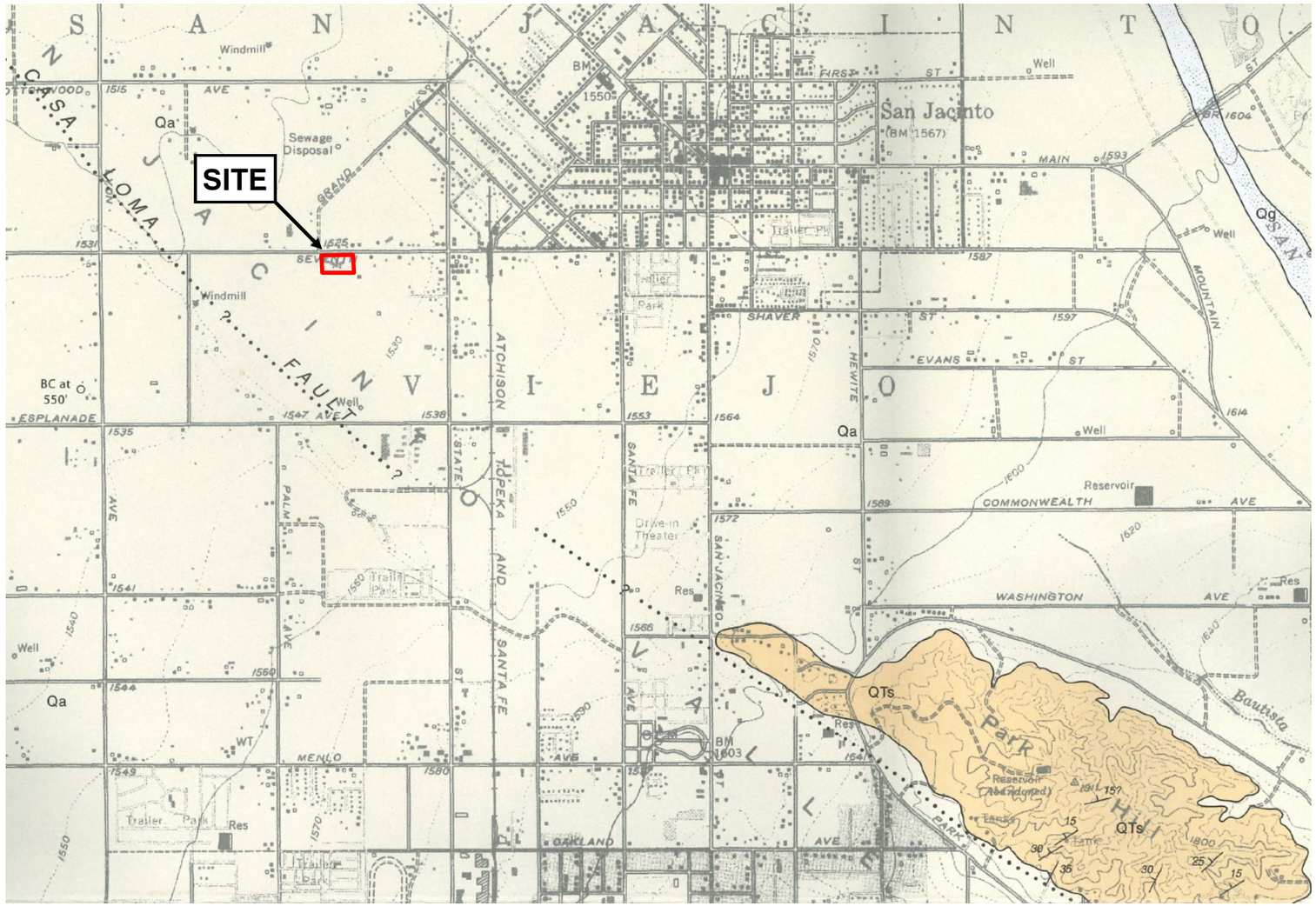
The property is situated near the northeastern margin of the Perris Block, a portion of a prominent natural geomorphic province in southwestern California known as the Peninsular Ranges. The Peninsular Ranges are characterized by steep, elongated ranges and valleys that trend northwesterly. The Peninsular Ranges extend north to the base of the San Gabriel Mountains and south into Baja California, Mexico. The Perris Block is a stable structural block bounded on the west by the Elsinore fault zone and on the east by the San Jacinto fault zone. The province is bounded on the north and northeast by the Transverse Ranges, on the south and southeast by the Colorado Desert geomorphic province. This province is typified by plutonic and metamorphic rocks (bedrock) which comprise the majority of the mountain masses, with relatively thin volcanic and sedimentary deposits discontinuously overlying the bedrock, and with Plio/Pleistocene-age (Quaternary-age) alluvial fan deposits filling in the valleys and younger alluvium filling in the incised drainages. The alluvial deposits are derived from the waterborne deposition of the products of weathering and erosion of the bedrock. Regional geologic mapping by Dibblee (2003) indicates the site is underlain by Holocene- to late Pleistocene-age alluvial sand and clay of valley areas (Qa), although no significant clay layers were encountered during our subsurface investigation. The regional geology of the site and near-vicinity is shown on Figure 2, which uses Dibblee (2003) as a base.

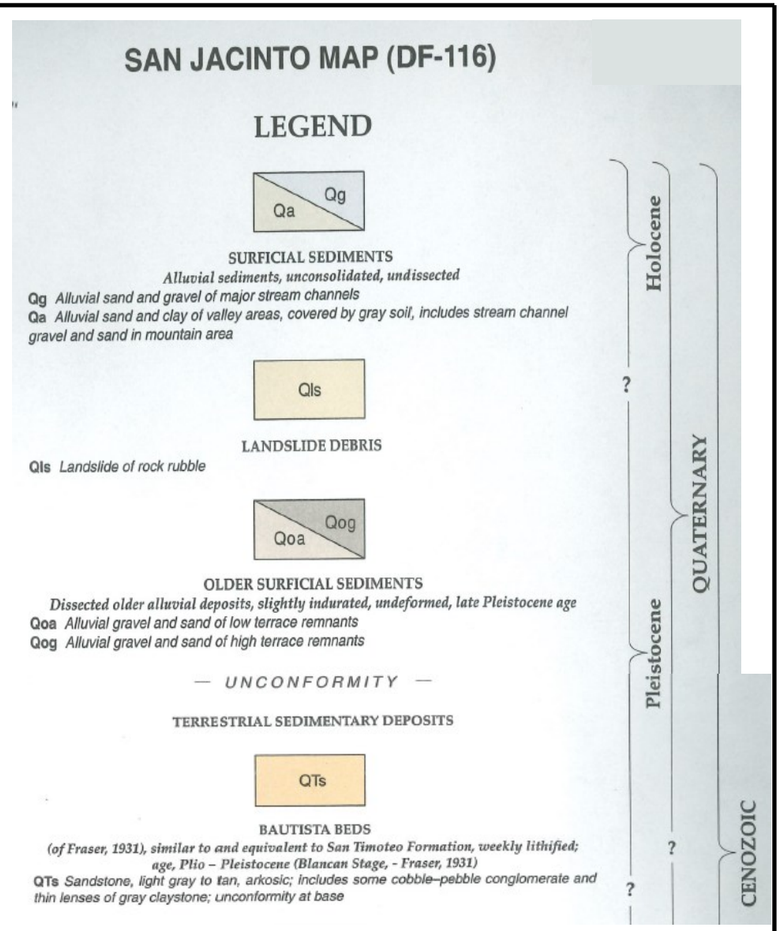
Site Geology

The site geologic units encountered or observed during our subsurface investigation and site reconnaissance included near surface topsoil and disturbed fill, underlain by Holocene- to late Pleistocene-age alluvial sand and clay of valley areas at depth. The earth materials are generally described below from the youngest to the oldest. The distribution of these materials is shown on Plate 1. The relationship of the geological units is shown in profile on Geologic Cross Sections A-A' and B-B' (Plate 2).

Topsoil and Disturbed Fill (Not Mapped)

Topsoil and disturbed fill were encountered in all the borings advanced onsite. The topsoil and disturbed fill generally consist of brown, moist, loose to medium dense silty sands with some occasional roots and rootlets. Based on the available data, the thickness of the topsoil and disturbed fill was relatively thin (approximately 2 to 3 feet). Due to the low relative densities





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SCALE 1:24000

1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 KILOMETER

SAN JACINTO QUADRANGLE
CONTOUR INTERVAL 40 FEET
DOTTED LINES REPRESENT 10-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

Figure Adapted from:

GEOLOGIC MAP OF THE
SAN JACINTO QUADRANGLE
RIVERSIDE COUNTY, CALIFORNIA

BY THOMAS W. DIBBLEE, JR., 2003
EDITED BY JOHN A. MINCH

GSI GeoSoils, Inc.

Figure 2

REGIONAL GEOLOGIC MAP

W.O. 9071-A-IE	DATE: 12/25	SCALE: 1"=2,000'

and potential for adverse settlements, all of the existing topsoil and disturbed fill should be removed and recompacted during site grading activities. The removed topsoil and disturbed fill may be reused for compacted fills, provided it has been cleansed of deleterious materials (e.g., weeds, grasses, and concentrations of organic matter) prior to placement onsite as engineered fill.

Quaternary-Age Alluvial Sand and Clay of Valley Areas (Map Symbol - Qa)

In general, the topsoil and disturbed fill is underlain by relatively young (Holocene- to late Pleistocene-age) alluvial deposits, described by Dibblee (2003) as alluvial sand and clay of valley areas. However, as encountered during our subsurface investigation the site soils were generally sandy with minor silt layers encountered at depth. The alluvial deposits generally consist of light brown and dark gray, grayish brown, and light gray, medium dense, silty sand and silt with a few minor sandy layers. The alluvium is generally damp to moist and locally wet to saturated. The observed alluvial deposits extend to depths beyond 60 feet, and are estimated to be hundreds of feet in thickness based on the data reviewed. The near surface alluvial deposits (upper 5 to 7 feet) should be removed and recompacted during site grading. In-place low density alluvial deposits should be removed to competent materials (e.g., greater than or equal to 105 pcf or greater than or equal to 85 percent compaction). The removed alluvial deposits may be reused for compacted fills, provided that they have been cleansed of deleterious materials prior to placement onsite as engineered fill.

GROUNDWATER

No groundwater or seepage were encountered during our field exploration in Borings B-1 through B-4 nor CPTs 1 through 4, at depths ranging between approximately 30 and 60 feet bgs. As such, groundwater is not expected to be a factor during construction of the proposed project. Based on our review of the California Department of Water Resources Water Data Library (CDWR; 2025), nearby well measurements reviewed appear to be regional groundwater measurements at depths of approximately 170 and 155 feet (State Well No. 04S01W27P005S [March 7, 1991], and Site Code No. 337748N1169760W001 [December 6, 2011], respectively) at sites with similar ground surface elevations. However, our review of historic groundwater measurements in the San Jacinto and Temecula basins (U.S. Geological Survey, 1919, Water Supply Paper 429) indicates groundwater near the center of the basin may have been as shallow as 40 feet bgs. However, in California, the legislature passed the Sustainable Groundwater Management Act (SGMA), creating a statewide framework for groundwater regulation. The Eastern Municipal Water District (EMWD), and several other water purveyors, have been actively managing the San Jacinto basin as part of a voluntary Assembly Bill 3030 effort passed in 1992. As such, it is unlikely the groundwater will reach historic levels as the basin is now adjudicated.

However, there is a potential for perched water to occur both during and following site development along zones of contrasting permeability (e.g., fill lifts, sandy and clayey bedding, or discontinuities). Sources of perched water may include infiltrated rain water, over-irrigation, or damaged underground utilities. These observations reflect site conditions at the time of our investigation and do not preclude future changes in local groundwater conditions that were not obvious at the time of our investigation.

FAULTING AND REGIONAL SEISMICITY

Our review indicates that there are no known active faults crossing this site (Jennings and Bryant, 2010), and the site is not within an Alquist-Priolo Earthquake Fault Zone (California Geological Survey [CGS], 2018). In addition, our review of the RCIT Map My County website (2025) indicates no County faults are mapped onsite and site is not located within a County fault zone. However, the site is situated in a region of active faulting, as is all of southern California. These faults include, but are not limited to: the San Andreas fault; the San Jacinto fault; and the Elsinore fault zone.

The closest known active fault is the San Jacinto fault, located at an approximate distance of 2.0 miles (3.2 kilometers) to the east-northeast. However, the nearby San Andreas fault, and design fault for the subject site, is located at an approximate distance of 17.1 miles (27.5 kilometers) to the northeast.

Portions of the San Jacinto and San Andreas faults have demonstrated movement in the Holocene Epoch (last 11,700 years); and therefore, are considered active and located within Alquist-Priolo Earthquake Fault Zones (CGS, 2018). Cao, et al. (2003) indicates that the San Andreas fault is an "A" fault with a slip rate of 24.0 ($\pm$6.0) millimeters per year, and is capable of producing a maximum magnitude (M_w) 7.5 earthquake. The location of the San Andreas and San Jacinto faults, and other major faults that could have an effect on the site in the form of moderate to strong ground motions, are shown on the Regional Fault Map (see Figure 3). In addition, the Riverside County Information Technology (RCIT) fault hazard mapping in the site vicinity is shown on the County Fault Map (see Figure 4).

Fault Activity Review (Alquist-Priolo Fault Zones)

Based on our review of available fault hazard mapping (CGS, 2025 and 2018 and RCIT, 2025) a small splay of the San Jacinto fault projects towards the subject property. This fault trace is described as the "Casa Loma" segment of the San Jacinto fault zone.

Our fault activity review included reviews of previous fault-finding and geotechnical investigations by Gary S. Rasmussen & Associates (GR&A, 1986, County Geo. No. 409), Lewis S. Lohr & Associates (LSL&A, 1991, County Geo. No. 790) and by Leighton & Associates (L&A, 2003, County Geo. No. 1189). These previous investigations, just northwest of the site, found no evidence of offsets or active faulting within the trench exposures evaluated. As such, it appears the small fault splay dies-out before reaching the

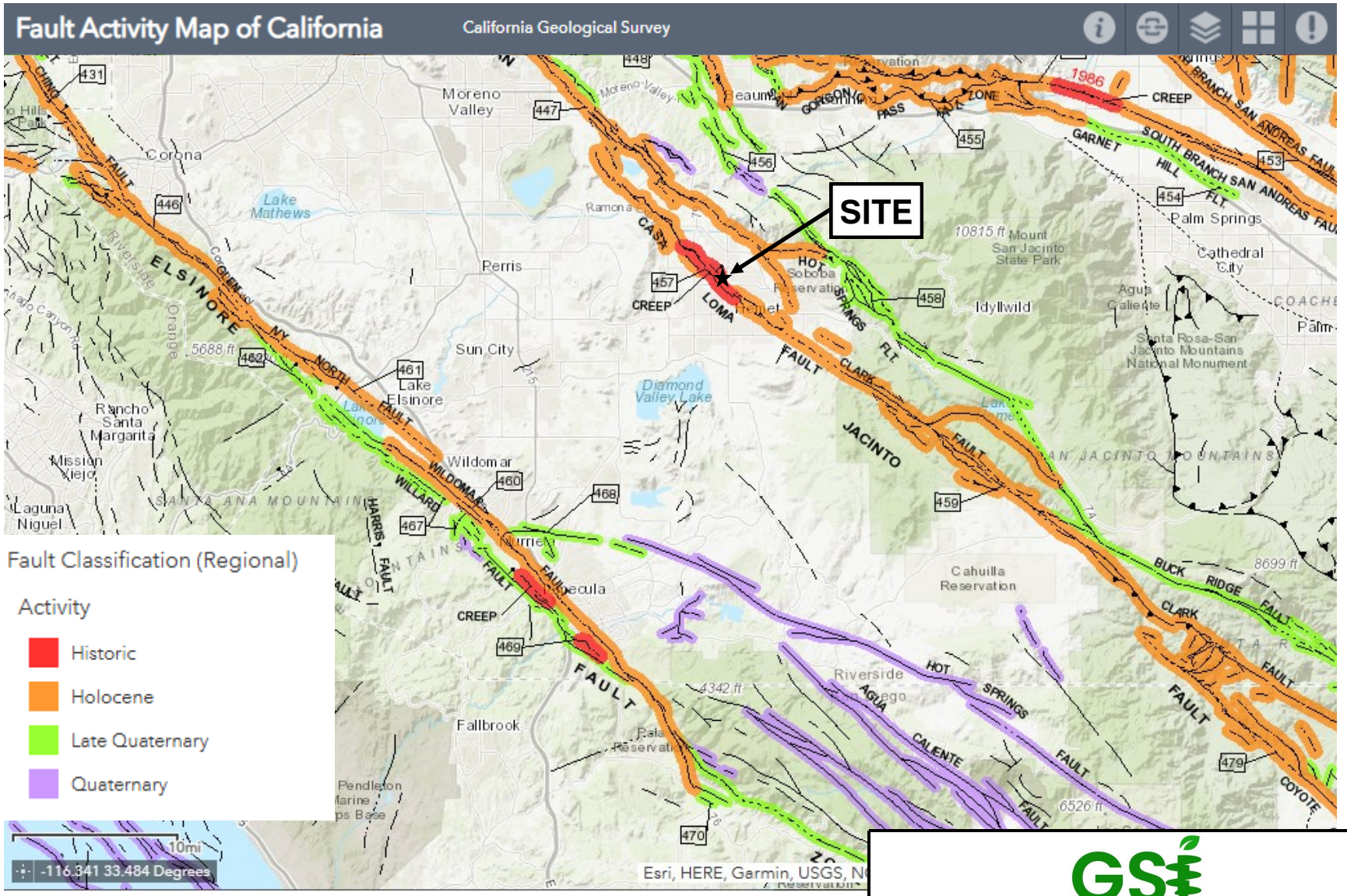

Figure Adapted from: Fault Activity Map of California, by the California Geological Survey, 2025

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Figure 3

REGIONAL FAULT MAP

W.O. 9071-A-IE	DATE: 12/25	SCALE: See Bar Scale

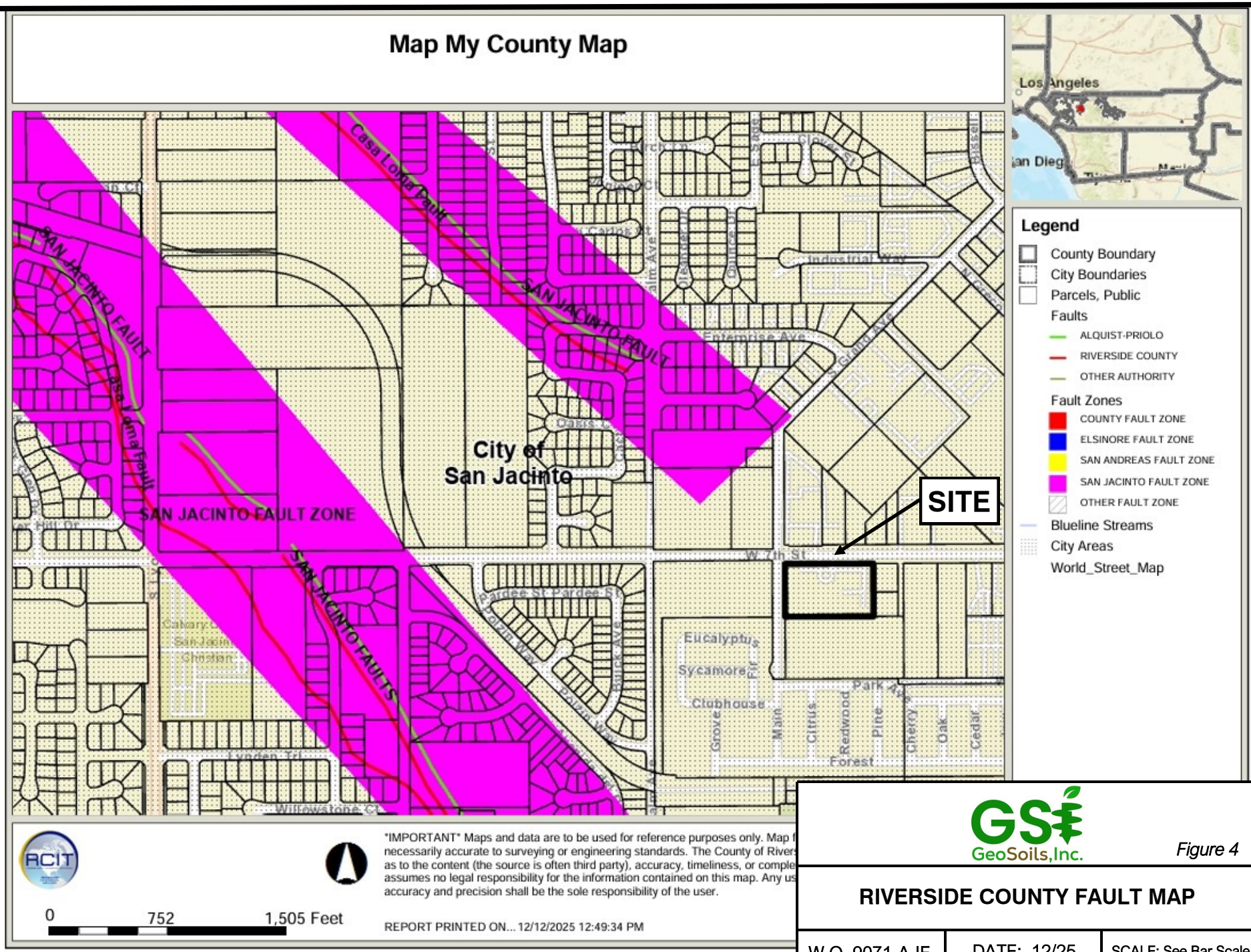

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Figure 4

RIVERSIDE COUNTY FAULT MAP

W.O. 9071-A-IE	DATE: 12/25	SCALE: See Bar Scale

Figure Adapted from: Riverside County Information Technology (RCIT), Map My County Website, 2025

site proximity. A map showing the Alquist-Priolo earthquake zones of required investigation (CGS, 2025) is provided on Figure 5. A map showing the nearby Alquist-Priolo site investigation reports reviewed (GR&A, 1986, LSL&A, 1991, and L&A, 2003) is provided on Figure 6.

Aerial-photographic Lineament Analysis

In order to identify possible unmapped faults and to evaluate topographic expressions of published fault traces in the proximity, a lineament analysis was performed using stereoscopic black-and-white aerial photographs (United States Department of Agriculture [USDA], 1980). Lineaments were generally classified as strong, moderate, or weak. A strong lineament is a well-defined feature that can be continuously traced several hundred feet to a few thousand feet. A moderate lineament is less well-defined, somewhat discontinuous, and can be traced for only a few hundred feet. A weak lineament is discontinuous, poorly defined, and can be traced for a few hundred feet or less. Based on our review and analysis, a moderate photolineament was noted west- northwest of the site, and correlates well with the mapped location of the Casa Loma segment of the San Jacinto fault zone. No lineaments specifically cross or project toward the project site. Furthermore, the site is not transected by geomorphic features indicative of active faulting.

Regional Seismicity

General

The subject site is located within a seismically active region, subject to moderate to strong earthquakes occurring along many active fault splays. The possibility of ground motions at the site, may be considered as approximately similar to the southern California region as a whole.

Historical Site Earthquake Records

Historical site seismicity was evaluated with the USGS website application "Search Earthquake Catalog" (https://earthquake.usgs.gov/earthquakes/search/). This program performs a search of the historical earthquake records for magnitude 5.0 to greater than 7.0 seismic events within a search area, between the years of January, 1800 through December, 2025. A historical earthquake epicenter map is generated from the historical data, and is presented on Figure 7. Our research of regional geologic and seismic data did not reveal any known instances of ground failure within the site associated with regional seismic activity.

Seismic Ground Motion Values

Using a latitude of 33.77956 degrees and a longitude of -116.97718, a Risk Category of III (provided by the architect) and based on the site conditions, the following table summarizes the design criteria obtained from the 2022 CBC, Chapter 16 Structural Design, Section 1613, Earthquake Loads. The ASCE Hazard Tool (ASCE Hazard Tool) has been used to aid in

Department of Conservation
California Geological Survey

Earthquake Zones of Required Investigation

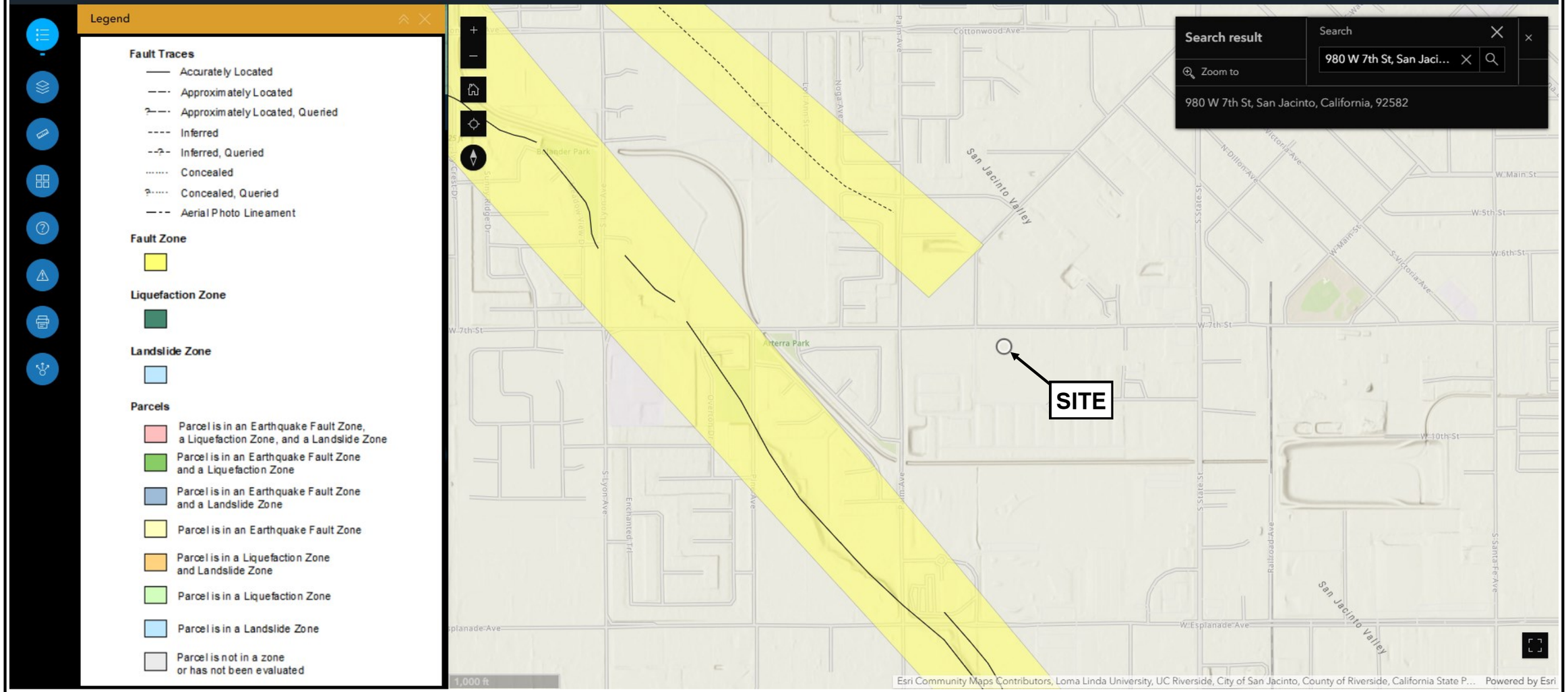

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Figure 5

ALQUIST-PRIOLO - EARTHQUAKE ZONES OF REQUIRED INVESTIGATION

W.O. 9071-A-IE	DATE: 12/25	SCALE: See Bar Scale

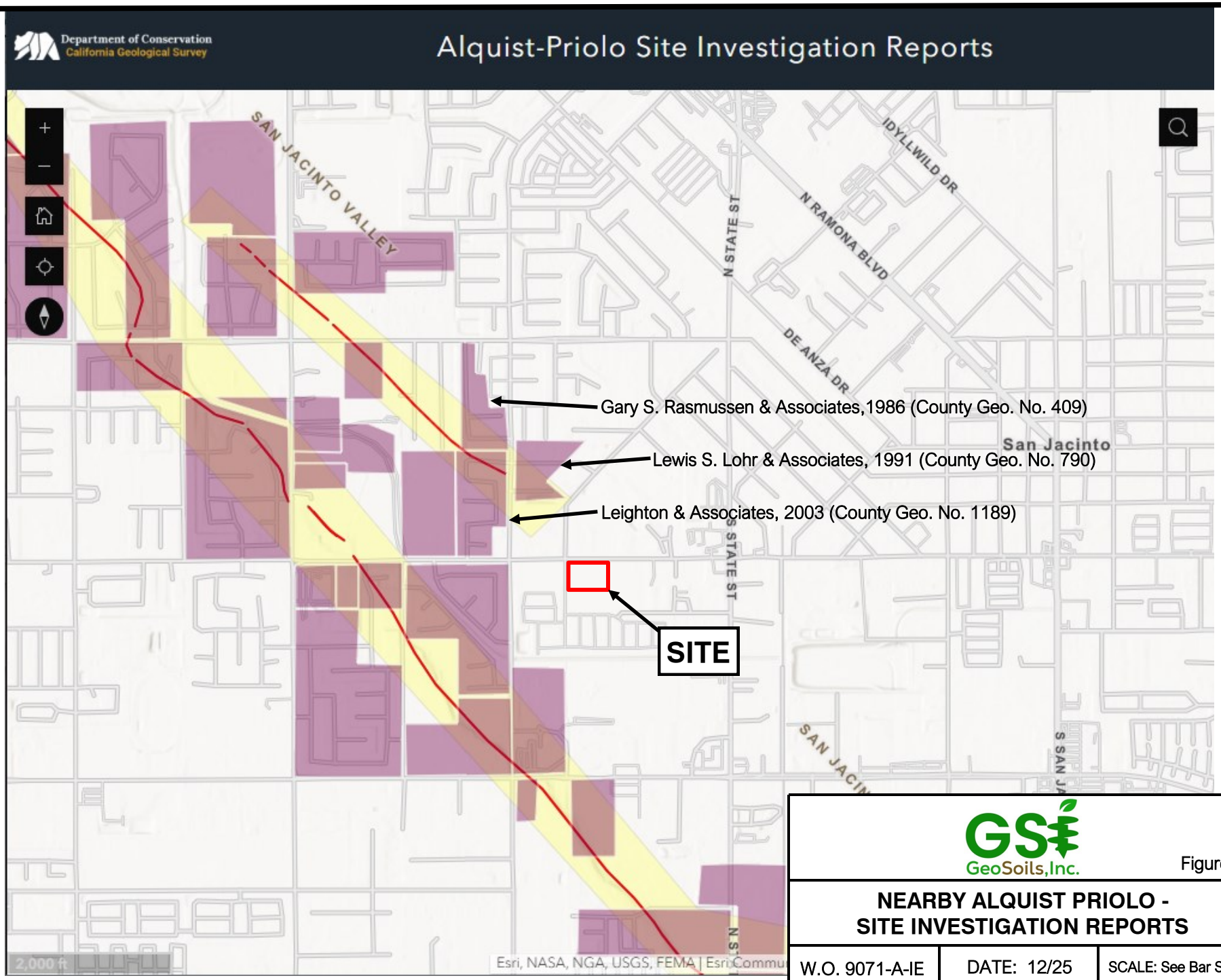

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Figure 6

NEARBY ALQUIST PRIOLO - SITE INVESTIGATION REPORTS

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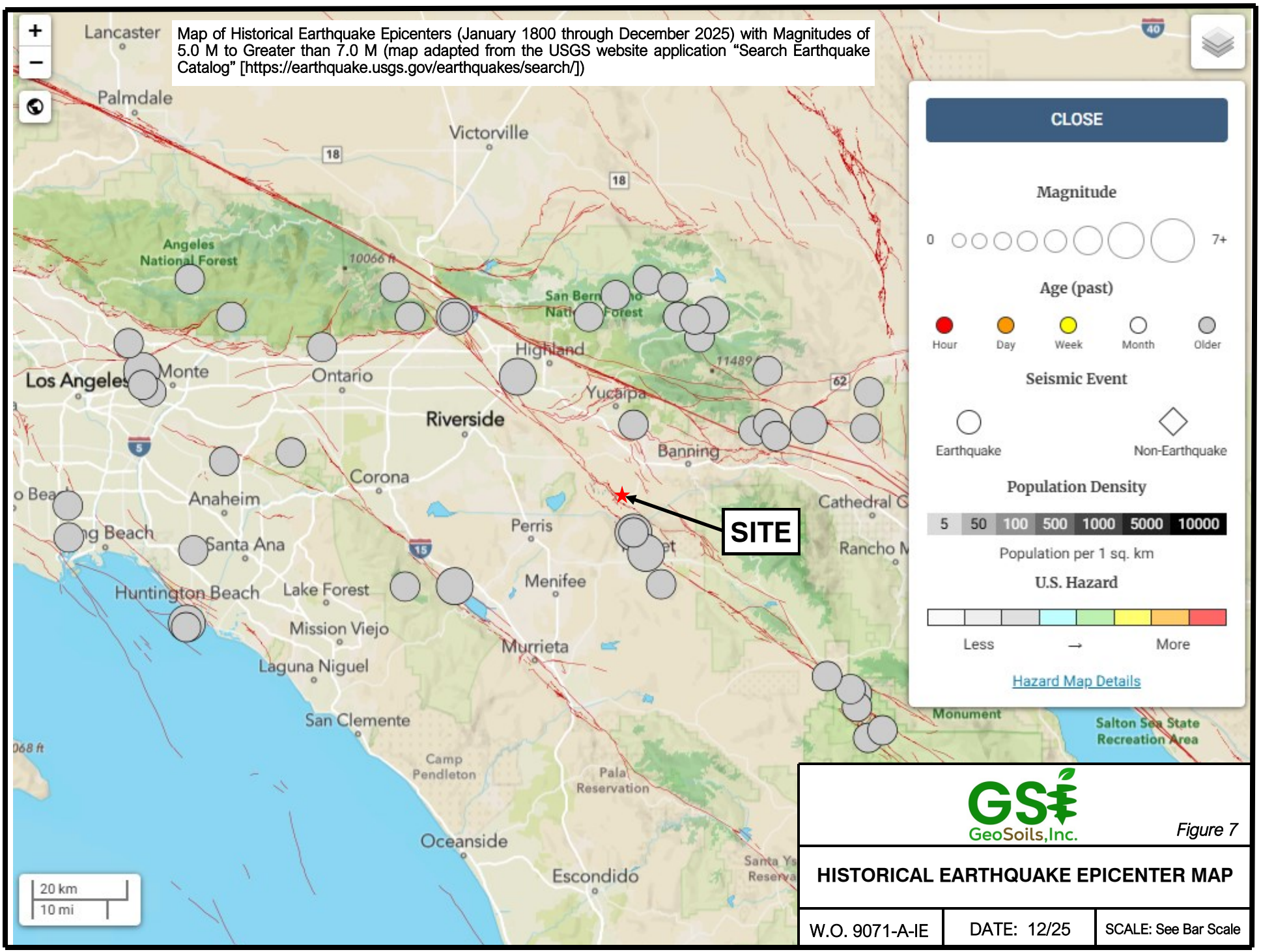

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Figure 7

HISTORICAL EARTHQUAKE EPICENTER MAP

W.O. 9071-A-IE	DATE: 12/25	SCALE: See Bar Scale

design. As the site is potentially liquefiable, the site may be classified as Site Class F. However, as we assume that the fundamental period of the proposed structure is less than 0.5 seconds, the site is classified as D (Appendix C). Since site class is D, a site-specific procedure would be required, but it is not performed as we follow the Exception of Section 11.4.8.1, ASCE 7-16, Supplement 3. A printout of the ASCE Design Hazards Report is presented in Appendix C.

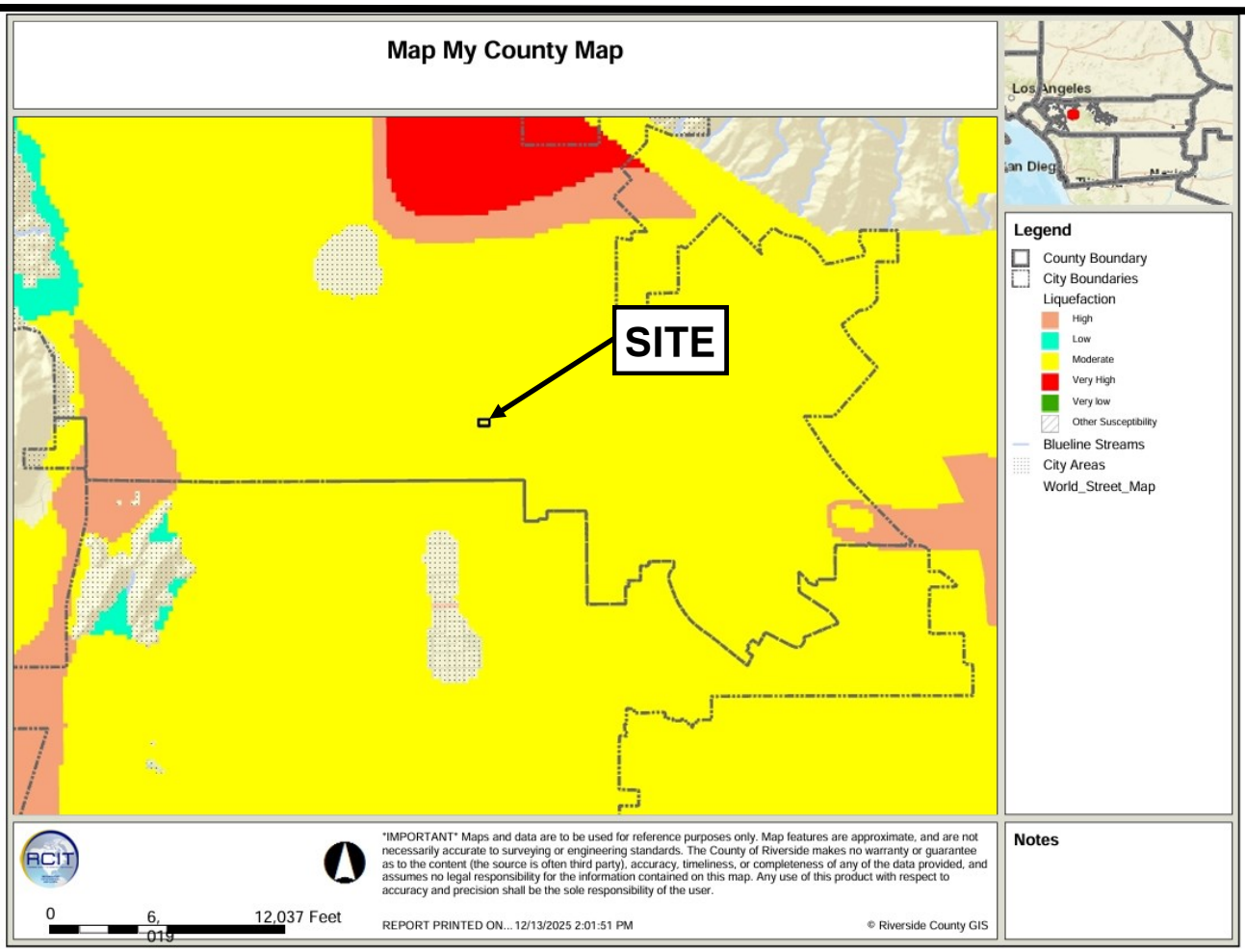
2022 CBC SEISMIC GROUND MOTIONS		
PARAMETER	VALUE	2022 CBC OR REFERENCE
Risk Category	III	Table 1604.5
Site Class	D	Chapter 20, ASCE 7-16
MCE_R spectral acceleration - (0.2 sec), S_s	2.161 g	Section 1613.2.1
MCE_R spectral acceleration - (1.0 sec), S_1	0.875 g	Section 1613.2.1
Site Coefficient, F_a	1.0	ASCE 7-16, Supplement 3
Site Coefficient, F_v	1.7	ASCE 7-16, Supplement 3
MCE_R spectral acceleration (0.2 sec), S_{MS}	2.161 g	Section 1613.2.3
MCE_R spectral acceleration (1.0 sec), S_{M1}	2.231 g	ASCE 7-16, Supplement 3
Design spectral acceleration (0.2 sec), S_{DS}	1.441 g	Section 1613.2.4
Design spectral acceleration (1.0 sec), S_{D1}	1.488 g	ASCE 7-16, Supplement 3
PGA_M	1.074 g	ASCE 7-16, Section 11.8.3
Seismic Design Category	E	Section 1613.2.5

Conformance to the criteria above for seismic design does not constitute any kind of guarantee or assurance that significant structural damage or ground failure will not occur in the event of a large earthquake. The primary goal of seismic design is to protect life, not to eliminate all damage, since such design may be economically prohibitive. Cumulative effects of seismic events are not addressed in the 2022 CBC (CBSC, 2022) and regular maintenance and repair following locally significant seismic events will likely be necessary, as is the case in all southern California.

LIQUEFACTION POTENTIAL

General

Based on our review, the CGS has not prepared Seismic Hazard Mapping for the San Jacinto Quadrangle. However, our review of the RCIT (2025) Map My County website indicates the site is mapped within an area designated as having a "moderate" potential for liquefaction (RCIT, 2025 [see Figure 8, Riverside County Liquefaction and Subsidence Maps]). As such, liquefaction and seismic settlement analyses were conducted, and are discussed below.



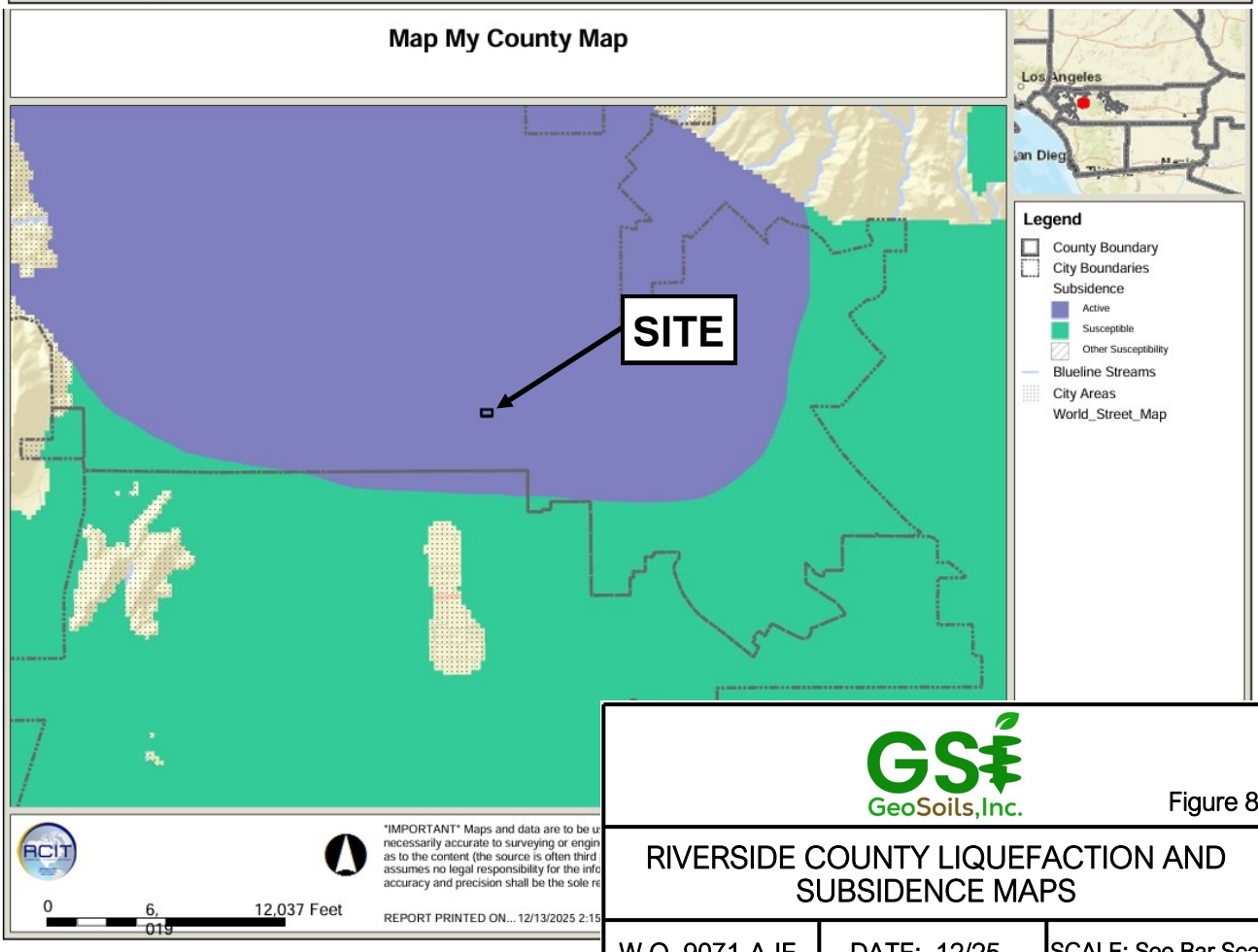


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Figure 8

RIVERSIDE COUNTY LIQUEFACTION AND SUBSIDENCE MAPS

W.O. 9071-A-IE	DATE: 12/25	SCALE: See Bar Scale

Figures Adapted from: Riverside County Information Technology (RCIT), Map My County Website, 2025

Liquefaction

Liquefaction is a phenomenon where earthquake- induced ground motions increase the pore pressure in saturated, sand-like soils until it is equal to the overburden pressure. When this occurs, the soil can completely lose its shear strength and enter a liquefied state. The possibility of liquefaction is dependent upon grain size, relative density, fines consistency, confining pressure, saturation of the soils, and intensity and duration of seismic ground motions. In order for liquefaction to occur, three criteria must be met: underlying loose, sand-like soils, a groundwater depth of less than about 50 feet, and a potential for seismic ground motions from nearby large-magnitude earthquakes.

Following a review of the subsurface borings, CPT data and laboratory testing, the CPT data was evaluated for liquefaction potential within the site. For the analyses, GSI used a groundwater depth of 40 feet below the existing grade to account for potential historic groundwater levels, although unlikely, at the time of the seismic event for the currently planned development.

The liquefaction analysis was performed, based on the CPT data obtained (CPT-1 through CPT-4) and was conducted using the commercially available CPT liquefaction assessment software, CLiq v.3.5.4.2 (Geologismiki, 2025). We used the soil information from the CPT data, and seismic parameters PGA_M = 1.074g and magnitude M= 8.1 earthquake. This magnitude was calculated from deaggregation analysis using the USGS Tool interactive website (Appendix C). Calculations of liquefaction potential indicate that sandy layers below the ground water table could be potentially liquefiable. No bearing capacity failure, sand boils, or lateral spreading are anticipated, based on the available data. Computer printouts from the analysis are presented in Appendix E.

Seismic Densification

Seismic densification is a phenomenon that typically occurs in low relative density granular soils (e.g., USCS classified as SP, SW, and SM) that are above the groundwater table and are significantly dry of optimum moisture content. During the seismic-induced ground shaking, these natural sediments deform under loading and volumetrically strain, resulting in ground surface settlements. These unsaturated granular soils are susceptible if left in their original density (unmitigated), and are significantly drier than the optimum water content (as defined by the ASTM D 1557). Seismic densification phenomenon has a low, to perhaps moderate potential to affect planned site improvements; however, will be mitigated by recommended remedial grading and appropriate foundation design. Calculations of seismically induced settlements are presented in Appendix E.

We estimate approximately 3-inch of total seismically induced ground settlement may occur at the site. The seismic total settlements at each of the CPT locations, including dry (above GWT) and wet (below GWT) are presented in the Table below.

CPT No.	Dry settlement (in)	Wet settlement (in)	Total Settlement (in)
1	0.62	1.12	1.74
2	1.05	1	2.05
3	3.14	1.21	4.35
4	3.16	0.75	3.91
		Average =	3.01

The differential settlements were calculated using the total settlement at each CPT location and the horizontal distances between them. The angular distortions (Δ/L) are consistent with ASCE 7-16, Chapter 12.13.9. These calculations are presented in the Table below.

CPT No.		Differential Settlement, Δ (in.)	Distance, L (ft)	Δ/L
1	2	0.31	50	0.001
1	3	2.61	87	0.003
1	4	2.17	119	0.002
2	3	2.3	109	0.002
2	4	1.86	152	0.001
3	4	0.44	55	0.001

Lateral Spreading

Lateral spread phenomenon is described as the lateral movement of stiff, surficial, mostly intact blocks of sediment or compacted fill displaced downslope towards a free face along a shear zone that has formed within the liquefied sediment. The resulting ground deformation typically has extensional fissures at the head of the failure, shear deformations along the side margins, and compression or buckling of the soil at the toe. Given, the location and flat laying nature of the site, the potential for lateral spreading to directly affect the site is considered low, based on the available data.

SUBSIDENCE POTENTIAL

Subsidence and Ground Fissures

Our review of the RCIT (2025) Map My County website indicates the site is located in a zone of "Active" subsidence (RCIT, 2025 [see Figure 8, Riverside County Liquefaction and Subsidence Maps]). The effects of areal subsidence and ground fissures generally occur at the transition or boundaries between low-lying areas and adjacent hillside terrain, where materials of substantially different engineering properties (e.g., alluvium vs. bedrock) are present.

Subsidence and ground fissures may also occur due to groundwater or fluid withdrawal and regional tectonics. Documented subsidence within the basin roughly corresponds to the limits of the bounding Casa Loma and San Jacinto fault zones (Lofgren, 1976). There is historical evidence that subsidence has occurred within the San Jacinto basin and the site area, including as much as 0.26 feet (Lofgren, 1976), occurring north of the site during the period of 1964 to 1973. Thus, the subsidence has been attributed to withdrawal of groundwater and regional tectonics along bounding fault zones. However, subsidence has eased appreciably, as a result of the groundwater basin being adjudicated.

The most significant ground fissures are located in the northwestern part of the valley adjacent to and immediately west of the Casa Loma fault, north and northwest of Lakeview (Morton, 1994). Ground fissures in the immediate site vicinity have not been documented.

As such, subsidence and ground fissures at the subject site due to groundwater withdrawal and regional tectonics should be no greater than other nearby already developed areas. As discussed previously, California regulations have been enacted by the Sustainable Groundwater Management Act (SGMA) to mitigate the subsidence potential from the withdraw of groundwater. Provided the SGMA guidelines are properly implemented, the potential for areal subsidence or ground fissures from subsidence owing to groundwater withdrawal, is considered low, but may not be entirely precluded.

OTHER SECONDARY SEISMIC HAZARDS

The following list includes other secondary seismic related hazards that have been considered during our evaluation of the site. The hazards listed are considered negligible or mitigated as a result of site location, soil characteristics, and typical site development procedures indicated herein:

- Lateral spreads
- Ground Lurching or Shallow Ground Rupture
- Tsunami
- Seiche and Dam Inundation

Following implementation of remedial earthwork and design of foundations described herein, this potential would be no greater than that for other existing structures and improvements in the immediate vicinity that comply with current and adopted building standards. Other geologic hazard considerations are addressed below.

Other Geologic Hazard Considerations

The California Geological Survey Note 48 (2022) identifies a number of exceptional geologic hazards that can occur at individual sites, but do not occur statewide. An evaluation of these exceptional conditions is referred to as a Conditional Geologic Assessment by Note 48. Specific assessment items listed in Note 48 are addressed in the table below.

Conditional Geologic Assessment

HAZARD	ASSESSMENT	REFERENCE
Methane Gas, Hydrogen-Sulfide Gas, or Tar Seeps	Not applicable, site is not located with an identified oil field.	California Geological Energy Management Division (CalGEM) Well Finder Program, and DOGGR Online Mapping System (DOMS, 2025).
Volcanic Eruption	Not applicable, site is not in a known hazard area for volcanic eruptions.	U.S. Geological Survey Bulletin 1847 and Geologic mapping by Dibblee (2003).
Flooding and Dam Inundation	The proposed project is located within FEMA Flood Zone X, not located within a County Flood zone, and not located within a dam inundation area.	FEMA Flood Maps, Map My County Website, and Division of Safety of Dams (DSOD).
Tsunami and Seiche Inundation	Not Applicable	See above Sections.
Radon-222 Gas	Not Applicable, typically a concern in the California Coast Ranges.	California Radon Survey (1990) and Nagda (1994).
Naturally Occurring Asbestos	Not Applicable, site is not within an area more likely to contain naturally occurring asbestos.	Churchill and Hill, 2000 (Open-File Report OFR-2000-19)
Hydrocollapse Due to Anthropic Use of Water	Drilling, CPT, and groundwater data indicate that soils are not likely to experience hydrocollapse.	See Groundwater Section.
Regional Subsidence	Our review of Lofgren (1976) and the Map My County Website indicates the site is located within an “Active” zone of subsidence.	Lofgren (1976) and Map My County Website. See above Sections.
Clays and Cyclic Softening	Soils underlying the site are predominately granular. No plastic clays encountered onsite.	See Appendix B and below sections.

LABORATORY TESTING

General

Laboratory testing was performed on representative onsite earth materials in order to evaluate their physical characteristics. The test procedures used and laboratory results obtained are presented below.

Classification

Soils were classified visually according to the Unified Soils Classification System (per ASTM D 2488). The soil classifications are shown on the Boring Logs in Appendix B.

Moisture-Density Relations

The field moisture contents and dry unit weights were measured for relatively undisturbed samples in the laboratory in general accordance with ASTM D 2937 and ASTM D 2216. The dry unit weight was calculated in pounds per cubic foot (pcf), and the field moisture content was calculated as a percentage of the dry unit weight. The results of these tests are indicated on the Boring Logs in Appendix B.

Laboratory Standard

The maximum dry density and optimum moisture content were evaluated for a representative bulk sample of the near-surface soil. The laboratory standard used was ASTM D 1557. The moisture-density relationship obtained for this soil is shown below:

SAMPLE LOCATION AND DEPTH (FT)	SOIL TYPE	MAXIMUM DRY DENSITY (PCF)	OPTIMUM MOISTURE CONTENT (%)
B-2 @ 0-5'	Silty Sand (SM)	113.6	13.1

Expansion Potential

A representative bulk sample of the near-surface soil was evaluated for expansion potential. The Expansion Index (E.I.) test was performed in accordance with ASTM Standard D 4829. The results of the expansion testing are presented in the following table.

SAMPLE LOCATION AND DEPTH (FT)	LABORATORY EXPANSION INDEX (E.I.)	EXPANSION POTENTIAL*
B-1 @ 0-5'	7	Very Low

Direct Shear Tests

Shear testing was performed on relatively undisturbed samples of site soil encountered in the borings. Shear tests were performed in general accordance with ASTM Test Method D 3080 in a Direct Shear Machine of the strain control type. The shear test results are presented in Appendix D, and summarized in the following table:

SAMPLE LOCATION AND DEPTH (FT)	PEAK		RESIDUAL	
	COHESION (PSF)	FRICTION ANGLE (DEGREES)	COHESION (PSF)	FRICTION ANGLE (DEGREES)
B-1 @ 7.5 (undisturbed)	38	36	22	33
B-4 @ 15 (undisturbed)	224	37	87	34

Saturated Resistivity, pH, and Soluble Sulfates

GSI conducted sampling of onsite earth materials for general soil corrosivity testing. The testing included evaluation of soil pH, soluble sulfates, soluble chlorides, and saturated resistivity. These preliminary data should be used by the project structural engineer (or corrosion engineer) in their evaluation of site corrosivity mitigation measures. The soluble sulfate and corrosion potential results are shown as follows, and are presented in Appendix D:

LOCATION AND DEPTH (FT)	SOLUBLE SULFATES PERCENTAGE BY WEIGHT	pH	CHLORIDE (mg/kg)	RESITIVITY (OHMS-CM)
B-1 @ 0-5	0.005	8.0	21	3,500

For preliminary planning purposes, and based upon the soluble sulfate test results and the American Concrete Institute (ACI, 2014), the soluble sulfate content is listed as Exposure Class “S0” (<0.10 Water-Soluble Sulfate in soil, percentage by weight), per the ACI, 2014 (Table 19.3.1.1). Based on the results of the resistivity and pH testing, the onsite soils are

generally considered moderately alkaline (a pH of 7.9 to 8.4 is considered moderately alkaline), and are considered moderately corrosive to ferrous metals in a saturated state (2,000 to 10,000 ohm-cm is considered moderately corrosive). Chlorides are generally low and below action levels.

Although the site soils are categorized as being moderately corrosive to ferrous metals in a saturated state, it is our understanding that ferrous metals embedded in properly poured and formed concrete with the proper mix should be adequately protected from these conditions. As stated above, the soluble sulfate content is listed as Exposure Class "S0" (ACI, 2014). However, reinforced concrete mix design for foundations, slab-on-grade floors, and pavements should also conform to Exposure Classes "S0," "W0," and "C1" in Table 19.3.1.1 of ACI 318-14, as concrete would likely be exposed to moisture. Based upon the laboratory test results obtained, a consulting corrosion engineer may be retained to provide specific recommendations for foundations, utility piping, or other subsurface structures, as warranted.

Resistance Value (R-Value)

Resistance value, or R-Value testing, was performed on a representative soil sample in accordance with CalTrans Test Method 301, and yielded a test result of R=31. The results of R-Value testing are presented in Appendix D. Based on the testing results obtained, preliminary pavement design recommendations are presented herein.

Conformance Testing for Expansion, Corrosion and Concrete Mix Design

Upon completion of grading, additional laboratory testing should be performed on representative samples of soil exposed near pad grade to evaluate its corrosive effects on concrete and steel, and expansion characteristics. Additional comments may be obtained from a qualified corrosion engineer at that time based on the level of corrosion protection required by the project architect, structural engineer, or civil engineer. It is assumed that the need for corrosion protection of steel reinforcement will be further evaluated by the project structural engineer or project architect.

PRELIMINARY CONCLUSIONS AND RECOMMENDATIONS

General

Based on our review of the existing body of near-site geotechnical data, and our field exploration, laboratory testing, and geotechnical engineering analysis, it is our opinion that the project site appears suitable to receive the proposed development from a geotechnical engineering and geologic viewpoint, provided that the recommendations presented in the following sections are incorporated into the design and construction phases of site development. The primary geotechnical concerns with respect to the proposed development are:

1. The presence of existing near-surface topsoil and disturbed fills, and the presence of underlying near-surface loose to medium dense sandy to silty young alluvial deposits.

2. The static and seismic settlement potential of underlying alluvial soils.

3. The depth to competent bearing material below existing grades.

4. The corrosion potential of onsite soils.

5. Regional seismic activity.

The recommendations presented herein consider these as well as other aspects of the site. The engineering analyses, performed, concerning site preparation and the recommendations presented herein have been completed using the information provided and obtained during our field work. In the event that any significant changes are made to proposed site development, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and the recommendations of this report are evaluated or modified in writing by this office. Foundation design parameters are considered preliminary until the foundation design, layout, and structural loads are provided to this office for review.

1. Owing to the presence of potentially compressible existing topsoil and disturbed fill, and near-surface alluvial deposits there will be a potential for distress to settlement-sensitive improvements, absent mitigation. Thus, the near-surface layers of existing topsoil and disturbed fill, and near-surface alluvial deposits should be removed and recompacted to current industry standards and Code as recommended herein within the building footprint. Remedial removals should be conducted to approximately 5 to 7 feet below existing grades. Proposed parking areas and fire access lanes should be graded and recompacted within the upper 2 feet of the existing finish surface.

2. Geotechnical engineering, observation, and testing services should be provided by GSI during grading to aid the contractor in removing unsuitable soils and in their effort to compact the fill. Geologic observations should also be performed during grading to observe and further evaluate site geologic conditions. Although unlikely, if adverse geologic features are encountered, supplemental recommendations and earthwork may be warranted.

3. The near-surface existing topsoil and disturbed fill, and near-surface alluvial deposits (Qa) is considered potentially compressible; and therefore, unsuitable for the support of settlement-sensitive improvements in its present condition, based on current industry standards. In order to reduce the effects of settlement, remedial earthwork should be performed within the areas of proposed development. Remedial grading should be performed to at least 5 feet outside the proposed building footprint, where

feasible. Removals on the order of 2 feet are recommended for other areas supporting settlement-sensitive improvements (e.g., parking lot and fire access lane).

4. Our expansion index test indicates very low expansive soils underlie the site in the near-surface. Preliminary foundation design and construction recommendations are provided herein for these soil conditions.

5. Building foundations will need to be designed to tolerate the soil conditions, and the potential settlements discussed herein. Based on the potential for seismic settlement, the use of a conventional foundation system (e.g., shallow spread and continuous footings) does not appear practical for the proposed building. As such, recommendations for building foundations, including mat slabs, are provided herein.

6. The seismic ground motion values provided herein should be considered during the design and construction of the proposed development.

7. General Earthwork and Grading Guidelines are provided at the end of this report as Appendix F. Specific recommendations are provided in the following sections.

EARTHWORK CONSTRUCTION RECOMMENDATIONS

General

All earthwork should conform to the guidelines presented in the 2022 CBC (CBSC, 2022), the requirements of the City of San Jacinto or County of Riverside, and the General Earthwork and Grading Guidelines presented in Appendix F, except where specifically superseded in the text of this report. Prior to earthwork, a GSI representative should be present at the preconstruction meeting to provide additional earthwork guidelines, if needed, and review the earthwork schedule. GSI should be notified in advance of any fill placement, supplemental regrading of the site, or backfilling underground utility trenches and retaining walls after rough earthwork has been completed. This includes grading for driveway approaches, driveways, and exterior hardscape.

During earthwork construction, all site preparation and the general grading procedures of the contractor should be observed and the fill selectively tested by a representative(s) of GSI. If unusual or unexpected conditions are exposed in the field, they should be reviewed by GSI and, if warranted, modified or additional recommendations will be offered. All applicable requirements of local and national construction and general industry safety orders, the Occupational Safety and Health Act (OSHA), and the Construction Safety Act should be met. It is the onsite general contractor's and individual subcontractors' responsibility to provide a safe working environment for our field staff who are onsite. GSI does not consult in the area of safety engineering.

Site Preparation

All existing improvements (e.g., underground utilities or foundations, if present), vegetation and deleterious debris should be removed from the site prior to the start of construction.

Treatment of Existing Ground

1. Removal of all topsoil and disturbed fill, and near surface weathered alluvial deposits will be necessary prior to fill placement, in areas proposed for settlement-sensitive improvements. The near surface deposits should be removed to competent materials (e.g., greater than or equal to 85 percent compaction, or greater than or equal to 105 pcf for in-place native materials, as evaluated by a GSI representative), if not removed by proposed excavation within areas proposed for settlement-sensitive improvements. For preliminary planning purposes, these depths are estimated to be on the order of 5 to 7 feet across the majority of the site. Variations from these thicknesses should be anticipated. A minimum of 3 feet of 90 percent compaction fill should underlie the proposed foundation. The foundation area shall be defined as the area extending from the edge of the mat for a distance of 5 feet. Actual depths of removals will be evaluated in the field during grading by GSI.

2. After the above removals, the upper 6 inches of the exposed subsoils should be scarified, brought to at least optimum moisture content, and recompacted to a minimum relative compaction of 90 percent of the laboratory standard

3. The existing onsite soils may be reused as compacted fill provided that any significant concentrations of vegetation and miscellaneous trash and debris are removed prior to or during fill placement.

4. Localized deeper removal may be necessary due to buried drainage channel meanders or dry porous materials. The project geotechnical consultant or geologist should observe all removal areas during the grading.

Fill Placement

1. Fill materials should be cleansed of major vegetation and debris prior to placement.

2. Fill materials should be brought to at least optimum moisture, placed in thin 6- to 8-inch lifts and mechanically compacted to obtain a minimum relative compaction of 90 percent of the laboratory standard (ASTM D 1557).

3. Any import materials should be observed and evaluated suitable by GSI prior to placement on the site. Foundation designs may be altered if import materials have a greater sulfate or expansion values than the onsite materials encountered during our preliminary investigation.

Temporary Slopes

Temporary slopes may be constructed at a gradient of 1:1 (h:v) of flatter (Cal-OSHA Type "B" soil), up to 15 feet in height, provided no seepage, groundwater, or running sands are encountered, and no equipment or stockpiles are located within a distance of "H" from the top of the temporary slope, where "H" is the height of the slope. All temporary slopes should be observed by GSI prior to the entry of unprotected workers, as needed. Although not anticipated, should any adverse conditions be exposed, temporary slopes may need to be inclined to flatter gradients or receive shoring. Shored excavations would be recommended if property lines or existing improvements that need to remain in serviceable use do not allow for the temporary slope gradient recommended herein.

Slot-Cut Grading

Due to the necessity for completing removals immediately adjacent to existing foundations that will remain in place, remedial earthwork adjacent to the existing health care facility may need to use "alternating slot" excavation methodology, also referred to as the "A-B-C" slot-cutting method, so that the existing foundation system is not adversely undermined and exposed to an elevated potential for distress. On a preliminary basis, slot widths should not exceed 5 to 6 linear feet. Consultation with the structural engineer is recommended prior to implementing slot excavations near the existing structure, that are above a 1:1 (h:v) projection from the outboard limits of remedial grading excavations. The structural engineer should evaluate if the recommended width of the slots will adversely affect bearing support of the existing improvements. The width of the slots may need to be reduced based on the results of the structural engineer's evaluation. Pre-construction surveys and survey monitoring should be performed in conjunction with site grading and shoring (if used), as necessary. If considered necessary, recommendations for temporary shoring are provided below.

TEMPORARY SHORING RECOMMENDATIONS

If needed, based on the anticipated remedial grading, the following temporary shoring recommendations are provided.

Lateral Earth Pressures for Temporary Shoring Design

1. Pressure diagrams showing the recommended application of active and passive earth pressures, and uniform and live load surcharges on temporary shoring systems are illustrated in Figure 9.

2. The active pressure to be used for temporary shoring design may be computed by the triangular pressure distribution shown in Figure 9.

3. Passive pressure for the design of temporary shoring may be computed as an equivalent fluid as shown in Figure 9.

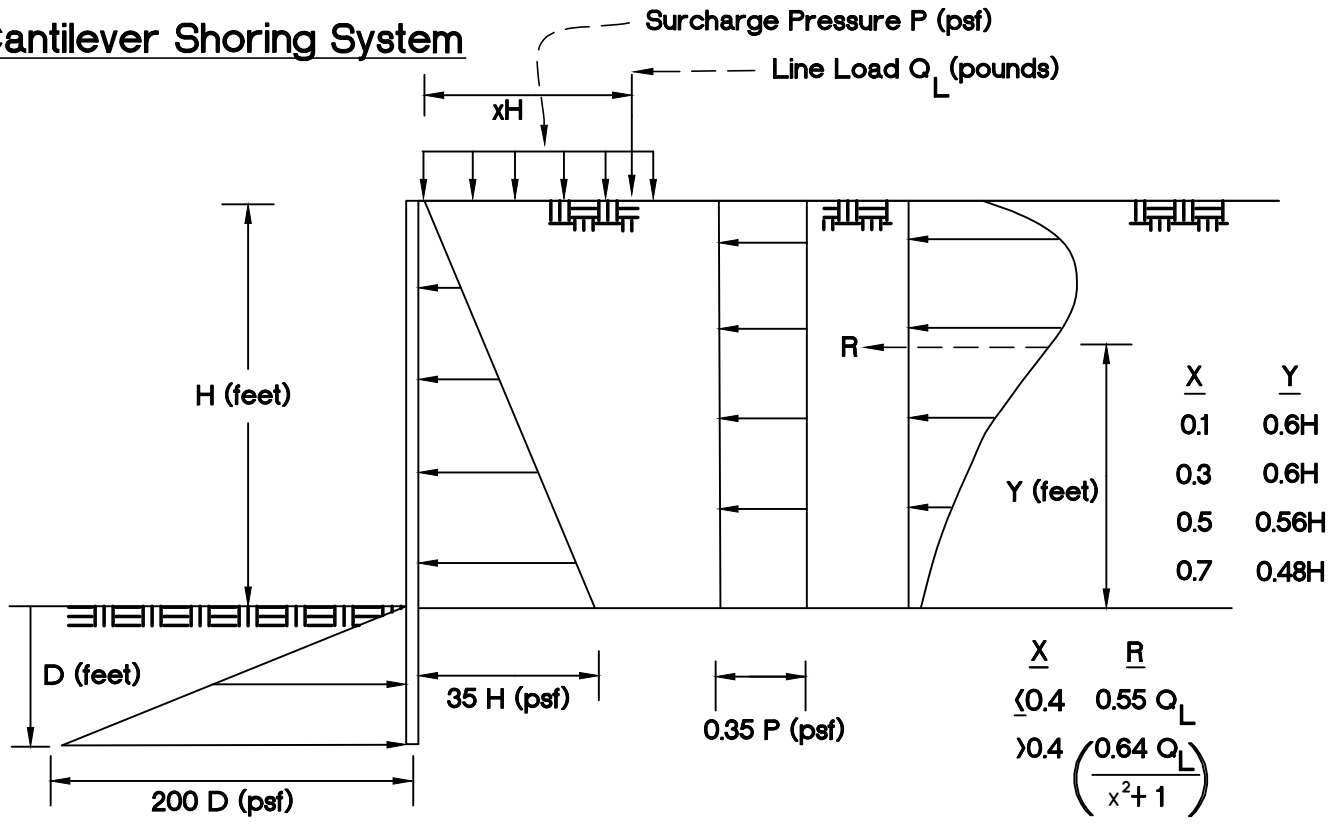
4. The above criteria assume the absence of soils with an E.I. > 20 behind the shoring and that hydrostatic pressure is not allowed to accumulate behind the shoring.

5. These recommendations are for a temporary shoring system with retained soil heights up to approximately 15 feet. Restraining elements, bracing, or the use of walers or rakers would likely be necessary for shoring of greater heights. The use of lateral resisting elements such as tiebacks or soil nails may be infeasible.

6. An empirical equivalent fluid pressure approach may be used to compute the horizontal pressure against the shoring. Appropriate fluid unit weights are provided for specific slope gradients of the retained material (see Figure 9). These do not include other superimposed loading imparted by traffic, structures, earthquakes, or adverse geologic conditions. Traffic surcharge for shoring should be modeled as a minimum 100 psf/ft load for light passenger vehicle traffic and at least 300 psf/ft for heavy (HS20) axle loads in the upper 5 feet of the shoring. These surcharges would apply if traffic will occur within "H" of the back of the shoring (where "H" equals the height of the retained earth). It is not recommended to allow sloping surcharge (other than level backfill) within a distance of "H" behind the shoring system from either stockpiled soils, stockpiled building materials, or temporary or permanent graded slopes, where "H" equals the height of the retained earth. Steeper slope gradients (more than level) will increase the equivalent fluid pressure for shoring design, significantly, and increase shoring costs. Regrading, if possible, is recommended prior to shoring installation to reduce the potential for sloping surcharge.

7. The shoring system should be designed such that the maximum lateral deformation at the top or bottom of the soldier pile does not exceed the value recommended by the shoring designer.

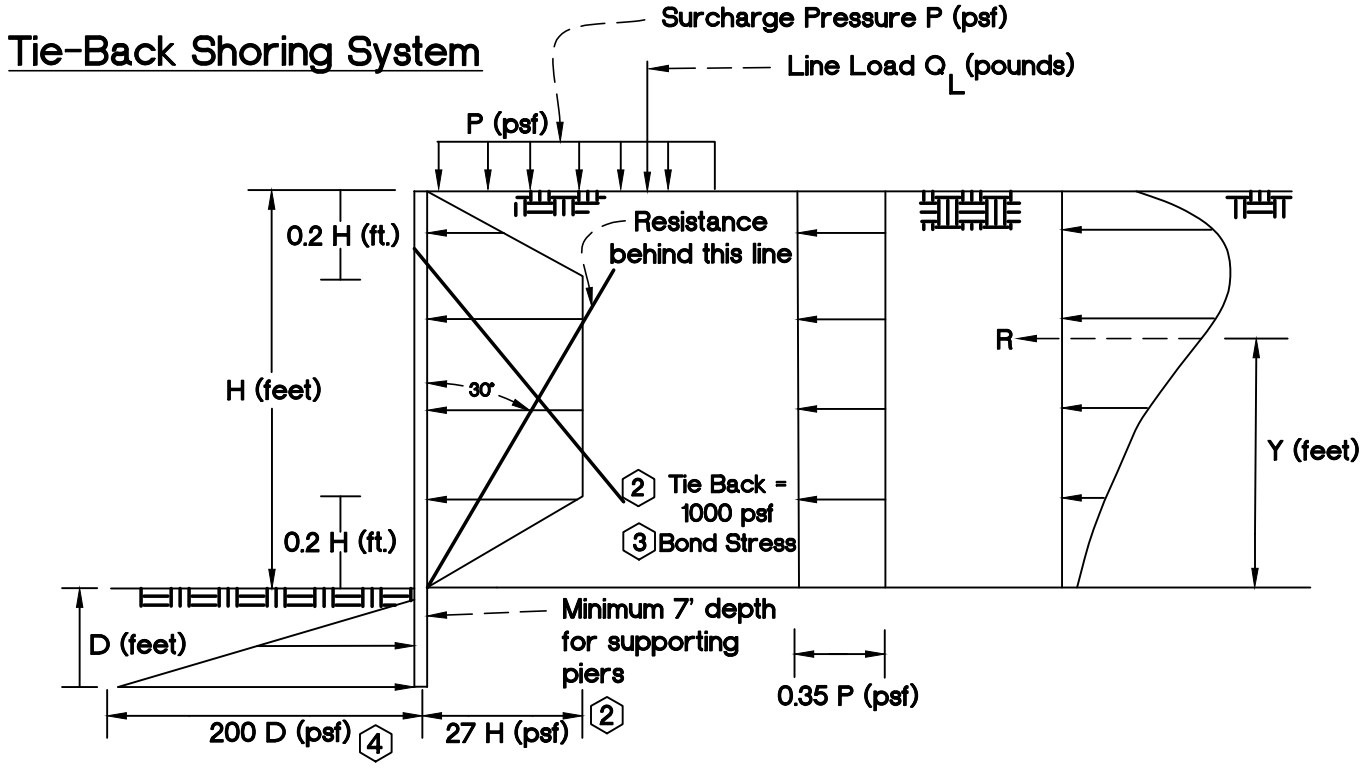
Cantilever Shoring System



X	Y
0.1	0.6H
0.3	0.6H
0.5	0.56H
0.7	0.48H

X	R
<0.4	$0.55\ Q_L$
>0.4	$\left(\frac{0.64\ Q_L}{x^2+1}\right)$

Tie-Back Shoring System



NOTES

1. Include groundwater effects below groundwater level.
2. Include water effects below groundwater level.
3. Grouted length greater than 7 feet; field test anchor strength.
4. Neglect passive pressure below base of excavation to a depth of one pier diameter.

GeoSoils, Inc.

Figure 9

LATERAL EARTH PRESSURES FOR TEMPORARY SHORING SYSTEMS

W.O. 9071-A-IE	DATE: 12/25	SCALE: None

8. The design of restraining elements, walers, bracing, and rakers should be provided by the project structural consultant or shoring designer, if necessary.

Shoring Construction Recommendations

1. The excavation and installation of the soldier piles should be observed and documented by the project geotechnical consultant to further evaluate the geologic conditions within the influence of the shoring and to ensure the soldier pile construction conforms to the requirements of the shoring plan.

2. Drilled excavations for soldier piles should be straight and plumb. The contractor should periodically recheck the drilled excavation for plumbness, especially when oversized rock constituents and debris are encountered.

3. Although not anticipated based on the available subsurface data, casing should be provided in drilled excavations if excessive groundwater or caving conditions are encountered. The bottom of the casing should be at least 4 feet below the top of the concrete as the concrete is placed and the casing is withdrawn. This should be considered during project planning. The exact tip elevation of the soldier piles should be clearly indicated on the shoring plans.

4. All concrete should be delivered through a tremie immediately after the approval of the drilled excavation and steel placement. Care should be taken to prevent striking the walls of the excavations with the tremie during concrete placement. Concrete should not be allowed to free fall more than 5 feet. “Tailgating” concrete is not recommended.

5. The height of exposed soils during vertical excavation should not exceed 4 feet. The entire excavation should receive lagging prior to the end of each workday. Alternatively, loose soil may be used as a temporary buttress located below a 1:1 (h:v) plane projected down and toward the excavation from the top of the unsupported soils. No excavation should be left unsupported overnight.

6. A complete and accurate record of all soldier pile locations, depths, concrete, strengths, quantity of concrete per pile, and other information should be maintained by the special inspector and geotechnical consultant. The shoring design engineer should be notified of any unusual conditions encountered during installation.

Excavation Observation and Monitoring

When excavations are made adjacent to an existing structure (e.g., building or underground utilities) there is a risk of some damage to that improvement, even if a well-designed system of excavation or shoring (if used), is planned and installed. Therefore, we recommend that a

systematic program of observations be made before, during, and after construction to evaluate the effects (if any) of construction on the existing structures.

Monitoring should include the measurement of any horizontal and vertical movements of both the existing structures and any shoring or bracing (if used). If shoring will be included in the proposed development, as determined by the designer, the locations and the type of the monitoring devices should be selected as soon as the total shoring system is designed and approved.

Reference points on the existing structures or improvements should be placed as low as possible on the exterior walls of buildings, adjacent to the excavation. Exact locations may be dictated by critical points within the structure, such as bearing walls or columns for buildings; and surface points on roadways and sidewalks near the top of the excavation. The points on a shoring system (if used) should be placed under or very near the points on the structures.

For a survey monitoring system, an accuracy of a least 0.01 foot should be required. Reference points should be installed and read initially prior to grading or excavation. The readings should continue until all construction below ground has been completed and the backfill has been brought up to final grade.

The frequency of readings will depend upon the results of previous readings and the rate of grading. Weekly readings could be assumed throughout the duration of grading with daily readings during rapid excavation near the bottom and at critical times during slot-cutting or installation of shoring for support. The reading should be plotted by the Surveyor and then reviewed by the Geotechnical Engineer and shoring designer (if used). Video or photographic documentation should be taken, where necessary.

Embankment Factors and Rippability

Embankment factors (shrinkage or bulking) for the site have been estimated based upon our experience with other sites in the general vicinity, and review of laboratory density testing of near-surface soils. It is apparent that shrinkage would vary with depth and with areal extent over the site, based on previous site use and the loose to medium dense nature of the existing topsoil and disturbed fill and native alluvial deposits. Variables include previous vegetation, weed control, discing, and previous filling or exporting. However, all these factors are difficult to define in a three-dimensional fashion, and the contractor's compaction efforts may also contribute some variance. Therefore, the information presented below represents average shrinkage and bulking values, using the following assumptions.

Undocumented Artificial Fill (Afu) ..... 10% to 15% shrinkage
Alluvium Deposits (Qoa) ..... 7% to 10% shrinkage

Rippability

All site soil is anticipated to be readily removed and re-graded with well-working earth moving equipment suitable for the scope of grading.

PRELIMINARY RECOMMENDATIONS - FOUNDATIONS

General

Preliminary recommendations for foundation design and construction are provided in the following sections. These preliminary recommendations have been developed from our understanding of the currently planned site development, site observations, subsurface exploration, laboratory testing, and engineering analyses. Foundation design should be re-evaluated at the conclusion of site grading or remedial earthwork for the as-graded soil conditions. Although not anticipated, revisions to these recommendations may be necessary. In the event that the information concerning the proposed development plan is not correct, or any changes in the design, location or loading conditions of the proposed buildings are made, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and conclusions of this report are modified or approved in writing by this office. We anticipate that the wall loads of 1 to 3 kips/foot, and column loads of 20 to 100 kips will be used. Based on the loads and subgrade conditions, we recommend the use of a structural mat foundation, or other stiffened foundation system designed to tolerate the onsite alluvial deposits and estimated settlement deformations. These assumptions should be revisited once the final plans and structural design are provided for GSI review.

The information and recommendations presented in this section are not meant to supersede design by the project structural engineer or civil engineer specializing in structural design. Upon request, GSI could provide additional input or consultation regarding soil parameters, as related to foundation design. From a geotechnical viewpoint, foundation design and construction should minimally conform to the following:

Structural Mat Foundations - Proposed Health Care Building

A structural mat-type foundation may be considered for the proposed healthcare building, considering the anticipated seismic settlement potential, and the underlying soil conditions.

For a mat foundation uniformly bearing on properly compacted engineered fill, a maximum allowable net bearing capacity of 2,000 psf and a minimum depth of 18 inches below the lowest adjacent grade may be used in the design. These values may be increased by one-third for short-term loads including wind or seismic. Mat-type slab foundations should be designed in accordance with 2022 CBC (CBSC, 2022) criteria for the soil conditions prevalent

onsite. Mat-type foundation may be either ribbed or uniform thickness (UTF) with a perimeter beam.

The passive earth pressure may be computed as an equivalent fluid having a density of 150 pcf, with a maximum earth pressure of 2,000 psf. The upper 6 inches of passive pressure should be neglected if not confined by slabs or pavement. For lateral sliding resistance, a 0.25 coefficient of friction may be utilized for concrete in contact with approved structural fill derived from the onsite soils, when multiplied by the dead load. When combining passive pressure and frictional resistance, the passive pressure component should be reduced by one-third.

A vertical modulus of subgrade reaction (K_s) of 100 pounds per cubic inch (pci) may be used in the design of mat foundations bearing on approved structural fill soils that are very low expansive. The modulus of subgrade reaction is a unit value for a 1-foot square footing and should be scaled in accordance with the following equation when used with the design of larger foundations. This assumes that the foundation and slab is underlain with properly compacted structural fill with an average relative compaction of 90 percent of the laboratory standard (per ASTM D 1557).

$$K_R = K_S \left[\frac{B+1}{2B} \right]^2$$

where: K_S = unit subgrade modulus
K_R = scaled subgrade modulus
B = foundation width (in feet)

Mat slabs may be uniform thickness foundations (UTF) or may incorporate the use of edge footings for moisture cut-off barriers. The recommendations for a mat type of foundation assume that the soils below the slab are compacted fill.

PRELIMINARY SETTLEMENT EVALUATION

GSI has estimated the potential magnitudes of seismic total settlement, differential settlement, and angular distortion for the project. The analyses were based on laboratory test results and subsurface data collected from borings and CPT completed in preparation of this study. Site specific conditions affecting the magnitude of settlement include earth material types, depth of remedial grading (e.g., thickness of planned fills), left-in-place compressible earth materials, moisture content, and density.

Static Settlement

The maximum expected static settlement is on the order of 1 inch with differential settlement on the order of ½ inch in a 30-foot span (e.g., angular distortion of approximately 1/720).

Assuming that remedial earthwork is completed in accordance with the recommendations provided herein, the majority of the foundation settlement on the underlying soils should occur at the end of construction.

Seismic Settlement

We calculated a total seismic settlement of 3 inch and a differential settlement of 0.003L. The seismic settlements have been discussed in the Liquefaction section of this report.

SOIL MOISTURE CONSIDERATIONS

GSI has evaluated the potential for vapor or water transmission through the concrete floor slabs, in light of typical floor coverings and improvements. Please note that slab moisture emission rates range from about 2 to 27 lbs/24 hours/1,000 square feet from a typical slab (Kanare, 2005), while floor covering manufacturers generally recommend about 3 lbs/24 hours as an upper limit. The recommendations in this section are not intended to preclude the transmission of water or vapor through the foundation or slabs.

Foundation systems and slabs shall not allow water or water vapor to enter into the structures so as to cause damage to another building component or to limit the installation of the type of flooring materials typically used for the particular application (State of California, 2025). These recommendations may be exceeded or supplemented by a "water proofing" specialist, the architect, or structural consultant. Thus, the Client or architect will need to evaluate the following in light of a cost vs. benefit analysis, along with disclosure to all interested or affected parties. It should also be noted that vapor transmission will occur in new slab-on-grade floors as a result of chemical reactions taking place within the curing concrete. Vapor transmission through concrete floor slabs as a result of concrete curing has the potential to adversely affect sensitive floor coverings depending on the thickness of the concrete floor slab, and the floor covering. It is possible that a slab moisture sealant may be needed prior to the placement of sensitive floor coverings if a thick mat slab is used and the time frame between concrete and floor covering placement is relatively short.

Considering the E.I. test results, anticipated typical water vapor transmission rates, and floor coverings and improvements (to be chosen by the client or architect) that can tolerate those rates without distress, the following alternatives are provided:

1. Concrete slab should be thicker.

2. Concrete slab underlayment should consist of a 15-mil vapor retarder, or equivalent, with all laps sealed per the 2022 CBC (CBSC, 2022) and the manufacturer's recommendation. The vapor retarder should comply with the ASTM E 1745 - Class A criteria, and be installed in accordance with ACI 302.1R-04, and ASTM D 1643.

3. The 15-mil vapor retarder (ASTM E 1745 - Class A) shall be installed per the recommendations of the manufacturer, including all penetrations (e.g., pipe, ducting, or rebar).

4. The vapor retarder should be underlain with 2 inches of sand (SE>30), and should be overlain by a 2-inch thick layer of sand (SE>30).

5. Concrete should have a maximum water/cement ratio of 0.50. This shall not supersede ACI 318-14 guidelines for corrosion or other corrosive requirements. Additional concrete mix design recommendations should be provided by the project structural consultant or waterproofing specialist. Concrete finishing and workability should be addressed by the project structural consultant and a waterproofing specialist.

6. Where floor slab water to cement ratios are as indicated above, or admixtures used, the Project Structural Consultant should also make changes to the concrete in the grade beams and footings in kind, so that the concrete used in the foundation and slabs are designed or treated for more uniform moisture protection.

7. The owner should be specifically advised which areas are suitable for tile flooring, wood flooring, or other types of water-vapor sensitive flooring.

8. Additional recommendations regarding water or vapor transmission should be provided by the structural engineer or foundation designer and should be consistent with the specified floor coverings indicated by the architect.

Regardless of the mitigation, some limited moisture or moisture vapor transmission through the foundation and floor slab should be anticipated, and areas potentially using moisture sensitive floor coverings or moisture sensitive storage, should be identified. construction crews may require special training for installation of certain product(s), as well as concrete finishing techniques. The use of specialized product(s) should be approved by the slab designer and water-proofing consultant.

PRELIMINARY RETAINING WALL DESIGN PARAMETERS

General

Recommendations for the design and construction of conventional masonry retaining walls are provided herein, if needed. Recommendations for specialty walls (e.g., crib, earthstone, or geogrid) can be provided upon request, and would be based on site specific conditions. If walls allow water to accumulate in the backfill, the water should be conveyed via a non-erosive device to an appropriate inlet, per the recommendations of the design civil engineer.

Conventional Retaining Walls

The design parameters provided below assume native onsite materials with an expansion index up to an E.I. of 20 are used to backfill any retaining wall. The type of backfill, should be specified by the wall designer, and clearly shown on the plans. Building walls, below grade, should be water-proofed. Waterproofing should also be provided for site retaining walls in order to reduce the potential for efflorescence staining.

Preliminary Retaining Wall Foundation Design

The preliminary foundation design for conventional retaining walls should incorporate the following recommendations:

Minimum Footing Embedment - 18 inches below the lowest adjacent grade (excluding landscape layer [upper 6 inches]).

Minimum Footing Width - 24 inches.

Allowable Bearing Pressure - An allowable vertical bearing pressure of 2,000 pcf may be used in the preliminary design of retaining wall foundations provided that the footing maintains a minimum width of 24 inches and extends at least 18 inches into approved engineered fill overlying dense formational materials. This pressure may be increased by one-third for short-term wind and seismic loads.

Passive Earth Pressure - A passive earth pressure of 150 pcf with a maximum earth pressure of 2,250 psf may be used in the preliminary design of retaining wall foundations provided the foundation is embedded into properly compacted silty to clayey sand fill.

Lateral Sliding Resistance - A 0.25 coefficient of friction may be used for a concrete to soil contact when multiplied by the dead load. When combining passive pressure and frictional resistance, the passive pressure component should be reduced by one-third.

Backfill Soil Density - A soil density of 120 to 130 pcf may be used in the design of retaining wall foundations. This assumes an average engineered fill compaction of at least 90 percent of the laboratory standard (ASTM D 1557).

Footing Setbacks - All retaining wall footing setbacks from slopes should comply with Figure 1808.7.1 of the 2022 CBC. GSI recommends a minimum horizontal setback distance of 7 feet, as measured from the bottom, outboard edge of the footing to the face to the 2:1 (h:v) slope face.

Any retaining wall footings near the perimeter of the site, or not within areas of placed compacted fills will likely need to be deepened into unweathered dense formational materials for adequate vertical and lateral bearing support.

Restrained Walls

Any retaining wall that will be restrained prior to placing and compacting backfill material or retaining walls that have re-entrant or male corners, should be designed for an at-rest equivalent fluid pressure (EFP) of 57 pcf. The design should include any applicable surcharge loading. For areas of male or re-entrant corners, the restrained wall design should extend a minimum distance of twice the height of the wall (2H) laterally from the corner.

Cantilevered Walls

The recommendations presented below are for cantilevered retaining walls with retained soil heights up to 10 feet. Design parameters for retaining walls less than 3 feet in height may be superseded by the Riverside County regional standard design. Active earth pressure may be used for retaining wall design, provided the top of the wall is not restrained from minor deflections. An equivalent fluid pressure approach may be used to compute the horizontal pressure against the wall. Appropriate fluid unit weights are given below for specific slope gradients of the retained material. These do not include other superimposed loading conditions due to traffic, structures, seismic events, or adverse geologic conditions. When wall configurations are finalized, the appropriate loading conditions for superimposed loads can be provided upon request.

For preliminary planning purposes, the structural consultant or wall designer should incorporate the surcharge of traffic on the back of retaining walls, if traffic will occur within a horizontal distance of "H" from the backside of the retaining walls, where "H" equals the retained soil height. The traffic surcharge may be taken as 100 psf/ft in the upper 5 feet of the wall for light passenger vehicle traffic (e.g., cars, vans, or pick-up trucks). This does not include the surcharge of parked vehicles which should be evaluated at a higher surcharge to account for the effects of seismic loading. Equivalent fluid pressures for the design of cantilevered retaining walls are provided in the following table:

SURFACE SLOPE OF RETAINED MATERIAL (HORIZONTAL:VERTICAL)	EQUIVALENT FLUID WEIGHT P.C.F.
Level	37
2:1 (h:v)	54

Seismic Surcharge

The Mononobe-Okabe method is commonly utilized for calculating seismically induced active and passive lateral earth pressures and is based on the limit equilibrium Coulomb theory for static stress conditions. This method entails three fundamental assumptions (e.g., Seed and Whitman, 1970): Wall movement is sufficient to ensure either active or passive conditions, the driving soil wedge inducing the lateral earth pressures is formed by a planar failure surface starting at the heel of the wall and extending to the free surface of the backfill, and the driving

soil wedge and the retaining structure act as rigid bodies, and therefore, experiences uniform accelerations throughout the respective bodies (U.S. Army Corps of Engineers, 2003, Engineering and Design - Stability Analysis of Concrete Structures).

- Seismic Lateral Earth Pressure = 39 pcf (equivalent fluid weight).

The seismic lateral earth pressure given above is a triangle increasing with depth, and the resultant of this pressure is an increment of force which should be applied to the back of the wall at 1/3 of the wall height from the wall base. The seismic increment of earth pressure should be added to the static active earth pressure. Even for the at-rest (Ko) condition, the seismic increment of earth pressure should be added to the static active earth pressure, not to the at-rest static earth pressure (SEAOC Seismology Committee, 2019).

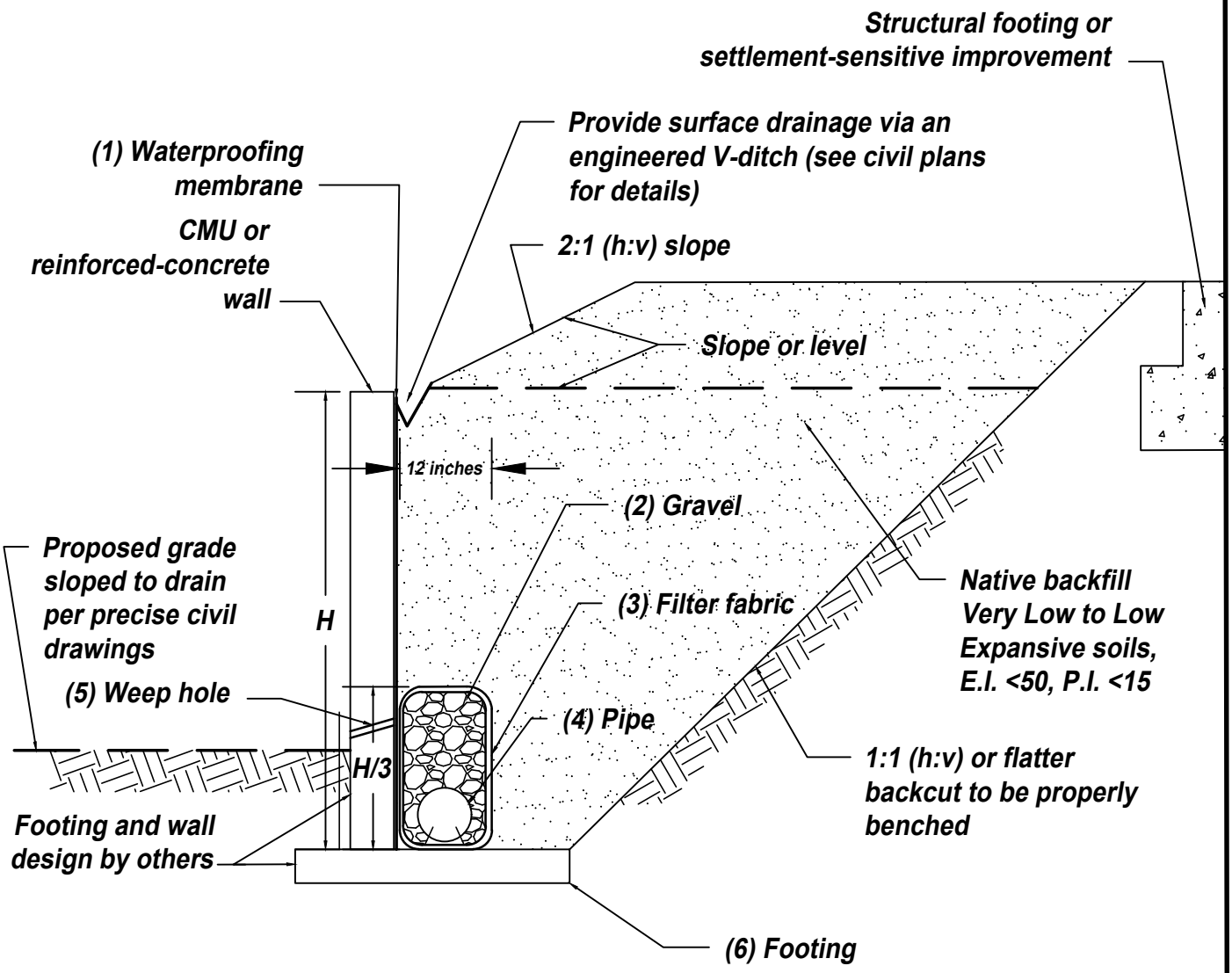
Per 2022 CBC Section 1803.5.12 dynamic seismic lateral earth pressures shall be applied to foundation walls and retaining walls supporting more than 6 feet of backfill. Dynamic seismic lateral earth pressures may also be applied to shorter walls at the discretion of the structural engineer.

Retaining Wall Backfill and Drainage

Positive drainage must be provided behind all retaining walls in the form of gravel wrapped in geofabric and outlets. A backdrain system is considered necessary for retaining walls that are 2 feet or greater in height. Details 1, 2, and 3, present the backdrainage options discussed below. Backdrains should consist of a 4-inch diameter perforated PVC or ABS pipe encased in either Class 2 permeable filter material or ¾-inch to 1½-inch gravel wrapped in approved filter fabric (Mirafi 140 or equivalent). The filter material should extend a minimum of 1 horizontal foot behind the base of the walls and upward at least 1 foot. For limited access and confined areas, (panel) drainage behind the wall may be constructed in accordance with Detail 2 (Retaining Wall Backfill and Subdrain Detail Geotextile Drain).

Materials with an expansion index (E.I.) potential of greater than 20 should not be used as backfill for retaining walls. Retaining wall backfill materials should be moisture conditioned and mixed to achieve the soil's optimum moisture content, placed in relatively thin lifts (6 to 8 inches) with relatively light equipment, and compacted to at least 90 percent relative compaction.

Outlets should consist of a 4-inch diameter solid PVC or ABS pipe spaced no greater than approximately 100 feet apart, with a minimum of two outlets, one on each end. The use of weep holes, only, in walls higher than 2 feet, is not recommended. The surface of the backfill should be sealed by pavement or the top 18 inches compacted with native soil (E.I. ≤ 20).



(1) Waterproofing membrane.

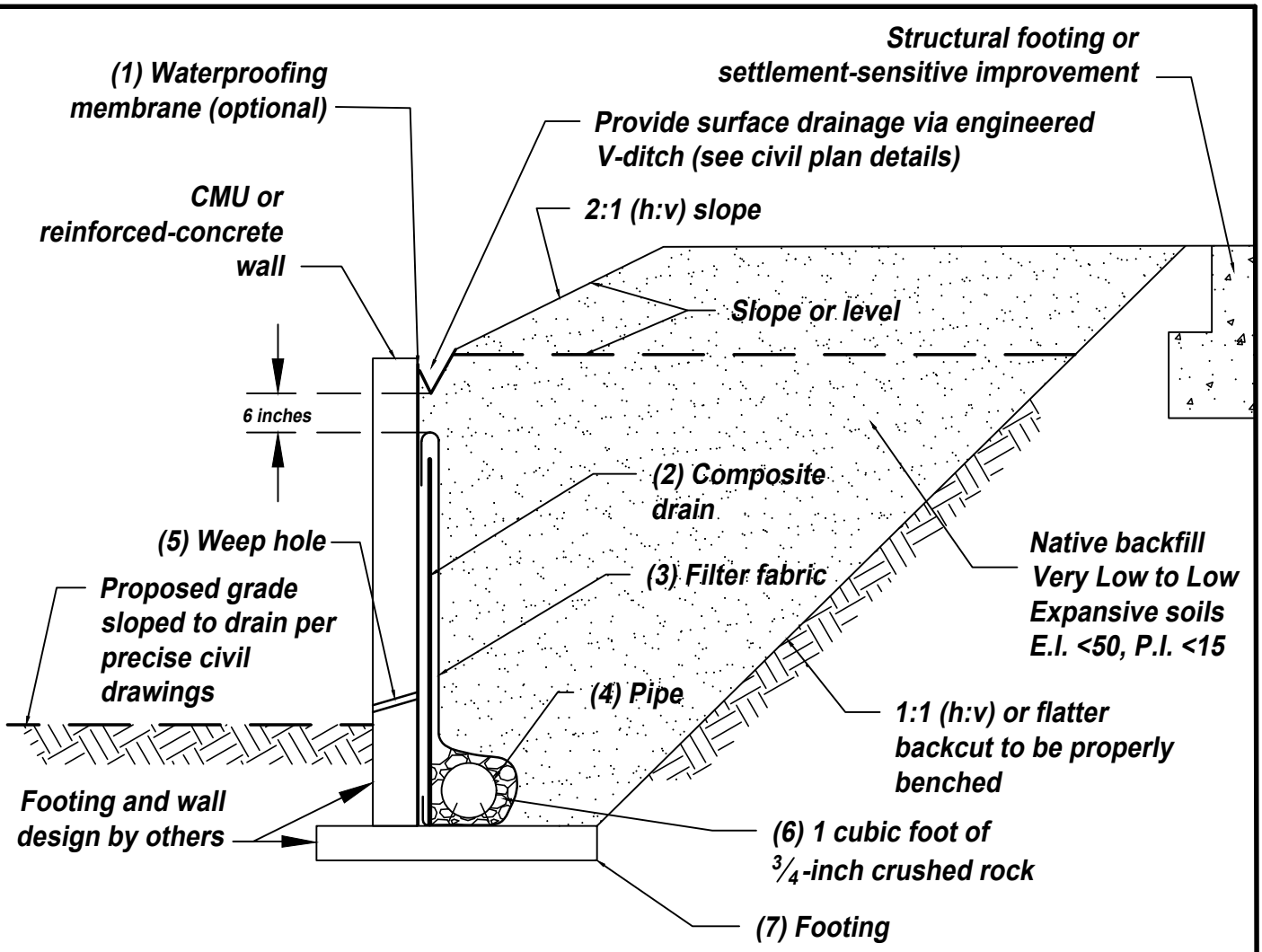
(2) Gravel: Clean, crushed, ¾ to 1½ inch.

(3) Filter fabric: Mirafi 140N or approved equivalent.

(4) Pipe: 4-inch-diameter perforated PVC, Schedule 40, or approved alternative with minimum of 1 percent gradient sloped to suitable, approved outlet point (perforations down).

(5) Weep holes: For CMU walls, Omit grout every other block, at or slightly above finished surface. For reinforced concrete walls, minimum 2-inch diameter weep holesspaced at 20 foot centers along the wall and placed 3 inches above finished surface. Design civil engineer to provide drainage at toe of wall. No weep holes for below-grade walls.

(6) Footing: If bench is created behind the footing greater than the footing width using level fill or cut natural earth materials, an additional "heel" drain will likely be required by geotechnical consultant.



(1) Waterproofing membrane (optional): Liquid boot or approved mastic equivalent.

(2) Drain: Miradrain 6000 or J-drain 200 or equivalent for non-waterproofed walls; Miradrain 6200 or J-drain 200 or equivalent for waterproofed walls (all perforations down).

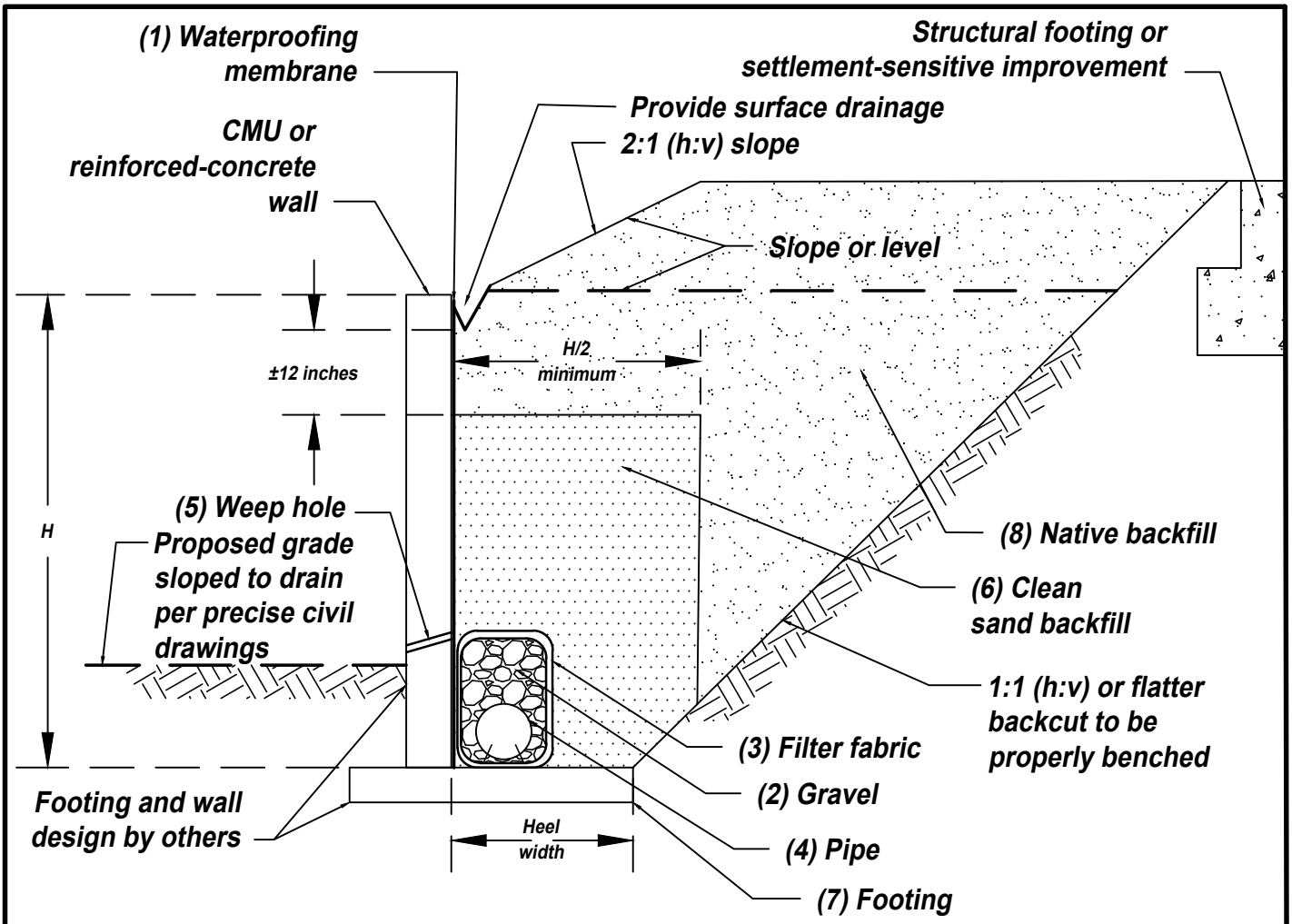
(3) Filter fabric: Mirafi 140N or approved equivalent; place fabric flap behind core.

(4) Pipe: 4-inch-diameter perforated PVC, Schedule 40, or approved alternative with minimum of 1 percent gradient to proper outlet point (perforations down).

(5) Weep holes: For CMU walls, Omit grout every other block, at or slightly above finished surface. For reinforced concrete walls, minimum 2-inch diameter weep holesspaced at 20 foot centers along the wall and placed 3 inches above finished surface. Design civil engineer to provide drainage at toe of wall. No weep holes for below-grade walls.

(6) Gravel: Clean, crushed, ¾ to 1½ inch.

(7) Footing: If bench is created behind the footing greater than the footing width using level fill or cut natural earth materials, an additional "heel" drain will likely be required by geotechnical consultant.



(1) Waterproofing membrane: Liquid boot or approved masticequivalent.

(2) Gravel: Clean, crushed, ¾ to 1½ inch.

(3) Filter fabric: Mirafi 140N or approved equivalent.

(4) Pipe: 4-inch-diameter perforated PVC, Schedule 40, or approved alternative with minimum of 1 percent gradient to proper outlet point (perforations down).

(5) Weep hole: For CMU walls, Omit grout every other block, at or slightly above finished surface. For reinforced concrete walls, minimum 2-inch diameter weep holesspaced at 20 foot centers along the wall and placed 3 inches above finished surface. Design civil engineer to provide drainage at toe of wall. No weep holes for below-grade walls.

(6) Clean sand backfill: Must have sand equivalent value (S.E.) of 35 or greater; can be densified by water jetting upon approval by geotechnical engineer.

(7) Footing: If bench is created behind the footing greater than the footing width using level fill or cut natural earth materials, an additional "heel" drain will likely be required by geotechnical consultant.

(8) Native backfill: If E.I. <21 and S.E. ≥35 then all sand requirements also may not be required and will be reviewed by the geotechnical consultant.

Proper surface drainage should also be provided. For additional mitigation, consideration should be given to applying a water-proof membrane to the back of all retaining structures. The use of a waterstop should be considered for all concrete and masonry joints.

Wall and Retaining Wall Footing Transitions

Site walls are anticipated to be founded on footings designed in accordance with the recommendations in this report. Should wall footings transition from cut to fill, the structural consultant or wall designer may specify either:

a) A minimum of a 2-foot overexcavation and recompaction of cut materials for a distance of 2H, from the point of transition, where "H" equals the wall height.

b) Increase the amount of reinforcing steel and wall detailing (e.g., expansion joints or crack control joints) such that an angular distortion of 1/360 for a distance of 2H on either side of the transition may be accommodated. Expansion joints should be placed no greater than 20 feet on-center, in accordance with the structural engineer's or wall designer's recommendations, regardless of whether or not a transition condition exists. Expansion joints should be sealed with a flexible, non-shrink grout.

c) Embed the footings entirely into suitable native formational material (e.g., deepened footings).

If transitions from cut to fill transect the wall footing alignment at an angle of less than 45 degrees (plan view), then the designer should follow recommendation "a" (above) and until such transition is between 45 and 90 degrees to the wall alignment.

STORM WATER INFILTRATION KSAT RATE EVALUATION AND DISCUSSION

U.S. Department of Agricultural (USDA) Review

A review of the United States Department of Agriculture database ([USDA]; 2025 and 1993) indicates that the surficial soils units mapped at the site consist of the Grangeville sandy loam, 0 to 5 percent slopes (GrB) and the Grangeville fine sandy loam, 0 to 5 percent slopes (GvB). The USDA (2025) indicates that the capacity of the most limiting layer to transmit water (Ksat) within the Grangeville sandy loam, is high (1.98 to 5.95 inches per hour [in/hr]) and falls into hydrologic soil groups (HSGs) "A/D." The USDA (2025) also indicates that capacity of most limiting layer to transmit water (Ksat) within the Grangeville fine sandy loam is moderately high to high (0.57 to 1.98 in/hr) and falls into hydrologic soil groups (HSGs) "B/D." Infiltration into HSG "D" soils are considered potentially feasible with some limitations. However, infiltration into HSG "A and B" soils is potentially feasible.

Infiltration Basin Siting Requirements

Our review of the general infiltration basin siting requirements and limitations (CASQA, 2003), indicates sites characterized as belonging to Hydrologic Soil Group "A," "B," and "C" may be suitable for infiltration, requiring a minimum soil infiltration rate of 0.5 inches/hour (CASQA, 2003). However, the County of Riverside water pollution prevention Water Quality Management Plan (WQMP, 2012), guidance document for the Santa Ana Region states: "the minimum long-term post-development infiltration rate must be at least 0.83 inches per hour."

The design engineer will need to review basin siting requirements by the WQMP (2012) and CASQA (2003) with respect to any proposed water quality BMP system. The recommendations proved herein are based on WQMP (2012), State criteria (CASQA, 2003), and our experience on nearby sites with similar geologic conditions. Based on our review of the USDA data and our subsurface explorations, similar conditions likely prevail throughout the site, including sandy fine-grained surficial soils.

Onsite Storm Water Quality Best Management Practice (BMP) Systems

Should onsite infiltration-systems be planned for Best Management Practices (BMP's) or Low Impact Development (LID) principles for the project, certain guidelines must be followed in the planning, design, and construction of such systems. Such systems, if improperly designed or implemented without consideration of the geotechnical aspects of site conditions, can contribute to flooding, saturation of bearing materials beneath site improvements, slope instability, and possible concentration and contribution of pollutants into the groundwater or storm drain or utility trench systems.

A key factor in these systems is the infiltration rate (often referred to as the percolation rate) which can be ascribed to, or determined for, the earth materials within which these systems are installed. Additionally, the infiltration rate of the designed system (which may include gravel, sand, mulch and topsoil, or other amendments) will need to be considered. Locally, relatively impermeable formations include: clayey surficial soils, igneous and metamorphic bedrock, as well as future fine grained fill soils.

Some of the methods which are used for onsite infiltration include percolation basins, dry wells, bio-swale or bio-retention, permeable pavers and pavement, infiltration trenches, filter boxes and subsurface infiltration galleries or chambers. Some of these systems are constructed using native and import soils, perforated piping, and filter fabrics while others employ structural components such as stormwater infiltration chambers and filters or separators. Every site will have characteristics which should lend themselves to one or more of these methods, but not every site is suitable for BMPs. In practice, BMPs are usually initially designed by the project design civil engineer. Applicable governing agency requirements should be reviewed and included in design considerations.

The following geotechnical guidelines should be considered when designing onsite BMP systems:

- It is not good engineering practice to allow water to saturate soils, especially near slopes or improvements; however, the controlling agency may now require the use of stormwater BMPs.

- Areas adjacent to, or within, the BMP that are subject to inundation should be properly protected against scouring, undermining, and erosion, in accordance with the recommendations of the design engineer.

- Where infiltration BMP systems are located near buildings or improvements, impermeable liners and subdrains should be used along the bottom or sides of bioretention swales or basins located within the influence of structures. Impermeable liners used in conjunction with BMP basins should consist of a 30-mil polyvinyl chloride (PVC) membrane that is covered by a minimum of 12 inches of clean soil, free from rocks and debris, with a maximum 4:1 (h:v) slope inclination, or flatter, and meets the following minimum specifications:

  Solid Soils Specific Gravity (ASTM D792): 1.2 (g/cc, min.); Tensile (ASTM D 882): 73 (lb/in-width, min); Elongation at Break (ASTM D882): 380 (%, min); Modulus (ASTM D882): 32 (lb/in-width, min.); and Tear Strength (ASTM D1004): 8 (lb/in, min); Seam Shear Strength (ASTM D882) 58.4 (lb/in, min); Seam Peel Strength (ASTM D882) 15 (lb/in, min).

- Subdrains should consist of at least 4-inch diameter Schedule 40 or SDR 35 drain pipe with perforations oriented down. The drain pipe should be sleeved with a filter sock.

- Storm drain, standpipes, and utilities that cross BMPs should be slurried with a 3-sack slurry mix, to 5 feet outside the structure.

- Infiltrations systems should not be installed within approximately 8 feet of building foundations utility trenches, and walls, or a 1:1 (horizontal to vertical [h:v]) slope (down and away) from the bottom elements of these improvements. Alternatively, deepened foundations may be used.
- Infiltration systems should not be installed adjacent to pavement or hardscape improvements. Alternatively, deepened or thickened edges and curbs or impermeable liners may be used in areas adjoining the BMP.

- As with any infiltration BMP, localized ponding and groundwater seepage should be anticipated. The potential for seepage or perched groundwater to occur after site development should be disclosed to all interested or affected parties.

- Installation of infiltration BMP systems should avoid expansive soils (Expansion Index [E.I.] ≥51) or soils with a relatively high plasticity index (P.I. > 20).

- Infiltration BMP systems should not be installed where the vertical separation of the groundwater level is less than approximately 10 feet from the base of the system.

- Infiltration BMP systems should be designed using a suitable factor of safety (FOS) to account for uncertainties in the known infiltration rates (as generally required by the controlling authorities), and reduction in performance over time.

- As with any infiltration system, proper care will need to provided. Best management practices should be followed at all times, especially during inclement weather. Provisions for the management of any siltation, debris within the BMP, or overgrown vegetation (including root systems) should be considered. An appropriate inspection schedule will need to adopted and provided to all interested or affected parties.

- Any designed system will require regular and periodic maintenance, which may include rehabilitation or complete replacement of the filter media (e.g., sand, gravel, filter fabrics, topsoil, or mulch) or other components used in construction, so that the design life exceeds 15 years. Due to the potential for piping and adverse seepage conditions, a burrowing rodent control program should also be implemented onsite.

- Newly established vegetation or landscaping (including phreatophytes) may have root systems that will influence the performance of the BMP or nearby LID systems.

- The potential for surface flooding, in the case of system blockage, should be evaluated by the design civil engineer.

- Any proposed utility backfill materials (e.g., inlet or outlet piping or other subsurface utilities) located within or near the proposed area of the BMP may become saturated. This is due to the potential for piping, water migration, and seepage along the utility trench line backfill. If utility trenches cross or are proposed near the BMP, cut-off walls or other water barriers will need to be installed to mitigate the potential for piping and excess water entering the utility backfill materials. Planned or existing utilities may also be subject to piping of fines into open-graded gravel backfill layers unless separated from overlying or adjoining BMP by geotextiles or slurry backfill.

PRELIMINARY PAVEMENT DESIGN RECOMMENDATIONS

General

The governing agency may retain the authority to approve the final structural design sections after subgrade elevations and actual resistance values (R-values) have been obtained at the conclusion of earthwork. Based on a general review of pavement designs for other nearby projects, and for estimation and bidding purposes, the pavement sections provided herein should be considered for preliminary design. Typically, actual pavement sections will likely vary, therefore final pavement sections should be based on actual R-value testing performed during, or shortly after, the access driveway and parking area grading, and for any proposed exterior street and improvements.

Asphaltic Concrete (AC) Pavements

The preliminary design for Asphaltic Concrete (AC) was evaluated based on an R-value of R=31, and the use of concrete shoulders (curb or gutter) at the edge of pavement. The preliminary pavement sections presented are also based on the traffic indices likely for the project (to be assigned by the project civil engineer), County of Riverside roadway design requirements (Standard Plan No. 114), and the guidelines presented in the latest revision to the California Department of Transportation "Highway Design Manual," seventh edition. Based on an R-value of 31, the following preliminary pavement design sections are presented.

STREET CLASSIFICATION	TRAFFIC INDEX (T.I.)[1]	STANDARD PAVEMENT DESIGNS		
		R-VALUE	AC INCHES	CLASS 2 BASE ROCK[2] INCHES
Access Road or Local Street	5.5	31	3.0**	7.0
Enhanced Local Street	6.5	31	3.6**	8.5
Collector (Road)	7.0	31	4.0**	9.0

[1] T.I.s are taken from the County of Riverside Department of Transportation, Standard Plan No. 114, "Roadway Design Requirements" (2022).
[2] Assumed R-values for base rock R=78 - Greenbook or Cal-Trans standard Class 2 base rock.
** County of Riverside minimum Class 2 base or asphaltic concrete

The preliminary pavement sections provided above are intended as a minimum guideline. If thinner or highly variable pavement sections are constructed, increased maintenance and repair could be expected. Consideration should be given to the increased potential for distress from overuse of paved street areas by heavy equipment and construction related heavy traffic (e.g., concrete trucks or loaded supply trucks), particularly when the final section is not in place (e.g., topcoat). Best management construction practices should be followed at all times, especially during inclement weather.

Portland Concrete Cement (PCC) Pavement

The preliminary design for Portland Cement Concrete Pavement (PCCP) was evaluated using a subgrade R-value of 31. The preliminary PCCP sections are provided in the following table.

PORTLAND CONCRETE CEMENT PAVEMENTS (PCCP)*					
TRAFFIC AREAS	CONCRETE TYPE	PCP THICKNESS (INCHES)	TRAFFIC AREAS	CONCRETE TYPE	PCCP THICKNESS (INCHES)
Light Vehicles	520-C-2500	6.0	Dumpster Aprons (Trash Service)	520-C-2500	7.0
	560-C-3250	5.0		560-C-3250	6.0
NOTE: All PCCP is designed as un-reinforced and bearing directly on compacted subgrade. However, a 4-inch thick leveling course of compacted aggregate base, or crushed rock may be considered to improve performance. All PCCP should be properly detailed (jointing) per the industry standard. Pavements may be additionally reinforced with #4 reinforcing bars, placed 18 inches on center, each way, for improved performance. * To be re-evaluated based on exposed field conditions and R-values obtained following rough grading.					

The transition of the pavement from parking to traffic lanes should be made over a distance of 24 inches, with crack control joints (weaken plane) or contact joints at the end of the transition. A minimum 4-inch layer of base rock, in traffic and dumpster areas, should be considered to improve traffic lane performance. Base rock may consist of either ¾-inch crushed rock or Caltrans Class 2 aggregate base. Crushed rock may be compacted by vibratory methods. Aggregate base should be compacted to a minimum relative compaction of 95 percent.

Weakened Plane Joints

Transverse and longitudinal weakened plane joints may be constructed in accordance with County standards. Transverse weakened plane joints should be spaced no farther than 15 feet apart, and no closer than 5 feet. Longitudinal weakened plane joints should be spaced no farther than 20 feet apart, and no less than 5 feet.

Expansion Joints and Contact Joints

Transverse expansion joints should be constructed at 120-foot spacings, or in accordance with County standards. Transverse and longitudinal contact joints should be constructed in accordance with the recommendations of the design engineer. Within large slab areas, joint spacings should be no greater than 20 feet.

Slab Reinforcement

The preliminary PCC Pavements for this project are designed as unreinforced and should perform adequately, assuming proper construction. If additional control of internal slab stresses (e.g., curing shrinkage, thermal expansion and contraction), then the use of No. 4 reinforcing bars, 18 inches on center each way, should be considered.

The upper 12 inches of subgrade should be compacted to a minimum relative compaction of 95 percent of the minimum dry density (ASTM D 1557). Aggregate base compaction should be 95 percent of the maximum dry density (ASTM D 1557). If adverse conditions (e.g., wet or saturated ground) are encountered during preparation of subgrade, special construction methods may need to be employed. R-value testing and pavement design analysis should be performed upon completion of grading for the project.

PAVEMENT GRADING RECOMMENDATIONS

General

All section changes should be properly transitioned. If adverse conditions are encountered during the preparation of subgrade materials, special construction methods may need to be employed. A GSI representative should be present for the preparation of subgrade, base rock, and asphalt concrete.

Subgrade

Within access lanes and parking areas, all surficial deposits of loose soil material should be removed and recompacted as recommended. After the loose soils are removed, the bottom is to be scarified to a depth of at least 6 inches, moisture conditioned as necessary and compacted to 95 percent of the maximum laboratory density or the Riverside County minimum, as determined by test designation ASTM D 1557.

Deleterious material, excessively wet or dry pockets, concentrated zones of oversized rock fragments, and any other unsuitable materials encountered during grading should be removed. The compacted fill material should then be brought to the elevation of the proposed subgrade for the pavement. The subgrade should be proof-rolled in order to promote a uniform firm and unyielding surface. All grading and fill placement should be observed by GSI.

Crushed Aggregate Base Rock

Compaction tests are required for the recommended base section. Minimum relative compaction required will be 95 percent of the laboratory maximum density as determined by ASTM test method D 1557 or Caltrans Test Method Number California 216.

Paving

Prime coat may be omitted if all of the following conditions are met:

1. The asphalt pavement layer is placed within two weeks of completion of base and subbase course.

2. Traffic is not routed over completed base before paving.

3. Construction is completed during the dry season of May through October.

4. The base is kept free of debris prior to placement of asphaltic concrete.

If construction is performed during the wet season of November through April, prime coat may be omitted if no rain occurs between completion of base course and paving and the time between completion of base and paving is reduced to three days, provided the base is free of loose soil or debris. Where prime coat has been omitted and rain occurs, traffic is routed over base course, or paving is delayed, measures shall be taken to restore base course, and subgrade to conditions that will meet specifications as directed by the geotechnical consultant.

Drainage

Positive drainage should be provided for all surface water to drain towards the area swale, curb and gutter, or to an approved drainage channel. Positive site drainage should be maintained at all times. Water should not be allowed to pond or seep into the ground, such as from behind unprotected curbs, both during and after grading. If planters or landscaping are adjacent to paved areas, measures should be taken to minimize the potential for water to enter the pavement section, such as thickened edges, or enclosed planters. Also, best management construction practices should be strictly adhered to at all times to minimize the potential for distress during construction and roadway improvements.

Additional Considerations

To mitigate perched groundwater, consideration should be given to installation of subgrade separators (cut-offs) between pavement subgrade and landscape areas, although this is not a requirement from a geotechnical standpoint. Cut-offs, if used, should be 6 inches wide and at least 12 inches below the pavement subgrade contact or 12 inches below the crushed aggregate base rock, if used.

DRIVEWAY, CONCRETE APRONS, FLATWORK, AND OTHER IMPROVEMENTS

General

The soil materials on site are anticipated to be very low expansive. A GSI representative should be present for the preparation of driveway, aprons, and flatwork subgrade materials. The following recommendations are presented for all exterior flatwork:

1. The subgrade area for concrete slabs should be compacted to achieve a minimum 90 percent relative compaction, and then be presoaked to optimum moisture content, or greater. The moisture content of the subgrade should be proof tested within 72 hours prior to concrete placement.

2. Exterior concrete slabs should be cast over a non-yielding surface, consisting of a 4-inch layer of Class 2 base, crushed rock, gravel, or clean sand (or County minimum, whichever is greater), that should be compacted and level prior to placement of concrete. If very low expansive soils are present, the base, rock, gravel, or sand may be deleted. The layer or subgrade should be wet-down completely prior to placement of concrete, to minimize loss of concrete moisture to the surrounding earth materials.

3. Exterior pedestrian slabs should be a minimum of 4 inches thick. Driveway slabs and approaches should be a minimum of 5 inches thick additionally have a thickened edge (12 inches) adjacent to all landscape areas, to help impede infiltration of landscape water under the slab. Trash disposal (dumpster) area aprons should be a minimum of 6 inches thick and meet minimum County standards, as necessary.

4. The use of transverse and longitudinal control joints is recommended to help control slab cracking due to concrete shrinkage or expansion. Two ways to mitigate such cracking are: a) add a sufficient amount of reinforcing steel, increasing tensile strength of the slab; and, b) provide an adequate amount of control and expansion joints to accommodate anticipated concrete shrinkage and expansion. The exterior slabs should be scored or saw cut, ½ to ⅜ inches deep, often enough so that no section is greater than 10 feet by 10 feet. For sidewalks or narrow slabs, control joints should be provided at intervals of every 6 feet. The slabs should be separated from the foundations and sidewalks with expansion joint filler material.

5. No traffic should be allowed upon the newly placed concrete slabs until they have been properly cured to within 75 percent of design strength. Concrete compression strength should be a minimum of 2,500 psi.

6. Driveways, sidewalks, and patio slabs adjacent to the structure should be separated from the structure with thick expansion joint filler material. In areas directly adjacent to a continuous source of moisture (e.g., irrigation or planters), all joints should be additionally sealed with flexible mastic.

7. Planters and walls (sound walls or retaining walls) should not be tied to the structure.

8. Overhang structures should be supported on the slabs, or structurally designed with continuous footings tied in at least two directions.

9. Any masonry landscape or sound walls that are to be constructed throughout the property should be grouted and articulated in segments no more than 20 feet long. These segments should be keyed or doweled together.

10. If settlement concerns or expansive soils are present, utilities may be enclosed within a closed utilidor (vault) or designed with flexible connections to accommodate differential settlement or expansive soil conditions (if present).

11. Positive site drainage should be maintained at all times. Finish grade on the building pad should provide a minimum of 1 to 2 percent fall to the street, as indicated herein. Drainage reversals could occur, including post-construction settlement, if relatively flat drainage gradients are not periodically maintained by the owner and interested or affected parties.

12. Air conditioning (A/C) units should be supported by slabs that are incorporated into the building foundation or constructed on a rigid slab with flexible couplings for plumbing and electrical lines. A/C waste water lines should be drained to a suitable non-erosive outlet.

13. Shrinkage cracks could become excessive if proper finishing and curing practices are not followed. Finishing and curing practices should be performed per the California Nevada Cement Association (CNCA) guidelines. Mix design should incorporate rate of curing for climate and time of year, sulfate content of soils, corrosion potential of soils, and fertilizers used on site.

DEVELOPMENT CRITERIA

Drainage

Adequate surface drainage is a very important factor in reducing the likelihood of adverse performance of improvements and slopes. Surface drainage should be sufficient to mitigate ponding of water anywhere in the project area, and especially near pavements, and the tops of descending slopes. Surface drainage should be carefully taken into consideration during fine grading, landscaping, and building construction. Future landscaping or construction activities should not create adverse drainage conditions. Positive site drainage within the project area should be provided and maintained at all times. Drainage should not flow uncontrolled down any descending slope. Water should be directed away from foundations, pavements, and tops

of slopes, and not allowed to pond or seep into the ground. In general, the area within 5 feet around the proposed building should slope away from the structure and conform to Section 1804.4 of the 2022 CBC. Whenever possible, surface drainage should be above adjacent paved areas. Consideration should be given to avoiding construction of planters adjacent to structures. Building pad drainage should be directed toward approved drainage facilities. Down spouts, or drainage devices should outlet a minimum of 5 feet from the structure or into a subsurface drainage system. Areas of seepage may develop due to irrigation or heavy rainfall, and should be anticipated. Minimizing irrigation will lessen this potential. If areas of seepage develop, recommendations for reducing this effect could be provided upon request.

Erosion Control

Graded pads and any slopes will be subject to surficial erosion during and after grading. Onsite earth materials have a moderate to high erosion potential. Consideration should be given to providing hay bales and silt fences for the temporary control of surface water, from a geotechnical viewpoint.

Landscape Maintenance

Over-watering the landscape areas will adversely affect the proposed site improvements. We recommend that any proposed open-bottom planters adjacent to structures be eliminated for a minimum distance of 10 feet. As an alternative, closed-bottom type planters could be used. An outlet placed in the bottom of the planter could be installed to direct drainage away from the structure or any exterior concrete flatwork. If planters are constructed adjacent to the structure, the sides and bottom of the planter should be provided with a moisture barrier to prevent infiltration of irrigation water into the subgrade. Provisions should be made to drain the excess irrigation water from the planters without saturating the subgrade below or adjacent to the planters. Consideration should be given to the type of vegetation chosen and their potential effect upon surface improvements (e.g., some trees will have an effect on concrete flatwork with their extensive root systems). From a geotechnical standpoint leaching is not recommended for establishing landscaping. If the surface soils are processed for the purpose of adding amendments, they should be recompacted to at least 90 percent relative density.

Site Improvements

If any additional improvements (e.g., buildings, building additions, walls, pavements, swimming pool, or spa) are planned for the site, recommendations concerning the geological or geotechnical aspects of design and construction of said improvements could be provided upon request. This office should be notified in advance of any fill placement, grading of the site, or trench backfilling after rough grading has been completed. This includes any grading, underground utility trench backfill, pavement or flatwork construction.

Tile Flooring

Tile flooring can crack, reflecting cracks in the concrete slab below the tile, although small cracks in a conventional slab may not be significant. Therefore, the designer should consider additional steel reinforcement for concrete slabs-on-grade where tile will be placed. The tile installer should consider installation methods that reduce possible cracking of the tile such as slipsheets. Slipsheets or a vinyl crack isolation membrane (approved by the Tile Council of America or Ceramic Tile Institute) are recommended between tile and concrete slabs-on-grade.

Additional Grading

This office should be notified in advance of any fill placement, supplemental regrading of the site, or trench backfilling after rough grading has been completed. This includes grading for vehicular and pedestrian pavements and underground utility trench backfill.

Footing Trench Excavations

All footing excavations should be observed by a representative of this firm subsequent to trenching and prior to concrete form and steel reinforcement placement. The purpose of the observations is to evaluate that the excavations have been made into the recommended bearing material and to the minimum widths and depths recommended for construction. If loose or compressible earth materials are exposed within the footing excavation, a deeper footing or the removal and recompaction of the subgrade materials would be recommended at that time.

Underground Utility Trench Backfill

1. All underground utility trench backfill, including under-slab utility trench backfill, should be uniformly moisture conditioned to at least optimum moisture content and then be compacted to obtain a minimum relative density of 90 percent of the laboratory standard (per ASTM D 1557). Observation, selective probing, and field density testing should be provided to evaluate the desired results.

2. Exterior trenches adjacent to, and within areas extending below a 1:1 (h:v) plane projected down and away from the outside, bottom edges of the footings, and all trenches beneath hardscape features and in slopes, should be compacted to a relative density of at least 90 percent of the laboratory standard (per ASTM D 1557). Sand backfill, unless excavated from the trench, should not be used in these backfill areas. Compaction testing and observations, along with selective probing, should be accomplished to evaluate the desired results.

3. All trench excavations should conform to CAL/OSHA, state, federal, and local safety codes.

4. Underground utilities crossing grade beams, perimeter beams, or footings should either pass below the footing or grade beam using a hardened collar or foam spacer, or pass through the footing or grade beam in accordance with the recommendations of the structural engineer.

SUMMARY OF RECOMMENDATIONS REGARDING GEOTECHNICAL OBSERVATION AND TESTING

We recommend that observation and testing be performed by GSI at each of the following construction stages:

- During grading or pad recertification.
- During excavation greater than 4 feet.
- After excavation of the building foundation, retaining wall footings, and any free-standing wall footings, prior to the placement of reinforcing steel or concrete.
- Prior to placement of any concrete slabs-on-grade or flatwork, after presoaking of building pad and other flatwork subgrade, before the placement of concrete, reinforcing steel, capillary break (e.g., sand, pea-gravel, or gravel), or vapor retarders.
- During placement of backfill for area drain, interior (under-slab) plumbing, and underground utility trenches.
- During retaining wall subdrain construction and backfill.
- During vehicular and pedestrian pavement construction.
- When any unusual soil conditions are encountered during any construction operations, subsequent to the issuance of this report.
- When any owner improvements, such as flatwork, walls, pavements, or retaining walls are constructed, prior to construction.
- A report of geotechnical observation and testing should be provided at the conclusion of each of the above stages, in order to provide concise and clear documentation of site work, and to comply with code requirements.

OTHER DESIGN PROFESSIONALS AND CONSULTANTS

The design civil engineer, structural engineer, post-tension designer, architect, landscape architect, or wall designer should review the recommendations provided herein, incorporate those recommendations into all their respective plans, and by explicit reference, make this report part of their project plans. This report presents minimum design criteria for the design of slabs, foundations and other elements possibly applicable to the project. These criteria should not be considered as substitutes for actual designs by the structural engineer or designer. The recommendations contained herein are not intended to preclude the transmission of water or vapor through the slab or foundation. The structural engineer or foundation and slab designer should provide recommendations to not allow water or vapor to enter into the structure so as to cause damage to another building component, or so as to limit the installation of the type of flooring materials typically used for the particular application.

The structural engineer or designer should analyze actual soil-structure interaction and consider, as needed, bearing, expansive soil influence, and strength, stiffness and deflections in the various slab, foundation, and other elements in order to develop appropriate, design-specific details. As conditions dictate, it is possible that other influences will also have to be considered. The structural engineer or designer should consider all applicable codes and authoritative sources where needed. If analyses by the structural engineer or designer result in less critical details than are provided herein as minimums, the minimums presented herein should be adopted. It is considered likely that some, more restrictive details will be required.

If the structural engineer or designer have any questions or requires further assistance, they should not hesitate to call or otherwise transmit their requests to GSI. In order to mitigate potential distress, the foundation and improvement's designer should confirm to GSI and the governing agency, in writing, that the proposed foundations and improvements can tolerate the amount of differential settlement and expansion characteristics, and other design criteria specified herein.

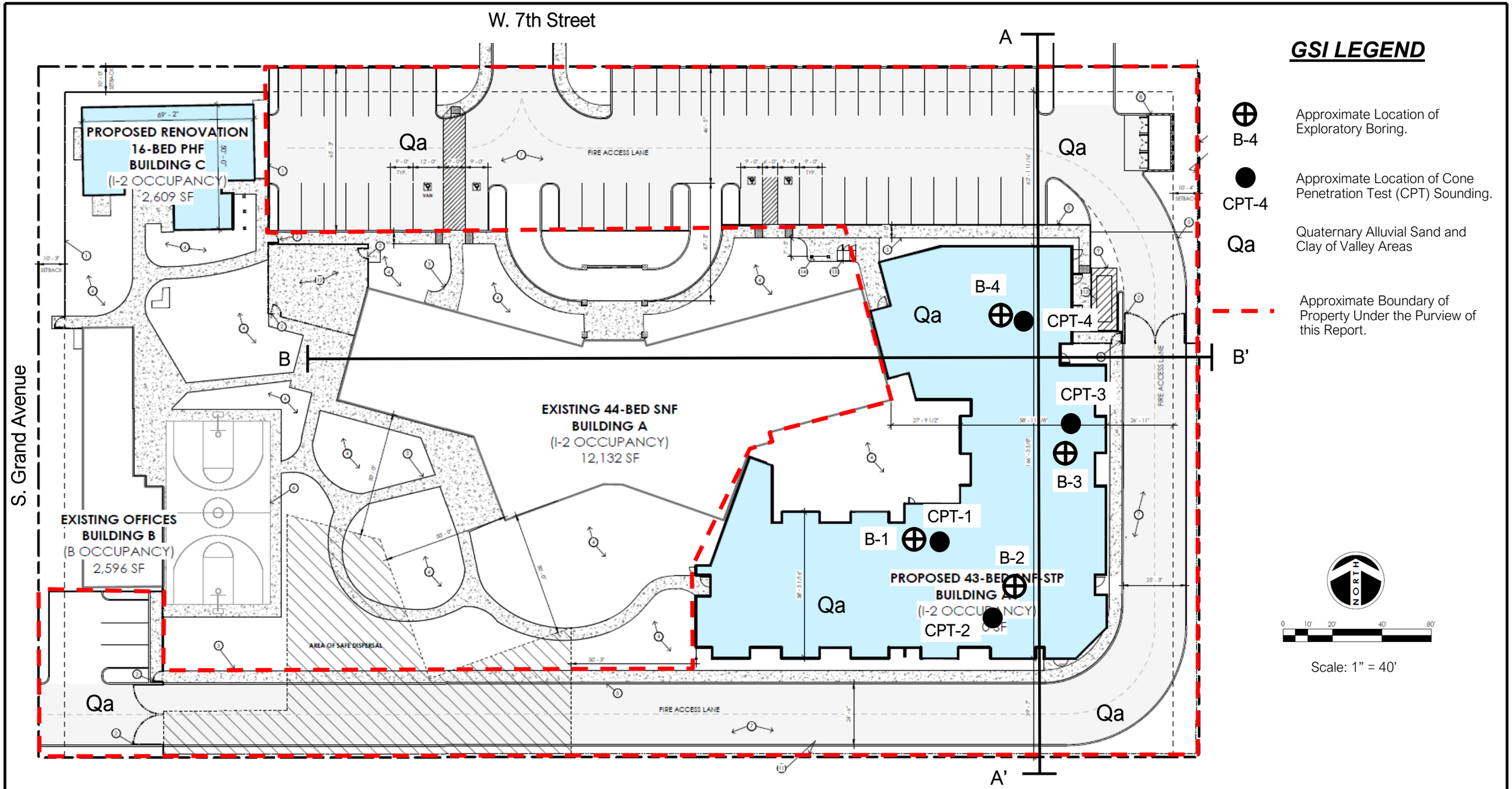
PLAN REVIEW

Final project plans (grading, precise grading, foundation, retaining wall or landscaping), should be reviewed by this office prior to construction, so that construction is in accordance with the conclusions and recommendations of this report. Based on our review, supplemental recommendations or further geotechnical studies may be warranted.

LIMITATIONS

The materials encountered on the project site and used for our analysis are believed representative of the area; however, soil and bedrock materials vary in character between excavations and natural outcrops or conditions exposed during mass grading. Site conditions may vary due to seasonal changes or other factors.

Inasmuch as our study is based upon our review and engineering analyses and laboratory data, the conclusions and recommendations are professional opinions. These opinions have been derived in accordance with current standards of practice, and no warranty, either express or implied, is given. Standards of practice are subject to change with time. GSI assumes no responsibility or liability for work or testing performed by others, or their inaction; or work performed when GSI is not requested to be onsite, to evaluate if our recommendations have been properly implemented. Use of this report constitutes an agreement and consent by the user to all the limitations outlined above, notwithstanding any other agreements that may be in place. In addition, this report may be subject to review by the controlling authorities. Thus, this report brings to completion our scope of services for this portion of the project. All samples will be disposed of after 30 days, unless specifically requested by the client, in writing.



ALL LOCATIONS ARE APPROXIMATE

This document or e-file is not part of the Construction Documents and should not be relied upon as being an accurate depiction of design.

Plate adapted from the Overall Site Plan by Gregg Maedo & Associates dated September 18, 2025.

OVERALL SITE PLAN

ARCHITECTURE + INTERIORS + PLANNING
321 NORTH RAMPART STREET, SUITE 101
ORANGE, CA 92868 . P: 714.937.1985
PROJECT#: 24060 . 18 SEPTEMBER 2025

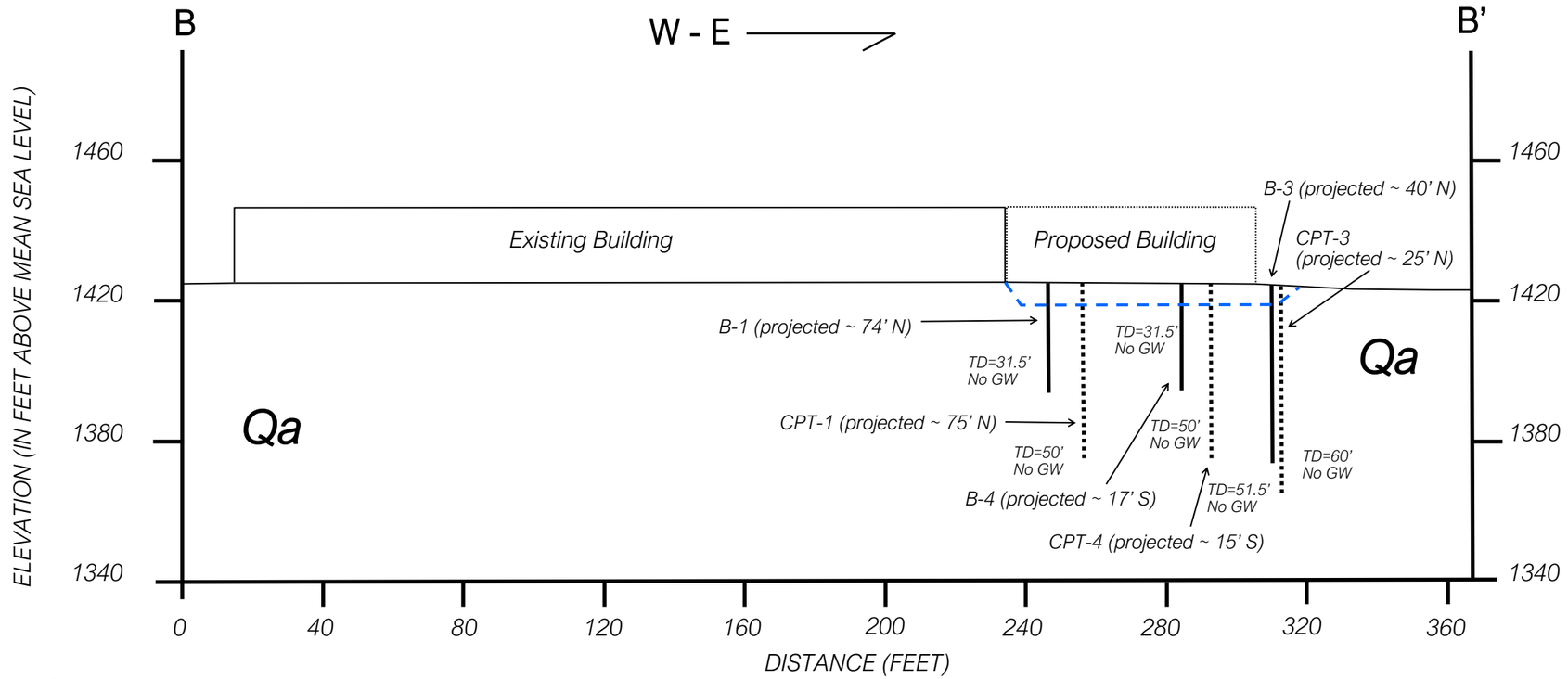
GREGG MAEDO + ASSOCIATES

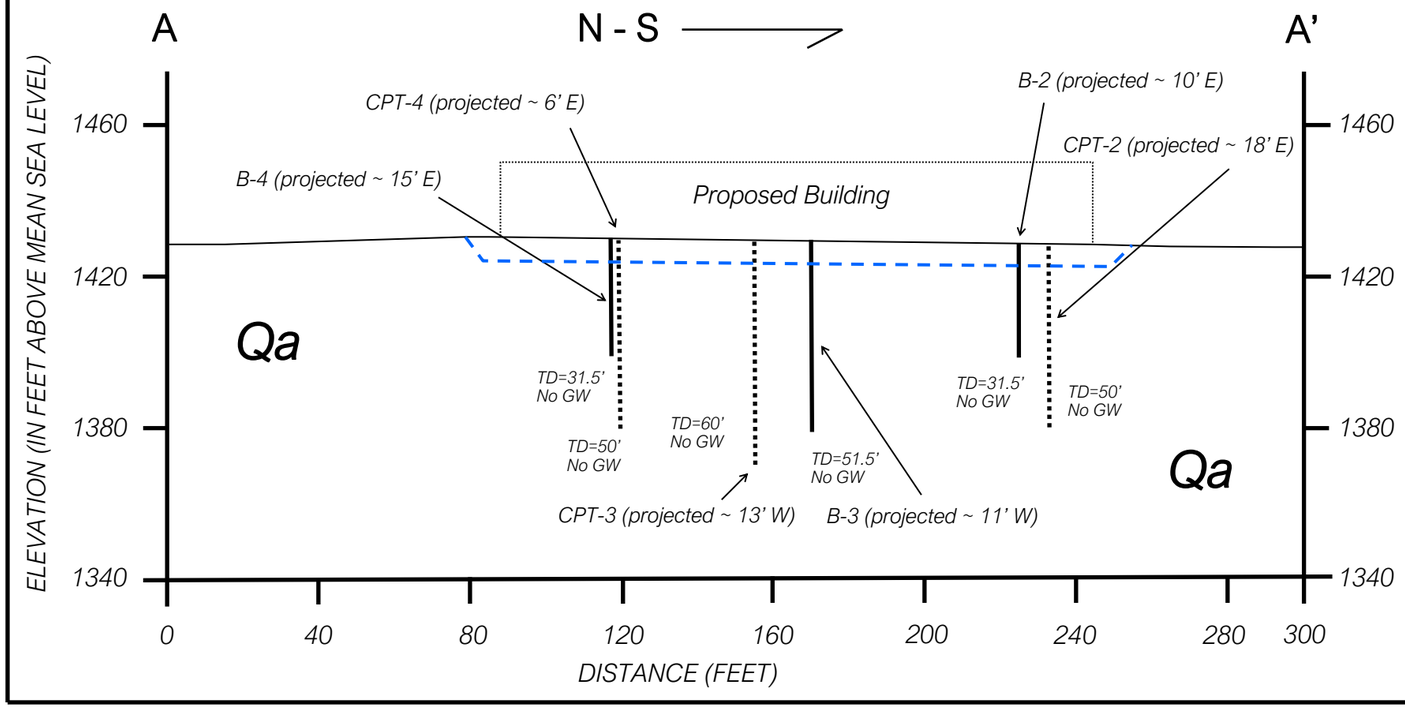
GSI GeoSoils,Inc.

Plate 1

GEOTECHNICAL MAP

W.O. 9071-A-IE	DATE: 12/25	SCALE: See Bar Scale





GSI LEGEND

Qa — Quaternary Alluvial Sand and Clay of Valley Areas.

Approximate Area of Remedial Removals (~5-7').

GeoSoils, Inc.

Plate 2

GEOLOGIC CROSS-SECTIONS

W.O. 9071-A-IE	DATE: 12/25	SCALE: 1"=40'

APPENDIX A

REFERENCES

APPENDIX A

REFERENCES

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APPENDIX B

BORING AND CPT LOGS

UNIFIED SOIL CLASSIFICATION SYSTEM

Major Divisions			Group Symbols	Typical Names
Coarse-Grained Soils More than 50% retained on No. 200 sieve	Gravels 50% or more of coarse fraction retained on No. 4 sieve	Clean Gravels	GW	Well-graded gravels and gravel-sand mixtures, little or no fines
			GP	Poorly graded gravels and gravel-sand mixtures, little or no fines
		Gravel with	GM	Silty gravels gravel-sand-silt mixtures
			GC	Clayey gravels, gravel-sand-clay mixtures
	Sands more than 50% of coarse fraction passes No. 4 sieve	Clean Sands	SW	Well-graded sands and gravelly sands, little or no fines
			SP	Poorly graded sands and gravelly sands, little or no fines
		Sands with Fines	SM	Silty sands, sand-silt mixtures
			SC	Clayey sands, sand-clay mixtures
Fine-Grained Soils 50% or more passes No. 200 sieve	Silts and Clays Liquid limit 50% or less		ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL	Organic silts and organic silty clays of low plasticity
	Silts and Clays Liquid limit greater than 50%		MH	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts
			CH	Inorganic clays of high plasticity, fat clays
			OH	Organic clays of medium to high plasticity
Highly Organic Soils			PT	Peat, mucic, and other highly organic soils

CONSISTENCY OR RELATIVE DENSITY

CRITERIA

Standard Penetration Test

Penetration Resistance N (blows/ft)	Relative Density
0 - 4	Very loose
4 - 10	Loose
10 - 30	Medium
30 - 50	Dense
> 50	Very dense

Standard Penetration Test

Penetration Resistance N (blows/ft)	Consistency	Unconfined Compressive Strength (tons/ft^2)
<2	Very Soft	<0.25
2 - 4	Soft	0.25 - .050
4 - 8	Medium	0.50 - 1.00
8 - 15	Stiff	1.00 - 2.00
15 - 30	Very Stiff	2.00 - 4.00
>30	Hard	>4.00

3" 3/4" #4 #10 #40 #200 U.S. Standard Sieve

Unified Soil Classification	Cobbles	Gravel		Sand			Silt or Clay
		coarse	fine	coarse	medium	fine	

MOISTURE CONDITIONS

Dry	Absence of moisture: dusty, dry to the touch
Slightly Moist	Below optimum moisture content for compaction
Moist	Near optimum moisture content
Very Moist	Above optimum moisture content
Wet	Visible free water; below water table

MATERIAL QUANTITY

trace	0 - 5 %
few	5 - 10 %
little	10 - 25 %
some	25 - 45 %

OTHER SYMBOLS

C Core Sample
S SPT Sample
B Bulk Sample
__ Groundwater
Qp Pocket Penetrometer

BASIC LOG FORMAT:
Group name, Group symbol, (grain size), color, moisture, consistency or relative density. Additional comments: odor, presence of roots, mica, gypsum, coarse grained particles, etc.

EXAMPLE:
Sand (SP), fine to medium grained, brown, moist, loose, trace silt, little fine gravel, few cobbles up to 4" in size, some hair roots and rootlets.

GeoSoils, Inc.

BORING LOG

PROJECT: Corcoran Construction, Inc.
980 West 7th Street, San Jacinto

W.O. 9071-A-IE *BORING* B-1 *SHEET* 1 *OF* 1

DATE EXCAVATED 11/26/25 *LOGGED BY:* DRE *APPROX. ELEV.:* 1,527

SAMPLE METHOD: CAL SAMPLER AND SPT, 140 LB HAMMER @ 30" DROP

Depth (ft.)	Sample: Bulk	Sample: Undisturbed	Sample: Blows/Ft.	USCS Symbol	Dry Unit Wt. (pcf)	Moisture (%)	Saturation (%)	Material Description
0				SM				**TOPSOIL AND DISTURBED FILL:** @ 0' SILTY SAND,brown, moist, loose; rootlets (topsoil), mica.
			33	SM	86.8	4.8	14.2	**QUATERNARY ALLUVIAL SAND AND CLAY OF VALLEY AREAS (Qa):** @ 2' Becomes medium dense to dense. @ 3' SILTY SAND,light brown to gray brown, dry, medium dense; medium to fine grained sands, some mica.
5			39		91.2	5.5	18.1	@ 5' As per 3'; dense; few roots.
			24		106.7	7.4	35.6	@ 7½' SILTY SAND, gray, damp, medium dense; some coarse grained sands, appear granitic.
10			38		111.4	10.2	55.9	@ 10' SILTY SAND, dark grayish brown, moist, dense; oxidation stains.
15			23					@ 15' SILTY SAND with SILT INTERBEDS, brownish gray to dark brownish gray, moist, medium dense.
20			37	SM/ ML	102.0	22.1	94.1	@ 20' SILTY SAND with SILT, dark gray, wet, dense; few oxidation stains, some mica, ½" low plasticity silt interbed.
25			10	ML				@ 25' SILT, gray to dark gray, moist, stiff; root traces, few interbeds, thin to medium laminated.
30			40	SM	114.0	8.5	50.2	@ 30' SILTY SAND, dark gray, damp, dense; coarse to fine grained sand.
								Total Depth = 31½' No seepage or caving Backfilled 11/26/25

▼ *Standard Penetration Test*
⌶ *Undisturbed, Ring Sample*
▽ *Groundwater*
♀ *Seepage*

GeoSoils, Inc.

PLATE B-2

GeoSoils, Inc.

BORING LOG

PROJECT: Corcoran Construction, Inc.
980 West 7th Street, San Jacinto

W.O. 9071-A-IE *BORING* B-2 *SHEET* 1 *OF* 1

DATE EXCAVATED 11/26/25 *LOGGED BY:* DRE *APPROX. ELEV.:* 1,526

SAMPLE METHOD: CAL SAMPLER AND SPT, 140 LB HAMMER @ 30" DROP

Depth (ft.)	Sample: Bulk	Sample: Undisturbed	Blows/Ft.	USCS Symbol	Dry Unit Wt. (pcf)	Moisture (%)	Saturation (%)	Material Description
0				SM				**TOPSOIL AND DISTURBED FILL:** @ 0' SILTY SAND, brown, wet, loose; few roots, some mica.
			12	SM	81.9	27.3	71.0	**QUATERNARY ALLUVIAL SAND AND CLAY OF VALLEY AREAS (Qa):** @ 3' SILTY SAND, light brownish gray, moist, medium dense; few coarse grained sands.
5			25		87.8	13.4	40.1	@ 5' SILTY SAND, brownish gray, damp, medium dense; few coarse grained sands.
			25		106.4	8.5	40.6	@ 7½' SILTY SAND, light gray and brownish gray, damp, medium dense; few sandy layers, few oxidation stains.
10			36		102.8	14.3	62.5	@ 10' SILTY SAND, brownish gray, moist, medium dense; some mica, few medium grained sands.
15			22					@ 15' SILTY SAND, light grayish brown, moist, medium dense.
20			41		112.7	9.3	52.6	@ 20' SILTY SAND, grayish brown, moist, dense; thickly bedded, some yellowish staining.
25			8	ML				@ 25' SILT, dark brownish gray, moist, medium stiff; calcified laminae.
30			27	SM	117.6	5.1	33.5	@ 30' SILTY SAND, dark brownish gray, damp, medium dense.
								Total Depth = 31½' No seepage or caving Backfilled 11/26/25

Standard Penetration Test
Undisturbed, Ring Sample
Groundwater
Seepage

GeoSoils, Inc.

PLATE B-3

GeoSoils, Inc.

BORING LOG

PROJECT: Corcoran Construction, Inc.
980 West 7th Street, San Jacinto

W.O. 9071-A-IE *BORING* B-3 *SHEET* 1 *OF* 2

DATE EXCAVATED 11/26/25 *LOGGED BY:* DRE *APPROX. ELEV.:* 1,526

SAMPLE METHOD: CAL SAMPLER AND SPT, 140 LB HAMMER @ 30" DROP

Depth (ft.)	Sample: Bulk	Sample: Undisturbed	Sample: Blows/Ft.	USCS Symbol	Dry Unit Wt. (pcf)	Moisture (%)	Saturation (%)	Material Description
0				SM				**TOPSOIL AND DISTURBED FILL:** @ 0' SILTY SAND, brown, moist, loose to medium dense.
			10	SM	99.7	15.4	61.8	**QUATERNARY ALLUVIAL SAND AND CLAY OF VALLEY AREAS (Qa):** @ 2½' SILTY SAND, grayish brown, moist, loose.
5			14		89.9	28.1	88.8	@ 5' As per 2½', wet, medium dense.
			23	SP-SM	105.2	2.1	9.6	@ 7½' SILTY SAND and SAND, grayish brown and light brownish gray, dry, medium dense.
10			33	SM	98.6	15.0	58.9	@ 10' SILTY SAND, grayish brown, moist, medium dense; fewer fine grained sands.
15			22	SP-SM				@ 15' SILTY SAND and SAND, dark gray, moist, medium dense.
20			28		110.6	3.1	16.7	@ 20' More medium to medium grained SAND; oxidation stains in root trace.
25			9	ML				@ 25' SANDY SILT, grayish brown, moist, medium stiff to stiff.
30			22	SM	101.0	18.2	75.9	@ 30' SILTY SAND, dark brownish gray to brownish gray, moist, medium dense; few oxidation stains along bedding laminae.

▼ *Standard Penetration Test*
⌶ *Undisturbed, Ring Sample*
▽ *Groundwater*
♀ *Seepage*

GeoSoils, Inc.

BORING LOG

PROJECT: Corcoran Construction, Inc.
980 West 7th Street, San Jacinto

W.O. 9071-A-IE *BORING* B-3 *SHEET* 2 *OF* 2

DATE EXCAVATED 11/26/25 *LOGGED BY:* DRE *APPROX. ELEV.:* 1,526

SAMPLE METHOD: CAL SAMPLER AND SPT, 140 LB HAMMER @ 30" DROP

Depth (ft.)	Sample: Bulk	Sample: Undisturbed	Sample: Blows/Ft.	USCS Symbol	Dry Unit Wt. (pcf)	Moisture (%)	Saturation (%)	Material Description
35			10	ML				@ 35' SILT with FINE SAND, dark brownish gray, moist, medium stiff.
40			30	SM	108.0	19.5	97.2	@ 40' SILTY SAND, dark gray, saturated, medium stiff.
45			17	SM				@ 45' SILTY SAND and SANDY SILT, brownish gray and dark brownish gray, moist, medium dense; sand layer at end of SPT 3", SILT with SAND has reddish yellow oxidation stains, slight mottling.
50			63		104.1	7.2	32.6	@ 50' SILTY SAND, gray to light gray, damp, dense.
								Total Depth = 51½' No seepage or caving Backfilled 11/26/25
55								
60								
65								

▼ *Standard Penetration Test*
⌶ *Undisturbed, Ring Sample*
▽ *Groundwater*
♀ *Seepage*

GeoSoils, Inc.

BORING LOG

PROJECT: Corcoran Construction, Inc.
980 West 7th Street, San Jacinto

W.O. 9071-A-IE *BORING* B-4 *SHEET* 1 *OF* 1

DATE EXCAVATED 11/26/25 *LOGGED BY:* DRE *APPROX. ELEV.:* 1,526

SAMPLE METHOD: CAL SAMPLER AND SPT, 140 LB HAMMER @ 30" DROP

Depth (ft.)	Sample: Bulk	Sample: Undisturbed	Sample: Blows/Ft.	USCS Symbol	Dry Unit Wt. (pcf)	Moisture (%)	Saturation (%)	Material Description
0				SM				**TOPSOIL AND DISTURBED FILL:** @ 0' SILTY SAND, brown, moist, loose; roots.
			13	SM	97.0	8.9	33.3	**QUATERNARY ALLUVIAL SAND AND CLAY OF VALLEY AREAS (Qa):** @ 3' SILTY SAND, dark grayish brown, damp, medium dense; few roots, mica, silty laminae horizontal beds.
5			25		114.4	6.0	35.7	@ 5' SILTY SAND, dark gray, damp, medium dense; few oxidation stains, fewer fines.
			15		87.2	23.2	68.8	@7½' SILTY SAND, becomes light brownish gray, moist, medium dense; sample disturbed.
10			14					@10' SILTY SAND, dark gray, moist, medium dense; few SILT interbeds.
15			22		115.0	11.7	71.0	@ 15' SILTY SAND, brown to brownish gray, moist, medium dense; few coarse grained sands, few oxidation stains.
20			20					@ 20' SILTY SAND, light gray to gray, moist, medium dense; few oxidation stains, gradational bedding, medium to fine graind sands.
25			22	SM/ ML	96.9	23.8	89.1	@ 25' SILT to SILTY SAND, dark gray to gray, wet, very stiff to medium dense; low plasticity SILT, 1cm-1mm laminae bedding, few oxidation stains.
30			21					@ 30' SILTY SAND, gray, moist, medium dense.
								Total Depth = 31½' No seepage or caving Backfilled 11/26/25

▼ *Standard Penetration Test*
⌶ *Undisturbed, Ring Sample*
▽ *Groundwater*
♀ *Seepage*

SUMMARY

OF

CONE PENETRATION TEST DATA

Project:

Bradley Gardens
980 W. 7th Street
San Jacinto, CA
November 26, 2025

Prepared for:

Mr. Ryan Boehmer
GeoSoils, Inc. (GSI)
5741 Palmer Way, Ste C & D
Carlsbad, CA 92010
Office (760) 438-3155 / Fax (760) 931-0915

Prepared by:

KEHOE TESTING & ENGINEERING
5415 Industrial Drive
Huntington Beach, CA 92649-1518
Office (714) 901-7270 / Fax (714) 901-7289
www.kehoetesting.com

TABLE OF CONTENTS

1. **INTRODUCTION**
2. **SUMMARY OF FIELD WORK**
3. **FIELD EQUIPMENT & PROCEDURES**
4. **CONE PENETRATION TEST DATA & INTERPRETATION**

APPENDIX

- CPT Plots
- CPT Classification/Soil Behavior Chart
- Summary of Shear Wave Velocities
- CPT Data Files (sent via email)

SUMMARY
OF
CONE PENETRATION TEST DATA

1. INTRODUCTION

This report presents the results of a Cone Penetration Test (CPT) program carried out for the Bradley Gardens project located at 980 W. 7th Street in San Jacinto, California. The work was performed by Kehoe Testing & Engineering (KTE) on November 26, 2025. The scope of work was performed as directed by GeoSoils, Inc. (GSI) personnel.

2. SUMMARY OF FIELD WORK

The fieldwork consisted of performing CPT soundings at four locations to determine the soil lithology. A summary is provided in **TABLE 2.1**.

LOCATION	DEPTH OF CPT (ft)	COMMENTS/NOTES:
CPT-1	50	
CPT-2	50	
CPT-3	60	
CPT-4	50	

TABLE 2.1 - Summary of CPT Soundings

3. FIELD EQUIPMENT & PROCEDURES

The CPT soundings were carried out by **KTE** using an integrated electronic cone system manufactured by Vertek. The CPT soundings were performed in accordance with ASTM standards (D5778). The cone penetrometers were pushed using a 30-ton CPT rig. The cone used during the program was a 15 cm^2 cone with a cone net area ratio of 0.83. The following parameters were recorded at approximately 2.5 cm depth intervals:

- Cone Resistance (qc)
- Sleeve Friction (fs)
- Dynamic Pore Pressure (u)
- Inclination
- Penetration Speed

At location CPT-3, shear wave measurements were obtained at approximately 10-foot intervals. The shear wave is generated using an air-actuated hammer, which is located inside the front jack of the CPT rig. The cone has a triaxial geophone, which recorded the shear wave signal generated by the air hammer.

The above parameters were recorded and viewed in real time using a laptop computer. Data is stored at the KTE office for up to 2 years for future analysis and reference. A complete set of baseline readings was taken prior to each sounding to determine temperature shifts and any zero load offsets. Monitoring base line readings ensures that the cone electronics are operating properly.

4. CONE PENETRATION TEST DATA & INTERPRETATION

The Cone Penetration Test data is presented in graphical form in the attached Appendix. These plots were generated using the CPeT-IT program. Penetration depths are referenced to ground surface. The soil behavior type on the CPT plots is derived from the attached CPT SBT plot (Robertson, "Interpretation of Cone Penetration Test…", 2009) and presents major soil lithologic changes. The stratigraphic interpretation is based on relationships between cone resistance (qc), sleeve friction (fs), and penetration pore pressure (u). The friction ratio (Rf), which is sleeve friction divided by cone resistance, is a calculated parameter that is used along with cone resistance to infer soil behavior type. Generally, cohesive soils (clays) have high friction ratios, low cone resistance and generate excess pore water pressures. Cohesionless soils (sands) have lower friction ratios, high cone bearing and generate little (or negative) excess pore water pressures.

The CPT data files have also been provided. These files can be imported in CPeT-IT (software by GeoLogismiki) and other programs to calculate various geotechnical parameters.

It should be noted that it is not always possible to clearly identify a soil type based on qc, fs and u. In these situations, experience, judgement and an assessment of the pore pressure data should be used to infer the soil behavior type.

If you have any questions regarding this information, please do not hesitate to call our office at (714) 901-7270.

Sincerely,

KEHOE TESTING & ENGINEERING



Steven P. Kehoe
President

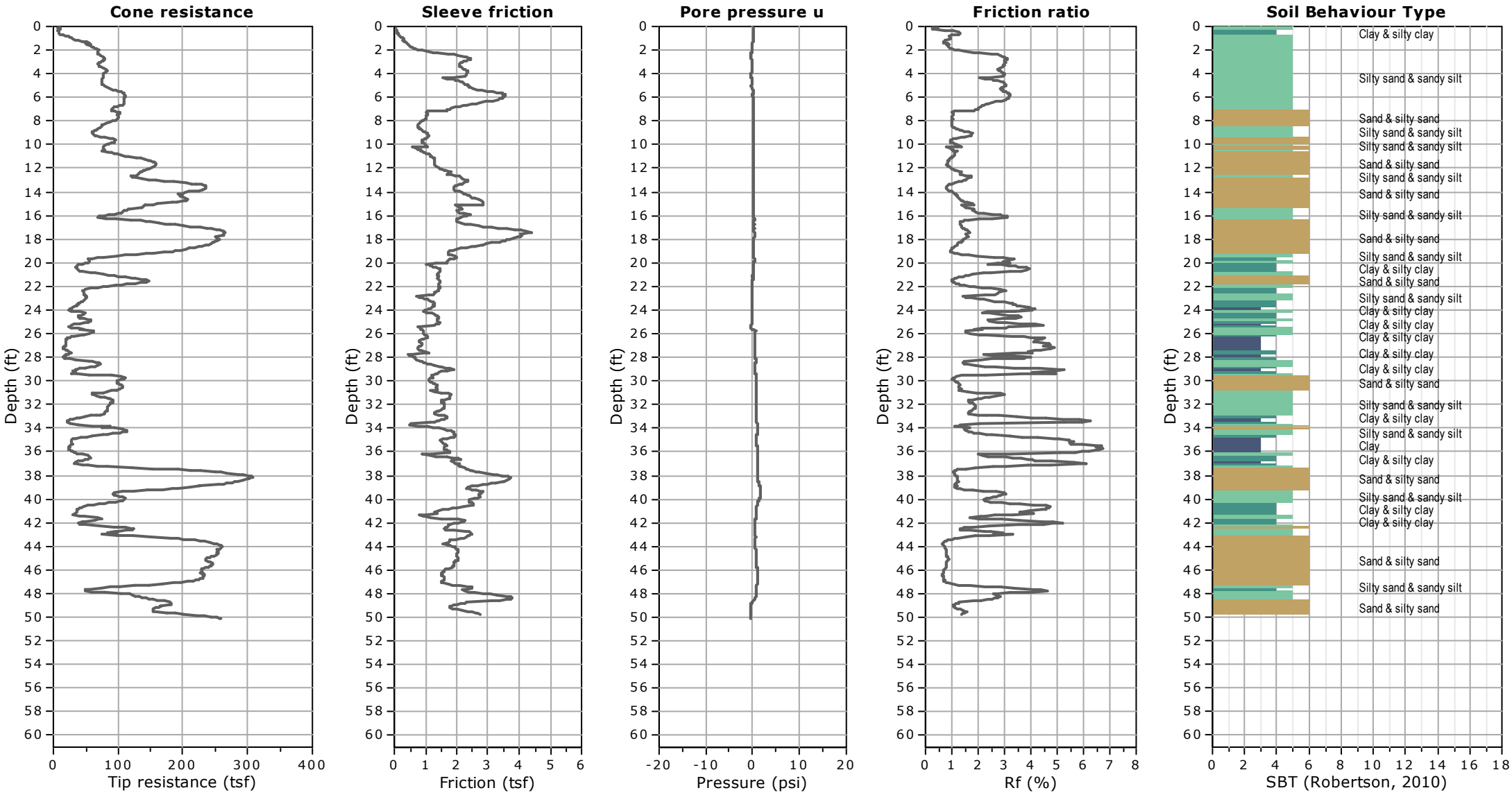
12/06/25-jg-8179

APPENDIX

Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: **GeoSoils / Bradley Gardens**
Location: **980 W. 7th St, San Jacinto, CA**

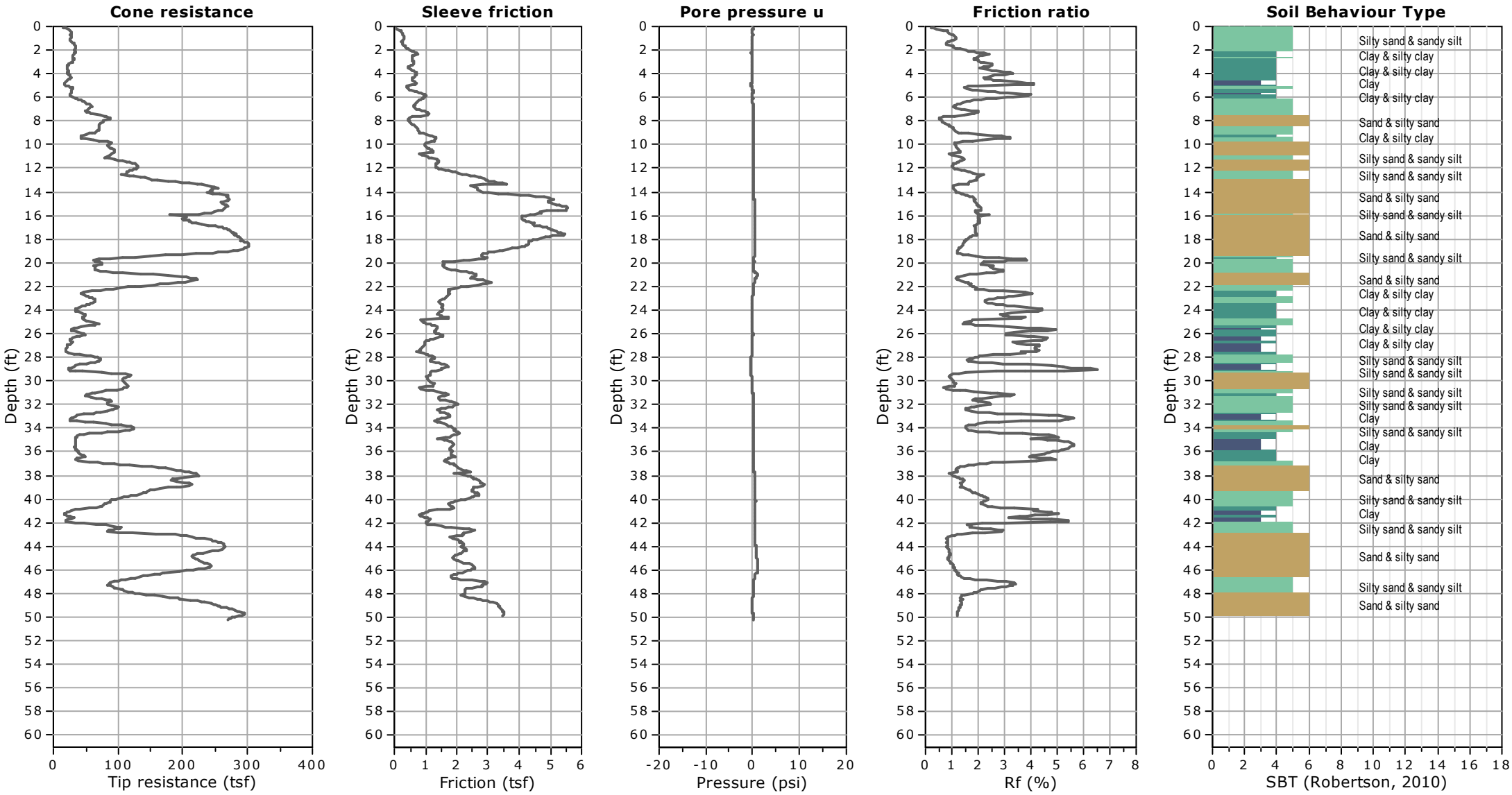
CPT-1
Total depth: 50.14 ft, Date: 11/26/2025



Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: GeoSoils / Bradley Gardens
Location: 980 W. 7th St, San Jacinto, CA

CPT-2
Total depth: 50.27 ft, Date: 11/26/2025



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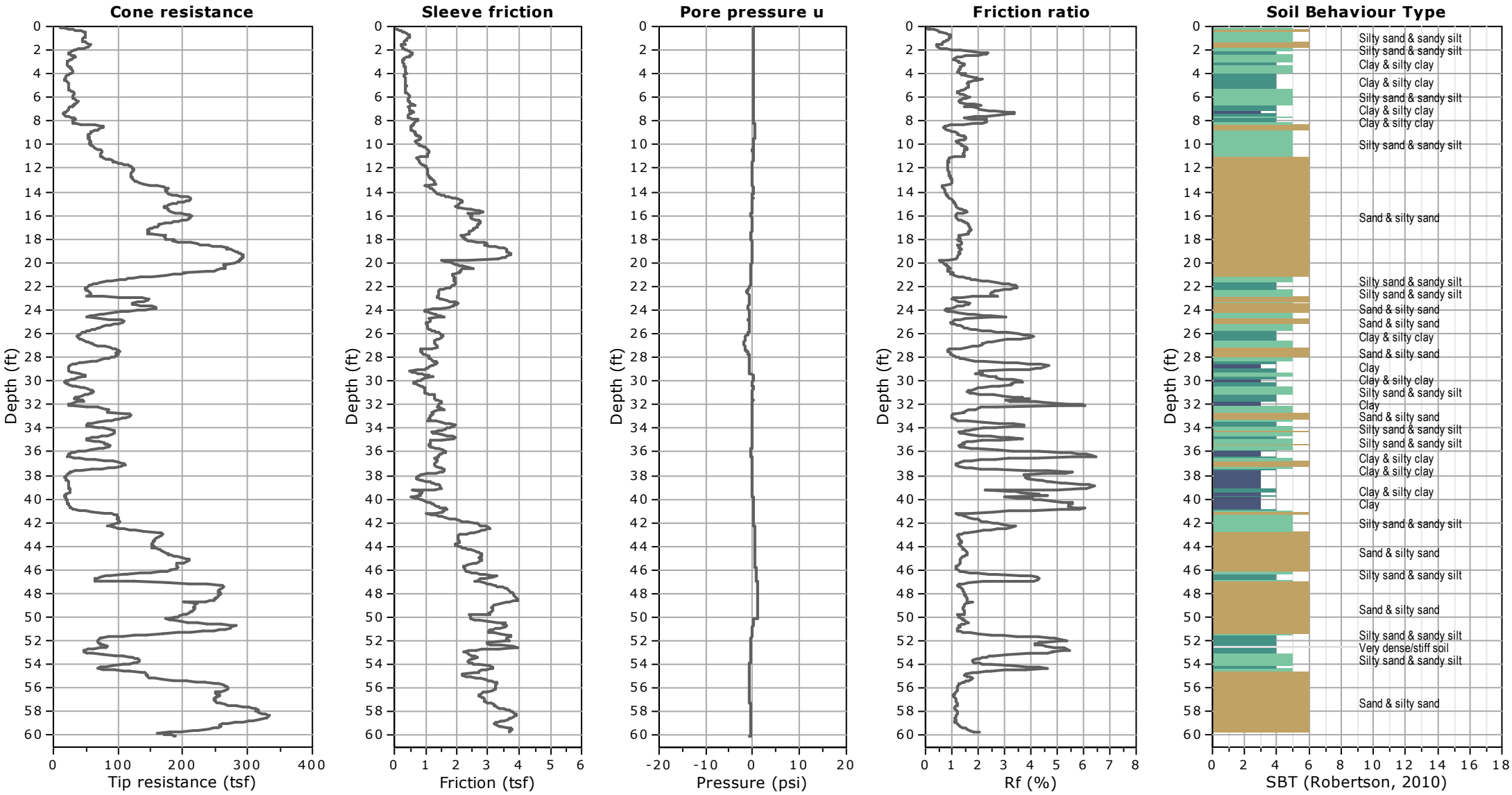
Project: **GeoSoils / Bradley Gardens**
Location: **980 W. 7th St, San Jacinto, CA**

CPT-3
Total depth: 60.11 ft, Date: 11/26/2025



Kehoe Testing and Engineering
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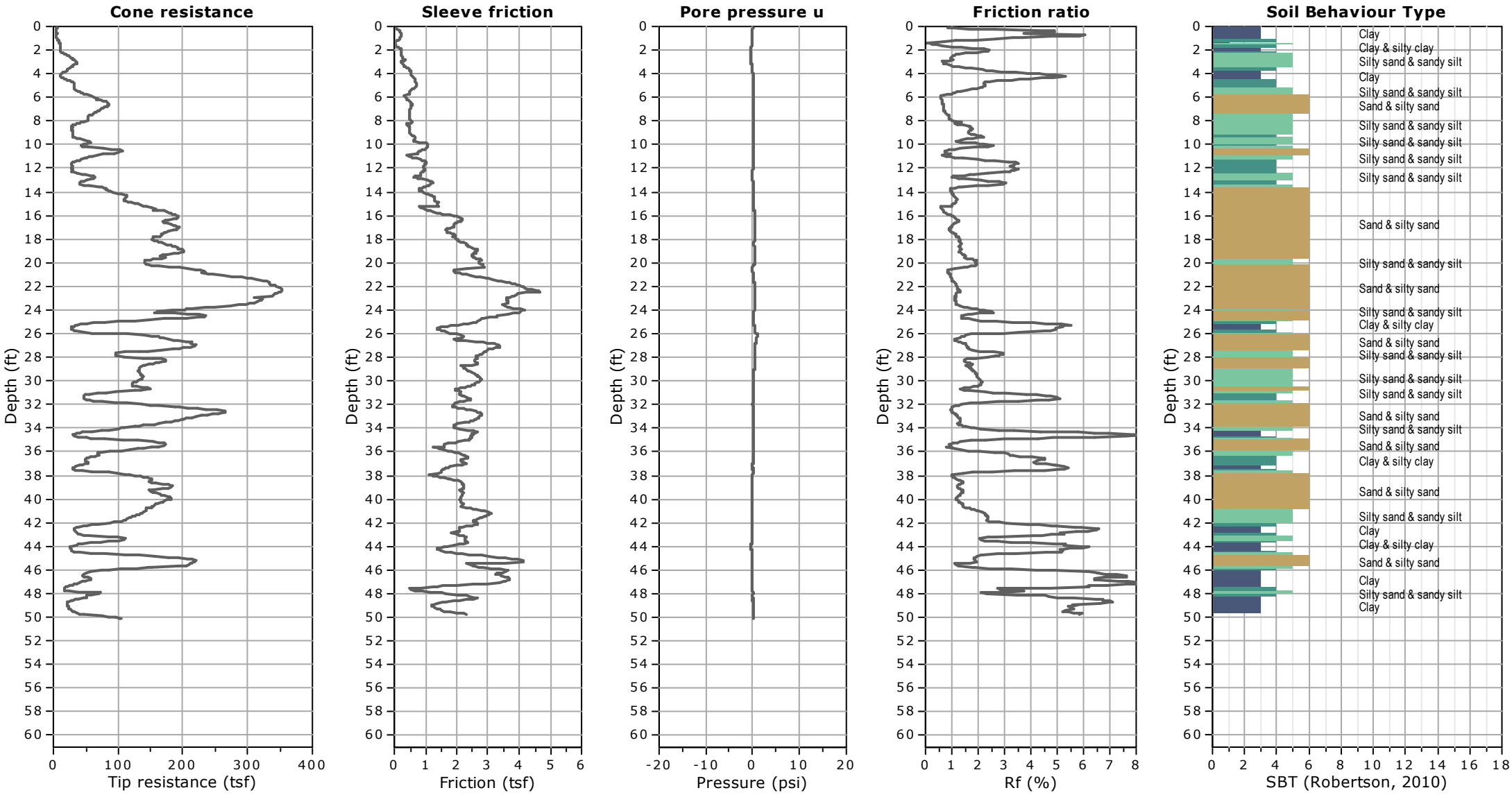
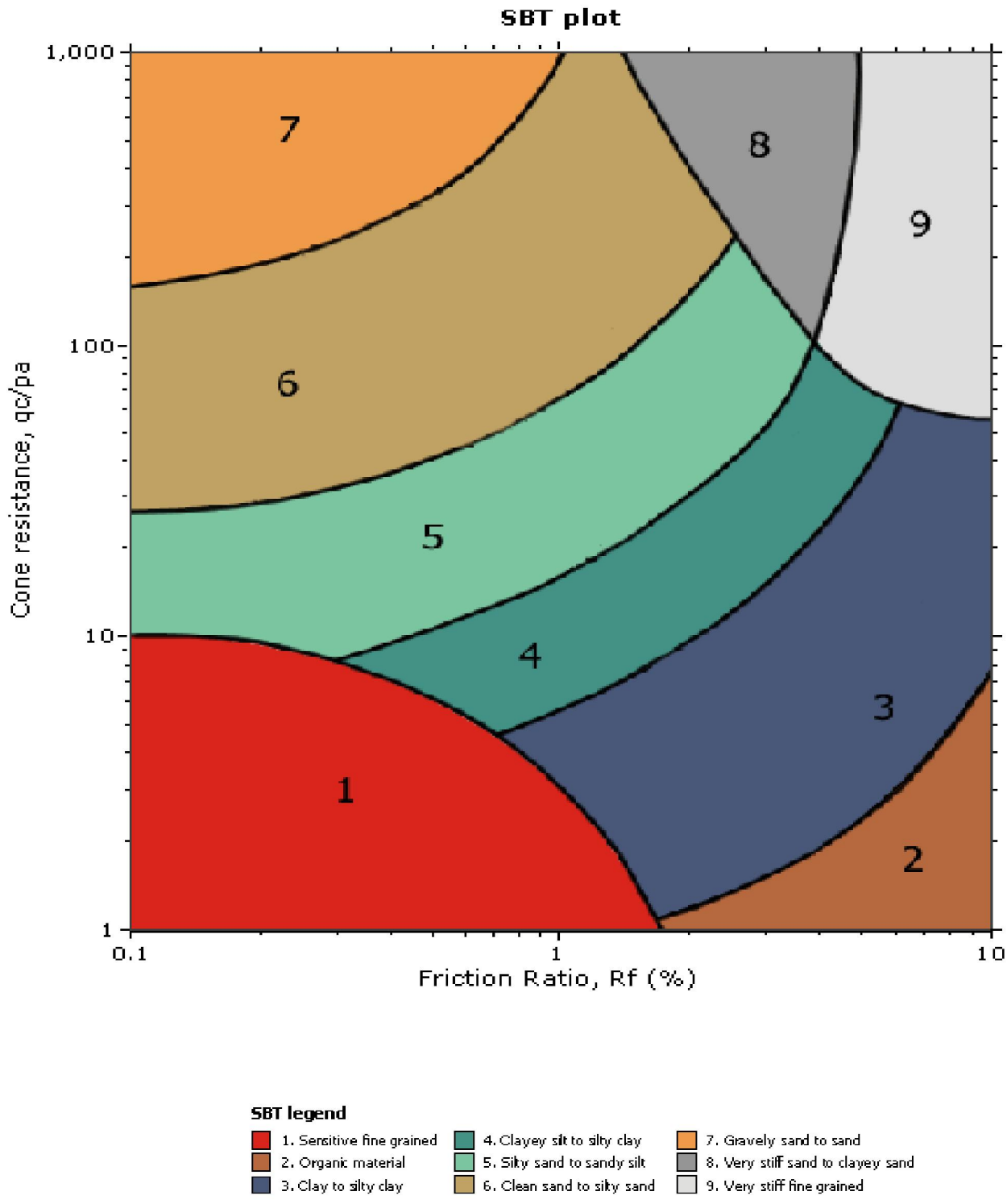
steve@kehoetesting.com
www.kehoetesting.com

Project: **GeoSoils / Bradley Gardens**
Location: **980 W. 7th St, San Jacinto, CA**

CPT-4
Total depth: 50.14 ft, Date: 11/26/2025



Kehoe Testing and Engineering
714-901-7270
rich@kehoetesting.com
www.kehoetesting.com



GeoSoils
Bradley Gardens
San Jacinto, CA

CPT Shear Wave Measurements

Location	Tip Depth (ft)	Geophone Depth (ft)	Travel Distance (ft)	S-Wave Arrival (msec)	S-Wave Velocity from Surface (ft/sec)	Interval S-Wave Velocity (ft/sec)
CPT-3	10.01	9.01	9.23	14.56	634	
	20.05	19.05	19.15	25.24	759	929
	30.02	29.02	29.09	39.48	737	698
	40.06	39.06	39.11	52.76	741	755
	50.10	49.10	49.14	61.76	796	1114
	60.10	59.10	59.13	72.36	817	943

Shear Wave Source Offset - 2 ft

S-Wave Velocity from Surface = Travel Distance/S-Wave Arrival
Interval S-Wave Velocity = (Travel Dist2-Travel Dist1)/(Time2-Time1)

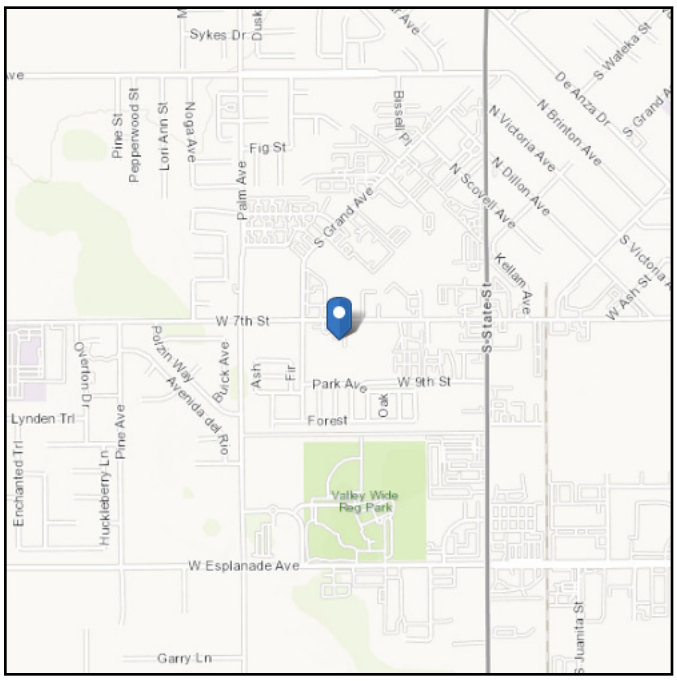
APPENDIX C

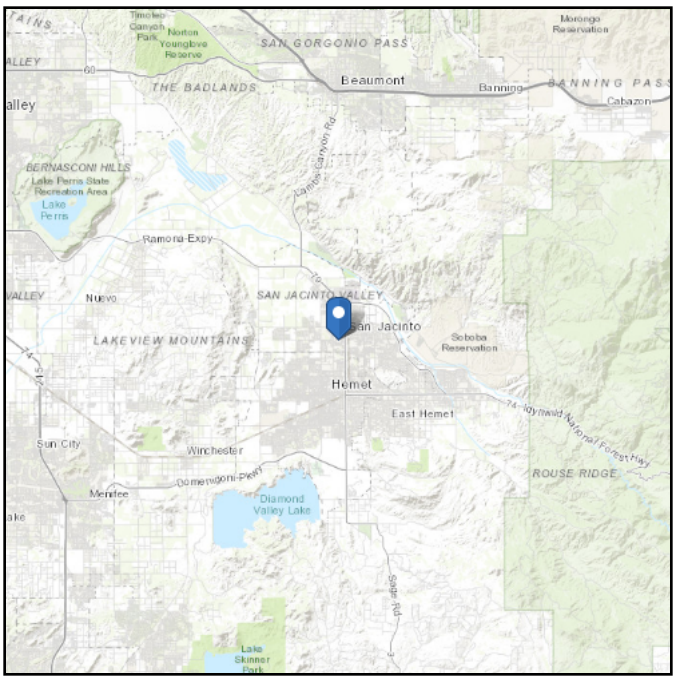
SEISMICITY DATA

ASCE Hazards Report

Address:
No Address at This Location

Standard:	ASCE/SEI 7-16	**Latitude:**	33.77956
Risk Category:	III	**Longitude:**	-116.97718
Soil Class:	D - Stiff Soil	**Elevation:**	1525.6020140554833 ft (NAVD 88)





W.O. 9071-A-IE
Plate C-1

Seismic

Site Soil Class: D - Stiff Soil

Results:

S_S :	2.161	S_{D1} :	N/A
S_1 :	0.875	T_L :	8
F_a :	1	PGA :	0.977
F_v :	N/A	PGA_M :	1.074
S_{MS} :	2.161	F_{PGA} :	1.1
S_{M1} :	N/A	I_e :	1.25
S_{DS} :	1.441	C_v :	1.5

Ground motion hazard analysis may be required. See ASCE/SEI 7-16 Section 11.4.8.

Data Accessed: Tue Dec 02 2025

Date Source: USGS Seismic Design Maps

W.O. 9071-A-IE
Plate C-2

The ASCE Hazard Tool is provided for your convenience, for informational purposes only, and is provided “as is” and without warranties of any kind. The location data included herein has been obtained from information developed, produced, and maintained by third party providers; or has been extrapolated from maps incorporated in the ASCE standard. While ASCE has made every effort to use data obtained from reliable sources or methodologies, ASCE does not make any representations or warranties as to the accuracy, completeness, reliability, currency, or quality of any data provided herein. Any third-party links provided by this Tool should not be construed as an endorsement, affiliation, relationship, or sponsorship of such third-party content by or from ASCE.

ASCE does not intend, nor should anyone interpret, the results provided by this Tool to replace the sound judgment of a competent professional, having knowledge and experience in the appropriate field(s) of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the contents of this Tool or the ASCE standard.

In using this Tool, you expressly assume all risks associated with your use. Under no circumstances shall ASCE or its officers, directors, employees, members, affiliates, or agents be liable to you or any other person for any direct, indirect, special, incidental, or consequential damages arising from or related to your use of, or reliance on, the Tool or any information obtained therein. To the fullest extent permitted by law, you agree to release and hold harmless ASCE from any and all liability of any nature arising out of or resulting from any use of data provided by the ASCE Hazard Tool.

W.O. 9071-A-IE
Plate C-3

U.S. Geological Survey - Earthquake Hazards Program

Unified Hazard Tool

Please do not use this tool to obtain ground motion parameter values for the design code reference documents covered by the U.S. Seismic Design Maps web tools (e.g., the International Building Code and the ASCE 7 or 41 Standard). The values returned by the two applications are not identical.

Please also see the new USGS Earthquake Hazard Toolbox for access to the most recent NSHMs for the conterminous U.S. and Hawaii.

Input

Edition

Dynamic: Conterminous U.S. 2014 (u…

Spectral Period

Peak Ground Acceleration

Latitude

Decimal degrees

33.77956

Time Horizon

Return period in years

2475

Longitude

Decimal degrees, negative values for western longitudes

-116.97718

Site Class

259 m/s (Site class D)

W.O. 9071-A-IE
Plate C-4

Hazard Curve

Please select “Edition”, “Location” & “Site Class” above to compute a hazard curve.

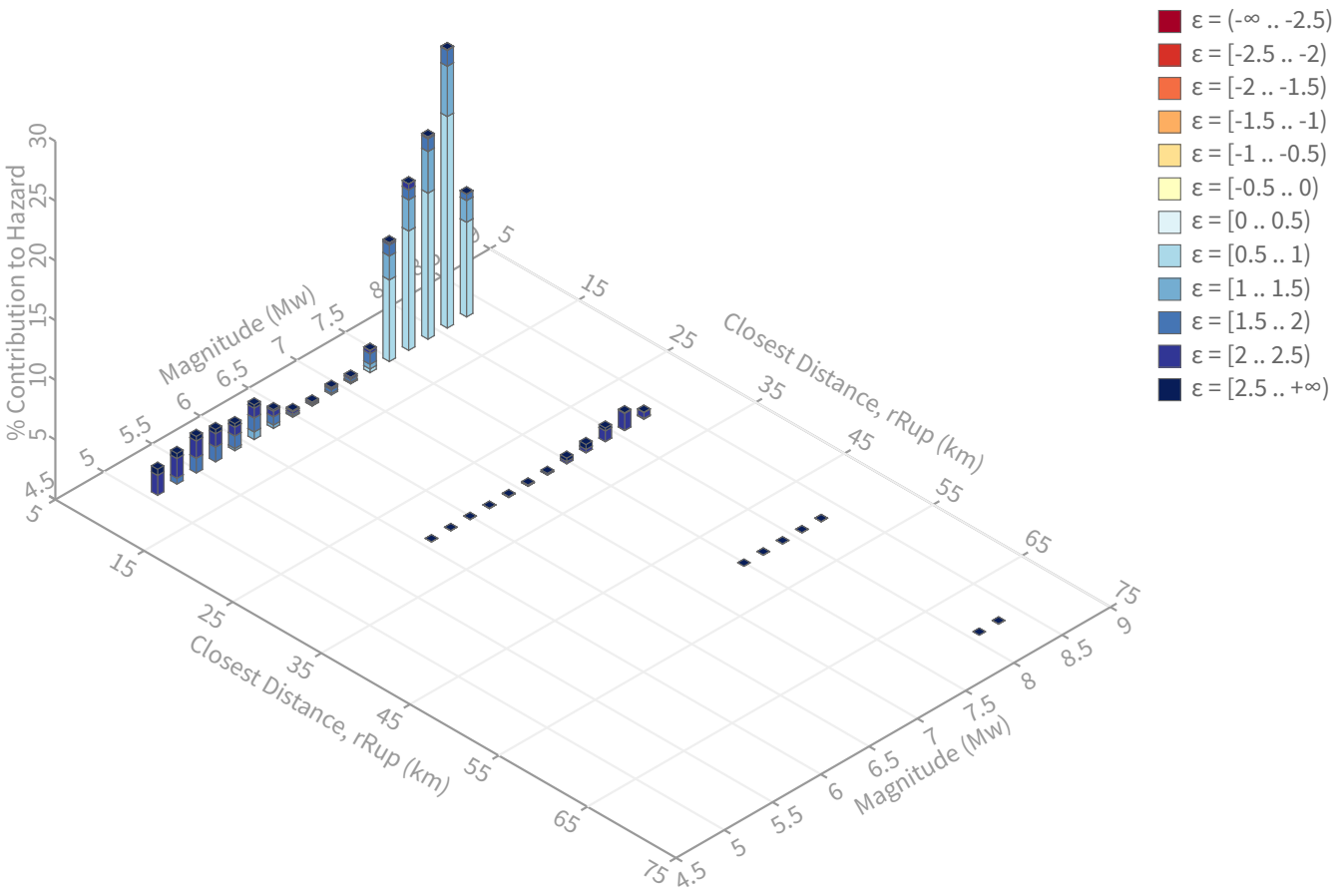
Compute Hazard Curve

W.O. 9071-A-IE
Plate C-5

Deaggregation

Component

Total



W.O. 9071-A-IE
Plate C-6

Summary statistics for, Deaggregation: Total

Deaggregation targets

Return period: 2475 yrs
Exceedance rate: 0.0004040404 yr^{-1}
PGA ground motion: 0.95359974 g

Recovered targets

Return period: 3108.4085 yrs
Exceedance rate: 0.00032170804 yr^{-1}

Totals

Binned: 100 %
Residual: 0 %
Trace: 0.06 %

Mean (over all sources)

m: 7.5
r: 4.09 km
ε_0: 1.3 σ

Mode (largest m-r bin)

m: 8.1
r: 1.47 km
ε_0: 1 σ
Contribution: 23.29 %

Mode (largest m-r-ε_0 bin)

m: 8.1
r: 1.4 km
ε_0: 0.86 σ
Contribution: 17.71 %

Discretization

r: min = 0.0, max = 1000.0, Δ = 20.0 km
m: min = 4.4, max = 9.4, Δ = 0.2
ε: min = -3.0, max = 3.0, Δ = 0.5 σ

Epsilon keys

ε0: [-∞ .. -2.5)
ε1: [-2.5 .. -2.0)
ε2: [-2.0 .. -1.5)
ε3: [-1.5 .. -1.0)
ε4: [-1.0 .. -0.5)
ε5: [-0.5 .. 0.0)
ε6: [0.0 .. 0.5)
ε7: [0.5 .. 1.0)
ε8: [1.0 .. 1.5)
ε9: [1.5 .. 2.0)
ε10: [2.0 .. 2.5)
ε11: [2.5 .. +∞]

W.O. 9071-A-IE
Plate C-7

Deaggregation Contributors

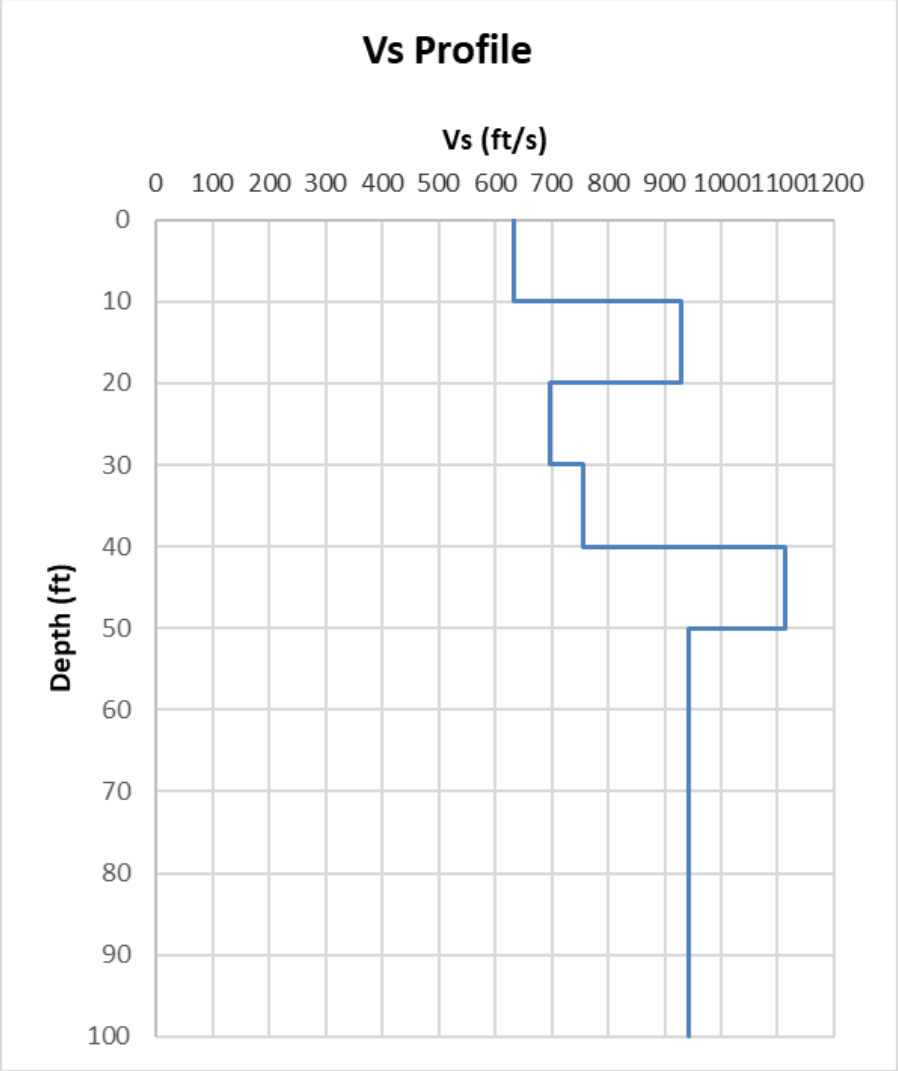
Source Set ↳ Source	Type	r	m	ε_0	lon	lat	az	%
UC33brAvg_FM31	System							40.90
San Jacinto (Stepovers Combined) [2]		1.40	7.92	1.02	116.964°W	33.784°N	65.28	36.90
San Andreas (San Bernardino S) [6]		24.73	7.92	2.32	116.820°W	33.959°N	36.00	1.68
UC33brAvg_FM32	System							40.81
San Jacinto (Stepovers Combined) [2]		1.40	7.92	1.02	116.964°W	33.784°N	65.28	36.78
San Andreas (San Bernardino S) [6]		24.73	7.92	2.32	116.820°W	33.959°N	36.00	1.69
UC33brAvg_FM31 (opt)	Grid							9.15
PointSourceFinite: -116.977, 33.811		6.29	5.59	1.86	116.977°W	33.811°N	0.00	2.58
PointSourceFinite: -116.977, 33.811		6.29	5.59	1.86	116.977°W	33.811°N	0.00	2.58
UC33brAvg_FM32 (opt)	Grid							9.14
PointSourceFinite: -116.977, 33.811		6.29	5.59	1.86	116.977°W	33.811°N	0.00	2.58
PointSourceFinite: -116.977, 33.811		6.29	5.59	1.86	116.977°W	33.811°N	0.00	2.58

W.O. 9071-A-IE
Plate C-8

Calculated V_{s30}

V_{s30} = 861.3 ft/s

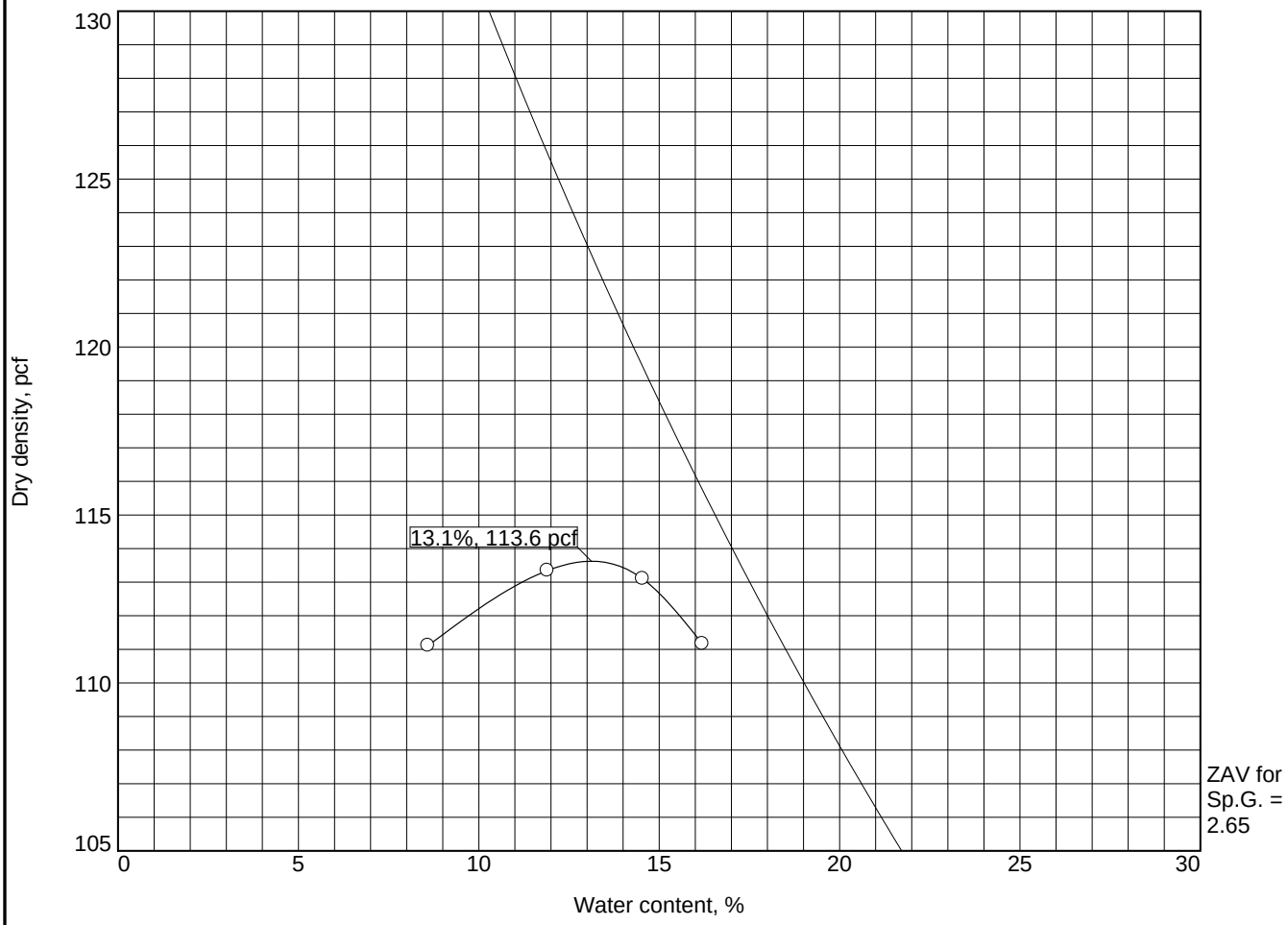
di	vsi	di/vsi
10	634	0.015773
10	929	0.010764
10	698	0.014327
10	755	0.013245
10	1114	0.008977
50	943	0.053022
100		**0.116108**



APPENDIX D

LABORATORY DATA

COMPACTION TEST REPORT For Curve No. B-2, 0-5ft



Test specification: ASTM D 1557-12 Method A Modified

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > #4	% < No.200
	USCS	AASHTO						
0-5ft	SM			2.65			1.0	

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 113.6 pcf Optimum moisture = 13.1 %	Olive Gray Silty Sand

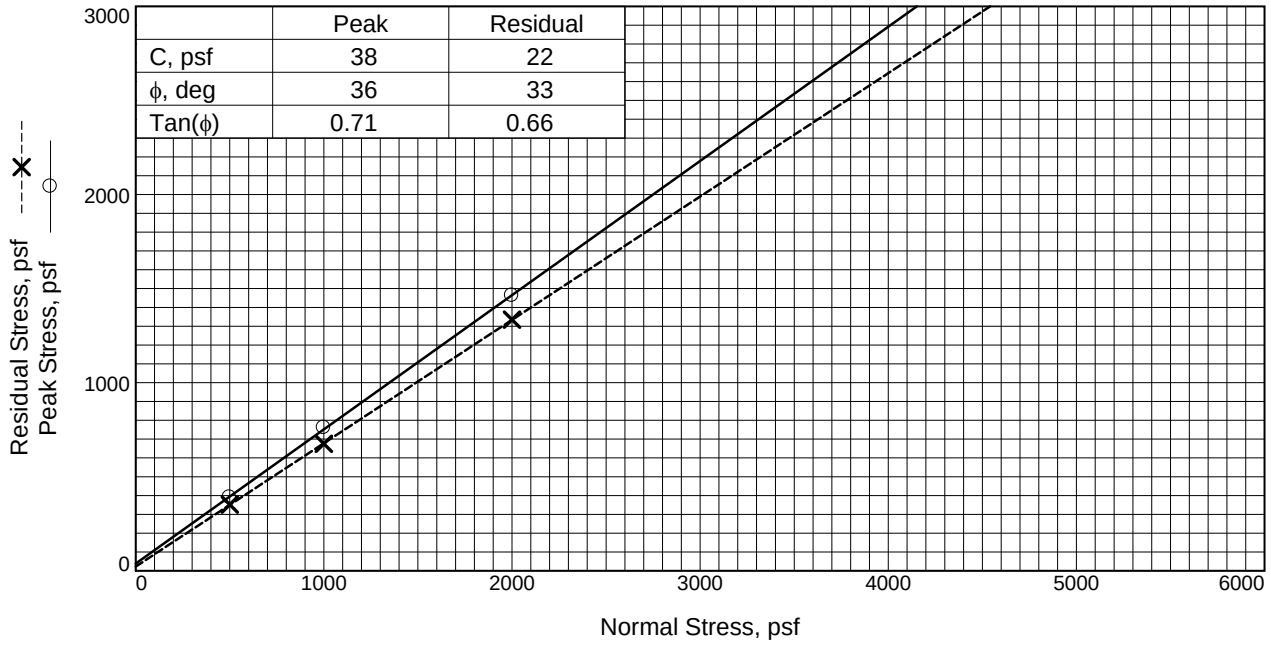
Project No. 9071-A-IE **Client:** Corcoran Construction, Inc.
Project: Bradley Gardens Skilled Nursing Facility
Date: 12-5-25
○ **Source of Sample:** B-2 **Sample Number:** B-2

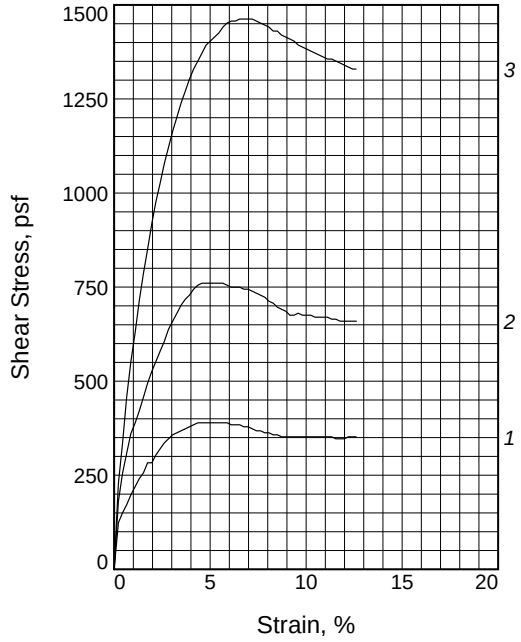
GeoSoils, Inc.

Remarks:

Plate D-1

Tested By: DG **Checked By:** TR





Sample No.		1	2	3
Initial	Water Content, %	7.4	7.4	7.4
	Dry Density, pcf	103.6	105.9	104.8
	Saturation, %	32.9	34.9	33.9
	Void Ratio	0.5967	0.5617	0.5784
	Diameter, in.	2.38	2.38	2.38
	Height, in.	1.00	1.00	1.00
At Test	Water Content, %	19.3	17.9	18.7
	Dry Density, pcf	104.7	107.4	108.7
	Saturation, %	88.2	88.0	95.0
	Void Ratio	0.5808	0.5399	0.5216
	Diameter, in.	2.38	2.38	2.38
	Height, in.	0.99	0.99	0.96
Normal Stress, psf		500	1000	2000
Peak Stress, psf		389	760	1462
Strain, %		5.0	5.2	6.8
Residual Stress, psf		352	675	1335
Strain, %		8.9	9.2	12.2
Strain rate, in./min.		0.008	0.008	0.008

Sample Type: In-Situ
Description: Gray Silty Sand

Specific Gravity= 2.65
Remarks:

Figure _____

Client: Corcoran Construction, Inc.

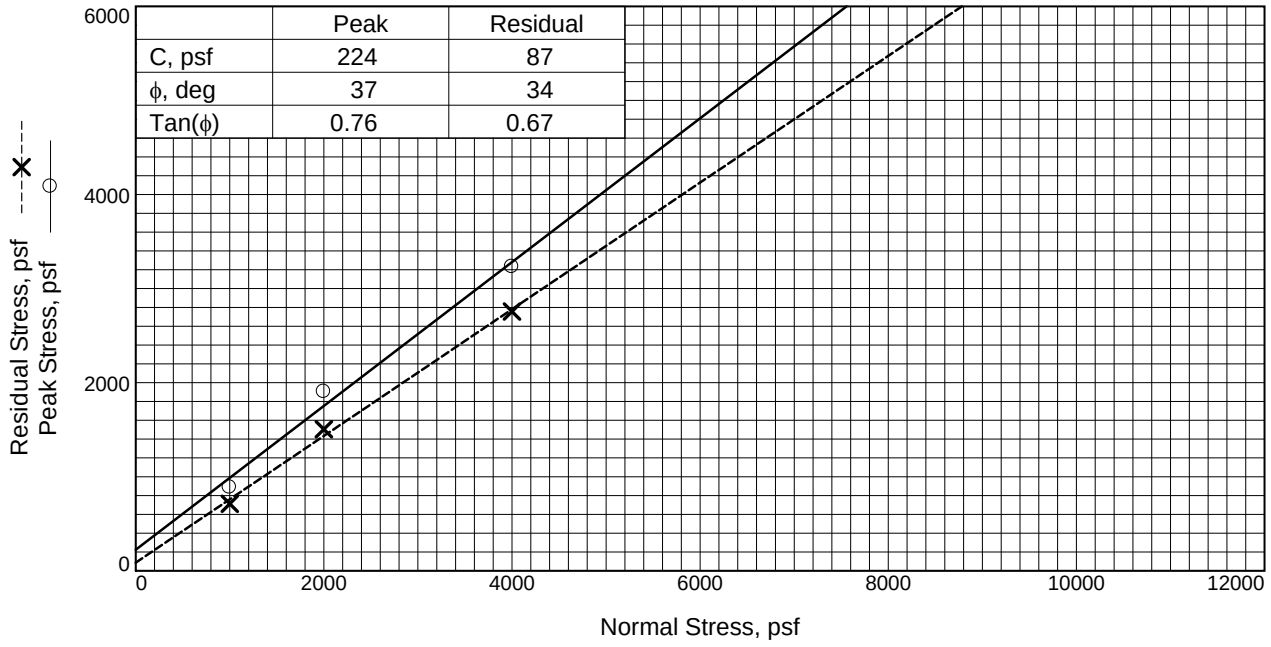
Project: Bradley Gardens Skilled Nursing Facility

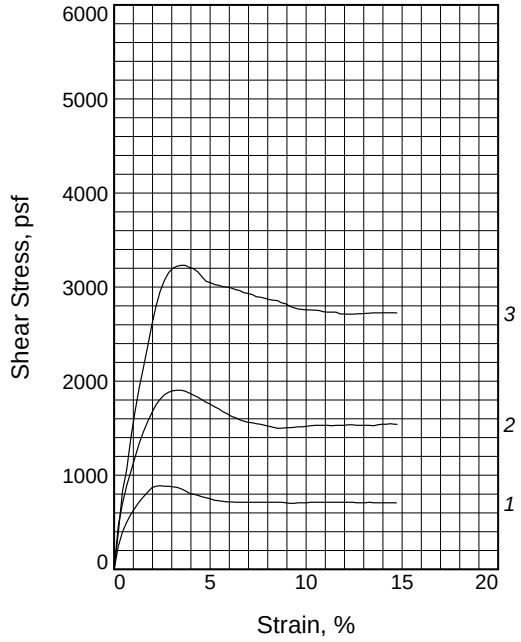
Source of Sample: B-1 **Depth:** 7.5ft
Sample Number: B-1
Proj. No.: 9071-A-IE

GeoSoils, Inc.

Tested By: TR **Checked By:** TR

Plate D-2





Sample No.		1	2	3
Initial	Water Content, %	11.7	11.7	11.7
	Dry Density, pcf	113.5	111.6	113.7
	Saturation, %	67.7	64.2	68.2
	Void Ratio	0.4579	0.4830	0.4549
	Diameter, in.	2.38	2.38	2.38
	Height, in.	1.00	1.00	1.00
At Test	Water Content, %	12.7	16.4	14.8
	Dry Density, pcf	114.5	112.8	116.4
	Saturation, %	75.5	93.2	93.1
	Void Ratio	0.4448	0.4667	0.4215
	Diameter, in.	2.38	2.38	2.38
	Height, in.	0.99	0.99	0.98
Normal Stress, psf		1000	2000	4000
Peak Stress, psf		888	1904	3232
Strain, %		2.4	3.3	3.5
Residual Stress, psf		713	1505	2756
Strain, %		6.3	8.9	10.2
Strain rate, in./min.		0.003	0.003	0.003

Sample Type: In-Situ
Description: Dark Gray Silty Sand

Specific Gravity= 2.65
Remarks:

Figure _____

Client: Corcoran Construction, Inc.

Project: Bradley Gardens Skilled Nursing Facility

Source of Sample: B-4 **Depth:** 15.0ft
Sample Number: B-4
Proj. No.: 9071-A-IE

GeoSoils, Inc.

Tested By: TR **Checked By:** TR

Plate D-3

GeoSoils, Inc.

1817 Aston Ave., Suite 104, Carlsbad CA 92008
Phone (760) 438-3155

CORROSION REPORT SUMMARY

Project No: **9071-A-IE**
Project Name: **Corcoran Construction, Inc.**
Report Date: **December 9, 2025**

SAMPLE ID	pH (H+)	Minimum Resistivity (ohm/cm)	Sulfate Content (wt%)	Chloride Content (mg/kg)
B-1, 0-5ft	8.0	3500	0.005	21

Sample testing in accordance with: pH - CTM 643, Resistivity - CTM 643
Sulfate - CTM 417, Chloride - CTM 422

Remarks: _____

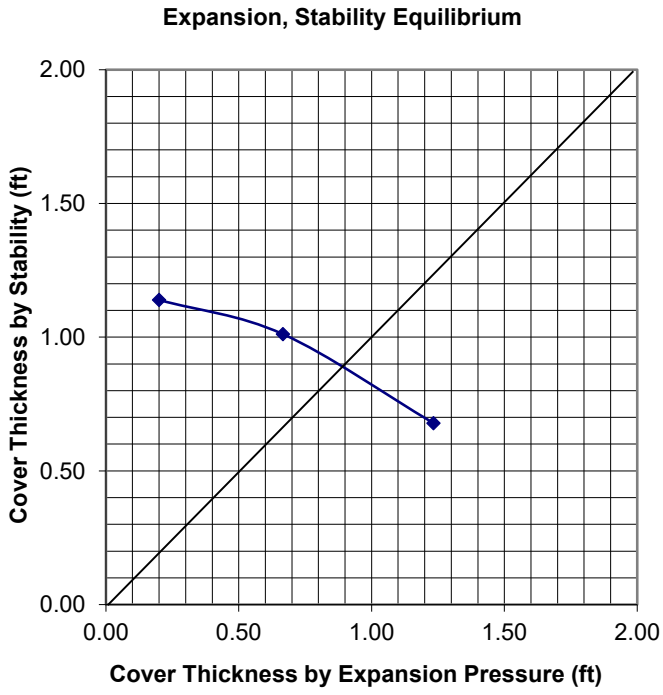
TEST SPECIMEN		A	B	C	D
Compactor air pressure	PSI	330	200	110	
Water added	%	3.3	5.6	7.9	
Moisture at compaction	%	15.6	17.9	20.2	
Height of sample	IN	2.42	2.52	2.55	
Dry density	PCF	112.6	107.0	103.8	
R-Value by exudation		47	21	11	
R-Value by exudation, corrected		44	21	11	
Exudation pressure	PSI	390	213	107	
Stability thickness	FT	0.68	1.01	1.14	
Expansion pressure thickness	FT	1.23	0.67	0.20	

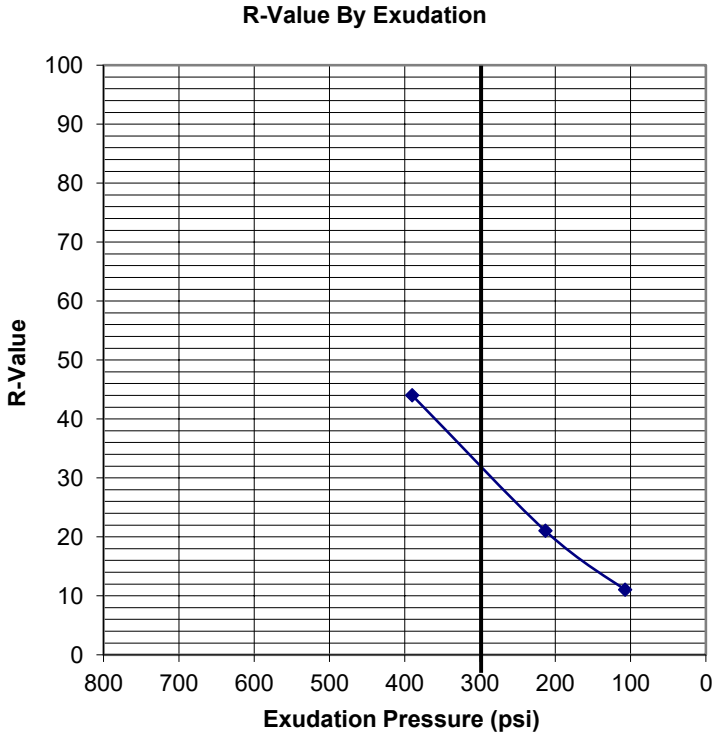
DESIGN CALCULATION DATA

Traffic index, assumed	5.0
Gravel equivalent factor, assumed	1.25
Expansion, stability equilibrium	0.88
R-Value by expansion	31
R-Value by exudation	32
R-Value at equilibrium	**31**

SAMPLE INFORMATION

Sample Location:	B-1, 0-5ft
Sample Description:	Gray Silty Sand
Notes:	-
	0% Retained on 3/4 inch sieve
Test Method:	Cal-Trans Test 301





GeoSoils, Inc.
1817 Aston Avenue, Suite 104
Carlsbad, CA 92008
Telephone: (760) 438-3155
Fax: (760) 931-0915

9/2/2010

R - VALUE TEST RESULTS

Project: Corcoran Construction

Number: 9071-A-IE

Date: December 2025 Plate: D-5

APPENDIX E

SEISMIC SETTLEMENT ANALYSIS

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Vertical settlements summary report	401
Vertical settlements data report	402
Strength loss data report	417

Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

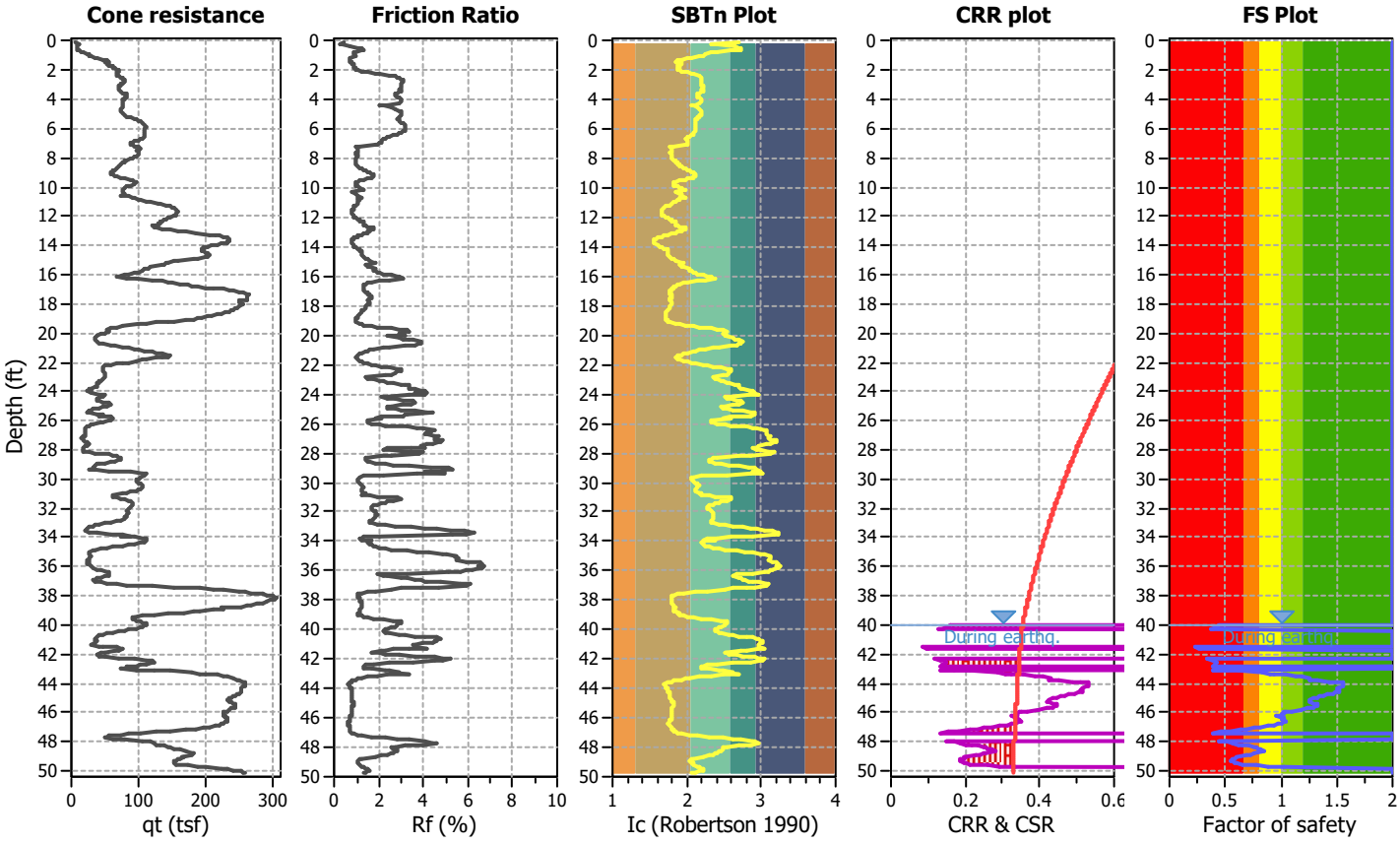
LIQUEFACTION ANALYSIS REPORT

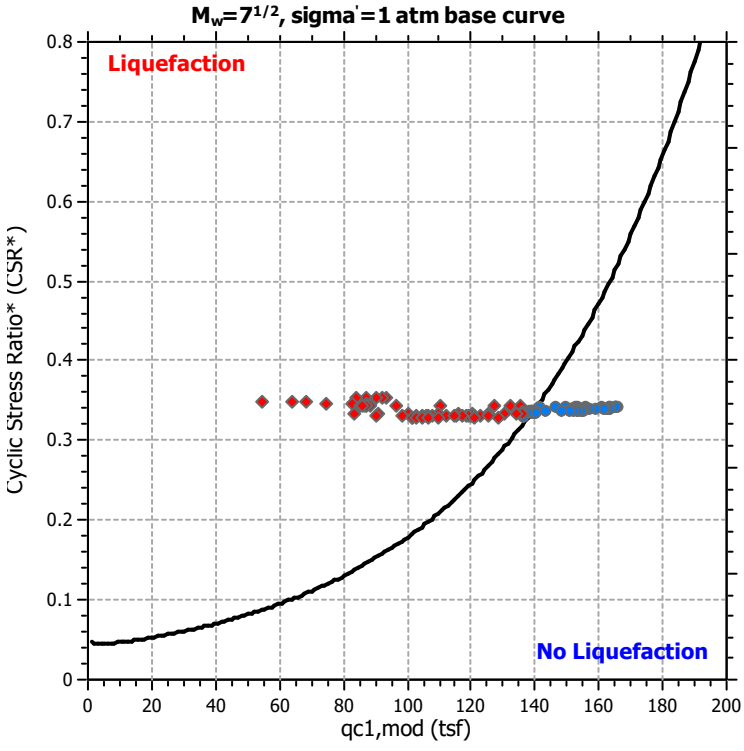
Project title : GeoSoils / Bradley Gardens **Location : 980 W. 7th St, San Jacinto, CA**

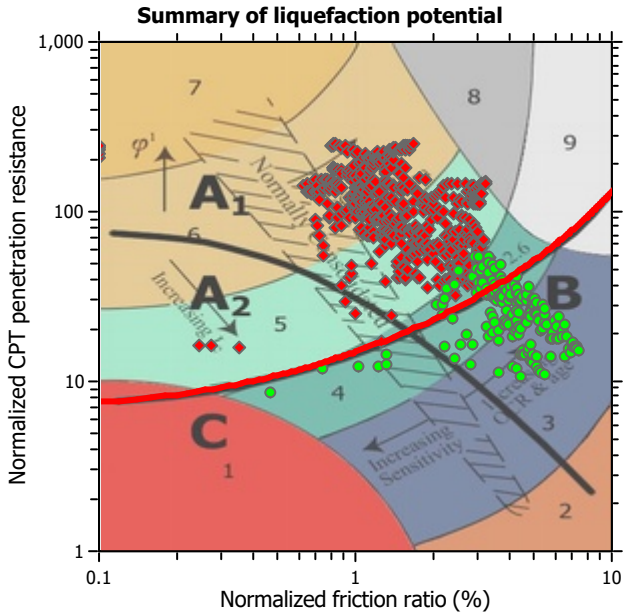
CPT file : CPT-1

Input parameters and analysis data

Analysis method:	Moss et al. (2006)	G.W.T. (in-situ):	100.00 ft	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	Moss et al. (2006)	G.W.T. (earthq.):	40.00 ft	Fill height:	N/A	Limit depth applied:	Yes
Points to test:	Based on Ic value	Average results interval:	1	Fill weight:	N/A	Limit depth:	50.00 ft
Earthquake magnitude M_w:	8.10	Ic cut-off value:	2.60	Trans. detect. applied:	No	MSF method:	Method based
Peak ground acceleration:	1.07	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		

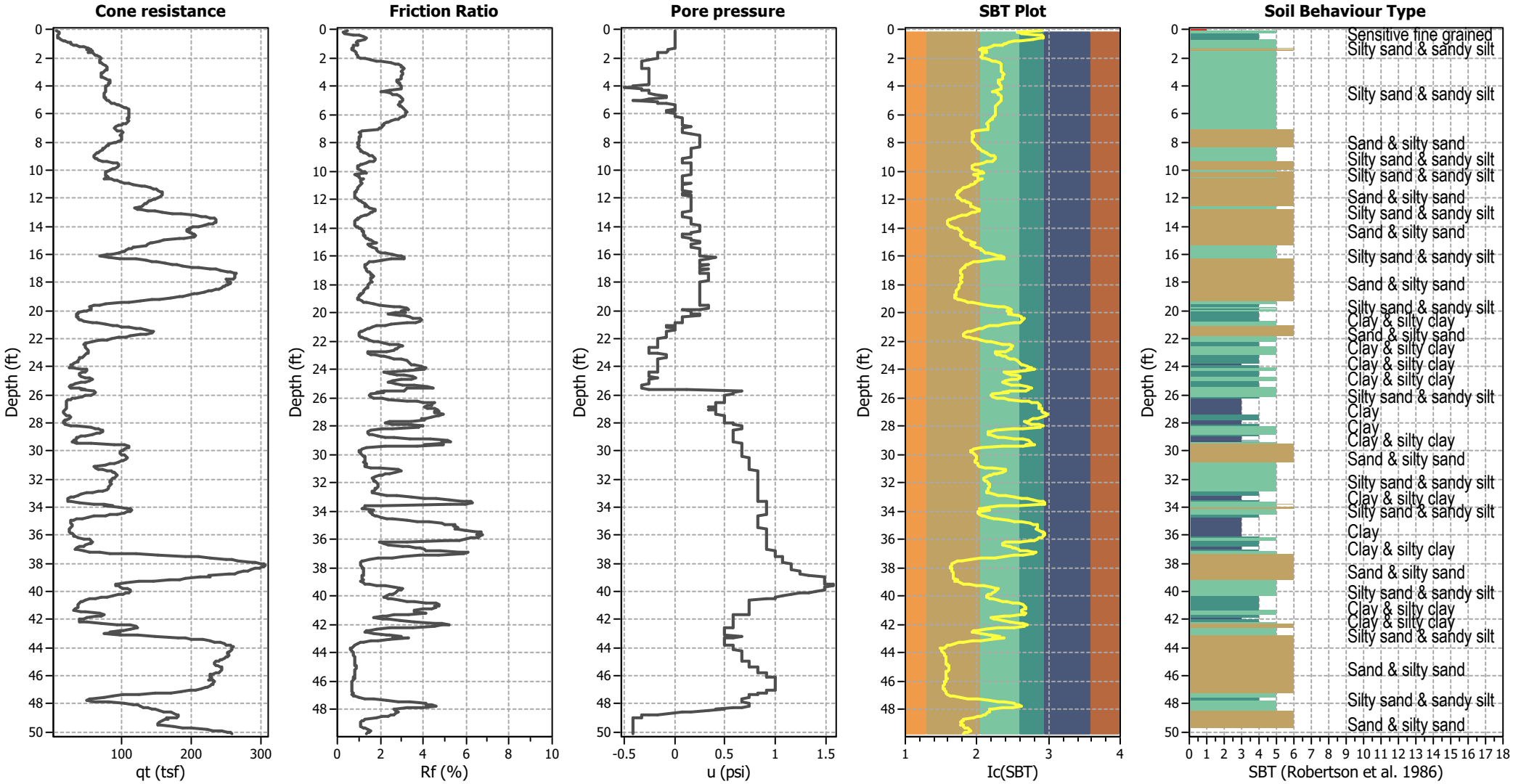






Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

CPT basic interpretation plots



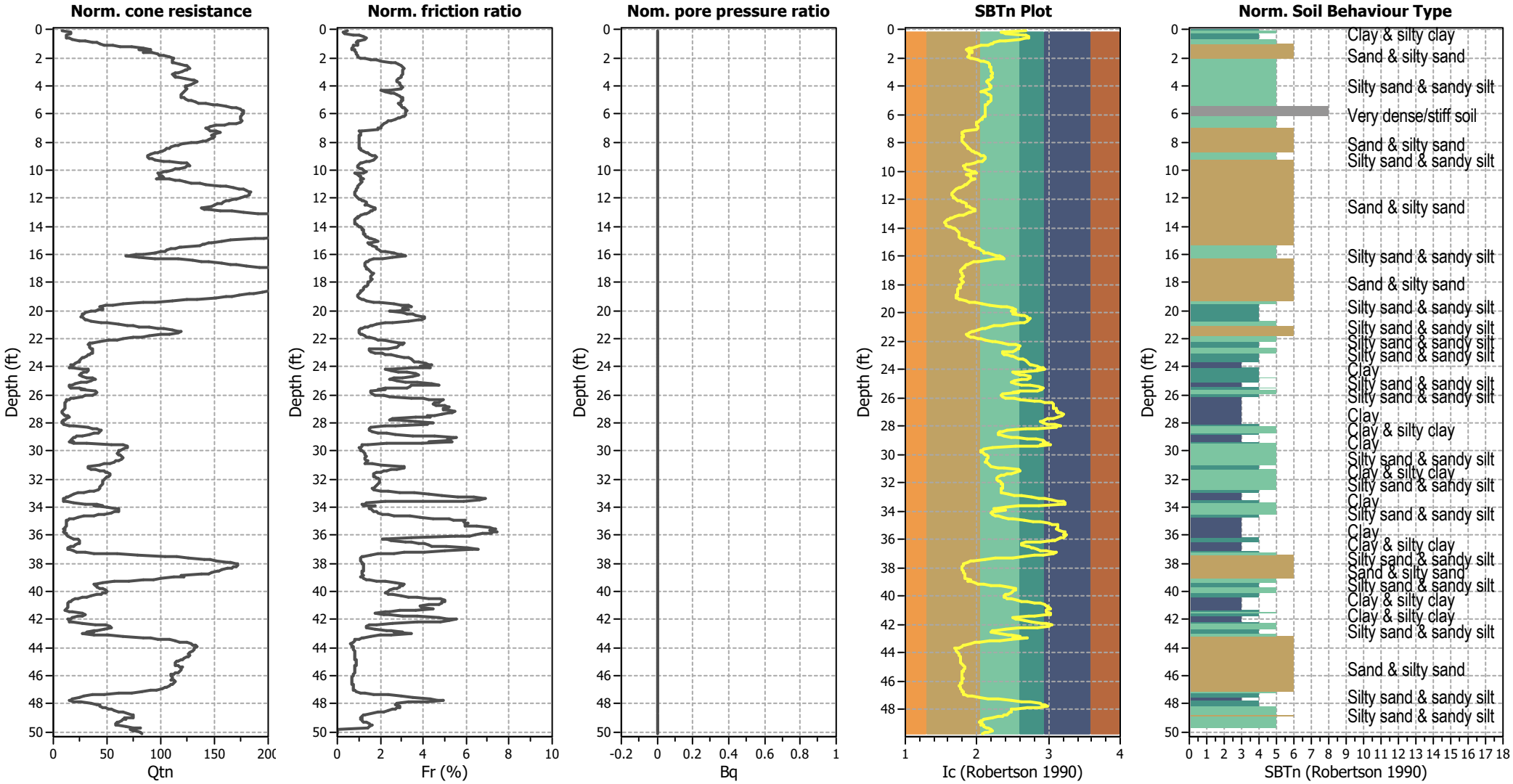
Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CPT basic interpretation plots (normalized)



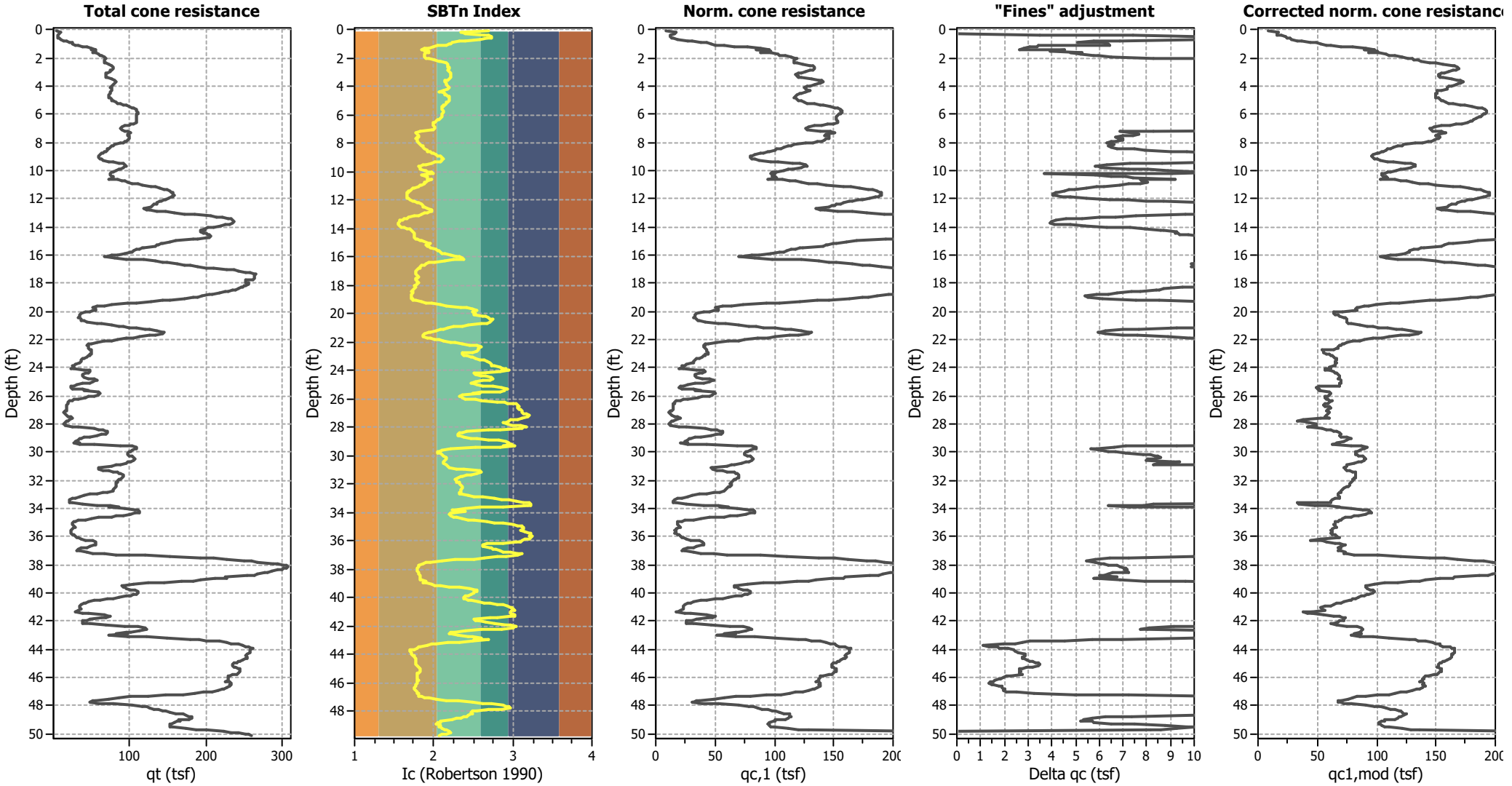
Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

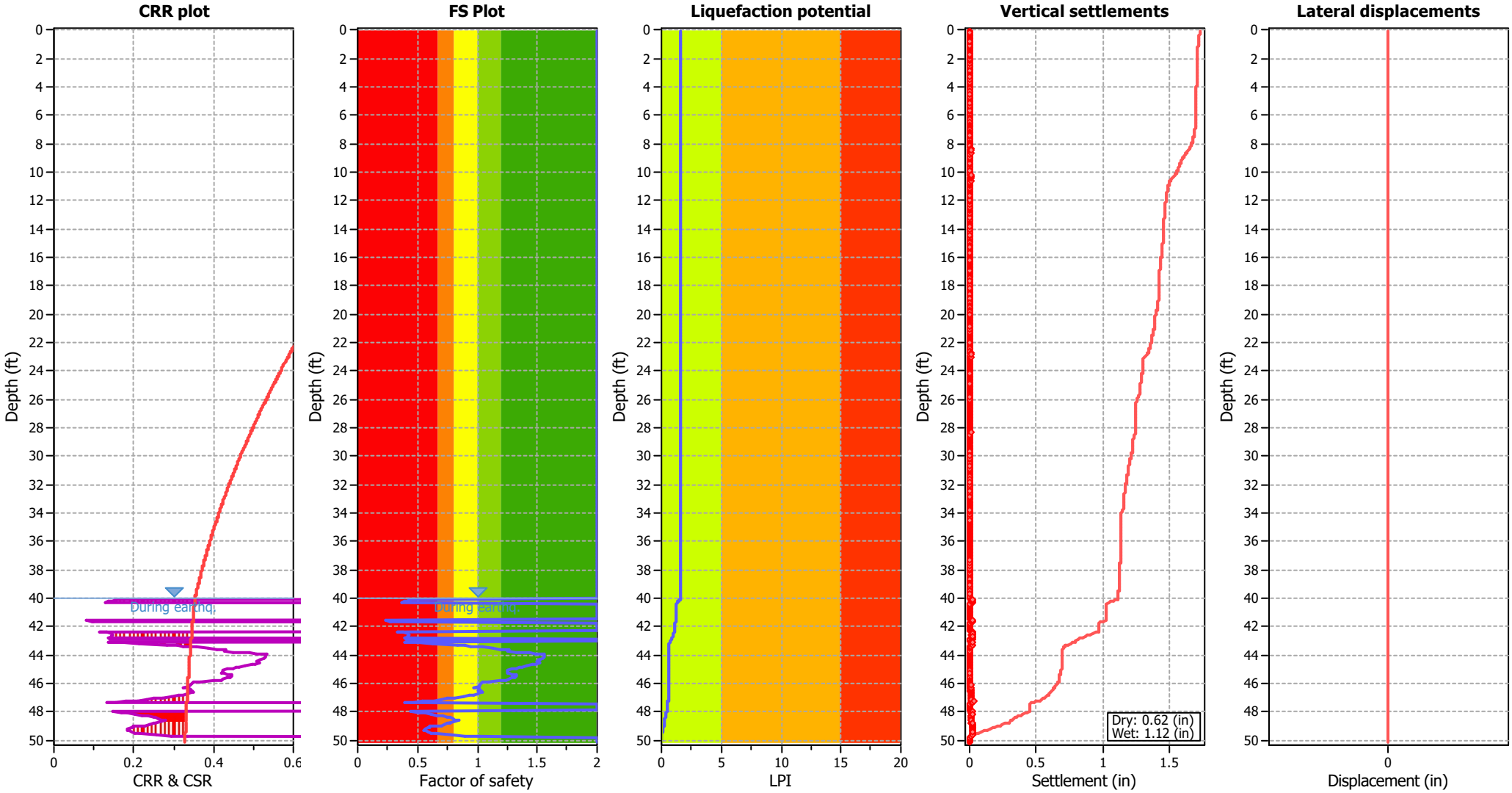
Liquefaction analysis overall plots (intermediate results)



Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

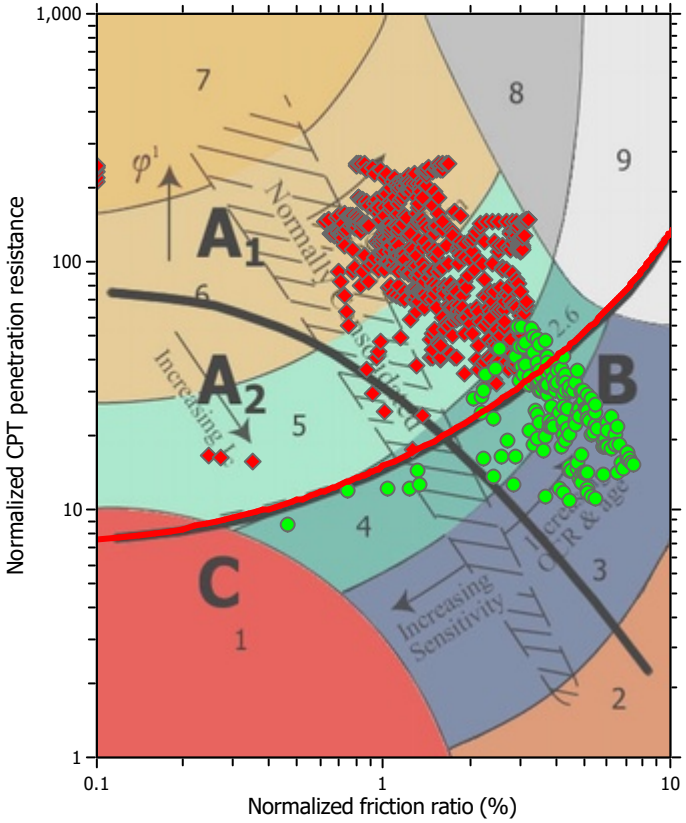
F.S. color scheme

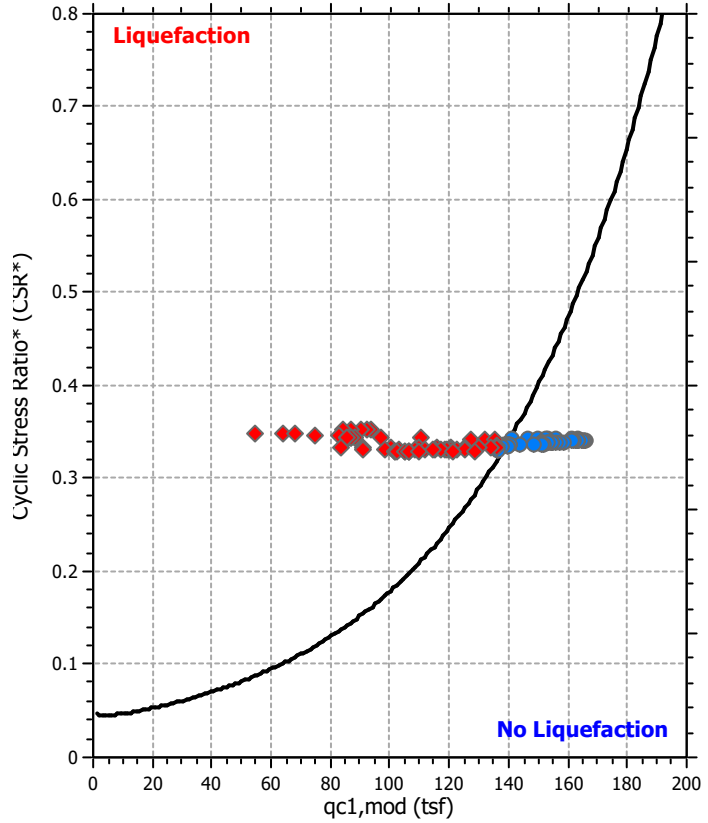
- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

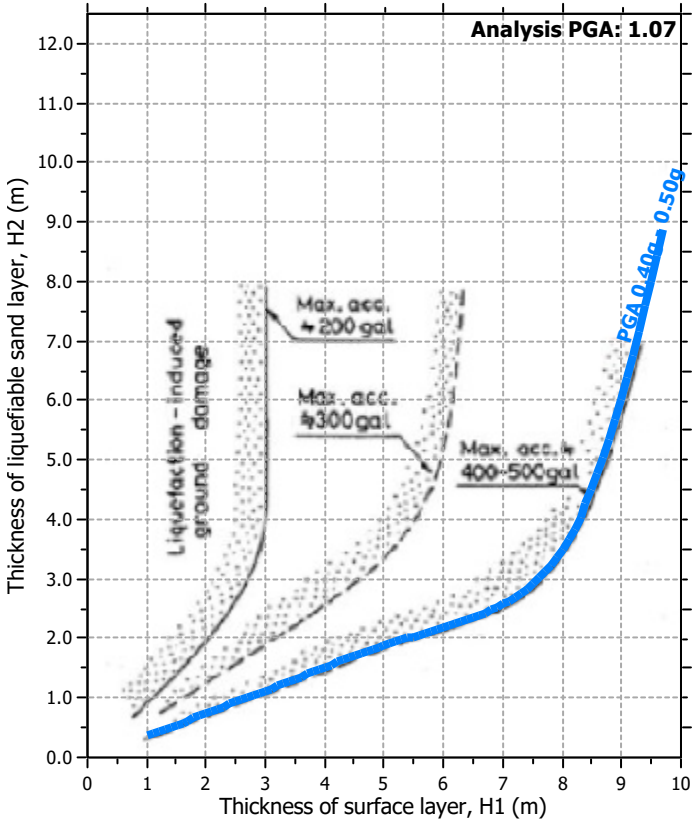
LPI color scheme

- Very high risk
- High risk
- Low risk

Liquefaction analysis summary plots



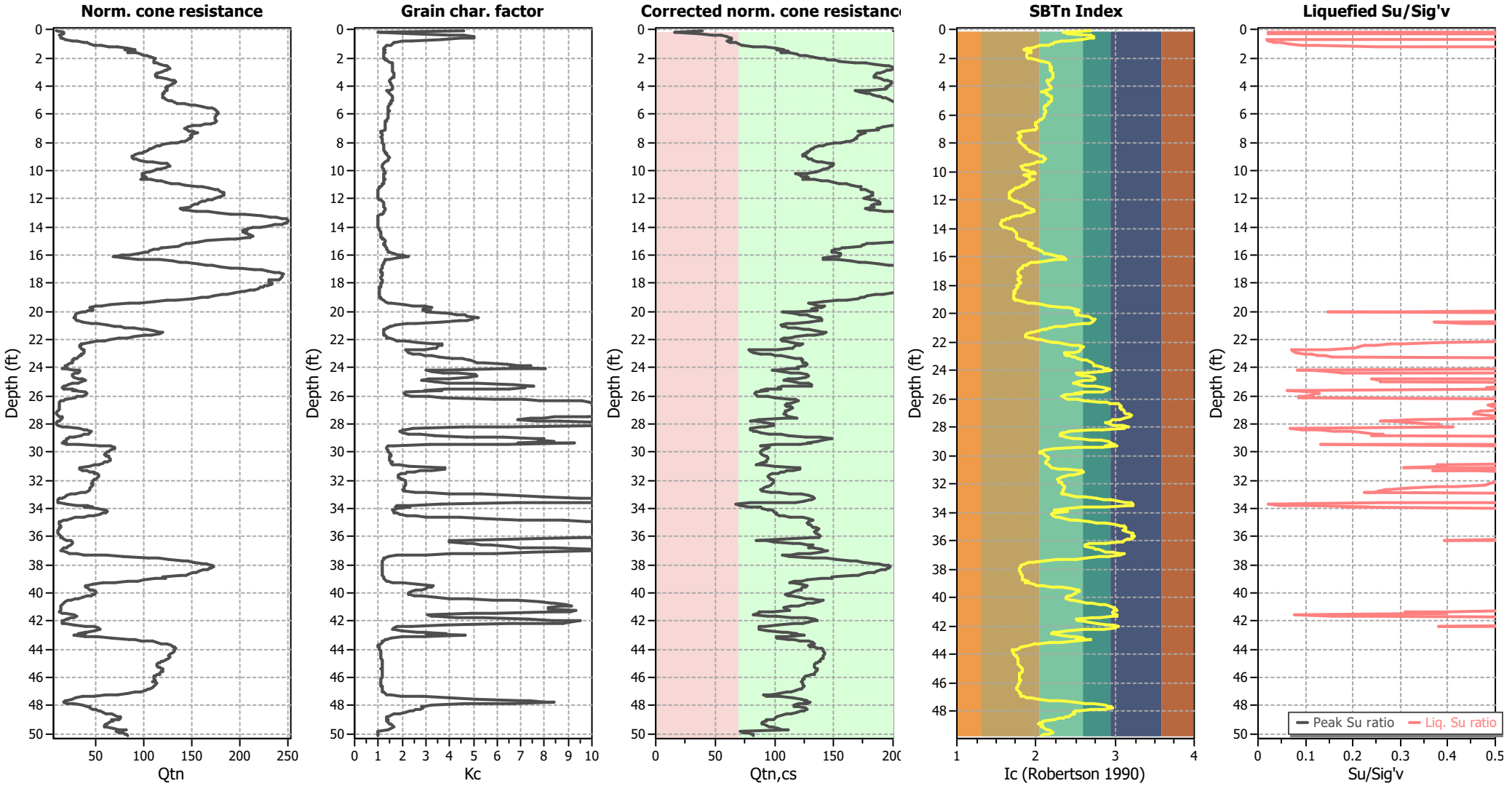




Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

Check for strength loss plots (Robertson (2010))



Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

:: Field input data ::

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
1	0.07	5.36	0.03	0.00	39.77	87.40
2	0.14	10.19	0.03	0.00	5.00	88.97
3	0.21	10.10	0.03	0.00	5.00	89.62
4	0.27	9.74	0.03	0.00	26.47	91.12
5	0.35	7.42	0.06	0.00	37.04	94.04
6	0.41	7.50	0.08	0.00	40.00	96.51
7	0.48	7.50	0.09	0.00	41.94	97.79
8	0.54	7.77	0.10	0.00	42.12	98.71
9	0.60	8.93	0.12	0.00	39.20	99.99
10	0.66	10.81	0.14	0.00	34.96	101.44
11	0.74	15.55	0.16	0.00	26.66	103.35
12	0.79	18.40	0.17	0.00	23.44	104.37
13	0.86	22.69	0.20	0.00	20.17	106.03
14	0.94	25.46	0.24	0.00	19.35	107.74
15	0.99	27.16	0.26	0.00	18.70	108.50
16	1.05	29.84	0.29	0.00	17.66	109.49
17	1.13	34.13	0.26	0.00	14.31	108.90
18	1.20	39.13	0.29	0.00	12.90	110.21
19	1.25	45.39	0.33	0.00	11.31	111.44
20	1.33	51.82	0.37	0.00	9.98	112.53
21	1.40	56.47	0.39	-0.07	9.16	113.22
22	1.46	50.03	0.42	-0.07	11.31	113.41
23	1.51	56.78	0.45	-0.07	9.85	114.20
24	1.57	52.00	0.46	-0.08	11.37	114.23
25	1.64	57.09	0.48	-0.17	10.31	114.84
26	1.73	60.49	0.53	-0.17	10.05	115.65
27	1.79	61.65	0.57	-0.17	10.19	116.18
28	1.85	64.24	0.60	-0.17	9.96	116.69
29	1.91	67.28	0.66	-0.17	9.88	117.46
30	1.99	69.60	0.77	-0.17	10.44	118.68
31	2.04	69.96	0.89	-0.17	11.42	119.76
32	2.10	68.89	1.06	-0.25	13.10	121.05
33	2.18	68.84	1.26	-0.25	14.59	122.30
34	2.24	68.84	1.40	-0.33	15.53	123.03
35	2.33	68.80	1.72	-0.33	17.63	124.57
36	2.39	70.32	1.91	-0.33	18.30	125.38
37	2.44	72.91	2.06	-0.33	18.38	126.01
38	2.53	76.66	2.26	-0.33	18.43	126.83
39	2.58	77.64	2.33	-0.33	18.47	127.06
40	2.64	78.45	2.40	-0.33	18.63	127.33
41	2.72	78.80	2.45	-0.33	18.78	127.49
42	2.76	78.62	2.44	-0.25	18.76	127.45
43	2.85	77.73	2.35	-0.25	18.55	127.13
44	2.90	76.48	2.30	-0.25	18.64	126.94
45	2.97	74.69	2.24	-0.25	18.86	126.70

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
46	3.03	72.10	2.19	-0.25	19.30	126.43
47	3.09	70.49	2.13	-0.25	19.46	126.17
48	3.18	69.42	2.09	-0.25	19.60	126.02
49	3.22	70.49	2.08	-0.25	19.19	126.00
50	3.32	69.78	2.08	-0.25	19.41	125.98
51	3.36	70.49	2.09	-0.25	19.27	126.05
52	3.42	72.28	2.13	-0.25	18.96	126.25
53	3.51	76.93	2.18	-0.25	17.97	126.57
54	3.57	80.59	2.22	-0.25	17.23	126.81
55	3.62	82.02	2.25	-0.25	17.06	126.97
56	3.70	83.27	2.32	-0.25	17.07	127.21
57	3.76	82.11	2.35	-0.25	17.50	127.28
58	3.81	81.48	2.36	-0.25	17.67	127.27
59	3.88	80.23	2.34	-0.25	17.89	127.18
60	3.95	77.91	2.32	-0.41	18.39	127.05
61	4.01	77.02	2.30	-0.41	18.54	126.96
62	4.09	76.39	2.29	-0.41	18.65	126.91
63	4.14	77.06	2.29	-0.50	18.47	126.93
64	4.21	77.37	2.28	-0.33	18.37	126.92
65	4.30	77.11	1.86	-0.33	16.26	125.41
66	4.35	76.57	1.56	-0.25	14.69	124.11
67	4.40	75.85	1.70	-0.25	15.70	124.73
68	4.50	75.41	1.90	-0.25	16.92	125.53
69	4.54	75.05	1.95	-0.25	17.27	125.69
70	4.61	74.34	2.04	-0.19	17.93	125.99
71	4.69	74.38	2.15	-0.08	18.52	126.40
72	4.73	74.38	2.18	-0.08	18.64	126.48
73	4.80	74.43	2.23	-0.08	18.89	126.65
74	4.86	75.59	2.29	-0.08	18.86	126.87
75	4.93	76.75	2.34	-0.25	18.82	127.09
76	5.00	78.18	2.37	-0.33	18.59	127.22
77	5.05	80.05	2.38	-0.41	18.17	127.32
78	5.14	82.47	2.42	-0.17	17.74	127.50
79	5.19	84.43	2.46	-0.17	17.44	127.66
80	5.26	88.54	2.53	-0.08	16.84	127.99
81	5.34	93.01	2.68	0.00	16.53	128.55
82	5.39	95.78	2.81	0.00	16.47	128.96
83	5.45	100.34	2.97	0.00	16.19	129.48
84	5.52	104.18	3.16	0.00	16.17	130.03
85	5.59	106.50	3.30	0.00	16.22	130.40
86	5.68	109.18	3.45	0.00	16.23	130.78
87	5.71	109.72	3.48	-0.08	16.24	130.86
88	5.78	110.16	3.54	0.00	16.34	130.98
89	5.84	110.88	3.54	-0.08	16.23	131.01
90	5.93	110.70	3.51	0.00	16.16	130.93

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
91	5.99	109.99	3.48	0.00	16.18	130.85
92	6.04	109.63	3.45	0.00	16.16	130.79
93	6.13	109.18	3.38	0.00	16.00	130.62
94	6.17	109.18	3.32	0.00	15.82	130.50
95	6.27	109.09	3.14	0.08	15.26	130.09
96	6.30	109.00	3.08	0.08	15.07	129.95
97	6.37	109.00	2.92	0.08	14.52	129.55
98	6.46	109.45	2.75	0.08	13.85	129.12
99	6.52	109.63	2.61	0.08	13.32	128.74
100	6.57	108.91	2.50	0.08	13.02	128.40
101	6.66	106.05	2.32	0.08	12.78	127.80
102	6.71	102.39	2.22	0.08	12.96	127.39
103	6.77	99.44	2.10	0.08	12.94	126.91
104	6.83	94.62	1.97	0.08	13.20	126.33
105	6.92	91.04	1.84	0.17	13.25	125.75
106	6.97	89.52	1.78	0.08	13.21	125.45
107	7.04	89.08	1.70	0.08	12.91	125.12
108	7.09	90.51	1.68	0.08	12.53	125.06
109	7.16	93.90	1.05	0.08	8.58	121.70
110	7.22	99.00	1.00	0.08	7.73	121.51
111	7.31	101.94	1.07	0.08	7.80	122.06
112	7.35	102.66	1.08	0.08	7.79	122.15
113	7.46	98.73	1.06	0.17	8.19	121.92
114	7.52	98.10	1.04	0.25	8.15	121.72
115	7.56	100.07	1.02	0.25	7.86	121.68
116	7.63	100.69	1.01	0.25	7.73	121.58
117	7.68	100.43	1.01	0.25	7.81	121.61
118	7.76	99.71	1.02	0.25	7.97	121.65
119	7.82	98.73	1.01	0.25	8.08	121.58
120	7.90	97.39	0.98	0.25	8.06	121.26
121	7.95	95.33	0.94	0.25	8.15	120.97
122	8.02	92.29	0.90	0.25	8.29	120.54
123	8.08	88.45	0.86	0.25	8.61	120.14
124	8.16	81.66	0.82	0.25	9.31	119.52
125	8.20	80.23	0.80	0.25	9.40	119.29
126	8.27	77.91	0.76	0.25	9.57	118.92
127	8.35	75.68	0.75	0.25	9.87	118.70
128	8.41	74.25	0.75	0.17	10.18	118.68
129	8.49	72.46	0.77	0.17	10.72	118.81
130	8.54	71.66	0.79	0.17	11.02	118.93
131	8.61	69.24	0.82	0.17	11.81	119.13
132	8.66	68.44	0.84	0.17	12.23	119.33
133	8.73	66.74	0.88	0.17	12.93	119.56
134	8.80	64.87	0.90	0.17	13.60	119.68
135	8.87	62.01	0.92	0.17	14.50	119.69

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
136	8.94	60.22	0.97	0.17	15.49	120.03
137	8.99	59.77	1.03	0.17	16.14	120.44
138	9.07	59.95	1.07	0.17	16.52	120.77
139	9.12	61.47	1.08	0.08	16.16	120.87
140	9.20	63.70	1.11	0.08	15.83	121.17
141	9.26	66.38	1.12	0.08	15.24	121.34
142	9.35	73.44	1.08	0.08	13.31	121.29
143	9.40	78.45	1.06	0.08	12.21	121.34
144	9.48	87.29	1.01	0.08	10.37	121.25
145	9.53	92.38	0.98	0.17	9.40	121.13
146	9.59	95.24	0.93	0.17	8.77	120.89
147	9.65	96.05	0.91	0.17	8.50	120.68
148	9.71	94.97	0.90	0.17	8.66	120.64
149	9.78	93.46	0.90	0.17	8.87	120.57
150	9.87	88.90	0.94	0.17	9.80	120.73
151	9.93	86.31	0.96	0.17	10.38	120.84
152	9.99	83.45	0.98	0.17	11.06	120.95
153	10.07	79.25	1.02	0.17	12.11	121.09
154	10.13	77.19	1.06	0.17	12.80	121.27
155	10.17	76.03	0.91	0.17	11.96	120.13
156	10.24	76.03	0.60	0.17	9.34	117.04
157	10.32	76.03	0.72	0.17	10.49	118.43
158	10.37	76.57	0.76	0.08	10.79	118.88
159	10.45	79.25	0.83	0.08	10.86	119.56
160	10.50	79.96	0.85	0.08	10.96	119.81
161	10.58	74.60	0.90	0.08	12.36	119.99
162	10.63	84.97	0.93	0.08	10.69	120.56
163	10.71	90.15	0.99	0.08	10.31	121.17
164	10.77	94.17	1.04	0.08	10.04	121.63
165	10.83	98.55	1.10	0.08	9.82	122.17
166	10.90	103.91	1.14	0.08	9.34	122.53
167	10.97	110.88	1.17	0.17	8.68	122.89
168	11.03	116.42	1.19	0.08	8.22	123.17
169	11.12	128.57	1.25	0.08	7.31	123.76
170	11.16	134.02	1.28	0.08	6.95	124.01
171	11.23	140.90	1.30	0.08	6.48	124.24
172	11.31	146.62	1.30	0.08	6.06	124.34
173	11.37	150.19	1.30	0.08	5.82	124.40
174	11.42	152.96	1.30	0.08	5.63	124.44
175	11.50	156.09	1.29	0.17	5.42	124.46
176	11.55	157.52	1.29	0.17	5.34	124.48
177	11.66	158.05	1.29	0.08	5.31	124.46
178	11.71	158.23	1.28	0.17	5.30	124.45
179	11.77	157.61	1.30	0.08	5.41	124.53
180	11.82	156.53	1.32	0.17	5.57	124.62

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
181	11.88	155.28	1.35	0.17	5.80	124.78
182	11.96	151.98	1.40	0.17	6.26	125.00
183	12.05	148.14	1.48	0.17	6.88	125.34
184	12.10	145.01	1.53	0.17	7.35	125.53
185	12.16	142.24	1.59	0.17	7.84	125.77
186	12.21	139.92	1.65	0.17	8.27	125.97
187	12.30	136.70	1.80	0.17	9.18	126.55
188	12.35	135.63	1.84	0.17	9.47	126.71
189	12.41	132.68	1.74	0.17	9.42	126.26
190	12.48	131.43	1.70	0.17	9.39	126.05
191	12.53	130.36	1.81	0.17	9.96	126.48
192	12.61	128.84	1.96	0.17	10.74	127.04
193	12.68	119.28	2.08	0.17	12.40	127.28
194	12.75	122.94	2.13	0.17	12.15	127.53
195	12.80	126.60	2.15	0.17	11.79	127.67
196	12.88	136.79	2.19	0.17	10.81	128.01
197	12.94	147.87	2.28	0.17	10.01	128.48
198	13.00	158.68	2.35	0.08	9.27	128.88
199	13.07	172.17	2.36	0.08	8.25	129.11
200	13.14	186.47	2.33	0.08	7.20	129.22
201	13.24	205.94	2.24	0.08	5.84	129.17
202	13.29	214.25	2.19	0.08	5.28	129.08
203	13.33	220.95	2.14	0.08	4.86	129.01
204	13.39	228.37	2.09	0.17	4.40	128.90
205	13.46	233.82	2.02	0.17	4.01	128.70
206	13.52	235.78	1.95	0.17	3.77	128.47
207	13.59	236.32	1.92	0.17	3.68	128.36
208	13.68	235.52	1.90	0.17	3.69	128.28
209	13.72	234.35	1.89	0.17	3.72	128.23
210	13.78	231.76	1.91	0.17	3.89	128.29
211	13.88	225.42	1.97	0.17	4.33	128.46
212	13.93	219.17	2.03	0.25	4.76	128.59
213	13.99	210.05	2.10	0.25	5.40	128.73
214	14.07	202.99	2.18	0.25	6.02	128.94
215	14.12	198.35	2.22	0.25	6.40	129.02
216	14.19	193.52	2.28	0.25	6.85	129.14
217	14.26	197.99	2.34	0.25	6.78	129.40
218	14.31	193.70	2.38	0.25	7.16	129.48
219	14.40	197.63	2.42	0.17	7.05	129.65
220	14.45	199.96	2.47	0.17	7.03	129.80
221	14.50	202.19	2.51	0.17	7.01	129.95
222	14.57	203.98	2.59	0.08	7.12	130.20
223	14.64	206.57	2.71	0.08	7.28	130.56
224	14.72	204.42	2.80	0.08	7.66	130.78
225	14.76	201.83	2.82	0.08	7.87	130.80

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
226	14.86	190.13	2.84	0.17	8.72	130.70
227	14.90	183.07	2.85	0.17	9.27	130.64
228	15.01	160.64	2.85	0.17	11.19	130.31
229	15.05	153.50	2.85	0.25	11.92	130.22
230	15.14	144.12	2.18	0.25	10.74	128.09
231	15.16	141.88	1.97	0.25	10.23	127.32
232	15.26	138.22	2.03	0.17	10.87	127.47
233	15.30	137.15	2.08	0.17	11.19	127.63
234	15.37	135.09	2.15	0.17	11.70	127.83
235	15.44	118.29	2.16	0.17	13.97	127.56
236	15.51	116.51	2.11	0.17	14.04	127.35
237	15.56	113.74	2.06	0.25	14.24	127.09
238	15.62	109.81	2.01	0.25	14.66	126.82
239	15.70	106.23	2.03	0.25	15.40	126.83
240	15.76	104.71	2.09	0.25	15.95	127.00
241	15.82	101.23	2.23	0.25	17.25	127.39
242	15.88	94.71	2.44	0.25	19.57	127.89
243	15.96	84.88	2.40	0.25	21.80	127.51
244	16.01	78.36	2.32	0.25	23.27	127.08
245	16.09	70.94	2.21	0.25	25.10	126.47
246	16.15	68.53	2.12	0.25	25.47	126.09
247	16.23	81.30	2.04	0.41	21.08	126.23
248	16.29	96.67	1.99	0.33	17.26	126.47
249	16.35	119.99	1.99	0.33	13.32	126.97
250	16.42	134.56	2.01	0.25	11.56	127.32
251	16.50	143.58	2.00	0.25	10.57	127.47
252	16.55	150.37	2.00	0.25	9.88	127.56
253	16.64	163.15	2.11	0.25	9.16	128.18
254	16.70	172.71	2.26	0.25	8.85	128.79
255	16.75	179.14	2.34	0.33	8.62	129.15
256	16.80	188.70	2.44	0.25	8.23	129.58
257	16.89	201.74	2.72	0.25	8.10	130.52
258	16.93	211.04	2.84	0.25	7.83	130.96
259	17.00	227.39	3.09	0.25	7.48	131.76
260	17.07	236.59	3.33	0.33	7.50	132.40
261	17.14	242.84	3.58	0.25	7.70	133.00
262	17.21	252.22	3.85	0.25	7.74	133.62
263	17.27	256.96	4.06	0.25	7.89	134.05
264	17.34	263.21	4.24	0.25	7.92	134.43
265	17.39	264.46	4.40	0.33	8.15	134.72
266	17.48	263.03	4.31	0.33	8.08	134.55
267	17.53	262.99	4.10	0.33	7.73	134.19
268	17.62	262.99	4.06	0.33	7.68	134.12
269	17.68	262.95	4.11	0.33	7.78	134.20
270	17.73	261.34	4.09	0.33	7.83	134.15

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
271	17.80	251.24	4.04	0.33	8.26	133.96
272	17.86	251.64	3.94	0.33	8.08	133.79
273	17.92	252.05	3.81	0.25	7.83	133.55
274	18.00	256.69	3.68	0.25	7.37	133.34
275	18.05	256.16	3.62	0.25	7.28	133.21
276	18.15	252.05	3.55	0.25	7.37	133.03
277	18.20	250.08	3.46	0.25	7.31	132.83
278	18.25	248.38	3.37	0.25	7.22	132.62
279	18.32	245.52	3.13	0.25	6.88	132.05
280	18.39	243.38	2.95	0.25	6.62	131.60
281	18.46	239.00	2.87	0.25	6.66	131.33
282	18.51	235.43	2.79	0.25	6.68	131.11
283	18.60	228.90	2.59	0.25	6.56	130.49
284	18.64	225.51	2.49	0.25	6.50	130.16
285	18.71	218.36	2.30	0.25	6.42	129.51
286	18.77	208.89	2.14	0.25	6.51	128.86
287	18.84	204.87	2.02	0.25	6.41	128.39
288	18.93	195.94	1.85	0.25	6.44	127.64
289	18.98	188.52	1.79	0.25	6.74	127.33
290	19.03	182.98	1.75	0.25	6.97	127.07
291	19.09	171.81	1.73	0.25	7.71	126.82
292	19.19	153.59	1.73	0.25	9.26	126.55
293	19.23	143.58	1.73	0.25	10.26	126.38
294	19.29	127.76	1.74	0.25	12.17	126.15
295	19.37	110.52	1.83	0.25	15.17	126.17
296	19.42	98.82	1.94	0.25	17.92	126.32
297	19.53	77.37	2.02	0.25	23.89	126.02
298	19.59	67.46	1.98	0.25	27.14	125.53
299	19.63	59.42	1.93	0.33	30.30	125.04
300	19.73	52.89	1.77	0.33	32.53	124.12
301	19.75	55.04	1.74	0.33	31.16	124.10
302	19.85	56.47	1.67	0.33	29.92	123.86
303	19.90	56.29	1.69	0.25	30.21	123.94
304	19.97	52.62	1.68	0.08	32.17	123.75
305	20.03	48.34	1.31	0.17	31.28	121.72
306	20.08	44.14	1.04	0.17	30.96	119.82
307	20.17	37.61	1.09	0.17	36.56	119.77
308	20.22	36.45	1.15	0.17	38.30	120.03
309	20.28	35.38	1.20	0.25	40.11	120.33
310	20.35	35.69	1.26	0.25	40.61	120.70
311	20.41	34.22	1.32	0.08	42.87	120.93
312	20.48	36.01	1.40	0.08	42.07	121.48
313	20.54	36.81	1.45	0.08	41.87	121.77
314	20.61	38.51	1.47	0.08	40.62	122.00
315	20.68	40.65	1.48	0.08	38.90	122.17

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
316	20.74	45.75	1.48	0.08	35.08	122.44
317	20.83	57.63	1.43	0.08	27.98	122.79
318	20.87	64.06	1.41	0.00	25.03	122.93
319	20.94	77.11	1.38	0.00	20.45	123.25
320	21.02	86.40	1.39	0.00	18.07	123.55
321	21.08	93.55	1.40	-0.08	16.57	123.82
322	21.14	99.98	1.41	0.00	15.34	124.02
323	21.19	110.34	1.41	-0.08	13.55	124.25
324	21.28	121.15	1.39	0.00	11.88	124.38
325	21.33	126.25	1.38	0.00	11.14	124.41
326	21.41	136.07	1.40	0.00	10.13	124.72
327	21.47	143.40	1.44	-0.08	9.57	125.07
328	21.53	146.62	1.47	-0.08	9.39	125.27
329	21.61	144.03	1.48	-0.08	9.71	125.26
330	21.68	134.47	1.47	-0.08	10.70	125.02
331	21.73	125.98	1.44	-0.08	11.63	124.74
332	21.80	112.93	1.41	-0.08	13.36	124.33
333	21.85	105.25	1.40	-0.08	14.58	124.11
334	21.93	95.69	1.41	-0.08	16.46	123.90
335	22.02	84.25	1.44	-0.17	19.34	123.74
336	22.05	77.82	1.45	-0.17	21.24	123.62
337	22.12	68.08	1.46	-0.17	24.58	123.34
338	22.19	58.43	1.44	-0.17	28.46	122.85
339	22.27	50.03	1.43	-0.17	32.91	122.41
340	22.32	46.64	1.41	-0.17	35.00	122.17
341	22.39	45.92	1.37	-0.17	35.05	121.88
342	22.46	46.73	1.31	-0.17	34.01	121.65
343	22.52	46.46	1.29	-0.17	34.00	121.52
344	22.59	47.00	1.28	-0.17	33.51	121.45
345	22.66	47.98	1.25	-0.25	32.64	121.35
346	22.71	48.78	1.11	-0.25	30.61	120.51
347	22.77	50.21	0.72	-0.25	24.78	117.38
348	22.86	50.75	0.74	-0.25	24.84	117.60
349	22.91	50.84	0.78	-0.25	25.44	118.04
350	22.98	50.75	0.88	-0.25	26.89	118.94
351	23.05	48.87	0.99	-0.17	29.39	119.72
352	23.10	48.25	1.06	-0.08	30.54	120.13
353	23.18	46.82	1.13	-0.08	32.30	120.52
354	23.25	45.12	1.20	-0.08	34.34	120.88
355	23.30	42.17	1.26	-0.08	37.30	121.09
356	23.37	39.76	1.28	-0.08	39.60	121.06
357	23.43	38.51	1.28	-0.17	40.75	120.98
358	23.49	38.15	1.27	-0.17	41.02	120.90
359	23.59	36.99	1.26	-0.17	42.04	120.75
360	23.63	36.54	1.26	-0.17	42.56	120.74

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
361	23.70	35.29	1.27	-0.17	44.01	120.70
362	23.79	30.47	1.20	-0.17	48.77	119.92
363	23.83	28.50	1.15	-0.17	50.78	119.48
364	23.89	26.36	1.09	-0.17	53.05	118.90
365	23.95	28.28	1.02	-0.17	49.20	118.60
366	24.02	23.68	0.96	-0.17	55.43	117.72
367	24.08	28.05	0.94	-0.17	48.20	117.93
368	24.16	40.74	0.97	-0.17	35.35	119.11
369	24.22	48.43	1.04	-0.17	30.86	119.99
370	24.28	48.96	1.18	-0.17	32.33	121.00
371	24.35	46.55	1.29	-0.17	35.13	121.50
372	24.42	42.80	1.34	-0.25	38.55	121.58
373	24.48	39.13	1.38	-0.25	42.26	121.59
374	24.57	39.13	1.42	-0.25	42.75	121.78
375	24.62	39.13	1.41	-0.25	42.74	121.75
376	24.68	41.19	1.41	-0.25	40.82	121.83
377	24.74	47.00	1.39	-0.17	36.21	122.09
378	24.81	54.23	1.38	-0.17	31.63	122.38
379	24.88	58.07	1.36	-0.25	29.49	122.45
380	24.94	57.36	1.38	-0.25	30.01	122.49
381	25.02	53.16	1.45	-0.25	33.00	122.66
382	25.07	48.16	1.47	-0.25	36.39	122.52
383	25.14	40.03	1.44	-0.25	42.58	121.93
384	25.22	32.25	1.35	-0.25	49.83	120.93
385	25.27	28.86	1.28	-0.33	53.48	120.30
386	25.36	25.28	0.82	-0.33	51.28	116.71
387	25.40	24.12	0.76	-0.33	51.92	116.01
388	25.47	27.16	0.84	-0.33	48.83	117.01
389	25.57	39.22	0.84	-0.33	35.63	117.97
390	25.61	46.28	0.85	-0.25	30.64	118.46
391	25.66	40.83	0.88	0.12	34.89	118.35
392	25.73	59.59	0.92	0.66	24.56	119.63
393	25.79	61.74	0.93	0.58	23.80	119.80
394	25.88	61.11	0.92	0.58	24.02	119.72
395	25.93	59.50	0.92	0.58	24.70	119.63
396	25.98	55.57	0.93	0.49	26.67	119.55
397	26.07	47.80	0.99	0.49	31.77	119.61
398	26.13	43.96	1.03	0.49	34.97	119.70
399	26.20	32.88	1.07	0.49	46.04	119.29
400	26.27	28.50	1.07	0.49	51.60	118.91
401	26.33	26.36	1.05	0.49	54.57	118.60
402	26.38	22.16	1.01	0.49	61.52	117.89
403	26.47	20.91	0.92	0.49	62.62	117.11
404	26.52	19.92	0.87	0.49	63.79	116.55
405	26.58	19.66	0.82	0.41	63.36	116.08

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
406	26.66	19.57	0.80	0.41	63.17	115.88
407	26.71	19.48	0.82	0.41	63.84	116.03
408	26.80	19.39	0.88	0.41	65.67	116.59
409	26.87	19.21	0.90	0.41	66.58	116.71
410	26.91	19.12	0.90	0.33	66.91	116.72
411	27.00	19.03	0.86	0.41	66.16	116.31
412	27.06	17.96	0.81	0.33	67.99	115.77
413	27.10	16.89	0.78	0.41	70.52	115.39
414	27.17	15.64	0.77	0.41	74.20	115.04
415	27.26	15.99	0.76	0.41	72.93	115.03
416	27.30	16.44	0.77	0.41	71.68	115.15
417	27.39	18.58	0.82	0.41	66.84	115.92
418	27.44	20.73	0.86	0.49	62.60	116.56
419	27.51	24.57	0.96	0.49	56.96	117.75
420	27.60	27.16	1.10	0.49	55.17	118.99
421	27.64	26.71	0.92	0.49	52.88	117.67
422	27.70	23.23	0.56	0.49	50.63	113.68
423	27.80	19.66	0.44	0.49	53.90	111.51
424	27.84	18.49	0.48	0.49	57.97	112.00
425	27.89	16.62	0.55	0.49	65.29	112.72
426	27.95	15.72	0.63	0.49	70.66	113.56
427	28.03	17.06	0.66	0.58	67.47	114.10
428	28.09	17.51	0.66	0.58	66.31	114.19
429	28.16	26.45	0.68	0.66	48.75	115.39
430	28.22	34.04	0.71	0.66	40.05	116.41
431	28.32	54.86	0.84	0.66	26.96	118.72
432	28.37	60.93	0.88	0.66	24.76	119.39
433	28.43	66.47	0.94	0.66	23.23	120.07
434	28.48	69.60	1.00	0.58	22.70	120.61
435	28.55	71.92	1.06	0.58	22.59	121.15
436	28.61	72.10	1.15	0.58	23.38	121.72
437	28.68	69.24	1.29	0.58	25.81	122.49
438	28.77	64.42	1.46	0.58	29.36	123.19
439	28.81	57.99	1.52	0.58	33.12	123.22
440	28.88	48.25	1.63	0.58	40.52	123.32
441	28.95	41.37	1.78	0.58	47.81	123.58
442	29.01	36.90	1.89	0.58	53.40	123.73
443	29.07	35.11	1.85	0.58	55.12	123.46
444	29.14	34.31	1.67	0.58	54.26	122.66
445	29.21	30.91	1.53	0.58	57.08	121.75
446	29.30	34.98	1.42	0.58	50.67	121.50
447	29.36	27.43	1.36	0.58	60.25	120.61
448	29.41	35.65	1.32	0.66	48.80	121.02
449	29.47	55.57	1.25	0.66	32.18	121.71
450	29.54	88.99	1.21	0.66	19.21	122.60

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
451	29.60	104.62	1.22	0.66	15.84	123.04
452	29.68	110.61	1.23	0.66	14.87	123.27
453	29.76	110.07	1.15	0.66	14.43	122.77
454	29.80	108.29	1.11	0.66	14.44	122.44
455	29.87	104.09	1.11	0.66	15.22	122.35
456	29.95	101.50	1.11	0.66	15.75	122.29
457	30.00	99.44	1.12	0.66	16.25	122.30
458	30.05	98.46	1.14	0.66	16.70	122.46
459	30.14	97.57	1.20	0.66	17.37	122.80
460	30.19	97.92	1.24	0.66	17.56	123.01
461	30.25	100.34	1.28	0.66	17.40	123.34
462	30.32	103.73	1.34	0.66	17.12	123.74
463	30.38	105.16	1.37	0.66	17.04	123.92
464	30.45	107.22	1.37	0.74	16.67	123.99
465	30.53	107.22	1.34	0.74	16.51	123.83
466	30.59	106.32	1.33	0.74	16.59	123.72
467	30.68	102.39	1.39	0.74	17.85	123.97
468	30.74	99.17	1.37	0.74	18.43	123.79
469	30.79	95.60	1.24	0.74	18.29	122.96
470	30.85	88.90	1.14	0.74	19.11	122.15
471	30.92	83.36	1.31	0.74	22.09	123.02
472	30.98	77.55	1.53	0.74	25.76	123.98
473	31.06	60.84	1.74	0.74	34.86	124.35
474	31.12	60.93	1.82	0.74	35.53	124.68
475	31.18	61.02	1.83	0.74	35.54	124.70
476	31.27	66.29	1.78	0.74	32.54	124.73
477	31.32	73.26	1.77	0.74	29.44	124.93
478	31.37	78.53	1.77	0.82	27.46	125.11
479	31.45	85.41	1.78	0.82	25.25	125.36
480	31.51	87.02	1.72	0.82	24.33	125.13
481	31.56	89.52	1.59	0.82	22.72	124.63
482	31.64	92.20	1.52	0.82	21.50	124.36
483	31.71	92.56	1.52	0.82	21.43	124.37
484	31.81	91.49	1.52	0.82	21.81	124.37
485	31.84	90.33	1.54	0.82	22.28	124.44
486	31.90	88.27	1.58	0.82	23.13	124.54
487	31.96	86.93	1.60	0.82	23.70	124.60
488	32.05	85.15	1.61	0.82	24.32	124.58
489	32.10	84.61	1.60	0.82	24.49	124.55
490	32.15	83.63	1.60	0.82	24.77	124.49
491	32.24	83.45	1.59	0.82	24.78	124.43
492	32.28	83.81	1.58	0.82	24.63	124.41
493	32.35	84.07	1.56	0.82	24.44	124.33
494	32.44	83.36	1.49	0.82	24.16	123.97
495	32.50	82.38	1.44	0.82	24.11	123.70

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
496	32.55	81.04	1.36	0.82	23.95	123.26
497	32.63	80.05	1.30	0.82	23.79	122.90
498	32.70	80.05	1.29	0.82	23.69	122.82
499	32.74	78.53	1.30	0.82	24.27	122.81
500	32.85	72.64	1.44	0.82	27.77	123.41
501	32.90	66.38	1.53	0.82	31.26	123.63
502	32.94	57.90	1.61	0.82	36.51	123.67
503	33.01	48.60	1.68	0.82	43.60	123.54
504	33.09	41.28	1.68	0.82	49.73	123.13
505	33.14	36.27	1.66	0.82	54.88	122.76
506	33.23	30.82	1.61	0.82	61.38	122.10
507	33.29	26.09	1.52	0.82	68.23	121.29
508	33.34	23.05	1.44	0.82	73.39	120.57
509	33.42	22.25	1.40	0.82	74.73	120.29
510	33.48	21.53	1.28	0.82	74.68	119.59
511	33.54	21.53	1.14	0.82	72.19	118.71
512	33.63	26.09	0.54	0.91	50.36	113.74
513	33.68	38.87	0.51	0.91	34.72	114.23
514	33.78	58.88	0.74	0.91	26.38	118.04
515	33.83	75.50	0.85	0.91	21.21	119.59
516	33.88	86.75	1.05	0.91	19.98	121.50
517	33.94	73.89	1.26	0.91	26.08	122.44
518	33.99	94.62	1.41	0.91	20.90	123.86
519	34.08	107.13	1.59	0.91	19.29	125.07
520	34.14	111.50	1.71	0.91	19.12	125.70
521	34.19	113.29	1.80	0.91	19.30	126.11
522	34.26	112.93	1.86	0.91	19.75	126.35
523	34.34	107.93	1.90	0.91	21.08	126.39
524	34.38	103.02	1.90	0.91	22.25	126.27
525	34.48	92.65	1.90	0.91	25.06	126.01
526	34.54	83.90	1.93	0.91	28.05	125.87
527	34.59	77.02	1.96	0.82	30.90	125.80
528	34.67	60.84	1.97	0.82	38.88	125.25
529	34.73	51.73	1.92	0.82	44.50	124.67
530	34.78	42.98	1.83	0.82	50.75	123.87
531	34.85	34.40	1.68	0.82	58.52	122.69
532	34.92	30.65	1.54	0.82	62.16	121.79
533	34.98	27.25	1.49	0.82	67.06	121.24
534	35.04	27.16	1.47	0.82	67.04	121.15
535	35.12	27.16	1.49	0.82	67.39	121.25
536	35.18	27.07	1.52	0.82	68.00	121.38
537	35.26	28.50	1.56	0.82	66.09	121.70
538	35.32	29.13	1.61	0.82	65.65	121.96
539	35.38	27.52	1.64	0.82	68.96	121.99
540	35.46	25.64	1.67	0.82	72.98	121.94

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
541	35.52	24.75	1.65	0.91	74.60	121.76
542	35.58	23.94	1.60	0.91	75.73	121.45
543	35.65	24.61	1.59	0.91	74.26	121.49
544	35.73	23.68	1.60	0.91	76.46	121.43
545	35.78	24.48	1.61	0.91	74.95	121.58
546	35.86	25.91	1.70	0.91	73.09	122.07
547	35.90	27.88	1.73	0.91	69.85	122.41
548	35.97	29.84	1.78	0.91	67.12	122.78
549	36.04	31.36	1.78	0.91	64.82	122.91
550	36.12	33.24	1.70	0.91	61.25	122.71
551	36.17	36.90	1.20	0.91	50.64	120.42
552	36.23	44.14	0.87	0.91	39.09	118.51
553	36.32	53.07	1.16	0.91	36.61	121.04
554	36.36	56.02	1.33	0.91	36.75	122.18
555	36.46	56.15	1.71	0.91	40.63	124.02
556	36.51	56.91	1.88	0.91	41.75	124.76
557	36.56	56.29	2.05	0.91	43.51	125.34
558	36.63	54.50	2.11	0.91	45.24	125.50
559	36.70	48.25	1.96	0.91	48.58	124.65
560	36.76	44.32	1.84	0.91	50.87	123.98
561	36.82	38.24	1.83	0.91	56.86	123.56
562	36.91	33.86	1.92	0.91	63.30	123.62
563	36.95	32.34	1.97	0.91	66.09	123.72
564	37.02	35.29	2.08	0.91	63.13	124.33
565	37.10	44.40	2.09	0.99	53.27	124.93
566	37.16	53.16	2.06	0.99	46.06	125.27
567	37.22	68.53	2.08	0.99	36.96	125.94
568	37.28	83.27	2.14	0.99	30.98	126.64
569	37.36	120.97	2.26	0.99	21.25	127.94
570	37.41	152.96	2.30	0.99	16.08	128.63
571	37.49	192.63	2.37	0.99	11.92	129.43
572	37.55	211.12	2.43	1.07	10.55	129.83
573	37.60	226.94	2.48	1.07	9.53	130.14
574	37.69	249.81	2.63	1.07	8.52	130.82
575	37.74	259.46	2.73	1.07	8.22	131.17
576	37.80	268.13	2.92	1.07	8.23	131.75
577	37.89	287.25	3.21	1.07	7.91	132.60
578	37.94	293.05	3.31	1.07	7.86	132.88
579	38.00	300.92	3.46	1.16	7.82	133.28
580	38.08	305.47	3.63	1.16	7.96	133.66
581	38.15	307.08	3.69	1.16	8.02	133.80
582	38.20	305.12	3.72	1.16	8.17	133.83
583	38.28	301.99	3.71	1.16	8.31	133.79
584	38.33	299.13	3.68	1.16	8.40	133.71
585	38.40	293.23	3.58	1.16	8.50	133.46

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
586	38.47	285.55	3.52	1.16	8.78	133.27
587	38.52	281.08	3.48	1.24	8.94	133.15
588	38.59	276.53	3.23	1.24	8.64	132.57
589	38.68	268.04	3.09	1.24	8.79	132.17
590	38.73	263.39	2.99	1.24	8.83	131.89
591	38.80	254.37	2.85	1.24	8.99	131.43
592	38.85	224.62	2.68	1.32	10.54	130.69
593	38.93	226.85	2.47	1.49	9.77	130.13
594	38.99	212.11	2.35	1.49	10.47	129.58
595	39.07	192.45	2.32	1.49	12.07	129.25
596	39.12	182.89	2.40	1.49	13.33	129.38
597	39.18	168.06	2.51	1.49	15.43	129.50
598	39.24	145.81	2.64	1.49	19.08	129.52
599	39.31	124.82	2.77	1.49	23.52	129.49
600	39.38	106.14	2.82	1.49	28.39	129.24
601	39.44	93.37	2.82	1.49	32.35	128.91
602	39.53	90.95	2.76	1.57	32.94	128.70
603	39.57	91.94	2.72	1.57	32.40	128.62
604	39.63	94.97	2.69	1.57	31.24	128.63
605	39.73	96.85	2.71	1.49	30.76	128.73
606	39.78	101.85	2.76	1.49	29.47	128.97
607	39.84	107.30	2.76	1.49	27.96	129.11
608	39.91	111.86	2.69	1.49	26.38	129.01
609	39.96	112.13	2.58	1.40	25.83	128.73
610	40.07	109.45	2.39	1.32	25.55	128.10
611	40.12	106.59	2.39	1.24	26.29	128.03
612	40.18	102.30	2.39	1.16	27.53	127.94
613	40.25	95.87	2.39	1.16	29.50	127.77
614	40.32	86.13	2.50	1.07	33.63	127.84
615	40.37	79.25	2.55	0.99	36.81	127.77
616	40.45	70.85	2.55	0.99	40.97	127.51
617	40.51	61.38	2.53	0.99	45.94	127.09
618	40.56	54.05	2.48	0.91	50.52	126.66
619	40.64	46.46	2.21	0.74	54.58	125.42
620	40.70	42.89	2.02	0.74	56.38	124.59
621	40.76	40.74	1.86	0.74	57.06	123.84
622	40.82	37.88	1.73	0.74	58.98	123.15
623	40.90	35.83	1.58	0.74	59.79	122.34
624	40.95	35.92	1.43	0.74	57.85	121.60
625	41.05	35.92	1.30	0.74	56.24	120.91
626	41.08	36.01	1.29	0.74	56.02	120.86
627	41.15	36.72	1.34	0.74	55.94	121.21
628	41.24	33.50	1.38	0.74	60.62	121.21
629	41.30	30.20	1.01	0.74	59.66	118.65
630	41.35	29.48	0.78	0.74	56.45	116.71

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
631	41.44	40.38	0.92	0.74	46.29	118.67
632	41.48	47.71	1.00	0.74	41.45	119.67
633	41.55	67.90	1.15	0.74	31.06	121.57
634	41.63	73.80	1.53	0.74	32.25	123.88
635	41.67	75.41	1.76	0.58	33.54	124.96
636	41.74	70.23	2.04	0.58	38.35	125.87
637	41.80	63.26	2.27	0.58	43.76	126.39
638	41.90	49.77	2.24	0.58	52.70	125.69
639	41.93	44.85	2.18	0.58	56.61	125.26
640	42.01	39.22	2.03	0.58	61.24	124.42
641	42.06	39.58	1.91	0.58	59.68	123.99
642	42.14	39.58	1.78	0.58	58.37	123.46
643	42.21	49.23	1.74	0.58	48.99	123.82
644	42.28	70.67	1.73	0.58	35.79	124.66
645	42.35	94.08	1.69	0.58	26.32	125.18
646	42.41	112.04	1.63	0.58	21.22	125.36
647	42.48	120.17	1.62	0.58	19.43	125.47
648	42.54	123.21	1.62	0.58	18.85	125.53
649	42.59	122.14	1.64	0.49	19.19	125.59
650	42.67	112.67	1.92	0.49	23.00	126.57
651	42.75	101.50	2.30	0.49	28.27	127.63
652	42.78	97.21	2.39	0.49	30.13	127.80
653	42.85	83.00	2.45	0.49	35.82	127.61
654	42.93	97.65	2.50	0.49	30.72	128.15
655	42.98	74.07	2.47	0.49	40.11	127.37
656	43.08	98.10	2.38	0.49	29.95	127.81
657	43.13	122.49	2.34	0.49	23.26	128.20
658	43.18	148.67	2.30	0.66	18.26	128.55
659	43.28	180.75	2.21	0.58	13.76	128.77
660	43.33	191.92	2.11	0.49	12.23	128.57
661	43.39	201.21	1.96	0.49	10.81	128.15
662	43.44	217.74	1.79	0.49	8.83	127.65
663	43.52	227.03	1.79	0.49	8.22	127.76
664	43.58	233.46	1.77	0.49	7.75	127.76
665	43.64	242.04	1.71	0.49	7.02	127.59
666	43.73	248.02	1.53	0.49	6.07	126.85
667	43.78	251.42	1.61	0.49	6.17	127.24
668	43.87	256.51	1.74	0.58	6.36	127.85
669	43.90	258.75	1.79	0.58	6.40	128.07
670	43.97	260.80	1.89	0.58	6.62	128.48
671	44.05	258.61	1.95	0.58	6.94	128.69
672	44.12	258.48	1.96	0.58	7.00	128.75
673	44.17	258.39	1.96	0.58	7.00	128.73
674	44.23	257.05	1.99	0.66	7.19	128.84
675	44.31	253.12	2.03	0.66	7.55	128.94

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
676	44.36	254.01	2.03	0.66	7.50	128.95
677	44.45	252.76	2.03	0.66	7.58	128.93
678	44.52	254.19	2.02	0.66	7.50	128.94
679	44.55	254.55	2.02	0.66	7.48	128.93
680	44.62	253.12	2.00	0.66	7.52	128.86
681	44.70	251.51	2.00	0.66	7.61	128.83
682	44.78	247.49	2.00	0.66	7.86	128.79
683	44.84	244.54	2.01	0.66	8.07	128.78
684	44.91	242.13	2.03	0.66	8.30	128.83
685	44.97	239.80	2.04	0.66	8.50	128.86
686	45.02	236.86	2.04	0.74	8.70	128.83
687	45.10	234.27	2.04	0.74	8.88	128.80
688	45.15	234.35	2.03	0.74	8.84	128.75
689	45.24	236.05	1.97	0.74	8.54	128.56
690	45.30	238.55	1.94	0.74	8.27	128.46
691	45.36	241.77	1.91	0.74	7.99	128.39
692	45.42	245.08	1.91	0.82	7.79	128.41
693	45.51	245.25	1.92	0.82	7.83	128.46
694	45.55	244.18	1.93	0.82	7.92	128.47
695	45.63	243.56	1.90	0.82	7.87	128.36
696	45.70	241.68	1.88	0.82	7.93	128.26
697	45.75	240.25	1.87	0.82	8.02	128.24
698	45.81	235.78	1.87	0.91	8.28	128.16
699	45.89	231.67	1.71	0.91	8.00	127.49
700	45.94	228.37	1.64	0.91	7.94	127.14
701	46.00	228.46	1.62	0.91	7.87	127.05
702	46.09	228.46	1.59	0.91	7.77	126.91
703	46.14	228.55	1.58	0.99	7.71	126.85
704	46.20	230.16	1.54	0.99	7.46	126.67
705	46.27	225.96	1.50	0.99	7.59	126.45
706	46.33	230.96	1.49	0.99	7.26	126.48
707	46.40	233.28	1.50	0.99	7.15	126.53
708	46.48	231.67	1.52	0.99	7.33	126.59
709	46.52	232.57	1.54	0.99	7.39	126.74
710	46.59	231.76	1.60	0.99	7.67	126.99
711	46.66	230.51	1.62	0.99	7.84	127.08
712	46.73	227.47	1.60	0.99	7.97	126.95
713	46.80	224.26	1.59	0.99	8.14	126.85
714	46.85	220.95	1.58	0.99	8.35	126.78
715	46.92	215.41	1.52	0.99	8.51	126.45
716	46.99	207.55	1.49	0.99	8.98	126.22
717	47.06	197.37	1.52	0.91	9.94	126.23
718	47.12	186.20	1.57	0.91	11.19	126.32
719	47.21	169.94	1.75	0.91	13.83	126.90
720	47.26	148.22	1.88	0.82	17.44	127.10

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
721	47.32	125.17	2.08	0.82	22.70	127.40
722	47.38	102.30	2.34	0.74	30.18	127.77
723	47.44	86.67	2.48	0.74	36.74	127.79
724	47.51	74.16	2.51	0.74	42.28	127.50
725	47.60	56.56	2.31	0.66	51.12	126.25
726	47.66	53.34	2.19	0.66	52.56	125.70
727	47.71	49.59	2.18	0.66	55.49	125.48
728	47.77	48.60	2.25	0.66	56.97	125.67
729	47.86	60.31	2.41	0.66	49.39	126.70
730	47.91	79.79	2.56	0.66	40.27	127.83
731	47.98	104.62	2.85	0.74	32.58	129.27
732	48.04	117.13	3.05	0.74	29.94	130.05
733	48.10	122.31	3.27	0.74	29.62	130.67
734	48.19	125.89	3.61	0.74	30.17	131.45
735	48.25	131.70	3.73	0.66	29.27	131.80
736	48.30	137.95	3.77	0.58	28.05	132.01
737	48.37	144.29	3.80	0.41	26.82	132.16
738	48.43	147.87	3.74	0.49	25.89	132.10
739	48.49	153.50	3.61	0.33	24.36	131.93
740	48.56	160.91	3.37	0.17	22.23	131.54
741	48.64	170.47	3.12	0.08	19.88	131.13
742	48.74	178.87	2.29	-0.17	15.56	128.99
743	48.77	180.75	2.25	-0.25	15.15	128.87
744	48.83	181.73	2.12	-0.33	14.52	128.46
745	48.89	181.02	2.00	-0.33	14.10	128.03
746	48.96	178.87	1.91	-0.33	13.94	127.66
747	49.03	165.11	1.81	-0.41	15.14	127.07
748	49.09	166.90	1.76	-0.41	14.68	126.90
749	49.16	162.79	1.81	-0.41	15.46	127.03
750	49.22	158.32	1.76	-0.41	15.85	126.77
751	49.29	155.02	1.85	-0.41	16.80	127.09
752	49.35	153.67	1.99	-0.41	17.73	127.59
753	49.43	153.05	2.20	-0.41	18.85	128.30
754	49.49	152.96	2.35	-0.41	19.61	128.79
755	49.55	156.89	2.47	-0.41	19.55	129.21
756	49.64	175.03	2.61	-0.41	17.55	129.88
757	49.68	188.16	2.67	-0.41	16.18	130.24
758	49.74	201.21	2.75	-0.41	15.05	130.62
759	49.84	222.83	0.00	-0.41	N/A	87.36
760	49.89	232.39	0.00	-0.41	N/A	87.36
761	49.94	243.29	0.00	-0.41	N/A	87.36
762	50.03	252.85	0.00	-0.41	N/A	87.36
763	50.08	256.69	0.00	-0.41	N/A	87.36
764	50.14	259.10	0.00	-0.41	N/A	87.36

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)

Abbreviations

Depth:	Depth from free surface, at which CPT was performed (ft)
q_c:	Measured cone resistance (tsf)
f_s:	Sleeve friction resistance (tsf)
u:	Pore pressure (tsf)
Fines content:	Percentage of fines in soil (%)
Unit weight:	Bulk soil unit weight (pcf)

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data ::

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
1	0.07	0.00	0.00	0.00	1.00	0.695	0.90	0.776	1.00	1.30	2.000	No
2	0.14	0.01	0.00	0.01	1.00	0.694	0.90	0.775	1.00	1.30	2.000	No
3	0.21	0.01	0.00	0.01	1.00	0.694	0.90	0.774	1.00	1.30	2.000	No
4	0.27	0.01	0.00	0.01	1.00	0.693	0.90	0.774	1.00	1.30	2.000	No
5	0.35	0.02	0.00	0.02	1.00	0.692	0.90	0.773	1.00	1.30	2.000	No
6	0.41	0.02	0.00	0.02	0.99	0.692	0.90	0.772	1.00	1.30	2.000	No
7	0.48	0.02	0.00	0.02	0.99	0.691	0.90	0.772	1.00	1.30	2.000	No
8	0.54	0.03	0.00	0.03	0.99	0.691	0.90	0.771	1.00	1.30	2.000	No
9	0.60	0.03	0.00	0.03	0.99	0.690	0.90	0.770	1.00	1.30	2.000	No
10	0.66	0.03	0.00	0.03	0.99	0.690	0.90	0.770	1.00	1.30	2.000	No
11	0.74	0.04	0.00	0.04	0.99	0.689	0.90	0.769	1.00	1.30	2.000	No
12	0.79	0.04	0.00	0.04	0.99	0.688	0.90	0.768	1.00	1.30	2.000	No
13	0.86	0.04	0.00	0.04	0.99	0.688	0.90	0.768	1.00	1.30	2.000	No
14	0.94	0.05	0.00	0.05	0.99	0.687	0.90	0.767	1.00	1.30	2.000	No
15	0.99	0.05	0.00	0.05	0.99	0.687	0.90	0.767	1.00	1.30	2.000	No
16	1.05	0.05	0.00	0.05	0.99	0.686	0.90	0.766	1.00	1.30	2.000	No
17	1.13	0.06	0.00	0.06	0.99	0.685	0.90	0.765	1.00	1.30	2.000	No
18	1.20	0.06	0.00	0.06	0.98	0.685	0.90	0.764	1.00	1.30	2.000	No
19	1.25	0.06	0.00	0.06	0.98	0.684	0.90	0.764	1.00	1.30	2.000	No
20	1.33	0.07	0.00	0.07	0.98	0.684	0.90	0.763	1.00	1.30	2.000	No
21	1.40	0.07	0.00	0.07	0.98	0.683	0.90	0.762	1.00	1.30	2.000	No
22	1.46	0.07	0.00	0.07	0.98	0.682	0.90	0.762	1.00	1.30	2.000	No
23	1.51	0.08	0.00	0.08	0.98	0.682	0.90	0.761	1.00	1.30	2.000	No
24	1.57	0.08	0.00	0.08	0.98	0.681	0.90	0.760	1.00	1.30	2.000	No
25	1.64	0.09	0.00	0.09	0.98	0.681	0.90	0.760	1.00	1.30	2.000	No
26	1.73	0.09	0.00	0.09	0.98	0.680	0.90	0.759	1.00	1.30	2.000	No
27	1.79	0.09	0.00	0.09	0.98	0.679	0.90	0.758	1.00	1.30	2.000	No
28	1.85	0.10	0.00	0.10	0.98	0.679	0.90	0.758	1.00	1.30	2.000	No
29	1.91	0.10	0.00	0.10	0.97	0.678	0.90	0.757	1.00	1.30	2.000	No
30	1.99	0.11	0.00	0.11	0.97	0.677	0.90	0.756	1.00	1.30	2.000	No
31	2.04	0.11	0.00	0.11	0.97	0.677	0.90	0.755	1.00	1.30	2.000	No
32	2.10	0.11	0.00	0.11	0.97	0.676	0.90	0.755	1.00	1.30	2.000	No
33	2.18	0.12	0.00	0.12	0.97	0.675	0.90	0.754	1.00	1.30	2.000	No
34	2.24	0.12	0.00	0.12	0.97	0.675	0.90	0.753	1.00	1.30	2.000	No
35	2.33	0.13	0.00	0.13	0.97	0.674	0.90	0.752	1.00	1.30	2.000	No
36	2.39	0.13	0.00	0.13	0.97	0.673	0.90	0.752	1.00	1.30	2.000	No
37	2.44	0.13	0.00	0.13	0.97	0.673	0.90	0.751	1.00	1.30	2.000	No
38	2.53	0.14	0.00	0.14	0.97	0.672	0.90	0.750	1.00	1.30	2.000	No
39	2.58	0.14	0.00	0.14	0.97	0.672	0.90	0.750	1.00	1.30	2.000	No
40	2.64	0.15	0.00	0.15	0.96	0.671	0.90	0.749	1.00	1.30	2.000	No
41	2.72	0.15	0.00	0.15	0.96	0.670	0.90	0.748	1.00	1.30	2.000	No
42	2.76	0.15	0.00	0.15	0.96	0.670	0.90	0.748	1.00	1.30	2.000	No
43	2.85	0.16	0.00	0.16	0.96	0.669	0.90	0.747	1.00	1.30	2.000	No
44	2.90	0.16	0.00	0.16	0.96	0.668	0.90	0.746	1.00	1.30	2.000	No
45	2.97	0.17	0.00	0.17	0.96	0.668	0.90	0.745	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
46	3.03	0.17	0.00	0.17	0.96	0.667	0.90	0.745	1.00	1.30	2.000	No
47	3.09	0.17	0.00	0.17	0.96	0.666	0.90	0.744	1.00	1.30	2.000	No
48	3.18	0.18	0.00	0.18	0.96	0.666	0.90	0.743	1.00	1.30	2.000	No
49	3.22	0.18	0.00	0.18	0.96	0.665	0.90	0.742	1.00	1.30	2.000	No
50	3.32	0.19	0.00	0.19	0.95	0.664	0.90	0.741	1.00	1.30	2.000	No
51	3.36	0.19	0.00	0.19	0.95	0.664	0.90	0.741	1.00	1.30	2.000	No
52	3.42	0.20	0.00	0.20	0.95	0.663	0.90	0.740	1.00	1.30	2.000	No
53	3.51	0.20	0.00	0.20	0.95	0.662	0.90	0.739	1.00	1.30	2.000	No
54	3.57	0.20	0.00	0.20	0.95	0.661	0.90	0.738	1.00	1.30	2.000	No
55	3.62	0.21	0.00	0.21	0.95	0.661	0.90	0.738	1.00	1.30	2.000	No
56	3.70	0.21	0.00	0.21	0.95	0.660	0.90	0.737	1.00	1.30	2.000	No
57	3.76	0.22	0.00	0.22	0.95	0.660	0.90	0.736	1.00	1.30	2.000	No
58	3.81	0.22	0.00	0.22	0.95	0.659	0.90	0.736	1.00	1.30	2.000	No
59	3.88	0.22	0.00	0.22	0.95	0.658	0.90	0.735	1.00	1.30	2.000	No
60	3.95	0.23	0.00	0.23	0.95	0.657	0.90	0.734	1.00	1.30	2.000	No
61	4.01	0.23	0.00	0.23	0.94	0.657	0.90	0.733	1.00	1.30	2.000	No
62	4.09	0.24	0.00	0.24	0.94	0.656	0.90	0.732	1.00	1.30	2.000	No
63	4.14	0.24	0.00	0.24	0.94	0.655	0.90	0.732	1.00	1.30	2.000	No
64	4.21	0.25	0.00	0.25	0.94	0.655	0.90	0.731	1.00	1.30	2.000	No
65	4.30	0.25	0.00	0.25	0.94	0.654	0.90	0.730	1.00	1.30	2.000	No
66	4.35	0.25	0.00	0.25	0.94	0.653	0.90	0.729	1.00	1.30	2.000	No
67	4.40	0.26	0.00	0.26	0.94	0.653	0.90	0.729	1.00	1.30	2.000	No
68	4.50	0.26	0.00	0.26	0.94	0.652	0.90	0.727	1.00	1.30	2.000	No
69	4.54	0.27	0.00	0.27	0.94	0.651	0.90	0.727	1.00	1.30	2.000	No
70	4.61	0.27	0.00	0.27	0.94	0.650	0.90	0.726	1.00	1.30	2.000	No
71	4.69	0.28	0.00	0.28	0.93	0.650	0.90	0.725	1.00	1.30	2.000	No
72	4.73	0.28	0.00	0.28	0.93	0.649	0.90	0.725	1.00	1.30	2.000	No
73	4.80	0.28	0.00	0.28	0.93	0.648	0.90	0.724	1.00	1.30	2.000	No
74	4.86	0.29	0.00	0.29	0.93	0.648	0.90	0.723	1.00	1.30	2.000	No
75	4.93	0.29	0.00	0.29	0.93	0.647	0.90	0.722	1.00	1.30	2.000	No
76	5.00	0.30	0.00	0.30	0.93	0.646	0.90	0.721	1.00	1.30	2.000	No
77	5.05	0.30	0.00	0.30	0.93	0.646	0.90	0.721	1.00	1.30	2.000	No
78	5.14	0.30	0.00	0.30	0.93	0.645	0.90	0.719	1.00	1.30	2.000	No
79	5.19	0.31	0.00	0.31	0.93	0.644	0.90	0.719	1.00	1.30	2.000	No
80	5.26	0.31	0.00	0.31	0.92	0.643	0.90	0.718	1.00	1.30	2.000	No
81	5.34	0.32	0.00	0.32	0.92	0.642	0.90	0.717	1.00	1.30	2.000	No
82	5.39	0.32	0.00	0.32	0.92	0.642	0.90	0.716	1.00	1.30	2.000	No
83	5.45	0.32	0.00	0.32	0.92	0.641	0.90	0.716	1.00	1.30	2.000	No
84	5.52	0.33	0.00	0.33	0.92	0.640	0.90	0.715	1.00	1.30	2.000	No
85	5.59	0.33	0.00	0.33	0.92	0.640	0.90	0.714	1.00	1.30	2.000	No
86	5.68	0.34	0.00	0.34	0.92	0.639	0.90	0.713	1.00	1.30	2.000	No
87	5.71	0.34	0.00	0.34	0.92	0.638	0.90	0.712	1.00	1.30	2.000	No
88	5.78	0.35	0.00	0.35	0.92	0.637	0.90	0.711	1.00	1.30	2.000	No
89	5.84	0.35	0.00	0.35	0.92	0.637	0.90	0.711	1.00	1.30	2.000	No
90	5.93	0.36	0.00	0.36	0.91	0.636	0.90	0.709	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
91	5.99	0.36	0.00	0.36	0.91	0.635	0.90	0.709	1.00	1.30	2.000	No
92	6.04	0.36	0.00	0.36	0.91	0.634	0.90	0.708	1.00	1.30	2.000	No
93	6.13	0.37	0.00	0.37	0.91	0.633	0.90	0.707	1.00	1.30	2.000	No
94	6.17	0.37	0.00	0.37	0.91	0.633	0.90	0.706	1.00	1.30	2.000	No
95	6.27	0.38	0.00	0.38	0.91	0.632	0.90	0.705	1.00	1.30	2.000	No
96	6.30	0.38	0.00	0.38	0.91	0.631	0.90	0.705	1.00	1.30	2.000	No
97	6.37	0.38	0.00	0.38	0.91	0.631	0.90	0.704	1.00	1.30	2.000	No
98	6.46	0.39	0.00	0.39	0.91	0.630	0.90	0.703	1.00	1.30	2.000	No
99	6.52	0.39	0.00	0.39	0.90	0.629	0.90	0.702	1.00	1.30	2.000	No
100	6.57	0.40	0.00	0.40	0.90	0.628	0.90	0.701	1.00	1.30	2.000	No
101	6.66	0.40	0.00	0.40	0.90	0.627	0.90	0.700	1.00	1.30	2.000	No
102	6.71	0.41	0.00	0.41	0.90	0.627	0.90	0.699	1.00	1.30	2.000	No
103	6.77	0.41	0.00	0.41	0.90	0.626	0.90	0.699	1.00	1.30	2.000	No
104	6.83	0.41	0.00	0.41	0.90	0.625	0.90	0.698	1.00	1.30	2.000	No
105	6.92	0.42	0.00	0.42	0.90	0.624	0.90	0.697	1.00	1.30	2.000	No
106	6.97	0.42	0.00	0.42	0.90	0.623	0.90	0.696	1.00	1.30	2.000	No
107	7.04	0.43	0.00	0.43	0.90	0.623	0.90	0.695	1.00	1.30	2.000	No
108	7.09	0.43	0.00	0.43	0.89	0.622	0.90	0.694	1.00	1.30	2.000	No
109	7.16	0.43	0.00	0.43	0.89	0.621	0.90	0.693	1.00	1.30	2.000	No
110	7.22	0.44	0.00	0.44	0.89	0.620	0.90	0.693	1.00	1.30	2.000	No
111	7.31	0.44	0.00	0.44	0.89	0.619	0.90	0.691	1.00	1.30	2.000	No
112	7.35	0.45	0.00	0.45	0.89	0.619	0.90	0.691	1.00	1.30	2.000	No
113	7.46	0.45	0.00	0.45	0.89	0.618	0.90	0.689	1.00	1.30	2.000	No
114	7.52	0.46	0.00	0.46	0.89	0.617	0.90	0.688	1.00	1.30	2.000	No
115	7.56	0.46	0.00	0.46	0.89	0.616	0.90	0.688	1.00	1.30	2.000	No
116	7.63	0.46	0.00	0.46	0.88	0.616	0.90	0.687	1.00	1.30	2.000	No
117	7.68	0.47	0.00	0.47	0.88	0.615	0.90	0.686	1.00	1.30	2.000	No
118	7.76	0.47	0.00	0.47	0.88	0.614	0.90	0.685	1.00	1.30	2.000	No
119	7.82	0.47	0.00	0.47	0.88	0.613	0.90	0.684	1.00	1.30	2.000	No
120	7.90	0.48	0.00	0.48	0.88	0.612	0.90	0.683	1.00	1.30	2.000	No
121	7.95	0.48	0.00	0.48	0.88	0.612	0.90	0.683	1.00	1.30	2.000	No
122	8.02	0.49	0.00	0.49	0.88	0.611	0.90	0.682	1.00	1.30	2.000	No
123	8.08	0.49	0.00	0.49	0.88	0.610	0.90	0.681	1.00	1.30	2.000	No
124	8.16	0.50	0.00	0.50	0.88	0.609	0.90	0.680	1.00	1.30	2.000	No
125	8.20	0.50	0.00	0.50	0.87	0.608	0.90	0.679	1.00	1.30	2.000	No
126	8.27	0.50	0.00	0.50	0.87	0.608	0.90	0.678	1.00	1.30	2.000	No
127	8.35	0.51	0.00	0.51	0.87	0.607	0.90	0.677	1.00	1.30	2.000	No
128	8.41	0.51	0.00	0.51	0.87	0.606	0.90	0.676	1.00	1.30	2.000	No
129	8.49	0.51	0.00	0.51	0.87	0.605	0.90	0.675	1.00	1.30	2.000	No
130	8.54	0.52	0.00	0.52	0.87	0.604	0.90	0.674	1.00	1.30	2.000	No
131	8.61	0.52	0.00	0.52	0.87	0.603	0.90	0.673	1.00	1.30	2.000	No
132	8.66	0.52	0.00	0.52	0.87	0.603	0.90	0.673	1.00	1.30	2.000	No
133	8.73	0.53	0.00	0.53	0.87	0.602	0.90	0.672	1.00	1.30	2.000	No
134	8.80	0.53	0.00	0.53	0.86	0.601	0.90	0.671	1.00	1.30	2.000	No
135	8.87	0.54	0.00	0.54	0.86	0.600	0.90	0.670	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
136	8.94	0.54	0.00	0.54	0.86	0.599	0.90	0.669	1.00	1.30	2.000	No
137	8.99	0.54	0.00	0.54	0.86	0.598	0.90	0.668	1.00	1.30	2.000	No
138	9.07	0.55	0.00	0.55	0.86	0.598	0.90	0.667	1.00	1.30	2.000	No
139	9.12	0.55	0.00	0.55	0.86	0.597	0.90	0.666	1.00	1.30	2.000	No
140	9.20	0.56	0.00	0.56	0.86	0.596	0.90	0.665	1.00	1.30	2.000	No
141	9.26	0.56	0.00	0.56	0.86	0.595	0.90	0.664	1.00	1.30	2.000	No
142	9.35	0.57	0.00	0.57	0.85	0.594	0.90	0.663	1.00	1.30	2.000	No
143	9.40	0.57	0.00	0.57	0.85	0.593	0.90	0.662	1.00	1.30	2.000	No
144	9.48	0.57	0.00	0.57	0.85	0.592	0.90	0.661	1.00	1.30	2.000	No
145	9.53	0.58	0.00	0.58	0.85	0.592	0.90	0.660	1.00	1.30	2.000	No
146	9.59	0.58	0.00	0.58	0.85	0.591	0.90	0.659	1.00	1.30	2.000	No
147	9.65	0.58	0.00	0.58	0.85	0.590	0.90	0.659	1.00	1.30	2.000	No
148	9.71	0.59	0.00	0.59	0.85	0.589	0.90	0.658	1.00	1.30	2.000	No
149	9.78	0.59	0.00	0.59	0.85	0.588	0.90	0.657	1.00	1.30	2.000	No
150	9.87	0.60	0.00	0.60	0.84	0.587	0.90	0.655	1.00	1.30	2.000	No
151	9.93	0.60	0.00	0.60	0.84	0.586	0.90	0.654	1.00	1.30	2.000	No
152	9.99	0.60	0.00	0.60	0.84	0.586	0.90	0.654	1.00	1.30	2.000	No
153	10.07	0.61	0.00	0.61	0.84	0.585	0.90	0.652	1.00	1.30	2.000	No
154	10.13	0.61	0.00	0.61	0.84	0.584	0.90	0.652	1.00	1.30	2.000	No
155	10.17	0.62	0.00	0.62	0.84	0.583	0.90	0.651	1.00	1.30	2.000	No
156	10.24	0.62	0.00	0.62	0.84	0.582	0.90	0.650	1.00	1.30	2.000	No
157	10.32	0.62	0.00	0.62	0.84	0.581	0.90	0.649	1.00	1.30	2.000	No
158	10.37	0.63	0.00	0.63	0.83	0.581	0.90	0.648	1.00	1.30	2.000	No
159	10.45	0.63	0.00	0.63	0.83	0.579	0.90	0.647	1.00	1.30	2.000	No
160	10.50	0.64	0.00	0.64	0.83	0.579	0.90	0.646	1.00	1.30	2.000	No
161	10.58	0.64	0.00	0.64	0.83	0.578	0.90	0.645	1.00	1.30	2.000	No
162	10.63	0.64	0.00	0.64	0.83	0.577	0.90	0.644	1.00	1.30	2.000	No
163	10.71	0.65	0.00	0.65	0.83	0.576	0.90	0.643	1.00	1.30	2.000	No
164	10.77	0.65	0.00	0.65	0.83	0.575	0.90	0.642	1.00	1.30	2.000	No
165	10.83	0.66	0.00	0.66	0.83	0.574	0.90	0.641	1.00	1.30	2.000	No
166	10.90	0.66	0.00	0.66	0.82	0.573	0.90	0.640	1.00	1.30	2.000	No
167	10.97	0.66	0.00	0.66	0.82	0.572	0.90	0.639	1.00	1.30	2.000	No
168	11.03	0.67	0.00	0.67	0.82	0.572	0.90	0.638	1.00	1.30	2.000	No
169	11.12	0.67	0.00	0.67	0.82	0.571	0.90	0.637	1.00	1.30	2.000	No
170	11.16	0.68	0.00	0.68	0.82	0.570	0.90	0.636	1.00	1.30	2.000	No
171	11.23	0.68	0.00	0.68	0.82	0.569	0.90	0.635	1.00	1.30	2.000	No
172	11.31	0.68	0.00	0.68	0.82	0.568	0.90	0.634	1.00	1.30	2.000	No
173	11.37	0.69	0.00	0.69	0.82	0.567	0.90	0.633	1.00	1.30	2.000	No
174	11.42	0.69	0.00	0.69	0.81	0.566	0.90	0.632	1.00	1.30	2.000	No
175	11.50	0.70	0.00	0.70	0.81	0.565	0.90	0.631	1.00	1.30	2.000	No
176	11.55	0.70	0.00	0.70	0.81	0.565	0.90	0.630	1.00	1.30	2.000	No
177	11.66	0.71	0.00	0.71	0.81	0.563	0.90	0.629	1.00	1.30	2.000	No
178	11.71	0.71	0.00	0.71	0.81	0.563	0.90	0.628	1.00	1.30	2.000	No
179	11.77	0.71	0.00	0.71	0.81	0.562	0.90	0.627	1.00	1.30	2.000	No
180	11.82	0.72	0.00	0.72	0.81	0.561	0.90	0.626	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
181	11.88	0.72	0.00	0.72	0.81	0.560	0.90	0.625	1.00	1.30	2.000	No
182	11.96	0.73	0.00	0.73	0.80	0.559	0.90	0.624	1.00	1.30	2.000	No
183	12.05	0.73	0.00	0.73	0.80	0.558	0.90	0.623	1.00	1.30	2.000	No
184	12.10	0.73	0.00	0.73	0.80	0.557	0.90	0.622	1.00	1.30	2.000	No
185	12.16	0.74	0.00	0.74	0.80	0.556	0.90	0.621	1.00	1.30	2.000	No
186	12.21	0.74	0.00	0.74	0.80	0.556	0.90	0.620	1.00	1.30	2.000	No
187	12.30	0.75	0.00	0.75	0.80	0.554	0.90	0.619	1.00	1.30	2.000	No
188	12.35	0.75	0.00	0.75	0.80	0.554	0.90	0.618	1.00	1.30	2.000	No
189	12.41	0.75	0.00	0.75	0.79	0.553	0.90	0.617	1.00	1.30	2.000	No
190	12.48	0.76	0.00	0.76	0.79	0.552	0.90	0.616	1.00	1.30	2.000	No
191	12.53	0.76	0.00	0.76	0.79	0.551	0.90	0.615	1.00	1.30	2.000	No
192	12.61	0.77	0.00	0.77	0.79	0.550	0.90	0.614	1.00	1.30	2.000	No
193	12.68	0.77	0.00	0.77	0.79	0.549	0.90	0.613	1.00	1.30	2.000	No
194	12.75	0.78	0.00	0.78	0.79	0.548	0.90	0.612	1.00	1.30	2.000	No
195	12.80	0.78	0.00	0.78	0.79	0.548	0.90	0.611	1.00	1.30	2.000	No
196	12.88	0.78	0.00	0.78	0.79	0.546	0.90	0.610	1.00	1.30	2.000	No
197	12.94	0.79	0.00	0.79	0.78	0.546	0.90	0.609	1.00	1.30	2.000	No
198	13.00	0.79	0.00	0.79	0.78	0.545	0.90	0.608	1.00	1.30	2.000	No
199	13.07	0.80	0.00	0.80	0.78	0.544	0.90	0.607	1.00	1.30	2.000	No
200	13.14	0.80	0.00	0.80	0.78	0.543	0.90	0.606	1.00	1.30	2.000	No
201	13.24	0.81	0.00	0.81	0.78	0.541	0.90	0.604	1.00	1.30	2.000	No
202	13.29	0.81	0.00	0.81	0.78	0.541	0.90	0.604	1.00	1.30	2.000	No
203	13.33	0.81	0.00	0.81	0.78	0.540	0.90	0.603	1.00	1.30	2.000	No
204	13.39	0.82	0.00	0.82	0.78	0.539	0.90	0.602	1.00	1.30	2.000	No
205	13.46	0.82	0.00	0.82	0.77	0.538	0.90	0.601	1.00	1.30	2.000	No
206	13.52	0.82	0.00	0.82	0.77	0.537	0.90	0.600	1.00	1.30	2.000	No
207	13.59	0.83	0.00	0.83	0.77	0.536	0.90	0.599	1.00	1.30	2.000	No
208	13.68	0.83	0.00	0.83	0.77	0.535	0.90	0.597	1.00	1.30	2.000	No
209	13.72	0.84	0.00	0.84	0.77	0.535	0.90	0.597	1.00	1.30	2.000	No
210	13.78	0.84	0.00	0.84	0.77	0.534	0.90	0.596	1.00	1.30	2.000	No
211	13.88	0.85	0.00	0.85	0.77	0.532	0.90	0.594	1.00	1.30	2.000	No
212	13.93	0.85	0.00	0.85	0.76	0.532	0.90	0.593	1.00	1.30	2.000	No
213	13.99	0.85	0.00	0.85	0.76	0.531	0.90	0.593	1.00	1.30	2.000	No
214	14.07	0.86	0.00	0.86	0.76	0.530	0.90	0.591	1.00	1.30	2.000	No
215	14.12	0.86	0.00	0.86	0.76	0.529	0.90	0.591	1.00	1.30	2.000	No
216	14.19	0.87	0.00	0.87	0.76	0.528	0.90	0.589	1.00	1.30	2.000	No
217	14.26	0.87	0.00	0.87	0.76	0.527	0.90	0.588	1.00	1.30	2.000	No
218	14.31	0.88	0.00	0.88	0.76	0.526	0.90	0.587	1.00	1.30	2.000	No
219	14.40	0.88	0.00	0.88	0.75	0.525	0.90	0.586	1.00	1.30	2.000	No
220	14.45	0.89	0.00	0.89	0.75	0.524	0.90	0.585	1.00	1.30	2.000	No
221	14.50	0.89	0.00	0.89	0.75	0.524	0.90	0.584	1.00	1.30	2.000	No
222	14.57	0.89	0.00	0.89	0.75	0.523	0.90	0.583	1.00	1.30	2.000	No
223	14.64	0.90	0.00	0.90	0.75	0.522	0.90	0.582	1.00	1.30	2.000	No
224	14.72	0.90	0.00	0.90	0.75	0.521	0.90	0.581	1.00	1.30	2.000	No
225	14.76	0.91	0.00	0.91	0.75	0.520	0.90	0.580	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
226	14.86	0.91	0.00	0.91	0.75	0.519	0.90	0.579	1.00	1.30	2.000	No
227	14.90	0.91	0.00	0.91	0.74	0.518	0.90	0.578	1.00	1.30	2.000	No
228	15.01	0.92	0.00	0.92	0.74	0.516	0.90	0.576	1.00	1.30	2.000	No
229	15.05	0.92	0.00	0.92	0.74	0.516	0.90	0.576	1.00	1.30	2.000	No
230	15.14	0.93	0.00	0.93	0.74	0.515	0.90	0.574	1.00	1.30	2.000	No
231	15.16	0.93	0.00	0.93	0.74	0.514	0.90	0.574	1.00	1.30	2.000	No
232	15.26	0.94	0.00	0.94	0.74	0.513	0.90	0.572	1.00	1.30	2.000	No
233	15.30	0.94	0.00	0.94	0.74	0.512	0.90	0.572	1.00	1.30	2.000	No
234	15.37	0.94	0.00	0.94	0.74	0.511	0.90	0.571	1.00	1.30	2.000	No
235	15.44	0.95	0.00	0.95	0.73	0.510	0.90	0.570	1.00	1.30	2.000	No
236	15.51	0.95	0.00	0.95	0.73	0.509	0.90	0.569	1.00	1.30	2.000	No
237	15.56	0.96	0.00	0.96	0.73	0.509	0.90	0.568	1.00	1.30	2.000	No
238	15.62	0.96	0.00	0.96	0.73	0.508	0.90	0.567	1.00	1.30	2.000	No
239	15.70	0.97	0.00	0.97	0.73	0.507	0.90	0.565	1.00	1.30	2.000	No
240	15.76	0.97	0.00	0.97	0.73	0.506	0.90	0.564	1.00	1.30	2.000	No
241	15.82	0.97	0.00	0.97	0.73	0.505	0.90	0.564	1.00	1.30	2.000	No
242	15.88	0.98	0.00	0.98	0.72	0.504	0.90	0.563	1.00	1.30	2.000	No
243	15.96	0.98	0.00	0.98	0.72	0.503	0.90	0.561	1.00	1.30	2.000	No
244	16.01	0.99	0.00	0.99	0.72	0.502	0.90	0.560	1.00	1.30	2.000	No
245	16.09	0.99	0.00	0.99	0.72	0.501	0.90	0.559	1.00	1.30	2.000	No
246	16.15	0.99	0.00	0.99	0.72	0.500	0.90	0.558	1.00	1.30	2.000	No
247	16.23	1.00	0.00	1.00	0.72	0.499	0.90	0.557	1.00	1.30	2.000	No
248	16.29	1.00	0.00	1.00	0.72	0.498	0.90	0.556	1.00	1.30	2.000	No
249	16.35	1.01	0.00	1.01	0.72	0.497	0.90	0.555	1.00	1.30	2.000	No
250	16.42	1.01	0.00	1.01	0.71	0.496	0.90	0.554	1.00	1.30	2.000	No
251	16.50	1.02	0.00	1.02	0.71	0.495	0.90	0.553	1.00	1.30	2.000	No
252	16.55	1.02	0.00	1.02	0.71	0.494	0.90	0.552	1.00	1.30	2.000	No
253	16.64	1.02	0.00	1.02	0.71	0.493	0.90	0.551	1.00	1.30	2.000	No
254	16.70	1.03	0.00	1.03	0.71	0.492	0.90	0.550	1.00	1.30	2.000	No
255	16.75	1.03	0.00	1.03	0.71	0.492	0.90	0.549	1.00	1.30	2.000	No
256	16.80	1.04	0.00	1.04	0.71	0.491	0.90	0.548	1.00	1.30	2.000	No
257	16.89	1.04	0.00	1.04	0.70	0.490	0.90	0.546	1.00	1.30	2.000	No
258	16.93	1.04	0.00	1.04	0.70	0.489	0.90	0.546	1.00	1.30	2.000	No
259	17.00	1.05	0.00	1.05	0.70	0.488	0.90	0.545	1.00	1.30	2.000	No
260	17.07	1.05	0.00	1.05	0.70	0.487	0.90	0.544	1.00	1.30	2.000	No
261	17.14	1.06	0.00	1.06	0.70	0.486	0.90	0.543	1.00	1.30	2.000	No
262	17.21	1.06	0.00	1.06	0.70	0.485	0.90	0.541	1.00	1.30	2.000	No
263	17.27	1.07	0.00	1.07	0.70	0.484	0.90	0.540	1.00	1.30	2.000	No
264	17.34	1.07	0.00	1.07	0.69	0.483	0.90	0.539	1.00	1.30	2.000	No
265	17.39	1.07	0.00	1.07	0.69	0.482	0.90	0.538	1.00	1.30	2.000	No
266	17.48	1.08	0.00	1.08	0.69	0.481	0.90	0.537	1.00	1.30	2.000	No
267	17.53	1.08	0.00	1.08	0.69	0.480	0.90	0.536	1.00	1.30	2.000	No
268	17.62	1.09	0.00	1.09	0.69	0.479	0.90	0.535	1.00	1.30	2.000	No
269	17.68	1.09	0.00	1.09	0.69	0.478	0.90	0.534	1.00	1.30	2.000	No
270	17.73	1.10	0.00	1.10	0.69	0.478	0.90	0.533	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
271	17.80	1.10	0.00	1.10	0.69	0.477	0.90	0.532	1.00	1.30	2.000	No
272	17.86	1.11	0.00	1.11	0.68	0.476	0.90	0.531	1.00	1.30	2.000	No
273	17.92	1.11	0.00	1.11	0.68	0.475	0.90	0.530	1.00	1.30	2.000	No
274	18.00	1.12	0.00	1.12	0.68	0.474	0.90	0.529	1.00	1.30	2.000	No
275	18.05	1.12	0.00	1.12	0.68	0.473	0.90	0.528	1.00	1.30	2.000	No
276	18.15	1.13	0.00	1.13	0.68	0.472	0.90	0.526	1.00	1.30	2.000	No
277	18.20	1.13	0.00	1.13	0.68	0.471	0.90	0.526	1.00	1.30	2.000	No
278	18.25	1.13	0.00	1.13	0.68	0.470	0.90	0.525	1.00	1.30	2.000	No
279	18.32	1.14	0.00	1.14	0.67	0.469	0.90	0.524	1.00	1.30	2.000	No
280	18.39	1.14	0.00	1.14	0.67	0.468	0.90	0.523	1.00	1.30	2.000	No
281	18.46	1.15	0.00	1.15	0.67	0.467	0.90	0.522	1.00	1.30	2.000	No
282	18.51	1.15	0.00	1.15	0.67	0.467	0.90	0.521	1.00	1.30	2.000	No
283	18.60	1.16	0.00	1.16	0.67	0.465	0.90	0.519	1.00	1.30	2.000	No
284	18.64	1.16	0.00	1.16	0.67	0.465	0.90	0.519	1.00	1.30	2.000	No
285	18.71	1.16	0.00	1.16	0.67	0.464	0.90	0.518	1.00	1.30	2.000	No
286	18.77	1.17	0.00	1.17	0.67	0.463	0.90	0.517	1.00	1.30	2.000	No
287	18.84	1.17	0.00	1.17	0.66	0.462	0.90	0.516	1.00	1.30	2.000	No
288	18.93	1.18	0.00	1.18	0.66	0.461	0.90	0.514	1.00	1.30	2.000	No
289	18.98	1.18	0.00	1.18	0.66	0.460	0.90	0.513	1.00	1.30	2.000	No
290	19.03	1.18	0.00	1.18	0.66	0.459	0.90	0.512	1.00	1.30	2.000	No
291	19.09	1.19	0.00	1.19	0.66	0.458	0.90	0.511	1.00	1.30	2.000	No
292	19.19	1.19	0.00	1.19	0.66	0.457	0.90	0.510	1.00	1.30	2.000	No
293	19.23	1.20	0.00	1.20	0.66	0.456	0.90	0.509	1.00	1.30	2.000	No
294	19.29	1.20	0.00	1.20	0.65	0.455	0.90	0.508	1.00	1.30	2.000	No
295	19.37	1.20	0.00	1.20	0.65	0.454	0.90	0.507	1.00	1.30	2.000	No
296	19.42	1.21	0.00	1.21	0.65	0.454	0.90	0.506	1.00	1.30	2.000	No
297	19.53	1.21	0.00	1.21	0.65	0.452	0.90	0.505	1.00	1.30	2.000	No
298	19.59	1.22	0.00	1.22	0.65	0.451	0.90	0.504	1.00	1.30	2.000	No
299	19.63	1.22	0.00	1.22	0.65	0.451	0.90	0.503	1.00	1.30	2.000	No
300	19.73	1.23	0.00	1.23	0.65	0.449	0.90	0.502	1.00	1.30	2.000	No
301	19.75	1.23	0.00	1.23	0.65	0.449	0.90	0.501	1.00	1.30	2.000	No
302	19.85	1.23	0.00	1.23	0.64	0.448	0.90	0.500	1.00	1.30	2.000	No
303	19.90	1.24	0.00	1.24	0.64	0.447	0.90	0.499	1.00	1.30	2.000	No
304	19.97	1.24	0.00	1.24	0.64	0.446	0.90	0.498	1.00	1.30	2.000	No
305	20.03	1.25	0.00	1.25	0.64	0.445	0.90	0.497	1.00	1.30	2.000	No
306	20.08	1.25	0.00	1.25	0.64	0.444	0.90	0.496	1.00	1.30	2.000	No
307	20.17	1.25	0.00	1.25	0.64	0.443	0.90	0.495	1.00	1.30	2.000	No
308	20.22	1.26	0.00	1.26	0.64	0.442	0.90	0.494	1.00	1.30	2.000	No
309	20.28	1.26	0.00	1.26	0.63	0.442	0.90	0.493	1.00	1.30	2.000	No
310	20.35	1.26	0.00	1.26	0.63	0.441	0.90	0.492	1.00	1.30	2.000	No
311	20.41	1.27	0.00	1.27	0.63	0.440	0.90	0.491	1.00	1.30	2.000	No
312	20.48	1.27	0.00	1.27	0.63	0.439	0.90	0.490	1.00	1.30	2.000	No
313	20.54	1.28	0.00	1.28	0.63	0.438	0.90	0.489	1.00	1.30	2.000	No
314	20.61	1.28	0.00	1.28	0.63	0.437	0.90	0.488	1.00	1.30	2.000	No
315	20.68	1.28	0.00	1.28	0.63	0.436	0.90	0.487	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
316	20.74	1.29	0.00	1.29	0.63	0.435	0.90	0.486	1.00	1.30	2.000	No
317	20.83	1.29	0.00	1.29	0.62	0.434	0.90	0.484	1.00	1.30	2.000	No
318	20.87	1.30	0.00	1.30	0.62	0.433	0.90	0.484	1.00	1.30	2.000	No
319	20.94	1.30	0.00	1.30	0.62	0.432	0.90	0.483	1.00	1.30	2.000	No
320	21.02	1.31	0.00	1.31	0.62	0.431	0.90	0.482	1.00	1.30	2.000	No
321	21.08	1.31	0.00	1.31	0.62	0.431	0.90	0.481	1.00	1.30	2.000	No
322	21.14	1.31	0.00	1.31	0.62	0.430	0.90	0.480	1.00	1.30	2.000	No
323	21.19	1.32	0.00	1.32	0.62	0.429	0.90	0.479	1.00	1.30	2.000	No
324	21.28	1.32	0.00	1.32	0.62	0.428	0.90	0.478	1.00	1.30	2.000	No
325	21.33	1.32	0.00	1.32	0.61	0.427	0.90	0.477	1.00	1.30	2.000	No
326	21.41	1.33	0.00	1.33	0.61	0.426	0.90	0.476	1.00	1.30	2.000	No
327	21.47	1.33	0.00	1.33	0.61	0.425	0.90	0.475	1.00	1.30	2.000	No
328	21.53	1.34	0.00	1.34	0.61	0.424	0.90	0.474	1.00	1.30	2.000	No
329	21.61	1.34	0.00	1.34	0.61	0.423	0.90	0.473	1.00	1.30	2.000	No
330	21.68	1.35	0.00	1.35	0.61	0.422	0.90	0.471	1.00	1.30	2.000	No
331	21.73	1.35	0.00	1.35	0.61	0.422	0.90	0.471	1.00	1.30	2.000	No
332	21.80	1.35	0.00	1.35	0.60	0.421	0.90	0.470	1.00	1.30	2.000	No
333	21.85	1.36	0.00	1.36	0.60	0.420	0.90	0.469	1.00	1.30	2.000	No
334	21.93	1.36	0.00	1.36	0.60	0.419	0.90	0.468	1.00	1.30	2.000	No
335	22.02	1.37	0.00	1.37	0.60	0.418	0.90	0.466	1.00	1.30	2.000	No
336	22.05	1.37	0.00	1.37	0.60	0.417	0.90	0.466	1.00	1.30	2.000	No
337	22.12	1.37	0.00	1.37	0.60	0.416	0.90	0.465	1.00	1.30	2.000	No
338	22.19	1.38	0.00	1.38	0.60	0.415	0.90	0.464	1.00	1.30	2.000	No
339	22.27	1.38	0.00	1.38	0.60	0.414	0.90	0.463	1.00	1.30	2.000	No
340	22.32	1.39	0.00	1.39	0.59	0.414	0.90	0.462	1.00	1.30	2.000	No
341	22.39	1.39	0.00	1.39	0.59	0.413	0.90	0.461	1.00	1.30	2.000	No
342	22.46	1.39	0.00	1.39	0.59	0.412	0.90	0.460	1.00	1.30	2.000	No
343	22.52	1.40	0.00	1.40	0.59	0.411	0.90	0.459	1.00	1.30	2.000	No
344	22.59	1.40	0.00	1.40	0.59	0.410	0.90	0.458	1.00	1.30	2.000	No
345	22.66	1.41	0.00	1.41	0.59	0.409	0.90	0.457	1.00	1.30	2.000	No
346	22.71	1.41	0.00	1.41	0.59	0.409	0.90	0.456	1.00	1.30	2.000	No
347	22.77	1.41	0.00	1.41	0.59	0.408	0.90	0.455	1.00	1.30	2.000	No
348	22.86	1.42	0.00	1.42	0.58	0.407	0.90	0.454	1.00	1.30	2.000	No
349	22.91	1.42	0.00	1.42	0.58	0.406	0.90	0.453	1.00	1.30	2.000	No
350	22.98	1.43	0.00	1.43	0.58	0.405	0.90	0.452	1.00	1.30	2.000	No
351	23.05	1.43	0.00	1.43	0.58	0.404	0.90	0.451	1.00	1.30	2.000	No
352	23.10	1.43	0.00	1.43	0.58	0.403	0.90	0.450	1.00	1.30	2.000	No
353	23.18	1.44	0.00	1.44	0.58	0.402	0.90	0.449	1.00	1.30	2.000	No
354	23.25	1.44	0.00	1.44	0.58	0.401	0.90	0.448	1.00	1.30	2.000	No
355	23.30	1.45	0.00	1.45	0.58	0.401	0.90	0.447	1.00	1.30	2.000	No
356	23.37	1.45	0.00	1.45	0.57	0.400	0.90	0.446	1.00	1.30	2.000	No
357	23.43	1.45	0.00	1.45	0.57	0.399	0.90	0.445	1.00	1.30	2.000	No
358	23.49	1.46	0.00	1.46	0.57	0.398	0.90	0.444	1.00	1.30	2.000	No
359	23.59	1.46	0.00	1.46	0.57	0.397	0.90	0.443	1.00	1.30	2.000	No
360	23.63	1.46	0.00	1.46	0.57	0.396	0.90	0.443	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
361	23.70	1.47	0.00	1.47	0.57	0.396	0.90	0.442	1.00	1.30	2.000	No
362	23.79	1.47	0.00	1.47	0.57	0.394	0.90	0.440	1.00	1.30	2.000	No
363	23.83	1.48	0.00	1.48	0.57	0.394	0.90	0.440	1.00	1.30	2.000	No
364	23.89	1.48	0.00	1.48	0.57	0.393	0.90	0.439	1.00	1.30	2.000	No
365	23.95	1.48	0.00	1.48	0.56	0.392	0.90	0.438	1.00	1.30	2.000	No
366	24.02	1.49	0.00	1.49	0.56	0.391	0.90	0.437	1.00	1.30	2.000	No
367	24.08	1.49	0.00	1.49	0.56	0.391	0.90	0.436	1.00	1.30	2.000	No
368	24.16	1.50	0.00	1.50	0.56	0.390	0.90	0.435	1.00	1.30	2.000	No
369	24.22	1.50	0.00	1.50	0.56	0.389	0.90	0.434	1.00	1.30	2.000	No
370	24.28	1.50	0.00	1.50	0.56	0.388	0.90	0.433	1.00	1.30	2.000	No
371	24.35	1.51	0.00	1.51	0.56	0.387	0.90	0.432	1.00	1.30	2.000	No
372	24.42	1.51	0.00	1.51	0.56	0.386	0.90	0.431	1.00	1.30	2.000	No
373	24.48	1.52	0.00	1.52	0.55	0.385	0.90	0.430	1.00	1.30	2.000	No
374	24.57	1.52	0.00	1.52	0.55	0.384	0.90	0.429	1.00	1.30	2.000	No
375	24.62	1.52	0.00	1.52	0.55	0.384	0.90	0.428	1.00	1.30	2.000	No
376	24.68	1.53	0.00	1.53	0.55	0.383	0.90	0.428	1.00	1.30	2.000	No
377	24.74	1.53	0.00	1.53	0.55	0.382	0.90	0.427	1.00	1.30	2.000	No
378	24.81	1.54	0.00	1.54	0.55	0.381	0.90	0.426	1.00	1.30	2.000	No
379	24.88	1.54	0.00	1.54	0.55	0.380	0.90	0.425	1.00	1.30	2.000	No
380	24.94	1.54	0.00	1.54	0.55	0.380	0.90	0.424	1.00	1.30	2.000	No
381	25.02	1.55	0.00	1.55	0.54	0.379	0.90	0.423	1.00	1.30	2.000	No
382	25.07	1.55	0.00	1.55	0.54	0.378	0.90	0.422	1.00	1.30	2.000	No
383	25.14	1.56	0.00	1.56	0.54	0.377	0.90	0.421	1.00	1.30	2.000	No
384	25.22	1.56	0.00	1.56	0.54	0.376	0.90	0.420	1.00	1.30	2.000	No
385	25.27	1.56	0.00	1.56	0.54	0.376	0.90	0.419	1.00	1.30	2.000	No
386	25.36	1.57	0.00	1.57	0.54	0.375	0.90	0.418	1.00	1.30	2.000	No
387	25.40	1.57	0.00	1.57	0.54	0.374	0.90	0.417	1.00	1.30	2.000	No
388	25.47	1.58	0.00	1.58	0.54	0.373	0.90	0.416	1.00	1.30	2.000	No
389	25.57	1.58	0.00	1.58	0.53	0.372	0.90	0.415	1.00	1.30	2.000	No
390	25.61	1.58	0.00	1.58	0.53	0.371	0.90	0.415	1.00	1.30	2.000	No
391	25.66	1.59	0.00	1.59	0.53	0.371	0.90	0.414	1.00	1.30	2.000	No
392	25.73	1.59	0.00	1.59	0.53	0.370	0.90	0.413	1.00	1.30	2.000	No
393	25.79	1.59	0.00	1.59	0.53	0.369	0.90	0.412	1.00	1.30	2.000	No
394	25.88	1.60	0.00	1.60	0.53	0.368	0.90	0.411	1.00	1.30	2.000	No
395	25.93	1.60	0.00	1.60	0.53	0.368	0.90	0.410	1.00	1.30	2.000	No
396	25.98	1.61	0.00	1.61	0.53	0.367	0.90	0.410	1.00	1.30	2.000	No
397	26.07	1.61	0.00	1.61	0.53	0.366	0.90	0.408	1.00	1.30	2.000	No
398	26.13	1.61	0.00	1.61	0.53	0.365	0.90	0.408	1.00	1.30	2.000	No
399	26.20	1.62	0.00	1.62	0.52	0.364	0.90	0.407	1.00	1.30	2.000	No
400	26.27	1.62	0.00	1.62	0.52	0.363	0.90	0.406	1.00	1.30	2.000	No
401	26.33	1.63	0.00	1.63	0.52	0.363	0.90	0.405	1.00	1.30	2.000	No
402	26.38	1.63	0.00	1.63	0.52	0.362	0.90	0.404	1.00	1.30	2.000	No
403	26.47	1.63	0.00	1.63	0.52	0.361	0.90	0.403	1.00	1.30	2.000	No
404	26.52	1.64	0.00	1.64	0.52	0.361	0.90	0.402	1.00	1.30	2.000	No
405	26.58	1.64	0.00	1.64	0.52	0.360	0.90	0.402	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
406	26.66	1.65	0.00	1.65	0.52	0.359	0.90	0.401	1.00	1.30	2.000	No
407	26.71	1.65	0.00	1.65	0.52	0.358	0.90	0.400	1.00	1.30	2.000	No
408	26.80	1.65	0.00	1.65	0.51	0.357	0.90	0.399	1.00	1.30	2.000	No
409	26.87	1.66	0.00	1.66	0.51	0.356	0.90	0.398	1.00	1.30	2.000	No
410	26.91	1.66	0.00	1.66	0.51	0.356	0.90	0.397	1.00	1.30	2.000	No
411	27.00	1.67	0.00	1.67	0.51	0.355	0.90	0.396	1.00	1.30	2.000	No
412	27.06	1.67	0.00	1.67	0.51	0.354	0.90	0.395	1.00	1.30	2.000	No
413	27.10	1.67	0.00	1.67	0.51	0.354	0.90	0.395	1.00	1.30	2.000	No
414	27.17	1.68	0.00	1.68	0.51	0.353	0.90	0.394	1.00	1.30	2.000	No
415	27.26	1.68	0.00	1.68	0.51	0.352	0.90	0.393	1.00	1.30	2.000	No
416	27.30	1.68	0.00	1.68	0.51	0.351	0.90	0.392	1.00	1.30	2.000	No
417	27.39	1.69	0.00	1.69	0.50	0.350	0.90	0.391	1.00	1.30	2.000	No
418	27.44	1.69	0.00	1.69	0.50	0.350	0.90	0.390	1.00	1.30	2.000	No
419	27.51	1.70	0.00	1.70	0.50	0.349	0.90	0.390	1.00	1.30	2.000	No
420	27.60	1.70	0.00	1.70	0.50	0.348	0.90	0.388	1.00	1.30	2.000	No
421	27.64	1.70	0.00	1.70	0.50	0.348	0.90	0.388	1.00	1.30	2.000	No
422	27.70	1.71	0.00	1.71	0.50	0.347	0.90	0.387	1.00	1.30	2.000	No
423	27.80	1.71	0.00	1.71	0.50	0.346	0.90	0.386	1.00	1.30	2.000	No
424	27.84	1.71	0.00	1.71	0.50	0.345	0.90	0.385	1.00	1.30	2.000	No
425	27.89	1.72	0.00	1.72	0.50	0.345	0.90	0.385	1.00	1.30	2.000	No
426	27.95	1.72	0.00	1.72	0.49	0.344	0.90	0.384	1.00	1.30	2.000	No
427	28.03	1.73	0.00	1.73	0.49	0.343	0.90	0.383	1.00	1.30	2.000	No
428	28.09	1.73	0.00	1.73	0.49	0.342	0.90	0.382	1.00	1.30	2.000	No
429	28.16	1.73	0.00	1.73	0.49	0.342	0.90	0.381	1.00	1.30	2.000	No
430	28.22	1.74	0.00	1.74	0.49	0.341	0.90	0.381	1.00	1.30	2.000	No
431	28.32	1.74	0.00	1.74	0.49	0.340	0.90	0.379	1.00	1.30	2.000	No
432	28.37	1.75	0.00	1.75	0.49	0.339	0.90	0.379	1.00	1.30	2.000	No
433	28.43	1.75	0.00	1.75	0.49	0.339	0.90	0.378	1.00	1.30	2.000	No
434	28.48	1.75	0.00	1.75	0.49	0.338	0.90	0.377	1.00	1.30	2.000	No
435	28.55	1.76	0.00	1.76	0.49	0.337	0.90	0.377	1.00	1.30	2.000	No
436	28.61	1.76	0.00	1.76	0.48	0.337	0.90	0.376	1.00	1.30	2.000	No
437	28.68	1.76	0.00	1.76	0.48	0.336	0.90	0.375	1.00	1.30	2.000	No
438	28.77	1.77	0.00	1.77	0.48	0.335	0.90	0.374	1.00	1.30	2.000	No
439	28.81	1.77	0.00	1.77	0.48	0.335	0.90	0.373	1.00	1.30	2.000	No
440	28.88	1.78	0.00	1.78	0.48	0.334	0.90	0.373	1.00	1.30	2.000	No
441	28.95	1.78	0.00	1.78	0.48	0.333	0.90	0.372	1.00	1.30	2.000	No
442	29.01	1.78	0.00	1.78	0.48	0.332	0.90	0.371	1.00	1.30	2.000	No
443	29.07	1.79	0.00	1.79	0.48	0.332	0.90	0.370	1.00	1.30	2.000	No
444	29.14	1.79	0.00	1.79	0.48	0.331	0.90	0.370	1.00	1.30	2.000	No
445	29.21	1.80	0.00	1.80	0.47	0.330	0.90	0.369	1.00	1.30	2.000	No
446	29.30	1.80	0.00	1.80	0.47	0.329	0.90	0.368	1.00	1.30	2.000	No
447	29.36	1.81	0.00	1.81	0.47	0.329	0.90	0.367	1.00	1.30	2.000	No
448	29.41	1.81	0.00	1.81	0.47	0.328	0.90	0.366	1.00	1.30	2.000	No
449	29.47	1.81	0.00	1.81	0.47	0.328	0.90	0.366	1.00	1.30	2.000	No
450	29.54	1.82	0.00	1.82	0.47	0.327	0.90	0.365	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
451	29.60	1.82	0.00	1.82	0.47	0.326	0.90	0.364	1.00	1.30	2.000	No
452	29.68	1.83	0.00	1.83	0.47	0.325	0.90	0.363	1.00	1.30	2.000	No
453	29.76	1.83	0.00	1.83	0.47	0.325	0.90	0.362	1.00	1.30	2.000	No
454	29.80	1.83	0.00	1.83	0.47	0.324	0.90	0.362	1.00	1.30	2.000	No
455	29.87	1.84	0.00	1.84	0.47	0.323	0.90	0.361	1.00	1.30	2.000	No
456	29.95	1.84	0.00	1.84	0.46	0.323	0.90	0.360	1.00	1.30	2.000	No
457	30.00	1.84	0.00	1.84	0.46	0.322	0.90	0.359	1.00	1.30	2.000	No
458	30.05	1.85	0.00	1.85	0.46	0.322	0.90	0.359	1.00	1.30	2.000	No
459	30.14	1.85	0.00	1.85	0.46	0.321	0.90	0.358	1.00	1.30	2.000	No
460	30.19	1.86	0.00	1.86	0.46	0.320	0.90	0.357	1.00	1.30	2.000	No
461	30.25	1.86	0.00	1.86	0.46	0.320	0.90	0.357	1.00	1.30	2.000	No
462	30.32	1.86	0.00	1.86	0.46	0.319	0.90	0.356	1.00	1.30	2.000	No
463	30.38	1.87	0.00	1.87	0.46	0.318	0.90	0.355	1.00	1.30	2.000	No
464	30.45	1.87	0.00	1.87	0.46	0.318	0.90	0.354	1.00	1.30	2.000	No
465	30.53	1.88	0.00	1.88	0.46	0.317	0.90	0.354	1.00	1.30	2.000	No
466	30.59	1.88	0.00	1.88	0.45	0.316	0.90	0.353	1.00	1.30	2.000	No
467	30.68	1.89	0.00	1.89	0.45	0.315	0.90	0.352	1.00	1.30	2.000	No
468	30.74	1.89	0.00	1.89	0.45	0.315	0.90	0.351	1.00	1.30	2.000	No
469	30.79	1.89	0.00	1.89	0.45	0.314	0.90	0.351	1.00	1.30	2.000	No
470	30.85	1.90	0.00	1.90	0.45	0.314	0.90	0.350	1.00	1.30	2.000	No
471	30.92	1.90	0.00	1.90	0.45	0.313	0.90	0.349	1.00	1.30	2.000	No
472	30.98	1.91	0.00	1.91	0.45	0.312	0.90	0.349	1.00	1.30	2.000	No
473	31.06	1.91	0.00	1.91	0.45	0.312	0.90	0.348	1.00	1.30	2.000	No
474	31.12	1.91	0.00	1.91	0.45	0.311	0.90	0.347	1.00	1.30	2.000	No
475	31.18	1.92	0.00	1.92	0.45	0.310	0.90	0.346	1.00	1.30	2.000	No
476	31.27	1.92	0.00	1.92	0.45	0.310	0.90	0.345	1.00	1.30	2.000	No
477	31.32	1.93	0.00	1.93	0.44	0.309	0.90	0.345	1.00	1.30	2.000	No
478	31.37	1.93	0.00	1.93	0.44	0.309	0.90	0.344	1.00	1.30	2.000	No
479	31.45	1.93	0.00	1.93	0.44	0.308	0.90	0.344	1.00	1.30	2.000	No
480	31.51	1.94	0.00	1.94	0.44	0.307	0.90	0.343	1.00	1.30	2.000	No
481	31.56	1.94	0.00	1.94	0.44	0.307	0.90	0.342	1.00	1.30	2.000	No
482	31.64	1.95	0.00	1.95	0.44	0.306	0.90	0.342	1.00	1.30	2.000	No
483	31.71	1.95	0.00	1.95	0.44	0.305	0.90	0.341	1.00	1.30	2.000	No
484	31.81	1.96	0.00	1.96	0.44	0.304	0.90	0.340	1.00	1.30	2.000	No
485	31.84	1.96	0.00	1.96	0.44	0.304	0.90	0.339	1.00	1.30	2.000	No
486	31.90	1.96	0.00	1.96	0.44	0.304	0.90	0.339	1.00	1.30	2.000	No
487	31.96	1.97	0.00	1.97	0.44	0.303	0.90	0.338	1.00	1.30	2.000	No
488	32.05	1.97	0.00	1.97	0.43	0.302	0.90	0.337	1.00	1.30	2.000	No
489	32.10	1.98	0.00	1.98	0.43	0.302	0.90	0.337	1.00	1.30	2.000	No
490	32.15	1.98	0.00	1.98	0.43	0.301	0.90	0.336	1.00	1.30	2.000	No
491	32.24	1.98	0.00	1.98	0.43	0.300	0.90	0.335	1.00	1.30	2.000	No
492	32.28	1.99	0.00	1.99	0.43	0.300	0.90	0.335	1.00	1.30	2.000	No
493	32.35	1.99	0.00	1.99	0.43	0.299	0.90	0.334	1.00	1.30	2.000	No
494	32.44	2.00	0.00	2.00	0.43	0.299	0.90	0.333	1.00	1.30	2.000	No
495	32.50	2.00	0.00	2.00	0.43	0.298	0.90	0.333	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
496	32.55	2.00	0.00	2.00	0.43	0.298	0.90	0.332	1.00	1.30	2.000	No
497	32.63	2.01	0.00	2.01	0.43	0.297	0.90	0.331	1.00	1.30	2.000	No
498	32.70	2.01	0.00	2.01	0.43	0.296	0.90	0.331	1.00	1.30	2.000	No
499	32.74	2.01	0.00	2.01	0.43	0.296	0.90	0.330	1.00	1.30	2.000	No
500	32.85	2.02	0.00	2.02	0.42	0.295	0.90	0.329	1.00	1.30	2.000	No
501	32.90	2.02	0.00	2.02	0.42	0.295	0.90	0.329	1.00	1.30	2.000	No
502	32.94	2.03	0.00	2.03	0.42	0.294	0.90	0.328	1.00	1.30	2.000	No
503	33.01	2.03	0.00	2.03	0.42	0.294	0.90	0.328	1.00	1.30	2.000	No
504	33.09	2.04	0.00	2.04	0.42	0.293	0.90	0.327	1.00	1.30	2.000	No
505	33.14	2.04	0.00	2.04	0.42	0.292	0.90	0.326	1.00	1.30	2.000	No
506	33.23	2.04	0.00	2.04	0.42	0.292	0.90	0.326	1.00	1.30	2.000	No
507	33.29	2.05	0.00	2.05	0.42	0.291	0.90	0.325	1.00	1.30	2.000	No
508	33.34	2.05	0.00	2.05	0.42	0.291	0.90	0.324	1.00	1.30	2.000	No
509	33.42	2.06	0.00	2.06	0.42	0.290	0.90	0.324	1.00	1.30	2.000	No
510	33.48	2.06	0.00	2.06	0.42	0.289	0.90	0.323	1.00	1.30	2.000	No
511	33.54	2.06	0.00	2.06	0.42	0.289	0.90	0.323	1.00	1.30	2.000	No
512	33.63	2.07	0.00	2.07	0.41	0.288	0.90	0.322	1.00	1.30	2.000	No
513	33.68	2.07	0.00	2.07	0.41	0.288	0.90	0.321	1.00	1.30	2.000	No
514	33.78	2.08	0.00	2.08	0.41	0.287	0.90	0.320	1.00	1.30	2.000	No
515	33.83	2.08	0.00	2.08	0.41	0.287	0.90	0.320	1.00	1.30	2.000	No
516	33.88	2.08	0.00	2.08	0.41	0.286	0.90	0.319	1.00	1.30	2.000	No
517	33.94	2.09	0.00	2.09	0.41	0.286	0.90	0.319	1.00	1.30	2.000	No
518	33.99	2.09	0.00	2.09	0.41	0.285	0.90	0.318	1.00	1.30	2.000	No
519	34.08	2.10	0.00	2.10	0.41	0.284	0.90	0.317	1.00	1.30	2.000	No
520	34.14	2.10	0.00	2.10	0.41	0.284	0.90	0.317	1.00	1.30	2.000	No
521	34.19	2.10	0.00	2.10	0.41	0.284	0.90	0.316	1.00	1.30	2.000	No
522	34.26	2.11	0.00	2.11	0.41	0.283	0.90	0.316	1.00	1.30	2.000	No
523	34.34	2.11	0.00	2.11	0.41	0.282	0.90	0.315	1.00	1.30	2.000	No
524	34.38	2.11	0.00	2.11	0.41	0.282	0.90	0.315	1.00	1.30	2.000	No
525	34.48	2.12	0.00	2.12	0.40	0.281	0.90	0.314	1.00	1.30	2.000	No
526	34.54	2.12	0.00	2.12	0.40	0.281	0.90	0.313	1.00	1.30	2.000	No
527	34.59	2.13	0.00	2.13	0.40	0.280	0.90	0.313	1.00	1.30	2.000	No
528	34.67	2.13	0.00	2.13	0.40	0.280	0.90	0.312	1.00	1.30	2.000	No
529	34.73	2.14	0.00	2.14	0.40	0.279	0.90	0.312	1.00	1.30	2.000	No
530	34.78	2.14	0.00	2.14	0.40	0.279	0.90	0.311	1.00	1.30	2.000	No
531	34.85	2.14	0.00	2.14	0.40	0.278	0.90	0.311	1.00	1.30	2.000	No
532	34.92	2.15	0.00	2.15	0.40	0.278	0.90	0.310	1.00	1.30	2.000	No
533	34.98	2.15	0.00	2.15	0.40	0.277	0.90	0.309	1.00	1.30	2.000	No
534	35.04	2.16	0.00	2.16	0.40	0.277	0.90	0.309	1.00	1.30	2.000	No
535	35.12	2.16	0.00	2.16	0.40	0.276	0.90	0.308	1.00	1.30	2.000	No
536	35.18	2.16	0.00	2.16	0.40	0.276	0.90	0.308	1.00	1.30	2.000	No
537	35.26	2.17	0.00	2.17	0.40	0.275	0.90	0.307	1.00	1.30	2.000	No
538	35.32	2.17	0.00	2.17	0.39	0.275	0.90	0.307	1.00	1.30	2.000	No
539	35.38	2.18	0.00	2.18	0.39	0.274	0.90	0.306	1.00	1.30	2.000	No
540	35.46	2.18	0.00	2.18	0.39	0.274	0.90	0.305	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
541	35.52	2.18	0.00	2.18	0.39	0.273	0.90	0.305	1.00	1.30	2.000	No
542	35.58	2.19	0.00	2.19	0.39	0.273	0.90	0.304	1.00	1.30	2.000	No
543	35.65	2.19	0.00	2.19	0.39	0.272	0.90	0.304	1.00	1.30	2.000	No
544	35.73	2.20	0.00	2.20	0.39	0.272	0.90	0.303	1.00	1.30	2.000	No
545	35.78	2.20	0.00	2.20	0.39	0.271	0.90	0.303	1.00	1.30	2.000	No
546	35.86	2.21	0.00	2.21	0.39	0.271	0.90	0.302	1.00	1.30	2.000	No
547	35.90	2.21	0.00	2.21	0.39	0.270	0.90	0.302	1.00	1.30	2.000	No
548	35.97	2.21	0.00	2.21	0.39	0.270	0.90	0.301	1.00	1.30	2.000	No
549	36.04	2.22	0.00	2.22	0.39	0.269	0.90	0.300	1.00	1.30	2.000	No
550	36.12	2.22	0.00	2.22	0.39	0.269	0.90	0.300	1.00	1.30	2.000	No
551	36.17	2.22	0.00	2.22	0.39	0.268	0.90	0.299	1.00	1.30	2.000	No
552	36.23	2.23	0.00	2.23	0.39	0.268	0.90	0.299	1.00	1.30	2.000	No
553	36.32	2.23	0.00	2.23	0.38	0.267	0.90	0.298	1.00	1.30	2.000	No
554	36.36	2.24	0.00	2.24	0.38	0.267	0.90	0.298	1.00	1.30	2.000	No
555	36.46	2.24	0.00	2.24	0.38	0.266	0.90	0.297	1.00	1.30	2.000	No
556	36.51	2.24	0.00	2.24	0.38	0.266	0.90	0.297	1.00	1.30	2.000	No
557	36.56	2.25	0.00	2.25	0.38	0.266	0.90	0.296	1.00	1.30	2.000	No
558	36.63	2.25	0.00	2.25	0.38	0.265	0.90	0.296	1.00	1.30	2.000	No
559	36.70	2.26	0.00	2.26	0.38	0.265	0.90	0.295	1.00	1.30	2.000	No
560	36.76	2.26	0.00	2.26	0.38	0.264	0.90	0.295	1.00	1.30	2.000	No
561	36.82	2.26	0.00	2.26	0.38	0.264	0.90	0.294	1.00	1.30	2.000	No
562	36.91	2.27	0.00	2.27	0.38	0.263	0.90	0.294	1.00	1.30	2.000	No
563	36.95	2.27	0.00	2.27	0.38	0.263	0.90	0.293	1.00	1.30	2.000	No
564	37.02	2.28	0.00	2.28	0.38	0.262	0.90	0.293	1.00	1.30	2.000	No
565	37.10	2.28	0.00	2.28	0.38	0.262	0.90	0.292	1.00	1.30	2.000	No
566	37.16	2.29	0.00	2.29	0.38	0.261	0.90	0.292	1.00	1.30	2.000	No
567	37.22	2.29	0.00	2.29	0.38	0.261	0.90	0.291	1.00	1.30	2.000	No
568	37.28	2.29	0.00	2.29	0.37	0.261	0.90	0.291	1.00	1.30	2.000	No
569	37.36	2.30	0.00	2.30	0.37	0.260	0.90	0.290	1.00	1.30	2.000	No
570	37.41	2.30	0.00	2.30	0.37	0.260	0.90	0.290	1.00	1.30	2.000	No
571	37.49	2.31	0.00	2.31	0.37	0.259	0.90	0.289	1.00	1.30	2.000	No
572	37.55	2.31	0.00	2.31	0.37	0.259	0.90	0.289	1.00	1.30	2.000	No
573	37.60	2.31	0.00	2.31	0.37	0.258	0.90	0.288	1.00	1.30	2.000	No
574	37.69	2.32	0.00	2.32	0.37	0.258	0.90	0.288	1.00	1.30	2.000	No
575	37.74	2.32	0.00	2.32	0.37	0.257	0.90	0.287	1.00	1.30	2.000	No
576	37.80	2.33	0.00	2.33	0.37	0.257	0.90	0.287	1.00	1.30	2.000	No
577	37.89	2.33	0.00	2.33	0.37	0.256	0.90	0.286	1.00	1.30	2.000	No
578	37.94	2.34	0.00	2.34	0.37	0.256	0.90	0.286	1.00	1.30	2.000	No
579	38.00	2.34	0.00	2.34	0.37	0.256	0.90	0.285	1.00	1.30	2.000	No
580	38.08	2.35	0.00	2.35	0.37	0.255	0.90	0.285	1.00	1.30	2.000	No
581	38.15	2.35	0.00	2.35	0.37	0.255	0.90	0.284	1.00	1.30	2.000	No
582	38.20	2.35	0.00	2.35	0.37	0.254	0.90	0.284	1.00	1.30	2.000	No
583	38.28	2.36	0.00	2.36	0.37	0.254	0.90	0.283	1.00	1.30	2.000	No
584	38.33	2.36	0.00	2.36	0.36	0.254	0.90	0.283	1.00	1.30	2.000	No
585	38.40	2.37	0.00	2.37	0.36	0.253	0.90	0.283	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
586	38.47	2.37	0.00	2.37	0.36	0.253	0.90	0.282	1.00	1.30	2.000	No
587	38.52	2.37	0.00	2.37	0.36	0.252	0.90	0.282	1.00	1.30	2.000	No
588	38.59	2.38	0.00	2.38	0.36	0.252	0.90	0.281	1.00	1.30	2.000	No
589	38.68	2.39	0.00	2.39	0.36	0.251	0.90	0.281	1.00	1.30	2.000	No
590	38.73	2.39	0.00	2.39	0.36	0.251	0.90	0.280	1.00	1.30	2.000	No
591	38.80	2.39	0.00	2.39	0.36	0.251	0.90	0.280	1.00	1.30	2.000	No
592	38.85	2.40	0.00	2.40	0.36	0.250	0.90	0.279	1.00	1.30	2.000	No
593	38.93	2.40	0.00	2.40	0.36	0.250	0.90	0.279	1.00	1.30	2.000	No
594	38.99	2.41	0.00	2.41	0.36	0.250	0.90	0.279	1.00	1.30	2.000	No
595	39.07	2.41	0.00	2.41	0.36	0.249	0.90	0.278	1.00	1.30	2.000	No
596	39.12	2.41	0.00	2.41	0.36	0.249	0.90	0.278	1.00	1.30	2.000	No
597	39.18	2.42	0.00	2.42	0.36	0.248	0.90	0.277	1.00	1.30	2.000	No
598	39.24	2.42	0.00	2.42	0.36	0.248	0.90	0.277	1.00	1.30	2.000	No
599	39.31	2.43	0.00	2.43	0.36	0.248	0.90	0.276	1.00	1.30	2.000	No
600	39.38	2.43	0.00	2.43	0.36	0.247	0.90	0.276	1.00	1.30	2.000	No
601	39.44	2.43	0.00	2.43	0.35	0.247	0.90	0.276	1.00	1.30	2.000	No
602	39.53	2.44	0.00	2.44	0.35	0.246	0.90	0.275	1.00	1.30	2.000	No
603	39.57	2.44	0.00	2.44	0.35	0.246	0.90	0.275	1.00	1.30	2.000	No
604	39.63	2.45	0.00	2.45	0.35	0.246	0.90	0.274	1.00	1.30	2.000	No
605	39.73	2.45	0.00	2.45	0.35	0.245	0.90	0.274	1.00	1.30	2.000	No
606	39.78	2.46	0.00	2.46	0.35	0.245	0.90	0.273	1.00	1.30	2.000	No
607	39.84	2.46	0.00	2.46	0.35	0.245	0.90	0.273	1.00	1.30	2.000	No
608	39.91	2.47	0.00	2.47	0.35	0.244	0.90	0.273	1.00	1.30	2.000	No
609	39.96	2.47	0.00	2.47	0.35	0.244	0.90	0.272	1.00	1.30	2.000	No
610	40.07	2.48	0.00	2.47	0.35	0.244	0.90	0.272	1.00	1.30	0.353	No
611	40.12	2.48	0.00	2.47	0.35	0.243	0.90	0.272	1.00	1.30	0.353	No
612	40.18	2.48	0.01	2.48	0.35	0.243	0.90	0.271	1.00	1.30	0.353	No
613	40.25	2.49	0.01	2.48	0.35	0.243	0.90	0.271	1.00	1.30	0.353	No
614	40.32	2.49	0.01	2.48	0.35	0.243	0.90	0.271	1.00	1.30	0.352	No
615	40.37	2.49	0.01	2.48	0.35	0.243	0.90	0.271	1.00	1.30	0.352	No
616	40.45	2.50	0.01	2.49	0.35	0.243	0.90	0.271	1.00	1.30	0.352	No
617	40.51	2.50	0.02	2.49	0.35	0.242	0.90	0.271	1.00	1.30	0.352	No
618	40.56	2.51	0.02	2.49	0.35	0.242	0.90	0.270	1.00	1.30	0.352	No
619	40.64	2.51	0.02	2.49	0.35	0.242	0.90	0.270	1.00	1.30	0.351	No
620	40.70	2.52	0.02	2.49	0.34	0.242	0.90	0.270	1.00	1.30	0.351	No
621	40.76	2.52	0.02	2.50	0.34	0.242	0.90	0.270	1.00	1.30	0.351	No
622	40.82	2.52	0.03	2.50	0.34	0.242	0.90	0.270	1.00	1.30	0.351	No
623	40.90	2.53	0.03	2.50	0.34	0.241	0.90	0.269	1.00	1.30	0.350	No
624	40.95	2.53	0.03	2.50	0.34	0.241	0.90	0.269	1.00	1.30	0.350	No
625	41.05	2.54	0.03	2.50	0.34	0.241	0.90	0.269	1.00	1.30	0.350	No
626	41.08	2.54	0.03	2.51	0.34	0.241	0.90	0.269	1.00	1.30	0.350	No
627	41.15	2.54	0.04	2.51	0.34	0.241	0.90	0.269	1.00	1.30	0.349	No
628	41.24	2.55	0.04	2.51	0.34	0.241	0.90	0.269	1.00	1.30	0.349	No
629	41.30	2.55	0.04	2.51	0.34	0.240	0.90	0.268	1.00	1.30	0.349	No
630	41.35	2.55	0.04	2.51	0.34	0.240	0.90	0.268	1.00	1.30	0.349	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
631	41.44	2.56	0.04	2.52	0.34	0.240	0.90	0.268	1.00	1.30	0.348	No
632	41.48	2.56	0.05	2.52	0.34	0.240	0.90	0.268	1.00	1.30	0.348	No
633	41.55	2.57	0.05	2.52	0.34	0.240	0.90	0.268	1.00	1.30	0.348	No
634	41.63	2.57	0.05	2.52	0.34	0.240	0.90	0.268	1.00	1.30	0.348	No
635	41.67	2.57	0.05	2.52	0.34	0.240	0.90	0.267	1.00	1.30	0.348	No
636	41.74	2.58	0.05	2.52	0.34	0.239	0.90	0.267	1.00	1.30	0.348	No
637	41.80	2.58	0.06	2.53	0.34	0.239	0.90	0.267	1.00	1.30	0.347	No
638	41.90	2.59	0.06	2.53	0.34	0.239	0.90	0.267	1.00	1.30	0.347	No
639	41.93	2.59	0.06	2.53	0.34	0.239	0.90	0.267	1.00	1.30	0.347	No
640	42.01	2.60	0.06	2.53	0.34	0.239	0.90	0.267	1.00	1.30	0.347	No
641	42.06	2.60	0.06	2.53	0.33	0.239	0.90	0.267	1.00	1.30	0.346	No
642	42.14	2.60	0.07	2.54	0.33	0.239	0.90	0.266	1.00	1.30	0.346	No
643	42.21	2.61	0.07	2.54	0.33	0.238	0.90	0.266	1.00	1.30	0.346	No
644	42.28	2.61	0.07	2.54	0.33	0.238	0.90	0.266	1.00	1.30	0.346	No
645	42.35	2.62	0.07	2.54	0.33	0.238	0.90	0.266	1.00	1.30	0.346	No
646	42.41	2.62	0.08	2.55	0.33	0.238	0.90	0.266	1.00	1.30	0.345	No
647	42.48	2.62	0.08	2.55	0.33	0.238	0.90	0.266	1.00	1.30	0.345	No
648	42.54	2.63	0.08	2.55	0.33	0.238	0.90	0.265	1.00	1.30	0.345	No
649	42.59	2.63	0.08	2.55	0.33	0.238	0.90	0.265	1.00	1.30	0.345	No
650	42.67	2.64	0.08	2.55	0.33	0.237	0.90	0.265	1.00	1.30	0.345	No
651	42.75	2.64	0.09	2.56	0.33	0.237	0.90	0.265	1.00	1.30	0.344	No
652	42.78	2.64	0.09	2.56	0.33	0.237	0.90	0.265	1.00	1.30	0.344	No
653	42.85	2.65	0.09	2.56	0.33	0.237	0.90	0.265	1.00	1.30	0.344	No
654	42.93	2.65	0.09	2.56	0.33	0.237	0.90	0.264	1.00	1.30	0.344	No
655	42.98	2.66	0.09	2.56	0.33	0.237	0.90	0.264	1.00	1.30	0.344	No
656	43.08	2.66	0.10	2.57	0.33	0.237	0.90	0.264	1.00	1.30	0.343	No
657	43.13	2.67	0.10	2.57	0.33	0.237	0.90	0.264	1.00	1.30	0.343	No
658	43.18	2.67	0.10	2.57	0.33	0.236	0.90	0.264	1.00	1.30	0.343	No
659	43.28	2.68	0.10	2.57	0.33	0.236	0.90	0.264	1.00	1.30	0.343	No
660	43.33	2.68	0.10	2.58	0.33	0.236	0.90	0.264	1.00	1.30	0.343	No
661	43.39	2.68	0.11	2.58	0.33	0.236	0.90	0.263	1.00	1.30	0.342	No
662	43.44	2.69	0.11	2.58	0.33	0.236	0.90	0.263	1.00	1.30	0.342	No
663	43.52	2.69	0.11	2.58	0.33	0.236	0.90	0.263	1.00	1.30	0.342	No
664	43.58	2.69	0.11	2.58	0.32	0.236	0.90	0.263	1.00	1.30	0.342	No
665	43.64	2.70	0.11	2.59	0.32	0.236	0.90	0.263	1.00	1.30	0.342	No
666	43.73	2.70	0.12	2.59	0.32	0.235	0.90	0.263	1.00	1.30	0.341	No
667	43.78	2.71	0.12	2.59	0.32	0.235	0.90	0.263	1.00	1.30	0.341	No
668	43.87	2.71	0.12	2.59	0.32	0.235	0.90	0.262	1.00	1.30	0.341	No
669	43.90	2.72	0.12	2.59	0.32	0.235	0.90	0.262	1.00	1.30	0.341	No
670	43.97	2.72	0.12	2.60	0.32	0.235	0.90	0.262	1.00	1.30	0.341	No
671	44.05	2.73	0.13	2.60	0.32	0.235	0.90	0.262	1.00	1.30	0.341	No
672	44.12	2.73	0.13	2.60	0.32	0.235	0.90	0.262	1.00	1.30	0.340	No
673	44.17	2.73	0.13	2.60	0.32	0.235	0.90	0.262	1.00	1.30	0.340	No
674	44.23	2.74	0.13	2.60	0.32	0.234	0.90	0.262	1.00	1.30	0.340	No
675	44.31	2.74	0.13	2.61	0.32	0.234	0.90	0.261	1.00	1.30	0.340	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
676	44.36	2.75	0.14	2.61	0.32	0.234	0.90	0.261	1.00	1.30	0.340	No
677	44.45	2.75	0.14	2.61	0.32	0.234	0.90	0.261	1.00	1.30	0.340	No
678	44.52	2.76	0.14	2.61	0.32	0.234	0.90	0.261	1.00	1.30	0.339	No
679	44.55	2.76	0.14	2.62	0.32	0.234	0.90	0.261	1.00	1.30	0.339	No
680	44.62	2.76	0.14	2.62	0.32	0.234	0.90	0.261	1.00	1.30	0.339	No
681	44.70	2.77	0.15	2.62	0.32	0.234	0.90	0.261	1.00	1.30	0.339	No
682	44.78	2.77	0.15	2.62	0.32	0.233	0.90	0.261	1.00	1.30	0.339	No
683	44.84	2.78	0.15	2.63	0.32	0.233	0.90	0.260	1.00	1.30	0.339	No
684	44.91	2.78	0.15	2.63	0.32	0.233	0.90	0.260	1.00	1.30	0.338	No
685	44.97	2.78	0.16	2.63	0.32	0.233	0.90	0.260	1.00	1.30	0.338	No
686	45.02	2.79	0.16	2.63	0.32	0.233	0.90	0.260	1.00	1.30	0.338	No
687	45.10	2.79	0.16	2.63	0.32	0.233	0.90	0.260	1.00	1.30	0.338	No
688	45.15	2.80	0.16	2.64	0.32	0.233	0.90	0.260	1.00	1.30	0.338	No
689	45.24	2.80	0.16	2.64	0.31	0.233	0.90	0.260	1.00	1.30	0.338	No
690	45.30	2.81	0.17	2.64	0.31	0.233	0.90	0.260	1.00	1.30	0.337	No
691	45.36	2.81	0.17	2.64	0.31	0.232	0.90	0.259	1.00	1.30	0.337	No
692	45.42	2.81	0.17	2.64	0.31	0.232	0.90	0.259	1.00	1.30	0.337	No
693	45.51	2.82	0.17	2.65	0.31	0.232	0.90	0.259	1.00	1.30	0.337	No
694	45.55	2.82	0.17	2.65	0.31	0.232	0.90	0.259	1.00	1.30	0.337	No
695	45.63	2.83	0.18	2.65	0.31	0.232	0.90	0.259	1.00	1.30	0.337	No
696	45.70	2.83	0.18	2.65	0.31	0.232	0.90	0.259	1.00	1.30	0.336	No
697	45.75	2.83	0.18	2.66	0.31	0.232	0.90	0.259	1.00	1.30	0.336	No
698	45.81	2.84	0.18	2.66	0.31	0.232	0.90	0.259	1.00	1.30	0.336	No
699	45.89	2.84	0.18	2.66	0.31	0.232	0.90	0.258	1.00	1.30	0.336	No
700	45.94	2.85	0.19	2.66	0.31	0.231	0.90	0.258	1.00	1.30	0.336	No
701	46.00	2.85	0.19	2.66	0.31	0.231	0.90	0.258	1.00	1.30	0.336	No
702	46.09	2.86	0.19	2.67	0.31	0.231	0.90	0.258	1.00	1.30	0.336	No
703	46.14	2.86	0.19	2.67	0.31	0.231	0.90	0.258	1.00	1.30	0.335	No
704	46.20	2.86	0.19	2.67	0.31	0.231	0.90	0.258	1.00	1.30	0.335	No
705	46.27	2.87	0.20	2.67	0.31	0.231	0.90	0.258	1.00	1.30	0.335	No
706	46.33	2.87	0.20	2.67	0.31	0.231	0.90	0.258	1.00	1.30	0.335	No
707	46.40	2.88	0.20	2.68	0.31	0.231	0.90	0.258	1.00	1.30	0.335	No
708	46.48	2.88	0.20	2.68	0.31	0.231	0.90	0.258	1.00	1.30	0.335	No
709	46.52	2.88	0.20	2.68	0.31	0.231	0.90	0.257	1.00	1.30	0.335	No
710	46.59	2.89	0.21	2.68	0.31	0.231	0.90	0.257	1.00	1.30	0.335	No
711	46.66	2.89	0.21	2.68	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
712	46.73	2.90	0.21	2.69	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
713	46.80	2.90	0.21	2.69	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
714	46.85	2.90	0.21	2.69	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
715	46.92	2.91	0.22	2.69	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
716	46.99	2.91	0.22	2.70	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
717	47.06	2.92	0.22	2.70	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
718	47.12	2.92	0.22	2.70	0.31	0.230	0.90	0.257	1.00	1.30	0.333	No
719	47.21	2.93	0.23	2.70	0.30	0.230	0.90	0.256	1.00	1.30	0.333	No
720	47.26	2.93	0.23	2.70	0.30	0.230	0.90	0.256	1.00	1.30	0.333	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
721	47.32	2.93	0.23	2.71	0.30	0.230	0.90	0.256	1.00	1.30	0.333	No
722	47.38	2.94	0.23	2.71	0.30	0.229	0.90	0.256	1.00	1.30	0.333	No
723	47.44	2.94	0.23	2.71	0.30	0.229	0.90	0.256	1.00	1.30	0.333	No
724	47.51	2.95	0.23	2.71	0.30	0.229	0.90	0.256	1.00	1.30	0.333	No
725	47.60	2.95	0.24	2.71	0.30	0.229	0.90	0.256	1.00	1.30	0.333	No
726	47.66	2.96	0.24	2.72	0.30	0.229	0.90	0.256	1.00	1.30	0.332	No
727	47.71	2.96	0.24	2.72	0.30	0.229	0.90	0.256	1.00	1.30	0.332	No
728	47.77	2.96	0.24	2.72	0.30	0.229	0.90	0.256	1.00	1.30	0.332	No
729	47.86	2.97	0.25	2.72	0.30	0.229	0.90	0.255	1.00	1.30	0.332	No
730	47.91	2.97	0.25	2.72	0.30	0.229	0.90	0.255	1.00	1.30	0.332	No
731	47.98	2.98	0.25	2.73	0.30	0.229	0.90	0.255	1.00	1.30	0.332	No
732	48.04	2.98	0.25	2.73	0.30	0.229	0.90	0.255	1.00	1.30	0.332	No
733	48.10	2.98	0.25	2.73	0.30	0.229	0.90	0.255	1.00	1.30	0.332	No
734	48.19	2.99	0.26	2.73	0.30	0.228	0.90	0.255	1.00	1.30	0.331	No
735	48.25	2.99	0.26	2.74	0.30	0.228	0.90	0.255	1.00	1.30	0.331	No
736	48.30	3.00	0.26	2.74	0.30	0.228	0.90	0.255	1.00	1.30	0.331	No
737	48.37	3.00	0.26	2.74	0.30	0.228	0.90	0.255	1.00	1.30	0.331	No
738	48.43	3.01	0.26	2.74	0.30	0.228	0.90	0.255	1.00	1.30	0.331	No
739	48.49	3.01	0.27	2.74	0.30	0.228	0.90	0.255	1.00	1.30	0.331	No
740	48.56	3.01	0.27	2.75	0.30	0.228	0.90	0.254	1.00	1.30	0.331	No
741	48.64	3.02	0.27	2.75	0.30	0.228	0.90	0.254	1.00	1.30	0.331	No
742	48.74	3.03	0.27	2.75	0.30	0.228	0.90	0.254	1.00	1.30	0.331	No
743	48.77	3.03	0.27	2.75	0.30	0.228	0.90	0.254	1.00	1.30	0.330	No
744	48.83	3.03	0.28	2.76	0.30	0.228	0.90	0.254	1.00	1.30	0.330	No
745	48.89	3.04	0.28	2.76	0.30	0.228	0.90	0.254	1.00	1.30	0.330	No
746	48.96	3.04	0.28	2.76	0.30	0.228	0.90	0.254	1.00	1.30	0.330	No
747	49.03	3.04	0.28	2.76	0.30	0.227	0.90	0.254	1.00	1.30	0.330	No
748	49.09	3.05	0.28	2.76	0.30	0.227	0.90	0.254	1.00	1.30	0.330	No
749	49.16	3.05	0.29	2.77	0.30	0.227	0.90	0.254	1.00	1.30	0.330	No
750	49.22	3.06	0.29	2.77	0.30	0.227	0.90	0.254	1.00	1.30	0.330	No
751	49.29	3.06	0.29	2.77	0.30	0.227	0.90	0.254	1.00	1.30	0.330	No
752	49.35	3.06	0.29	2.77	0.30	0.227	0.90	0.254	1.00	1.30	0.330	No
753	49.43	3.07	0.29	2.78	0.30	0.227	0.90	0.253	1.00	1.30	0.329	No
754	49.49	3.07	0.30	2.78	0.29	0.227	0.90	0.253	1.00	1.30	0.329	No
755	49.55	3.08	0.30	2.78	0.29	0.227	0.90	0.253	1.00	1.30	0.329	No
756	49.64	3.08	0.30	2.78	0.29	0.227	0.90	0.253	1.00	1.30	0.329	No
757	49.68	3.09	0.30	2.78	0.29	0.227	0.90	0.253	1.00	1.30	0.329	No
758	49.74	3.09	0.30	2.79	0.29	0.227	0.90	0.253	1.00	1.30	0.329	No
759	49.84	3.09	0.31	2.79	0.29	0.227	0.90	0.253	1.00	1.30	2.000	No
760	49.89	3.10	0.31	2.79	0.29	0.227	0.90	0.253	1.00	1.30	2.000	No
761	49.94	3.10	0.31	2.79	0.29	0.227	0.90	0.253	1.00	1.30	2.000	No
762	50.03	3.10	0.31	2.79	0.29	0.227	0.90	0.253	1.00	1.30	2.000	No
763	50.08	3.10	0.31	2.79	0.29	0.226	0.90	0.253	1.00	1.30	2.000	No
764	50.14	3.11	0.32	2.79	0.29	0.226	0.90	0.253	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition

Abbreviations

Depth: Depth from free surface, at which CPT was performed (ft)
σ_v: Total overburden pressure at test point (tsf)
u_0: Water pressure at test point (tsf)
σ_v': Effective overburden pressure based on GWT during earthquake (tsf)
r_d: Nonlinear shear mass factor
CSR: Cyclic Stress Ratio
MSF: Magnitude Scaling Factor
CSR_{eq}: CSR adjusted for M=7.5
K_σ: Effective overburden stress factor
CSR^*: CSR fully adjusted

:: Cyclic Resistance Ratio (CRR) calculation data ::

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
1	0.07	5.36	0.00	1.00	1.70	9.11	0.00	9.11	4.000	No	Yes	2.00
2	0.14	10.19	0.01	0.97	1.70	17.32	0.00	17.32	4.000	No	No	2.00
3	0.21	10.10	0.01	0.95	1.70	17.17	0.00	17.17	4.000	No	No	2.00
4	0.27	9.74	0.01	0.91	1.70	16.56	0.00	16.56	4.000	No	No	2.00
5	0.35	7.42	0.02	0.85	1.70	12.61	3.47	16.09	4.000	No	Yes	2.00
6	0.41	7.50	0.02	0.81	1.70	12.75	7.43	20.18	4.000	No	Yes	2.00
7	0.48	7.50	0.02	0.78	1.70	12.75	10.16	22.91	4.000	No	Yes	2.00
8	0.54	7.77	0.03	0.76	1.70	13.21	11.55	24.76	4.000	No	Yes	2.00
9	0.60	8.93	0.03	0.73	1.70	15.18	11.36	26.54	4.000	No	Yes	2.00
10	0.66	10.81	0.03	0.70	1.70	18.38	10.34	28.72	4.000	No	No	2.00
11	0.74	15.55	0.04	0.66	1.70	26.43	6.88	33.32	4.000	No	No	2.00
12	0.79	18.40	0.04	0.64	1.70	31.28	5.78	37.06	4.000	No	No	2.00
13	0.86	22.69	0.04	0.61	1.70	38.57	5.12	43.69	4.000	No	No	2.00
14	0.94	25.46	0.05	0.58	1.70	43.28	6.12	49.40	4.000	No	No	2.00
15	0.99	27.16	0.05	0.57	1.70	46.17	6.36	52.53	4.000	No	No	2.00
16	1.05	29.84	0.05	0.56	1.70	50.73	6.47	57.20	4.000	No	No	2.00
17	1.13	34.13	0.06	0.58	1.70	58.02	3.42	61.44	4.000	No	No	2.00
18	1.20	39.13	0.06	0.57	1.70	66.52	3.39	69.91	4.000	No	No	2.00
19	1.25	45.39	0.06	0.55	1.70	77.16	3.09	80.26	4.000	No	No	2.00
20	1.33	51.82	0.07	0.55	1.70	88.09	2.81	90.91	4.000	No	No	2.00
21	1.40	56.47	0.07	0.54	1.70	96.00	2.62	98.62	4.000	No	No	2.00
22	1.46	50.03	0.07	0.52	1.70	85.05	4.57	89.62	4.000	No	No	2.00
23	1.51	56.78	0.08	0.52	1.70	96.53	3.90	100.42	4.000	No	No	2.00
24	1.57	52.00	0.08	0.51	1.70	88.40	5.29	93.69	4.000	No	No	2.00
25	1.64	57.09	0.09	0.51	1.70	97.05	4.79	101.85	4.000	No	No	2.00
26	1.73	60.49	0.09	0.50	1.70	102.83	5.19	108.03	4.000	No	No	2.00
27	1.79	61.65	0.09	0.49	1.70	104.81	5.77	110.57	4.000	No	No	2.00
28	1.85	64.24	0.10	0.48	1.70	109.21	5.95	115.16	4.000	No	No	2.00
29	1.91	67.28	0.10	0.47	1.70	114.38	6.52	120.90	4.000	No	No	2.00
30	1.99	69.60	0.11	0.45	1.70	118.32	8.26	126.58	4.000	No	No	2.00
31	2.04	69.96	0.11	0.44	1.70	118.93	10.54	129.47	4.000	No	No	2.00
32	2.10	68.89	0.11	0.41	1.70	117.11	14.31	131.42	4.000	No	No	2.00
33	2.18	68.84	0.12	0.39	1.70	117.03	18.25	135.28	4.000	No	No	2.00
34	2.24	68.84	0.12	0.38	1.70	117.03	20.92	137.94	4.000	No	No	2.00
35	2.33	68.80	0.13	0.36	1.70	116.96	27.39	144.35	4.000	No	No	2.00
36	2.39	70.32	0.13	0.35	1.70	119.54	30.31	149.86	4.000	No	No	2.00
37	2.44	72.91	0.13	0.34	1.70	123.95	31.76	155.71	4.000	No	No	2.00
38	2.53	76.66	0.14	0.33	1.70	130.32	33.54	163.86	4.000	No	No	2.00
39	2.58	77.64	0.14	0.33	1.70	131.99	34.12	166.11	4.000	No	No	2.00
40	2.64	78.45	0.15	0.33	1.70	133.37	35.03	168.40	4.000	No	No	2.00
41	2.72	78.80	0.15	0.33	1.70	133.96	35.72	169.68	4.000	No	No	2.00
42	2.76	78.62	0.15	0.33	1.70	133.65	35.57	169.23	4.000	No	No	2.00
43	2.85	77.73	0.16	0.33	1.70	132.14	34.37	166.51	4.000	No	No	2.00
44	2.90	76.48	0.16	0.33	1.70	130.02	34.18	164.20	4.000	No	No	2.00
45	2.97	74.69	0.17	0.33	1.70	126.97	34.15	161.12	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
46	3.03	72.10	0.17	0.33	1.70	122.57	34.53	157.10	4.000	No	No	2.00
47	3.09	70.49	0.17	0.34	1.70	119.83	34.33	154.16	4.000	No	No	2.00
48	3.18	69.42	0.18	0.34	1.70	118.01	34.31	152.32	4.000	No	No	2.00
49	3.22	70.49	0.18	0.34	1.70	119.83	33.34	153.17	4.000	No	No	2.00
50	3.32	69.78	0.19	0.34	1.70	118.63	33.75	152.38	4.000	No	No	2.00
51	3.36	70.49	0.19	0.34	1.70	119.83	33.61	153.44	4.000	No	No	2.00
52	3.42	72.28	0.20	0.34	1.70	122.88	33.33	156.21	4.000	No	No	2.00
53	3.51	76.93	0.20	0.34	1.70	130.78	31.81	162.59	4.000	No	No	2.00
54	3.57	80.59	0.20	0.34	1.70	137.00	30.65	167.66	4.000	No	No	2.00
55	3.62	82.02	0.21	0.33	1.70	139.43	30.58	170.02	4.000	No	No	2.00
56	3.70	83.27	0.21	0.33	1.70	141.56	31.08	172.64	4.000	No	No	2.00
57	3.76	82.11	0.22	0.33	1.69	138.74	32.16	170.89	4.000	No	No	2.00
58	3.81	81.48	0.22	0.33	1.68	136.98	32.49	169.48	4.000	No	No	2.00
59	3.88	80.23	0.22	0.33	1.67	134.13	32.81	166.94	4.000	No	No	2.00
60	3.95	77.90	0.23	0.33	1.66	129.47	33.63	163.10	4.000	No	No	2.00
61	4.01	77.01	0.23	0.33	1.65	127.47	33.78	161.24	4.000	No	No	2.00
62	4.09	76.38	0.24	0.33	1.64	125.61	33.90	159.51	4.000	No	No	2.00
63	4.14	77.05	0.24	0.33	1.64	126.29	33.54	159.83	4.000	No	No	2.00
64	4.21	77.37	0.25	0.33	1.63	126.18	33.27	159.45	4.000	No	No	2.00
65	4.30	77.11	0.25	0.35	1.66	128.34	25.94	154.28	4.000	No	No	2.00
66	4.35	76.57	0.25	0.37	1.70	130.09	20.88	150.96	4.000	No	No	2.00
67	4.40	75.85	0.26	0.36	1.67	126.66	23.68	150.34	4.000	No	No	2.00
68	4.50	75.41	0.26	0.35	1.63	123.10	27.43	150.52	4.000	No	No	2.00
69	4.54	75.05	0.27	0.35	1.62	121.79	28.42	150.20	4.000	No	No	2.00
70	4.61	74.34	0.27	0.35	1.60	119.26	30.37	149.63	4.000	No	No	2.00
71	4.69	74.38	0.28	0.34	1.58	117.75	32.43	150.18	4.000	No	No	2.00
72	4.73	74.38	0.28	0.34	1.58	117.32	32.86	150.18	4.000	No	No	2.00
73	4.80	74.43	0.28	0.34	1.56	116.45	33.74	150.19	4.000	No	No	2.00
74	4.86	75.59	0.29	0.34	1.55	117.46	34.15	151.62	4.000	No	No	2.00
75	4.93	76.75	0.29	0.34	1.54	118.41	34.50	152.91	4.000	No	No	2.00
76	5.00	78.18	0.30	0.34	1.54	120.01	34.24	154.25	4.000	No	No	2.00
77	5.05	80.04	0.30	0.34	1.53	122.43	33.49	155.92	4.000	No	No	2.00
78	5.14	82.47	0.30	0.34	1.52	125.32	32.87	158.19	4.000	No	No	2.00
79	5.19	84.43	0.31	0.34	1.51	127.77	32.52	160.29	4.000	No	No	2.00
80	5.26	88.54	0.31	0.33	1.50	133.21	31.79	165.01	4.000	No	No	2.00
81	5.34	93.01	0.32	0.33	1.49	138.57	32.16	170.74	4.000	No	No	2.00
82	5.39	95.78	0.32	0.33	1.48	141.68	32.83	174.51	4.000	No	No	2.00
83	5.45	100.34	0.32	0.32	1.47	147.22	33.17	180.39	4.000	No	No	2.00
84	5.52	104.18	0.33	0.32	1.45	151.43	34.19	185.61	4.000	No	No	2.00
85	5.59	106.50	0.33	0.32	1.44	153.62	35.03	188.66	4.000	No	No	2.00
86	5.68	109.18	0.34	0.31	1.43	156.09	35.81	191.91	4.000	No	No	2.00
87	5.71	109.72	0.34	0.31	1.43	156.45	35.99	192.43	4.000	No	No	2.00
88	5.78	110.16	0.35	0.31	1.42	156.22	36.49	192.71	4.000	No	No	2.00
89	5.84	110.88	0.35	0.31	1.41	156.72	36.25	192.98	4.000	No	No	2.00
90	5.93	110.70	0.36	0.31	1.41	155.85	35.89	191.74	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
91	5.99	109.99	0.36	0.31	1.40	154.47	35.76	190.24	4.000	No	No	2.00
92	6.04	109.63	0.36	0.32	1.40	153.69	35.58	189.27	4.000	No	No	2.00
93	6.13	109.18	0.37	0.32	1.40	152.62	34.84	187.46	4.000	No	No	2.00
94	6.17	109.18	0.37	0.32	1.40	152.52	34.11	186.63	4.000	No	No	2.00
95	6.27	109.09	0.38	0.32	1.40	152.43	31.95	184.38	4.000	No	No	2.00
96	6.30	109.00	0.38	0.33	1.40	152.29	31.24	183.52	4.000	No	No	2.00
97	6.37	109.00	0.38	0.33	1.40	152.55	29.21	181.76	4.000	No	No	2.00
98	6.46	109.45	0.39	0.34	1.40	153.40	26.96	180.36	4.000	No	No	2.00
99	6.52	109.63	0.39	0.34	1.40	153.96	25.17	179.13	4.000	No	No	2.00
100	6.57	108.91	0.40	0.35	1.41	153.17	24.01	177.18	4.000	No	No	2.00
101	6.66	106.05	0.40	0.35	1.41	149.42	22.58	171.99	4.000	No	No	2.00
102	6.71	102.39	0.41	0.36	1.41	144.29	22.31	166.60	4.000	No	No	2.00
103	6.77	99.44	0.41	0.36	1.41	140.31	21.55	161.86	4.000	No	No	2.00
104	6.83	94.62	0.41	0.37	1.41	133.61	21.17	154.78	4.000	No	No	2.00
105	6.92	91.04	0.42	0.37	1.41	128.65	20.40	149.05	4.000	No	No	2.00
106	6.97	89.52	0.42	0.38	1.41	126.52	19.90	146.41	4.000	No	No	2.00
107	7.04	89.08	0.43	0.38	1.41	125.91	18.88	144.79	4.000	No	No	2.00
108	7.09	90.51	0.43	0.38	1.41	127.83	18.15	145.98	4.000	No	No	2.00
109	7.16	93.90	0.43	0.44	1.48	139.09	8.25	147.34	4.000	No	No	2.00
110	7.22	99.00	0.44	0.45	1.49	147.23	6.87	154.09	4.000	No	No	2.00
111	7.31	101.94	0.44	0.44	1.47	149.98	7.37	157.35	4.000	No	No	2.00
112	7.35	102.66	0.45	0.44	1.47	150.55	7.41	157.96	4.000	No	No	2.00
113	7.46	98.73	0.45	0.44	1.46	143.95	7.68	151.64	4.000	No	No	2.00
114	7.52	98.10	0.46	0.45	1.46	142.81	7.42	150.23	4.000	No	No	2.00
115	7.56	100.07	0.46	0.45	1.46	145.76	6.98	152.74	4.000	No	No	2.00
116	7.63	100.69	0.46	0.45	1.45	146.35	6.68	153.03	4.000	No	No	2.00
117	7.68	100.43	0.47	0.45	1.45	145.46	6.78	152.25	4.000	No	No	2.00
118	7.76	99.71	0.47	0.45	1.44	143.65	6.97	150.62	4.000	No	No	2.00
119	7.82	98.73	0.47	0.45	1.44	141.77	7.02	148.79	4.000	No	No	2.00
120	7.90	97.39	0.48	0.46	1.43	139.68	6.68	146.36	4.000	No	No	2.00
121	7.95	95.33	0.48	0.46	1.43	136.69	6.53	143.21	4.000	No	No	2.00
122	8.02	92.29	0.49	0.46	1.43	132.30	6.32	138.62	4.000	No	No	2.00
123	8.08	88.45	0.49	0.47	1.43	126.63	6.34	132.97	4.000	No	No	2.00
124	8.16	81.66	0.50	0.47	1.43	116.64	6.63	123.27	4.000	No	No	2.00
125	8.20	80.23	0.50	0.47	1.43	114.58	6.52	121.10	4.000	No	No	2.00
126	8.27	77.91	0.50	0.48	1.43	111.20	6.36	117.56	4.000	No	No	2.00
127	8.35	75.68	0.51	0.48	1.42	107.63	6.48	114.11	4.000	No	No	2.00
128	8.41	74.25	0.51	0.48	1.42	105.15	6.77	111.92	4.000	No	No	2.00
129	8.49	72.46	0.51	0.47	1.41	101.82	7.47	109.29	4.000	No	No	2.00
130	8.54	71.66	0.52	0.47	1.40	100.26	7.90	108.16	4.000	No	No	2.00
131	8.61	69.24	0.52	0.46	1.39	96.07	9.00	105.07	4.000	No	No	2.00
132	8.66	68.44	0.52	0.46	1.38	94.41	9.70	104.11	4.000	No	No	2.00
133	8.73	66.74	0.53	0.45	1.37	91.41	10.77	102.18	4.000	No	No	2.00
134	8.80	64.87	0.53	0.45	1.36	88.29	11.74	100.03	4.000	No	No	2.00
135	8.87	62.01	0.54	0.45	1.35	83.94	12.91	96.85	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
136	8.94	60.22	0.54	0.44	1.34	80.84	14.65	95.49	4.000	No	No	2.00
137	8.99	59.77	0.54	0.43	1.33	79.68	16.09	95.76	4.000	No	No	2.00
138	9.07	59.95	0.55	0.43	1.32	79.39	17.02	96.41	4.000	No	No	2.00
139	9.12	61.47	0.55	0.43	1.32	81.19	16.55	97.74	4.000	No	No	2.00
140	9.20	63.70	0.56	0.43	1.31	83.73	16.39	100.12	4.000	No	No	2.00
141	9.26	66.38	0.56	0.43	1.31	87.04	15.66	102.70	4.000	No	No	2.00
142	9.35	73.44	0.57	0.43	1.31	96.39	12.72	109.11	4.000	No	No	2.00
143	9.40	78.45	0.57	0.44	1.31	103.01	11.22	114.24	4.000	No	No	2.00
144	9.48	87.29	0.57	0.45	1.32	114.97	8.67	123.64	4.000	No	No	2.00
145	9.53	92.38	0.58	0.46	1.32	121.99	7.32	129.30	4.000	No	No	2.00
146	9.59	95.24	0.58	0.47	1.32	125.96	6.33	132.29	4.000	No	No	2.00
147	9.65	96.05	0.58	0.47	1.32	127.06	5.83	132.89	4.000	No	No	2.00
148	9.71	94.97	0.59	0.47	1.32	125.21	5.94	131.15	4.000	No	No	2.00
149	9.78	93.46	0.59	0.47	1.31	122.82	6.10	128.91	4.000	No	No	2.00
150	9.87	88.90	0.60	0.46	1.30	115.78	7.26	123.05	4.000	No	No	2.00
151	9.93	86.31	0.60	0.46	1.30	111.83	8.02	119.85	4.000	No	No	2.00
152	9.99	83.45	0.60	0.45	1.29	107.55	8.92	116.47	4.000	No	No	2.00
153	10.07	79.25	0.61	0.45	1.28	101.40	10.33	111.74	4.000	No	No	2.00
154	10.13	77.19	0.61	0.44	1.27	98.21	11.39	109.60	4.000	No	No	2.00
155	10.17	76.03	0.62	0.46	1.28	97.52	9.11	106.62	4.000	No	No	2.00
156	10.24	76.03	0.62	0.52	1.32	100.29	3.71	103.99	4.000	No	No	2.00
157	10.32	76.03	0.62	0.49	1.30	98.49	5.84	104.34	4.000	No	No	2.00
158	10.37	76.57	0.63	0.48	1.29	98.58	6.51	105.10	4.000	No	No	2.00
159	10.45	79.25	0.63	0.48	1.28	101.20	7.13	108.33	4.000	No	No	2.00
160	10.50	79.96	0.64	0.47	1.27	101.70	7.44	109.13	4.000	No	No	2.00
161	10.58	74.60	0.64	0.46	1.26	94.10	9.18	103.29	4.000	No	No	2.00
162	10.63	84.97	0.64	0.46	1.26	107.04	7.74	114.78	4.000	No	No	2.00
163	10.71	90.15	0.65	0.46	1.25	112.90	7.81	120.70	4.000	No	No	2.00
164	10.77	94.17	0.65	0.46	1.25	117.45	7.87	125.32	4.000	No	No	2.00
165	10.83	98.55	0.66	0.45	1.24	122.29	8.05	130.34	4.000	No	No	2.00
166	10.90	103.91	0.66	0.45	1.24	128.49	7.74	136.24	4.000	No	No	2.00
167	10.97	110.88	0.66	0.45	1.23	136.74	7.21	143.95	4.000	No	No	2.00
168	11.03	116.42	0.67	0.45	1.23	143.28	6.84	150.12	4.000	No	No	2.00
169	11.12	128.57	0.67	0.45	1.23	157.69	6.17	163.86	4.000	No	No	2.00
170	11.16	134.02	0.68	0.45	1.22	164.12	5.90	170.02	4.000	No	No	2.00
171	11.23	140.90	0.68	0.45	1.22	172.13	5.47	177.60	4.000	No	No	2.00
172	11.31	146.62	0.68	0.46	1.22	178.81	5.00	183.81	4.000	No	No	2.00
173	11.37	150.19	0.69	0.46	1.22	182.86	4.73	187.60	4.000	No	No	2.00
174	11.42	152.96	0.69	0.46	1.22	185.99	4.51	190.51	4.000	No	No	2.00
175	11.50	156.09	0.70	0.46	1.21	189.34	4.25	193.60	4.000	No	No	2.00
176	11.55	157.52	0.70	0.46	1.21	190.74	4.15	194.89	4.000	No	No	2.00
177	11.66	158.05	0.71	0.46	1.21	190.60	4.07	194.67	4.000	No	No	2.00
178	11.71	158.23	0.71	0.46	1.20	190.51	4.04	194.55	4.000	No	No	2.00
179	11.77	157.61	0.71	0.46	1.20	189.19	4.20	193.39	4.000	No	No	2.00
180	11.82	156.53	0.72	0.46	1.20	187.25	4.43	191.68	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
181	11.88	155.28	0.72	0.46	1.19	185.05	4.79	189.84	4.000	No	No	2.00
182	11.96	151.98	0.73	0.45	1.18	180.09	5.47	185.56	4.000	No	No	2.00
183	12.05	148.14	0.73	0.44	1.18	174.36	6.47	180.82	4.000	No	No	2.00
184	12.10	145.01	0.73	0.43	1.17	169.97	7.20	177.17	4.000	No	No	2.00
185	12.16	142.24	0.74	0.43	1.17	165.99	8.00	173.99	4.000	No	No	2.00
186	12.21	139.92	0.74	0.42	1.16	162.67	8.74	171.41	4.000	No	No	2.00
187	12.30	136.70	0.75	0.41	1.15	157.72	10.50	168.22	4.000	No	No	2.00
188	12.35	135.63	0.75	0.41	1.15	156.06	11.05	167.11	4.000	No	No	2.00
189	12.41	132.68	0.75	0.41	1.15	152.61	10.51	163.12	4.000	No	No	2.00
190	12.48	131.43	0.76	0.42	1.15	150.97	10.22	161.20	4.000	No	No	2.00
191	12.53	130.36	0.76	0.41	1.14	149.08	11.43	160.50	4.000	No	No	2.00
192	12.61	128.84	0.77	0.40	1.14	146.48	13.13	159.61	4.000	No	No	2.00
193	12.68	119.28	0.77	0.39	1.13	134.83	15.97	150.80	4.000	No	No	2.00
194	12.75	122.94	0.78	0.39	1.13	138.63	15.82	154.45	4.000	No	No	2.00
195	12.80	126.60	0.78	0.39	1.13	142.54	15.39	157.93	4.000	No	No	2.00
196	12.88	136.79	0.78	0.39	1.12	153.70	14.15	167.85	4.000	No	No	2.00
197	12.94	147.87	0.79	0.39	1.12	165.80	13.36	179.17	4.000	No	No	2.00
198	13.00	158.68	0.79	0.39	1.12	177.66	12.58	190.23	4.000	No	No	2.00
199	13.07	172.17	0.80	0.39	1.12	192.57	11.16	203.73	4.000	No	No	2.00
200	13.14	186.47	0.80	0.40	1.12	208.51	9.63	218.14	4.000	No	No	2.00
201	13.24	205.94	0.81	0.41	1.12	230.32	7.54	237.86	4.000	No	No	2.00
202	13.29	214.25	0.81	0.42	1.12	239.63	6.66	246.29	4.000	No	No	2.00
203	13.33	220.95	0.81	0.42	1.12	247.14	6.02	253.15	4.000	No	No	2.00
204	13.39	228.37	0.82	0.43	1.12	255.37	5.29	260.66	4.000	No	No	2.00
205	13.46	233.82	0.82	0.44	1.12	261.33	4.63	265.96	4.000	No	No	2.00
206	13.52	235.78	0.82	0.44	1.12	263.33	4.17	267.49	4.000	No	No	2.00
207	13.59	236.32	0.83	0.45	1.11	263.48	3.97	267.44	4.000	No	No	2.00
208	13.68	235.52	0.83	0.45	1.11	261.86	3.90	265.77	4.000	No	No	2.00
209	13.72	234.35	0.84	0.45	1.11	260.19	3.91	264.09	4.000	No	No	2.00
210	13.78	231.76	0.84	0.45	1.11	256.61	4.14	260.75	4.000	No	No	2.00
211	13.88	225.42	0.85	0.44	1.10	248.43	4.78	253.22	4.000	No	No	2.00
212	13.93	219.17	0.85	0.43	1.10	240.78	5.42	246.20	4.000	No	No	2.00
213	13.99	210.05	0.85	0.42	1.09	229.94	6.34	236.28	4.000	No	No	2.00
214	14.07	202.99	0.86	0.42	1.09	221.27	7.32	228.60	4.000	No	No	2.00
215	14.12	198.35	0.86	0.41	1.09	215.72	7.90	223.62	4.000	No	No	2.00
216	14.19	193.52	0.87	0.41	1.08	209.77	8.60	218.38	4.000	No	No	2.00
217	14.26	197.99	0.87	0.41	1.08	214.09	8.68	222.78	4.000	No	No	2.00
218	14.31	193.70	0.88	0.40	1.08	208.99	9.29	218.28	4.000	No	No	2.00
219	14.40	197.63	0.88	0.40	1.08	212.65	9.23	221.88	4.000	No	No	2.00
220	14.45	199.96	0.89	0.40	1.07	214.77	9.30	224.07	4.000	No	No	2.00
221	14.50	202.19	0.89	0.40	1.07	216.80	9.39	226.19	4.000	No	No	2.00
222	14.57	203.98	0.89	0.40	1.07	218.19	9.75	227.94	4.000	No	No	2.00
223	14.64	206.57	0.90	0.39	1.07	220.31	10.27	230.58	4.000	No	No	2.00
224	14.72	204.42	0.90	0.39	1.06	217.37	11.01	228.39	4.000	No	No	2.00
225	14.76	201.83	0.91	0.38	1.06	214.31	11.34	225.65	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
226	14.86	190.13	0.91	0.38	1.06	201.24	12.55	213.79	4.000	No	No	2.00
227	14.90	183.07	0.91	0.38	1.06	193.46	13.34	206.80	4.000	No	No	2.00
228	15.01	160.64	0.92	0.37	1.05	169.07	16.05	185.11	4.000	No	No	2.00
229	15.05	153.50	0.92	0.37	1.05	161.33	17.14	178.47	4.000	No	No	2.00
230	15.14	144.12	0.93	0.40	1.05	151.71	12.75	164.46	4.000	No	No	2.00
231	15.16	141.88	0.93	0.41	1.05	149.46	11.20	160.67	4.000	No	No	2.00
232	15.26	138.22	0.94	0.40	1.05	145.14	12.20	157.34	4.000	No	No	2.00
233	15.30	137.15	0.94	0.40	1.05	143.78	12.80	156.58	4.000	No	No	2.00
234	15.37	135.09	0.94	0.39	1.05	141.27	13.72	155.00	4.000	No	No	2.00
235	15.44	118.29	0.95	0.39	1.04	123.39	16.72	140.11	4.000	No	No	2.00
236	15.51	116.51	0.95	0.39	1.04	121.35	16.51	137.86	4.000	No	No	2.00
237	15.56	113.74	0.96	0.39	1.04	118.34	16.44	134.77	4.000	No	No	2.00
238	15.62	109.81	0.96	0.39	1.04	114.09	16.65	130.74	4.000	No	No	2.00
239	15.70	106.23	0.97	0.39	1.04	110.10	17.71	127.81	4.000	No	No	2.00
240	15.76	104.71	0.97	0.39	1.03	108.33	18.73	127.06	4.000	No	No	2.00
241	15.82	101.23	0.97	0.38	1.03	104.50	21.32	125.82	4.000	No	No	2.00
242	15.88	94.71	0.98	0.37	1.03	97.53	26.00	123.53	4.000	No	No	2.00
243	15.96	84.88	0.98	0.37	1.03	87.23	29.12	116.35	4.000	No	No	2.00
244	16.01	78.36	0.99	0.37	1.03	80.46	30.83	111.29	4.000	No	No	2.00
245	16.09	70.94	0.99	0.37	1.03	72.73	32.73	105.46	4.000	No	No	2.00
246	16.15	68.53	0.99	0.38	1.02	70.16	32.45	102.61	4.000	No	No	2.00
247	16.23	81.31	1.00	0.38	1.02	83.13	25.14	108.27	4.000	No	No	2.00
248	16.29	96.67	1.00	0.39	1.02	98.73	19.50	118.22	4.000	No	No	2.00
249	16.35	119.99	1.01	0.40	1.02	122.41	14.42	136.83	4.000	No	No	2.00
250	16.42	134.56	1.01	0.40	1.02	137.04	12.36	149.40	4.000	No	No	2.00
251	16.50	143.58	1.02	0.41	1.02	145.98	11.16	157.13	4.000	No	No	2.00
252	16.55	150.37	1.02	0.41	1.02	152.70	10.31	163.01	4.000	No	No	2.00
253	16.64	163.15	1.02	0.41	1.01	165.29	9.90	175.19	4.000	No	No	2.00
254	16.70	172.71	1.03	0.41	1.01	174.67	10.03	184.70	4.000	No	No	2.00
255	16.75	179.14	1.03	0.40	1.01	180.94	10.04	190.98	4.000	No	No	2.00
256	16.80	188.70	1.04	0.40	1.01	190.34	9.86	200.20	4.000	No	No	2.00
257	16.89	201.74	1.04	0.39	1.01	202.99	10.50	213.49	4.000	No	No	2.00
258	16.93	211.04	1.04	0.39	1.01	212.15	10.48	222.62	4.000	No	No	2.00
259	17.00	227.39	1.05	0.38	1.00	228.17	10.65	238.83	4.000	No	No	2.00
260	17.07	236.59	1.05	0.38	1.00	236.99	11.22	248.22	4.000	No	No	2.00
261	17.14	242.84	1.06	0.37	1.00	242.87	12.07	254.93	4.000	No	No	2.00
262	17.21	252.22	1.06	0.37	1.00	251.83	12.69	264.52	4.000	No	No	2.00
263	17.27	256.96	1.07	0.36	1.00	256.24	13.34	269.58	4.000	No	No	2.00
264	17.34	263.21	1.07	0.36	1.00	262.06	13.73	275.79	4.000	No	No	2.00
265	17.39	264.46	1.07	0.35	0.99	263.01	14.40	277.41	4.000	No	No	2.00
266	17.48	263.03	1.08	0.36	0.99	261.05	14.06	275.11	4.000	No	No	2.00
267	17.53	262.99	1.08	0.36	0.99	260.69	13.07	273.76	4.000	No	No	2.00
268	17.62	262.99	1.09	0.36	0.99	260.17	12.88	273.05	4.000	No	No	2.00
269	17.68	262.95	1.09	0.36	0.99	259.76	13.10	272.86	4.000	No	No	2.00
270	17.73	261.34	1.10	0.36	0.99	257.90	13.11	271.01	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
271	17.80	251.24	1.10	0.36	0.99	247.58	13.62	261.20	4.000	No	No	2.00
272	17.86	251.64	1.11	0.36	0.98	247.64	13.12	260.75	4.000	No	No	2.00
273	17.92	252.05	1.11	0.37	0.98	247.62	12.44	260.06	4.000	No	No	2.00
274	18.00	256.69	1.12	0.37	0.98	251.69	11.48	263.17	4.000	No	No	2.00
275	18.05	256.16	1.12	0.37	0.98	250.84	11.20	262.04	4.000	No	No	2.00
276	18.15	252.05	1.13	0.38	0.98	246.24	11.13	257.37	4.000	No	No	2.00
277	18.20	250.08	1.13	0.38	0.98	244.04	10.85	254.89	4.000	No	No	2.00
278	18.25	248.38	1.13	0.38	0.97	242.07	10.51	252.58	4.000	No	No	2.00
279	18.32	245.52	1.14	0.39	0.97	238.73	9.50	248.22	4.000	No	No	2.00
280	18.39	243.38	1.14	0.40	0.97	236.15	8.73	244.88	4.000	No	No	2.00
281	18.46	239.00	1.15	0.40	0.97	231.52	8.55	240.06	4.000	No	No	2.00
282	18.51	235.43	1.15	0.40	0.97	227.75	8.39	236.14	4.000	No	No	2.00
283	18.60	228.90	1.16	0.41	0.96	220.81	7.71	228.52	4.000	No	No	2.00
284	18.64	225.51	1.16	0.41	0.96	217.27	7.36	224.64	4.000	No	No	2.00
285	18.71	218.36	1.16	0.42	0.96	209.88	6.77	216.65	4.000	No	No	2.00
286	18.77	208.89	1.17	0.43	0.96	200.33	6.38	206.72	4.000	No	No	2.00
287	18.84	204.87	1.17	0.44	0.96	196.06	5.90	201.97	4.000	No	No	2.00
288	18.93	195.94	1.18	0.44	0.95	186.92	5.39	192.31	4.000	No	No	2.00
289	18.98	188.52	1.18	0.45	0.95	179.60	5.50	185.09	4.000	No	No	2.00
290	19.03	182.98	1.18	0.45	0.95	174.08	5.55	179.62	4.000	No	No	2.00
291	19.09	171.81	1.19	0.44	0.95	163.27	6.14	169.40	4.000	No	No	2.00
292	19.19	153.59	1.19	0.44	0.95	145.76	7.57	153.33	4.000	No	No	2.00
293	19.23	143.58	1.20	0.43	0.95	136.20	8.52	144.72	4.000	No	No	2.00
294	19.29	127.76	1.20	0.43	0.95	121.13	10.44	131.57	4.000	No	No	2.00
295	19.37	110.52	1.20	0.41	0.95	104.78	14.01	118.79	4.000	No	No	2.00
296	19.42	98.82	1.21	0.40	0.95	93.71	17.70	111.41	4.000	No	No	2.00
297	19.53	77.37	1.21	0.39	0.95	73.29	25.53	98.82	4.000	No	No	2.00
298	19.59	67.46	1.22	0.39	0.95	63.82	29.40	93.22	4.000	No	No	2.00
299	19.63	59.42	1.22	0.40	0.94	56.14	33.17	89.31	4.000	No	No	2.00
300	19.73	52.89	1.23	0.41	0.94	49.79	34.32	84.11	4.000	No	No	2.00
301	19.75	55.04	1.23	0.41	0.94	51.78	32.13	83.91	4.000	No	No	2.00
302	19.85	56.47	1.23	0.41	0.94	52.99	29.61	82.59	4.000	No	No	2.00
303	19.90	56.29	1.24	0.41	0.94	52.77	30.15	82.91	4.000	No	No	2.00
304	19.97	52.62	1.24	0.41	0.94	49.24	32.53	81.78	4.000	No	No	2.00
305	20.03	48.34	1.25	0.44	0.93	44.97	26.65	71.61	4.000	No	No	2.00
306	20.08	44.14	1.25	0.47	0.92	40.82	22.41	63.23	4.000	No	No	2.00
307	20.17	37.61	1.25	0.47	0.92	34.71	28.93	63.64	4.000	No	Yes	2.00
308	20.22	36.45	1.26	0.47	0.92	33.62	31.72	65.35	4.000	No	Yes	2.00
309	20.28	35.38	1.26	0.47	0.92	32.62	34.85	67.46	4.000	No	Yes	2.00
310	20.35	35.69	1.26	0.46	0.92	32.88	36.42	69.30	4.000	No	Yes	2.00
311	20.41	34.22	1.27	0.46	0.92	31.50	40.29	71.79	4.000	No	Yes	2.00
312	20.48	36.01	1.27	0.45	0.92	33.15	40.60	73.76	4.000	No	Yes	2.00
313	20.54	36.81	1.28	0.44	0.92	33.87	41.06	74.93	4.000	No	Yes	2.00
314	20.61	38.51	1.28	0.44	0.92	35.41	39.71	75.12	4.000	No	Yes	2.00
315	20.68	40.65	1.28	0.44	0.92	37.34	37.47	74.82	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
316	20.74	45.75	1.29	0.43	0.92	42.00	32.55	74.56	4.000	No	No	2.00
317	20.83	57.63	1.29	0.43	0.92	52.82	23.68	76.51	4.000	No	No	2.00
318	20.87	64.06	1.30	0.44	0.92	58.64	20.28	78.92	4.000	No	No	2.00
319	20.94	77.11	1.30	0.44	0.91	70.43	15.43	85.86	4.000	No	No	2.00
320	21.02	86.40	1.31	0.44	0.91	78.75	13.20	91.95	4.000	No	No	2.00
321	21.08	93.55	1.31	0.44	0.91	85.14	11.91	97.04	4.000	No	No	2.00
322	21.14	99.98	1.31	0.44	0.91	90.83	10.83	101.66	4.000	No	No	2.00
323	21.19	110.34	1.32	0.45	0.91	100.04	9.24	109.27	4.000	No	No	2.00
324	21.28	121.15	1.32	0.46	0.90	109.48	7.69	117.17	4.000	No	No	2.00
325	21.33	126.25	1.32	0.46	0.90	113.87	7.00	120.88	4.000	No	No	2.00
326	21.41	136.07	1.33	0.46	0.90	122.46	6.29	128.74	4.000	No	No	2.00
327	21.47	143.40	1.33	0.46	0.90	128.90	6.01	134.91	4.000	No	No	2.00
328	21.53	146.62	1.34	0.46	0.90	131.66	5.97	137.63	4.000	No	No	2.00
329	21.61	144.03	1.34	0.46	0.90	129.19	6.25	135.44	4.000	No	No	2.00
330	21.68	134.47	1.35	0.45	0.90	120.51	6.98	127.49	4.000	No	No	2.00
331	21.73	125.98	1.35	0.45	0.90	112.82	7.61	120.42	4.000	No	No	2.00
332	21.80	112.93	1.35	0.45	0.89	101.05	8.88	109.93	4.000	No	No	2.00
333	21.85	105.25	1.36	0.45	0.89	94.12	9.84	103.96	4.000	No	No	2.00
334	21.93	95.69	1.36	0.44	0.89	85.52	11.45	96.98	4.000	No	No	2.00
335	22.02	84.25	1.37	0.44	0.89	75.28	14.21	89.49	4.000	No	No	2.00
336	22.05	77.82	1.37	0.44	0.89	69.53	16.07	85.60	4.000	No	No	2.00
337	22.12	68.08	1.37	0.43	0.89	60.78	19.39	80.17	4.000	No	No	2.00
338	22.19	58.43	1.38	0.44	0.89	52.07	23.05	75.11	4.000	No	No	2.00
339	22.27	50.03	1.38	0.44	0.89	44.47	27.60	72.07	4.000	No	No	2.00
340	22.32	46.64	1.39	0.44	0.89	41.38	29.70	71.09	4.000	No	No	2.00
341	22.39	45.92	1.39	0.45	0.89	40.64	29.03	69.67	4.000	No	No	2.00
342	22.46	46.73	1.39	0.45	0.88	41.25	27.11	68.36	4.000	No	No	2.00
343	22.52	46.46	1.40	0.45	0.88	40.94	26.76	67.70	4.000	No	No	2.00
344	22.59	47.00	1.40	0.46	0.88	41.34	25.94	67.28	4.000	No	No	2.00
345	22.66	47.98	1.41	0.46	0.88	42.12	24.64	66.76	4.000	No	No	2.00
346	22.71	48.78	1.41	0.47	0.87	42.61	20.75	63.36	4.000	No	No	2.00
347	22.77	50.21	1.41	0.53	0.86	43.09	10.82	53.91	4.000	No	No	2.00
348	22.86	50.75	1.42	0.52	0.86	43.52	11.09	54.61	4.000	No	No	2.00
349	22.91	50.84	1.42	0.52	0.86	43.65	12.07	55.72	4.000	No	No	2.00
350	22.98	50.75	1.43	0.50	0.86	43.71	14.45	58.16	4.000	No	No	2.00
351	23.05	48.87	1.43	0.49	0.86	42.21	17.89	60.10	4.000	No	No	2.00
352	23.10	48.25	1.43	0.48	0.86	41.73	19.68	61.41	4.000	No	No	2.00
353	23.18	46.82	1.44	0.47	0.87	40.51	22.15	62.66	4.000	No	No	2.00
354	23.25	45.12	1.44	0.47	0.87	39.06	25.03	64.09	4.000	No	No	2.00
355	23.30	42.17	1.45	0.46	0.87	36.51	28.89	65.40	4.000	No	Yes	2.00
356	23.37	39.76	1.45	0.46	0.86	34.37	31.58	65.95	4.000	No	Yes	2.00
357	23.43	38.51	1.45	0.46	0.86	33.23	32.74	65.98	4.000	No	Yes	2.00
358	23.49	38.15	1.46	0.47	0.86	32.86	32.81	65.68	4.000	No	Yes	2.00
359	23.59	36.99	1.46	0.47	0.86	31.78	33.56	65.34	4.000	No	Yes	2.00
360	23.63	36.54	1.46	0.47	0.86	31.36	34.15	65.51	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
361	23.70	35.29	1.47	0.47	0.86	30.23	35.80	66.04	4.000	No	Yes	2.00
362	23.79	30.47	1.47	0.49	0.85	25.91	39.60	65.51	4.000	No	Yes	2.00
363	23.83	28.50	1.48	0.50	0.85	24.14	40.95	65.08	4.000	No	Yes	2.00
364	23.89	26.36	1.48	0.51	0.84	22.20	42.07	64.27	4.000	No	Yes	2.00
365	23.95	28.28	1.48	0.51	0.84	23.77	36.00	59.77	4.000	No	Yes	2.00
366	24.02	23.68	1.49	0.54	0.83	19.71	41.14	60.85	4.000	No	Yes	2.00
367	24.08	28.05	1.49	0.52	0.84	23.42	32.75	56.17	4.000	No	Yes	2.00
368	24.16	40.74	1.50	0.50	0.84	34.28	21.72	56.00	4.000	No	No	2.00
369	24.22	48.43	1.50	0.48	0.84	40.90	18.83	59.73	4.000	No	No	2.00
370	24.28	48.96	1.50	0.47	0.85	41.54	22.06	63.60	4.000	No	No	2.00
371	24.35	46.55	1.51	0.46	0.85	39.56	26.07	65.63	4.000	No	No	2.00
372	24.42	42.80	1.51	0.46	0.85	36.35	30.22	66.57	4.000	No	Yes	2.00
373	24.48	39.13	1.52	0.46	0.85	33.18	34.81	68.00	4.000	No	Yes	2.00
374	24.57	39.13	1.52	0.46	0.85	33.16	35.83	68.99	4.000	No	Yes	2.00
375	24.62	39.13	1.52	0.46	0.85	33.12	35.65	68.78	4.000	No	Yes	2.00
376	24.68	41.19	1.53	0.45	0.85	34.85	33.32	68.17	4.000	No	Yes	2.00
377	24.74	47.00	1.53	0.45	0.85	39.78	28.17	67.95	4.000	No	Yes	2.00
378	24.81	54.23	1.54	0.45	0.85	45.89	23.39	69.28	4.000	No	No	2.00
379	24.88	58.07	1.54	0.45	0.84	49.06	21.11	70.17	4.000	No	No	2.00
380	24.94	57.36	1.54	0.45	0.84	48.43	21.69	70.12	4.000	No	No	2.00
381	25.02	53.16	1.55	0.44	0.84	44.89	25.31	70.20	4.000	No	No	2.00
382	25.07	48.16	1.55	0.44	0.84	40.61	28.99	69.60	4.000	No	Yes	2.00
383	25.14	40.03	1.56	0.45	0.84	33.59	35.19	68.78	4.000	No	Yes	2.00
384	25.22	32.25	1.56	0.48	0.83	26.80	41.85	68.65	4.000	No	Yes	2.00
385	25.27	28.86	1.56	0.49	0.83	23.83	44.89	68.72	4.000	No	Yes	2.00
386	25.36	25.28	1.57	0.56	0.80	20.30	31.19	51.49	4.000	No	Yes	2.00
387	25.40	24.12	1.57	0.57	0.80	19.24	30.00	49.24	4.000	No	Yes	2.00
388	25.47	27.16	1.58	0.55	0.80	21.84	29.20	51.04	4.000	No	Yes	2.00
389	25.57	39.22	1.58	0.52	0.81	31.80	18.68	50.48	4.000	No	Yes	2.00
390	25.61	46.28	1.58	0.51	0.81	37.60	15.21	52.81	4.000	No	No	2.00
391	25.66	40.83	1.59	0.52	0.81	33.13	18.62	51.75	4.000	No	No	2.00
392	25.73	59.60	1.59	0.50	0.82	48.57	11.79	60.36	4.000	No	No	2.00
393	25.79	61.75	1.59	0.50	0.81	50.29	11.36	61.65	4.000	No	No	2.00
394	25.88	61.12	1.60	0.50	0.81	49.67	11.40	61.07	4.000	No	No	2.00
395	25.93	59.51	1.60	0.50	0.81	48.30	11.80	60.10	4.000	No	No	2.00
396	25.98	55.58	1.61	0.50	0.81	45.08	13.24	58.33	4.000	No	No	2.00
397	26.07	47.81	1.61	0.50	0.81	38.80	17.63	56.43	4.000	No	No	2.00
398	26.13	43.97	1.61	0.49	0.81	35.68	20.67	56.34	4.000	No	No	2.00
399	26.20	32.89	1.62	0.50	0.81	26.53	30.97	57.50	4.000	No	Yes	2.00
400	26.27	28.51	1.62	0.52	0.80	22.84	36.40	59.24	4.000	No	Yes	2.00
401	26.33	26.37	1.63	0.53	0.80	21.02	39.02	60.04	4.000	No	Yes	2.00
402	26.38	22.17	1.63	0.55	0.79	17.46	45.43	62.89	4.000	No	Yes	2.00
403	26.47	20.92	1.63	0.57	0.78	16.31	43.89	60.20	4.000	No	Yes	2.00
404	26.52	19.93	1.64	0.59	0.77	15.42	43.26	58.68	4.000	No	Yes	2.00
405	26.58	19.67	1.64	0.60	0.77	15.14	41.05	56.19	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
406	26.66	19.58	1.65	0.60	0.77	15.01	40.02	55.03	4.000	No	Yes	2.00
407	26.71	19.49	1.65	0.60	0.77	14.94	41.19	56.13	4.000	No	Yes	2.00
408	26.80	19.40	1.65	0.59	0.77	14.89	45.24	60.13	4.000	No	Yes	2.00
409	26.87	19.22	1.66	0.59	0.77	14.74	46.69	61.43	4.000	No	Yes	2.00
410	26.91	19.12	1.66	0.59	0.77	14.65	47.06	61.71	4.000	No	Yes	2.00
411	27.00	19.04	1.67	0.60	0.76	14.51	44.47	58.98	4.000	No	Yes	2.00
412	27.06	17.96	1.67	0.61	0.76	13.57	44.55	58.11	4.000	No	Yes	2.00
413	27.10	16.90	1.67	0.63	0.75	12.66	46.05	58.71	4.000	No	Yes	2.00
414	27.17	15.65	1.68	0.65	0.74	11.60	48.97	60.58	4.000	No	Yes	2.00
415	27.26	16.00	1.68	0.65	0.74	11.86	47.24	59.10	4.000	No	Yes	2.00
416	27.30	16.45	1.68	0.64	0.74	12.21	46.15	58.37	4.000	No	Yes	2.00
417	27.39	18.59	1.69	0.61	0.75	13.97	43.17	57.14	4.000	No	Yes	2.00
418	27.44	20.74	1.69	0.59	0.76	15.74	40.36	56.11	4.000	No	Yes	2.00
419	27.51	24.58	1.70	0.55	0.77	18.95	37.53	56.48	4.000	No	Yes	2.00
420	27.60	27.17	1.70	0.52	0.78	21.18	39.06	60.24	4.000	No	Yes	2.00
421	27.64	26.72	1.70	0.55	0.77	20.59	32.52	53.11	4.000	No	Yes	2.00
422	27.70	23.24	1.71	0.63	0.74	17.21	21.02	38.23	4.000	No	Yes	2.00
423	27.80	19.67	1.71	0.68	0.72	14.15	19.11	33.26	4.000	No	Yes	2.00
424	27.84	18.50	1.71	0.68	0.72	13.31	23.05	36.36	4.000	No	Yes	2.00
425	27.89	16.63	1.72	0.68	0.72	11.93	30.78	42.72	4.000	No	Yes	2.00
426	27.95	15.73	1.72	0.68	0.72	11.30	38.28	49.58	4.000	No	Yes	2.00
427	28.03	17.07	1.73	0.66	0.73	12.38	36.75	49.12	4.000	No	Yes	2.00
428	28.09	17.52	1.73	0.65	0.73	12.72	35.77	48.49	4.000	No	Yes	2.00
429	28.16	26.46	1.73	0.59	0.75	19.77	22.54	42.31	4.000	No	Yes	2.00
430	28.22	34.05	1.74	0.56	0.76	25.78	17.54	43.32	4.000	No	Yes	2.00
431	28.32	54.87	1.74	0.52	0.77	42.29	11.21	53.50	4.000	No	No	2.00
432	28.37	60.94	1.75	0.51	0.77	47.12	10.40	57.52	4.000	No	No	2.00
433	28.43	66.48	1.75	0.50	0.78	51.58	10.04	61.62	4.000	No	No	2.00
434	28.48	69.61	1.75	0.50	0.78	54.17	10.22	64.39	4.000	No	No	2.00
435	28.55	71.93	1.76	0.49	0.78	56.14	10.71	66.85	4.000	No	No	2.00
436	28.61	72.11	1.76	0.48	0.78	56.52	11.95	68.48	4.000	No	No	2.00
437	28.68	69.25	1.76	0.46	0.79	54.65	14.94	69.60	4.000	No	No	2.00
438	28.77	64.43	1.77	0.45	0.79	51.16	19.22	70.38	4.000	No	No	2.00
439	28.81	58.00	1.77	0.44	0.80	46.11	23.07	69.17	4.000	No	No	2.00
440	28.88	48.26	1.78	0.44	0.80	38.39	31.44	69.83	4.000	No	Yes	2.00
441	28.95	41.38	1.78	0.44	0.80	32.92	41.42	74.34	4.000	No	Yes	2.00
442	29.01	36.91	1.78	0.44	0.79	29.32	48.94	78.27	4.000	No	Yes	2.00
443	29.07	35.12	1.79	0.45	0.79	27.79	48.91	76.70	4.000	No	Yes	2.00
444	29.14	34.32	1.79	0.46	0.79	26.94	47.50	74.44	4.000	No	Yes	2.00
445	29.21	30.92	1.80	0.48	0.78	24.00	48.29	72.29	4.000	No	Yes	2.00
446	29.30	34.99	1.80	0.48	0.78	27.14	38.51	65.65	4.000	No	Yes	2.00
447	29.36	27.44	1.81	0.50	0.76	20.96	48.36	69.31	4.000	No	Yes	2.00
448	29.41	35.66	1.81	0.48	0.77	27.50	34.66	62.16	4.000	No	Yes	2.00
449	29.47	55.58	1.81	0.47	0.78	43.13	18.93	62.06	4.000	No	No	2.00
450	29.54	89.00	1.82	0.48	0.77	68.77	9.26	78.03	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
451	29.60	104.63	1.82	0.48	0.77	80.57	7.15	87.71	4.000	No	No	2.00
452	29.68	110.62	1.83	0.48	0.77	85.04	6.62	91.66	4.000	No	No	2.00
453	29.76	110.08	1.83	0.49	0.76	84.08	5.89	89.97	4.000	No	No	2.00
454	29.80	108.30	1.83	0.50	0.76	82.42	5.63	88.05	4.000	No	No	2.00
455	29.87	104.10	1.84	0.50	0.76	79.21	6.07	85.28	4.000	No	No	2.00
456	29.95	101.51	1.84	0.49	0.76	77.17	6.35	83.53	4.000	No	No	2.00
457	30.00	99.45	1.84	0.49	0.76	75.62	6.69	82.32	4.000	No	No	2.00
458	30.05	98.47	1.85	0.49	0.76	74.98	7.12	82.10	4.000	No	No	2.00
459	30.14	97.58	1.85	0.48	0.76	74.50	7.88	82.38	4.000	No	No	2.00
460	30.19	97.93	1.86	0.48	0.76	74.86	8.19	83.05	4.000	No	No	2.00
461	30.25	100.35	1.86	0.47	0.77	76.83	8.36	85.19	4.000	No	No	2.00
462	30.32	103.74	1.86	0.47	0.77	79.55	8.50	88.05	4.000	No	No	2.00
463	30.38	105.17	1.87	0.47	0.77	80.68	8.58	89.26	4.000	No	No	2.00
464	30.45	107.23	1.87	0.47	0.77	82.15	8.34	90.48	4.000	No	No	2.00
465	30.53	107.23	1.88	0.47	0.76	81.90	8.04	89.94	4.000	No	No	2.00
466	30.59	106.33	1.88	0.47	0.76	81.06	7.98	89.05	4.000	No	No	2.00
467	30.68	102.40	1.89	0.46	0.76	78.30	9.14	87.44	4.000	No	No	2.00
468	30.74	99.18	1.89	0.46	0.76	75.73	9.39	85.12	4.000	No	No	2.00
469	30.79	95.61	1.89	0.48	0.76	72.40	8.47	80.86	4.000	No	No	2.00
470	30.85	88.91	1.90	0.49	0.75	66.86	8.28	75.14	4.000	No	No	2.00
471	30.92	83.37	1.90	0.47	0.76	63.39	11.36	74.75	4.000	No	No	2.00
472	30.98	77.56	1.91	0.45	0.77	59.65	15.62	75.26	4.000	No	No	2.00
473	31.06	60.85	1.91	0.43	0.77	47.14	25.07	72.21	4.000	No	No	2.00
474	31.12	60.94	1.91	0.43	0.78	47.32	26.42	73.73	4.000	No	Yes	2.00
475	31.18	61.03	1.92	0.43	0.78	47.35	26.41	73.77	4.000	No	Yes	2.00
476	31.27	66.30	1.92	0.43	0.77	51.33	23.17	74.50	4.000	No	No	2.00
477	31.32	73.27	1.93	0.43	0.77	56.68	20.31	76.98	4.000	No	No	2.00
478	31.37	78.54	1.93	0.43	0.77	60.72	18.62	79.34	4.000	No	No	2.00
479	31.45	85.42	1.93	0.43	0.77	65.96	16.80	82.76	4.000	No	No	2.00
480	31.51	87.03	1.94	0.43	0.77	66.95	15.59	82.54	4.000	No	No	2.00
481	31.56	89.53	1.94	0.44	0.76	68.38	13.47	81.85	4.000	No	No	2.00
482	31.64	92.21	1.95	0.45	0.76	70.06	12.08	82.14	4.000	No	No	2.00
483	31.71	92.57	1.95	0.45	0.76	70.25	12.01	82.26	4.000	No	No	2.00
484	31.81	91.50	1.96	0.45	0.76	69.37	12.28	81.65	4.000	No	No	2.00
485	31.84	90.34	1.96	0.45	0.76	68.54	12.73	81.27	4.000	No	No	2.00
486	31.90	88.28	1.96	0.44	0.76	67.05	13.54	80.60	4.000	No	No	2.00
487	31.96	86.94	1.97	0.44	0.76	66.06	14.08	80.14	4.000	No	No	2.00
488	32.05	85.16	1.97	0.44	0.76	64.65	14.55	79.20	4.000	No	No	2.00
489	32.10	84.62	1.98	0.44	0.76	64.19	14.64	78.83	4.000	No	No	2.00
490	32.15	83.64	1.98	0.44	0.76	63.37	14.77	78.15	4.000	No	No	2.00
491	32.24	83.46	1.98	0.44	0.76	63.12	14.66	77.77	4.000	No	No	2.00
492	32.28	83.82	1.99	0.44	0.76	63.33	14.48	77.81	4.000	No	No	2.00
493	32.35	84.08	1.99	0.45	0.75	63.40	14.18	77.57	4.000	No	No	2.00
494	32.44	83.37	2.00	0.45	0.75	62.54	13.44	75.98	4.000	No	No	2.00
495	32.50	82.39	2.00	0.46	0.75	61.58	13.03	74.61	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
496	32.55	81.05	2.00	0.46	0.74	60.26	12.35	72.61	4.000	No	No	2.00
497	32.63	80.06	2.01	0.47	0.74	59.23	11.77	71.00	4.000	No	No	2.00
498	32.70	80.06	2.01	0.47	0.74	59.11	11.56	70.67	4.000	No	No	2.00
499	32.74	78.54	2.01	0.47	0.74	57.97	11.97	69.94	4.000	No	No	2.00
500	32.85	72.65	2.02	0.46	0.74	54.05	15.47	69.53	4.000	No	No	2.00
501	32.90	66.39	2.02	0.45	0.75	49.59	18.79	68.38	4.000	No	No	2.00
502	32.94	57.91	2.03	0.45	0.75	43.34	23.76	67.10	4.000	No	Yes	2.00
503	33.01	48.61	2.03	0.45	0.75	36.31	30.70	67.01	4.000	No	Yes	2.00
504	33.09	41.29	2.04	0.46	0.74	30.62	36.92	67.54	4.000	No	Yes	2.00
505	33.14	36.28	2.04	0.47	0.74	26.71	42.37	69.08	4.000	No	Yes	2.00
506	33.23	30.83	2.04	0.49	0.73	22.37	46.61	68.98	4.000	No	Yes	2.00
507	33.29	26.10	2.05	0.51	0.71	18.59	46.57	65.16	4.000	No	Yes	2.00
508	33.34	23.06	2.05	0.54	0.70	16.14	46.54	62.69	4.000	No	Yes	2.00
509	33.42	22.26	2.06	0.55	0.70	15.47	46.51	61.97	4.000	No	Yes	2.00
510	33.48	21.54	2.06	0.56	0.69	14.79	46.47	61.26	4.000	No	Yes	2.00
511	33.54	21.54	2.06	0.58	0.68	14.63	46.44	61.07	4.000	No	Yes	2.00
512	33.63	26.10	2.07	0.65	0.65	16.88	16.24	33.13	4.000	No	Yes	2.00
513	33.68	38.88	2.07	0.62	0.66	25.56	8.29	33.85	4.000	No	No	2.00
514	33.78	58.89	2.08	0.55	0.69	40.56	7.83	48.39	4.000	No	No	2.00
515	33.83	75.51	2.08	0.53	0.70	52.63	6.37	59.00	4.000	No	No	2.00
516	33.88	86.76	2.08	0.50	0.71	61.63	7.27	68.90	4.000	No	No	2.00
517	33.94	73.90	2.09	0.48	0.72	53.44	12.35	65.79	4.000	No	No	2.00
518	33.99	94.63	2.09	0.47	0.73	68.94	10.11	79.05	4.000	No	No	2.00
519	34.08	107.14	2.10	0.45	0.73	78.68	10.11	88.80	4.000	No	No	2.00
520	34.14	111.51	2.10	0.44	0.74	82.29	10.60	92.89	4.000	No	No	2.00
521	34.19	113.30	2.10	0.44	0.74	83.92	11.16	95.08	4.000	No	No	2.00
522	34.26	112.94	2.11	0.43	0.74	83.83	11.75	95.58	4.000	No	No	2.00
523	34.34	107.94	2.11	0.43	0.74	80.26	12.90	93.16	4.000	No	No	2.00
524	34.38	103.03	2.11	0.43	0.74	76.62	13.74	90.36	4.000	No	No	2.00
525	34.48	92.66	2.12	0.43	0.74	68.91	15.83	84.74	4.000	No	No	2.00
526	34.54	83.91	2.12	0.42	0.74	62.47	18.33	80.79	4.000	No	No	2.00
527	34.59	77.03	2.13	0.42	0.75	57.40	20.88	78.28	4.000	No	No	2.00
528	34.67	60.85	2.13	0.42	0.74	45.20	27.87	73.07	4.000	No	Yes	2.00
529	34.73	51.74	2.14	0.43	0.74	38.18	32.68	70.86	4.000	No	Yes	2.00
530	34.78	42.99	2.14	0.45	0.73	31.37	38.23	69.59	4.000	No	Yes	2.00
531	34.85	34.41	2.14	0.48	0.71	24.59	44.51	69.10	4.000	No	Yes	2.00
532	34.92	30.66	2.15	0.50	0.70	21.55	45.73	67.28	4.000	No	Yes	2.00
533	34.98	27.26	2.15	0.52	0.69	18.89	45.70	64.59	4.000	No	Yes	2.00
534	35.04	27.17	2.16	0.52	0.69	18.78	45.67	64.45	4.000	No	Yes	2.00
535	35.12	27.17	2.16	0.52	0.69	18.78	45.63	64.42	4.000	No	Yes	2.00
536	35.18	27.08	2.16	0.51	0.69	18.73	45.60	64.33	4.000	No	Yes	2.00
537	35.26	28.51	2.17	0.51	0.70	19.83	45.56	65.39	4.000	No	Yes	2.00
538	35.32	29.14	2.17	0.50	0.70	20.34	45.53	65.87	4.000	No	Yes	2.00
539	35.38	27.53	2.18	0.50	0.70	19.13	45.50	64.63	4.000	No	Yes	2.00
540	35.46	25.65	2.18	0.51	0.69	17.70	45.46	63.16	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
541	35.52	24.76	2.18	0.52	0.69	16.98	45.43	62.41	4.000	No	Yes	2.00
542	35.58	23.95	2.19	0.53	0.68	16.30	45.40	61.70	4.000	No	Yes	2.00
543	35.65	24.62	2.19	0.53	0.68	16.79	45.37	62.15	4.000	No	Yes	2.00
544	35.73	23.69	2.20	0.53	0.68	16.06	45.33	61.39	4.000	No	Yes	2.00
545	35.78	24.49	2.20	0.52	0.68	16.67	45.30	61.97	4.000	No	Yes	2.00
546	35.86	25.92	2.21	0.51	0.69	17.81	45.27	63.07	4.000	No	Yes	2.00
547	35.90	27.89	2.21	0.50	0.69	19.33	45.24	64.57	4.000	No	Yes	2.00
548	35.97	29.85	2.21	0.49	0.70	20.84	45.21	66.05	4.000	No	Yes	2.00
549	36.04	31.37	2.22	0.48	0.70	21.97	45.18	67.15	4.000	No	Yes	2.00
550	36.12	33.25	2.22	0.48	0.70	23.28	45.14	68.42	4.000	No	Yes	2.00
551	36.17	36.91	2.22	0.51	0.68	25.19	27.66	52.85	4.000	No	Yes	2.00
552	36.23	44.15	2.23	0.55	0.67	29.41	14.80	44.21	4.000	No	Yes	2.00
553	36.32	53.08	2.23	0.50	0.69	36.59	16.85	53.44	4.000	No	Yes	2.00
554	36.36	56.03	2.24	0.48	0.70	39.18	18.74	57.92	4.000	No	Yes	2.00
555	36.46	56.16	2.24	0.45	0.72	40.17	25.45	65.62	4.000	No	Yes	2.00
556	36.51	56.92	2.24	0.43	0.72	41.06	28.06	69.12	4.000	No	Yes	2.00
557	36.56	56.30	2.25	0.42	0.73	40.87	31.29	72.16	4.000	No	Yes	2.00
558	36.63	54.51	2.25	0.42	0.73	39.61	33.69	73.30	4.000	No	Yes	2.00
559	36.70	48.26	2.26	0.44	0.72	34.66	35.48	70.13	4.000	No	Yes	2.00
560	36.76	44.33	2.26	0.45	0.71	31.50	36.38	67.88	4.000	No	Yes	2.00
561	36.82	38.25	2.26	0.46	0.70	26.92	42.54	69.46	4.000	No	Yes	2.00
562	36.91	33.87	2.27	0.47	0.70	23.70	44.76	68.46	4.000	No	Yes	2.00
563	36.95	32.35	2.27	0.47	0.70	22.60	44.74	67.35	4.000	No	Yes	2.00
564	37.02	35.30	2.28	0.45	0.71	24.92	44.71	69.63	4.000	No	Yes	2.00
565	37.10	44.41	2.28	0.43	0.72	31.79	41.82	73.61	4.000	No	Yes	2.00
566	37.16	53.17	2.29	0.43	0.72	38.26	33.57	71.83	4.000	No	Yes	2.00
567	37.22	68.54	2.29	0.42	0.72	49.59	25.12	74.71	4.000	No	Yes	2.00
568	37.28	83.28	2.29	0.41	0.73	60.46	20.56	81.02	4.000	No	No	2.00
569	37.36	120.98	2.30	0.41	0.73	87.81	13.57	101.38	4.000	No	No	2.00
570	37.41	152.97	2.30	0.42	0.72	110.36	9.93	120.29	4.000	No	No	2.00
571	37.49	192.64	2.31	0.43	0.72	137.94	7.24	145.17	4.000	No	No	2.00
572	37.55	211.14	2.31	0.43	0.71	150.77	6.45	157.21	4.000	No	No	2.00
573	37.60	226.96	2.31	0.43	0.71	161.64	5.84	167.49	4.000	No	No	2.00
574	37.69	249.83	2.32	0.43	0.71	177.93	5.47	183.40	4.000	No	No	2.00
575	37.74	259.48	2.32	0.43	0.71	185.02	5.44	190.46	4.000	No	No	2.00
576	37.80	268.15	2.33	0.42	0.72	192.10	5.80	197.90	4.000	No	No	2.00
577	37.89	287.27	2.33	0.42	0.72	206.81	6.06	212.88	4.000	No	No	2.00
578	37.94	293.07	2.34	0.41	0.72	211.34	6.19	217.53	4.000	No	No	2.00
579	38.00	300.94	2.34	0.41	0.72	217.59	6.41	223.99	4.000	No	No	2.00
580	38.08	305.49	2.35	0.40	0.73	221.58	6.77	228.34	4.000	No	No	2.00
581	38.15	307.10	2.35	0.40	0.73	222.91	6.90	229.81	4.000	No	No	2.00
582	38.20	305.14	2.35	0.40	0.73	221.60	7.05	228.65	4.000	No	No	2.00
583	38.28	302.01	2.36	0.40	0.73	219.19	7.14	226.33	4.000	No	No	2.00
584	38.33	299.15	2.36	0.40	0.73	216.92	7.15	224.08	4.000	No	No	2.00
585	38.40	293.25	2.37	0.40	0.72	212.11	7.06	219.17	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
586	38.47	285.57	2.37	0.40	0.72	206.32	7.17	213.49	4.000	No	No	2.00
587	38.52	281.10	2.37	0.40	0.72	202.90	7.21	210.12	4.000	No	No	2.00
588	38.59	276.55	2.38	0.41	0.72	198.05	6.54	204.59	4.000	No	No	2.00
589	38.68	268.06	2.39	0.42	0.71	191.16	6.38	197.54	4.000	No	No	2.00
590	38.73	263.41	2.39	0.42	0.71	187.24	6.21	193.45	4.000	No	No	2.00
591	38.80	254.39	2.39	0.42	0.71	180.04	6.04	186.07	4.000	No	No	2.00
592	38.85	224.64	2.40	0.42	0.71	158.95	6.76	165.72	4.000	No	No	2.00
593	38.93	226.87	2.40	0.43	0.70	158.82	5.75	164.57	4.000	No	No	2.00
594	38.99	212.13	2.41	0.44	0.70	148.05	5.90	153.95	4.000	No	No	2.00
595	39.07	192.47	2.41	0.43	0.70	134.70	6.85	141.54	4.000	No	No	2.00
596	39.12	182.91	2.41	0.43	0.70	128.76	7.89	136.65	4.000	No	No	2.00
597	39.18	168.08	2.42	0.41	0.71	119.29	9.65	128.94	4.000	No	No	2.00
598	39.24	145.83	2.42	0.40	0.72	104.52	12.71	117.23	4.000	No	No	2.00
599	39.31	124.84	2.43	0.39	0.72	90.22	16.65	106.87	4.000	No	No	2.00
600	39.38	106.16	2.43	0.39	0.73	77.02	20.94	97.96	4.000	No	No	2.00
601	39.44	93.39	2.43	0.38	0.73	67.76	24.38	92.13	4.000	No	No	2.00
602	39.53	90.97	2.44	0.39	0.72	65.81	24.54	90.35	4.000	No	No	2.00
603	39.57	91.96	2.44	0.39	0.72	66.41	23.82	90.23	4.000	No	No	2.00
604	39.63	94.99	2.45	0.39	0.72	68.47	22.59	91.06	4.000	No	No	2.00
605	39.73	96.87	2.45	0.39	0.72	69.79	22.23	92.02	4.000	No	No	2.00
606	39.78	101.87	2.46	0.39	0.72	73.45	21.34	94.79	4.000	No	No	2.00
607	39.84	107.32	2.46	0.39	0.72	77.29	20.04	97.33	4.000	No	No	2.00
608	39.91	111.88	2.47	0.39	0.72	80.24	18.34	98.58	4.000	No	No	2.00
609	39.96	112.15	2.47	0.40	0.71	80.06	17.40	97.46	4.000	No	No	2.00
610	40.07	109.47	2.48	0.41	0.71	77.47	16.24	93.71	0.157	No	No	0.45
611	40.12	106.61	2.48	0.41	0.71	75.41	16.76	92.18	0.153	No	No	0.43
612	40.18	102.32	2.48	0.41	0.71	72.38	17.70	90.07	0.147	No	No	0.42
613	40.25	95.89	2.49	0.41	0.71	67.81	19.18	86.99	0.138	No	No	0.39
614	40.32	86.15	2.49	0.40	0.71	61.17	23.13	84.30	0.128	No	No	0.36
615	40.37	79.26	2.49	0.40	0.71	56.34	26.11	82.45	4.000	No	Yes	2.00
616	40.45	70.86	2.50	0.40	0.71	50.26	29.79	80.05	4.000	No	Yes	2.00
617	40.51	61.39	2.50	0.40	0.71	43.34	34.78	78.12	4.000	No	Yes	2.00
618	40.56	54.06	2.51	0.41	0.70	37.92	39.37	77.28	4.000	No	Yes	2.00
619	40.64	46.47	2.51	0.43	0.69	31.93	40.85	72.78	4.000	No	Yes	2.00
620	40.70	42.90	2.52	0.45	0.68	29.06	40.48	69.54	4.000	No	Yes	2.00
621	40.76	40.75	2.52	0.46	0.67	27.24	38.98	66.22	4.000	No	Yes	2.00
622	40.82	37.89	2.52	0.48	0.66	24.98	39.09	64.07	4.000	No	Yes	2.00
623	40.90	35.84	2.53	0.50	0.65	23.26	37.48	60.74	4.000	No	Yes	2.00
624	40.95	35.93	2.53	0.51	0.64	23.04	33.29	56.33	4.000	No	Yes	2.00
625	41.05	35.93	2.54	0.52	0.63	22.77	29.86	52.63	4.000	No	Yes	2.00
626	41.08	36.02	2.54	0.52	0.63	22.80	29.49	52.29	4.000	No	Yes	2.00
627	41.15	36.73	2.54	0.52	0.64	23.37	30.25	53.62	4.000	No	Yes	2.00
628	41.24	33.51	2.55	0.52	0.63	21.19	34.82	56.01	4.000	No	Yes	2.00
629	41.30	30.21	2.55	0.58	0.60	18.18	27.23	45.40	4.000	No	Yes	2.00
630	41.35	29.49	2.55	0.62	0.58	17.12	20.58	37.70	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
631	41.44	40.39	2.56	0.56	0.61	24.63	17.01	41.64	4.000	No	Yes	2.00
632	41.48	47.72	2.56	0.54	0.62	29.67	15.22	44.89	4.000	No	Yes	2.00
633	41.55	67.91	2.57	0.50	0.64	43.40	11.41	54.81	0.083	No	No	0.24
634	41.63	73.81	2.57	0.46	0.66	48.89	15.08	63.97	0.094	No	No	0.27
635	41.67	75.42	2.57	0.45	0.67	50.76	17.58	68.34	0.100	No	No	0.29
636	41.74	70.24	2.58	0.43	0.68	48.00	23.08	71.08	4.000	No	Yes	2.00
637	41.80	63.27	2.58	0.42	0.69	43.60	29.59	73.19	4.000	No	Yes	2.00
638	41.90	49.78	2.59	0.43	0.68	33.87	38.21	72.08	4.000	No	Yes	2.00
639	41.93	44.86	2.59	0.44	0.67	30.25	41.76	72.01	4.000	No	Yes	2.00
640	42.01	39.23	2.60	0.46	0.66	25.98	43.04	69.02	4.000	No	Yes	2.00
641	42.06	39.59	2.60	0.47	0.66	26.04	41.43	67.47	4.000	No	Yes	2.00
642	42.14	39.59	2.60	0.47	0.65	25.81	38.18	63.99	4.000	No	Yes	2.00
643	42.21	49.24	2.61	0.46	0.66	32.45	28.98	61.43	4.000	No	Yes	2.00
644	42.28	70.68	2.61	0.45	0.67	47.09	18.57	65.66	4.000	No	Yes	2.00
645	42.35	94.09	2.62	0.45	0.66	62.48	12.35	74.82	0.115	No	No	0.33
646	42.41	112.05	2.62	0.46	0.66	73.80	9.12	82.92	0.133	No	No	0.39
647	42.48	120.18	2.62	0.46	0.66	78.84	8.08	86.92	0.143	No	No	0.41
648	42.54	123.22	2.63	0.46	0.66	80.71	7.76	88.47	0.147	No	No	0.43
649	42.59	122.15	2.63	0.46	0.66	80.11	8.01	88.12	0.146	No	No	0.42
650	42.67	112.68	2.64	0.44	0.67	75.50	11.48	86.98	0.142	No	No	0.41
651	42.75	101.51	2.64	0.41	0.69	69.54	16.83	86.37	0.138	No	No	0.40
652	42.78	97.22	2.64	0.41	0.69	66.89	18.64	85.52	0.135	No	No	0.39
653	42.85	83.01	2.65	0.40	0.69	57.25	23.39	80.64	4.000	No	Yes	2.00
654	42.93	97.66	2.65	0.40	0.69	67.43	19.64	87.07	0.138	No	No	0.40
655	42.98	74.08	2.66	0.41	0.69	50.99	26.95	77.94	4.000	No	Yes	2.00
656	43.08	98.11	2.66	0.41	0.69	67.27	18.37	85.64	0.135	No	No	0.39
657	43.13	122.50	2.67	0.42	0.68	83.44	13.40	96.84	0.168	No	No	0.49
658	43.18	148.68	2.67	0.42	0.68	100.37	9.94	110.32	0.214	No	No	0.62
659	43.28	180.76	2.68	0.44	0.67	120.25	6.91	127.15	0.284	No	No	0.83
660	43.33	191.93	2.68	0.45	0.66	126.39	5.72	132.11	0.308	No	No	0.90
661	43.39	201.22	2.68	0.46	0.65	130.69	4.53	135.23	0.323	No	No	0.94
662	43.44	217.75	2.69	0.48	0.64	138.65	3.05	141.70	0.357	No	No	1.04
663	43.52	227.04	2.69	0.49	0.63	144.01	2.74	146.75	0.388	No	No	1.13
664	43.58	233.47	2.69	0.49	0.63	147.45	2.47	149.91	0.408	No	No	1.19
665	43.64	242.05	2.70	0.50	0.63	151.47	1.97	153.44	0.431	No	No	1.26
666	43.73	248.03	2.70	0.52	0.61	152.06	1.13	153.18	0.426	No	No	1.25
667	43.78	251.43	2.71	0.51	0.62	155.05	1.34	156.39	0.450	No	No	1.32
668	43.87	256.52	2.71	0.50	0.62	159.66	1.69	161.35	0.490	No	No	1.44
669	43.90	258.76	2.72	0.50	0.62	161.54	1.81	163.34	0.508	No	No	1.49
670	43.97	260.81	2.72	0.49	0.63	163.94	2.12	166.06	0.533	No	No	1.56
671	44.05	258.62	2.73	0.49	0.63	163.31	2.40	165.70	0.531	No	No	1.56
672	44.12	258.49	2.73	0.48	0.63	163.28	2.45	165.74	0.532	No	No	1.56
673	44.17	258.40	2.73	0.49	0.63	163.07	2.44	165.51	0.530	No	No	1.56
674	44.23	257.06	2.74	0.48	0.63	162.61	2.60	165.21	0.528	No	No	1.55
675	44.31	253.13	2.74	0.48	0.63	160.62	2.86	163.48	0.514	No	No	1.51

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
676	44.36	254.02	2.75	0.48	0.63	161.04	2.83	163.86	0.517	No	No	1.52
677	44.45	252.77	2.75	0.48	0.63	160.12	2.86	162.98	0.510	No	No	1.50
678	44.52	254.20	2.76	0.48	0.63	160.80	2.81	163.61	0.515	No	No	1.52
679	44.55	254.56	2.76	0.48	0.63	160.90	2.79	163.69	0.515	No	No	1.52
680	44.62	253.13	2.76	0.48	0.63	159.74	2.77	162.51	0.505	No	No	1.49
681	44.70	251.52	2.77	0.48	0.63	158.65	2.81	161.45	0.496	No	No	1.46
682	44.78	247.50	2.77	0.48	0.63	156.15	2.93	159.08	0.477	No	No	1.41
683	44.84	244.55	2.78	0.48	0.63	154.40	3.04	157.44	0.465	No	No	1.37
684	44.91	242.14	2.78	0.47	0.63	153.11	3.20	156.31	0.457	No	No	1.35
685	44.97	239.81	2.78	0.47	0.63	151.81	3.33	155.14	0.448	No	No	1.33
686	45.02	236.87	2.79	0.47	0.63	150.00	3.42	153.43	0.436	No	No	1.29
687	45.10	234.28	2.79	0.47	0.63	148.33	3.51	151.84	0.425	No	No	1.26
688	45.15	234.36	2.80	0.47	0.63	148.15	3.46	151.60	0.423	No	No	1.25
689	45.24	236.06	2.80	0.48	0.63	148.34	3.17	151.51	0.421	No	No	1.25
690	45.30	238.56	2.81	0.48	0.63	149.29	2.95	152.24	0.426	No	No	1.26
691	45.36	241.78	2.81	0.48	0.62	150.70	2.74	153.44	0.434	No	No	1.29
692	45.42	245.09	2.81	0.49	0.62	152.44	2.63	155.07	0.445	No	No	1.32
693	45.51	245.26	2.82	0.48	0.62	152.52	2.67	155.19	0.446	No	No	1.32
694	45.55	244.19	2.82	0.48	0.62	151.93	2.73	154.65	0.443	No	No	1.31
695	45.63	243.57	2.83	0.49	0.62	151.06	2.63	153.70	0.435	No	No	1.29
696	45.70	241.69	2.83	0.49	0.62	149.64	2.61	152.25	0.425	No	No	1.26
697	45.75	240.26	2.83	0.49	0.62	148.70	2.65	151.35	0.418	No	No	1.24
698	45.81	235.79	2.84	0.49	0.62	145.95	2.75	148.70	0.401	No	No	1.19
699	45.89	231.68	2.84	0.50	0.61	141.52	2.26	143.77	0.368	No	No	1.09
700	45.94	228.38	2.85	0.50	0.61	138.61	2.06	140.67	0.349	No	No	1.04
701	46.00	228.47	2.85	0.51	0.61	138.28	1.97	140.25	0.346	No	No	1.03
702	46.09	228.47	2.86	0.51	0.60	137.72	1.85	139.57	0.342	No	No	1.02
703	46.14	228.56	2.86	0.51	0.60	137.46	1.79	139.25	0.340	No	No	1.01
704	46.20	230.17	2.86	0.52	0.60	137.65	1.58	139.22	0.340	No	No	1.01
705	46.27	225.97	2.87	0.52	0.60	134.67	1.54	136.21	0.323	No	No	0.96
706	46.33	230.97	2.87	0.52	0.59	137.21	1.38	138.59	0.336	No	No	1.00
707	46.40	233.29	2.88	0.52	0.59	138.44	1.35	139.79	0.342	No	No	1.02
708	46.48	231.68	2.88	0.52	0.59	137.69	1.45	139.14	0.339	No	No	1.01
709	46.52	232.58	2.88	0.52	0.60	138.52	1.54	140.06	0.344	No	No	1.03
710	46.59	231.77	2.89	0.51	0.60	138.81	1.79	140.60	0.348	No	No	1.04
711	46.66	230.52	2.89	0.51	0.60	138.33	1.92	140.25	0.346	No	No	1.04
712	46.73	227.48	2.90	0.51	0.60	136.26	1.92	138.18	0.334	No	No	1.00
713	46.80	224.27	2.90	0.51	0.60	134.19	1.95	136.15	0.323	No	No	0.97
714	46.85	220.96	2.90	0.51	0.60	132.19	2.02	134.21	0.313	No	No	0.94
715	46.92	215.42	2.91	0.51	0.60	128.24	1.94	130.18	0.293	No	No	0.88
716	46.99	207.56	2.91	0.51	0.59	123.46	2.07	125.53	0.272	No	No	0.81
717	47.06	197.38	2.92	0.51	0.60	118.14	2.54	120.69	0.251	No	No	0.75
718	47.12	186.21	2.92	0.50	0.60	112.47	3.23	115.70	0.232	No	No	0.69
719	47.21	169.95	2.93	0.47	0.62	104.96	5.00	109.96	0.211	No	No	0.63
720	47.26	148.23	2.93	0.46	0.63	93.19	7.26	100.45	0.181	No	No	0.54

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
721	47.32	125.18	2.93	0.44	0.64	80.27	10.91	91.17	0.153	No	No	0.46
722	47.38	102.31	2.94	0.42	0.65	66.88	16.78	83.66	0.132	No	No	0.40
723	47.44	86.68	2.94	0.41	0.66	57.07	22.16	79.23	4.000	No	Yes	2.00
724	47.51	74.17	2.95	0.41	0.66	48.77	27.07	75.84	4.000	No	Yes	2.00
725	47.60	56.57	2.95	0.43	0.64	36.42	33.73	70.14	4.000	No	Yes	2.00
726	47.66	53.35	2.96	0.44	0.64	33.98	33.87	67.85	4.000	No	Yes	2.00
727	47.71	49.60	2.96	0.44	0.63	31.40	36.51	67.92	4.000	No	Yes	2.00
728	47.77	48.61	2.96	0.44	0.63	30.84	38.72	69.56	4.000	No	Yes	2.00
729	47.86	60.32	2.97	0.42	0.65	39.04	32.78	71.82	4.000	No	Yes	2.00
730	47.91	79.80	2.97	0.41	0.66	52.48	25.45	77.93	4.000	No	Yes	2.00
731	47.98	104.63	2.98	0.39	0.67	69.71	20.87	90.58	0.147	No	No	0.44
732	48.04	117.14	2.98	0.39	0.67	78.56	19.76	98.31	0.170	No	No	0.51
733	48.10	122.32	2.98	0.38	0.68	82.63	20.41	103.04	0.186	No	No	0.56
734	48.19	125.90	2.99	0.37	0.68	85.94	22.19	108.13	0.204	No	No	0.61
735	48.25	131.71	2.99	0.36	0.68	90.13	21.87	112.00	0.219	No	No	0.66
736	48.30	137.96	3.00	0.36	0.68	94.41	20.98	115.39	0.234	No	No	0.71
737	48.37	144.30	3.00	0.36	0.68	98.65	20.01	118.65	0.250	No	No	0.75
738	48.43	147.88	3.01	0.37	0.68	100.77	19.02	119.79	0.255	No	No	0.77
739	48.49	153.50	3.01	0.37	0.68	103.96	17.34	121.30	0.262	No	No	0.79
740	48.56	160.91	3.01	0.38	0.67	107.79	14.93	122.71	0.269	No	No	0.81
741	48.64	170.47	3.02	0.39	0.66	112.72	12.48	125.20	0.280	No	No	0.85
742	48.74	178.87	3.03	0.44	0.63	112.86	7.33	120.19	0.253	No	No	0.77
743	48.77	180.75	3.03	0.44	0.63	113.59	6.96	120.55	0.254	No	No	0.77
744	48.83	181.73	3.03	0.45	0.62	113.11	6.26	119.37	0.249	No	No	0.75
745	48.89	181.02	3.04	0.46	0.62	111.62	5.68	117.30	0.240	No	No	0.73
746	48.96	178.87	3.04	0.47	0.61	109.49	5.33	114.81	0.230	No	No	0.70
747	49.03	165.10	3.04	0.47	0.61	100.63	5.59	106.23	0.199	No	No	0.60
748	49.09	166.89	3.05	0.47	0.61	101.14	5.21	106.35	0.199	No	No	0.60
749	49.16	162.78	3.05	0.47	0.61	99.14	5.72	104.86	0.194	No	No	0.59
750	49.22	158.31	3.06	0.47	0.61	96.12	5.75	101.87	0.185	No	No	0.56
751	49.29	155.01	3.06	0.46	0.61	94.89	6.51	101.40	0.183	No	No	0.56
752	49.35	153.66	3.06	0.45	0.62	95.11	7.46	102.57	0.187	No	No	0.57
753	49.43	153.04	3.07	0.44	0.63	96.07	8.75	104.82	0.195	No	No	0.59
754	49.49	152.95	3.07	0.43	0.63	96.91	9.70	106.60	0.201	No	No	0.61
755	49.55	156.88	3.08	0.42	0.64	99.94	10.05	109.99	0.213	No	No	0.65
756	49.64	175.02	3.08	0.42	0.64	111.68	9.26	120.93	0.258	No	No	0.78
757	49.68	188.15	3.09	0.42	0.64	119.96	8.61	128.58	0.294	No	No	0.89
758	49.74	201.20	3.09	0.42	0.64	128.27	8.13	136.40	0.336	No	No	1.02
759	49.84	222.82	3.09	0.00	1.00	222.83	0.00	222.83	4.000	No	No	2.00
760	49.89	232.38	3.10	0.00	1.00	232.39	0.00	232.39	4.000	No	No	2.00
761	49.94	243.28	3.10	0.00	1.00	243.29	0.00	243.29	4.000	No	No	2.00
762	50.03	252.84	3.10	0.00	1.00	252.85	0.00	252.85	4.000	No	No	2.00
763	50.08	256.68	3.10	0.00	1.00	256.69	0.00	256.69	4.000	No	No	2.00
764	50.14	259.09	3.11	0.00	1.00	259.10	0.00	259.10	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS

Abbreviations

Depth: Depth from free surface, at which CPT was performed (ft)
q_t: Total cone resistance
I_c: Soil behavior type index
Fr: Normalized friction ratio (%)
n: Stress exponent
Q_{tn}: Normalized cone resistance
K_c: Cone resistance correction factor due to fines
$Q_{tn,cs}$: Normalized and adjusted cone resistance
$CRR_{7.5}$: Cyclic resistance ratio for M_w=7.5
FS: Factor of safety against soil liquefaction

:: Liquefaction Potential Index calculation data ::

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
0.07	2.00	0.00	0.00	0.07	0.00	0.14	2.00	0.00	0.00	0.07	0.00
0.21	2.00	0.00	0.00	0.07	0.00	0.27	2.00	0.00	0.00	0.06	0.00
0.35	2.00	0.00	0.00	0.08	0.00	0.41	2.00	0.00	0.00	0.06	0.00
0.48	2.00	0.00	0.00	0.07	0.00	0.54	2.00	0.00	0.00	0.06	0.00
0.60	2.00	0.00	0.00	0.06	0.00	0.66	2.00	0.00	0.00	0.06	0.00
0.74	2.00	0.00	0.00	0.08	0.00	0.79	2.00	0.00	0.00	0.05	0.00
0.86	2.00	0.00	0.00	0.07	0.00	0.94	2.00	0.00	0.00	0.08	0.00
0.99	2.00	0.00	0.00	0.04	0.00	1.05	2.00	0.00	0.00	0.07	0.00
1.13	2.00	0.00	0.00	0.08	0.00	1.20	2.00	0.00	0.00	0.06	0.00
1.25	2.00	0.00	0.00	0.05	0.00	1.33	2.00	0.00	0.00	0.08	0.00
1.40	2.00	0.00	0.00	0.06	0.00	1.46	2.00	0.00	0.00	0.06	0.00
1.51	2.00	0.00	0.00	0.05	0.00	1.57	2.00	0.00	0.00	0.06	0.00
1.64	2.00	0.00	0.00	0.07	0.00	1.73	2.00	0.00	0.00	0.09	0.00
1.79	2.00	0.00	0.00	0.07	0.00	1.85	2.00	0.00	0.00	0.06	0.00
1.91	2.00	0.00	0.00	0.06	0.00	1.99	2.00	0.00	0.00	0.08	0.00
2.04	2.00	0.00	0.00	0.05	0.00	2.10	2.00	0.00	0.00	0.06	0.00
2.18	2.00	0.00	0.00	0.08	0.00	2.24	2.00	0.00	0.00	0.06	0.00
2.33	2.00	0.00	0.00	0.09	0.00	2.39	2.00	0.00	0.00	0.06	0.00
2.44	2.00	0.00	0.00	0.05	0.00	2.53	2.00	0.00	0.00	0.09	0.00
2.58	2.00	0.00	0.00	0.05	0.00	2.64	2.00	0.00	0.00	0.06	0.00
2.72	2.00	0.00	0.00	0.07	0.00	2.76	2.00	0.00	0.00	0.04	0.00
2.85	2.00	0.00	0.00	0.09	0.00	2.90	2.00	0.00	0.00	0.05	0.00
2.97	2.00	0.00	0.00	0.07	0.00	3.03	2.00	0.00	0.00	0.06	0.00
3.09	2.00	0.00	0.00	0.07	0.00	3.18	2.00	0.00	0.00	0.08	0.00
3.22	2.00	0.00	0.00	0.05	0.00	3.32	2.00	0.00	0.00	0.09	0.00
3.36	2.00	0.00	0.00	0.04	0.00	3.42	2.00	0.00	0.00	0.05	0.00
3.51	2.00	0.00	0.00	0.09	0.00	3.57	2.00	0.00	0.00	0.06	0.00
3.62	2.00	0.00	0.00	0.05	0.00	3.70	2.00	0.00	0.00	0.08	0.00
3.76	2.00	0.00	0.00	0.06	0.00	3.81	2.00	0.00	0.00	0.05	0.00
3.88	2.00	0.00	0.00	0.07	0.00	3.95	2.00	0.00	0.00	0.07	0.00
4.01	2.00	0.00	0.00	0.06	0.00	4.09	2.00	0.00	0.00	0.08	0.00
4.14	2.00	0.00	0.00	0.05	0.00	4.21	2.00	0.00	0.00	0.07	0.00
4.30	2.00	0.00	0.00	0.09	0.00	4.35	2.00	0.00	0.00	0.05	0.00
4.40	2.00	0.00	0.00	0.05	0.00	4.50	2.00	0.00	0.00	0.10	0.00
4.54	2.00	0.00	0.00	0.03	0.00	4.61	2.00	0.00	0.00	0.07	0.00
4.69	2.00	0.00	0.00	0.09	0.00	4.73	2.00	0.00	0.00	0.03	0.00
4.80	2.00	0.00	0.00	0.08	0.00	4.86	2.00	0.00	0.00	0.06	0.00
4.93	2.00	0.00	0.00	0.07	0.00	5.00	2.00	0.00	0.00	0.06	0.00
5.05	2.00	0.00	0.00	0.06	0.00	5.14	2.00	0.00	0.00	0.09	0.00
5.19	2.00	0.00	0.00	0.05	0.00	5.26	2.00	0.00	0.00	0.07	0.00
5.34	2.00	0.00	0.00	0.08	0.00	5.39	2.00	0.00	0.00	0.05	0.00
5.45	2.00	0.00	0.00	0.06	0.00	5.52	2.00	0.00	0.00	0.07	0.00
5.59	2.00	0.00	0.00	0.07	0.00	5.68	2.00	0.00	0.00	0.09	0.00
5.71	2.00	0.00	0.00	0.03	0.00	5.78	2.00	0.00	0.00	0.07	0.00
5.84	2.00	0.00	0.00	0.06	0.00	5.93	2.00	0.00	0.00	0.09	0.00
5.99	2.00	0.00	0.00	0.06	0.00	6.04	2.00	0.00	0.00	0.04	0.00
6.13	2.00	0.00	0.00	0.09	0.00	6.17	2.00	0.00	0.00	0.04	0.00
6.27	2.00	0.00	0.00	0.10	0.00	6.30	2.00	0.00	0.00	0.04	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
6.37	2.00	0.00	0.00	0.07	0.00	6.46	2.00	0.00	0.00	0.09	0.00
6.52	2.00	0.00	0.00	0.06	0.00	6.57	2.00	0.00	0.00	0.05	0.00
6.66	2.00	0.00	0.00	0.08	0.00	6.71	2.00	0.00	0.00	0.05	0.00
6.77	2.00	0.00	0.00	0.06	0.00	6.83	2.00	0.00	0.00	0.07	0.00
6.92	2.00	0.00	0.00	0.08	0.00	6.97	2.00	0.00	0.00	0.05	0.00
7.04	2.00	0.00	0.00	0.08	0.00	7.09	2.00	0.00	0.00	0.05	0.00
7.16	2.00	0.00	0.00	0.06	0.00	7.22	2.00	0.00	0.00	0.07	0.00
7.31	2.00	0.00	0.00	0.08	0.00	7.35	2.00	0.00	0.00	0.04	0.00
7.46	2.00	0.00	0.00	0.10	0.00	7.52	2.00	0.00	0.00	0.07	0.00
7.56	2.00	0.00	0.00	0.03	0.00	7.63	2.00	0.00	0.00	0.07	0.00
7.68	2.00	0.00	0.00	0.05	0.00	7.76	2.00	0.00	0.00	0.08	0.00
7.82	2.00	0.00	0.00	0.06	0.00	7.90	2.00	0.00	0.00	0.08	0.00
7.95	2.00	0.00	0.00	0.05	0.00	8.02	2.00	0.00	0.00	0.07	0.00
8.08	2.00	0.00	0.00	0.06	0.00	8.16	2.00	0.00	0.00	0.08	0.00
8.20	2.00	0.00	0.00	0.04	0.00	8.27	2.00	0.00	0.00	0.07	0.00
8.35	2.00	0.00	0.00	0.08	0.00	8.41	2.00	0.00	0.00	0.06	0.00
8.49	2.00	0.00	0.00	0.08	0.00	8.54	2.00	0.00	0.00	0.04	0.00
8.61	2.00	0.00	0.00	0.07	0.00	8.66	2.00	0.00	0.00	0.05	0.00
8.73	2.00	0.00	0.00	0.06	0.00	8.80	2.00	0.00	0.00	0.07	0.00
8.87	2.00	0.00	0.00	0.06	0.00	8.94	2.00	0.00	0.00	0.07	0.00
8.99	2.00	0.00	0.00	0.05	0.00	9.07	2.00	0.00	0.00	0.08	0.00
9.12	2.00	0.00	0.00	0.06	0.00	9.20	2.00	0.00	0.00	0.07	0.00
9.26	2.00	0.00	0.00	0.06	0.00	9.35	2.00	0.00	0.00	0.09	0.00
9.40	2.00	0.00	0.00	0.05	0.00	9.48	2.00	0.00	0.00	0.08	0.00
9.53	2.00	0.00	0.00	0.05	0.00	9.59	2.00	0.00	0.00	0.06	0.00
9.65	2.00	0.00	0.00	0.06	0.00	9.71	2.00	0.00	0.00	0.07	0.00
9.78	2.00	0.00	0.00	0.06	0.00	9.87	2.00	0.00	0.00	0.10	0.00
9.93	2.00	0.00	0.00	0.06	0.00	9.99	2.00	0.00	0.00	0.06	0.00
10.07	2.00	0.00	0.00	0.08	0.00	10.13	2.00	0.00	0.00	0.06	0.00
10.17	2.00	0.00	0.00	0.04	0.00	10.24	2.00	0.00	0.00	0.06	0.00
10.32	2.00	0.00	0.00	0.09	0.00	10.37	2.00	0.00	0.00	0.05	0.00
10.45	2.00	0.00	0.00	0.08	0.00	10.50	2.00	0.00	0.00	0.05	0.00
10.58	2.00	0.00	0.00	0.08	0.00	10.63	2.00	0.00	0.00	0.05	0.00
10.71	2.00	0.00	0.00	0.08	0.00	10.77	2.00	0.00	0.00	0.05	0.00
10.83	2.00	0.00	0.00	0.06	0.00	10.90	2.00	0.00	0.00	0.07	0.00
10.97	2.00	0.00	0.00	0.07	0.00	11.03	2.00	0.00	0.00	0.05	0.00
11.12	2.00	0.00	0.00	0.09	0.00	11.16	2.00	0.00	0.00	0.04	0.00
11.23	2.00	0.00	0.00	0.08	0.00	11.31	2.00	0.00	0.00	0.08	0.00
11.37	2.00	0.00	0.00	0.06	0.00	11.42	2.00	0.00	0.00	0.05	0.00
11.50	2.00	0.00	0.00	0.08	0.00	11.55	2.00	0.00	0.00	0.05	0.00
11.66	2.00	0.00	0.00	0.11	0.00	11.71	2.00	0.00	0.00	0.04	0.00
11.77	2.00	0.00	0.00	0.06	0.00	11.82	2.00	0.00	0.00	0.06	0.00
11.88	2.00	0.00	0.00	0.06	0.00	11.96	2.00	0.00	0.00	0.08	0.00
12.05	2.00	0.00	0.00	0.09	0.00	12.10	2.00	0.00	0.00	0.05	0.00
12.16	2.00	0.00	0.00	0.06	0.00	12.21	2.00	0.00	0.00	0.05	0.00
12.30	2.00	0.00	0.00	0.09	0.00	12.35	2.00	0.00	0.00	0.05	0.00
12.41	2.00	0.00	0.00	0.06	0.00	12.48	2.00	0.00	0.00	0.07	0.00
12.53	2.00	0.00	0.00	0.05	0.00	12.61	2.00	0.00	0.00	0.08	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
12.68	2.00	0.00	0.00	0.07	0.00	12.75	2.00	0.00	0.00	0.06	0.00
12.80	2.00	0.00	0.00	0.05	0.00	12.88	2.00	0.00	0.00	0.08	0.00
12.94	2.00	0.00	0.00	0.06	0.00	13.00	2.00	0.00	0.00	0.05	0.00
13.07	2.00	0.00	0.00	0.07	0.00	13.14	2.00	0.00	0.00	0.07	0.00
13.24	2.00	0.00	0.00	0.10	0.00	13.29	2.00	0.00	0.00	0.05	0.00
13.33	2.00	0.00	0.00	0.04	0.00	13.39	2.00	0.00	0.00	0.06	0.00
13.46	2.00	0.00	0.00	0.07	0.00	13.52	2.00	0.00	0.00	0.06	0.00
13.59	2.00	0.00	0.00	0.07	0.00	13.68	2.00	0.00	0.00	0.09	0.00
13.72	2.00	0.00	0.00	0.04	0.00	13.78	2.00	0.00	0.00	0.06	0.00
13.88	2.00	0.00	0.00	0.09	0.00	13.93	2.00	0.00	0.00	0.05	0.00
13.99	2.00	0.00	0.00	0.06	0.00	14.07	2.00	0.00	0.00	0.08	0.00
14.12	2.00	0.00	0.00	0.05	0.00	14.19	2.00	0.00	0.00	0.08	0.00
14.26	2.00	0.00	0.00	0.07	0.00	14.31	2.00	0.00	0.00	0.05	0.00
14.40	2.00	0.00	0.00	0.09	0.00	14.45	2.00	0.00	0.00	0.05	0.00
14.50	2.00	0.00	0.00	0.05	0.00	14.57	2.00	0.00	0.00	0.06	0.00
14.64	2.00	0.00	0.00	0.08	0.00	14.72	2.00	0.00	0.00	0.08	0.00
14.76	2.00	0.00	0.00	0.04	0.00	14.86	2.00	0.00	0.00	0.09	0.00
14.90	2.00	0.00	0.00	0.04	0.00	15.01	2.00	0.00	0.00	0.12	0.00
15.05	2.00	0.00	0.00	0.04	0.00	15.14	2.00	0.00	0.00	0.08	0.00
15.16	2.00	0.00	0.00	0.03	0.00	15.26	2.00	0.00	0.00	0.09	0.00
15.30	2.00	0.00	0.00	0.05	0.00	15.37	2.00	0.00	0.00	0.07	0.00
15.44	2.00	0.00	0.00	0.07	0.00	15.51	2.00	0.00	0.00	0.07	0.00
15.56	2.00	0.00	0.00	0.05	0.00	15.62	2.00	0.00	0.00	0.06	0.00
15.70	2.00	0.00	0.00	0.09	0.00	15.76	2.00	0.00	0.00	0.06	0.00
15.82	2.00	0.00	0.00	0.06	0.00	15.88	2.00	0.00	0.00	0.06	0.00
15.96	2.00	0.00	0.00	0.08	0.00	16.01	2.00	0.00	0.00	0.05	0.00
16.09	2.00	0.00	0.00	0.07	0.00	16.15	2.00	0.00	0.00	0.07	0.00
16.23	2.00	0.00	0.00	0.07	0.00	16.29	2.00	0.00	0.00	0.06	0.00
16.35	2.00	0.00	0.00	0.06	0.00	16.42	2.00	0.00	0.00	0.08	0.00
16.50	2.00	0.00	0.00	0.07	0.00	16.55	2.00	0.00	0.00	0.05	0.00
16.64	2.00	0.00	0.00	0.09	0.00	16.70	2.00	0.00	0.00	0.06	0.00
16.75	2.00	0.00	0.00	0.05	0.00	16.80	2.00	0.00	0.00	0.05	0.00
16.89	2.00	0.00	0.00	0.09	0.00	16.93	2.00	0.00	0.00	0.04	0.00
17.00	2.00	0.00	0.00	0.07	0.00	17.07	2.00	0.00	0.00	0.07	0.00
17.14	2.00	0.00	0.00	0.07	0.00	17.21	2.00	0.00	0.00	0.07	0.00
17.27	2.00	0.00	0.00	0.06	0.00	17.34	2.00	0.00	0.00	0.07	0.00
17.39	2.00	0.00	0.00	0.05	0.00	17.48	2.00	0.00	0.00	0.09	0.00
17.53	2.00	0.00	0.00	0.05	0.00	17.62	2.00	0.00	0.00	0.09	0.00
17.68	2.00	0.00	0.00	0.07	0.00	17.73	2.00	0.00	0.00	0.05	0.00
17.80	2.00	0.00	0.00	0.07	0.00	17.86	2.00	0.00	0.00	0.06	0.00
17.92	2.00	0.00	0.00	0.07	0.00	18.00	2.00	0.00	0.00	0.08	0.00
18.05	2.00	0.00	0.00	0.05	0.00	18.15	2.00	0.00	0.00	0.10	0.00
18.20	2.00	0.00	0.00	0.04	0.00	18.25	2.00	0.00	0.00	0.05	0.00
18.32	2.00	0.00	0.00	0.08	0.00	18.39	2.00	0.00	0.00	0.07	0.00
18.46	2.00	0.00	0.00	0.06	0.00	18.51	2.00	0.00	0.00	0.05	0.00
18.60	2.00	0.00	0.00	0.09	0.00	18.64	2.00	0.00	0.00	0.04	0.00
18.71	2.00	0.00	0.00	0.07	0.00	18.77	2.00	0.00	0.00	0.07	0.00
18.84	2.00	0.00	0.00	0.06	0.00	18.93	2.00	0.00	0.00	0.10	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
18.98	2.00	0.00	0.00	0.05	0.00	19.03	2.00	0.00	0.00	0.05	0.00
19.09	2.00	0.00	0.00	0.06	0.00	19.19	2.00	0.00	0.00	0.10	0.00
19.23	2.00	0.00	0.00	0.04	0.00	19.29	2.00	0.00	0.00	0.06	0.00
19.37	2.00	0.00	0.00	0.08	0.00	19.42	2.00	0.00	0.00	0.05	0.00
19.53	2.00	0.00	0.00	0.11	0.00	19.59	2.00	0.00	0.00	0.05	0.00
19.63	2.00	0.00	0.00	0.05	0.00	19.73	2.00	0.00	0.00	0.09	0.00
19.75	2.00	0.00	0.00	0.03	0.00	19.85	2.00	0.00	0.00	0.09	0.00
19.90	2.00	0.00	0.00	0.06	0.00	19.97	2.00	0.00	0.00	0.07	0.00
20.03	2.00	0.00	0.00	0.06	0.00	20.08	2.00	0.00	0.00	0.05	0.00
20.17	2.00	0.00	0.00	0.09	0.00	20.22	2.00	0.00	0.00	0.05	0.00
20.28	2.00	0.00	0.00	0.06	0.00	20.35	2.00	0.00	0.00	0.07	0.00
20.41	2.00	0.00	0.00	0.06	0.00	20.48	2.00	0.00	0.00	0.07	0.00
20.54	2.00	0.00	0.00	0.06	0.00	20.61	2.00	0.00	0.00	0.07	0.00
20.68	2.00	0.00	0.00	0.07	0.00	20.74	2.00	0.00	0.00	0.06	0.00
20.83	2.00	0.00	0.00	0.09	0.00	20.87	2.00	0.00	0.00	0.05	0.00
20.94	2.00	0.00	0.00	0.07	0.00	21.02	2.00	0.00	0.00	0.08	0.00
21.08	2.00	0.00	0.00	0.06	0.00	21.14	2.00	0.00	0.00	0.06	0.00
21.19	2.00	0.00	0.00	0.05	0.00	21.28	2.00	0.00	0.00	0.08	0.00
21.33	2.00	0.00	0.00	0.05	0.00	21.41	2.00	0.00	0.00	0.08	0.00
21.47	2.00	0.00	0.00	0.06	0.00	21.53	2.00	0.00	0.00	0.06	0.00
21.61	2.00	0.00	0.00	0.07	0.00	21.68	2.00	0.00	0.00	0.07	0.00
21.73	2.00	0.00	0.00	0.05	0.00	21.80	2.00	0.00	0.00	0.07	0.00
21.85	2.00	0.00	0.00	0.05	0.00	21.93	2.00	0.00	0.00	0.07	0.00
22.02	2.00	0.00	0.00	0.09	0.00	22.05	2.00	0.00	0.00	0.04	0.00
22.12	2.00	0.00	0.00	0.07	0.00	22.19	2.00	0.00	0.00	0.07	0.00
22.27	2.00	0.00	0.00	0.08	0.00	22.32	2.00	0.00	0.00	0.05	0.00
22.39	2.00	0.00	0.00	0.07	0.00	22.46	2.00	0.00	0.00	0.07	0.00
22.52	2.00	0.00	0.00	0.06	0.00	22.59	2.00	0.00	0.00	0.07	0.00
22.66	2.00	0.00	0.00	0.07	0.00	22.71	2.00	0.00	0.00	0.05	0.00
22.77	2.00	0.00	0.00	0.06	0.00	22.86	2.00	0.00	0.00	0.08	0.00
22.91	2.00	0.00	0.00	0.05	0.00	22.98	2.00	0.00	0.00	0.07	0.00
23.05	2.00	0.00	0.00	0.07	0.00	23.10	2.00	0.00	0.00	0.04	0.00
23.18	2.00	0.00	0.00	0.08	0.00	23.25	2.00	0.00	0.00	0.07	0.00
23.30	2.00	0.00	0.00	0.05	0.00	23.37	2.00	0.00	0.00	0.07	0.00
23.43	2.00	0.00	0.00	0.06	0.00	23.49	2.00	0.00	0.00	0.07	0.00
23.59	2.00	0.00	0.00	0.09	0.00	23.63	2.00	0.00	0.00	0.04	0.00
23.70	2.00	0.00	0.00	0.07	0.00	23.79	2.00	0.00	0.00	0.10	0.00
23.83	2.00	0.00	0.00	0.04	0.00	23.89	2.00	0.00	0.00	0.06	0.00
23.95	2.00	0.00	0.00	0.07	0.00	24.02	2.00	0.00	0.00	0.07	0.00
24.08	2.00	0.00	0.00	0.06	0.00	24.16	2.00	0.00	0.00	0.08	0.00
24.22	2.00	0.00	0.00	0.05	0.00	24.28	2.00	0.00	0.00	0.06	0.00
24.35	2.00	0.00	0.00	0.07	0.00	24.42	2.00	0.00	0.00	0.07	0.00
24.48	2.00	0.00	0.00	0.06	0.00	24.57	2.00	0.00	0.00	0.08	0.00
24.62	2.00	0.00	0.00	0.06	0.00	24.68	2.00	0.00	0.00	0.05	0.00
24.74	2.00	0.00	0.00	0.06	0.00	24.81	2.00	0.00	0.00	0.07	0.00
24.88	2.00	0.00	0.00	0.07	0.00	24.94	2.00	0.00	0.00	0.06	0.00
25.02	2.00	0.00	0.00	0.08	0.00	25.07	2.00	0.00	0.00	0.05	0.00
25.14	2.00	0.00	0.00	0.07	0.00	25.22	2.00	0.00	0.00	0.08	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
25.27	2.00	0.00	0.00	0.05	0.00	25.36	2.00	0.00	0.00	0.09	0.00
25.40	2.00	0.00	0.00	0.04	0.00	25.47	2.00	0.00	0.00	0.07	0.00
25.57	2.00	0.00	0.00	0.09	0.00	25.61	2.00	0.00	0.00	0.05	0.00
25.66	2.00	0.00	0.00	0.04	0.00	25.73	2.00	0.00	0.00	0.07	0.00
25.79	2.00	0.00	0.00	0.06	0.00	25.88	2.00	0.00	0.00	0.09	0.00
25.93	2.00	0.00	0.00	0.05	0.00	25.98	2.00	0.00	0.00	0.05	0.00
26.07	2.00	0.00	0.00	0.08	0.00	26.13	2.00	0.00	0.00	0.06	0.00
26.20	2.00	0.00	0.00	0.08	0.00	26.27	2.00	0.00	0.00	0.07	0.00
26.33	2.00	0.00	0.00	0.06	0.00	26.38	2.00	0.00	0.00	0.06	0.00
26.47	2.00	0.00	0.00	0.08	0.00	26.52	2.00	0.00	0.00	0.05	0.00
26.58	2.00	0.00	0.00	0.06	0.00	26.66	2.00	0.00	0.00	0.08	0.00
26.71	2.00	0.00	0.00	0.05	0.00	26.80	2.00	0.00	0.00	0.09	0.00
26.87	2.00	0.00	0.00	0.07	0.00	26.91	2.00	0.00	0.00	0.04	0.00
27.00	2.00	0.00	0.00	0.09	0.00	27.06	2.00	0.00	0.00	0.07	0.00
27.10	2.00	0.00	0.00	0.04	0.00	27.17	2.00	0.00	0.00	0.07	0.00
27.26	2.00	0.00	0.00	0.09	0.00	27.30	2.00	0.00	0.00	0.05	0.00
27.39	2.00	0.00	0.00	0.09	0.00	27.44	2.00	0.00	0.00	0.05	0.00
27.51	2.00	0.00	0.00	0.06	0.00	27.60	2.00	0.00	0.00	0.09	0.00
27.64	2.00	0.00	0.00	0.04	0.00	27.70	2.00	0.00	0.00	0.07	0.00
27.80	2.00	0.00	0.00	0.09	0.00	27.84	2.00	0.00	0.00	0.04	0.00
27.89	2.00	0.00	0.00	0.06	0.00	27.95	2.00	0.00	0.00	0.06	0.00
28.03	2.00	0.00	0.00	0.07	0.00	28.09	2.00	0.00	0.00	0.06	0.00
28.16	2.00	0.00	0.00	0.07	0.00	28.22	2.00	0.00	0.00	0.06	0.00
28.32	2.00	0.00	0.00	0.10	0.00	28.37	2.00	0.00	0.00	0.05	0.00
28.43	2.00	0.00	0.00	0.06	0.00	28.48	2.00	0.00	0.00	0.05	0.00
28.55	2.00	0.00	0.00	0.07	0.00	28.61	2.00	0.00	0.00	0.06	0.00
28.68	2.00	0.00	0.00	0.07	0.00	28.77	2.00	0.00	0.00	0.09	0.00
28.81	2.00	0.00	0.00	0.04	0.00	28.88	2.00	0.00	0.00	0.07	0.00
28.95	2.00	0.00	0.00	0.07	0.00	29.01	2.00	0.00	0.00	0.06	0.00
29.07	2.00	0.00	0.00	0.06	0.00	29.14	2.00	0.00	0.00	0.07	0.00
29.21	2.00	0.00	0.00	0.07	0.00	29.30	2.00	0.00	0.00	0.09	0.00
29.36	2.00	0.00	0.00	0.05	0.00	29.41	2.00	0.00	0.00	0.05	0.00
29.47	2.00	0.00	0.00	0.06	0.00	29.54	2.00	0.00	0.00	0.07	0.00
29.60	2.00	0.00	0.00	0.07	0.00	29.68	2.00	0.00	0.00	0.08	0.00
29.76	2.00	0.00	0.00	0.07	0.00	29.80	2.00	0.00	0.00	0.05	0.00
29.87	2.00	0.00	0.00	0.06	0.00	29.95	2.00	0.00	0.00	0.08	0.00
30.00	2.00	0.00	0.00	0.05	0.00	30.05	2.00	0.00	0.00	0.05	0.00
30.14	2.00	0.00	0.00	0.09	0.00	30.19	2.00	0.00	0.00	0.05	0.00
30.25	2.00	0.00	0.00	0.06	0.00	30.32	2.00	0.00	0.00	0.07	0.00
30.38	2.00	0.00	0.00	0.06	0.00	30.45	2.00	0.00	0.00	0.07	0.00
30.53	2.00	0.00	0.00	0.08	0.00	30.59	2.00	0.00	0.00	0.06	0.00
30.68	2.00	0.00	0.00	0.09	0.00	30.74	2.00	0.00	0.00	0.05	0.00
30.79	2.00	0.00	0.00	0.05	0.00	30.85	2.00	0.00	0.00	0.06	0.00
30.92	2.00	0.00	0.00	0.07	0.00	30.98	2.00	0.00	0.00	0.06	0.00
31.06	2.00	0.00	0.00	0.08	0.00	31.12	2.00	0.00	0.00	0.06	0.00
31.18	2.00	0.00	0.00	0.06	0.00	31.27	2.00	0.00	0.00	0.09	0.00
31.32	2.00	0.00	0.00	0.05	0.00	31.37	2.00	0.00	0.00	0.04	0.00
31.45	2.00	0.00	0.00	0.08	0.00	31.51	2.00	0.00	0.00	0.05	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
31.56	2.00	0.00	0.00	0.06	0.00	31.64	2.00	0.00	0.00	0.08	0.00
31.71	2.00	0.00	0.00	0.07	0.00	31.81	2.00	0.00	0.00	0.10	0.00
31.84	2.00	0.00	0.00	0.03	0.00	31.90	2.00	0.00	0.00	0.06	0.00
31.96	2.00	0.00	0.00	0.06	0.00	32.05	2.00	0.00	0.00	0.09	0.00
32.10	2.00	0.00	0.00	0.05	0.00	32.15	2.00	0.00	0.00	0.05	0.00
32.24	2.00	0.00	0.00	0.09	0.00	32.28	2.00	0.00	0.00	0.04	0.00
32.35	2.00	0.00	0.00	0.07	0.00	32.44	2.00	0.00	0.00	0.09	0.00
32.50	2.00	0.00	0.00	0.05	0.00	32.55	2.00	0.00	0.00	0.06	0.00
32.63	2.00	0.00	0.00	0.07	0.00	32.70	2.00	0.00	0.00	0.07	0.00
32.74	2.00	0.00	0.00	0.05	0.00	32.85	2.00	0.00	0.00	0.10	0.00
32.90	2.00	0.00	0.00	0.05	0.00	32.94	2.00	0.00	0.00	0.05	0.00
33.01	2.00	0.00	0.00	0.07	0.00	33.09	2.00	0.00	0.00	0.08	0.00
33.14	2.00	0.00	0.00	0.05	0.00	33.23	2.00	0.00	0.00	0.09	0.00
33.29	2.00	0.00	0.00	0.06	0.00	33.34	2.00	0.00	0.00	0.05	0.00
33.42	2.00	0.00	0.00	0.07	0.00	33.48	2.00	0.00	0.00	0.07	0.00
33.54	2.00	0.00	0.00	0.06	0.00	33.63	2.00	0.00	0.00	0.09	0.00
33.68	2.00	0.00	0.00	0.05	0.00	33.78	2.00	0.00	0.00	0.10	0.00
33.83	2.00	0.00	0.00	0.05	0.00	33.88	2.00	0.00	0.00	0.06	0.00
33.94	2.00	0.00	0.00	0.06	0.00	33.99	2.00	0.00	0.00	0.05	0.00
34.08	2.00	0.00	0.00	0.09	0.00	34.14	2.00	0.00	0.00	0.06	0.00
34.19	2.00	0.00	0.00	0.05	0.00	34.26	2.00	0.00	0.00	0.07	0.00
34.34	2.00	0.00	0.00	0.08	0.00	34.38	2.00	0.00	0.00	0.05	0.00
34.48	2.00	0.00	0.00	0.09	0.00	34.54	2.00	0.00	0.00	0.06	0.00
34.59	2.00	0.00	0.00	0.05	0.00	34.67	2.00	0.00	0.00	0.08	0.00
34.73	2.00	0.00	0.00	0.05	0.00	34.78	2.00	0.00	0.00	0.06	0.00
34.85	2.00	0.00	0.00	0.07	0.00	34.92	2.00	0.00	0.00	0.08	0.00
34.98	2.00	0.00	0.00	0.06	0.00	35.04	2.00	0.00	0.00	0.06	0.00
35.12	2.00	0.00	0.00	0.07	0.00	35.18	2.00	0.00	0.00	0.07	0.00
35.26	2.00	0.00	0.00	0.07	0.00	35.32	2.00	0.00	0.00	0.06	0.00
35.38	2.00	0.00	0.00	0.06	0.00	35.46	2.00	0.00	0.00	0.08	0.00
35.52	2.00	0.00	0.00	0.06	0.00	35.58	2.00	0.00	0.00	0.06	0.00
35.65	2.00	0.00	0.00	0.07	0.00	35.73	2.00	0.00	0.00	0.08	0.00
35.78	2.00	0.00	0.00	0.05	0.00	35.86	2.00	0.00	0.00	0.08	0.00
35.90	2.00	0.00	0.00	0.04	0.00	35.97	2.00	0.00	0.00	0.06	0.00
36.04	2.00	0.00	0.00	0.08	0.00	36.12	2.00	0.00	0.00	0.07	0.00
36.17	2.00	0.00	0.00	0.06	0.00	36.23	2.00	0.00	0.00	0.06	0.00
36.32	2.00	0.00	0.00	0.09	0.00	36.36	2.00	0.00	0.00	0.05	0.00
36.46	2.00	0.00	0.00	0.09	0.00	36.51	2.00	0.00	0.00	0.05	0.00
36.56	2.00	0.00	0.00	0.05	0.00	36.63	2.00	0.00	0.00	0.07	0.00
36.70	2.00	0.00	0.00	0.07	0.00	36.76	2.00	0.00	0.00	0.06	0.00
36.82	2.00	0.00	0.00	0.06	0.00	36.91	2.00	0.00	0.00	0.09	0.00
36.95	2.00	0.00	0.00	0.03	0.00	37.02	2.00	0.00	0.00	0.07	0.00
37.10	2.00	0.00	0.00	0.07	0.00	37.16	2.00	0.00	0.00	0.06	0.00
37.22	2.00	0.00	0.00	0.07	0.00	37.28	2.00	0.00	0.00	0.05	0.00
37.36	2.00	0.00	0.00	0.08	0.00	37.41	2.00	0.00	0.00	0.05	0.00
37.49	2.00	0.00	0.00	0.08	0.00	37.55	2.00	0.00	0.00	0.06	0.00
37.60	2.00	0.00	0.00	0.05	0.00	37.69	2.00	0.00	0.00	0.09	0.00
37.74	2.00	0.00	0.00	0.04	0.00	37.80	2.00	0.00	0.00	0.06	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
37.89	2.00	0.00	0.00	0.10	0.00	37.94	2.00	0.00	0.00	0.04	0.00
38.00	2.00	0.00	0.00	0.07	0.00	38.08	2.00	0.00	0.00	0.08	0.00
38.15	2.00	0.00	0.00	0.06	0.00	38.20	2.00	0.00	0.00	0.05	0.00
38.28	2.00	0.00	0.00	0.08	0.00	38.33	2.00	0.00	0.00	0.05	0.00
38.40	2.00	0.00	0.00	0.07	0.00	38.47	2.00	0.00	0.00	0.07	0.00
38.52	2.00	0.00	0.00	0.05	0.00	38.59	2.00	0.00	0.00	0.07	0.00
38.68	2.00	0.00	0.00	0.10	0.00	38.73	2.00	0.00	0.00	0.05	0.00
38.80	2.00	0.00	0.00	0.06	0.00	38.85	2.00	0.00	0.00	0.06	0.00
38.93	2.00	0.00	0.00	0.07	0.00	38.99	2.00	0.00	0.00	0.06	0.00
39.07	2.00	0.00	0.00	0.09	0.00	39.12	2.00	0.00	0.00	0.05	0.00
39.18	2.00	0.00	0.00	0.05	0.00	39.24	2.00	0.00	0.00	0.06	0.00
39.31	2.00	0.00	0.00	0.07	0.00	39.38	2.00	0.00	0.00	0.07	0.00
39.44	2.00	0.00	0.00	0.06	0.00	39.53	2.00	0.00	0.00	0.09	0.00
39.57	2.00	0.00	0.00	0.04	0.00	39.63	2.00	0.00	0.00	0.07	0.00
39.73	2.00	0.00	0.00	0.09	0.00	39.78	2.00	0.00	0.00	0.05	0.00
39.84	2.00	0.00	0.00	0.06	0.00	39.91	2.00	0.00	0.00	0.07	0.00
39.96	2.00	0.00	0.00	0.05	0.00	40.07	0.45	0.00	0.00	0.10	0.07
40.12	0.43	0.00	0.00	0.05	0.03	40.18	0.42	0.00	0.00	0.06	0.04
40.25	0.39	0.00	0.00	0.07	0.05	40.32	0.36	0.00	0.00	0.07	0.06
40.37	2.00	0.00	0.00	0.05	0.00	40.45	2.00	0.00	0.00	0.08	0.00
40.51	2.00	0.00	0.00	0.05	0.00	40.56	2.00	0.00	0.00	0.05	0.00
40.64	2.00	0.00	0.00	0.09	0.00	40.70	2.00	0.00	0.00	0.05	0.00
40.76	2.00	0.00	0.00	0.06	0.00	40.82	2.00	0.00	0.00	0.07	0.00
40.90	2.00	0.00	0.00	0.08	0.00	40.95	2.00	0.00	0.00	0.05	0.00
41.05	2.00	0.00	0.00	0.09	0.00	41.08	2.00	0.00	0.00	0.04	0.00
41.15	2.00	0.00	0.00	0.07	0.00	41.24	2.00	0.00	0.00	0.09	0.00
41.30	2.00	0.00	0.00	0.05	0.00	41.35	2.00	0.00	0.00	0.05	0.00
41.44	2.00	0.00	0.00	0.09	0.00	41.48	2.00	0.00	0.00	0.04	0.00
41.55	0.24	0.00	0.00	0.07	0.06	41.63	0.27	0.00	0.00	0.08	0.06
41.67	0.29	0.00	0.00	0.05	0.04	41.74	2.00	0.00	0.00	0.06	0.00
41.80	2.00	0.00	0.00	0.06	0.00	41.90	2.00	0.00	0.00	0.10	0.00
41.93	2.00	0.00	0.00	0.03	0.00	42.01	2.00	0.00	0.00	0.08	0.00
42.06	2.00	0.00	0.00	0.05	0.00	42.14	2.00	0.00	0.00	0.08	0.00
42.21	2.00	0.00	0.00	0.06	0.00	42.28	2.00	0.00	0.00	0.07	0.00
42.35	0.33	0.00	0.00	0.07	0.05	42.41	0.39	0.00	0.00	0.06	0.04
42.48	0.41	0.00	0.00	0.07	0.05	42.54	0.43	0.00	0.00	0.06	0.04
42.59	0.42	0.00	0.00	0.05	0.03	42.67	0.41	0.00	0.00	0.08	0.05
42.75	0.40	0.00	0.00	0.08	0.05	42.78	0.39	0.00	0.00	0.04	0.03
42.85	2.00	0.00	0.00	0.07	0.00	42.93	0.40	0.00	0.00	0.08	0.05
42.98	2.00	0.00	0.00	0.05	0.00	43.08	0.39	0.00	0.00	0.09	0.06
43.13	0.49	0.00	0.00	0.05	0.03	43.18	0.62	0.00	0.00	0.06	0.02
43.28	0.83	0.00	0.00	0.09	0.02	43.33	0.90	0.00	0.00	0.05	0.01
43.39	0.94	0.00	0.00	0.06	0.00	43.44	1.04	0.00	0.00	0.06	0.00
43.52	1.13	0.00	0.00	0.08	0.00	43.58	1.19	0.00	0.00	0.05	0.00
43.64	1.26	0.00	0.00	0.06	0.00	43.73	1.25	0.00	0.00	0.09	0.00
43.78	1.32	0.00	0.00	0.05	0.00	43.87	1.44	0.00	0.00	0.09	0.00
43.90	1.49	0.00	0.00	0.03	0.00	43.97	1.56	0.00	0.00	0.06	0.00
44.05	1.56	0.00	0.00	0.08	0.00	44.12	1.56	0.00	0.00	0.06	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
44.17	1.56	0.00	0.00	0.06	0.00	44.23	1.55	0.00	0.00	0.06	0.00
44.31	1.51	0.00	0.00	0.09	0.00	44.36	1.52	0.00	0.00	0.05	0.00
44.45	1.50	0.00	0.00	0.09	0.00	44.52	1.52	0.00	0.00	0.07	0.00
44.55	1.52	0.00	0.00	0.04	0.00	44.62	1.49	0.00	0.00	0.07	0.00
44.70	1.46	0.00	0.00	0.07	0.00	44.78	1.41	0.00	0.00	0.09	0.00
44.84	1.37	0.00	0.00	0.05	0.00	44.91	1.35	0.00	0.00	0.07	0.00
44.97	1.33	0.00	0.00	0.06	0.00	45.02	1.29	0.00	0.00	0.05	0.00
45.10	1.26	0.00	0.00	0.09	0.00	45.15	1.25	0.00	0.00	0.05	0.00
45.24	1.25	0.00	0.00	0.08	0.00	45.30	1.26	0.00	0.00	0.06	0.00
45.36	1.29	0.00	0.00	0.06	0.00	45.42	1.32	0.00	0.00	0.06	0.00
45.51	1.32	0.00	0.00	0.09	0.00	45.55	1.31	0.00	0.00	0.04	0.00
45.63	1.29	0.00	0.00	0.08	0.00	45.70	1.26	0.00	0.00	0.07	0.00
45.75	1.24	0.00	0.00	0.05	0.00	45.81	1.19	0.00	0.00	0.06	0.00
45.89	1.09	0.00	0.00	0.08	0.00	45.94	1.04	0.00	0.00	0.05	0.00
46.00	1.03	0.00	0.00	0.06	0.00	46.09	1.02	0.00	0.00	0.08	0.00
46.14	1.01	0.00	0.00	0.06	0.00	46.20	1.01	0.00	0.00	0.06	0.00
46.27	0.96	0.00	0.00	0.07	0.00	46.33	1.00	0.00	0.00	0.05	0.00
46.40	1.02	0.00	0.00	0.08	0.00	46.48	1.01	0.00	0.00	0.07	0.00
46.52	1.03	0.00	0.00	0.05	0.00	46.59	1.04	0.00	0.00	0.07	0.00
46.66	1.04	0.00	0.00	0.07	0.00	46.73	1.00	0.00	0.00	0.07	0.00
46.80	0.97	0.00	0.00	0.07	0.00	46.85	0.94	0.00	0.00	0.05	0.00
46.92	0.88	0.00	0.00	0.07	0.01	46.99	0.81	0.00	0.00	0.07	0.01
47.06	0.75	0.00	0.00	0.06	0.01	47.12	0.69	0.00	0.00	0.06	0.02
47.21	0.63	0.00	0.00	0.10	0.03	47.26	0.54	0.00	0.00	0.05	0.02
47.32	0.46	0.00	0.00	0.06	0.03	47.38	0.40	0.00	0.00	0.06	0.03
47.44	2.00	0.00	0.00	0.06	0.00	47.51	2.00	0.00	0.00	0.07	0.00
47.60	2.00	0.00	0.00	0.09	0.00	47.66	2.00	0.00	0.00	0.06	0.00
47.71	2.00	0.00	0.00	0.05	0.00	47.77	2.00	0.00	0.00	0.06	0.00
47.86	2.00	0.00	0.00	0.09	0.00	47.91	2.00	0.00	0.00	0.05	0.00
47.98	0.44	0.00	0.00	0.07	0.03	48.04	0.51	0.00	0.00	0.06	0.02
48.10	0.56	0.00	0.00	0.06	0.02	48.19	0.61	0.00	0.00	0.09	0.03
48.25	0.66	0.00	0.00	0.06	0.02	48.30	0.71	0.00	0.00	0.05	0.01
48.37	0.75	0.00	0.00	0.07	0.01	48.43	0.77	0.00	0.00	0.06	0.01
48.49	0.79	0.00	0.00	0.07	0.01	48.56	0.81	0.00	0.00	0.06	0.01
48.64	0.85	0.00	0.00	0.08	0.01	48.74	0.77	0.00	0.00	0.11	0.02
48.77	0.77	0.00	0.00	0.03	0.00	48.83	0.75	0.00	0.00	0.06	0.01
48.89	0.73	0.00	0.00	0.06	0.01	48.96	0.70	0.00	0.00	0.07	0.02
49.03	0.60	0.00	0.00	0.06	0.02	49.09	0.60	0.00	0.00	0.06	0.02
49.16	0.59	0.00	0.00	0.07	0.02	49.22	0.56	0.00	0.00	0.07	0.02
49.29	0.56	0.00	0.00	0.07	0.02	49.35	0.57	0.00	0.00	0.06	0.02
49.43	0.59	0.00	0.00	0.08	0.02	49.49	0.61	0.00	0.00	0.06	0.02
49.55	0.65	0.00	0.00	0.06	0.02	49.64	0.78	0.00	0.00	0.09	0.01
49.68	0.89	0.00	0.00	0.04	0.00	49.74	1.02	0.00	0.00	0.06	0.00
49.84	2.00	0.00	0.00	0.09	0.00	49.89	2.00	0.00	0.00	0.05	0.00
49.94	2.00	0.00	0.00	0.05	0.00	50.03	2.00	0.00	0.00	0.09	0.00
50.08	2.00	0.00	0.00	0.05	0.00	50.14	2.00	0.00	0.00	0.06	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI

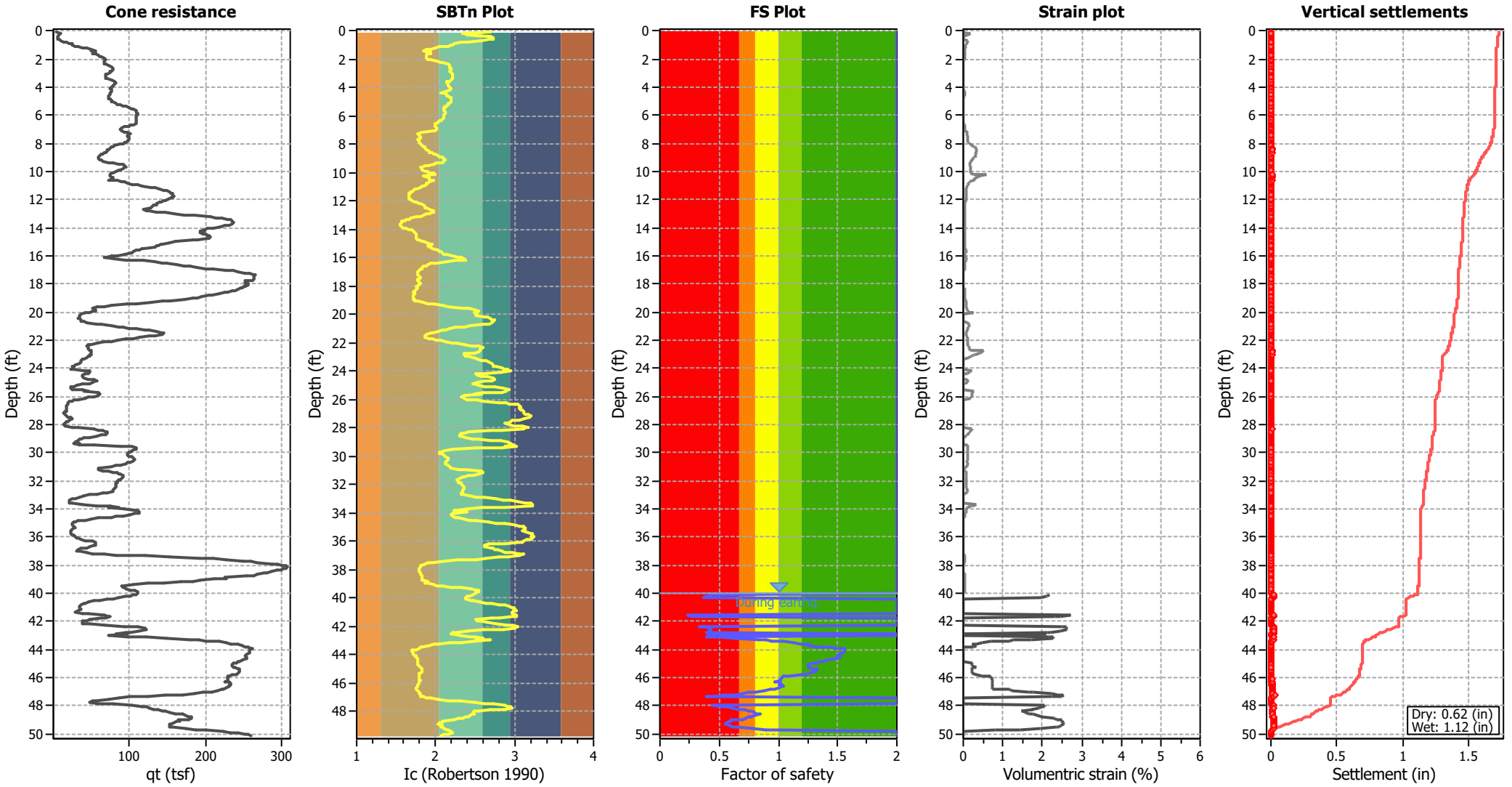
Overall liquefaction potential: 1.54

LPI = 0.00 - Liquefaction risk very low
LPI between 0.00 and 5.00 - Liquefaction risk low
LPI between 5.00 and 15.00 - Liquefaction risk high
LPI > 15.00 - Liquefaction risk very high

Abbreviations

FS: Calculated factor of safety for test point
F_L: 1 - FS
w_z: Function value of the extend of soil liquefaction according to depth
d_z: Layer thickness (ft)

Estimation of post-earthquake settlements



Abbreviations

q_t:	Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c:	Soil Behaviour Type Index
FS:	Calculated Factor of Safety against liquefaction
Volumentric strain:	Post-liquefaction volumentric strain

:: Post-earthquake settlement of dry sands ::

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
0.07	2.69	8.61	39.36	0	0.0	0	1.01	0.000	0.00	0.00	0.00	0.000
0.14	2.34	16.36	16.36	4	0.0	177	1.01	0.010	0.07	21.37	0.09	0.002
0.21	2.35	16.21	16.21	4	0.0	179	1.01	0.024	0.17	21.37	0.20	0.003
0.27	2.40	15.63	37.22	9	0.0	183	1.01	0.039	0.10	21.37	0.12	0.002
0.35	2.63	11.90	48.25	0	0.0	0	1.00	0.000	0.00	0.00	0.00	0.000
0.41	2.69	12.02	55.51	0	0.0	0	1.00	0.000	0.00	0.00	0.00	0.000
0.48	2.73	12.01	60.10	0	0.0	0	1.00	0.000	0.00	0.00	0.00	0.000
0.54	2.73	12.44	62.72	0	0.0	0	1.00	0.000	0.00	0.00	0.00	0.000
0.60	2.68	14.30	63.83	0	0.0	0	1.00	0.000	0.00	0.00	0.00	0.000
0.66	2.59	17.32	63.78	17	0.0	258	1.00	0.084	0.10	21.37	0.12	0.002
0.74	2.41	24.93	59.98	15	0.0	294	1.00	0.062	0.09	21.37	0.10	0.002
0.79	2.32	29.50	59.63	14	0.0	314	1.00	0.055	0.08	21.37	0.10	0.001
0.86	2.23	36.39	62.11	14	0.0	345	1.00	0.045	0.07	21.37	0.08	0.001
0.94	2.21	40.83	67.01	15	0.0	376	1.00	0.040	0.06	21.37	0.06	0.001
0.99	2.19	43.56	69.38	16	0.0	391	1.00	0.038	0.05	21.37	0.06	0.001
1.05	2.16	47.86	72.86	16	0.0	413	1.00	0.036	0.05	21.37	0.05	0.001
1.13	2.05	54.74	74.10	16	0.0	411	0.99	0.043	0.06	21.37	0.07	0.001
1.20	2.00	62.77	81.96	17	0.0	442	0.99	0.037	0.05	21.37	0.05	0.001
1.25	1.94	72.82	91.87	19	0.0	474	0.99	0.032	0.03	21.37	0.04	0.001
1.33	1.88	83.15	101.87	20	0.0	505	0.99	0.030	0.03	21.37	0.03	0.001
1.40	1.85	90.61	108.58	21	0.0	526	0.99	0.029	0.03	21.37	0.03	0.000
1.46	1.94	80.26	101.24	21	0.0	523	0.99	0.032	0.03	21.37	0.04	0.001
1.51	1.88	91.10	111.27	22	0.0	550	0.99	0.029	0.03	21.37	0.03	0.000
1.57	1.94	83.41	105.36	21	0.0	545	0.99	0.033	0.03	21.37	0.04	0.001
1.64	1.90	91.58	113.06	23	0.0	566	0.99	0.032	0.03	21.37	0.03	0.001
1.73	1.89	97.04	119.08	24	0.0	592	0.99	0.030	0.02	21.37	0.03	0.001
1.79	1.89	98.89	121.77	24	0.0	608	0.99	0.030	0.02	21.37	0.03	0.000
1.85	1.88	103.05	126.19	25	0.0	626	0.98	0.030	0.02	21.37	0.03	0.000
1.91	1.88	107.93	131.91	26	0.0	653	0.98	0.028	0.02	21.37	0.02	0.000
1.99	1.90	111.65	138.26	28	0.0	695	0.98	0.025	0.02	21.37	0.02	0.000
2.04	1.94	112.22	141.89	29	0.0	735	0.98	0.023	0.01	21.37	0.02	0.000
2.10	2.01	110.50	144.96	30	0.0	785	0.98	0.020	0.01	21.37	0.01	0.000
2.18	2.06	110.41	150.69	32	0.0	839	0.98	0.019	0.01	21.37	0.01	0.000
2.24	2.09	110.40	155.16	33	0.0	873	0.98	0.018	0.01	21.37	0.01	0.000
2.33	2.16	110.33	167.75	37	0.0	951	0.98	0.016	0.01	21.37	0.01	0.000
2.39	2.18	112.76	176.43	39	0.0	997	0.98	0.015	0.01	21.37	0.01	0.000
2.44	2.18	116.92	183.60	41	0.0	1038	0.98	0.014	0.01	21.37	0.01	0.000
2.53	2.18	122.93	193.41	43	0.0	1093	0.98	0.014	0.01	21.37	0.01	0.000
2.58	2.18	124.50	196.29	44	0.0	1109	0.97	0.014	0.01	21.37	0.01	0.000
2.64	2.19	125.80	199.71	45	0.0	1127	0.97	0.014	0.01	21.37	0.01	0.000
2.72	2.19	126.35	201.92	45	0.0	1138	0.97	0.014	0.01	21.37	0.01	0.000
2.76	2.19	126.06	201.32	45	0.0	1135	0.97	0.015	0.01	21.37	0.01	0.000
2.85	2.19	124.62	197.10	44	0.0	1113	0.97	0.016	0.01	21.37	0.01	0.000
2.90	2.19	122.61	194.78	44	0.0	1099	0.97	0.017	0.01	21.37	0.01	0.000
2.97	2.20	119.73	192.03	43	0.0	1082	0.97	0.018	0.01	21.37	0.01	0.000
3.03	2.21	115.56	189.13	43	0.0	1062	0.97	0.019	0.01	21.37	0.01	0.000
3.09	2.21	112.97	186.30	42	0.0	1044	0.97	0.020	0.01	21.37	0.01	0.000
3.18	2.22	111.24	184.72	42	0.0	1034	0.97	0.022	0.01	21.37	0.01	0.000

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
3.22	2.21	112.95	183.96	42	0.0	1034	0.97	0.022	0.01	21.37	0.01	0.000
3.32	2.21	111.80	183.94	42	0.0	1031	0.96	0.023	0.01	21.37	0.01	0.000
3.36	2.21	112.94	184.66	42	0.0	1037	0.96	0.024	0.01	21.37	0.01	0.000
3.42	2.20	115.81	186.66	42	0.0	1051	0.96	0.023	0.01	21.37	0.01	0.000
3.51	2.17	123.27	190.13	42	0.0	1077	0.96	0.023	0.01	21.37	0.01	0.000
3.57	2.15	129.14	193.21	43	0.0	1095	0.96	0.023	0.01	21.37	0.01	0.000
3.62	2.14	131.44	195.30	43	0.0	1107	0.96	0.023	0.01	21.37	0.01	0.000
3.70	2.14	133.44	198.38	44	0.0	1125	0.96	0.023	0.01	21.37	0.01	0.000
3.76	2.15	131.57	198.99	44	0.0	1128	0.96	0.023	0.01	21.37	0.01	0.000
3.81	2.16	130.55	198.80	44	0.0	1127	0.96	0.024	0.01	21.37	0.01	0.000
3.88	2.17	128.53	197.61	44	0.0	1119	0.96	0.025	0.01	21.37	0.01	0.000
3.95	2.18	124.80	196.02	44	0.0	1108	0.95	0.026	0.01	21.37	0.01	0.000
4.01	2.19	123.36	195.03	44	0.0	1101	0.95	0.027	0.01	21.37	0.01	0.000
4.09	2.19	122.34	194.41	44	0.0	1097	0.95	0.028	0.01	21.37	0.01	0.000
4.14	2.18	123.41	194.57	44	0.0	1099	0.95	0.028	0.01	21.37	0.01	0.000
4.21	2.18	123.90	194.42	43	0.0	1099	0.95	0.029	0.01	21.37	0.01	0.000
4.30	2.11	123.48	178.02	39	0.0	1007	0.95	0.037	0.02	21.37	0.02	0.000
4.35	2.06	122.61	167.83	36	0.0	935	0.95	0.046	0.02	21.37	0.03	0.000
4.40	2.10	121.44	171.66	37	0.0	967	0.95	0.043	0.02	21.37	0.02	0.000
4.50	2.14	120.73	178.43	39	0.0	1012	0.95	0.039	0.02	21.37	0.02	0.000
4.54	2.15	120.15	180.00	40	0.0	1021	0.95	0.039	0.02	21.37	0.02	0.000
4.61	2.17	119.00	183.26	41	0.0	1038	0.94	0.038	0.02	21.37	0.02	0.000
4.69	2.19	119.06	188.12	42	0.0	1062	0.94	0.037	0.02	21.37	0.02	0.000
4.73	2.19	119.05	189.13	42	0.0	1067	0.94	0.037	0.02	21.37	0.02	0.000
4.80	2.20	119.13	191.36	43	0.0	1078	0.94	0.037	0.01	21.37	0.02	0.000
4.86	2.20	120.98	194.12	44	0.0	1094	0.94	0.037	0.01	21.37	0.02	0.000
4.93	2.19	122.84	196.72	44	0.0	1109	0.94	0.036	0.01	21.37	0.02	0.000
5.00	2.19	125.13	198.27	44	0.0	1119	0.94	0.036	0.01	21.37	0.02	0.000
5.05	2.18	128.12	199.34	44	0.0	1128	0.94	0.036	0.01	21.37	0.02	0.000
5.14	2.16	132.01	201.65	45	0.0	1143	0.94	0.036	0.01	21.37	0.02	0.000
5.19	2.15	135.15	203.92	45	0.0	1156	0.93	0.035	0.01	21.37	0.02	0.000
5.26	2.13	141.75	208.80	46	0.0	1183	0.93	0.034	0.01	21.37	0.01	0.000
5.34	2.12	148.92	216.84	47	0.0	1228	0.93	0.032	0.01	21.37	0.01	0.000
5.39	2.12	153.37	222.84	49	0.0	1262	0.93	0.031	0.01	21.37	0.01	0.000
5.45	2.11	160.69	231.08	50	0.0	1307	0.93	0.029	0.01	21.37	0.01	0.000
5.52	2.11	166.85	239.71	52	0.0	1355	0.93	0.027	0.01	21.37	0.01	0.000
5.59	2.11	170.57	245.51	53	0.0	1388	0.93	0.027	0.01	21.37	0.01	0.000
5.68	2.11	174.87	251.79	55	0.0	1424	0.93	0.026	0.01	21.37	0.01	0.000
5.71	2.11	175.73	253.10	55	0.0	1432	0.93	0.026	0.01	21.37	0.01	0.000
5.78	2.12	176.43	255.04	56	0.0	1443	0.92	0.026	0.01	21.37	0.01	0.000
5.84	2.11	177.58	255.71	56	0.0	1446	0.92	0.026	0.01	21.37	0.01	0.000
5.93	2.11	177.28	254.60	55	0.0	1439	0.92	0.027	0.01	21.37	0.01	0.000
5.99	2.11	176.14	253.15	55	0.0	1431	0.92	0.028	0.01	21.37	0.01	0.000
6.04	2.11	175.55	252.14	55	0.0	1425	0.92	0.028	0.01	21.37	0.01	0.000
6.13	2.11	174.82	249.72	54	0.0	1410	0.92	0.029	0.01	21.37	0.01	0.000
6.17	2.10	174.82	248.11	54	0.0	1400	0.92	0.030	0.01	21.37	0.01	0.000
6.27	2.08	174.66	243.31	52	0.0	1366	0.92	0.032	0.01	21.37	0.01	0.000
6.30	2.08	174.52	241.69	52	0.0	1354	0.92	0.033	0.01	21.37	0.01	0.000

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
6.37	2.06	174.51	237.67	51	0.0	1321	0.91	0.035	0.01	21.37	0.01	0.000
6.46	2.03	175.22	234.27	49	0.0	1288	0.91	0.038	0.01	21.37	0.02	0.000
6.52	2.01	175.51	231.49	48	0.0	1259	0.91	0.041	0.01	21.37	0.02	0.000
6.57	2.00	174.34	228.31	48	0.0	1234	0.91	0.043	0.02	21.37	0.02	0.000
6.66	1.99	169.74	221.03	46	0.0	1188	0.91	0.048	0.02	21.37	0.02	0.000
6.71	2.00	163.85	214.25	45	0.0	1156	0.91	0.052	0.02	21.37	0.02	0.000
6.77	2.00	159.11	207.94	43	0.0	1121	0.91	0.057	0.02	21.37	0.03	0.000
6.83	2.01	151.36	199.04	42	0.0	1080	0.91	0.064	0.03	21.37	0.03	0.001
6.92	2.01	145.60	191.69	40	0.0	1041	0.91	0.073	0.03	21.37	0.04	0.001
6.97	2.01	143.15	188.31	39	0.0	1022	0.90	0.078	0.03	21.37	0.04	0.001
7.04	2.00	142.44	186.01	39	0.0	1002	0.90	0.084	0.04	21.37	0.04	0.001
7.09	1.98	144.73	187.40	39	0.0	1001	0.90	0.085	0.04	21.37	0.05	0.001
7.16	1.82	146.13	171.75	33	0.0	844	0.90	0.156	0.08	21.37	0.10	0.001
7.22	1.78	151.29	171.00	33	0.0	846	0.90	0.157	0.09	21.37	0.10	0.002
7.31	1.78	155.02	175.89	34	0.0	875	0.90	0.141	0.08	21.37	0.09	0.002
7.35	1.78	155.60	176.48	34	0.0	881	0.90	0.139	0.07	21.37	0.09	0.001
7.46	1.80	149.41	172.77	33	0.0	868	0.90	0.151	0.08	21.37	0.10	0.002
7.52	1.80	147.64	170.44	33	0.0	860	0.90	0.158	0.09	21.37	0.10	0.002
7.56	1.79	149.62	170.30	33	0.0	862	0.89	0.158	0.09	21.37	0.10	0.001
7.63	1.78	149.48	168.97	32	0.0	861	0.89	0.161	0.09	21.37	0.11	0.002
7.68	1.79	148.62	168.77	32	0.0	863	0.89	0.162	0.09	21.37	0.11	0.001
7.76	1.79	147.11	168.40	32	0.0	865	0.89	0.163	0.09	21.37	0.11	0.002
7.82	1.80	145.25	167.16	32	0.0	862	0.89	0.167	0.09	21.37	0.11	0.002
7.90	1.80	142.40	163.68	32	0.0	849	0.89	0.181	0.10	21.37	0.12	0.002
7.95	1.80	139.09	160.54	31	0.0	835	0.89	0.195	0.11	21.37	0.13	0.002
8.02	1.81	134.30	156.02	30	0.0	816	0.89	0.218	0.13	21.37	0.16	0.002
8.08	1.82	128.67	151.35	29	0.0	796	0.89	0.245	0.15	21.37	0.18	0.003
8.16	1.85	119.14	143.43	28	0.0	764	0.88	0.298	0.20	21.37	0.23	0.005
8.20	1.86	116.87	141.05	28	0.0	755	0.88	0.318	0.21	21.37	0.25	0.002
8.27	1.87	113.20	137.25	27	0.0	739	0.88	0.355	0.25	21.37	0.29	0.004
8.35	1.88	109.74	134.09	27	0.0	730	0.88	0.383	0.27	21.37	0.32	0.006
8.41	1.89	107.59	132.42	26	0.0	728	0.88	0.394	0.28	21.37	0.33	0.005
8.49	1.91	105.02	130.83	26	0.0	730	0.88	0.394	0.28	21.37	0.33	0.007
8.54	1.93	103.89	130.26	26	0.0	733	0.88	0.389	0.28	21.37	0.33	0.003
8.61	1.96	100.70	128.37	26	0.0	737	0.88	0.386	0.28	21.37	0.33	0.006
8.66	1.97	99.60	128.11	26	0.0	744	0.87	0.374	0.27	21.37	0.31	0.004
8.73	2.00	97.33	127.16	26	0.0	749	0.87	0.365	0.26	21.37	0.31	0.005
8.80	2.02	94.71	125.81	26	0.0	751	0.87	0.366	0.26	21.37	0.31	0.005
8.87	2.06	90.83	123.65	26	0.0	747	0.87	0.380	0.27	21.37	0.32	0.005
8.94	2.09	88.49	124.22	27	0.0	757	0.87	0.362	0.25	21.37	0.30	0.005
8.99	2.11	87.96	126.28	27	0.0	772	0.87	0.334	0.23	21.37	0.27	0.003
9.07	2.12	88.00	128.06	28	0.0	786	0.87	0.311	0.21	21.37	0.24	0.004
9.12	2.11	89.60	128.69	28	0.0	795	0.87	0.300	0.20	21.37	0.24	0.003
9.20	2.10	92.13	130.80	28	0.0	813	0.86	0.276	0.18	21.37	0.21	0.004
9.26	2.08	95.19	132.50	28	0.0	826	0.86	0.260	0.17	21.37	0.20	0.003
9.35	2.01	103.03	135.85	28	0.0	839	0.86	0.246	0.16	21.37	0.19	0.004
9.40	1.97	108.68	139.72	29	0.0	852	0.86	0.234	0.15	21.37	0.18	0.002
9.48	1.90	118.34	146.32	29	0.0	865	0.86	0.222	0.14	21.37	0.16	0.003

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
9.53	1.86	123.72	149.31	29	0.0	868	0.86	0.220	0.14	21.37	0.16	0.002
9.59	1.83	126.28	149.42	29	0.0	864	0.86	0.227	0.14	21.37	0.17	0.003
9.65	1.82	126.60	148.32	29	0.0	858	0.86	0.235	0.15	21.37	0.18	0.002
9.71	1.82	124.88	147.18	29	0.0	856	0.85	0.240	0.16	21.37	0.18	0.003
9.78	1.83	122.69	145.65	28	0.0	853	0.85	0.247	0.16	21.37	0.19	0.003
9.87	1.87	117.05	142.76	28	0.0	854	0.85	0.249	0.16	21.37	0.19	0.004
9.93	1.90	113.85	140.79	28	0.0	855	0.85	0.249	0.17	21.37	0.19	0.003
9.99	1.93	110.33	138.45	28	0.0	856	0.85	0.250	0.17	21.37	0.20	0.003
10.07	1.97	105.14	134.89	28	0.0	856	0.85	0.253	0.17	21.37	0.20	0.004
10.13	1.99	102.54	133.58	28	0.0	861	0.85	0.249	0.17	21.37	0.20	0.003
10.17	1.96	100.06	127.95	26	0.0	815	0.85	0.318	0.23	21.37	0.27	0.003
10.24	1.86	97.52	117.49	23	0.0	711	0.84	0.615	0.52	21.37	0.61	0.009
10.32	1.90	98.02	121.51	24	0.0	757	0.84	0.457	0.36	21.37	0.42	0.009
10.37	1.92	98.69	123.14	25	0.0	774	0.84	0.413	0.32	21.37	0.37	0.004
10.45	1.92	101.76	127.15	26	0.0	804	0.84	0.351	0.26	21.37	0.30	0.006
10.50	1.92	102.47	128.31	26	0.0	815	0.84	0.332	0.24	21.37	0.28	0.003
10.58	1.98	96.11	123.96	26	0.0	815	0.84	0.336	0.25	21.37	0.29	0.006
10.63	1.91	107.90	134.34	27	0.0	855	0.84	0.275	0.19	21.37	0.22	0.003
10.71	1.90	113.69	140.36	28	0.0	889	0.84	0.235	0.16	21.37	0.18	0.003
10.77	1.89	118.20	145.02	29	0.0	916	0.83	0.211	0.14	21.37	0.16	0.002
10.83	1.88	123.08	150.20	30	0.0	948	0.83	0.186	0.12	21.37	0.14	0.002
10.90	1.86	128.83	155.21	31	0.0	974	0.83	0.170	0.10	21.37	0.12	0.002
10.97	1.83	136.29	160.78	31	0.0	1002	0.83	0.155	0.09	21.37	0.11	0.002
11.03	1.80	142.21	164.65	32	0.0	1024	0.83	0.144	0.08	21.37	0.10	0.001
11.12	1.76	155.25	171.11	33	0.0	1071	0.83	0.125	0.07	21.37	0.08	0.002
11.16	1.74	161.04	172.77	33	0.0	1091	0.83	0.119	0.07	21.37	0.08	0.001
11.23	1.72	168.03	172.68	32	0.0	1113	0.83	0.112	0.06	21.37	0.07	0.001
11.31	1.70	173.60	173.60	32	0.0	1126	0.82	0.109	0.06	21.37	0.07	0.001
11.37	1.68	176.97	176.97	33	0.0	1135	0.82	0.107	0.06	21.37	0.07	0.001
11.42	1.67	179.53	179.53	33	0.0	1141	0.82	0.106	0.06	21.37	0.07	0.001
11.50	1.66	182.20	182.20	34	0.0	1147	0.82	0.105	0.06	21.37	0.07	0.001
11.55	1.66	183.31	183.31	34	0.0	1151	0.82	0.105	0.06	21.37	0.07	0.001
11.66	1.66	182.97	182.97	34	0.0	1152	0.82	0.105	0.06	21.37	0.07	0.002
11.71	1.66	182.81	182.81	34	0.0	1153	0.82	0.106	0.06	21.37	0.07	0.001
11.77	1.66	181.80	181.80	33	0.0	1157	0.82	0.105	0.06	21.37	0.07	0.001
11.82	1.67	180.31	180.31	33	0.0	1163	0.81	0.104	0.06	21.37	0.07	0.001
11.88	1.68	178.74	178.74	33	0.0	1172	0.81	0.102	0.06	21.37	0.07	0.001
11.96	1.71	174.92	175.32	33	0.0	1183	0.81	0.100	0.06	21.37	0.06	0.001
12.05	1.74	170.58	182.02	34	0.0	1201	0.81	0.097	0.05	21.37	0.06	0.001
12.10	1.76	167.10	184.63	35	0.0	1211	0.81	0.095	0.05	21.37	0.06	0.001
12.16	1.79	163.97	186.42	36	0.0	1223	0.81	0.093	0.05	21.37	0.05	0.001
12.21	1.81	161.33	187.23	36	0.0	1235	0.81	0.091	0.04	21.37	0.05	0.001
12.30	1.85	157.76	189.18	37	0.0	1271	0.80	0.084	0.04	21.37	0.05	0.001
12.35	1.86	156.42	189.16	37	0.0	1281	0.80	0.083	0.04	21.37	0.05	0.001
12.41	1.86	152.48	184.13	36	0.0	1250	0.80	0.089	0.04	21.37	0.05	0.001
12.48	1.86	150.52	181.62	36	0.0	1236	0.80	0.092	0.05	21.37	0.05	0.001
12.53	1.88	149.36	182.89	36	0.0	1264	0.80	0.087	0.04	21.37	0.05	0.001
12.61	1.91	147.64	184.01	37	0.0	1302	0.80	0.081	0.04	21.37	0.05	0.001

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
12.68	1.98	137.18	177.10	37	0.0	1308	0.80	0.080	0.04	21.37	0.05	0.001
12.75	1.97	140.78	180.75	37	0.0	1332	0.80	0.077	0.04	21.37	0.04	0.001
12.80	1.96	144.38	183.98	38	0.0	1348	0.79	0.075	0.04	21.37	0.04	0.001
12.88	1.92	154.73	193.16	39	0.0	1387	0.79	0.070	0.03	21.37	0.04	0.001
12.94	1.88	166.18	203.73	41	0.0	1438	0.79	0.065	0.03	21.37	0.03	0.000
13.00	1.85	177.30	213.18	42	0.0	1483	0.79	0.061	0.02	21.37	0.03	0.000
13.07	1.81	190.82	221.23	43	0.0	1518	0.79	0.058	0.02	21.37	0.03	0.000
13.14	1.76	204.99	224.11	43	0.0	1543	0.79	0.056	0.02	21.37	0.03	0.000
13.24	1.68	223.84	223.84	42	0.0	1559	0.79	0.055	0.02	21.37	0.03	0.001
13.29	1.65	231.68	231.68	43	0.0	1560	0.78	0.055	0.02	21.37	0.03	0.000
13.33	1.63	237.98	237.98	43	0.0	1560	0.78	0.055	0.02	21.37	0.03	0.000
13.39	1.60	244.76	244.76	44	0.0	1557	0.78	0.056	0.02	21.37	0.03	0.000
13.46	1.58	249.40	249.40	45	0.0	1547	0.78	0.057	0.02	21.37	0.03	0.000
13.52	1.56	250.53	250.53	45	0.0	1531	0.78	0.058	0.02	21.37	0.03	0.000
13.59	1.56	250.33	250.33	45	0.0	1523	0.78	0.059	0.02	21.37	0.03	0.000
13.68	1.56	248.68	248.68	44	0.0	1518	0.78	0.060	0.02	21.37	0.03	0.001
13.72	1.56	247.09	247.09	44	0.0	1515	0.78	0.061	0.02	21.37	0.03	0.000
13.78	1.57	244.02	244.02	44	0.0	1519	0.77	0.060	0.02	21.37	0.03	0.000
13.88	1.60	237.07	237.07	43	0.0	1529	0.77	0.060	0.02	21.37	0.03	0.001
13.93	1.62	230.49	230.49	42	0.0	1537	0.77	0.059	0.02	21.37	0.03	0.000
13.99	1.66	221.04	221.04	41	0.0	1542	0.77	0.059	0.03	21.37	0.03	0.000
14.07	1.69	213.48	213.48	40	0.0	1556	0.77	0.058	0.03	21.37	0.03	0.001
14.12	1.71	208.52	212.45	40	0.0	1559	0.77	0.058	0.03	21.37	0.03	0.000
14.19	1.74	203.16	216.26	41	0.0	1567	0.77	0.058	0.02	21.37	0.03	0.001
14.26	1.73	207.23	219.10	41	0.0	1595	0.76	0.056	0.02	21.37	0.03	0.000
14.31	1.75	202.59	220.95	42	0.0	1599	0.76	0.056	0.02	21.37	0.03	0.000
14.40	1.75	205.88	222.59	42	0.0	1620	0.76	0.054	0.02	21.37	0.03	0.001
14.45	1.75	207.85	224.36	43	0.0	1637	0.76	0.053	0.02	21.37	0.03	0.000
14.50	1.75	209.74	226.19	43	0.0	1654	0.76	0.052	0.02	21.37	0.02	0.000
14.57	1.75	211.14	229.62	44	0.0	1680	0.76	0.051	0.02	21.37	0.02	0.000
14.64	1.76	213.27	234.54	45	0.0	1718	0.76	0.049	0.02	21.37	0.02	0.000
14.72	1.78	210.61	237.09	45	0.0	1740	0.76	0.048	0.02	21.37	0.02	0.000
14.76	1.79	207.69	236.52	46	0.0	1740	0.75	0.048	0.02	21.37	0.02	0.000
14.86	1.83	195.30	230.68	45	0.0	1723	0.75	0.049	0.02	21.37	0.02	0.000
14.90	1.85	187.93	225.94	44	0.0	1711	0.75	0.050	0.02	21.37	0.02	0.000
15.01	1.93	164.67	207.20	42	0.0	1661	0.75	0.053	0.02	21.37	0.03	0.001
15.05	1.96	157.27	200.96	41	0.0	1646	0.75	0.055	0.02	21.37	0.03	0.000
15.14	1.91	146.72	182.88	37	0.0	1456	0.75	0.072	0.03	21.37	0.04	0.001
15.16	1.89	144.12	177.60	36	0.0	1395	0.75	0.080	0.04	21.37	0.05	0.000
15.26	1.92	139.99	174.95	35	0.0	1404	0.74	0.079	0.04	21.37	0.05	0.001
15.30	1.93	138.70	174.52	35	0.0	1416	0.74	0.077	0.04	21.37	0.05	0.001
15.37	1.95	136.31	173.36	35	0.0	1431	0.74	0.076	0.04	21.37	0.04	0.001
15.44	2.04	119.31	160.01	34	0.0	1393	0.74	0.081	0.04	21.37	0.05	0.001
15.51	2.04	117.16	157.44	33	0.0	1376	0.74	0.084	0.05	21.37	0.05	0.001
15.56	2.05	114.12	154.20	33	0.0	1355	0.74	0.088	0.05	21.37	0.06	0.001
15.62	2.06	109.91	150.31	32	0.0	1332	0.74	0.092	0.05	21.37	0.06	0.001
15.70	2.09	105.98	148.32	32	0.0	1330	0.73	0.092	0.05	21.37	0.06	0.001
15.76	2.10	104.24	148.63	32	0.0	1342	0.73	0.091	0.05	21.37	0.06	0.001

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
15.82	2.15	100.60	150.62	33	0.0	1368	0.73	0.086	0.05	21.37	0.06	0.001
15.88	2.22	93.99	155.82	35	0.0	1398	0.73	0.082	0.04	21.37	0.05	0.001
15.96	2.28	83.94	155.56	36	0.0	1356	0.73	0.089	0.04	21.37	0.05	0.001
16.01	2.32	77.32	154.88	37	0.0	1315	0.73	0.097	0.05	21.37	0.05	0.001
16.09	2.37	69.73	154.12	37	0.0	1262	0.73	0.108	0.05	21.37	0.06	0.001
16.15	2.38	67.10	151.39	37	0.0	1233	0.73	0.116	0.06	21.37	0.07	0.001
16.23	2.26	79.30	141.66	33	0.0	1265	0.72	0.108	0.06	21.37	0.07	0.001
16.29	2.15	93.97	140.74	31	0.0	1305	0.72	0.099	0.06	21.37	0.07	0.001
16.35	2.01	116.26	153.32	32	0.0	1371	0.72	0.088	0.05	21.37	0.06	0.001
16.42	1.95	129.92	164.74	34	0.0	1415	0.72	0.081	0.04	21.37	0.05	0.001
16.50	1.91	138.20	171.63	34	0.0	1436	0.72	0.079	0.04	21.37	0.05	0.001
16.55	1.88	144.44	176.54	35	0.0	1451	0.72	0.077	0.04	21.37	0.05	0.001
16.64	1.85	156.20	187.18	37	0.0	1513	0.72	0.070	0.03	21.37	0.04	0.001
16.70	1.83	164.99	195.74	38	0.0	1575	0.71	0.064	0.03	21.37	0.03	0.001
16.75	1.82	170.84	201.09	39	0.0	1613	0.71	0.061	0.03	21.37	0.03	0.000
16.80	1.80	179.64	208.09	40	0.0	1661	0.71	0.057	0.02	21.37	0.03	0.000
16.89	1.80	191.45	220.55	43	0.0	1763	0.71	0.051	0.02	21.37	0.02	0.001
16.93	1.79	200.03	227.35	44	0.0	1815	0.71	0.048	0.02	21.37	0.02	0.000
17.00	1.77	215.03	239.58	46	0.0	1915	0.71	0.044	0.02	21.37	0.02	0.000
17.07	1.77	223.20	248.94	48	0.0	1995	0.71	0.041	0.01	21.37	0.02	0.000
17.14	1.78	228.56	257.90	49	0.0	2072	0.71	0.038	0.01	21.37	0.02	0.000
17.21	1.78	236.80	267.85	51	0.0	2159	0.70	0.036	0.01	21.37	0.01	0.000
17.27	1.79	240.77	274.54	53	0.0	2220	0.70	0.034	0.01	21.37	0.01	0.000
17.34	1.79	245.99	280.88	54	0.0	2278	0.70	0.033	0.01	21.37	0.01	0.000
17.39	1.80	246.68	284.77	55	0.0	2320	0.70	0.032	0.01	21.37	0.01	0.000
17.48	1.80	244.51	281.39	54	0.0	2298	0.70	0.033	0.01	21.37	0.01	0.000
17.53	1.78	244.08	275.88	53	0.0	2249	0.70	0.034	0.01	21.37	0.01	0.000
17.62	1.78	243.31	274.27	53	0.0	2242	0.70	0.034	0.01	21.37	0.01	0.000
17.68	1.78	242.68	275.05	53	0.0	2256	0.69	0.034	0.01	21.37	0.01	0.000
17.73	1.79	240.78	273.63	53	0.0	2249	0.69	0.034	0.01	21.37	0.01	0.000
17.80	1.81	230.80	267.78	52	0.0	2218	0.69	0.035	0.01	21.37	0.01	0.000
17.86	1.80	230.73	265.48	51	0.0	2197	0.69	0.036	0.01	21.37	0.01	0.000
17.92	1.79	230.59	262.06	50	0.0	2168	0.69	0.036	0.01	21.37	0.01	0.000
18.00	1.76	234.34	259.18	49	0.0	2147	0.69	0.037	0.01	21.37	0.01	0.000
18.05	1.76	233.44	256.71	49	0.0	2131	0.69	0.038	0.01	21.37	0.02	0.000
18.15	1.76	228.86	253.17	48	0.0	2108	0.68	0.038	0.01	21.37	0.02	0.000
18.20	1.76	226.73	249.85	48	0.0	2084	0.68	0.039	0.01	21.37	0.02	0.000
18.25	1.76	224.84	246.20	47	0.0	2058	0.68	0.040	0.01	21.37	0.02	0.000
18.32	1.74	221.76	236.60	45	0.0	1991	0.68	0.043	0.02	21.37	0.02	0.000
18.39	1.73	219.39	228.63	43	0.0	1941	0.68	0.045	0.02	21.37	0.02	0.000
18.46	1.73	214.97	224.77	42	0.0	1910	0.68	0.046	0.02	21.37	0.02	0.000
18.51	1.73	211.37	221.60	42	0.0	1884	0.68	0.047	0.02	21.37	0.02	0.000
18.60	1.72	204.90	212.30	40	0.0	1817	0.68	0.051	0.02	21.37	0.03	0.001
18.64	1.72	201.64	207.53	39	0.0	1783	0.67	0.053	0.02	21.37	0.03	0.000
18.71	1.72	194.80	198.90	37	0.0	1717	0.67	0.057	0.03	21.37	0.03	0.001
18.77	1.72	185.88	191.65	36	0.0	1652	0.67	0.062	0.03	21.37	0.04	0.001
18.84	1.72	181.97	185.51	35	0.0	1609	0.67	0.065	0.03	21.37	0.04	0.001
18.93	1.72	173.47	177.45	33	0.0	1542	0.67	0.072	0.04	21.37	0.05	0.001

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
18.98	1.73	166.49	175.51	33	0.0	1513	0.67	0.075	0.04	21.37	0.05	0.001
19.03	1.74	161.23	173.28	33	0.0	1489	0.67	0.078	0.04	21.37	0.05	0.001
19.09	1.78	150.80	170.26	33	0.0	1463	0.66	0.081	0.04	21.37	0.05	0.001
19.19	1.85	133.85	160.87	32	0.0	1431	0.66	0.086	0.05	21.37	0.06	0.001
19.23	1.89	124.64	153.70	31	0.0	1411	0.66	0.089	0.05	21.37	0.06	0.001
19.29	1.97	110.16	141.50	29	0.0	1381	0.66	0.093	0.06	21.37	0.07	0.001
19.37	2.08	94.39	131.10	28	0.0	1368	0.66	0.096	0.06	21.37	0.07	0.001
19.42	2.17	83.74	128.89	29	0.0	1367	0.66	0.096	0.06	21.37	0.07	0.001
19.53	2.34	64.48	133.54	32	0.0	1321	0.66	0.105	0.06	21.37	0.07	0.002
19.59	2.42	55.72	137.57	34	0.0	1274	0.65	0.116	0.06	21.37	0.07	0.001
19.63	2.49	48.66	142.10	36	0.0	1228	0.65	0.128	0.06	21.37	0.07	0.001
19.73	2.54	42.90	140.33	37	0.0	1161	0.65	0.151	0.07	21.37	0.09	0.002
19.75	2.51	44.71	136.48	35	0.0	1164	0.65	0.150	0.08	21.37	0.09	0.001
19.85	2.48	45.78	131.07	34	0.0	1153	0.65	0.154	0.08	21.37	0.10	0.002
19.90	2.49	45.50	132.26	34	0.0	1159	0.65	0.152	0.08	21.37	0.09	0.001
19.97	2.53	42.22	135.66	36	0.0	1143	0.65	0.159	0.08	21.37	0.09	0.002
20.03	2.51	38.66	118.75	31	0.0	1022	0.65	0.229	0.14	21.37	0.16	0.002
20.08	2.51	35.15	106.21	27	0.0	923	0.64	0.336	0.23	21.37	0.27	0.003
20.17	2.62	29.45	116.88	0	0.0	0	0.64	0.000	0.00	0.00	0.00	0.000
20.22	2.66	28.38	121.78	0	0.0	0	0.64	0.000	0.00	0.00	0.00	0.000
20.28	2.69	27.39	127.06	0	0.0	0	0.64	0.000	0.00	0.00	0.00	0.000
20.35	2.70	27.52	130.38	0	0.0	0	0.64	0.000	0.00	0.00	0.00	0.000
20.41	2.74	26.20	136.08	0	0.0	0	0.64	0.000	0.00	0.00	0.00	0.000
20.48	2.73	27.56	138.58	0	0.0	0	0.64	0.000	0.00	0.00	0.00	0.000
20.54	2.73	28.11	140.26	0	0.0	0	0.64	0.000	0.00	0.00	0.00	0.000
20.61	2.70	29.41	139.37	0	0.0	0	0.63	0.000	0.00	0.00	0.00	0.000
20.68	2.67	31.08	136.87	0	0.0	0	0.63	0.000	0.00	0.00	0.00	0.000
20.74	2.59	35.20	130.39	35	0.0	1069	0.63	0.196	0.10	21.37	0.12	0.002
20.83	2.44	44.98	116.17	29	0.0	1111	0.63	0.173	0.11	21.37	0.13	0.003
20.87	2.37	50.29	110.78	27	0.0	1130	0.63	0.164	0.12	21.37	0.14	0.001
20.94	2.24	61.18	105.84	24	0.0	1167	0.63	0.149	0.12	21.37	0.14	0.002
21.02	2.17	68.86	106.64	24	0.0	1198	0.63	0.138	0.11	21.37	0.13	0.002
21.08	2.12	74.77	109.01	24	0.0	1224	0.62	0.130	0.11	21.37	0.12	0.002
21.14	2.08	80.07	111.85	24	0.0	1244	0.62	0.124	0.10	21.37	0.12	0.002
21.19	2.02	88.77	117.76	25	0.0	1270	0.62	0.117	0.09	21.37	0.11	0.001
21.28	1.96	97.81	124.86	26	0.0	1289	0.62	0.113	0.08	21.37	0.10	0.002
21.33	1.93	102.07	128.31	26	0.0	1296	0.62	0.111	0.08	21.37	0.10	0.001
21.41	1.89	110.21	135.52	27	0.0	1326	0.62	0.105	0.07	21.37	0.09	0.002
21.47	1.87	116.23	140.92	28	0.0	1357	0.62	0.099	0.07	21.37	0.08	0.001
21.53	1.86	118.73	143.24	28	0.0	1374	0.62	0.096	0.06	21.37	0.07	0.001
21.61	1.87	116.21	141.41	28	0.0	1373	0.61	0.096	0.06	21.37	0.08	0.001
21.68	1.91	107.77	134.22	27	0.0	1350	0.61	0.100	0.07	21.37	0.08	0.001
21.73	1.95	100.40	127.50	26	0.0	1325	0.61	0.105	0.08	21.37	0.09	0.001
21.80	2.02	89.13	117.66	25	0.0	1288	0.61	0.113	0.09	21.37	0.10	0.002
21.85	2.06	82.51	112.58	24	0.0	1267	0.61	0.118	0.09	21.37	0.11	0.001
21.93	2.12	74.28	107.87	24	0.0	1246	0.61	0.123	0.10	21.37	0.12	0.002
22.02	2.21	64.51	105.82	24	0.0	1226	0.61	0.129	0.10	21.37	0.12	0.003
22.05	2.26	59.10	106.42	25	0.0	1211	0.61	0.133	0.10	21.37	0.12	0.001

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
22.12	2.35	51.00	109.61	26	0.0	1183	0.60	0.142	0.10	21.37	0.12	0.002
22.19	2.45	43.10	114.20	29	0.0	1141	0.60	0.158	0.10	21.37	0.12	0.002
22.27	2.55	36.26	120.88	32	0.0	1104	0.60	0.175	0.10	21.37	0.12	0.002
22.32	2.59	33.51	123.63	33	0.0	1086	0.60	0.184	0.10	21.37	0.12	0.001
22.39	2.59	32.88	121.61	33	0.0	1070	0.60	0.193	0.11	21.37	0.13	0.002
22.46	2.57	33.45	117.68	31	0.0	1060	0.60	0.199	0.12	21.37	0.14	0.002
22.52	2.57	33.18	116.69	31	0.0	1053	0.60	0.203	0.12	21.37	0.14	0.002
22.59	2.56	33.51	115.05	31	0.0	1052	0.60	0.203	0.12	21.37	0.14	0.003
22.66	2.54	34.21	112.51	30	0.0	1049	0.59	0.205	0.13	21.37	0.15	0.002
22.71	2.50	34.89	103.51	27	0.0	1008	0.59	0.234	0.17	21.37	0.19	0.002
22.77	2.36	36.41	79.09	19	0.0	871	0.59	0.404	0.43	21.37	0.50	0.008
22.86	2.36	36.70	79.97	19	0.0	882	0.59	0.382	0.40	21.37	0.47	0.009
22.91	2.38	36.63	82.48	20	0.0	901	0.59	0.351	0.35	21.37	0.41	0.005
22.98	2.41	36.32	88.49	22	0.0	941	0.59	0.297	0.27	21.37	0.31	0.006
23.05	2.47	34.61	96.37	24	0.0	975	0.59	0.261	0.20	21.37	0.24	0.004
23.10	2.50	34.00	100.53	26	0.0	995	0.59	0.243	0.18	21.37	0.21	0.002
23.18	2.54	32.71	105.81	28	0.0	1013	0.58	0.228	0.15	21.37	0.18	0.003
23.25	2.58	31.24	111.65	30	0.0	1030	0.58	0.215	0.13	21.37	0.16	0.003
23.30	2.64	28.86	118.39	0	0.0	0	0.58	0.000	0.00	0.00	0.00	0.000
23.37	2.68	26.93	122.22	0	0.0	0	0.58	0.000	0.00	0.00	0.00	0.000
23.43	2.71	25.92	123.50	0	0.0	0	0.58	0.000	0.00	0.00	0.00	0.000
23.49	2.71	25.58	123.28	0	0.0	0	0.58	0.000	0.00	0.00	0.00	0.000
23.59	2.73	24.62	123.66	0	0.0	0	0.58	0.000	0.00	0.00	0.00	0.000
23.63	2.74	24.24	124.35	0	0.0	0	0.58	0.000	0.00	0.00	0.00	0.000
23.70	2.77	23.23	126.14	0	0.0	0	0.57	0.000	0.00	0.00	0.00	0.000
23.79	2.85	19.66	127.09	0	0.0	0	0.57	0.000	0.00	0.00	0.00	0.000
23.83	2.88	18.30	126.66	0	0.0	0	0.57	0.000	0.00	0.00	0.00	0.000
23.89	2.92	16.81	125.27	0	0.0	0	0.57	0.000	0.00	0.00	0.00	0.000
23.95	2.85	18.05	118.46	0	0.0	0	0.57	0.000	0.00	0.00	0.00	0.000
24.02	2.95	14.91	119.67	0	0.0	0	0.57	0.000	0.00	0.00	0.00	0.000
24.08	2.84	17.80	112.79	0	0.0	0	0.57	0.000	0.00	0.00	0.00	0.000
24.16	2.60	27.04	101.42	27	0.0	950	0.57	0.278	0.19	21.37	0.22	0.004
24.22	2.50	32.68	98.23	25	0.0	1006	0.56	0.228	0.17	21.37	0.20	0.003
24.28	2.54	32.83	106.35	28	0.0	1060	0.56	0.192	0.13	21.37	0.15	0.002
24.35	2.60	30.84	114.49	31	0.0	1084	0.56	0.178	0.11	21.37	0.12	0.002
24.42	2.66	27.93	121.17	0	0.0	0	0.56	0.000	0.00	0.00	0.00	0.000
24.48	2.73	25.14	127.44	0	0.0	0	0.56	0.000	0.00	0.00	0.00	0.000
24.57	2.74	25.02	129.32	0	0.0	0	0.56	0.000	0.00	0.00	0.00	0.000
24.62	2.74	24.96	128.95	0	0.0	0	0.56	0.000	0.00	0.00	0.00	0.000
24.68	2.71	26.40	126.17	0	0.0	0	0.56	0.000	0.00	0.00	0.00	0.000
24.74	2.62	30.58	119.39	0	0.0	0	0.55	0.000	0.00	0.00	0.00	0.000
24.81	2.52	35.84	112.02	29	0.0	1155	0.55	0.147	0.09	21.37	0.11	0.002
24.88	2.47	38.60	108.06	27	0.0	1166	0.55	0.143	0.10	21.37	0.11	0.002
24.94	2.48	37.97	109.20	28	0.0	1168	0.55	0.142	0.10	21.37	0.11	0.002
25.02	2.55	34.68	116.13	31	0.0	1174	0.55	0.140	0.08	21.37	0.10	0.002
25.07	2.62	30.94	121.83	0	0.0	0	0.55	0.000	0.00	0.00	0.00	0.000
25.14	2.74	25.04	128.56	0	0.0	0	0.55	0.000	0.00	0.00	0.00	0.000
25.22	2.86	19.66	131.81	0	0.0	0	0.55	0.000	0.00	0.00	0.00	0.000

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
25.27	2.92	17.45	131.85	0	0.0	0	0.55	0.000	0.00	0.00	0.00	0.000
25.36	2.89	15.11	106.34	0	0.0	0	0.54	0.000	0.00	0.00	0.00	0.000
25.40	2.90	14.34	103.10	0	0.0	0	0.54	0.000	0.00	0.00	0.00	0.000
25.47	2.85	16.23	105.17	0	0.0	0	0.54	0.000	0.00	0.00	0.00	0.000
25.57	2.61	24.60	93.48	0	0.0	0	0.54	0.000	0.00	0.00	0.00	0.000
25.61	2.50	29.64	88.09	23	0.0	952	0.54	0.264	0.23	21.37	0.27	0.003
25.66	2.59	25.63	94.08	25	0.0	939	0.54	0.277	0.21	21.37	0.24	0.002
25.73	2.35	39.20	84.14	20	0.0	1028	0.54	0.204	0.20	21.37	0.24	0.004
25.79	2.33	40.70	83.85	20	0.0	1040	0.54	0.196	0.20	21.37	0.23	0.003
25.88	2.34	40.12	83.65	20	0.0	1037	0.53	0.198	0.20	21.37	0.23	0.005
25.93	2.36	38.86	84.05	20	0.0	1031	0.53	0.201	0.20	21.37	0.23	0.003
25.98	2.41	35.87	86.36	21	0.0	1023	0.53	0.206	0.19	21.37	0.22	0.003
26.07	2.52	30.05	94.64	25	0.0	1016	0.53	0.210	0.16	21.37	0.19	0.004
26.13	2.59	27.20	100.22	27	0.0	1016	0.53	0.210	0.15	21.37	0.17	0.002
26.20	2.80	19.36	113.50	0	0.0	0	0.53	0.000	0.00	0.00	0.00	0.000
26.27	2.89	16.56	117.81	0	0.0	0	0.53	0.000	0.00	0.00	0.00	0.000
26.33	2.94	15.21	118.88	0	0.0	0	0.53	0.000	0.00	0.00	0.00	0.000
26.38	3.04	12.60	120.49	0	0.0	0	0.53	0.000	0.00	0.00	0.00	0.000
26.47	3.06	11.79	116.18	0	0.0	0	0.52	0.000	0.00	0.00	0.00	0.000
26.52	3.08	11.17	113.46	0	0.0	0	0.52	0.000	0.00	0.00	0.00	0.000
26.58	3.07	10.98	110.32	0	0.0	0	0.52	0.000	0.00	0.00	0.00	0.000
26.66	3.07	10.89	108.87	0	0.0	0	0.52	0.000	0.00	0.00	0.00	0.000
26.71	3.08	10.82	110.04	0	0.0	0	0.52	0.000	0.00	0.00	0.00	0.000
26.80	3.10	10.72	114.40	0	0.0	0	0.52	0.000	0.00	0.00	0.00	0.000
26.87	3.12	10.59	115.57	0	0.0	0	0.52	0.000	0.00	0.00	0.00	0.000
26.91	3.12	10.52	115.74	0	0.0	0	0.52	0.000	0.00	0.00	0.00	0.000
27.00	3.11	10.43	112.63	0	0.0	0	0.51	0.000	0.00	0.00	0.00	0.000
27.06	3.13	9.76	110.35	0	0.0	0	0.51	0.000	0.00	0.00	0.00	0.000
27.10	3.17	9.11	109.44	0	0.0	0	0.51	0.000	0.00	0.00	0.00	0.000
27.17	3.22	8.34	109.11	0	0.0	0	0.51	0.000	0.00	0.00	0.00	0.000
27.26	3.20	8.52	108.28	0	0.0	0	0.51	0.000	0.00	0.00	0.00	0.000
27.30	3.18	8.77	108.29	0	0.0	0	0.51	0.000	0.00	0.00	0.00	0.000
27.39	3.12	10.01	109.93	0	0.0	0	0.51	0.000	0.00	0.00	0.00	0.000
27.44	3.06	11.26	110.86	0	0.0	0	0.51	0.000	0.00	0.00	0.00	0.000
27.51	2.98	13.50	113.42	0	0.0	0	0.51	0.000	0.00	0.00	0.00	0.000
27.60	2.95	14.97	119.22	0	0.0	0	0.50	0.000	0.00	0.00	0.00	0.000
27.64	2.91	14.69	108.88	0	0.0	0	0.50	0.000	0.00	0.00	0.00	0.000
27.70	2.88	12.61	86.89	0	0.0	0	0.50	0.000	0.00	0.00	0.00	0.000
27.80	2.93	10.49	80.30	0	0.0	0	0.50	0.000	0.00	0.00	0.00	0.000
27.84	2.99	9.79	84.73	0	0.0	0	0.50	0.000	0.00	0.00	0.00	0.000
27.89	3.10	8.68	91.71	0	0.0	0	0.50	0.000	0.00	0.00	0.00	0.000
27.95	3.17	8.14	98.14	0	0.0	0	0.50	0.000	0.00	0.00	0.00	0.000
28.03	3.13	8.89	99.27	0	0.0	0	0.50	0.000	0.00	0.00	0.00	0.000
28.09	3.11	9.13	99.02	0	0.0	0	0.50	0.000	0.00	0.00	0.00	0.000
28.16	2.85	14.27	92.19	0	0.0	0	0.50	0.000	0.00	0.00	0.00	0.000
28.22	2.69	19.00	87.92	0	0.0	0	0.49	0.000	0.00	0.00	0.00	0.000
28.32	2.41	32.82	80.25	20	0.0	1016	0.49	0.196	0.20	21.37	0.23	0.006
28.37	2.36	36.91	80.10	19	0.0	1056	0.49	0.174	0.18	21.37	0.21	0.002

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
28.43	2.32	40.60	81.13	19	0.0	1098	0.49	0.155	0.16	21.37	0.19	0.003
28.48	2.30	42.61	82.80	20	0.0	1131	0.49	0.143	0.15	21.37	0.17	0.002
28.55	2.30	44.00	84.98	20	0.0	1165	0.49	0.132	0.13	21.37	0.15	0.003
28.61	2.32	43.85	88.33	21	0.0	1200	0.49	0.122	0.12	21.37	0.14	0.002
28.68	2.39	41.46	95.28	23	0.0	1245	0.49	0.111	0.09	21.37	0.11	0.002
28.77	2.47	37.76	104.96	27	0.0	1287	0.49	0.103	0.07	21.37	0.09	0.002
28.81	2.55	33.29	112.18	30	0.0	1284	0.49	0.103	0.06	21.37	0.08	0.001
28.88	2.70	26.67	125.88	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
28.95	2.83	22.24	139.02	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
29.01	2.92	19.68	148.36	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
29.07	2.95	18.64	148.23	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
29.14	2.94	18.15	140.52	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
29.21	2.98	16.21	136.70	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
29.30	2.88	18.42	127.04	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
29.36	3.03	14.20	131.11	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
29.41	2.85	18.72	121.14	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
29.47	2.53	31.29	100.59	26	0.0	1196	0.48	0.121	0.09	21.37	0.10	0.001
29.54	2.21	54.16	88.30	20	0.0	1283	0.47	0.102	0.10	21.37	0.12	0.002
29.60	2.10	65.16	92.53	20	0.0	1323	0.47	0.095	0.09	21.37	0.11	0.002
29.68	2.07	69.27	95.32	20	0.0	1344	0.47	0.092	0.09	21.37	0.11	0.002
29.76	2.05	69.01	93.74	20	0.0	1312	0.47	0.097	0.10	21.37	0.11	0.002
29.80	2.05	67.78	92.09	20	0.0	1290	0.47	0.100	0.10	21.37	0.12	0.001
29.87	2.08	64.63	89.93	19	0.0	1283	0.47	0.101	0.11	21.37	0.12	0.002
29.95	2.10	62.63	88.67	19	0.0	1278	0.47	0.102	0.11	21.37	0.13	0.002
30.00	2.11	61.04	87.97	19	0.0	1278	0.47	0.102	0.11	21.37	0.13	0.002
30.05	2.13	60.15	88.13	19	0.0	1289	0.47	0.100	0.10	21.37	0.12	0.002
30.14	2.15	59.19	89.05	20	0.0	1312	0.47	0.096	0.10	21.37	0.11	0.002
30.19	2.16	59.25	89.82	20	0.0	1326	0.46	0.094	0.09	21.37	0.11	0.001
30.25	2.15	60.70	91.44	20	0.0	1351	0.46	0.090	0.09	21.37	0.10	0.002
30.32	2.14	62.79	93.53	21	0.0	1382	0.46	0.085	0.08	21.37	0.10	0.002
30.38	2.14	63.61	94.43	21	0.0	1397	0.46	0.083	0.08	21.37	0.09	0.001
30.45	2.13	64.92	95.03	21	0.0	1404	0.46	0.082	0.08	21.37	0.09	0.002
30.53	2.12	64.85	94.33	21	0.0	1394	0.46	0.084	0.08	21.37	0.09	0.002
30.59	2.13	64.15	93.61	20	0.0	1387	0.46	0.084	0.08	21.37	0.10	0.001
30.68	2.17	61.05	93.69	21	0.0	1404	0.46	0.082	0.08	21.37	0.09	0.002
30.74	2.18	58.78	92.49	21	0.0	1390	0.46	0.084	0.08	21.37	0.09	0.001
30.79	2.18	56.60	88.50	20	0.0	1331	0.46	0.092	0.09	21.37	0.11	0.001
30.85	2.20	52.18	84.68	19	0.0	1276	0.46	0.101	0.11	21.37	0.13	0.002
30.92	2.29	47.84	90.03	21	0.0	1330	0.45	0.092	0.09	21.37	0.10	0.002
30.98	2.38	43.41	99.50	24	0.0	1394	0.45	0.083	0.07	21.37	0.08	0.001
31.06	2.59	32.21	118.04	32	0.0	1409	0.45	0.081	0.05	21.37	0.05	0.001
31.12	2.60	32.09	121.38	0	0.0	0	0.45	0.000	0.00	0.00	0.00	0.000
31.18	2.60	32.08	121.41	0	0.0	0	0.45	0.000	0.00	0.00	0.00	0.000
31.27	2.54	35.33	115.68	30	0.0	1447	0.45	0.077	0.05	21.37	0.05	0.001
31.32	2.47	39.71	110.83	28	0.0	1469	0.45	0.074	0.05	21.37	0.06	0.001
31.37	2.43	43.04	108.14	27	0.0	1488	0.45	0.072	0.05	21.37	0.06	0.001
31.45	2.37	47.39	105.60	26	0.0	1513	0.45	0.070	0.05	21.37	0.06	0.001
31.51	2.35	48.48	102.79	25	0.0	1497	0.45	0.071	0.06	21.37	0.07	0.001

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
31.56	2.31	50.31	97.83	23	0.0	1460	0.45	0.075	0.06	21.37	0.07	0.001
31.64	2.27	52.14	95.13	22	0.0	1443	0.44	0.077	0.07	21.37	0.08	0.001
31.71	2.27	52.26	95.04	22	0.0	1445	0.44	0.076	0.07	21.37	0.08	0.001
31.81	2.28	51.38	95.25	22	0.0	1447	0.44	0.076	0.07	21.37	0.08	0.002
31.84	2.29	50.51	95.98	23	0.0	1452	0.44	0.076	0.07	21.37	0.08	0.001
31.90	2.32	48.99	97.36	23	0.0	1459	0.44	0.075	0.06	21.37	0.07	0.001
31.96	2.33	47.98	98.32	23	0.0	1464	0.44	0.074	0.06	21.37	0.07	0.001
32.05	2.35	46.67	98.92	24	0.0	1463	0.44	0.074	0.06	21.37	0.07	0.002
32.10	2.35	46.25	98.95	24	0.0	1462	0.44	0.074	0.06	21.37	0.07	0.001
32.15	2.36	45.56	98.94	24	0.0	1458	0.44	0.075	0.06	21.37	0.07	0.001
32.24	2.36	45.33	98.51	24	0.0	1455	0.44	0.075	0.06	21.37	0.07	0.002
32.28	2.36	45.52	98.12	24	0.0	1454	0.44	0.075	0.06	21.37	0.07	0.001
32.35	2.35	45.64	97.34	23	0.0	1450	0.43	0.075	0.06	21.37	0.07	0.001
32.44	2.34	45.20	94.97	23	0.0	1424	0.43	0.078	0.07	21.37	0.08	0.002
32.50	2.34	44.60	93.43	22	0.0	1404	0.43	0.080	0.07	21.37	0.08	0.001
32.55	2.34	43.83	91.03	22	0.0	1373	0.43	0.084	0.08	21.37	0.09	0.001
32.63	2.33	43.23	89.04	21	0.0	1349	0.43	0.087	0.08	21.37	0.09	0.002
32.70	2.33	43.18	88.43	21	0.0	1345	0.43	0.087	0.08	21.37	0.10	0.002
32.74	2.35	42.13	89.01	21	0.0	1344	0.43	0.088	0.08	21.37	0.09	0.001
32.85	2.43	37.93	96.89	24	0.0	1384	0.43	0.082	0.07	21.37	0.08	0.002
32.90	2.51	33.85	103.87	27	0.0	1396	0.43	0.081	0.06	21.37	0.07	0.001
32.94	2.62	28.56	113.05	0	0.0	0	0.43	0.000	0.00	0.00	0.00	0.000
33.01	2.76	22.97	122.79	0	0.0	0	0.43	0.000	0.00	0.00	0.00	0.000
33.09	2.86	19.28	128.82	0	0.0	0	0.42	0.000	0.00	0.00	0.00	0.000
33.14	2.95	16.79	132.50	0	0.0	0	0.42	0.000	0.00	0.00	0.00	0.000
33.23	3.04	14.08	134.12	0	0.0	0	0.42	0.000	0.00	0.00	0.00	0.000
33.29	3.14	11.74	133.54	0	0.0	0	0.42	0.000	0.00	0.00	0.00	0.000
33.34	3.21	10.24	131.56	0	0.0	0	0.42	0.000	0.00	0.00	0.00	0.000
33.42	3.22	9.83	130.16	0	0.0	0	0.42	0.000	0.00	0.00	0.00	0.000
33.48	3.22	9.46	125.11	0	0.0	0	0.42	0.000	0.00	0.00	0.00	0.000
33.54	3.19	9.44	117.97	0	0.0	0	0.42	0.000	0.00	0.00	0.00	0.000
33.63	2.87	11.62	79.33	0	0.0	0	0.42	0.000	0.00	0.00	0.00	0.000
33.68	2.59	18.58	67.64	18	0.0	877	0.42	0.264	0.30	21.37	0.35	0.004
33.78	2.40	30.01	71.13	17	0.0	1067	0.42	0.148	0.17	21.37	0.20	0.005
33.83	2.26	40.11	72.12	17	0.0	1162	0.42	0.119	0.15	21.37	0.17	0.002
33.88	2.23	46.61	78.81	18	0.0	1282	0.42	0.095	0.11	21.37	0.13	0.002
33.94	2.39	37.84	88.24	22	0.0	1336	0.41	0.087	0.08	21.37	0.09	0.001
33.99	2.26	50.45	89.30	21	0.0	1449	0.41	0.074	0.07	21.37	0.08	0.001
34.08	2.21	57.83	94.62	21	0.0	1550	0.41	0.065	0.06	21.37	0.07	0.002
34.14	2.20	60.21	97.76	22	0.0	1604	0.41	0.061	0.05	21.37	0.06	0.001
34.19	2.21	61.04	99.93	23	0.0	1642	0.41	0.059	0.05	21.37	0.06	0.001
34.26	2.22	60.52	101.19	23	0.0	1664	0.41	0.057	0.05	21.37	0.06	0.001
34.34	2.26	57.10	101.98	24	0.0	1667	0.41	0.057	0.05	21.37	0.05	0.001
34.38	2.29	53.92	102.30	24	0.0	1656	0.41	0.058	0.05	21.37	0.05	0.001
34.48	2.37	47.32	104.36	25	0.0	1631	0.41	0.059	0.04	21.37	0.05	0.001
34.54	2.44	41.84	108.50	27	0.0	1617	0.41	0.060	0.04	21.37	0.05	0.001
34.59	2.50	37.60	113.26	29	0.0	1608	0.41	0.061	0.04	21.37	0.05	0.001
34.67	2.67	28.15	123.87	0	0.0	0	0.41	0.000	0.00	0.00	0.00	0.000

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
34.73	2.77	23.22	128.51	0	0.0	0	0.41	0.000	0.00	0.00	0.00	0.000
34.78	2.88	19.09	132.03	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
34.85	3.00	15.05	132.35	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
34.92	3.05	13.27	129.10	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
34.98	3.12	11.67	128.90	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
35.04	3.12	11.60	128.13	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
35.12	3.13	11.58	128.97	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
35.18	3.13	11.51	130.19	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
35.26	3.11	12.15	130.96	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
35.32	3.10	12.41	132.37	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
35.38	3.15	11.65	134.87	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
35.46	3.20	10.76	136.97	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
35.52	3.22	10.34	136.47	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
35.58	3.23	9.95	134.70	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
35.65	3.22	10.23	134.05	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
35.73	3.24	9.78	134.64	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
35.78	3.22	10.13	134.81	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
35.86	3.20	10.75	137.24	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
35.90	3.16	11.63	137.57	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
35.97	3.12	12.50	138.23	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.04	3.09	13.15	137.27	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.12	3.04	13.97	132.61	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.17	2.88	15.59	107.42	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.23	2.67	19.18	85.17	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.32	2.63	23.53	93.58	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.36	2.63	24.84	99.41	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.46	2.70	24.31	115.22	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.51	2.72	24.46	121.42	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.56	2.76	24.04	128.07	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.63	2.79	23.20	132.00	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
36.70	2.84	20.38	130.88	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
36.76	2.88	18.61	129.18	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
36.82	2.98	15.89	133.12	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
36.91	3.07	13.92	139.60	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
36.95	3.11	13.24	142.72	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
37.02	3.07	14.50	144.81	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
37.10	2.92	18.47	138.59	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
37.16	2.80	22.27	130.67	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
37.22	2.63	29.81	120.47	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
37.28	2.51	37.75	114.15	30	0.0	1743	0.38	0.052	0.03	21.37	0.04	0.000
37.36	2.27	59.30	106.82	25	0.0	1881	0.38	0.046	0.04	21.37	0.04	0.001
37.41	2.11	78.74	112.77	24	0.0	1959	0.38	0.043	0.03	21.37	0.04	0.000
37.49	1.96	103.72	132.52	27	0.0	2052	0.38	0.040	0.03	21.37	0.03	0.001
37.55	1.91	115.50	143.38	29	0.0	2102	0.38	0.039	0.03	21.37	0.03	0.000
37.60	1.86	125.72	152.27	30	0.0	2141	0.37	0.038	0.02	21.37	0.03	0.000
37.69	1.82	140.12	164.27	32	0.0	2228	0.37	0.036	0.02	21.37	0.02	0.001
37.74	1.80	146.06	169.13	33	0.0	2274	0.37	0.035	0.02	21.37	0.02	0.000
37.80	1.80	150.78	174.65	34	0.0	2352	0.37	0.033	0.02	21.37	0.02	0.000

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
37.89	1.79	162.02	184.92	36	0.0	2474	0.37	0.031	0.02	21.37	0.02	0.000
37.94	1.79	165.30	188.13	36	0.0	2516	0.37	0.030	0.01	21.37	0.02	0.000
38.00	1.79	169.62	192.70	37	0.0	2579	0.37	0.029	0.01	21.37	0.02	0.000
38.08	1.79	171.58	196.28	38	0.0	2640	0.37	0.028	0.01	21.37	0.02	0.000
38.15	1.80	172.12	197.46	38	0.0	2663	0.37	0.028	0.01	21.37	0.02	0.000
38.20	1.80	170.45	196.93	38	0.0	2670	0.37	0.028	0.01	21.37	0.02	0.000
38.28	1.81	168.07	195.37	38	0.0	2664	0.37	0.028	0.01	21.37	0.02	0.000
38.33	1.81	166.08	193.77	38	0.0	2652	0.37	0.028	0.01	21.37	0.02	0.000
38.40	1.82	162.31	190.14	37	0.0	2615	0.37	0.029	0.01	21.37	0.02	0.000
38.47	1.83	157.17	186.02	36	0.0	2587	0.37	0.029	0.01	21.37	0.02	0.000
38.52	1.84	154.18	183.47	36	0.0	2570	0.37	0.029	0.01	21.37	0.02	0.000
38.59	1.82	152.07	179.11	35	0.0	2485	0.37	0.031	0.02	21.37	0.02	0.000
38.68	1.83	146.75	173.78	34	0.0	2429	0.36	0.032	0.02	21.37	0.02	0.000
38.73	1.83	143.96	170.67	33	0.0	2391	0.36	0.032	0.02	21.37	0.02	0.000
38.80	1.84	138.47	165.09	32	0.0	2331	0.36	0.034	0.02	21.37	0.02	0.000
38.85	1.91	119.48	148.28	30	0.0	2236	0.36	0.036	0.02	21.37	0.03	0.000
38.93	1.87	121.73	148.35	29	0.0	2167	0.36	0.037	0.02	21.37	0.03	0.000
38.99	1.90	112.54	139.45	28	0.0	2102	0.36	0.039	0.03	21.37	0.03	0.000
39.07	1.97	99.79	127.92	26	0.0	2065	0.36	0.040	0.03	21.37	0.03	0.001
39.12	2.01	93.29	123.05	26	0.0	2081	0.36	0.039	0.03	21.37	0.03	0.000
39.18	2.09	83.56	117.06	25	0.0	2096	0.36	0.039	0.03	21.37	0.03	0.000
39.24	2.20	69.66	112.88	25	0.0	2100	0.36	0.039	0.03	21.37	0.03	0.001
39.31	2.33	57.08	115.87	28	0.0	2097	0.36	0.039	0.03	21.37	0.03	0.001
39.38	2.45	46.43	122.58	31	0.0	2071	0.36	0.040	0.02	21.37	0.03	0.000
39.44	2.54	39.53	128.16	34	0.0	2033	0.36	0.041	0.02	21.37	0.03	0.000
39.53	2.55	38.23	127.67	34	0.0	2011	0.36	0.041	0.02	21.37	0.03	0.001
39.57	2.54	38.75	125.98	33	0.0	2004	0.36	0.042	0.02	21.37	0.03	0.000
39.63	2.51	40.32	123.55	32	0.0	2006	0.36	0.042	0.02	21.37	0.03	0.000
39.73	2.50	41.17	123.13	32	0.0	2019	0.36	0.041	0.02	21.37	0.03	0.001
39.78	2.47	43.69	122.19	31	0.0	2049	0.36	0.040	0.02	21.37	0.03	0.000
39.84	2.44	46.53	120.06	30	0.0	2067	0.35	0.040	0.02	21.37	0.03	0.000
39.91	2.40	49.10	116.36	29	0.0	2055	0.35	0.040	0.03	21.37	0.03	0.001
39.96	2.39	49.36	113.52	28	0.0	2025	0.35	0.041	0.03	21.37	0.03	0.000

Total estimated settlement: 0.62

:: Post-earthquake settlement due to soil liquefaction ::

Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)
40.07	93.71	88.56	0.45	2.18	1.00	0.03	40.12	92.18	87.11	0.43	2.17	1.00	0.01
40.18	90.07	85.13	0.42	2.14	1.00	0.02	40.25	86.99	82.21	0.39	2.11	1.00	0.02
40.32	84.30	79.67	0.36	1.99	1.00	0.02	40.37	82.45	77.92	2.00	0.00	1.00	0.00
40.45	80.05	75.65	2.00	0.00	1.00	0.00	40.51	78.12	73.83	2.00	0.00	1.00	0.00
40.56	77.28	73.04	2.00	0.00	1.00	0.00	40.64	72.78	68.78	2.00	0.00	1.00	0.00
40.70	69.54	65.72	2.00	0.00	1.00	0.00	40.76	66.22	62.58	2.00	0.00	1.00	0.00
40.82	64.07	60.55	2.00	0.00	1.00	0.00	40.90	60.74	57.40	2.00	0.00	1.00	0.00
40.95	56.33	53.24	2.00	0.00	1.00	0.00	41.05	52.63	49.74	2.00	0.00	1.00	0.00
41.08	52.29	49.42	2.00	0.00	1.00	0.00	41.15	53.62	50.68	2.00	0.00	1.00	0.00

:: Post-earthquake settlement due to soil liquefaction :: (continued)

Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)
41.24	56.01	52.94	2.00	0.00	1.00	0.00	41.30	45.40	42.91	2.00	0.00	1.00	0.00
41.35	37.70	35.63	2.00	0.00	1.00	0.00	41.44	41.64	39.35	2.00	0.00	1.00	0.00
41.48	44.89	42.42	2.00	0.00	1.00	0.00	41.55	54.81	51.80	0.24	2.74	1.00	0.02
41.63	63.97	60.46	0.27	2.45	1.00	0.02	41.67	68.34	64.59	0.29	2.30	1.00	0.01
41.74	71.08	67.17	2.00	0.00	1.00	0.00	41.80	73.19	69.17	2.00	0.00	1.00	0.00
41.90	72.08	68.12	2.00	0.00	1.00	0.00	41.93	72.01	68.05	2.00	0.00	1.00	0.00
42.01	69.02	65.23	2.00	0.00	1.00	0.00	42.06	67.47	63.77	2.00	0.00	1.00	0.00
42.14	63.99	60.48	2.00	0.00	1.00	0.00	42.21	61.43	58.06	2.00	0.00	1.00	0.00
42.28	65.66	62.05	2.00	0.00	1.00	0.00	42.35	74.82	70.71	0.33	2.51	1.00	0.02
42.41	82.92	78.36	0.39	2.62	1.00	0.02	42.48	86.92	82.14	0.41	2.62	1.00	0.02
42.54	88.47	83.61	0.43	2.61	1.00	0.02	42.59	88.12	83.28	0.42	2.61	1.00	0.02
42.67	86.98	82.21	0.41	2.46	1.00	0.02	42.75	86.37	81.63	0.40	2.21	1.00	0.02
42.78	85.52	80.83	0.39	2.14	1.00	0.01	42.85	80.64	76.21	2.00	0.00	1.00	0.00
42.93	87.07	82.29	0.40	2.10	1.00	0.02	42.98	77.94	73.66	2.00	0.00	1.00	0.00
43.08	85.64	80.93	0.39	2.16	1.00	0.02	43.13	96.84	91.52	0.49	2.29	1.00	0.01
43.18	110.32	104.26	0.62	2.30	1.00	0.02	43.28	127.15	120.17	0.83	1.72	1.00	0.02
43.33	132.11	124.86	0.90	1.24	1.00	0.01	43.39	135.23	127.80	0.94	1.18	1.00	0.01
43.44	141.70	133.92	1.04	0.70	1.00	0.00	43.52	146.75	138.69	1.13	0.46	1.00	0.00
43.58	149.91	141.68	1.19	0.33	1.00	0.00	43.64	153.44	145.01	1.26	0.24	1.00	0.00
43.73	153.18	144.77	1.25	0.34	1.00	0.00	43.78	156.39	147.80	1.32	0.24	1.00	0.00
43.87	161.35	152.49	1.44	0.00	1.00	0.00	43.90	163.34	154.37	1.49	0.00	1.00	0.00
43.97	166.06	156.94	1.56	0.00	1.00	0.00	44.05	165.70	156.60	1.56	0.00	1.00	0.00
44.12	165.74	156.63	1.56	0.00	1.00	0.00	44.17	165.51	156.42	1.56	0.00	1.00	0.00
44.23	165.21	156.14	1.55	0.00	1.00	0.00	44.31	163.48	154.50	1.51	0.00	1.00	0.00
44.36	163.86	154.86	1.52	0.00	1.00	0.00	44.45	162.98	154.03	1.50	0.00	1.00	0.00
44.52	163.61	154.63	1.52	0.00	1.00	0.00	44.55	163.69	154.70	1.52	0.00	1.00	0.00
44.62	162.51	153.58	1.49	0.00	1.00	0.00	44.70	161.45	152.59	1.46	0.00	1.00	0.00
44.78	159.08	150.34	1.41	0.00	1.00	0.00	44.84	157.44	148.79	1.37	0.00	1.00	0.00
44.91	156.31	147.73	1.35	0.00	1.00	0.00	44.97	155.14	146.62	1.33	0.23	1.00	0.00
45.02	153.43	145.00	1.29	0.23	1.00	0.00	45.10	151.84	143.50	1.26	0.23	1.00	0.00
45.15	151.60	143.28	1.25	0.23	1.00	0.00	45.24	151.51	143.19	1.25	0.33	1.00	0.00
45.30	152.24	143.88	1.26	0.23	1.00	0.00	45.36	153.44	145.01	1.29	0.23	1.00	0.00
45.42	155.07	146.56	1.32	0.23	1.00	0.00	45.51	155.19	146.67	1.32	0.23	1.00	0.00
45.55	154.65	146.16	1.31	0.23	1.00	0.00	45.63	153.70	145.26	1.29	0.23	1.00	0.00
45.70	152.25	143.89	1.26	0.23	1.00	0.00	45.75	151.35	143.04	1.24	0.33	1.00	0.00
45.81	148.70	140.54	1.19	0.33	1.00	0.00	45.89	143.77	135.88	1.09	0.47	1.00	0.00
45.94	140.67	132.94	1.04	0.71	1.00	0.00	46.00	140.25	132.55	1.03	0.72	1.00	0.00
46.09	139.57	131.90	1.02	0.72	1.00	0.01	46.14	139.25	131.60	1.01	0.72	1.00	0.01
46.20	139.22	131.58	1.01	0.72	1.00	0.00	46.27	136.21	128.73	0.96	0.73	1.00	0.01
46.33	138.59	130.98	1.00	0.73	1.00	0.00	46.40	139.79	132.11	1.02	0.73	1.00	0.01
46.48	139.14	131.50	1.01	0.73	1.00	0.01	46.52	140.06	132.37	1.03	0.72	1.00	0.00
46.59	140.60	132.88	1.04	0.72	1.00	0.01	46.66	140.25	132.55	1.04	0.72	1.00	0.01
46.73	138.18	130.59	1.00	0.73	1.00	0.01	46.80	136.15	128.67	0.97	0.73	1.00	0.01
46.85	134.21	126.84	0.94	1.18	1.00	0.01	46.92	130.18	123.03	0.88	1.22	1.00	0.01
46.99	125.53	118.64	0.81	1.66	1.00	0.01	47.06	120.69	114.06	0.75	1.77	1.00	0.01
47.12	115.70	109.34	0.69	2.26	1.00	0.02	47.21	109.96	103.92	0.63	2.40	1.00	0.03
47.26	100.45	94.94	0.54	2.53	1.00	0.01	47.32	91.17	86.17	0.46	2.49	1.00	0.02
47.38	83.66	79.07	0.40	2.25	1.00	0.02	47.44	79.23	74.88	2.00	0.00	1.00	0.00

:: Post-earthquake settlement due to soil liquefaction :: (continued)

Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)
47.51	75.84	71.68	2.00	0.00	1.00	0.00	47.60	70.14	66.29	2.00	0.00	1.00	0.00
47.66	67.85	64.12	2.00	0.00	1.00	0.00	47.71	67.92	64.19	2.00	0.00	1.00	0.00
47.77	69.56	65.74	2.00	0.00	1.00	0.00	47.86	71.82	67.88	2.00	0.00	1.00	0.00
47.91	77.93	73.65	2.00	0.00	1.00	0.00	47.98	90.58	85.60	0.44	2.06	1.00	0.02
48.04	98.31	92.92	0.51	2.05	1.00	0.01	48.10	103.04	97.38	0.56	2.01	1.00	0.02
48.19	108.13	102.19	0.61	1.92	1.00	0.02	48.25	112.00	105.85	0.66	1.74	1.00	0.01
48.30	115.39	109.05	0.71	1.76	1.00	0.01	48.37	118.65	112.14	0.75	1.46	1.00	0.01
48.43	119.79	113.21	0.77	1.50	1.00	0.01	48.49	121.30	114.64	0.79	1.57	1.00	0.01
48.56	122.71	115.97	0.81	1.67	1.00	0.01	48.64	125.20	118.32	0.85	1.76	1.00	0.02
48.74	120.19	113.59	0.77	1.98	1.00	0.03	48.77	120.55	113.93	0.77	1.97	1.00	0.01
48.83	119.37	112.81	0.75	1.99	1.00	0.01	48.89	117.30	110.86	0.73	2.33	1.00	0.02
48.96	114.81	108.51	0.70	2.36	1.00	0.02	49.03	106.23	100.39	0.60	2.49	1.00	0.02
49.09	106.35	100.51	0.60	2.48	1.00	0.02	49.16	104.86	99.10	0.59	2.51	1.00	0.02
49.22	101.87	96.27	0.56	2.56	1.00	0.02	49.29	101.40	95.83	0.56	2.56	1.00	0.02
49.35	102.57	96.94	0.57	2.53	1.00	0.02	49.43	104.82	99.06	0.59	2.46	1.00	0.02
49.49	106.60	100.75	0.61	2.42	1.00	0.02	49.55	109.99	103.95	0.65	2.37	1.00	0.02
49.64	120.93	114.29	0.78	1.95	1.00	0.02	49.68	128.58	121.52	0.89	1.43	1.00	0.01
49.74	136.40	128.91	1.02	0.80	1.00	0.01	49.84	222.83	210.59	2.00	0.00	1.00	0.00
49.89	232.39	219.63	2.00	0.00	1.00	0.00	49.94	243.29	229.93	2.00	0.00	1.00	0.00
50.03	252.85	238.96	2.00	0.00	1.00	0.00	50.08	256.69	242.59	2.00	0.00	1.00	0.00
50.14	259.10	244.87	2.00	0.00	1.00	0.00							

Total estimated settlement: 1.12

Abbreviations

$q_{c,1,mod}$:	Equivalent clean sand cone resistance
$q_{c,1N,mod}$:	Equivalent clean sand normalized cone resistance
FS:	Factor of safety against liquefaction
e_v (%):	Post-liquefaction volumentric strain
DF:	e_v depth weighting factor
Settlement:	Calculated settlement

:: Strength loss calculation (Robertson (2009) ::

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
0.07	5.36	8.61	4.57	39.36	2.69	8.45	128.76
0.14	10.19	16.36	1.00	16.36	2.34	0.02	0.62
0.21	10.10	16.21	1.00	16.21	2.35	0.02	0.62
0.27	9.74	15.63	2.38	37.22	2.40	0.02	0.62
0.35	7.42	11.90	4.06	48.25	2.63	3.57	33.85
0.41	7.50	12.02	4.62	55.51	2.69	4.21	28.85
0.48	7.50	12.01	5.00	60.10	2.73	4.20	24.18
0.54	7.77	12.44	5.04	62.72	2.73	4.16	22.13
0.60	8.93	14.30	4.46	63.83	2.68	4.23	22.75
0.66	10.81	17.32	3.68	63.78	2.59	0.02	0.62
0.74	15.55	24.93	2.41	59.98	2.41	0.02	0.62
0.79	18.40	29.50	2.02	59.63	2.32	0.02	0.62
0.86	22.69	36.39	1.71	62.11	2.23	0.03	0.62
0.94	25.46	40.83	1.64	67.01	2.21	0.05	0.62
0.99	27.16	43.56	1.59	69.38	2.19	0.06	0.63
1.05	29.84	47.86	1.52	72.86	2.16	0.09	0.65
1.13	34.13	54.74	1.35	74.10	2.05	0.13	0.66
1.20	39.13	62.77	1.31	81.96	2.00	0.25	0.68
1.25	45.39	72.82	1.26	91.87	1.94	0.60	0.71
1.33	51.82	83.15	1.23	101.87	1.88	0.73	0.73
1.40	56.47	90.61	1.20	108.58	1.85	0.75	0.75
1.46	50.03	80.26	1.26	101.24	1.94	0.73	0.73
1.51	56.78	91.10	1.22	111.27	1.88	0.75	0.75
1.57	52.00	83.41	1.26	105.36	1.94	0.74	0.74
1.64	57.09	91.58	1.23	113.06	1.90	0.75	0.75
1.73	60.49	97.04	1.23	119.08	1.89	0.76	0.76
1.79	61.65	98.89	1.23	121.77	1.89	0.77	0.77
1.85	64.24	103.05	1.22	126.19	1.88	0.77	0.77
1.91	67.28	107.93	1.22	131.91	1.88	0.78	0.78
1.99	69.60	111.65	1.24	138.26	1.90	0.79	0.79
2.04	69.96	112.22	1.26	141.89	1.94	0.80	0.80
2.10	68.89	110.50	1.31	144.96	2.01	0.80	0.80
2.18	68.84	110.41	1.36	150.69	2.06	0.81	0.81
2.24	68.84	110.40	1.41	155.16	2.09	0.81	0.81
2.33	68.80	110.33	1.52	167.75	2.16	0.82	0.82
2.39	70.32	112.76	1.56	176.43	2.18	0.83	0.83
2.44	72.91	116.92	1.57	183.60	2.18	0.83	0.83
2.53	76.66	122.93	1.57	193.41	2.18	0.84	0.84
2.58	77.64	124.50	1.58	196.29	2.18	0.85	0.85
2.64	78.45	125.80	1.59	199.71	2.19	0.85	0.85
2.72	78.80	126.35	1.60	201.92	2.19	0.85	0.85
2.76	78.62	126.06	1.60	201.32	2.19	0.85	0.85
2.85	77.73	124.62	1.58	197.10	2.19	0.85	0.85
2.90	76.48	122.61	1.59	194.78	2.19	0.85	0.85
2.97	74.69	119.73	1.60	192.03	2.20	0.84	0.84
3.03	72.10	115.56	1.64	189.13	2.21	0.84	0.84
3.09	70.49	112.97	1.65	186.30	2.21	0.83	0.83
3.18	69.42	111.24	1.66	184.72	2.22	0.83	0.83

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
3.22	70.49	112.95	1.63	183.96	2.21	0.83	0.83
3.32	69.78	111.80	1.65	183.94	2.21	0.83	0.83
3.36	70.49	112.94	1.64	184.66	2.21	0.83	0.83
3.42	72.28	115.81	1.61	186.66	2.20	0.84	0.84
3.51	76.93	123.27	1.54	190.13	2.17	0.84	0.84
3.57	80.59	129.14	1.50	193.21	2.15	0.85	0.85
3.62	82.02	131.44	1.49	195.30	2.14	0.85	0.85
3.70	83.27	133.44	1.49	198.38	2.14	0.86	0.86
3.76	82.11	131.57	1.51	198.99	2.15	0.85	0.85
3.81	81.48	130.55	1.52	198.80	2.16	0.85	0.85
3.88	80.23	128.53	1.54	197.61	2.17	0.85	0.85
3.95	77.90	124.80	1.57	196.02	2.18	0.84	0.84
4.01	77.01	123.36	1.58	195.03	2.19	0.84	0.84
4.09	76.38	122.34	1.59	194.41	2.19	0.84	0.84
4.14	77.05	123.41	1.58	194.57	2.18	0.84	0.84
4.21	77.37	123.90	1.57	194.42	2.18	0.84	0.84
4.30	77.11	123.48	1.44	178.02	2.11	0.83	0.83
4.35	76.57	122.61	1.37	167.83	2.06	0.83	0.83
4.40	75.85	121.44	1.41	171.66	2.10	0.83	0.83
4.50	75.41	120.73	1.48	178.43	2.14	0.83	0.83
4.54	75.05	120.15	1.50	180.00	2.15	0.83	0.83
4.61	74.34	119.00	1.54	183.26	2.17	0.83	0.83
4.69	74.38	119.06	1.58	188.12	2.19	0.83	0.83
4.73	74.38	119.05	1.59	189.13	2.19	0.83	0.83
4.80	74.43	119.13	1.61	191.36	2.20	0.83	0.83
4.86	75.59	120.98	1.60	194.12	2.20	0.83	0.83
4.93	76.75	122.84	1.60	196.72	2.19	0.83	0.83
5.00	78.18	125.13	1.58	198.27	2.19	0.83	0.83
5.05	80.04	128.12	1.56	199.34	2.18	0.83	0.83
5.14	82.47	132.01	1.53	201.65	2.16	0.84	0.84
5.19	84.43	135.15	1.51	203.92	2.15	0.84	0.84
5.26	88.54	141.75	1.47	208.80	2.13	0.85	0.85
5.34	93.01	148.92	1.46	216.84	2.12	0.85	0.85
5.39	95.78	153.37	1.45	222.84	2.12	0.86	0.86
5.45	100.34	160.69	1.44	231.08	2.11	0.86	0.86
5.52	104.18	166.85	1.44	239.71	2.11	0.87	0.87
5.59	106.50	170.57	1.44	245.51	2.11	0.87	0.87
5.68	109.18	174.87	1.44	251.79	2.11	0.88	0.88
5.71	109.72	175.73	1.44	253.10	2.11	0.88	0.88
5.78	110.16	176.43	1.45	255.04	2.12	0.88	0.88
5.84	110.88	177.58	1.44	255.71	2.11	0.88	0.88
5.93	110.70	177.28	1.44	254.60	2.11	0.88	0.88
5.99	109.99	176.14	1.44	253.15	2.11	0.88	0.88
6.04	109.63	175.55	1.44	252.14	2.11	0.88	0.88
6.13	109.18	174.82	1.43	249.72	2.11	0.87	0.87
6.17	109.18	174.82	1.42	248.11	2.10	0.87	0.87
6.27	109.09	174.66	1.39	243.31	2.08	0.87	0.87
6.30	109.00	174.52	1.38	241.69	2.08	0.87	0.87

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
6.37	109.00	174.51	1.36	237.67	2.06	0.87	0.87
6.46	109.45	175.22	1.34	234.27	2.03	0.86	0.86
6.52	109.63	175.51	1.32	231.49	2.01	0.86	0.86
6.57	108.91	174.34	1.31	228.31	2.00	0.86	0.86
6.66	106.05	169.74	1.30	221.03	1.99	0.86	0.86
6.71	102.39	163.85	1.31	214.25	2.00	0.85	0.85
6.77	99.44	159.11	1.31	207.94	2.00	0.84	0.84
6.83	94.62	151.36	1.32	199.04	2.01	0.83	0.83
6.92	91.04	145.60	1.32	191.69	2.01	0.83	0.83
6.97	89.52	143.15	1.32	188.31	2.01	0.82	0.82
7.04	89.08	142.44	1.31	186.01	2.00	0.82	0.82
7.09	90.51	144.73	1.29	187.40	1.98	0.82	0.82
7.16	93.90	146.13	1.18	171.75	1.82	0.82	0.82
7.22	99.00	151.29	1.13	171.00	1.78	0.83	0.83
7.31	101.94	155.02	1.13	175.89	1.78	0.84	0.84
7.35	102.66	155.60	1.13	176.48	1.78	0.84	0.84
7.46	98.73	149.41	1.16	172.77	1.80	0.83	0.83
7.52	98.10	147.64	1.15	170.44	1.80	0.83	0.83
7.56	100.07	149.62	1.14	170.30	1.79	0.83	0.83
7.63	100.69	149.48	1.13	168.97	1.78	0.83	0.83
7.68	100.43	148.62	1.14	168.77	1.79	0.83	0.83
7.76	99.71	147.11	1.14	168.40	1.79	0.83	0.83
7.82	98.73	145.25	1.15	167.16	1.80	0.83	0.83
7.90	97.39	142.40	1.15	163.68	1.80	0.82	0.82
7.95	95.33	139.09	1.15	160.54	1.80	0.82	0.82
8.02	92.29	134.30	1.16	156.02	1.81	0.81	0.81
8.08	88.45	128.67	1.18	151.35	1.82	0.80	0.80
8.16	81.66	119.14	1.20	143.43	1.85	0.79	0.79
8.20	80.23	116.87	1.21	141.05	1.86	0.78	0.78
8.27	77.91	113.20	1.21	137.25	1.87	0.78	0.78
8.35	75.68	109.74	1.22	134.09	1.88	0.77	0.77
8.41	74.25	107.59	1.23	132.42	1.89	0.77	0.77
8.49	72.46	105.02	1.25	130.83	1.91	0.76	0.76
8.54	71.66	103.89	1.25	130.26	1.93	0.76	0.76
8.61	69.24	100.70	1.27	128.37	1.96	0.76	0.76
8.66	68.44	99.60	1.29	128.11	1.97	0.76	0.76
8.73	66.74	97.33	1.31	127.16	2.00	0.75	0.75
8.80	64.87	94.71	1.33	125.81	2.02	0.75	0.75
8.87	62.01	90.83	1.36	123.65	2.06	0.74	0.74
8.94	60.22	88.49	1.40	124.22	2.09	0.74	0.74
8.99	59.77	87.96	1.44	126.28	2.11	0.74	0.74
9.07	59.95	88.00	1.46	128.06	2.12	0.74	0.74
9.12	61.47	89.60	1.44	128.69	2.11	0.74	0.74
9.20	63.70	92.13	1.42	130.80	2.10	0.75	0.75
9.26	66.38	95.19	1.39	132.50	2.08	0.75	0.75
9.35	73.44	103.03	1.32	135.85	2.01	0.76	0.76
9.40	78.45	108.68	1.29	139.72	1.97	0.77	0.77
9.48	87.29	118.34	1.24	146.32	1.90	0.79	0.79

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
9.53	92.38	123.72	1.21	149.31	1.86	0.80	0.80
9.59	95.24	126.28	1.18	149.42	1.83	0.80	0.80
9.65	96.05	126.60	1.17	148.32	1.82	0.80	0.80
9.71	94.97	124.88	1.18	147.18	1.82	0.80	0.80
9.78	93.46	122.69	1.19	145.65	1.83	0.80	0.80
9.87	88.90	117.05	1.22	142.76	1.87	0.79	0.79
9.93	86.31	113.85	1.24	140.79	1.90	0.78	0.78
9.99	83.45	110.33	1.25	138.45	1.93	0.78	0.78
10.07	79.25	105.14	1.28	134.89	1.97	0.77	0.77
10.13	77.19	102.54	1.30	133.58	1.99	0.77	0.77
10.17	76.03	100.06	1.28	127.95	1.96	0.76	0.76
10.24	76.03	97.52	1.20	117.49	1.86	0.76	0.76
10.32	76.03	98.02	1.24	121.51	1.90	0.76	0.76
10.37	76.57	98.69	1.25	123.14	1.92	0.76	0.76
10.45	79.25	101.76	1.25	127.15	1.92	0.76	0.76
10.50	79.96	102.47	1.25	128.31	1.92	0.76	0.76
10.58	74.60	96.11	1.29	123.96	1.98	0.75	0.75
10.63	84.97	107.90	1.24	134.34	1.91	0.77	0.77
10.71	90.15	113.69	1.23	140.36	1.90	0.78	0.78
10.77	94.17	118.20	1.23	145.02	1.89	0.79	0.79
10.83	98.55	123.08	1.22	150.20	1.88	0.80	0.80
10.90	103.91	128.83	1.20	155.21	1.86	0.81	0.81
10.97	110.88	136.29	1.18	160.78	1.83	0.82	0.82
11.03	116.42	142.21	1.16	164.65	1.80	0.83	0.83
11.12	128.57	155.25	1.10	171.11	1.76	0.84	0.84
11.16	134.02	161.04	1.07	172.77	1.74	0.85	0.85
11.23	140.90	168.03	1.03	172.68	1.72	0.86	0.86
11.31	146.62	173.60	1.00	173.60	1.70	0.87	0.87
11.37	150.19	176.97	1.00	176.97	1.68	0.87	0.87
11.42	152.96	179.53	1.00	179.53	1.67	0.88	0.88
11.50	156.09	182.20	1.00	182.20	1.66	0.88	0.88
11.55	157.52	183.31	1.00	183.31	1.66	0.88	0.88
11.66	158.05	182.97	1.00	182.97	1.66	0.88	0.88
11.71	158.23	182.81	1.00	182.81	1.66	0.88	0.88
11.77	157.61	181.80	1.00	181.80	1.66	0.88	0.88
11.82	156.53	180.31	1.00	180.31	1.67	0.88	0.88
11.88	155.28	178.74	1.00	178.74	1.68	0.88	0.88
11.96	151.98	174.92	1.00	175.32	1.71	0.87	0.87
12.05	148.14	170.58	1.07	182.02	1.74	0.87	0.87
12.10	145.01	167.10	1.10	184.63	1.76	0.86	0.86
12.16	142.24	163.97	1.14	186.42	1.79	0.86	0.86
12.21	139.92	161.33	1.16	187.23	1.81	0.85	0.85
12.30	136.70	157.76	1.20	189.18	1.85	0.85	0.85
12.35	135.63	156.42	1.21	189.16	1.86	0.85	0.85
12.41	132.68	152.48	1.21	184.13	1.86	0.84	0.84
12.48	131.43	150.52	1.21	181.62	1.86	0.84	0.84
12.53	130.36	149.36	1.22	182.89	1.88	0.84	0.84
12.61	128.84	147.64	1.25	184.01	1.91	0.84	0.84

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
12.68	119.28	137.18	1.29	177.10	1.98	0.83	0.83
12.75	122.94	140.78	1.28	180.75	1.97	0.83	0.83
12.80	126.60	144.38	1.27	183.98	1.96	0.84	0.84
12.88	136.79	154.73	1.25	193.16	1.92	0.85	0.85
12.94	147.87	166.18	1.23	203.73	1.88	0.86	0.86
13.00	158.68	177.30	1.20	213.18	1.85	0.88	0.88
13.07	172.17	190.82	1.16	221.23	1.81	0.89	0.89
13.14	186.47	204.99	1.09	224.11	1.76	0.91	0.91
13.24	205.94	223.84	1.00	223.84	1.68	0.92	0.92
13.29	214.25	231.68	1.00	231.68	1.65	0.93	0.93
13.33	220.95	237.98	1.00	237.98	1.63	0.94	0.94
13.39	228.37	244.76	1.00	244.76	1.60	0.95	0.95
13.46	233.82	249.40	1.00	249.40	1.58	0.95	0.95
13.52	235.78	250.53	1.00	250.53	1.56	0.95	0.95
13.59	236.32	250.33	1.00	250.33	1.56	0.95	0.95
13.68	235.52	248.68	1.00	248.68	1.56	0.95	0.95
13.72	234.35	247.09	1.00	247.09	1.56	0.95	0.95
13.78	231.76	244.02	1.00	244.02	1.57	0.95	0.95
13.88	225.42	237.07	1.00	237.07	1.60	0.94	0.94
13.93	219.17	230.49	1.00	230.49	1.62	0.93	0.93
13.99	210.05	221.04	1.00	221.04	1.66	0.92	0.92
14.07	202.99	213.48	1.00	213.48	1.69	0.92	0.92
14.12	198.35	208.52	1.02	212.45	1.71	0.91	0.91
14.19	193.52	203.16	1.06	216.26	1.74	0.91	0.91
14.26	197.99	207.23	1.06	219.10	1.73	0.91	0.91
14.31	193.70	202.59	1.09	220.95	1.75	0.91	0.91
14.40	197.63	205.88	1.08	222.59	1.75	0.91	0.91
14.45	199.96	207.85	1.08	224.36	1.75	0.91	0.91
14.50	202.19	209.74	1.08	226.19	1.75	0.91	0.91
14.57	203.98	211.14	1.09	229.62	1.75	0.92	0.92
14.64	206.57	213.27	1.10	234.54	1.76	0.92	0.92
14.72	204.42	210.61	1.13	237.09	1.78	0.92	0.92
14.76	201.83	207.69	1.14	236.52	1.79	0.91	0.91
14.86	190.13	195.30	1.18	230.68	1.83	0.90	0.90
14.90	183.07	187.93	1.20	225.94	1.85	0.89	0.89
15.01	160.64	164.67	1.26	207.20	1.93	0.87	0.87
15.05	153.50	157.27	1.28	200.96	1.96	0.86	0.86
15.14	144.12	146.72	1.25	182.88	1.91	0.85	0.85
15.16	141.88	144.12	1.23	177.60	1.89	0.84	0.84
15.26	138.22	139.99	1.25	174.95	1.92	0.84	0.84
15.30	137.15	138.70	1.26	174.52	1.93	0.84	0.84
15.37	135.09	136.31	1.27	173.36	1.95	0.83	0.83
15.44	118.29	119.31	1.34	160.01	2.04	0.81	0.81
15.51	116.51	117.16	1.34	157.44	2.04	0.81	0.81
15.56	113.74	114.12	1.35	154.20	2.05	0.81	0.81
15.62	109.81	109.91	1.37	150.31	2.06	0.80	0.80
15.70	106.23	105.98	1.40	148.32	2.09	0.80	0.80
15.76	104.71	104.24	1.43	148.63	2.10	0.79	0.79

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
15.82	101.23	100.60	1.50	150.62	2.15	0.79	0.79
15.88	94.71	93.99	1.66	155.82	2.22	0.79	0.79
15.96	84.88	83.94	1.85	155.56	2.28	0.78	0.78
16.01	78.36	77.32	2.00	154.88	2.32	0.77	0.77
16.09	70.94	69.73	2.21	154.12	2.37	0.76	0.76
16.15	68.53	67.10	2.26	151.39	2.38	0.75	0.75
16.23	81.31	79.30	1.79	141.66	2.26	0.76	0.76
16.29	96.67	93.97	1.50	140.74	2.15	0.78	0.78
16.35	119.99	116.26	1.32	153.32	2.01	0.81	0.81
16.42	134.56	129.92	1.27	164.74	1.95	0.83	0.83
16.50	143.58	138.20	1.24	171.63	1.91	0.84	0.84
16.55	150.37	144.44	1.22	176.54	1.88	0.84	0.84
16.64	163.15	156.20	1.20	187.18	1.85	0.86	0.86
16.70	172.71	164.99	1.19	195.74	1.83	0.87	0.87
16.75	179.14	170.84	1.18	201.09	1.82	0.88	0.88
16.80	188.70	179.64	1.16	208.09	1.80	0.89	0.89
16.89	201.74	191.45	1.15	220.55	1.80	0.90	0.90
16.93	211.04	200.03	1.14	227.35	1.79	0.91	0.91
17.00	227.39	215.03	1.11	239.58	1.77	0.93	0.93
17.07	236.59	223.20	1.12	248.94	1.77	0.93	0.93
17.14	242.84	228.56	1.13	257.90	1.78	0.94	0.94
17.21	252.22	236.80	1.13	267.85	1.78	0.95	0.95
17.27	256.96	240.77	1.14	274.54	1.79	0.95	0.95
17.34	263.21	245.99	1.14	280.88	1.79	0.96	0.96
17.39	264.46	246.68	1.15	284.77	1.80	0.96	0.96
17.48	263.03	244.51	1.15	281.39	1.80	0.96	0.96
17.53	262.99	244.08	1.13	275.88	1.78	0.96	0.96
17.62	262.99	243.31	1.13	274.27	1.78	0.96	0.96
17.68	262.95	242.68	1.13	275.05	1.78	0.96	0.96
17.73	261.34	240.78	1.14	273.63	1.79	0.95	0.95
17.80	251.24	230.80	1.16	267.78	1.81	0.95	0.95
17.86	251.64	230.73	1.15	265.48	1.80	0.95	0.95
17.92	252.05	230.59	1.14	262.06	1.79	0.94	0.94
18.00	256.69	234.34	1.11	259.18	1.76	0.95	0.95
18.05	256.16	233.44	1.10	256.71	1.76	0.95	0.95
18.15	252.05	228.86	1.11	253.17	1.76	0.94	0.94
18.20	250.08	226.73	1.10	249.85	1.76	0.94	0.94
18.25	248.38	224.84	1.10	246.20	1.76	0.94	0.94
18.32	245.52	221.76	1.07	236.60	1.74	0.93	0.93
18.39	243.38	219.39	1.04	228.63	1.73	0.93	0.93
18.46	239.00	214.97	1.05	224.77	1.73	0.93	0.93
18.51	235.43	211.37	1.05	221.60	1.73	0.92	0.92
18.60	228.90	204.90	1.04	212.30	1.72	0.92	0.92
18.64	225.51	201.64	1.03	207.53	1.72	0.91	0.91
18.71	218.36	194.80	1.02	198.90	1.72	0.90	0.90
18.77	208.89	185.88	1.03	191.65	1.72	0.89	0.89
18.84	204.87	181.97	1.02	185.51	1.72	0.89	0.89
18.93	195.94	173.47	1.02	177.45	1.72	0.88	0.88

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
18.98	188.52	166.49	1.05	175.51	1.73	0.87	0.87
19.03	182.98	161.23	1.07	173.28	1.74	0.86	0.86
19.09	171.81	150.80	1.13	170.26	1.78	0.85	0.85
19.19	153.59	133.85	1.20	160.87	1.85	0.83	0.83
19.23	143.58	124.64	1.23	153.70	1.89	0.82	0.82
19.29	127.76	110.16	1.28	141.50	1.97	0.80	0.80
19.37	110.52	94.39	1.39	131.10	2.08	0.78	0.78
19.42	98.82	83.74	1.54	128.89	2.17	0.77	0.77
19.53	77.37	64.48	2.07	133.54	2.34	0.75	0.75
19.59	67.46	55.72	2.47	137.57	2.42	0.74	0.74
19.63	59.42	48.66	2.92	142.10	2.49	0.73	0.73
19.73	52.89	42.90	3.27	140.33	2.54	0.72	0.72
19.75	55.04	44.71	3.05	136.48	2.51	0.72	0.72
19.85	56.47	45.78	2.86	131.07	2.48	0.71	0.71
19.90	56.29	45.50	2.91	132.26	2.49	0.71	0.71
19.97	52.62	42.22	3.21	135.66	2.53	0.68	0.71
20.03	48.34	38.66	3.07	118.75	2.51	0.29	0.69
20.08	44.14	35.15	3.02	106.21	2.51	0.15	0.67
20.17	37.61	29.45	3.97	116.88	2.62	0.87	2.07
20.22	36.45	28.38	4.29	121.78	2.66	0.91	2.00
20.28	35.38	27.39	4.64	127.06	2.69	0.96	1.93
20.35	35.69	27.52	4.74	130.38	2.70	1.00	1.95
20.41	34.22	26.20	5.19	136.08	2.74	1.04	1.86
20.48	36.01	27.56	5.03	138.58	2.73	1.10	1.95
20.54	36.81	28.11	4.99	140.26	2.73	1.13	1.99
20.61	38.51	29.41	4.74	139.37	2.70	1.15	2.08
20.68	40.65	31.08	4.40	136.87	2.67	1.15	2.19
20.74	45.75	35.20	3.70	130.39	2.59	0.37	0.69
20.83	57.63	44.98	2.58	116.17	2.44	0.44	0.70
20.87	64.06	50.29	2.20	110.78	2.37	0.53	0.70
20.94	77.11	61.18	1.73	105.84	2.24	0.72	0.72
21.02	86.40	68.86	1.55	106.64	2.17	0.73	0.73
21.08	93.55	74.77	1.46	109.01	2.12	0.74	0.74
21.14	99.98	80.07	1.40	111.85	2.08	0.75	0.75
21.19	110.34	88.77	1.33	117.76	2.02	0.76	0.76
21.28	121.15	97.81	1.28	124.86	1.96	0.78	0.78
21.33	126.25	102.07	1.26	128.31	1.93	0.78	0.78
21.41	136.07	110.21	1.23	135.52	1.89	0.80	0.80
21.47	143.40	116.23	1.21	140.92	1.87	0.81	0.81
21.53	146.62	118.73	1.21	143.24	1.86	0.81	0.81
21.61	144.03	116.21	1.22	141.41	1.87	0.81	0.81
21.68	134.47	107.77	1.25	134.22	1.91	0.79	0.79
21.73	125.98	100.40	1.27	127.50	1.95	0.78	0.78
21.80	112.93	89.13	1.32	117.66	2.02	0.77	0.77
21.85	105.25	82.51	1.36	112.58	2.06	0.76	0.76
21.93	95.69	74.28	1.45	107.87	2.12	0.74	0.74
22.02	84.25	64.51	1.64	105.82	2.21	0.73	0.73
22.05	77.82	59.10	1.80	106.42	2.26	0.72	0.72

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
22.12	68.08	51.00	2.15	109.61	2.35	0.59	0.71
22.19	58.43	43.10	2.65	114.20	2.45	0.39	0.70
22.27	50.03	36.26	3.33	120.88	2.55	0.30	0.69
22.32	46.64	33.51	3.69	123.63	2.59	0.28	0.69
22.39	45.92	32.88	3.70	121.61	2.59	0.25	0.68
22.46	46.73	33.45	3.52	117.68	2.57	0.22	0.68
22.52	46.46	33.18	3.52	116.69	2.57	0.21	0.68
22.59	47.00	33.51	3.43	115.05	2.56	0.20	0.68
22.66	47.98	34.21	3.29	112.51	2.54	0.20	0.68
22.71	48.78	34.89	2.97	103.51	2.50	0.15	0.67
22.77	50.21	36.41	2.17	79.09	2.36	0.07	0.64
22.86	50.75	36.70	2.18	79.97	2.36	0.07	0.64
22.91	50.84	36.63	2.25	82.48	2.38	0.08	0.64
22.98	50.75	36.32	2.44	88.49	2.41	0.10	0.65
23.05	48.87	34.61	2.78	96.37	2.47	0.11	0.66
23.10	48.25	34.00	2.96	100.53	2.50	0.13	0.66
23.18	46.82	32.71	3.23	105.81	2.54	0.14	0.66
23.25	45.12	31.24	3.57	111.65	2.58	0.16	0.67
23.30	42.17	28.86	4.10	118.39	2.64	0.87	2.01
23.37	39.76	26.93	4.54	122.22	2.68	0.88	1.89
23.43	38.51	25.92	4.76	123.50	2.71	0.88	1.82
23.49	38.15	25.58	4.82	123.28	2.71	0.87	1.80
23.59	36.99	24.62	5.02	123.66	2.73	0.86	1.74
23.63	36.54	24.24	5.13	124.35	2.74	0.86	1.71
23.70	35.29	23.23	5.43	126.14	2.77	0.86	1.64
23.79	30.47	19.66	6.46	127.09	2.85	0.81	1.40
23.83	28.50	18.30	6.92	126.66	2.88	0.78	1.31
23.89	26.36	16.81	7.45	125.27	2.92	0.74	1.20
23.95	28.28	18.05	6.56	118.46	2.85	0.69	1.29
24.02	23.68	14.91	8.03	119.67	2.95	0.65	1.06
24.08	28.05	17.80	6.34	112.79	2.84	0.63	1.27
24.16	40.74	27.04	3.75	101.42	2.60	0.08	0.64
24.22	48.43	32.68	3.01	98.23	2.50	0.11	0.66
24.28	48.96	32.83	3.24	106.35	2.54	0.15	0.67
24.35	46.55	30.84	3.71	114.49	2.60	0.18	0.67
24.42	42.80	27.93	4.34	121.17	2.66	0.89	1.95
24.48	39.13	25.14	5.07	127.44	2.73	0.91	1.77
24.57	39.13	25.02	5.17	129.32	2.74	0.93	1.77
24.62	39.13	24.96	5.17	128.95	2.74	0.93	1.76
24.68	41.19	26.40	4.78	126.17	2.71	0.92	1.85
24.74	47.00	30.58	3.90	119.39	2.62	0.91	2.12
24.81	54.23	35.84	3.13	112.02	2.52	0.24	0.68
24.88	58.07	38.60	2.80	108.06	2.47	0.26	0.68
24.94	57.36	37.97	2.88	109.20	2.48	0.26	0.68
25.02	53.16	34.68	3.35	116.13	2.55	0.26	0.68
25.07	48.16	30.94	3.94	121.83	2.62	0.95	2.15
25.14	40.03	25.04	5.13	128.56	2.74	0.92	1.77
25.22	32.25	19.66	6.70	131.81	2.86	0.86	1.40

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
25.27	28.86	17.45	7.56	131.85	2.92	0.82	1.25
25.36	25.28	15.11	7.04	106.34	2.89	0.52	1.08
25.40	24.12	14.34	7.19	103.10	2.90	0.48	1.02
25.47	27.16	16.23	6.48	105.17	2.85	0.53	1.16
25.57	39.22	24.60	3.80	93.48	2.61	0.53	1.70
25.61	46.28	29.64	2.97	88.09	2.50	0.06	0.63
25.66	40.83	25.63	3.67	94.08	2.59	0.06	0.63
25.73	59.60	39.20	2.15	84.14	2.35	0.12	0.66
25.79	61.75	40.70	2.06	83.85	2.33	0.13	0.66
25.88	61.12	40.12	2.09	83.65	2.34	0.12	0.66
25.93	59.51	38.86	2.16	84.05	2.36	0.11	0.66
25.98	55.58	35.87	2.41	86.36	2.41	0.10	0.65
26.07	47.81	30.05	3.15	94.64	2.52	0.09	0.65
26.13	43.97	27.20	3.68	100.22	2.59	0.08	0.65
26.20	32.89	19.36	5.86	113.50	2.80	0.66	1.38
26.27	28.51	16.56	7.11	117.81	2.89	0.66	1.18
26.33	26.37	15.21	7.82	118.88	2.94	0.64	1.09
26.38	22.17	12.60	9.56	120.49	3.04	0.62	0.90
26.47	20.92	11.79	9.85	116.18	3.06	0.57	0.84
26.52	19.93	11.17	10.16	113.46	3.08	0.53	0.80
26.58	19.67	10.98	10.05	110.32	3.07	0.50	0.78
26.66	19.58	10.89	10.00	108.87	3.07	0.49	0.78
26.71	19.49	10.82	10.17	110.04	3.08	0.49	0.77
26.80	19.40	10.72	10.67	114.40	3.10	0.53	0.77
26.87	19.22	10.59	10.92	115.57	3.12	0.54	0.76
26.91	19.12	10.52	11.01	115.74	3.12	0.54	0.75
27.00	19.04	10.43	10.80	112.63	3.11	0.51	0.74
27.06	17.96	9.76	11.31	110.35	3.13	0.48	0.70
27.10	16.90	9.11	12.02	109.44	3.17	0.47	0.65
27.17	15.65	8.34	13.09	109.11	3.22	0.46	0.60
27.26	16.00	8.52	12.71	108.28	3.20	0.45	0.61
27.30	16.45	8.77	12.35	108.29	3.18	0.46	0.63
27.39	18.59	10.01	10.99	109.93	3.12	0.48	0.71
27.44	20.74	11.26	9.85	110.86	3.06	0.51	0.80
27.51	24.58	13.50	8.40	113.42	2.98	0.56	0.96
27.60	27.17	14.97	7.96	119.22	2.95	0.64	1.07
27.64	26.72	14.69	7.41	108.88	2.91	0.54	1.05
27.70	23.24	12.61	6.89	86.89	2.88	0.33	0.90
27.80	19.67	10.49	7.66	80.30	2.93	0.26	0.75
27.84	18.50	9.79	8.65	84.73	2.99	0.28	0.70
27.89	16.63	8.68	10.56	91.71	3.10	0.32	0.62
27.95	15.73	8.14	12.06	98.14	3.17	0.36	0.58
28.03	17.07	8.89	11.16	99.27	3.13	0.38	0.64
28.09	17.52	9.13	10.84	99.02	3.11	0.38	0.65
28.16	26.46	14.27	6.46	92.19	2.85	0.39	1.02
28.22	34.05	19.00	4.63	87.92	2.69	0.41	1.33
28.32	54.87	32.82	2.44	80.25	2.41	0.07	0.64
28.37	60.94	36.91	2.17	80.10	2.36	0.09	0.65

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
28.43	66.48	40.60	2.00	81.13	2.32	0.13	0.66
28.48	69.61	42.61	1.94	82.80	2.30	0.16	0.67
28.55	71.93	44.00	1.93	84.98	2.30	0.20	0.68
28.61	72.11	43.85	2.01	88.33	2.32	0.22	0.68
28.68	69.25	41.46	2.30	95.28	2.39	0.25	0.68
28.77	64.43	37.76	2.78	104.96	2.47	0.26	0.68
28.81	58.00	33.29	3.37	112.18	2.55	0.24	0.68
28.88	48.26	26.67	4.72	125.88	2.70	0.92	1.87
28.95	41.38	22.24	6.25	139.02	2.83	1.00	1.59
29.01	36.91	19.68	7.54	148.36	2.92	1.06	1.41
29.07	35.12	18.64	7.95	148.23	2.95	1.04	1.33
29.14	34.32	18.15	7.74	140.52	2.94	0.93	1.30
29.21	30.92	16.21	8.43	136.70	2.98	0.85	1.16
29.30	34.99	18.42	6.90	127.04	2.88	0.79	1.32
29.36	27.44	14.20	9.23	131.11	3.03	0.75	1.01
29.41	35.66	18.72	6.47	121.14	2.85	0.73	1.34
29.47	55.58	31.29	3.21	100.59	2.53	0.13	0.66
29.54	89.00	54.16	1.63	88.30	2.21	0.50	0.70
29.60	104.63	65.16	1.42	92.53	2.10	0.72	0.72
29.68	110.62	69.27	1.38	95.32	2.07	0.73	0.73
29.76	110.08	69.01	1.36	93.74	2.05	0.73	0.73
29.80	108.30	67.78	1.36	92.09	2.05	0.72	0.72
29.87	104.10	64.63	1.39	89.93	2.08	0.72	0.72
29.95	101.51	62.63	1.42	88.67	2.10	0.71	0.71
30.00	99.45	61.04	1.44	87.97	2.11	0.71	0.71
30.05	98.47	60.15	1.47	88.13	2.13	0.70	0.71
30.14	97.58	59.19	1.50	89.05	2.15	0.71	0.71
30.19	97.93	59.25	1.52	89.82	2.16	0.71	0.71
30.25	100.35	60.70	1.51	91.44	2.15	0.72	0.72
30.32	103.74	62.79	1.49	93.53	2.14	0.72	0.72
30.38	105.17	63.61	1.48	94.43	2.14	0.73	0.73
30.45	107.23	64.92	1.46	95.03	2.13	0.73	0.73
30.53	107.23	64.85	1.45	94.33	2.12	0.73	0.73
30.59	106.33	64.15	1.46	93.61	2.13	0.73	0.73
30.68	102.40	61.05	1.53	93.69	2.17	0.72	0.72
30.74	99.18	58.78	1.57	92.49	2.18	0.72	0.72
30.79	95.61	56.60	1.56	88.50	2.18	0.63	0.71
30.85	88.91	52.18	1.62	84.68	2.20	0.39	0.70
30.92	83.37	47.84	1.88	90.03	2.29	0.38	0.69
30.98	77.56	43.41	2.29	99.50	2.38	0.39	0.70
31.06	60.85	32.21	3.67	118.04	2.59	0.31	0.69
31.12	60.94	32.09	3.78	121.38	2.60	0.95	2.20
31.18	61.03	32.08	3.78	121.41	2.60	0.95	2.20
31.27	66.30	35.33	3.27	115.68	2.54	0.37	0.69
31.32	73.27	39.71	2.79	110.83	2.47	0.45	0.70
31.37	78.54	43.04	2.51	108.14	2.43	0.55	0.71
31.45	85.42	47.39	2.23	105.60	2.37	0.71	0.71
31.51	87.03	48.48	2.12	102.79	2.35	0.71	0.71

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
31.56	89.53	50.31	1.94	97.83	2.31	0.68	0.71
31.64	92.21	52.14	1.82	95.13	2.27	0.70	0.71
31.71	92.57	52.26	1.82	95.04	2.27	0.71	0.71
31.81	91.50	51.38	1.85	95.25	2.28	0.67	0.71
31.84	90.34	50.51	1.90	95.98	2.29	0.65	0.71
31.90	88.28	48.99	1.99	97.36	2.32	0.61	0.71
31.96	86.94	47.98	2.05	98.32	2.33	0.59	0.71
32.05	85.16	46.67	2.12	98.92	2.35	0.55	0.71
32.10	84.62	46.25	2.14	98.95	2.35	0.53	0.70
32.15	83.64	45.56	2.17	98.94	2.36	0.50	0.70
32.24	83.46	45.33	2.17	98.51	2.36	0.49	0.70
32.28	83.82	45.52	2.16	98.12	2.36	0.49	0.70
32.35	84.08	45.64	2.13	97.34	2.35	0.48	0.70
32.44	83.37	45.20	2.10	94.97	2.34	0.42	0.70
32.50	82.39	44.60	2.09	93.43	2.34	0.37	0.69
32.55	81.05	43.83	2.08	91.03	2.34	0.32	0.69
32.63	80.06	43.23	2.06	89.04	2.33	0.28	0.69
32.70	80.06	43.18	2.05	88.43	2.33	0.27	0.69
32.74	78.54	42.13	2.11	89.01	2.35	0.25	0.68
32.85	72.65	37.93	2.55	96.89	2.43	0.25	0.68
32.90	66.39	33.85	3.07	103.87	2.51	0.22	0.68
32.94	57.91	28.56	3.96	113.05	2.62	0.80	1.97
33.01	48.61	22.97	5.34	122.79	2.76	0.83	1.64
33.09	41.29	19.28	6.68	128.82	2.86	0.82	1.38
33.14	36.28	16.79	7.89	132.50	2.95	0.82	1.20
33.23	30.83	14.08	9.53	134.12	3.04	0.79	1.01
33.29	26.10	11.74	11.37	133.54	3.14	0.74	0.84
33.34	23.06	10.24	12.85	131.56	3.21	0.70	0.73
33.42	22.26	9.83	13.24	130.16	3.22	0.68	0.70
33.48	21.54	9.46	13.23	125.11	3.22	0.62	0.68
33.54	21.54	9.44	12.50	117.97	3.19	0.55	0.67
33.63	26.10	11.62	6.83	79.33	2.87	0.26	0.83
33.68	38.88	18.58	3.64	67.64	2.59	0.02	0.62
33.78	58.89	30.01	2.37	71.13	2.40	0.05	0.62
33.83	75.51	40.11	1.80	72.12	2.26	0.10	0.65
33.88	86.76	46.61	1.69	78.81	2.23	0.23	0.68
33.94	73.90	37.84	2.33	88.24	2.39	0.18	0.67
33.99	94.63	50.45	1.77	89.30	2.26	0.54	0.70
34.08	107.14	57.83	1.64	94.62	2.21	0.73	0.73
34.14	111.51	60.21	1.62	97.76	2.20	0.73	0.73
34.19	113.30	61.04	1.64	99.93	2.21	0.74	0.74
34.26	112.94	60.52	1.67	101.19	2.22	0.74	0.74
34.34	107.94	57.10	1.79	101.98	2.26	0.73	0.73
34.38	103.03	53.92	1.90	102.30	2.29	0.73	0.73
34.48	92.66	47.32	2.21	104.36	2.37	0.72	0.72
34.54	83.91	41.84	2.59	108.50	2.44	0.62	0.71
34.59	77.03	37.60	3.01	113.26	2.50	0.51	0.70
34.67	60.85	28.15	4.40	123.87	2.67	0.92	1.97

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
34.73	51.74	23.22	5.53	128.51	2.77	0.90	1.66
34.78	42.99	19.09	6.92	132.03	2.88	0.86	1.36
34.85	34.41	15.05	8.79	132.35	3.00	0.78	1.08
34.92	30.66	13.27	9.73	129.10	3.05	0.72	0.95
34.98	27.26	11.67	11.05	128.90	3.12	0.69	0.83
35.04	27.17	11.60	11.04	128.13	3.12	0.68	0.83
35.12	27.17	11.58	11.14	128.97	3.13	0.69	0.83
35.18	27.08	11.51	11.31	130.19	3.13	0.70	0.82
35.26	28.51	12.15	10.78	130.96	3.11	0.72	0.87
35.32	29.14	12.41	10.66	132.37	3.10	0.74	0.89
35.38	27.53	11.65	11.58	134.87	3.15	0.76	0.83
35.46	25.65	10.76	12.73	136.97	3.20	0.77	0.77
35.52	24.76	10.34	13.20	136.47	3.22	0.75	0.74
35.58	23.95	9.95	13.54	134.70	3.23	0.73	0.71
35.65	24.62	10.23	13.10	134.05	3.22	0.73	0.73
35.73	23.69	9.78	13.76	134.64	3.24	0.73	0.70
35.78	24.49	10.13	13.31	134.81	3.22	0.73	0.72
35.86	25.92	10.75	12.76	137.24	3.20	0.77	0.77
35.90	27.89	11.63	11.83	137.57	3.16	0.78	0.83
35.97	29.85	12.50	11.06	138.23	3.12	0.81	0.89
36.04	31.37	13.15	10.44	137.27	3.09	0.80	0.94
36.12	33.25	13.97	9.49	132.61	3.04	0.77	1.00
36.17	36.91	15.59	6.89	107.42	2.88	0.54	1.11
36.23	44.15	19.18	4.44	85.17	2.67	0.39	1.34
36.32	53.08	23.53	3.98	93.58	2.63	0.52	1.63
36.36	56.03	24.84	4.00	99.41	2.63	0.59	1.72
36.46	56.16	24.31	4.74	115.22	2.70	0.76	1.72
36.51	56.92	24.46	4.96	121.42	2.72	0.84	1.74
36.56	56.30	24.04	5.33	128.07	2.76	0.91	1.72
36.63	54.51	23.20	5.69	132.00	2.79	0.94	1.66
36.70	48.26	20.38	6.42	130.88	2.84	0.87	1.46
36.76	44.33	18.61	6.94	129.18	2.88	0.81	1.33
36.82	38.25	15.89	8.38	133.12	2.98	0.81	1.14
36.91	33.87	13.92	10.03	139.60	3.07	0.84	0.99
36.95	32.35	13.24	10.78	142.72	3.11	0.87	0.95
37.02	35.30	14.50	9.98	144.81	3.07	0.91	1.04
37.10	44.41	18.47	7.50	138.59	2.92	0.92	1.32
37.16	53.17	22.27	5.87	130.67	2.80	0.90	1.59
37.22	68.54	29.81	4.04	120.47	2.63	0.91	2.07
37.28	83.28	37.75	3.02	114.15	2.51	0.64	0.71
37.36	120.98	59.30	1.80	106.82	2.27	0.75	0.75
37.41	152.97	78.74	1.43	112.77	2.11	0.78	0.78
37.49	192.64	103.72	1.28	132.52	1.96	0.82	0.82
37.55	211.14	115.50	1.24	143.38	1.91	0.84	0.84
37.60	226.96	125.72	1.21	152.27	1.86	0.85	0.85
37.69	249.83	140.12	1.17	164.27	1.82	0.87	0.87
37.74	259.48	146.06	1.16	169.13	1.80	0.88	0.88
37.80	268.15	150.78	1.16	174.65	1.80	0.88	0.88

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
37.89	287.27	162.02	1.14	184.92	1.79	0.90	0.90
37.94	293.07	165.30	1.14	188.13	1.79	0.91	0.91
38.00	300.94	169.62	1.14	192.70	1.79	0.91	0.91
38.08	305.49	171.58	1.14	196.28	1.79	0.92	0.92
38.15	307.10	172.12	1.15	197.46	1.80	0.92	0.92
38.20	305.14	170.45	1.16	196.93	1.80	0.92	0.92
38.28	302.01	168.07	1.16	195.37	1.81	0.91	0.91
38.33	299.15	166.08	1.17	193.77	1.81	0.91	0.91
38.40	293.25	162.31	1.17	190.14	1.82	0.91	0.91
38.47	285.57	157.17	1.18	186.02	1.83	0.90	0.90
38.52	281.10	154.18	1.19	183.47	1.84	0.90	0.90
38.59	276.55	152.07	1.18	179.11	1.82	0.89	0.89
38.68	268.06	146.75	1.18	173.78	1.83	0.88	0.88
38.73	263.41	143.96	1.19	170.67	1.83	0.88	0.88
38.80	254.39	138.47	1.19	165.09	1.84	0.87	0.87
38.85	224.64	119.48	1.24	148.28	1.91	0.85	0.85
38.93	226.87	121.73	1.22	148.35	1.87	0.85	0.85
38.99	212.13	112.54	1.24	139.45	1.90	0.83	0.83
39.07	192.47	99.79	1.28	127.92	1.97	0.82	0.82
39.12	182.91	93.29	1.32	123.05	2.01	0.81	0.81
39.18	168.08	83.56	1.40	117.06	2.09	0.80	0.80
39.24	145.83	69.66	1.62	112.88	2.20	0.78	0.78
39.31	124.84	57.08	2.03	115.87	2.33	0.76	0.76
39.38	106.16	46.43	2.64	122.58	2.45	0.74	0.74
39.44	93.39	39.53	3.24	128.16	2.54	0.73	0.73
39.53	90.97	38.23	3.34	127.67	2.55	0.73	0.73
39.57	91.96	38.75	3.25	125.98	2.54	0.73	0.73
39.63	94.99	40.32	3.06	123.55	2.51	0.73	0.73
39.73	96.87	41.17	2.99	123.13	2.50	0.73	0.73
39.78	101.87	43.69	2.80	122.19	2.47	0.74	0.74
39.84	107.32	46.53	2.58	120.06	2.44	0.74	0.74
39.91	111.88	49.10	2.37	116.36	2.40	0.75	0.75
39.96	112.15	49.36	2.30	113.52	2.39	0.74	0.74
40.07	109.47	48.14	2.27	109.04	2.38	0.74	0.74
40.12	106.61	46.51	2.36	109.70	2.40	0.73	0.73
40.18	102.32	44.09	2.52	111.17	2.43	0.73	0.73
40.25	95.89	40.53	2.80	113.54	2.47	0.72	0.72
40.32	86.15	35.19	3.45	121.55	2.56	0.72	0.72
40.37	79.26	31.57	4.01	126.71	2.63	1.03	2.20
40.45	70.86	27.35	4.81	131.49	2.71	1.02	1.95
40.51	61.39	23.53	5.84	137.42	2.80	1.02	1.68
40.56	54.06	20.57	6.86	141.14	2.88	1.00	1.47
40.64	46.47	17.50	7.82	136.84	2.94	0.89	1.25
40.70	42.90	16.06	8.26	132.59	2.97	0.81	1.15
40.76	40.75	15.18	8.43	127.89	2.98	0.74	1.08
40.82	37.89	14.02	8.91	124.90	3.01	0.69	1.00
40.90	35.84	13.18	9.12	120.11	3.02	0.63	0.94
40.95	35.93	13.20	8.62	113.80	2.99	0.57	0.94

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
41.05	35.93	13.16	8.23	108.28	2.97	0.52	0.94
41.08	36.02	13.19	8.17	107.74	2.96	0.51	0.94
41.15	36.73	13.44	8.15	109.59	2.96	0.54	0.96
41.24	33.51	12.15	9.33	113.31	3.03	0.55	0.87
41.30	30.21	10.84	9.08	98.44	3.02	0.40	0.77
41.35	29.49	10.54	8.28	87.25	2.97	0.31	0.75
41.44	40.39	14.78	5.92	87.44	2.81	0.37	1.06
41.48	47.72	17.62	4.90	86.43	2.72	0.40	1.26
41.55	67.91	27.14	3.04	82.43	2.51	0.08	0.64
41.63	73.81	29.27	3.23	94.42	2.53	0.16	0.67
41.67	75.42	29.62	3.44	101.87	2.56	0.22	0.68
41.74	70.24	26.58	4.30	114.32	2.66	0.81	1.87
41.80	63.27	23.50	5.38	126.39	2.76	0.90	1.68
41.90	49.78	18.23	7.37	134.33	2.91	0.88	1.30
41.93	44.86	16.31	8.32	135.66	2.97	0.86	1.17
42.01	39.23	14.11	9.49	133.92	3.04	0.80	1.01
42.06	39.59	14.23	9.09	129.34	3.02	0.75	1.02
42.14	39.59	14.20	8.75	124.35	3.00	0.70	1.01
42.21	49.24	17.88	6.51	116.49	2.85	0.68	1.28
42.28	70.68	26.83	3.83	102.73	2.61	0.68	1.86
42.35	94.09	38.71	2.36	91.46	2.40	0.38	0.70
42.41	112.05	48.42	1.80	87.10	2.26	0.71	0.71
42.48	120.18	52.86	1.65	87.08	2.21	0.72	0.72
42.54	123.22	54.48	1.60	87.37	2.20	0.73	0.73
42.59	122.15	53.75	1.63	87.55	2.21	0.72	0.72
42.67	112.68	47.60	1.97	93.96	2.31	0.72	0.72
42.75	101.51	40.73	2.62	106.88	2.44	0.72	0.72
42.78	97.22	38.36	2.89	111.03	2.49	0.72	0.72
42.85	83.01	31.20	3.83	119.62	2.61	0.96	2.17
42.93	97.66	38.21	2.98	114.05	2.50	0.72	0.72
42.98	74.08	26.88	4.64	124.68	2.69	0.96	1.92
43.08	98.11	38.48	2.87	110.34	2.48	0.72	0.72
43.13	122.50	51.16	2.00	102.38	2.32	0.74	0.74
43.18	148.68	65.43	1.56	102.19	2.18	0.77	0.77
43.28	180.76	83.92	1.33	111.93	2.03	0.79	0.79
43.33	191.93	90.89	1.29	116.90	1.97	0.80	0.80
43.39	201.22	97.14	1.25	121.25	1.92	0.81	0.81
43.44	217.75	108.29	1.19	128.42	1.83	0.82	0.82
43.52	227.04	113.94	1.16	131.93	1.80	0.82	0.82
43.58	233.47	118.01	1.13	133.54	1.78	0.83	0.83
43.64	242.05	123.82	1.08	133.59	1.75	0.83	0.83
43.73	248.03	128.94	1.00	128.94	1.70	0.83	0.83
43.78	251.43	130.37	1.00	130.37	1.70	0.84	0.84
43.87	256.52	132.35	1.01	134.16	1.71	0.84	0.84
43.90	258.76	133.34	1.02	135.80	1.71	0.84	0.84
43.97	260.81	133.69	1.04	139.32	1.73	0.85	0.85
44.05	258.62	131.58	1.07	141.10	1.74	0.85	0.85
44.12	258.49	131.21	1.08	141.40	1.75	0.85	0.85

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
44.17	258.40	131.03	1.08	141.20	1.75	0.85	0.85
44.23	257.06	129.77	1.09	141.84	1.76	0.85	0.85
44.31	253.13	126.76	1.12	141.81	1.77	0.84	0.84
44.36	254.02	127.21	1.12	141.90	1.77	0.84	0.84
44.45	252.77	126.19	1.12	141.44	1.77	0.84	0.84
44.52	254.20	126.92	1.12	141.61	1.77	0.84	0.84
44.55	254.56	127.07	1.11	141.56	1.77	0.84	0.84
44.62	253.13	126.10	1.12	140.82	1.77	0.84	0.84
44.70	251.52	124.91	1.12	140.29	1.78	0.84	0.84
44.78	247.50	122.15	1.14	139.07	1.79	0.84	0.84
44.84	244.55	120.13	1.15	138.16	1.80	0.84	0.84
44.91	242.14	118.31	1.16	137.47	1.81	0.84	0.84
44.97	239.81	116.62	1.17	136.64	1.82	0.83	0.83
45.02	236.87	114.70	1.18	135.37	1.83	0.83	0.83
45.10	234.28	112.89	1.19	134.09	1.83	0.83	0.83
45.15	234.36	112.91	1.19	133.92	1.83	0.83	0.83
45.24	236.06	114.12	1.17	133.92	1.82	0.83	0.83
45.30	238.56	115.75	1.16	134.35	1.81	0.83	0.83
45.36	241.78	117.78	1.15	134.93	1.79	0.83	0.83
45.42	245.09	119.70	1.13	135.73	1.78	0.83	0.83
45.51	245.26	119.50	1.14	135.80	1.79	0.83	0.83
45.55	244.19	118.69	1.14	135.53	1.79	0.83	0.83
45.63	243.57	118.31	1.14	134.76	1.79	0.83	0.83
45.70	241.69	117.11	1.14	133.80	1.79	0.83	0.83
45.75	240.26	116.12	1.15	133.24	1.80	0.83	0.83
45.81	235.79	113.27	1.16	131.54	1.81	0.83	0.83
45.89	231.68	111.66	1.15	128.00	1.79	0.82	0.82
45.94	228.38	110.06	1.14	125.82	1.79	0.81	0.81
46.00	228.47	110.13	1.14	125.43	1.79	0.81	0.81
46.09	228.47	110.17	1.13	124.79	1.78	0.81	0.81
46.14	228.56	110.21	1.13	124.47	1.78	0.81	0.81
46.20	230.17	111.40	1.11	123.94	1.77	0.81	0.81
46.27	225.97	108.93	1.12	122.16	1.77	0.81	0.81
46.33	230.97	111.95	1.10	122.93	1.76	0.81	0.81
46.40	233.29	113.17	1.09	123.33	1.75	0.81	0.81
46.48	231.68	111.86	1.10	123.39	1.76	0.81	0.81
46.52	232.58	112.08	1.11	124.13	1.76	0.81	0.81
46.59	231.77	110.97	1.13	125.02	1.78	0.81	0.81
46.66	230.52	109.88	1.14	124.97	1.79	0.81	0.81
46.73	227.48	108.03	1.14	123.66	1.79	0.81	0.81
46.80	224.27	106.02	1.15	122.34	1.80	0.81	0.81
46.85	220.96	103.95	1.16	121.03	1.81	0.80	0.80
46.92	215.42	100.89	1.17	118.24	1.82	0.80	0.80
46.99	207.56	96.24	1.19	114.70	1.84	0.79	0.79
47.06	197.38	89.89	1.22	110.02	1.88	0.78	0.78
47.12	186.21	82.96	1.26	104.40	1.93	0.78	0.78
47.21	169.95	72.62	1.34	97.02	2.03	0.77	0.77
47.26	148.23	60.24	1.51	90.88	2.15	0.75	0.75

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
47.32	125.18	47.71	1.94	92.70	2.30	0.73	0.73
47.38	102.31	36.04	2.90	104.56	2.49	0.72	0.72
47.44	86.68	28.71	4.00	114.90	2.63	0.91	2.03
47.51	74.17	24.17	5.07	122.64	2.73	0.92	1.73
47.60	56.57	18.16	7.00	127.14	2.89	0.85	1.30
47.66	53.35	17.05	7.34	125.08	2.91	0.81	1.22
47.71	49.60	15.76	8.04	126.75	2.95	0.80	1.13
47.77	48.61	15.41	8.41	129.50	2.98	0.83	1.10
47.86	60.32	19.32	6.60	127.62	2.86	0.88	1.38
47.91	79.80	25.86	4.67	120.73	2.70	0.94	1.85
47.98	104.63	35.61	3.28	116.82	2.54	0.73	0.73
48.04	117.14	40.86	2.87	117.11	2.48	0.74	0.74
48.10	122.32	42.77	2.82	120.51	2.48	0.75	0.75
48.19	125.90	43.75	2.90	126.90	2.49	0.76	0.76
48.25	131.71	46.11	2.77	127.57	2.47	0.77	0.77
48.30	137.96	48.83	2.59	126.61	2.44	0.78	0.78
48.37	144.30	51.64	2.43	125.30	2.41	0.78	0.78
48.43	147.88	53.41	2.31	123.22	2.39	0.78	0.78
48.49	153.50	56.26	2.12	119.50	2.35	0.78	0.78
48.56	160.91	60.28	1.90	114.25	2.29	0.79	0.79
48.64	170.47	65.51	1.68	110.27	2.23	0.79	0.79
48.74	178.87	72.42	1.41	101.90	2.09	0.78	0.78
48.77	180.75	73.57	1.39	102.12	2.08	0.78	0.78
48.83	181.73	74.52	1.36	101.50	2.06	0.78	0.78
48.89	181.02	74.57	1.35	100.36	2.04	0.78	0.78
48.96	178.87	73.73	1.34	98.81	2.04	0.77	0.77
49.03	165.10	66.75	1.39	92.64	2.08	0.76	0.76
49.09	166.89	67.83	1.37	92.82	2.06	0.76	0.76
49.16	162.78	65.34	1.40	91.62	2.09	0.76	0.76
49.22	158.31	63.10	1.42	89.64	2.10	0.75	0.75
49.29	155.01	60.91	1.47	89.58	2.13	0.75	0.75
49.35	153.66	59.59	1.53	90.98	2.16	0.75	0.75
49.43	153.04	58.43	1.60	93.70	2.20	0.76	0.76
49.49	152.95	57.79	1.66	95.99	2.22	0.76	0.76
49.55	156.88	59.27	1.66	98.18	2.22	0.77	0.77
49.64	175.02	67.79	1.52	102.71	2.16	0.78	0.78
49.68	188.15	74.19	1.44	106.66	2.11	0.80	0.80
49.74	201.20	80.56	1.38	111.49	2.07	0.81	0.81
49.84	222.82	71.01	1.00	71.01	-1.00	0.91	0.91
49.89	232.38	74.05	1.00	74.05	-1.00	0.92	0.92
49.94	243.28	77.51	1.00	77.51	-1.00	0.93	0.93
50.03	252.84	80.49	1.00	80.49	-1.00	0.94	0.94
50.08	256.68	81.67	1.00	81.67	-1.00	0.94	0.94
50.14	259.09	82.38	1.00	82.38	-1.00	0.94	0.94

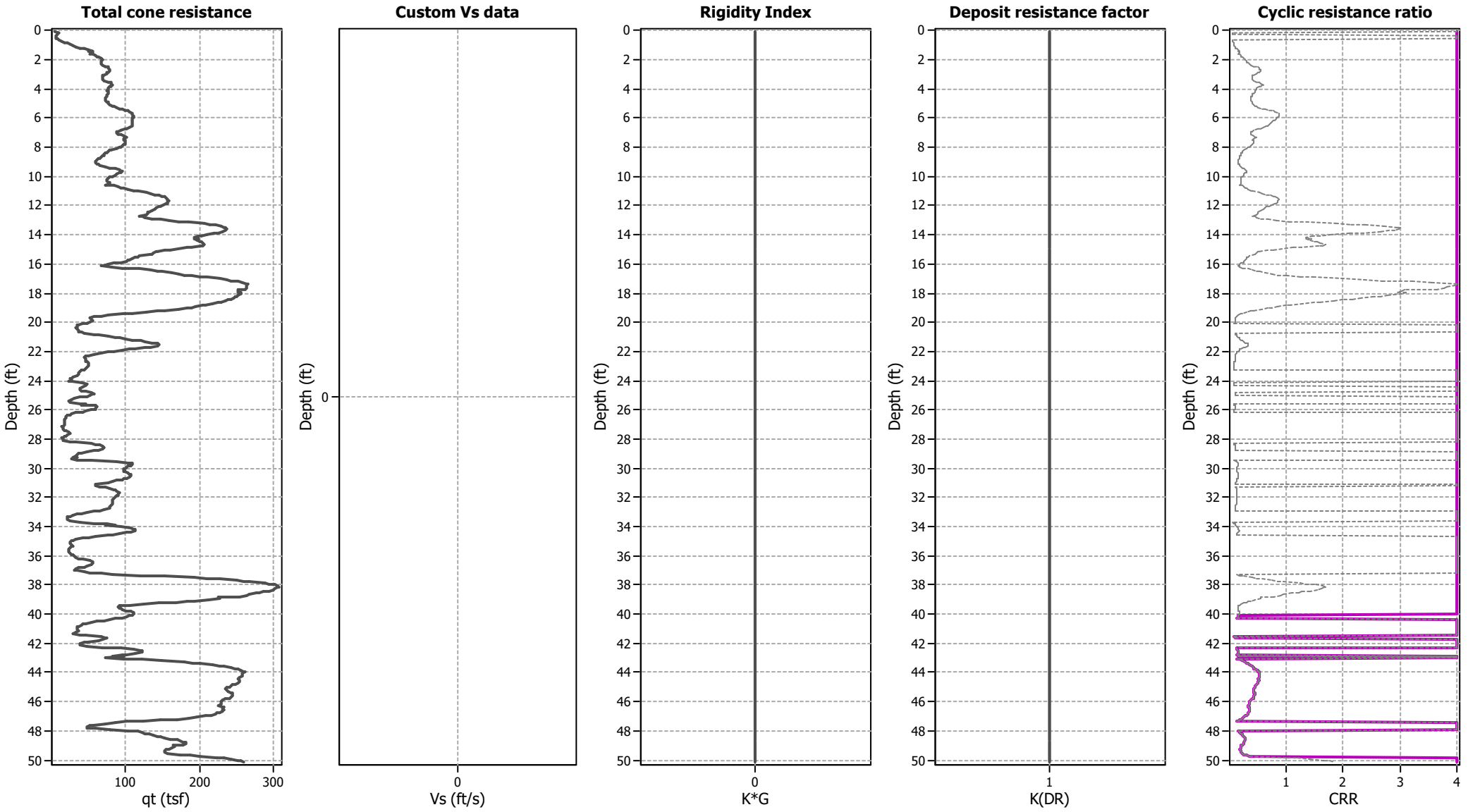
:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$

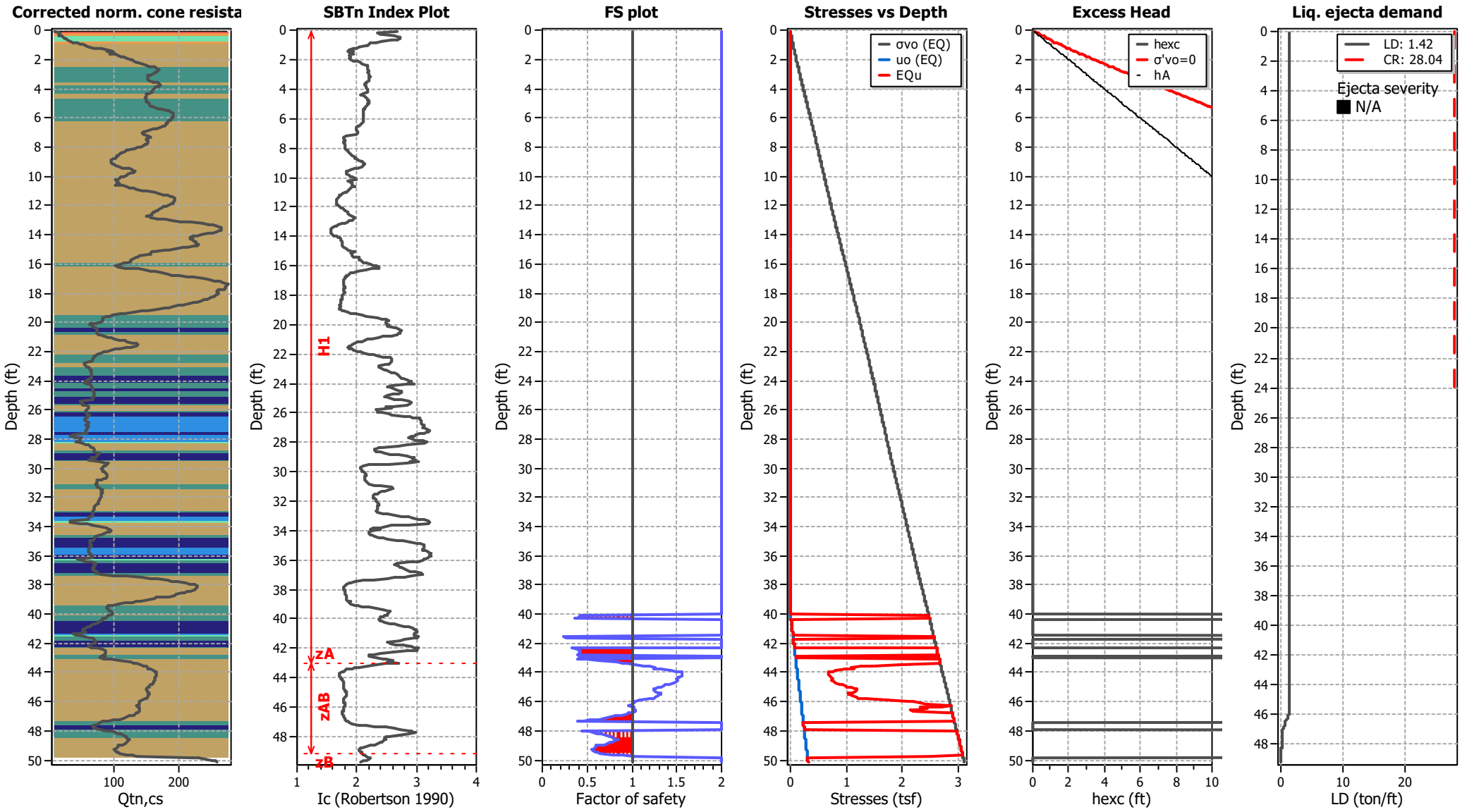
Abbreviations

q_t:	Total cone resistance
K_c:	Cone resistance correction factor due to fines
$Q_{tn,cs}$:	Adjusted and corrected cone resistance due to fines
I_c:	Soil behavior type index
$S_{u(liq)}/\sigma'_v$:	Calculated liquefied undrained strength ratio
$S_{u(peak)}/\sigma'_v$:	Calculated peak undrained strength ratio

Aging Calculation Estimation



Ejecta Severity Estimation



Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
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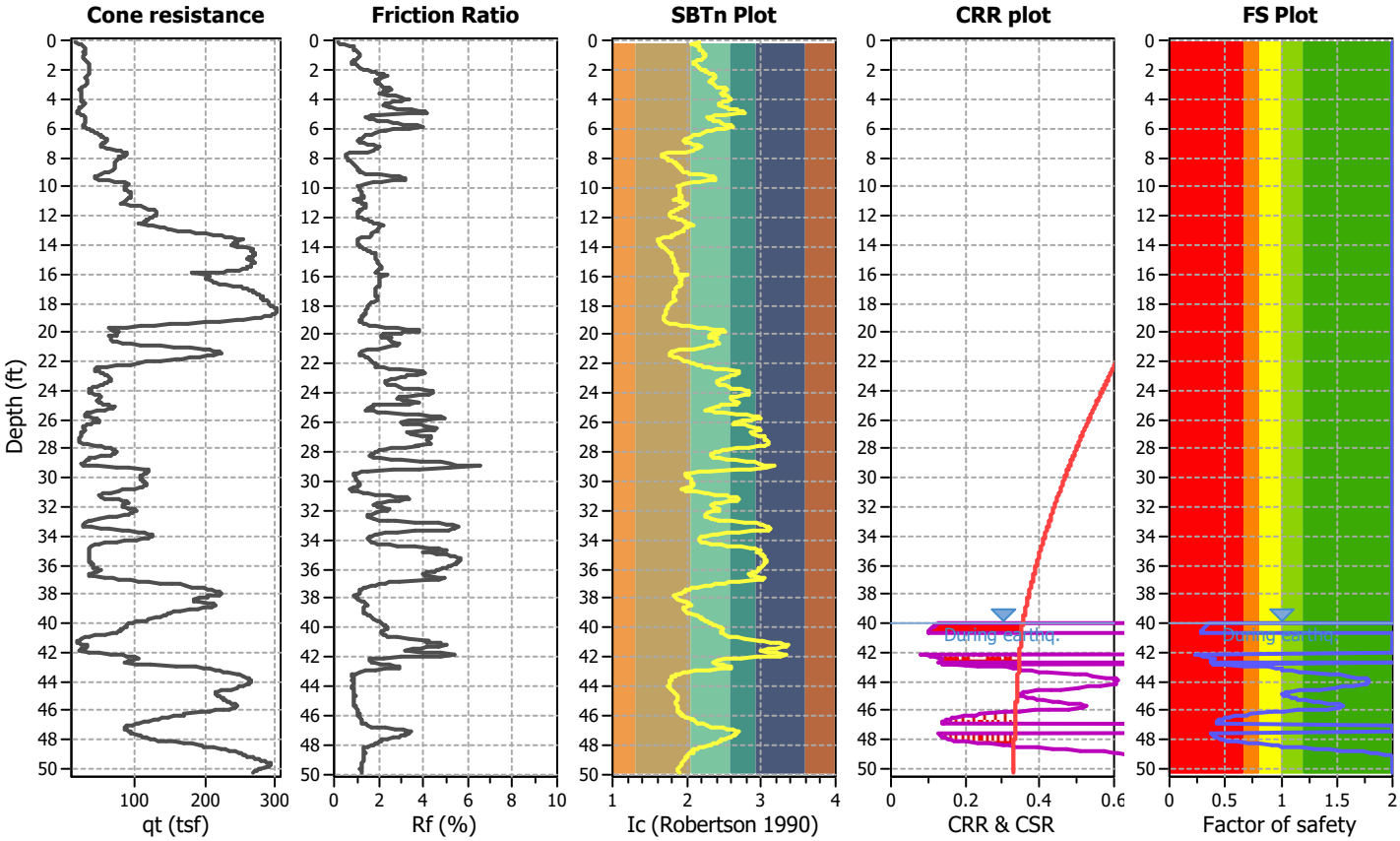
LIQUEFACTION ANALYSIS REPORT

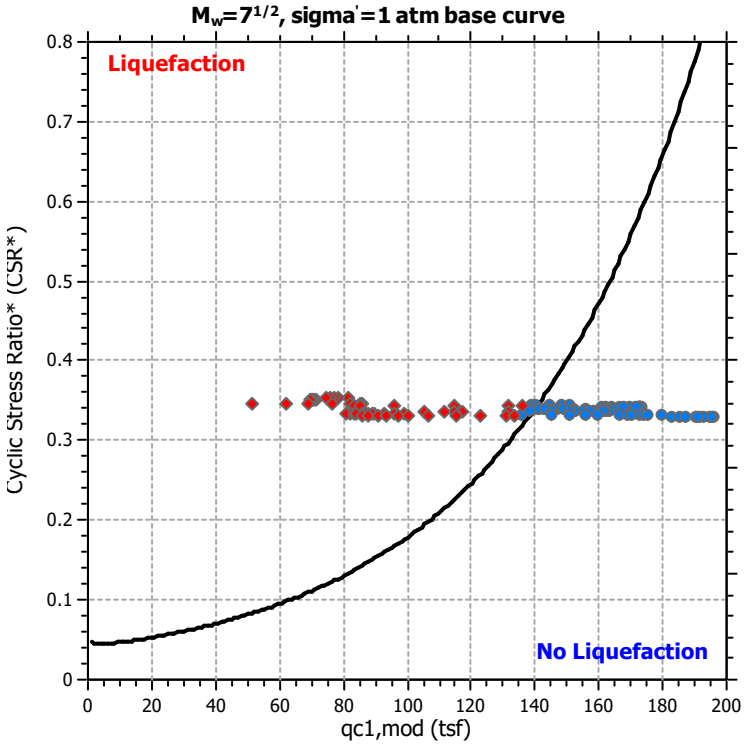
Project title : GeoSoils / Bradley Gardens **Location : 980 W. 7th St, San Jacinto, CA**

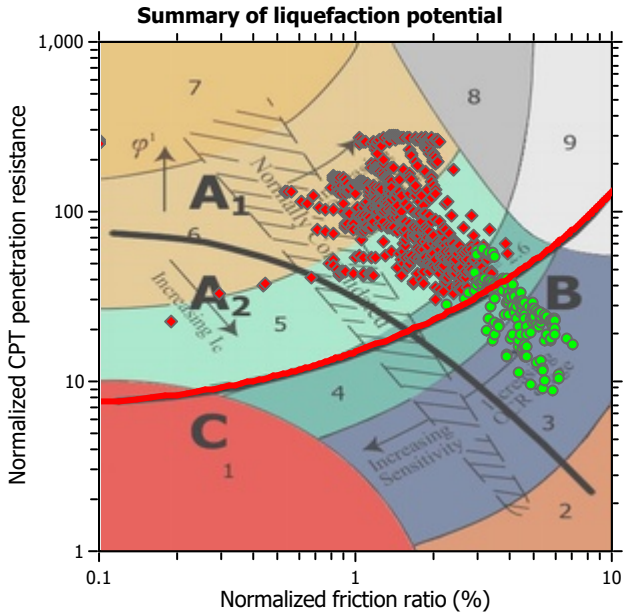
CPT file : CPT-2

Input parameters and analysis data

Analysis method:	Moss et al. (2006)	G.W.T. (in-situ):	100.00 ft	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	Moss et al. (2006)	G.W.T. (earthq.):	40.00 ft	Fill height:	N/A	Limit depth applied:	Yes
Points to test:	Based on Ic value	Average results interval:	1	Fill weight:	N/A	Limit depth:	50.00 ft
Earthquake magnitude M_w:	8.10	Ic cut-off value:	2.60	Trans. detect. applied:	No	MSF method:	Method based
Peak ground acceleration:	1.07	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		

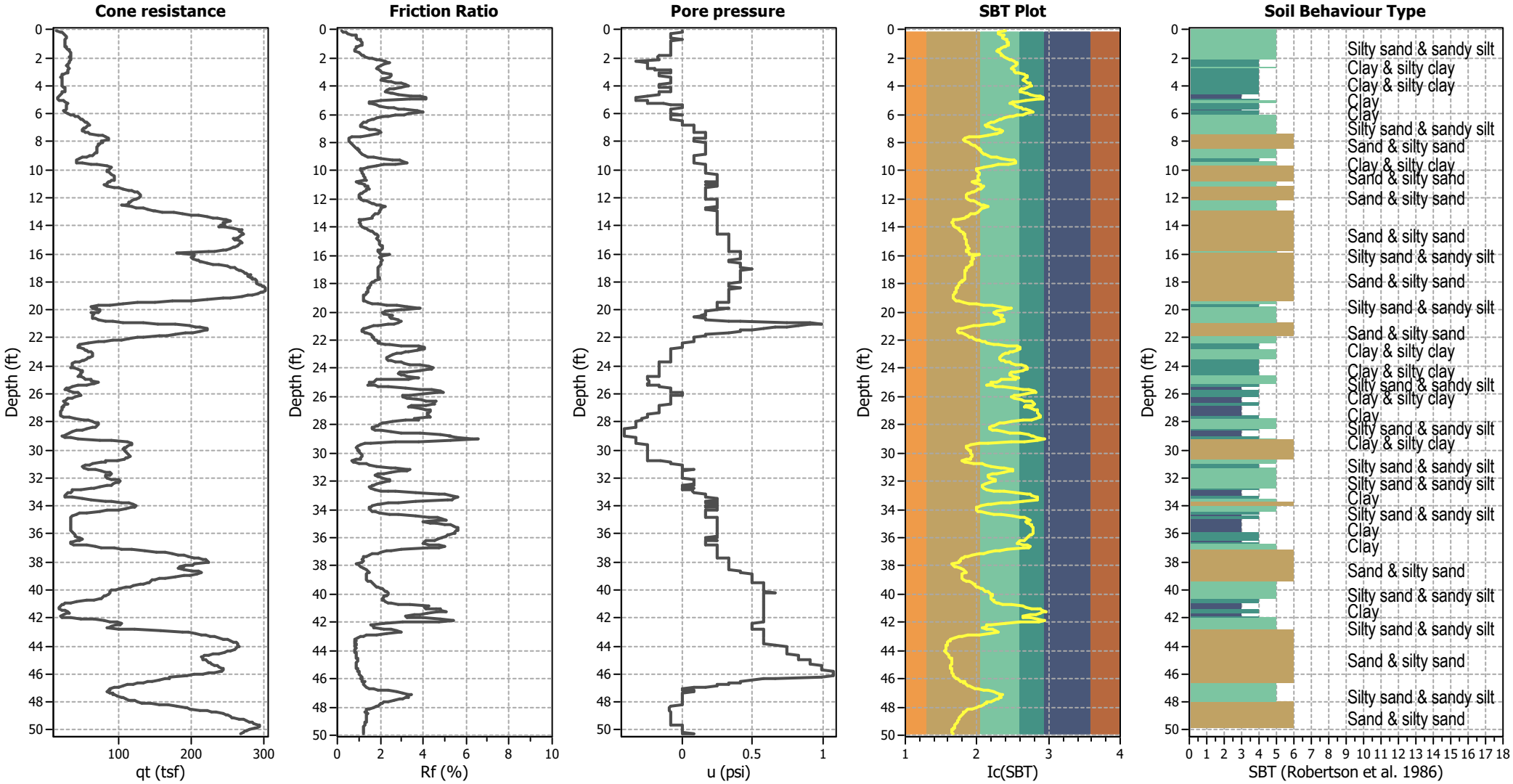






Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

CPT basic interpretation plots



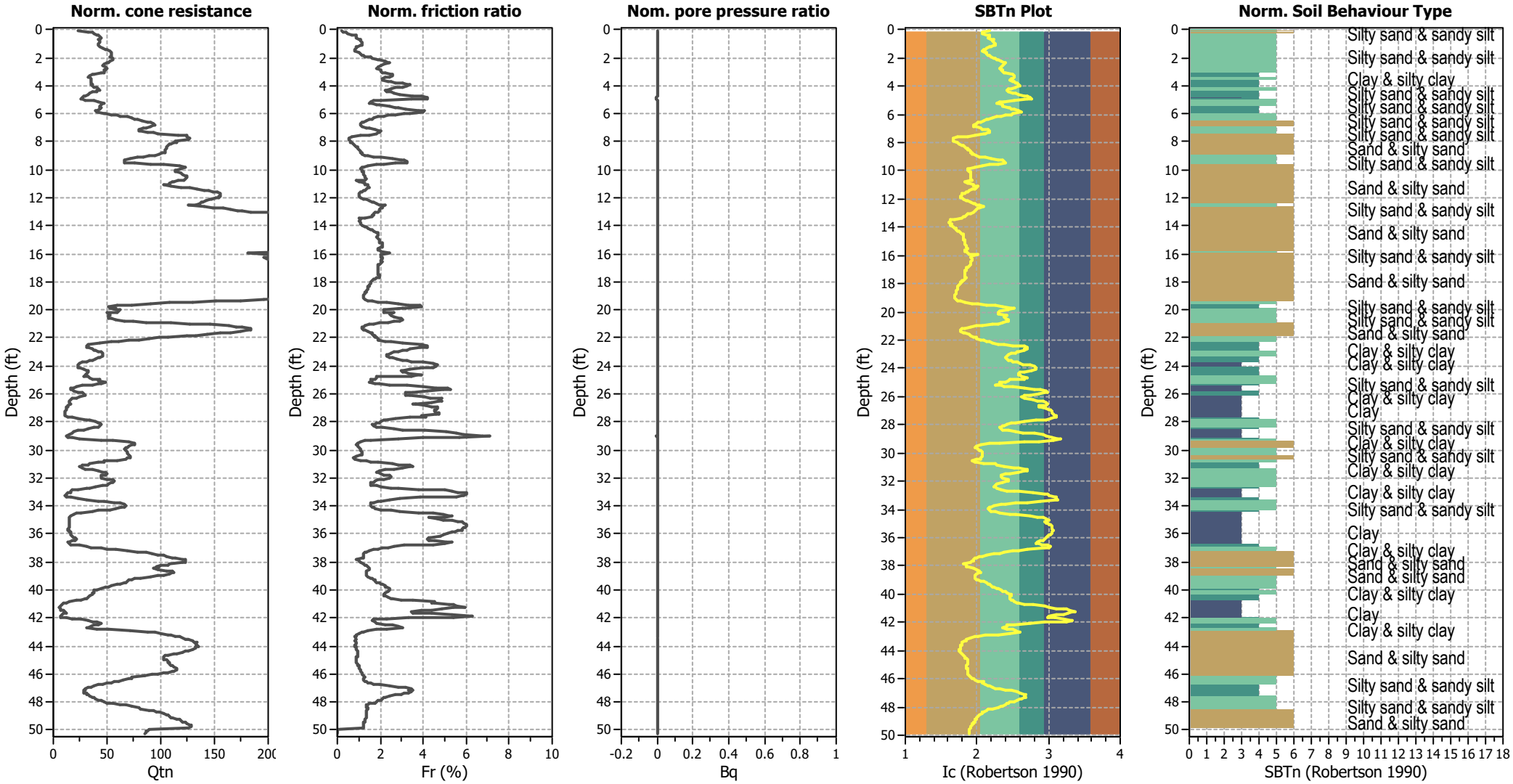
Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CPT basic interpretation plots (normalized)



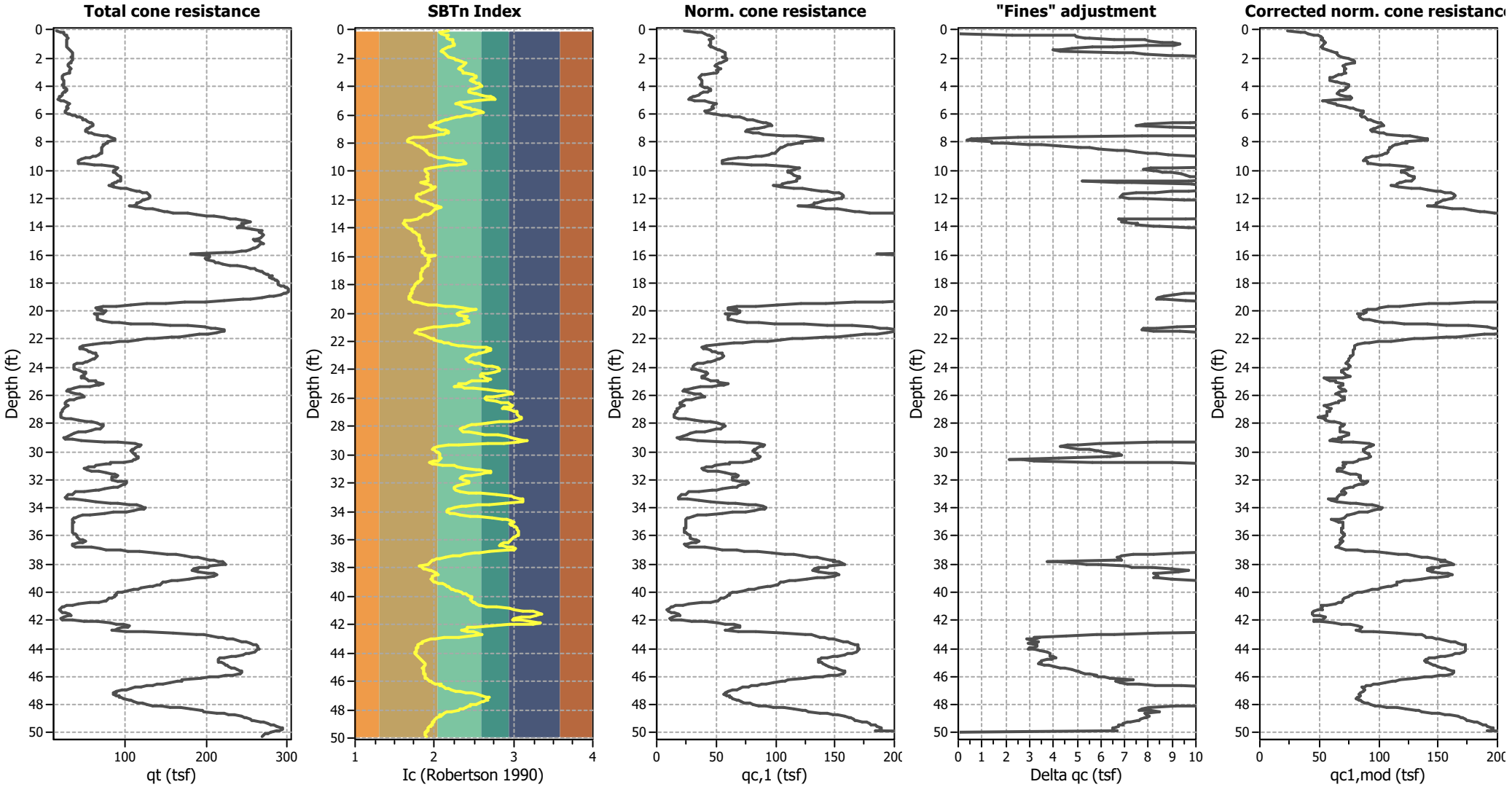
Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

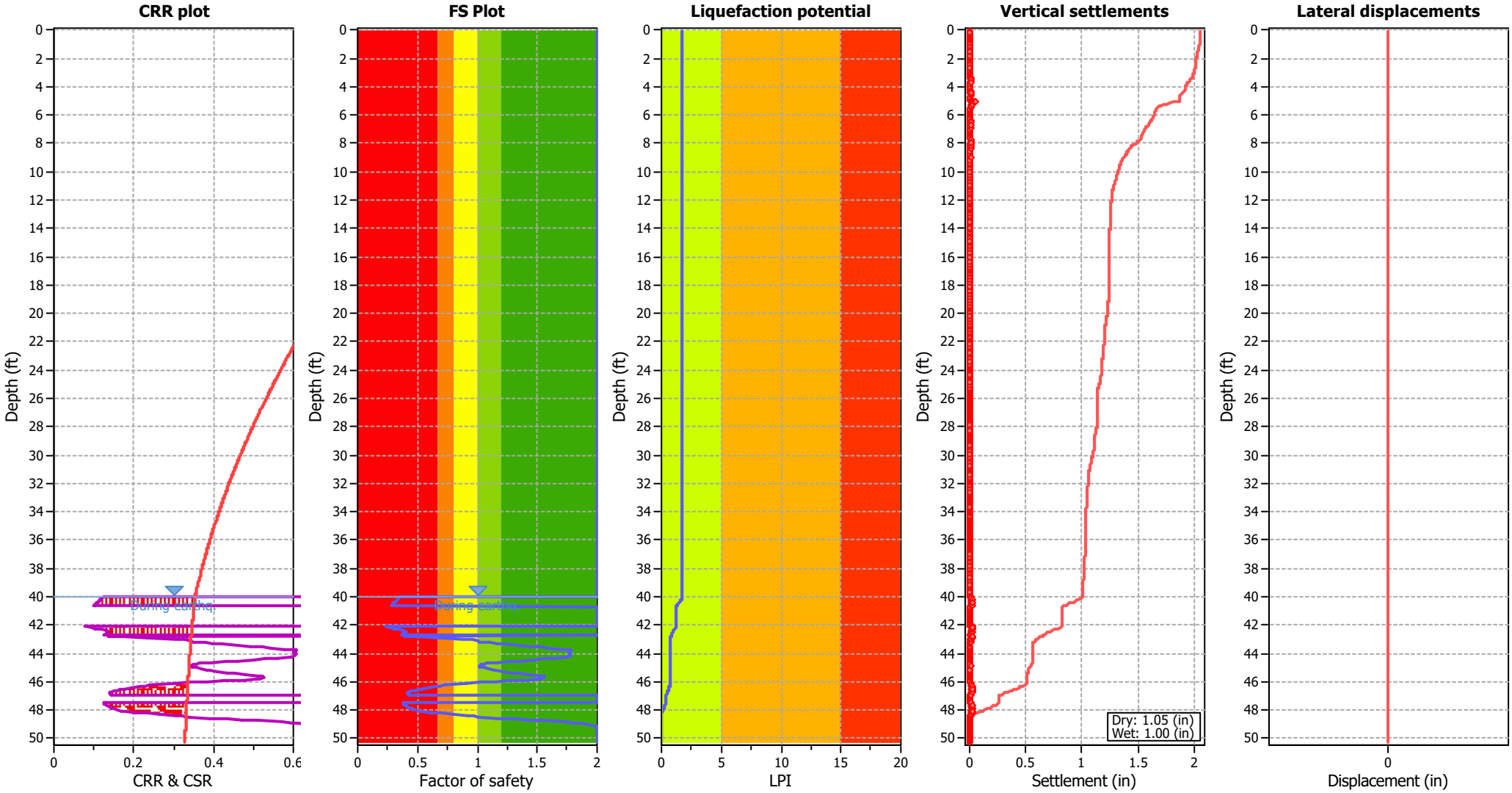
Liquefaction analysis overall plots (intermediate results)



Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

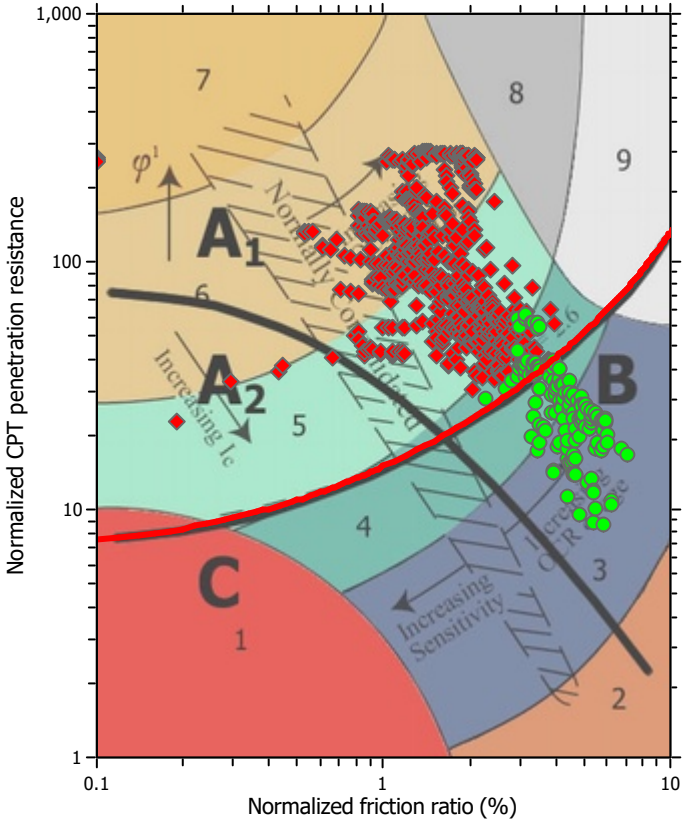
F.S. color scheme

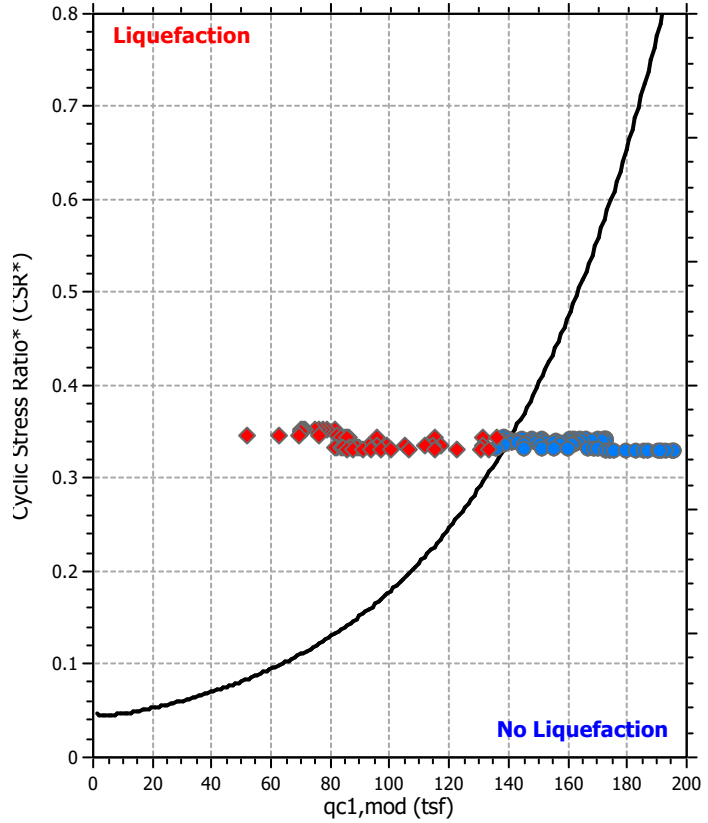
- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

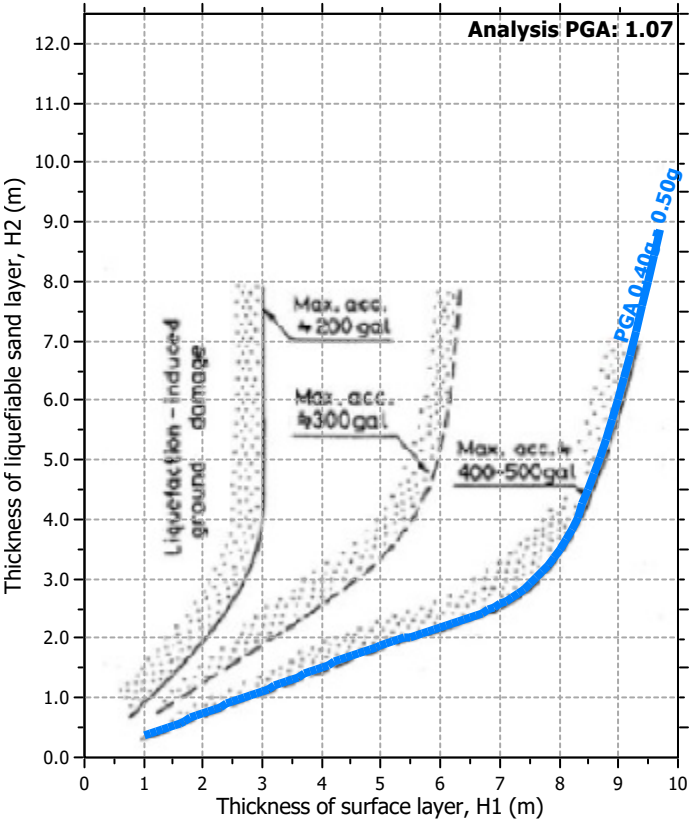
LPI color scheme

- Very high risk
- High risk
- Low risk

Liquefaction analysis summary plots



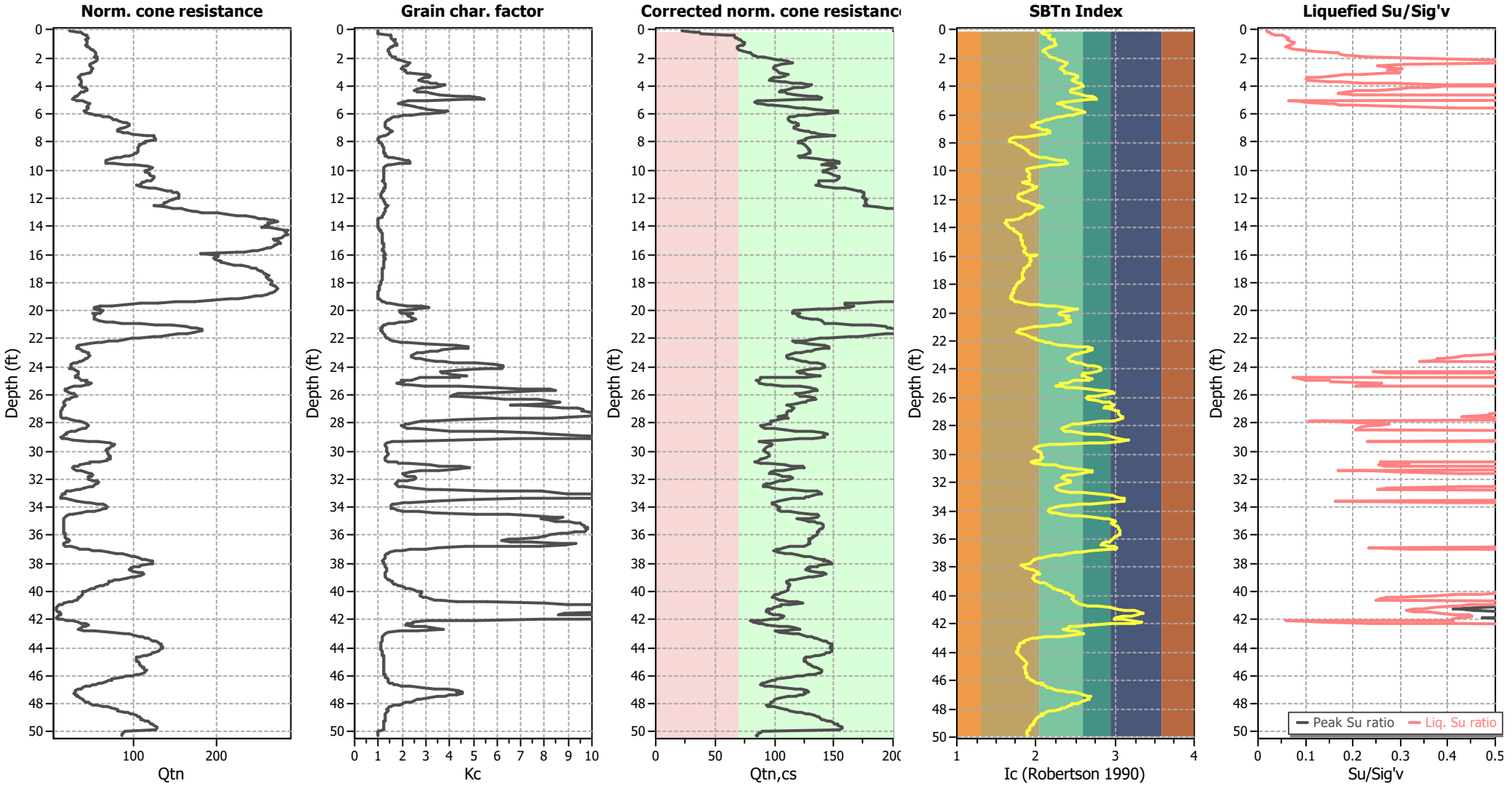




Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

Check for strength loss plots (Robertson (2010))



Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

:: Field input data ::

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
1	0.07	14.05	0.03	0.00	5.00	90.23
2	0.14	20.32	0.06	0.00	5.00	96.96
3	0.21	22.56	0.10	0.00	5.00	100.86
4	0.27	23.63	0.10	-0.08	5.00	101.46
5	0.34	25.33	0.17	-0.08	16.85	105.14
6	0.40	26.23	0.23	-0.08	18.22	107.32
7	0.47	27.12	0.23	-0.08	17.86	107.69
8	0.55	27.66	0.24	-0.08	17.83	108.07
9	0.59	27.93	0.25	-0.08	17.84	108.29
10	0.66	26.90	0.26	0.00	18.95	108.54
11	0.72	25.87	0.28	0.00	20.17	108.81
12	0.79	26.77	0.29	-0.08	19.84	109.22
13	0.88	27.03	0.30	-0.08	20.06	109.61
14	0.92	26.95	0.31	-0.08	20.34	109.78
15	1.01	26.50	0.31	-0.08	20.69	109.73
16	1.07	26.05	0.30	-0.08	20.78	109.46
17	1.12	26.54	0.29	-0.08	19.91	109.09
18	1.21	26.59	0.26	-0.08	19.08	108.39
19	1.25	27.39	0.25	-0.08	18.18	108.18
20	1.32	28.56	0.24	-0.08	17.17	108.08
21	1.40	30.35	0.25	-0.08	16.15	108.35
22	1.45	31.15	0.25	-0.08	15.67	108.40
23	1.54	32.76	0.27	-0.08	15.31	109.09
24	1.61	33.66	0.33	-0.08	16.47	110.80
25	1.65	33.93	0.35	-0.08	16.73	111.21
26	1.72	33.75	0.36	-0.08	17.09	111.43
27	1.82	33.75	0.39	-0.08	17.67	111.95
28	1.84	33.66	0.40	-0.17	17.95	112.14
29	1.92	34.11	0.44	-0.18	18.54	112.90
30	1.97	32.50	0.49	-0.18	20.56	113.59
31	2.05	34.46	0.57	-0.18	20.66	114.76
32	2.12	34.73	0.64	-0.17	21.75	115.70
33	2.17	34.64	0.68	-0.17	22.38	116.10
34	2.27	33.03	0.73	-0.33	24.26	116.49
35	2.32	31.78	0.74	-0.25	25.42	116.55
36	2.37	31.15	0.75	-0.25	26.03	116.57
37	2.46	29.36	0.63	-0.25	25.45	115.12
38	2.51	28.91	0.59	-0.25	25.05	114.58
39	2.57	29.09	0.58	-0.25	24.77	114.50
40	2.66	30.53	0.58	-0.25	23.61	114.61
41	2.72	31.33	0.58	-0.25	23.04	114.69
42	2.76	31.69	0.58	-0.19	22.83	114.76
43	2.83	29.72	0.59	-0.19	24.45	114.68
44	2.89	30.08	0.60	-0.08	24.29	114.80
45	2.95	29.99	0.61	-0.08	24.53	114.90

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
46	3.05	29.45	0.62	-0.08	25.20	115.00
47	3.10	28.11	0.61	-0.17	26.28	114.84
48	3.15	23.90	0.60	-0.17	30.28	114.29
49	3.22	22.56	0.57	-0.17	31.16	113.73
50	3.29	21.48	0.54	-0.17	31.98	113.29
51	3.36	20.77	0.50	-0.08	31.83	112.57
52	3.43	21.22	0.46	-0.08	30.37	112.11
53	3.49	21.66	0.46	-0.08	29.57	112.01
54	3.56	22.38	0.46	-0.08	28.81	112.15
55	3.66	22.38	0.53	-0.08	30.54	113.21
56	3.70	22.47	0.56	-0.08	31.17	113.65
57	3.76	22.47	0.61	-0.08	32.20	114.23
58	3.81	22.20	0.66	-0.08	33.67	114.81
59	3.90	22.51	0.72	-0.17	34.38	115.43
60	3.94	21.75	0.72	-0.17	35.55	115.42
61	4.01	22.56	0.73	-0.17	34.48	115.52
62	4.08	23.81	0.71	-0.17	32.62	115.50
63	4.15	25.60	0.68	-0.08	30.00	115.35
64	4.21	26.68	0.65	-0.08	28.41	115.16
65	4.28	26.77	0.61	-0.08	27.59	114.72
66	4.35	25.78	0.58	-0.08	27.81	114.16
67	4.40	25.16	0.57	-0.08	28.23	113.97
68	4.47	23.01	0.57	-0.17	30.84	113.86
69	4.53	21.57	0.56	-0.17	32.27	113.48
70	4.60	20.86	0.60	-0.17	34.15	113.89
71	4.69	18.98	0.66	-0.25	38.50	114.40
72	4.74	17.90	0.69	-0.25	41.07	114.57
73	4.80	16.83	0.69	-0.33	43.22	114.44
74	4.90	16.11	0.66	-0.33	44.12	114.05
75	4.93	16.74	0.56	-0.33	40.27	112.95
76	5.00	18.89	0.38	-0.33	31.31	110.36
77	5.08	23.54	0.39	-0.25	25.78	111.07
78	5.13	26.23	0.39	-0.25	23.32	111.43
79	5.21	29.45	0.43	-0.25	21.50	112.32
80	5.26	29.18	0.46	-0.14	22.43	112.84
81	5.34	27.93	0.51	-0.08	24.39	113.40
82	5.39	27.93	0.54	0.00	25.08	113.86
83	5.49	27.57	0.65	0.00	27.64	115.26
84	5.54	27.48	0.73	0.00	29.05	116.03
85	5.58	28.20	0.80	0.00	29.49	116.75
86	5.64	27.39	0.86	-0.08	31.27	117.22
87	5.72	25.60	0.95	-0.08	34.69	117.82
88	5.79	24.80	0.99	-0.08	36.22	118.02
89	5.84	25.69	1.00	-0.08	35.37	118.21
90	5.93	29.36	0.98	-0.08	31.13	118.36

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
91	5.99	30.62	0.94	-0.08	29.50	118.20
92	6.04	33.93	0.91	0.00	26.39	118.21
93	6.12	37.06	0.87	-0.08	23.63	118.05
94	6.17	39.39	0.84	-0.08	21.85	117.94
95	6.24	43.33	0.80	-0.08	19.30	117.83
96	6.32	45.83	0.77	-0.08	17.78	117.69
97	6.37	47.18	0.75	-0.08	17.01	117.60
98	6.44	49.50	0.72	-0.08	15.65	117.34
99	6.52	51.92	0.69	0.00	14.41	117.14
100	6.58	54.88	0.67	0.00	13.32	117.15
101	6.63	56.85	0.67	0.00	12.65	117.15
102	6.72	58.81	0.64	0.00	11.80	116.93
103	6.77	59.26	0.63	0.00	11.54	116.81
104	6.83	58.64	0.62	0.08	11.66	116.74
105	6.91	56.49	0.66	0.08	12.67	117.05
106	6.97	54.16	0.73	0.08	14.23	117.73
107	7.02	52.91	0.79	0.08	15.28	118.22
108	7.10	50.31	0.89	0.08	17.28	118.94
109	7.18	50.22	0.99	0.08	18.41	119.77
110	7.23	51.29	1.03	0.08	18.38	120.11
111	7.29	54.79	1.06	0.08	17.31	120.45
112	7.37	58.10	1.08	0.17	16.38	120.75
113	7.42	60.87	1.10	0.17	15.64	120.98
114	7.52	72.87	1.09	0.17	12.43	121.35
115	7.57	78.15	0.85	0.17	9.54	119.67
116	7.61	81.91	0.56	0.17	6.82	116.81
117	7.71	86.12	0.48	0.17	5.68	115.80
118	7.76	86.74	0.47	0.08	5.52	115.63
119	7.83	86.83	0.46	0.08	5.43	115.44
120	7.88	85.76	0.46	0.08	5.55	115.38
121	7.98	76.63	0.47	0.08	6.84	115.27
122	8.02	77.70	0.47	0.17	6.77	115.40
123	8.08	76.09	0.49	0.17	7.22	115.66
124	8.17	73.32	0.53	0.17	8.03	116.09
125	8.21	72.33	0.55	0.17	8.41	116.35
126	8.28	71.44	0.59	0.17	8.92	116.79
127	8.37	70.81	0.63	0.17	9.47	117.27
128	8.41	70.27	0.64	0.17	9.73	117.43
129	8.47	70.23	0.66	0.17	9.94	117.65
130	8.54	69.91	0.70	0.17	10.37	118.04
131	8.60	70.18	0.72	0.17	10.55	118.28
132	8.67	70.18	0.75	0.17	10.79	118.52
133	8.74	69.65	0.77	0.17	11.09	118.69
134	8.82	68.66	0.78	0.17	11.42	118.73
135	8.87	66.78	0.78	0.17	11.87	118.70

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
136	8.97	63.20	0.80	0.08	12.92	118.74
137	9.00	59.71	0.83	0.08	14.14	118.90
138	9.07	55.32	0.92	0.08	16.23	119.42
139	9.12	51.03	1.02	0.08	18.72	120.03
140	9.22	45.48	1.16	0.08	22.38	120.68
141	9.27	41.90	1.22	0.08	24.81	120.84
142	9.32	41.90	1.28	0.08	25.43	121.21
143	9.40	41.90	1.35	0.08	26.03	121.56
144	9.47	41.90	1.35	0.08	26.10	121.57
145	9.52	49.06	1.32	0.08	22.41	121.81
146	9.59	61.14	1.31	0.17	17.97	122.28
147	9.66	70.81	1.28	0.17	15.20	122.47
148	9.72	83.97	1.20	0.17	11.98	122.39
149	9.81	90.15	1.07	0.17	10.21	121.73
150	9.86	90.59	1.01	0.17	9.80	121.33
151	9.92	88.09	0.96	0.17	9.90	120.92
152	10.01	85.04	0.96	0.17	10.38	120.79
153	10.05	84.15	0.96	0.17	10.55	120.76
154	10.11	84.06	0.97	0.17	10.68	120.86
155	10.17	85.85	1.01	0.17	10.71	121.24
156	10.26	88.53	1.08	0.17	10.73	121.76
157	10.31	89.70	1.11	0.25	10.74	121.98
158	10.40	93.19	1.16	0.25	10.56	122.41
159	10.45	93.73	1.19	0.25	10.68	122.62
160	10.51	94.35	1.21	0.25	10.71	122.74
161	10.59	94.26	1.22	0.25	10.84	122.83
162	10.66	93.55	1.24	0.25	11.11	122.94
163	10.71	93.28	1.16	0.25	10.69	122.43
164	10.78	90.68	0.81	0.25	8.86	119.76
165	10.86	87.73	0.89	0.25	9.85	120.32
166	10.89	86.66	0.92	0.17	10.23	120.52
167	11.00	83.61	1.05	0.25	11.71	121.42
168	11.05	84.15	1.08	0.17	11.83	121.64
169	11.11	79.31	1.12	0.25	13.07	121.79
170	11.16	84.69	1.20	0.25	12.58	122.44
171	11.26	93.55	1.36	0.17	12.03	123.59
172	11.31	100.35	1.39	0.17	11.14	123.90
173	11.36	106.80	1.41	0.17	10.40	124.19
174	11.45	113.42	1.42	0.17	9.62	124.35
175	11.51	117.90	1.41	0.17	9.07	124.39
176	11.56	121.30	1.38	0.17	8.60	124.32
177	11.62	125.69	1.35	0.17	8.06	124.28
178	11.70	128.46	1.33	0.17	7.71	124.21
179	11.76	129.18	1.33	0.17	7.67	124.23
180	11.86	129.45	1.33	0.17	7.64	124.19

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
181	11.90	129.45	1.34	0.17	7.70	124.25
182	11.96	129.00	1.36	0.17	7.87	124.37
183	12.01	127.48	1.41	0.17	8.25	124.60
184	12.08	123.18	1.52	0.17	9.23	125.09
185	12.14	121.39	1.64	0.25	9.94	125.59
186	12.22	118.34	1.75	0.25	10.83	126.03
187	12.29	115.57	1.86	0.25	11.64	126.38
188	12.35	114.41	1.94	0.25	12.19	126.70
189	12.40	114.14	2.05	0.25	12.66	127.06
190	12.47	110.56	2.19	0.25	13.77	127.47
191	12.54	103.93	2.31	0.25	15.37	127.74
192	12.61	118.08	2.42	0.25	13.65	128.39
193	12.67	124.97	2.57	0.17	13.25	128.94
194	12.76	134.19	2.69	0.25	12.57	129.47
195	12.81	140.28	2.77	0.17	12.12	129.78
196	12.90	147.80	2.91	0.25	11.77	130.27
197	12.94	150.84	2.95	0.25	11.58	130.42
198	12.99	159.43	2.99	0.25	10.88	130.64
199	13.06	176.53	3.04	0.25	9.61	131.03
200	13.15	187.45	3.19	0.25	9.18	131.53
201	13.20	199.99	3.31	0.25	8.60	131.95
202	13.27	210.28	3.46	0.25	8.31	132.41
203	13.35	221.65	3.61	0.25	7.96	132.83
204	13.40	229.35	2.86	0.25	6.04	131.23
205	13.46	236.78	2.43	0.25	4.77	130.11
206	13.55	245.73	2.57	0.25	4.72	130.61
207	13.60	248.33	2.61	0.25	4.71	130.75
208	13.66	254.86	2.64	0.25	4.53	130.90
209	13.72	246.89	2.65	0.25	4.86	130.83
210	13.78	243.22	2.65	0.25	5.04	130.81
211	13.85	245.46	2.67	0.25	5.00	130.89
212	13.93	240.90	2.76	0.25	5.39	131.07
213	14.00	245.91	2.87	0.25	5.41	131.40
214	14.04	238.30	3.00	0.25	6.04	131.67
215	14.11	246.36	3.32	0.25	6.32	132.49
216	14.18	257.28	3.64	0.25	6.43	133.27
217	14.25	266.68	4.06	0.25	6.74	134.14
218	14.32	269.10	4.32	0.25	7.08	134.62
219	14.38	266.59	4.54	0.25	7.55	134.96
220	14.45	269.19	4.81	0.25	7.88	135.42
221	14.51	269.28	5.00	0.25	8.17	135.69
222	14.58	271.78	5.07	0.25	8.18	135.83
223	14.63	271.24	5.10	0.33	8.26	135.86
224	14.71	268.56	4.99	0.33	8.24	135.68
225	14.77	266.86	4.94	0.33	8.26	135.59

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
226	14.85	261.84	4.94	0.33	8.53	135.54
227	14.91	258.62	4.96	0.33	8.73	135.54
228	14.97	260.32	5.06	0.33	8.81	135.70
229	15.06	264.89	5.18	0.33	8.79	135.92
230	15.11	267.13	5.28	0.33	8.83	136.07
231	15.17	270.35	5.36	0.33	8.82	136.22
232	15.26	267.31	5.50	0.33	9.19	136.38
233	15.32	265.96	5.55	0.33	9.35	136.43
234	15.37	265.43	5.58	0.33	9.42	136.46
235	15.43	264.17	5.52	0.33	9.43	136.37
236	15.51	260.68	5.51	0.33	9.61	136.32
237	15.57	258.62	5.24	0.33	9.33	135.95
238	15.62	254.41	4.87	0.33	8.98	135.37
239	15.72	248.95	4.68	0.33	8.98	135.02
240	15.77	243.58	4.69	0.33	9.31	134.98
241	15.82	232.39	4.62	0.33	9.85	134.75
242	15.88	224.96	4.48	0.41	10.09	134.46
243	15.95	179.84	4.34	0.41	13.27	133.67
244	16.01	200.70	4.21	0.41	11.27	133.71
245	16.09	204.46	4.08	0.41	10.75	133.53
246	16.15	204.64	4.08	0.41	10.75	133.53
247	16.22	201.96	4.08	0.41	10.97	133.50
248	16.28	199.18	4.10	0.41	11.23	133.50
249	16.34	201.42	4.15	0.41	11.20	133.63
250	16.41	208.94	4.19	0.33	10.74	133.78
251	16.48	210.19	4.23	0.33	10.75	133.86
252	16.56	211.09	4.32	0.33	10.89	134.03
253	16.61	214.22	4.41	0.33	10.86	134.22
254	16.67	221.29	4.47	0.41	10.52	134.40
255	16.75	229.53	4.46	0.41	9.99	134.48
256	16.81	238.93	4.51	0.41	9.51	134.64
257	16.89	249.76	4.66	0.41	9.17	134.99
258	16.93	253.97	4.76	0.41	9.12	135.19
259	17.01	260.14	4.90	0.41	9.04	135.46
260	17.07	262.74	4.95	0.50	9.00	135.56
261	17.14	266.68	4.99	0.41	8.88	135.66
262	17.21	268.74	5.03	0.41	8.86	135.74
263	17.27	271.15	5.08	0.41	8.82	135.83
264	17.34	274.11	5.19	0.41	8.87	136.02
265	17.39	276.08	5.26	0.41	8.88	136.12
266	17.46	278.67	5.34	0.41	8.89	136.26
267	17.54	281.81	5.42	0.41	8.88	136.40
268	17.60	278.85	5.46	0.41	9.09	136.43
269	17.66	281.27	5.42	0.41	8.93	136.40
270	17.73	283.15	5.06	0.41	8.31	135.90

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
271	17.80	284.94	4.97	0.41	8.12	135.79
272	17.86	287.00	4.86	0.41	7.87	135.65
273	17.93	289.60	4.71	0.41	7.52	135.43
274	18.00	290.13	4.58	0.41	7.32	135.24
275	18.09	289.86	4.45	0.33	7.15	135.03
276	18.12	289.60	4.41	0.33	7.09	134.95
277	18.18	293.45	4.33	0.33	6.83	134.86
278	18.24	296.04	4.32	0.33	6.72	134.86
279	18.31	298.82	4.33	0.33	6.62	134.89
280	18.37	300.70	4.30	0.33	6.51	134.86
281	18.45	301.95	4.26	0.41	6.41	134.80
282	18.50	301.77	4.23	0.33	6.38	134.75
283	18.58	301.14	4.18	0.33	6.34	134.66
284	18.64	301.05	4.09	0.33	6.21	134.49
285	18.71	297.92	3.94	0.33	6.11	134.20
286	18.78	295.77	3.79	0.33	5.95	133.90
287	18.84	292.73	3.65	0.33	5.84	133.60
288	18.93	284.58	3.45	0.33	5.82	133.12
289	18.97	278.94	3.37	0.33	5.92	132.91
290	19.04	269.81	3.21	0.33	6.00	132.46
291	19.13	254.95	3.03	0.33	6.31	131.89
292	19.17	244.93	2.97	0.33	6.67	131.65
293	19.24	221.38	2.86	0.33	7.70	131.12
294	19.33	199.36	2.81	0.33	9.01	130.74
295	19.38	174.12	2.81	0.33	11.02	130.41
296	19.44	149.32	2.81	0.33	13.56	130.04
297	19.50	126.67	2.88	0.25	16.88	129.82
298	19.57	106.17	2.97	0.25	20.94	129.61
299	19.63	87.73	2.87	0.25	25.06	128.90
300	19.68	71.17	2.69	0.25	29.74	127.92
301	19.76	62.93	2.42	0.25	31.74	126.83
302	19.83	70.72	2.20	0.25	27.29	126.44
303	19.88	64.10	1.93	0.33	28.20	125.22
304	19.96	70.27	1.55	0.25	23.25	123.86
305	20.02	75.02	1.60	0.25	22.11	124.26
306	20.09	74.48	1.58	0.17	22.15	124.14
307	20.18	72.06	1.55	0.17	22.77	123.92
308	20.22	61.23	1.57	0.17	26.98	123.59
309	20.28	65.62	1.58	0.17	25.29	123.80
310	20.35	64.63	1.58	0.14	25.78	123.80
311	20.41	64.50	1.60	0.17	25.97	123.86
312	20.47	64.50	1.67	0.08	26.56	124.19
313	20.56	64.36	1.82	0.17	27.73	124.80
314	20.61	67.14	1.96	0.17	27.62	125.47
315	20.67	72.15	2.14	0.17	26.85	126.27

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
316	20.76	82.09	2.32	0.33	24.64	127.19
317	20.82	92.29	2.42	0.41	22.31	127.76
318	20.87	106.62	2.49	0.74	19.42	128.33
319	20.96	134.01	2.58	0.91	15.20	129.14
320	21.00	154.87	2.61	0.99	12.73	129.58
321	21.07	177.52	2.60	0.91	10.53	129.90
322	21.15	197.93	2.52	0.83	8.73	129.94
323	21.21	205.09	2.47	0.74	8.10	129.87
324	21.26	211.18	2.44	0.66	7.65	129.87
325	21.35	221.38	2.55	0.58	7.33	130.29
326	21.41	222.19	2.65	0.50	7.54	130.57
327	21.47	219.77	2.83	0.41	8.15	131.02
328	21.53	212.34	2.93	0.41	8.90	131.21
329	21.61	202.94	3.10	0.33	10.01	131.51
330	21.67	191.84	3.09	0.33	10.86	131.35
331	21.76	178.14	2.92	0.17	11.60	130.76
332	21.80	165.34	2.83	0.17	12.57	130.34
333	21.86	156.66	2.66	0.17	12.96	129.75
334	21.95	134.82	2.38	0.08	14.66	128.57
335	21.98	125.86	2.29	0.08	15.62	128.14
336	22.05	114.76	2.14	0.08	16.77	127.39
337	22.12	103.40	2.02	0.08	18.40	126.75
338	22.20	91.85	1.74	0.08	19.42	125.35
339	22.25	80.57	1.78	0.08	22.66	125.18
340	22.31	72.96	1.78	0.08	25.17	124.95
341	22.39	58.99	1.75	0.00	30.78	124.29
342	22.44	46.28	1.75	0.00	38.41	123.70
343	22.54	43.33	1.74	0.00	40.74	123.54
344	22.58	46.51	1.75	0.00	38.37	123.72
345	22.65	43.51	1.76	0.00	40.79	123.59
346	22.71	46.73	1.74	0.00	38.26	123.71
347	22.80	51.29	1.70	-0.08	34.89	123.75
348	22.84	53.08	1.68	-0.08	33.72	123.77
349	22.91	55.59	1.66	-0.08	32.12	123.76
350	22.97	58.99	1.63	-0.08	30.19	123.78
351	23.04	62.13	1.59	-0.08	28.45	123.74
352	23.10	63.29	1.53	-0.08	27.51	123.52
353	23.20	63.92	1.46	-0.08	26.71	123.19
354	23.23	63.92	1.45	-0.08	26.60	123.12
355	23.30	63.47	1.44	-0.08	26.78	123.07
356	23.40	60.96	1.45	-0.08	28.04	123.04
357	23.44	58.72	1.48	-0.08	29.37	123.09
358	23.50	56.49	1.53	-0.08	30.89	123.20
359	23.57	52.37	1.55	-0.08	33.43	123.12
360	23.64	49.50	1.55	-0.08	35.25	122.99

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
361	23.70	45.74	1.54	-0.08	37.79	122.75
362	23.76	39.93	1.53	-0.17	42.47	122.36
363	23.83	36.43	1.55	-0.17	46.27	122.27
364	23.90	35.18	1.56	-0.17	47.76	122.21
365	23.96	35.90	1.55	-0.17	46.90	122.21
366	24.02	35.18	1.55	-0.17	47.73	122.16
367	24.10	34.91	1.49	-0.17	47.44	121.86
368	24.15	37.69	1.45	-0.17	44.11	121.86
369	24.25	43.24	1.41	-0.17	38.80	121.99
370	24.30	47.45	1.39	-0.17	35.54	122.12
371	24.37	49.41	1.42	-0.17	34.50	122.33
372	24.43	49.68	1.47	-0.17	34.92	122.62
373	24.49	48.97	1.52	-0.17	35.89	122.82
374	24.54	48.07	1.55	-0.17	36.88	122.94
375	24.64	45.12	1.72	-0.17	40.68	123.52
376	24.69	47.89	1.73	-0.17	38.78	123.72
377	24.74	44.31	1.48	-0.17	39.00	122.37
378	24.80	47.71	0.86	-0.25	29.25	118.56
379	24.89	51.29	0.90	-0.25	27.84	119.10
380	24.94	54.43	0.92	-0.25	26.48	119.40
381	25.00	62.84	0.94	-0.25	23.07	119.92
382	25.08	62.13	0.98	-0.24	23.81	120.19
383	25.14	71.62	1.03	-0.24	20.94	120.93
384	25.23	66.96	1.16	-0.23	23.83	121.61
385	25.27	63.38	1.21	-0.25	25.75	121.79
386	25.34	55.50	1.30	-0.25	30.38	121.99
387	25.41	43.78	1.38	-0.17	38.86	121.85
388	25.47	36.34	1.39	-0.17	45.89	121.46
389	25.53	31.24	1.37	-0.08	51.48	120.95
390	25.62	27.66	1.33	-0.08	56.13	120.47
391	25.68	26.95	1.33	-0.08	57.28	120.39
392	25.73	28.56	1.33	-0.08	54.82	120.52
393	25.80	32.67	1.31	-0.08	49.24	120.75
394	25.88	38.76	1.31	-0.08	42.69	121.14
395	25.94	43.86	1.33	0.00	38.65	121.60
396	25.98	46.37	1.41	0.00	37.67	122.17
397	26.06	48.70	1.49	0.00	36.87	122.68
398	26.13	47.71	1.56	-0.08	38.29	122.95
399	26.18	39.93	1.56	-0.08	44.74	122.50
400	26.28	35.54	1.46	-0.08	48.20	121.74
401	26.33	29.99	1.39	-0.08	54.09	120.95
402	26.43	27.48	1.22	-0.08	55.61	119.84
403	26.48	25.60	1.17	-0.08	57.80	119.30
404	26.52	24.89	1.10	-0.08	58.04	118.82
405	26.58	25.16	1.04	-0.08	56.53	118.41

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
406	26.68	28.74	0.99	-0.08	50.25	118.36
407	26.72	29.27	0.97	-0.08	49.27	118.28
408	26.78	27.84	0.96	-0.08	51.21	118.11
409	26.88	24.89	0.96	-0.17	55.88	117.81
410	26.91	23.45	0.96	-0.17	58.50	117.67
411	26.98	22.29	0.96	-0.17	60.81	117.54
412	27.07	21.66	0.94	-0.17	61.75	117.28
413	27.10	21.57	0.92	-0.17	61.66	117.15
414	27.17	21.13	0.88	-0.17	61.82	116.77
415	27.23	20.32	0.85	-0.17	62.99	116.39
416	27.32	19.60	0.83	-0.17	64.34	116.13
417	27.37	19.16	0.82	-0.17	65.37	116.03
418	27.43	19.16	0.83	-0.25	65.55	116.08
419	27.50	19.25	0.81	-0.25	65.05	115.96
420	27.57	20.23	0.73	-0.25	60.82	115.30
421	27.65	24.53	0.93	-0.25	56.70	117.58
422	27.71	31.69	1.01	-0.25	47.65	118.77
423	27.76	41.00	1.05	-0.29	38.74	119.72
424	27.84	51.38	1.12	-0.29	32.17	120.70
425	27.90	57.29	1.19	-0.29	29.70	121.41
426	27.97	64.19	1.27	-0.33	27.31	122.17
427	28.03	68.93	1.30	-0.33	25.70	122.53
428	28.10	71.17	1.28	-0.33	24.63	122.45
429	28.16	71.88	1.21	-0.33	23.81	122.09
430	28.22	72.24	1.15	-0.33	23.14	121.72
431	28.30	70.45	1.15	-0.33	23.84	121.68
432	28.35	68.48	1.20	-0.33	25.05	121.90
433	28.42	63.83	1.31	-0.33	28.13	122.41
434	28.50	56.85	1.43	-0.41	32.77	122.76
435	28.55	50.94	1.51	-0.41	37.15	122.88
436	28.61	41.63	1.62	-0.41	45.68	122.88
437	28.68	35.09	1.69	-0.41	53.14	122.78
438	28.76	32.76	1.72	-0.41	56.38	122.74
439	28.81	32.05	1.67	-0.41	56.88	122.50
440	28.90	28.29	1.56	-0.41	61.12	121.69
441	28.96	24.17	1.51	-0.41	67.93	121.06
442	29.01	22.83	1.49	-0.41	70.58	120.84
443	29.11	25.69	1.35	-0.33	62.82	120.38
444	29.16	33.66	1.27	-0.33	50.23	120.61
445	29.21	44.67	1.20	-0.33	38.71	120.89
446	29.30	74.12	1.14	-0.33	22.91	121.76
447	29.34	90.33	1.15	-0.33	18.32	122.27
448	29.41	111.45	1.17	-0.33	14.22	122.92
449	29.49	118.08	1.14	-0.33	12.95	122.85
450	29.54	118.97	1.10	-0.33	12.57	122.62

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
451	29.60	117.63	1.05	-0.25	12.47	122.29
452	29.66	115.21	1.04	-0.25	12.74	122.12
453	29.75	111.81	1.05	-0.25	13.41	122.15
454	29.79	109.93	1.07	-0.25	13.85	122.22
455	29.86	107.69	1.09	-0.25	14.41	122.30
456	29.95	106.89	1.12	-0.25	14.78	122.47
457	29.99	107.42	1.13	-0.25	14.78	122.55
458	30.05	108.14	1.16	-0.25	14.89	122.77
459	30.16	110.56	1.24	-0.25	15.03	123.30
460	30.19	111.00	1.26	-0.25	15.11	123.43
461	30.25	111.63	1.27	-0.25	15.12	123.53
462	30.34	113.78	1.25	-0.25	14.63	123.45
463	30.39	114.58	1.24	-0.25	14.45	123.42
464	30.45	115.03	1.03	-0.25	12.93	122.07
465	30.53	112.71	0.79	-0.25	11.40	120.04
466	30.60	109.48	0.83	-0.25	12.25	120.33
467	30.64	107.96	0.86	-0.25	12.82	120.62
468	30.74	97.84	1.01	-0.25	15.93	121.51
469	30.77	81.28	1.09	-0.15	20.75	121.63
470	30.84	81.64	1.24	-0.08	21.98	122.57
471	30.91	75.11	1.38	-0.08	25.40	123.18
472	31.01	63.65	1.57	-0.08	31.89	123.70
473	31.05	60.87	1.65	0.00	34.07	123.97
474	31.11	53.44	1.75	0.00	39.42	124.07
475	31.17	50.85	1.72	0.00	41.01	123.84
476	31.23	49.06	1.58	0.00	40.99	123.13
477	31.30	51.29	1.49	0.00	38.47	122.79
478	31.40	57.29	1.44	0.00	34.28	122.82
479	31.44	67.23	1.44	0.08	29.31	123.21
480	31.50	75.38	1.44	0.00	26.08	123.50
481	31.57	82.27	1.47	0.00	23.99	123.86
482	31.63	87.37	1.62	0.00	23.59	124.73
483	31.71	89.25	1.77	0.00	24.07	125.40
484	31.76	88.00	1.84	0.00	24.95	125.67
485	31.84	82.54	1.98	0.00	27.64	126.02
486	31.91	82.90	2.04	0.00	27.97	126.27
487	31.96	82.90	2.04	0.00	28.02	126.28
488	32.02	83.25	2.00	0.00	27.61	126.11
489	32.10	90.24	1.91	0.08	24.84	125.98
490	32.15	100.08	1.86	0.08	21.88	126.03
491	32.24	101.43	1.74	0.08	20.89	125.60
492	32.30	99.46	1.63	0.08	20.69	125.08
493	32.36	96.50	1.49	0.08	20.48	124.35
494	32.43	92.83	1.40	0.08	20.74	123.77
495	32.48	89.97	1.39	0.00	21.45	123.64

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
496	32.55	84.42	1.48	0.08	23.77	123.94
497	32.66	73.67	1.48	0.00	27.53	123.60
498	32.70	66.51	1.60	0.08	31.64	123.93
499	32.75	62.48	1.71	0.00	34.63	124.27
500	32.82	47.62	1.73	0.00	44.73	123.72
501	32.89	36.97	1.74	0.07	54.68	123.12
502	32.95	35.36	1.78	0.07	57.02	123.18
503	33.01	33.66	1.78	0.08	59.26	123.07
504	33.10	29.18	1.64	0.08	64.19	122.11
505	33.15	27.21	1.52	0.17	66.06	121.40
506	33.23	26.32	1.43	0.17	66.44	120.85
507	33.29	25.51	1.36	0.17	66.99	120.40
508	33.34	26.05	1.33	0.17	65.65	120.32
509	33.40	35.72	1.30	0.17	51.35	120.92
510	33.49	49.41	1.39	0.25	40.14	122.18
511	33.54	62.04	1.45	0.25	32.95	123.05
512	33.63	81.46	1.61	0.17	26.24	124.51
513	33.67	89.52	1.67	0.25	24.12	125.00
514	33.75	104.29	1.71	0.17	20.55	125.54
515	33.80	113.06	1.76	0.25	18.95	125.92
516	33.87	119.78	1.81	0.25	18.01	126.30
517	33.94	123.27	1.87	0.17	17.71	126.60
518	34.02	123.90	1.92	0.25	17.90	126.82
519	34.09	122.19	1.94	0.17	18.29	126.82
520	34.13	117.54	1.93	0.25	19.18	126.73
521	34.19	110.20	1.93	0.25	20.68	126.55
522	34.26	100.26	1.99	0.25	23.44	126.55
523	34.34	84.42	2.07	0.17	28.71	126.40
524	34.38	74.30	2.09	0.17	32.84	126.18
525	34.48	56.40	2.07	0.17	42.39	125.42
526	34.54	46.64	2.00	0.17	48.92	124.71
527	34.58	41.09	1.93	0.17	53.33	124.13
528	34.67	36.97	1.81	0.17	56.66	123.41
529	34.73	35.36	1.78	0.17	58.37	123.19
530	34.78	34.82	1.64	0.17	57.53	122.56
531	34.85	34.55	1.38	0.25	54.79	121.28
532	34.92	34.73	1.51	0.25	56.23	121.95
533	34.98	34.91	1.61	0.25	57.22	122.43
534	35.05	33.93	1.70	0.25	59.49	122.74
535	35.12	33.84	1.78	0.25	60.54	123.07
536	35.18	33.75	1.83	0.25	61.31	123.28
537	35.24	34.02	1.88	0.25	61.52	123.50
538	35.31	33.84	1.91	0.25	62.06	123.58
539	35.39	33.75	1.89	0.25	62.13	123.53
540	35.44	33.30	1.88	0.25	62.58	123.42

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
541	35.51	33.21	1.85	0.25	62.48	123.32
542	35.57	33.30	1.83	0.25	62.15	123.23
543	35.64	33.12	1.81	0.25	62.25	123.14
544	35.70	33.30	1.80	0.25	61.94	123.12
545	35.78	34.46	1.80	0.25	60.46	123.21
546	35.84	35.45	1.83	0.25	59.50	123.38
547	35.90	36.88	1.86	0.25	58.17	123.62
548	35.96	38.67	1.87	0.25	56.28	123.77
549	36.05	39.12	1.83	0.25	55.45	123.65
550	36.10	39.12	1.81	0.25	55.30	123.57
551	36.16	40.37	1.82	0.25	54.12	123.69
552	36.24	43.86	1.81	0.17	50.65	123.82
553	36.29	46.73	1.88	0.25	48.90	124.28
554	36.37	49.41	1.96	0.17	47.51	124.72
555	36.44	46.28	1.87	0.25	49.22	124.19
556	36.49	41.45	1.78	0.17	52.80	123.57
557	36.56	36.26	1.72	0.17	57.83	122.98
558	36.63	33.66	1.67	0.17	60.70	122.61
559	36.70	34.82	1.64	0.17	58.85	122.54
560	36.75	38.49	1.62	0.17	54.39	122.71
561	36.84	56.67	1.68	0.25	40.20	123.90
562	36.90	68.48	1.73	0.25	33.99	124.57
563	36.95	76.45	1.77	0.25	30.84	125.04
564	37.03	93.55	1.91	0.25	25.85	126.06
565	37.09	103.22	1.93	0.25	23.35	126.39
566	37.15	117.36	1.94	0.25	20.22	126.75
567	37.22	136.07	1.98	0.25	17.06	127.25
568	37.29	151.47	2.01	0.25	14.98	127.63
569	37.34	163.10	2.03	0.25	13.63	127.88
570	37.41	173.04	2.06	0.25	12.67	128.14
571	37.48	181.72	2.15	0.25	12.14	128.57
572	37.54	189.60	2.23	0.25	11.70	128.93
573	37.60	196.32	2.33	0.25	11.47	129.34
574	37.67	204.19	2.44	0.25	11.15	129.76
575	37.74	209.57	2.44	0.33	10.75	129.84
576	37.81	215.56	1.89	0.33	8.44	128.05
577	37.87	219.95	2.03	0.33	8.64	128.62
578	37.93	222.10	2.22	0.33	9.12	129.29
579	38.00	223.98	2.35	0.33	9.42	129.72
580	38.08	221.11	2.43	0.33	9.89	129.94
581	38.16	203.39	2.49	0.33	11.50	129.92
582	38.21	202.14	2.52	0.33	11.71	129.98
583	38.26	191.12	2.55	0.33	12.83	129.92
584	38.33	184.77	2.62	0.33	13.74	130.05
585	38.39	190.23	2.69	0.33	13.45	130.32

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
586	38.46	182.71	2.73	0.33	14.35	130.31
587	38.52	189.33	2.73	0.33	13.70	130.42
588	38.61	202.85	2.76	0.41	12.51	130.65
589	38.66	210.28	2.82	0.41	12.06	130.90
590	38.74	213.68	2.89	0.41	12.01	131.12
591	38.79	213.15	2.89	0.41	12.07	131.13
592	38.85	208.94	2.84	0.50	12.28	130.94
593	38.94	197.84	2.65	0.50	12.70	130.31
594	38.99	190.23	2.58	0.50	13.19	130.00
595	39.05	178.59	2.54	0.50	14.28	129.73
596	39.12	164.36	2.52	0.50	15.92	129.48
597	39.20	156.21	2.51	0.50	16.99	129.33
598	39.26	149.86	2.49	0.50	17.84	129.17
599	39.33	145.92	2.50	0.50	18.50	129.12
600	39.39	144.93	2.53	0.50	18.80	129.20
601	39.44	142.87	2.59	0.50	19.41	129.33
602	39.50	139.83	2.67	0.58	20.27	129.49
603	39.57	134.01	2.71	0.58	21.52	129.51
604	39.64	129.36	2.70	0.58	22.41	129.40
605	39.74	119.42	2.58	0.58	24.01	128.88
606	39.79	115.66	2.54	0.58	24.68	128.68
607	39.84	109.12	2.48	0.58	26.02	128.37
608	39.90	102.77	2.41	0.58	27.38	128.00
609	39.99	96.05	2.26	0.58	28.56	127.37
610	40.05	90.41	2.15	0.58	29.79	126.88
611	40.12	88.18	2.00	0.58	29.59	126.28
612	40.16	88.18	1.93	0.66	29.12	126.02
613	40.23	87.19	1.87	0.58	29.05	125.75
614	40.29	85.85	1.82	0.58	29.18	125.51
615	40.39	82.27	1.74	0.58	29.92	125.07
616	40.44	79.94	1.74	0.58	30.90	125.02
617	40.50	77.88	1.76	0.58	31.88	125.02
618	40.58	75.64	1.81	0.58	33.27	125.15
619	40.64	73.50	1.85	0.58	34.59	125.24
620	40.69	66.96	1.90	0.58	38.39	125.24
621	40.75	55.95	1.89	0.58	44.77	124.75
622	40.84	41.45	1.76	0.58	55.38	123.49
623	40.90	34.38	1.39	0.58	59.29	121.31
624	40.99	26.95	1.11	0.58	66.61	119.09
625	41.04	23.10	1.06	0.58	73.69	118.39
626	41.08	21.57	1.03	0.58	76.72	117.97
627	41.17	19.25	0.93	0.58	81.02	116.92
628	41.22	17.19	0.87	0.58	86.51	116.19
629	41.28	17.64	0.82	0.58	83.70	115.83
630	41.34	18.71	0.78	0.58	79.28	115.62

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
631	41.41	21.40	0.83	0.58	72.96	116.34
632	41.49	25.42	0.90	0.58	65.90	117.42
633	41.54	30.35	0.96	0.58	58.79	118.33
634	41.62	32.14	1.04	0.58	57.67	119.06
635	41.69	28.11	1.12	0.58	65.16	119.24
636	41.74	23.90	1.14	0.58	73.80	118.97
637	41.82	20.23	1.10	0.58	82.46	118.31
638	41.87	19.60	1.07	0.58	83.65	117.99
639	41.94	21.66	1.03	0.58	77.22	117.99
640	42.01	34.02	1.03	0.58	55.23	119.10
641	42.06	47.62	1.04	0.58	42.32	119.96
642	42.13	65.44	1.05	0.58	31.41	120.86
643	42.20	80.93	1.27	0.58	27.18	122.75
644	42.26	87.55	1.50	0.58	26.92	124.15
645	42.34	97.84	1.66	0.58	25.00	125.17
646	42.40	104.74	1.84	0.50	24.35	126.08
647	42.48	102.86	2.20	0.50	27.15	127.35
648	42.53	95.70	2.39	0.50	30.52	127.78
649	42.59	90.95	2.51	0.50	32.92	128.02
650	42.66	86.57	2.56	0.50	34.90	128.03
651	42.73	83.34	2.43	0.50	35.46	127.56
652	42.82	100.17	2.27	0.50	28.52	127.51
653	42.85	122.55	2.22	0.58	22.54	127.85
654	42.93	158.72	2.19	0.58	16.25	128.38
655	43.02	187.19	2.23	0.58	13.06	128.89
656	43.05	196.32	2.18	0.58	12.01	128.87
657	43.12	205.54	2.01	0.58	10.57	128.38
658	43.22	214.22	1.79	0.58	9.05	127.62
659	43.27	219.77	1.89	0.58	9.04	128.09
660	43.32	225.86	1.90	0.58	8.65	128.19
661	43.37	232.30	1.87	0.58	8.11	128.12
662	43.48	244.39	2.06	0.58	8.04	128.98
663	43.51	246.36	2.11	0.58	8.07	129.16
664	43.57	249.31	2.12	0.58	7.94	129.23
665	43.64	254.95	2.07	0.58	7.46	129.10
666	43.72	258.71	2.18	0.58	7.60	129.52
667	43.77	262.74	2.22	0.58	7.52	129.70
668	43.85	263.05	2.24	0.58	7.56	129.76
669	43.93	263.37	2.20	0.66	7.43	129.62
670	43.97	264.71	2.17	0.66	7.28	129.54
671	44.03	266.23	2.15	0.74	7.16	129.51
672	44.10	263.81	2.21	0.74	7.48	129.68
673	44.17	262.83	2.26	0.74	7.67	129.82
674	44.23	259.96	2.32	0.74	8.03	129.99
675	44.32	253.70	2.31	0.74	8.38	129.90

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
676	44.38	249.13	2.26	0.74	8.51	129.69
677	44.43	245.19	2.22	0.74	8.64	129.52
678	44.52	237.14	2.16	0.74	8.98	129.24
679	44.57	230.78	2.13	0.74	9.33	129.08
680	44.63	223.17	2.09	0.83	9.73	128.84
681	44.70	217.17	2.01	0.83	9.93	128.52
682	44.76	215.65	1.98	0.83	9.92	128.36
683	44.82	214.85	1.93	0.83	9.82	128.18
684	44.91	215.03	1.87	0.83	9.59	127.95
685	44.95	215.92	1.87	0.83	9.54	127.96
686	45.03	219.32	1.89	0.91	9.37	128.08
687	45.08	222.64	1.90	0.91	9.19	128.17
688	45.17	224.69	1.99	0.91	9.37	128.51
689	45.21	225.41	2.03	0.91	9.46	128.66
690	45.28	228.19	2.12	0.91	9.59	129.01
691	45.37	232.21	2.22	0.99	9.66	129.39
692	45.42	235.08	2.28	0.99	9.68	129.63
693	45.48	238.21	2.39	0.99	9.83	130.01
694	45.56	242.60	2.49	0.99	9.84	130.34
695	45.62	244.12	2.53	0.99	9.86	130.46
696	45.67	244.12	2.55	0.99	9.95	130.54
697	45.76	241.61	2.57	1.07	10.18	130.55
698	45.81	239.91	2.60	1.07	10.41	130.63
699	45.88	232.84	2.60	1.07	10.93	130.55
700	45.95	224.43	2.48	1.07	11.20	130.11
701	46.01	215.38	2.43	1.07	11.78	129.86
702	46.07	204.73	2.35	1.07	12.48	129.51
703	46.14	194.08	2.28	1.07	13.25	129.15
704	46.20	170.53	2.18	0.99	15.48	128.51
705	46.30	169.19	2.03	0.66	15.01	127.98
706	46.33	164.98	1.99	0.58	15.34	127.75
707	46.40	155.23	1.90	0.50	16.26	127.28
708	46.50	145.83	1.83	0.41	17.28	126.83
709	46.53	139.47	1.83	0.41	18.33	126.73
710	46.59	133.20	1.84	0.41	19.51	126.65
711	46.66	125.86	1.88	0.33	21.19	126.68
712	46.74	119.69	1.99	0.33	23.18	126.97
713	46.79	111.81	2.15	0.25	26.06	127.37
714	46.85	105.54	2.47	0.25	29.71	128.24
715	46.93	100.71	2.78	0.17	33.01	128.99
716	46.99	94.80	2.90	0.08	35.82	129.17
717	47.08	88.71	2.97	0.00	38.59	129.17
718	47.13	85.13	2.92	0.08	39.71	128.94
719	47.19	88.36	2.85	0.00	38.18	128.87
720	47.27	84.42	2.82	0.08	39.54	128.67

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
721	47.32	88.00	2.82	0.00	38.22	128.78
722	47.39	91.67	2.78	0.00	36.53	128.78
723	47.45	92.47	2.67	0.00	35.57	128.49
724	47.52	94.26	2.47	0.00	33.74	127.97
725	47.58	97.22	2.32	0.00	31.81	127.60
726	47.67	104.47	2.24	0.00	29.06	127.53
727	47.71	106.71	2.24	0.00	28.42	127.58
728	47.77	110.02	2.24	0.00	27.51	127.65
729	47.84	114.58	2.25	0.00	26.36	127.78
730	47.92	121.30	2.26	0.00	24.78	127.94
731	47.98	126.40	2.27	0.00	23.70	128.07
732	48.04	132.94	2.28	0.00	22.44	128.24
733	48.14	144.13	2.12	0.00	19.56	127.90
734	48.17	155.85	2.13	0.00	17.74	128.11
735	48.24	168.21	2.28	0.00	16.74	128.82
736	48.30	180.29	2.39	-0.08	15.66	129.31
737	48.38	192.47	2.53	-0.10	14.84	129.88
738	48.44	194.79	2.66	-0.10	15.09	130.28
739	48.50	197.12	2.77	-0.10	15.25	130.61
740	48.56	212.70	2.85	-0.09	13.96	131.00
741	48.63	221.56	2.96	-0.09	13.53	131.40
742	48.70	228.01	3.07	-0.08	13.29	131.71
743	48.75	234.09	3.15	-0.08	13.03	131.97
744	48.85	243.31	3.30	-0.08	12.75	132.42
745	48.90	247.70	3.33	-0.08	12.48	132.51
746	48.96	250.03	3.34	-0.08	12.35	132.56
747	49.05	254.32	3.35	-0.08	12.09	132.64
748	49.09	256.74	3.37	-0.08	11.96	132.69
749	49.15	258.89	3.38	-0.08	11.85	132.73
750	49.22	266.68	3.39	-0.08	11.36	132.84
751	49.28	271.96	3.43	-0.08	11.10	132.96
752	49.34	276.53	3.43	-0.08	10.83	133.01
753	49.43	279.48	3.46	-0.08	10.72	133.09
754	49.49	284.49	3.47	-0.08	10.47	133.16
755	49.55	286.82	3.50	-0.08	10.39	133.23
756	49.62	292.82	3.52	-0.08	10.09	133.32
757	49.69	294.43	3.52	0.00	10.02	133.34
758	49.74	294.34	3.52	0.00	10.03	133.34
759	49.83	290.85	3.49	0.00	10.18	133.25
760	49.89	287.27	3.48	0.00	10.38	133.20
761	49.95	280.29	0.00	0.00	N/A	87.36
762	50.03	276.08	0.00	0.00	N/A	87.36
763	50.08	273.21	0.00	0.00	N/A	87.36
764	50.15	271.51	0.00	0.00	N/A	87.36
765	50.24	268.92	0.00	0.08	N/A	87.36

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
766	50.27	268.74	0.00	0.00	N/A	87.36

Abbreviations

Depth:	Depth from free surface, at which CPT was performed (ft)
q_c:	Measured cone resistance (tsf)
f_s:	Sleeve friction resistance (tsf)
u:	Pore pressure (tsf)
Fines content:	Percentage of fines in soil (%)
Unit weight:	Bulk soil unit weight (pcf)

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data ::

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
1	0.07	0.00	0.00	0.00	1.00	0.695	0.90	0.776	1.00	1.30	2.000	No
2	0.14	0.01	0.00	0.01	1.00	0.694	0.90	0.775	1.00	1.30	2.000	No
3	0.21	0.01	0.00	0.01	1.00	0.694	0.90	0.774	1.00	1.30	2.000	No
4	0.27	0.01	0.00	0.01	1.00	0.693	0.90	0.774	1.00	1.30	2.000	No
5	0.34	0.02	0.00	0.02	1.00	0.692	0.90	0.773	1.00	1.30	2.000	No
6	0.40	0.02	0.00	0.02	0.99	0.692	0.90	0.772	1.00	1.30	2.000	No
7	0.47	0.02	0.00	0.02	0.99	0.691	0.90	0.772	1.00	1.30	2.000	No
8	0.55	0.03	0.00	0.03	0.99	0.691	0.90	0.771	1.00	1.30	2.000	No
9	0.59	0.03	0.00	0.03	0.99	0.690	0.90	0.771	1.00	1.30	2.000	No
10	0.66	0.03	0.00	0.03	0.99	0.690	0.90	0.770	1.00	1.30	2.000	No
11	0.72	0.04	0.00	0.04	0.99	0.689	0.90	0.769	1.00	1.30	2.000	No
12	0.79	0.04	0.00	0.04	0.99	0.689	0.90	0.769	1.00	1.30	2.000	No
13	0.88	0.05	0.00	0.05	0.99	0.688	0.90	0.768	1.00	1.30	2.000	No
14	0.92	0.05	0.00	0.05	0.99	0.687	0.90	0.767	1.00	1.30	2.000	No
15	1.01	0.05	0.00	0.05	0.99	0.687	0.90	0.766	1.00	1.30	2.000	No
16	1.07	0.06	0.00	0.06	0.99	0.686	0.90	0.766	1.00	1.30	2.000	No
17	1.12	0.06	0.00	0.06	0.99	0.685	0.90	0.765	1.00	1.30	2.000	No
18	1.21	0.06	0.00	0.06	0.98	0.685	0.90	0.764	1.00	1.30	2.000	No
19	1.25	0.07	0.00	0.07	0.98	0.684	0.90	0.764	1.00	1.30	2.000	No
20	1.32	0.07	0.00	0.07	0.98	0.684	0.90	0.763	1.00	1.30	2.000	No
21	1.40	0.07	0.00	0.07	0.98	0.683	0.90	0.762	1.00	1.30	2.000	No
22	1.45	0.08	0.00	0.08	0.98	0.682	0.90	0.762	1.00	1.30	2.000	No
23	1.54	0.08	0.00	0.08	0.98	0.682	0.90	0.761	1.00	1.30	2.000	No
24	1.61	0.09	0.00	0.09	0.98	0.681	0.90	0.760	1.00	1.30	2.000	No
25	1.65	0.09	0.00	0.09	0.98	0.681	0.90	0.760	1.00	1.30	2.000	No
26	1.72	0.09	0.00	0.09	0.98	0.680	0.90	0.759	1.00	1.30	2.000	No
27	1.82	0.10	0.00	0.10	0.98	0.679	0.90	0.758	1.00	1.30	2.000	No
28	1.84	0.10	0.00	0.10	0.98	0.679	0.90	0.758	1.00	1.30	2.000	No
29	1.92	0.10	0.00	0.10	0.97	0.678	0.90	0.757	1.00	1.30	2.000	No
30	1.97	0.11	0.00	0.11	0.97	0.677	0.90	0.756	1.00	1.30	2.000	No
31	2.05	0.11	0.00	0.11	0.97	0.677	0.90	0.755	1.00	1.30	2.000	No
32	2.12	0.11	0.00	0.11	0.97	0.676	0.90	0.755	1.00	1.30	2.000	No
33	2.17	0.12	0.00	0.12	0.97	0.676	0.90	0.754	1.00	1.30	2.000	No
34	2.27	0.12	0.00	0.12	0.97	0.675	0.90	0.753	1.00	1.30	2.000	No
35	2.32	0.13	0.00	0.13	0.97	0.674	0.90	0.752	1.00	1.30	2.000	No
36	2.37	0.13	0.00	0.13	0.97	0.674	0.90	0.752	1.00	1.30	2.000	No
37	2.46	0.13	0.00	0.13	0.97	0.673	0.90	0.751	1.00	1.30	2.000	No
38	2.51	0.14	0.00	0.14	0.97	0.672	0.90	0.750	1.00	1.30	2.000	No
39	2.57	0.14	0.00	0.14	0.97	0.672	0.90	0.750	1.00	1.30	2.000	No
40	2.66	0.15	0.00	0.15	0.96	0.671	0.90	0.749	1.00	1.30	2.000	No
41	2.72	0.15	0.00	0.15	0.96	0.670	0.90	0.748	1.00	1.30	2.000	No
42	2.76	0.15	0.00	0.15	0.96	0.670	0.90	0.748	1.00	1.30	2.000	No
43	2.83	0.16	0.00	0.16	0.96	0.669	0.90	0.747	1.00	1.30	2.000	No
44	2.89	0.16	0.00	0.16	0.96	0.668	0.90	0.746	1.00	1.30	2.000	No
45	2.95	0.16	0.00	0.16	0.96	0.668	0.90	0.745	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
46	3.05	0.17	0.00	0.17	0.96	0.667	0.90	0.744	1.00	1.30	2.000	No
47	3.10	0.17	0.00	0.17	0.96	0.666	0.90	0.744	1.00	1.30	2.000	No
48	3.15	0.17	0.00	0.17	0.96	0.666	0.90	0.743	1.00	1.30	2.000	No
49	3.22	0.18	0.00	0.18	0.96	0.665	0.90	0.742	1.00	1.30	2.000	No
50	3.29	0.18	0.00	0.18	0.96	0.664	0.90	0.742	1.00	1.30	2.000	No
51	3.36	0.19	0.00	0.19	0.95	0.664	0.90	0.741	1.00	1.30	2.000	No
52	3.43	0.19	0.00	0.19	0.95	0.663	0.90	0.740	1.00	1.30	2.000	No
53	3.49	0.19	0.00	0.19	0.95	0.662	0.90	0.739	1.00	1.30	2.000	No
54	3.56	0.20	0.00	0.20	0.95	0.662	0.90	0.739	1.00	1.30	2.000	No
55	3.66	0.20	0.00	0.20	0.95	0.661	0.90	0.737	1.00	1.30	2.000	No
56	3.70	0.21	0.00	0.21	0.95	0.660	0.90	0.737	1.00	1.30	2.000	No
57	3.76	0.21	0.00	0.21	0.95	0.660	0.90	0.736	1.00	1.30	2.000	No
58	3.81	0.21	0.00	0.21	0.95	0.659	0.90	0.736	1.00	1.30	2.000	No
59	3.90	0.22	0.00	0.22	0.95	0.658	0.90	0.735	1.00	1.30	2.000	No
60	3.94	0.22	0.00	0.22	0.95	0.658	0.90	0.734	1.00	1.30	2.000	No
61	4.01	0.22	0.00	0.22	0.94	0.657	0.90	0.733	1.00	1.30	2.000	No
62	4.08	0.23	0.00	0.23	0.94	0.656	0.90	0.732	1.00	1.30	2.000	No
63	4.15	0.23	0.00	0.23	0.94	0.655	0.90	0.732	1.00	1.30	2.000	No
64	4.21	0.23	0.00	0.23	0.94	0.655	0.90	0.731	1.00	1.30	2.000	No
65	4.28	0.24	0.00	0.24	0.94	0.654	0.90	0.730	1.00	1.30	2.000	No
66	4.35	0.24	0.00	0.24	0.94	0.653	0.90	0.729	1.00	1.30	2.000	No
67	4.40	0.25	0.00	0.25	0.94	0.653	0.90	0.729	1.00	1.30	2.000	No
68	4.47	0.25	0.00	0.25	0.94	0.652	0.90	0.728	1.00	1.30	2.000	No
69	4.53	0.25	0.00	0.25	0.94	0.651	0.90	0.727	1.00	1.30	2.000	No
70	4.60	0.26	0.00	0.26	0.94	0.651	0.90	0.726	1.00	1.30	2.000	No
71	4.69	0.26	0.00	0.26	0.93	0.650	0.90	0.725	1.00	1.30	2.000	No
72	4.74	0.26	0.00	0.26	0.93	0.649	0.90	0.724	1.00	1.30	2.000	No
73	4.80	0.27	0.00	0.27	0.93	0.648	0.90	0.724	1.00	1.30	2.000	No
74	4.90	0.27	0.00	0.27	0.93	0.647	0.90	0.722	1.00	1.30	2.000	No
75	4.93	0.28	0.00	0.28	0.93	0.647	0.90	0.722	1.00	1.30	2.000	No
76	5.00	0.28	0.00	0.28	0.93	0.646	0.90	0.721	1.00	1.30	2.000	No
77	5.08	0.28	0.00	0.28	0.93	0.645	0.90	0.720	1.00	1.30	2.000	No
78	5.13	0.29	0.00	0.29	0.93	0.645	0.90	0.720	1.00	1.30	2.000	No
79	5.21	0.29	0.00	0.29	0.93	0.644	0.90	0.719	1.00	1.30	2.000	No
80	5.26	0.29	0.00	0.29	0.92	0.643	0.90	0.718	1.00	1.30	2.000	No
81	5.34	0.30	0.00	0.30	0.92	0.642	0.90	0.717	1.00	1.30	2.000	No
82	5.39	0.30	0.00	0.30	0.92	0.642	0.90	0.716	1.00	1.30	2.000	No
83	5.49	0.31	0.00	0.31	0.92	0.641	0.90	0.715	1.00	1.30	2.000	No
84	5.54	0.31	0.00	0.31	0.92	0.640	0.90	0.715	1.00	1.30	2.000	No
85	5.58	0.31	0.00	0.31	0.92	0.640	0.90	0.714	1.00	1.30	2.000	No
86	5.64	0.32	0.00	0.32	0.92	0.639	0.90	0.713	1.00	1.30	2.000	No
87	5.72	0.32	0.00	0.32	0.92	0.638	0.90	0.712	1.00	1.30	2.000	No
88	5.79	0.32	0.00	0.32	0.92	0.637	0.90	0.711	1.00	1.30	2.000	No
89	5.84	0.33	0.00	0.33	0.92	0.637	0.90	0.711	1.00	1.30	2.000	No
90	5.93	0.33	0.00	0.33	0.91	0.636	0.90	0.710	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
91	5.99	0.34	0.00	0.34	0.91	0.635	0.90	0.709	1.00	1.30	2.000	No
92	6.04	0.34	0.00	0.34	0.91	0.634	0.90	0.708	1.00	1.30	2.000	No
93	6.12	0.34	0.00	0.34	0.91	0.634	0.90	0.707	1.00	1.30	2.000	No
94	6.17	0.35	0.00	0.35	0.91	0.633	0.90	0.706	1.00	1.30	2.000	No
95	6.24	0.35	0.00	0.35	0.91	0.632	0.90	0.706	1.00	1.30	2.000	No
96	6.32	0.36	0.00	0.36	0.91	0.631	0.90	0.705	1.00	1.30	2.000	No
97	6.37	0.36	0.00	0.36	0.91	0.631	0.90	0.704	1.00	1.30	2.000	No
98	6.44	0.36	0.00	0.36	0.91	0.630	0.90	0.703	1.00	1.30	2.000	No
99	6.52	0.37	0.00	0.37	0.90	0.629	0.90	0.702	1.00	1.30	2.000	No
100	6.58	0.37	0.00	0.37	0.90	0.628	0.90	0.701	1.00	1.30	2.000	No
101	6.63	0.37	0.00	0.37	0.90	0.627	0.90	0.700	1.00	1.30	2.000	No
102	6.72	0.38	0.00	0.38	0.90	0.626	0.90	0.699	1.00	1.30	2.000	No
103	6.77	0.38	0.00	0.38	0.90	0.626	0.90	0.699	1.00	1.30	2.000	No
104	6.83	0.39	0.00	0.39	0.90	0.625	0.90	0.698	1.00	1.30	2.000	No
105	6.91	0.39	0.00	0.39	0.90	0.624	0.90	0.697	1.00	1.30	2.000	No
106	6.97	0.39	0.00	0.39	0.90	0.623	0.90	0.696	1.00	1.30	2.000	No
107	7.02	0.40	0.00	0.40	0.90	0.623	0.90	0.695	1.00	1.30	2.000	No
108	7.10	0.40	0.00	0.40	0.89	0.622	0.90	0.694	1.00	1.30	2.000	No
109	7.18	0.41	0.00	0.41	0.89	0.621	0.90	0.693	1.00	1.30	2.000	No
110	7.23	0.41	0.00	0.41	0.89	0.620	0.90	0.692	1.00	1.30	2.000	No
111	7.29	0.41	0.00	0.41	0.89	0.620	0.90	0.692	1.00	1.30	2.000	No
112	7.37	0.42	0.00	0.42	0.89	0.619	0.90	0.691	1.00	1.30	2.000	No
113	7.42	0.42	0.00	0.42	0.89	0.618	0.90	0.690	1.00	1.30	2.000	No
114	7.52	0.43	0.00	0.43	0.89	0.617	0.90	0.688	1.00	1.30	2.000	No
115	7.57	0.43	0.00	0.43	0.89	0.616	0.90	0.688	1.00	1.30	2.000	No
116	7.61	0.43	0.00	0.43	0.89	0.616	0.90	0.687	1.00	1.30	2.000	No
117	7.71	0.44	0.00	0.44	0.88	0.615	0.90	0.686	1.00	1.30	2.000	No
118	7.76	0.44	0.00	0.44	0.88	0.614	0.90	0.685	1.00	1.30	2.000	No
119	7.83	0.45	0.00	0.45	0.88	0.613	0.90	0.684	1.00	1.30	2.000	No
120	7.88	0.45	0.00	0.45	0.88	0.612	0.90	0.684	1.00	1.30	2.000	No
121	7.98	0.45	0.00	0.45	0.88	0.611	0.90	0.682	1.00	1.30	2.000	No
122	8.02	0.46	0.00	0.46	0.88	0.611	0.90	0.682	1.00	1.30	2.000	No
123	8.08	0.46	0.00	0.46	0.88	0.610	0.90	0.681	1.00	1.30	2.000	No
124	8.17	0.46	0.00	0.46	0.88	0.609	0.90	0.680	1.00	1.30	2.000	No
125	8.21	0.47	0.00	0.47	0.87	0.608	0.90	0.679	1.00	1.30	2.000	No
126	8.28	0.47	0.00	0.47	0.87	0.608	0.90	0.678	1.00	1.30	2.000	No
127	8.37	0.48	0.00	0.48	0.87	0.606	0.90	0.677	1.00	1.30	2.000	No
128	8.41	0.48	0.00	0.48	0.87	0.606	0.90	0.676	1.00	1.30	2.000	No
129	8.47	0.48	0.00	0.48	0.87	0.605	0.90	0.675	1.00	1.30	2.000	No
130	8.54	0.49	0.00	0.49	0.87	0.604	0.90	0.674	1.00	1.30	2.000	No
131	8.60	0.49	0.00	0.49	0.87	0.603	0.90	0.674	1.00	1.30	2.000	No
132	8.67	0.49	0.00	0.49	0.87	0.603	0.90	0.673	1.00	1.30	2.000	No
133	8.74	0.50	0.00	0.50	0.87	0.602	0.90	0.672	1.00	1.30	2.000	No
134	8.82	0.50	0.00	0.50	0.86	0.601	0.90	0.671	1.00	1.30	2.000	No
135	8.87	0.51	0.00	0.51	0.86	0.600	0.90	0.670	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
136	8.97	0.51	0.00	0.51	0.86	0.599	0.90	0.668	1.00	1.30	2.000	No
137	9.00	0.51	0.00	0.51	0.86	0.598	0.90	0.668	1.00	1.30	2.000	No
138	9.07	0.52	0.00	0.52	0.86	0.598	0.90	0.667	1.00	1.30	2.000	No
139	9.12	0.52	0.00	0.52	0.86	0.597	0.90	0.666	1.00	1.30	2.000	No
140	9.22	0.53	0.00	0.53	0.86	0.596	0.90	0.665	1.00	1.30	2.000	No
141	9.27	0.53	0.00	0.53	0.86	0.595	0.90	0.664	1.00	1.30	2.000	No
142	9.32	0.53	0.00	0.53	0.85	0.594	0.90	0.663	1.00	1.30	2.000	No
143	9.40	0.54	0.00	0.54	0.85	0.593	0.90	0.662	1.00	1.30	2.000	No
144	9.47	0.54	0.00	0.54	0.85	0.592	0.90	0.661	1.00	1.30	2.000	No
145	9.52	0.55	0.00	0.55	0.85	0.592	0.90	0.660	1.00	1.30	2.000	No
146	9.59	0.55	0.00	0.55	0.85	0.591	0.90	0.659	1.00	1.30	2.000	No
147	9.66	0.55	0.00	0.55	0.85	0.590	0.90	0.658	1.00	1.30	2.000	No
148	9.72	0.56	0.00	0.56	0.85	0.589	0.90	0.658	1.00	1.30	2.000	No
149	9.81	0.56	0.00	0.56	0.85	0.588	0.90	0.656	1.00	1.30	2.000	No
150	9.86	0.57	0.00	0.57	0.84	0.587	0.90	0.655	1.00	1.30	2.000	No
151	9.92	0.57	0.00	0.57	0.84	0.586	0.90	0.655	1.00	1.30	2.000	No
152	10.01	0.57	0.00	0.57	0.84	0.585	0.90	0.653	1.00	1.30	2.000	No
153	10.05	0.58	0.00	0.58	0.84	0.585	0.90	0.653	1.00	1.30	2.000	No
154	10.11	0.58	0.00	0.58	0.84	0.584	0.90	0.652	1.00	1.30	2.000	No
155	10.17	0.58	0.00	0.58	0.84	0.583	0.90	0.651	1.00	1.30	2.000	No
156	10.26	0.59	0.00	0.59	0.84	0.582	0.90	0.650	1.00	1.30	2.000	No
157	10.31	0.59	0.00	0.59	0.84	0.581	0.90	0.649	1.00	1.30	2.000	No
158	10.40	0.60	0.00	0.60	0.83	0.580	0.90	0.648	1.00	1.30	2.000	No
159	10.45	0.60	0.00	0.60	0.83	0.579	0.90	0.647	1.00	1.30	2.000	No
160	10.51	0.61	0.00	0.61	0.83	0.579	0.90	0.646	1.00	1.30	2.000	No
161	10.59	0.61	0.00	0.61	0.83	0.578	0.90	0.645	1.00	1.30	2.000	No
162	10.66	0.61	0.00	0.61	0.83	0.577	0.90	0.644	1.00	1.30	2.000	No
163	10.71	0.62	0.00	0.62	0.83	0.576	0.90	0.643	1.00	1.30	2.000	No
164	10.78	0.62	0.00	0.62	0.83	0.575	0.90	0.642	1.00	1.30	2.000	No
165	10.86	0.63	0.00	0.63	0.83	0.574	0.90	0.641	1.00	1.30	2.000	No
166	10.89	0.63	0.00	0.63	0.82	0.574	0.90	0.640	1.00	1.30	2.000	No
167	11.00	0.64	0.00	0.64	0.82	0.572	0.90	0.639	1.00	1.30	2.000	No
168	11.05	0.64	0.00	0.64	0.82	0.571	0.90	0.638	1.00	1.30	2.000	No
169	11.11	0.64	0.00	0.64	0.82	0.571	0.90	0.637	1.00	1.30	2.000	No
170	11.16	0.65	0.00	0.65	0.82	0.570	0.90	0.636	1.00	1.30	2.000	No
171	11.26	0.65	0.00	0.65	0.82	0.569	0.90	0.635	1.00	1.30	2.000	No
172	11.31	0.65	0.00	0.65	0.82	0.568	0.90	0.634	1.00	1.30	2.000	No
173	11.36	0.66	0.00	0.66	0.82	0.567	0.90	0.633	1.00	1.30	2.000	No
174	11.45	0.66	0.00	0.66	0.81	0.566	0.90	0.632	1.00	1.30	2.000	No
175	11.51	0.67	0.00	0.67	0.81	0.565	0.90	0.631	1.00	1.30	2.000	No
176	11.56	0.67	0.00	0.67	0.81	0.565	0.90	0.630	1.00	1.30	2.000	No
177	11.62	0.67	0.00	0.67	0.81	0.564	0.90	0.629	1.00	1.30	2.000	No
178	11.70	0.68	0.00	0.68	0.81	0.563	0.90	0.628	1.00	1.30	2.000	No
179	11.76	0.68	0.00	0.68	0.81	0.562	0.90	0.627	1.00	1.30	2.000	No
180	11.86	0.69	0.00	0.69	0.81	0.560	0.90	0.626	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
181	11.90	0.69	0.00	0.69	0.80	0.560	0.90	0.625	1.00	1.30	2.000	No
182	11.96	0.69	0.00	0.69	0.80	0.559	0.90	0.624	1.00	1.30	2.000	No
183	12.01	0.70	0.00	0.70	0.80	0.558	0.90	0.623	1.00	1.30	2.000	No
184	12.08	0.70	0.00	0.70	0.80	0.557	0.90	0.622	1.00	1.30	2.000	No
185	12.14	0.71	0.00	0.71	0.80	0.557	0.90	0.621	1.00	1.30	2.000	No
186	12.22	0.71	0.00	0.71	0.80	0.556	0.90	0.620	1.00	1.30	2.000	No
187	12.29	0.72	0.00	0.72	0.80	0.555	0.90	0.619	1.00	1.30	2.000	No
188	12.35	0.72	0.00	0.72	0.80	0.554	0.90	0.618	1.00	1.30	2.000	No
189	12.40	0.72	0.00	0.72	0.80	0.553	0.90	0.617	1.00	1.30	2.000	No
190	12.47	0.73	0.00	0.73	0.79	0.552	0.90	0.616	1.00	1.30	2.000	No
191	12.54	0.73	0.00	0.73	0.79	0.551	0.90	0.615	1.00	1.30	2.000	No
192	12.61	0.74	0.00	0.74	0.79	0.550	0.90	0.614	1.00	1.30	2.000	No
193	12.67	0.74	0.00	0.74	0.79	0.549	0.90	0.613	1.00	1.30	2.000	No
194	12.76	0.75	0.00	0.75	0.79	0.548	0.90	0.612	1.00	1.30	2.000	No
195	12.81	0.75	0.00	0.75	0.79	0.547	0.90	0.611	1.00	1.30	2.000	No
196	12.90	0.75	0.00	0.75	0.79	0.546	0.90	0.610	1.00	1.30	2.000	No
197	12.94	0.76	0.00	0.76	0.78	0.546	0.90	0.609	1.00	1.30	2.000	No
198	12.99	0.76	0.00	0.76	0.78	0.545	0.90	0.608	1.00	1.30	2.000	No
199	13.06	0.76	0.00	0.76	0.78	0.544	0.90	0.607	1.00	1.30	2.000	No
200	13.15	0.77	0.00	0.77	0.78	0.543	0.90	0.606	1.00	1.30	2.000	No
201	13.20	0.77	0.00	0.77	0.78	0.542	0.90	0.605	1.00	1.30	2.000	No
202	13.27	0.78	0.00	0.78	0.78	0.541	0.90	0.604	1.00	1.30	2.000	No
203	13.35	0.78	0.00	0.78	0.78	0.540	0.90	0.603	1.00	1.30	2.000	No
204	13.40	0.79	0.00	0.79	0.78	0.539	0.90	0.602	1.00	1.30	2.000	No
205	13.46	0.79	0.00	0.79	0.77	0.538	0.90	0.601	1.00	1.30	2.000	No
206	13.55	0.80	0.00	0.80	0.77	0.537	0.90	0.599	1.00	1.30	2.000	No
207	13.60	0.80	0.00	0.80	0.77	0.536	0.90	0.599	1.00	1.30	2.000	No
208	13.66	0.80	0.00	0.80	0.77	0.536	0.90	0.598	1.00	1.30	2.000	No
209	13.72	0.81	0.00	0.81	0.77	0.535	0.90	0.597	1.00	1.30	2.000	No
210	13.78	0.81	0.00	0.81	0.77	0.534	0.90	0.596	1.00	1.30	2.000	No
211	13.85	0.82	0.00	0.82	0.77	0.533	0.90	0.595	1.00	1.30	2.000	No
212	13.93	0.82	0.00	0.82	0.76	0.532	0.90	0.593	1.00	1.30	2.000	No
213	14.00	0.83	0.00	0.83	0.76	0.531	0.90	0.592	1.00	1.30	2.000	No
214	14.04	0.83	0.00	0.83	0.76	0.530	0.90	0.592	1.00	1.30	2.000	No
215	14.11	0.83	0.00	0.83	0.76	0.529	0.90	0.591	1.00	1.30	2.000	No
216	14.18	0.84	0.00	0.84	0.76	0.528	0.90	0.590	1.00	1.30	2.000	No
217	14.25	0.84	0.00	0.84	0.76	0.527	0.90	0.588	1.00	1.30	2.000	No
218	14.32	0.85	0.00	0.85	0.76	0.526	0.90	0.587	1.00	1.30	2.000	No
219	14.38	0.85	0.00	0.85	0.76	0.525	0.90	0.586	1.00	1.30	2.000	No
220	14.45	0.86	0.00	0.86	0.75	0.524	0.90	0.585	1.00	1.30	2.000	No
221	14.51	0.86	0.00	0.86	0.75	0.524	0.90	0.584	1.00	1.30	2.000	No
222	14.58	0.87	0.00	0.87	0.75	0.523	0.90	0.583	1.00	1.30	2.000	No
223	14.63	0.87	0.00	0.87	0.75	0.522	0.90	0.582	1.00	1.30	2.000	No
224	14.71	0.87	0.00	0.87	0.75	0.521	0.90	0.581	1.00	1.30	2.000	No
225	14.77	0.88	0.00	0.88	0.75	0.520	0.90	0.580	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
226	14.85	0.88	0.00	0.88	0.75	0.519	0.90	0.579	1.00	1.30	2.000	No
227	14.91	0.89	0.00	0.89	0.74	0.518	0.90	0.578	1.00	1.30	2.000	No
228	14.97	0.89	0.00	0.89	0.74	0.517	0.90	0.577	1.00	1.30	2.000	No
229	15.06	0.90	0.00	0.90	0.74	0.516	0.90	0.576	1.00	1.30	2.000	No
230	15.11	0.90	0.00	0.90	0.74	0.515	0.90	0.575	1.00	1.30	2.000	No
231	15.17	0.91	0.00	0.91	0.74	0.514	0.90	0.574	1.00	1.30	2.000	No
232	15.26	0.91	0.00	0.91	0.74	0.513	0.90	0.572	1.00	1.30	2.000	No
233	15.32	0.92	0.00	0.92	0.74	0.512	0.90	0.572	1.00	1.30	2.000	No
234	15.37	0.92	0.00	0.92	0.74	0.511	0.90	0.571	1.00	1.30	2.000	No
235	15.43	0.92	0.00	0.92	0.73	0.510	0.90	0.570	1.00	1.30	2.000	No
236	15.51	0.93	0.00	0.93	0.73	0.509	0.90	0.568	1.00	1.30	2.000	No
237	15.57	0.93	0.00	0.93	0.73	0.508	0.90	0.568	1.00	1.30	2.000	No
238	15.62	0.94	0.00	0.94	0.73	0.508	0.90	0.567	1.00	1.30	2.000	No
239	15.72	0.94	0.00	0.94	0.73	0.506	0.90	0.565	1.00	1.30	2.000	No
240	15.77	0.95	0.00	0.95	0.73	0.506	0.90	0.564	1.00	1.30	2.000	No
241	15.82	0.95	0.00	0.95	0.73	0.505	0.90	0.563	1.00	1.30	2.000	No
242	15.88	0.95	0.00	0.95	0.72	0.504	0.90	0.562	1.00	1.30	2.000	No
243	15.95	0.96	0.00	0.96	0.72	0.503	0.90	0.561	1.00	1.30	2.000	No
244	16.01	0.96	0.00	0.96	0.72	0.502	0.90	0.560	1.00	1.30	2.000	No
245	16.09	0.97	0.00	0.97	0.72	0.501	0.90	0.559	1.00	1.30	2.000	No
246	16.15	0.97	0.00	0.97	0.72	0.500	0.90	0.558	1.00	1.30	2.000	No
247	16.22	0.98	0.00	0.98	0.72	0.499	0.90	0.557	1.00	1.30	2.000	No
248	16.28	0.98	0.00	0.98	0.72	0.498	0.90	0.556	1.00	1.30	2.000	No
249	16.34	0.99	0.00	0.99	0.72	0.497	0.90	0.555	1.00	1.30	2.000	No
250	16.41	0.99	0.00	0.99	0.71	0.496	0.90	0.554	1.00	1.30	2.000	No
251	16.48	0.99	0.00	0.99	0.71	0.495	0.90	0.553	1.00	1.30	2.000	No
252	16.56	1.00	0.00	1.00	0.71	0.494	0.90	0.552	1.00	1.30	2.000	No
253	16.61	1.00	0.00	1.00	0.71	0.494	0.90	0.551	1.00	1.30	2.000	No
254	16.67	1.01	0.00	1.01	0.71	0.493	0.90	0.550	1.00	1.30	2.000	No
255	16.75	1.01	0.00	1.01	0.71	0.492	0.90	0.549	1.00	1.30	2.000	No
256	16.81	1.02	0.00	1.02	0.71	0.491	0.90	0.548	1.00	1.30	2.000	No
257	16.89	1.02	0.00	1.02	0.70	0.490	0.90	0.546	1.00	1.30	2.000	No
258	16.93	1.02	0.00	1.02	0.70	0.489	0.90	0.546	1.00	1.30	2.000	No
259	17.01	1.03	0.00	1.03	0.70	0.488	0.90	0.545	1.00	1.30	2.000	No
260	17.07	1.03	0.00	1.03	0.70	0.487	0.90	0.544	1.00	1.30	2.000	No
261	17.14	1.04	0.00	1.04	0.70	0.486	0.90	0.543	1.00	1.30	2.000	No
262	17.21	1.04	0.00	1.04	0.70	0.485	0.90	0.541	1.00	1.30	2.000	No
263	17.27	1.05	0.00	1.05	0.70	0.484	0.90	0.540	1.00	1.30	2.000	No
264	17.34	1.05	0.00	1.05	0.69	0.483	0.90	0.539	1.00	1.30	2.000	No
265	17.39	1.06	0.00	1.06	0.69	0.482	0.90	0.538	1.00	1.30	2.000	No
266	17.46	1.06	0.00	1.06	0.69	0.481	0.90	0.537	1.00	1.30	2.000	No
267	17.54	1.07	0.00	1.07	0.69	0.480	0.90	0.536	1.00	1.30	2.000	No
268	17.60	1.07	0.00	1.07	0.69	0.479	0.90	0.535	1.00	1.30	2.000	No
269	17.66	1.07	0.00	1.07	0.69	0.479	0.90	0.534	1.00	1.30	2.000	No
270	17.73	1.08	0.00	1.08	0.69	0.478	0.90	0.533	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
271	17.80	1.08	0.00	1.08	0.69	0.477	0.90	0.532	1.00	1.30	2.000	No
272	17.86	1.09	0.00	1.09	0.68	0.476	0.90	0.531	1.00	1.30	2.000	No
273	17.93	1.09	0.00	1.09	0.68	0.475	0.90	0.530	1.00	1.30	2.000	No
274	18.00	1.10	0.00	1.10	0.68	0.474	0.90	0.529	1.00	1.30	2.000	No
275	18.09	1.10	0.00	1.10	0.68	0.472	0.90	0.527	1.00	1.30	2.000	No
276	18.12	1.10	0.00	1.10	0.68	0.472	0.90	0.527	1.00	1.30	2.000	No
277	18.18	1.11	0.00	1.11	0.68	0.471	0.90	0.526	1.00	1.30	2.000	No
278	18.24	1.11	0.00	1.11	0.68	0.470	0.90	0.525	1.00	1.30	2.000	No
279	18.31	1.12	0.00	1.12	0.67	0.469	0.90	0.524	1.00	1.30	2.000	No
280	18.37	1.12	0.00	1.12	0.67	0.468	0.90	0.523	1.00	1.30	2.000	No
281	18.45	1.13	0.00	1.13	0.67	0.467	0.90	0.522	1.00	1.30	2.000	No
282	18.50	1.13	0.00	1.13	0.67	0.467	0.90	0.521	1.00	1.30	2.000	No
283	18.58	1.14	0.00	1.14	0.67	0.466	0.90	0.520	1.00	1.30	2.000	No
284	18.64	1.14	0.00	1.14	0.67	0.465	0.90	0.519	1.00	1.30	2.000	No
285	18.71	1.14	0.00	1.14	0.67	0.464	0.90	0.517	1.00	1.30	2.000	No
286	18.78	1.15	0.00	1.15	0.67	0.463	0.90	0.516	1.00	1.30	2.000	No
287	18.84	1.15	0.00	1.15	0.66	0.462	0.90	0.515	1.00	1.30	2.000	No
288	18.93	1.16	0.00	1.16	0.66	0.461	0.90	0.514	1.00	1.30	2.000	No
289	18.97	1.16	0.00	1.16	0.66	0.460	0.90	0.513	1.00	1.30	2.000	No
290	19.04	1.17	0.00	1.17	0.66	0.459	0.90	0.512	1.00	1.30	2.000	No
291	19.13	1.17	0.00	1.17	0.66	0.458	0.90	0.511	1.00	1.30	2.000	No
292	19.17	1.18	0.00	1.18	0.66	0.457	0.90	0.510	1.00	1.30	2.000	No
293	19.24	1.18	0.00	1.18	0.66	0.456	0.90	0.509	1.00	1.30	2.000	No
294	19.33	1.19	0.00	1.19	0.65	0.455	0.90	0.508	1.00	1.30	2.000	No
295	19.38	1.19	0.00	1.19	0.65	0.454	0.90	0.507	1.00	1.30	2.000	No
296	19.44	1.19	0.00	1.19	0.65	0.453	0.90	0.506	1.00	1.30	2.000	No
297	19.50	1.20	0.00	1.20	0.65	0.453	0.90	0.505	1.00	1.30	2.000	No
298	19.57	1.20	0.00	1.20	0.65	0.452	0.90	0.504	1.00	1.30	2.000	No
299	19.63	1.20	0.00	1.20	0.65	0.451	0.90	0.503	1.00	1.30	2.000	No
300	19.68	1.21	0.00	1.21	0.65	0.450	0.90	0.502	1.00	1.30	2.000	No
301	19.76	1.21	0.00	1.21	0.65	0.449	0.90	0.501	1.00	1.30	2.000	No
302	19.83	1.22	0.00	1.22	0.64	0.448	0.90	0.500	1.00	1.30	2.000	No
303	19.88	1.22	0.00	1.22	0.64	0.447	0.90	0.499	1.00	1.30	2.000	No
304	19.96	1.23	0.00	1.23	0.64	0.446	0.90	0.498	1.00	1.30	2.000	No
305	20.02	1.23	0.00	1.23	0.64	0.445	0.90	0.497	1.00	1.30	2.000	No
306	20.09	1.23	0.00	1.23	0.64	0.444	0.90	0.496	1.00	1.30	2.000	No
307	20.18	1.24	0.00	1.24	0.64	0.443	0.90	0.494	1.00	1.30	2.000	No
308	20.22	1.24	0.00	1.24	0.64	0.442	0.90	0.494	1.00	1.30	2.000	No
309	20.28	1.25	0.00	1.25	0.63	0.442	0.90	0.493	1.00	1.30	2.000	No
310	20.35	1.25	0.00	1.25	0.63	0.441	0.90	0.492	1.00	1.30	2.000	No
311	20.41	1.25	0.00	1.25	0.63	0.440	0.90	0.491	1.00	1.30	2.000	No
312	20.47	1.26	0.00	1.26	0.63	0.439	0.90	0.490	1.00	1.30	2.000	No
313	20.56	1.26	0.00	1.26	0.63	0.438	0.90	0.489	1.00	1.30	2.000	No
314	20.61	1.27	0.00	1.27	0.63	0.437	0.90	0.488	1.00	1.30	2.000	No
315	20.67	1.27	0.00	1.27	0.63	0.436	0.90	0.487	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
316	20.76	1.28	0.00	1.28	0.63	0.435	0.90	0.485	1.00	1.30	2.000	No
317	20.82	1.28	0.00	1.28	0.62	0.434	0.90	0.485	1.00	1.30	2.000	No
318	20.87	1.28	0.00	1.28	0.62	0.433	0.90	0.484	1.00	1.30	2.000	No
319	20.96	1.29	0.00	1.29	0.62	0.432	0.90	0.482	1.00	1.30	2.000	No
320	21.00	1.29	0.00	1.29	0.62	0.432	0.90	0.482	1.00	1.30	2.000	No
321	21.07	1.30	0.00	1.30	0.62	0.431	0.90	0.481	1.00	1.30	2.000	No
322	21.15	1.30	0.00	1.30	0.62	0.430	0.90	0.480	1.00	1.30	2.000	No
323	21.21	1.30	0.00	1.30	0.62	0.429	0.90	0.479	1.00	1.30	2.000	No
324	21.26	1.31	0.00	1.31	0.62	0.428	0.90	0.478	1.00	1.30	2.000	No
325	21.35	1.31	0.00	1.31	0.61	0.427	0.90	0.476	1.00	1.30	2.000	No
326	21.41	1.32	0.00	1.32	0.61	0.426	0.90	0.476	1.00	1.30	2.000	No
327	21.47	1.32	0.00	1.32	0.61	0.425	0.90	0.475	1.00	1.30	2.000	No
328	21.53	1.33	0.00	1.33	0.61	0.424	0.90	0.474	1.00	1.30	2.000	No
329	21.61	1.33	0.00	1.33	0.61	0.423	0.90	0.472	1.00	1.30	2.000	No
330	21.67	1.34	0.00	1.34	0.61	0.422	0.90	0.471	1.00	1.30	2.000	No
331	21.76	1.34	0.00	1.34	0.61	0.421	0.90	0.470	1.00	1.30	2.000	No
332	21.80	1.34	0.00	1.34	0.60	0.421	0.90	0.470	1.00	1.30	2.000	No
333	21.86	1.35	0.00	1.35	0.60	0.420	0.90	0.469	1.00	1.30	2.000	No
334	21.95	1.35	0.00	1.35	0.60	0.419	0.90	0.467	1.00	1.30	2.000	No
335	21.98	1.36	0.00	1.36	0.60	0.418	0.90	0.467	1.00	1.30	2.000	No
336	22.05	1.36	0.00	1.36	0.60	0.417	0.90	0.466	1.00	1.30	2.000	No
337	22.12	1.36	0.00	1.36	0.60	0.416	0.90	0.465	1.00	1.30	2.000	No
338	22.20	1.37	0.00	1.37	0.60	0.415	0.90	0.464	1.00	1.30	2.000	No
339	22.25	1.37	0.00	1.37	0.60	0.415	0.90	0.463	1.00	1.30	2.000	No
340	22.31	1.38	0.00	1.38	0.59	0.414	0.90	0.462	1.00	1.30	2.000	No
341	22.39	1.38	0.00	1.38	0.59	0.413	0.90	0.461	1.00	1.30	2.000	No
342	22.44	1.38	0.00	1.38	0.59	0.412	0.90	0.460	1.00	1.30	2.000	No
343	22.54	1.39	0.00	1.39	0.59	0.411	0.90	0.458	1.00	1.30	2.000	No
344	22.58	1.39	0.00	1.39	0.59	0.410	0.90	0.458	1.00	1.30	2.000	No
345	22.65	1.40	0.00	1.40	0.59	0.409	0.90	0.457	1.00	1.30	2.000	No
346	22.71	1.40	0.00	1.40	0.59	0.409	0.90	0.456	1.00	1.30	2.000	No
347	22.80	1.41	0.00	1.41	0.59	0.407	0.90	0.455	1.00	1.30	2.000	No
348	22.84	1.41	0.00	1.41	0.58	0.407	0.90	0.454	1.00	1.30	2.000	No
349	22.91	1.41	0.00	1.41	0.58	0.406	0.90	0.453	1.00	1.30	2.000	No
350	22.97	1.42	0.00	1.42	0.58	0.405	0.90	0.452	1.00	1.30	2.000	No
351	23.04	1.42	0.00	1.42	0.58	0.404	0.90	0.451	1.00	1.30	2.000	No
352	23.10	1.42	0.00	1.42	0.58	0.403	0.90	0.450	1.00	1.30	2.000	No
353	23.20	1.43	0.00	1.43	0.58	0.402	0.90	0.449	1.00	1.30	2.000	No
354	23.23	1.43	0.00	1.43	0.58	0.402	0.90	0.448	1.00	1.30	2.000	No
355	23.30	1.44	0.00	1.44	0.58	0.401	0.90	0.447	1.00	1.30	2.000	No
356	23.40	1.44	0.00	1.44	0.57	0.399	0.90	0.446	1.00	1.30	2.000	No
357	23.44	1.45	0.00	1.45	0.57	0.399	0.90	0.445	1.00	1.30	2.000	No
358	23.50	1.45	0.00	1.45	0.57	0.398	0.90	0.444	1.00	1.30	2.000	No
359	23.57	1.45	0.00	1.45	0.57	0.397	0.90	0.443	1.00	1.30	2.000	No
360	23.64	1.46	0.00	1.46	0.57	0.396	0.90	0.442	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
361	23.70	1.46	0.00	1.46	0.57	0.396	0.90	0.442	1.00	1.30	2.000	No
362	23.76	1.47	0.00	1.47	0.57	0.395	0.90	0.441	1.00	1.30	2.000	No
363	23.83	1.47	0.00	1.47	0.57	0.394	0.90	0.440	1.00	1.30	2.000	No
364	23.90	1.47	0.00	1.47	0.56	0.393	0.90	0.439	1.00	1.30	2.000	No
365	23.96	1.48	0.00	1.48	0.56	0.392	0.90	0.438	1.00	1.30	2.000	No
366	24.02	1.48	0.00	1.48	0.56	0.391	0.90	0.437	1.00	1.30	2.000	No
367	24.10	1.49	0.00	1.49	0.56	0.390	0.90	0.436	1.00	1.30	2.000	No
368	24.15	1.49	0.00	1.49	0.56	0.390	0.90	0.435	1.00	1.30	2.000	No
369	24.25	1.50	0.00	1.50	0.56	0.388	0.90	0.434	1.00	1.30	2.000	No
370	24.30	1.50	0.00	1.50	0.56	0.388	0.90	0.433	1.00	1.30	2.000	No
371	24.37	1.50	0.00	1.50	0.56	0.387	0.90	0.432	1.00	1.30	2.000	No
372	24.43	1.51	0.00	1.51	0.56	0.386	0.90	0.431	1.00	1.30	2.000	No
373	24.49	1.51	0.00	1.51	0.55	0.385	0.90	0.430	1.00	1.30	2.000	No
374	24.54	1.51	0.00	1.51	0.55	0.385	0.90	0.429	1.00	1.30	2.000	No
375	24.64	1.52	0.00	1.52	0.55	0.384	0.90	0.428	1.00	1.30	2.000	No
376	24.69	1.52	0.00	1.52	0.55	0.383	0.90	0.427	1.00	1.30	2.000	No
377	24.74	1.53	0.00	1.53	0.55	0.382	0.90	0.427	1.00	1.30	2.000	No
378	24.80	1.53	0.00	1.53	0.55	0.381	0.90	0.426	1.00	1.30	2.000	No
379	24.89	1.53	0.00	1.53	0.55	0.380	0.90	0.424	1.00	1.30	2.000	No
380	24.94	1.54	0.00	1.54	0.55	0.380	0.90	0.424	1.00	1.30	2.000	No
381	25.00	1.54	0.00	1.54	0.54	0.379	0.90	0.423	1.00	1.30	2.000	No
382	25.08	1.55	0.00	1.55	0.54	0.378	0.90	0.422	1.00	1.30	2.000	No
383	25.14	1.55	0.00	1.55	0.54	0.377	0.90	0.421	1.00	1.30	2.000	No
384	25.23	1.55	0.00	1.55	0.54	0.376	0.90	0.420	1.00	1.30	2.000	No
385	25.27	1.56	0.00	1.56	0.54	0.376	0.90	0.419	1.00	1.30	2.000	No
386	25.34	1.56	0.00	1.56	0.54	0.375	0.90	0.418	1.00	1.30	2.000	No
387	25.41	1.57	0.00	1.57	0.54	0.374	0.90	0.417	1.00	1.30	2.000	No
388	25.47	1.57	0.00	1.57	0.54	0.373	0.90	0.417	1.00	1.30	2.000	No
389	25.53	1.57	0.00	1.57	0.54	0.372	0.90	0.416	1.00	1.30	2.000	No
390	25.62	1.58	0.00	1.58	0.53	0.371	0.90	0.414	1.00	1.30	2.000	No
391	25.68	1.58	0.00	1.58	0.53	0.371	0.90	0.414	1.00	1.30	2.000	No
392	25.73	1.59	0.00	1.59	0.53	0.370	0.90	0.413	1.00	1.30	2.000	No
393	25.80	1.59	0.00	1.59	0.53	0.369	0.90	0.412	1.00	1.30	2.000	No
394	25.88	1.59	0.00	1.59	0.53	0.368	0.90	0.411	1.00	1.30	2.000	No
395	25.94	1.60	0.00	1.60	0.53	0.367	0.90	0.410	1.00	1.30	2.000	No
396	25.98	1.60	0.00	1.60	0.53	0.367	0.90	0.410	1.00	1.30	2.000	No
397	26.06	1.61	0.00	1.61	0.53	0.366	0.90	0.409	1.00	1.30	2.000	No
398	26.13	1.61	0.00	1.61	0.53	0.365	0.90	0.408	1.00	1.30	2.000	No
399	26.18	1.61	0.00	1.61	0.52	0.365	0.90	0.407	1.00	1.30	2.000	No
400	26.28	1.62	0.00	1.62	0.52	0.363	0.90	0.406	1.00	1.30	2.000	No
401	26.33	1.62	0.00	1.62	0.52	0.363	0.90	0.405	1.00	1.30	2.000	No
402	26.43	1.63	0.00	1.63	0.52	0.362	0.90	0.404	1.00	1.30	2.000	No
403	26.48	1.63	0.00	1.63	0.52	0.361	0.90	0.403	1.00	1.30	2.000	No
404	26.52	1.63	0.00	1.63	0.52	0.360	0.90	0.402	1.00	1.30	2.000	No
405	26.58	1.64	0.00	1.64	0.52	0.360	0.90	0.402	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
406	26.68	1.64	0.00	1.64	0.52	0.359	0.90	0.400	1.00	1.30	2.000	No
407	26.72	1.64	0.00	1.64	0.51	0.358	0.90	0.400	1.00	1.30	2.000	No
408	26.78	1.65	0.00	1.65	0.51	0.357	0.90	0.399	1.00	1.30	2.000	No
409	26.88	1.65	0.00	1.65	0.51	0.356	0.90	0.398	1.00	1.30	2.000	No
410	26.91	1.66	0.00	1.66	0.51	0.356	0.90	0.397	1.00	1.30	2.000	No
411	26.98	1.66	0.00	1.66	0.51	0.355	0.90	0.396	1.00	1.30	2.000	No
412	27.07	1.67	0.00	1.67	0.51	0.354	0.90	0.395	1.00	1.30	2.000	No
413	27.10	1.67	0.00	1.67	0.51	0.354	0.90	0.395	1.00	1.30	2.000	No
414	27.17	1.67	0.00	1.67	0.51	0.353	0.90	0.394	1.00	1.30	2.000	No
415	27.23	1.68	0.00	1.68	0.51	0.352	0.90	0.393	1.00	1.30	2.000	No
416	27.32	1.68	0.00	1.68	0.50	0.351	0.90	0.392	1.00	1.30	2.000	No
417	27.37	1.68	0.00	1.68	0.50	0.351	0.90	0.391	1.00	1.30	2.000	No
418	27.43	1.69	0.00	1.69	0.50	0.350	0.90	0.391	1.00	1.30	2.000	No
419	27.50	1.69	0.00	1.69	0.50	0.349	0.90	0.390	1.00	1.30	2.000	No
420	27.57	1.69	0.00	1.69	0.50	0.348	0.90	0.389	1.00	1.30	2.000	No
421	27.65	1.70	0.00	1.70	0.50	0.347	0.90	0.388	1.00	1.30	2.000	No
422	27.71	1.70	0.00	1.70	0.50	0.347	0.90	0.387	1.00	1.30	2.000	No
423	27.76	1.71	0.00	1.71	0.50	0.346	0.90	0.386	1.00	1.30	2.000	No
424	27.84	1.71	0.00	1.71	0.50	0.345	0.90	0.385	1.00	1.30	2.000	No
425	27.90	1.71	0.00	1.71	0.50	0.345	0.90	0.385	1.00	1.30	2.000	No
426	27.97	1.72	0.00	1.72	0.49	0.344	0.90	0.384	1.00	1.30	2.000	No
427	28.03	1.72	0.00	1.72	0.49	0.343	0.90	0.383	1.00	1.30	2.000	No
428	28.10	1.73	0.00	1.73	0.49	0.342	0.90	0.382	1.00	1.30	2.000	No
429	28.16	1.73	0.00	1.73	0.49	0.342	0.90	0.381	1.00	1.30	2.000	No
430	28.22	1.73	0.00	1.73	0.49	0.341	0.90	0.381	1.00	1.30	2.000	No
431	28.30	1.74	0.00	1.74	0.49	0.340	0.90	0.380	1.00	1.30	2.000	No
432	28.35	1.74	0.00	1.74	0.49	0.340	0.90	0.379	1.00	1.30	2.000	No
433	28.42	1.75	0.00	1.75	0.49	0.339	0.90	0.378	1.00	1.30	2.000	No
434	28.50	1.75	0.00	1.75	0.49	0.338	0.90	0.377	1.00	1.30	2.000	No
435	28.55	1.75	0.00	1.75	0.49	0.337	0.90	0.377	1.00	1.30	2.000	No
436	28.61	1.76	0.00	1.76	0.48	0.337	0.90	0.376	1.00	1.30	2.000	No
437	28.68	1.76	0.00	1.76	0.48	0.336	0.90	0.375	1.00	1.30	2.000	No
438	28.76	1.77	0.00	1.77	0.48	0.335	0.90	0.374	1.00	1.30	2.000	No
439	28.81	1.77	0.00	1.77	0.48	0.335	0.90	0.373	1.00	1.30	2.000	No
440	28.90	1.78	0.00	1.78	0.48	0.334	0.90	0.372	1.00	1.30	2.000	No
441	28.96	1.78	0.00	1.78	0.48	0.333	0.90	0.372	1.00	1.30	2.000	No
442	29.01	1.78	0.00	1.78	0.48	0.332	0.90	0.371	1.00	1.30	2.000	No
443	29.11	1.79	0.00	1.79	0.48	0.331	0.90	0.370	1.00	1.30	2.000	No
444	29.16	1.79	0.00	1.79	0.48	0.331	0.90	0.369	1.00	1.30	2.000	No
445	29.21	1.79	0.00	1.79	0.47	0.330	0.90	0.369	1.00	1.30	2.000	No
446	29.30	1.80	0.00	1.80	0.47	0.329	0.90	0.368	1.00	1.30	2.000	No
447	29.34	1.80	0.00	1.80	0.47	0.329	0.90	0.367	1.00	1.30	2.000	No
448	29.41	1.81	0.00	1.81	0.47	0.328	0.90	0.366	1.00	1.30	2.000	No
449	29.49	1.81	0.00	1.81	0.47	0.327	0.90	0.365	1.00	1.30	2.000	No
450	29.54	1.81	0.00	1.81	0.47	0.327	0.90	0.365	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
451	29.60	1.82	0.00	1.82	0.47	0.326	0.90	0.364	1.00	1.30	2.000	No
452	29.66	1.82	0.00	1.82	0.47	0.326	0.90	0.363	1.00	1.30	2.000	No
453	29.75	1.83	0.00	1.83	0.47	0.325	0.90	0.362	1.00	1.30	2.000	No
454	29.79	1.83	0.00	1.83	0.47	0.324	0.90	0.362	1.00	1.30	2.000	No
455	29.86	1.83	0.00	1.83	0.47	0.324	0.90	0.361	1.00	1.30	2.000	No
456	29.95	1.84	0.00	1.84	0.46	0.323	0.90	0.360	1.00	1.30	2.000	No
457	29.99	1.84	0.00	1.84	0.46	0.322	0.90	0.360	1.00	1.30	2.000	No
458	30.05	1.85	0.00	1.85	0.46	0.322	0.90	0.359	1.00	1.30	2.000	No
459	30.16	1.85	0.00	1.85	0.46	0.320	0.90	0.358	1.00	1.30	2.000	No
460	30.19	1.85	0.00	1.85	0.46	0.320	0.90	0.357	1.00	1.30	2.000	No
461	30.25	1.86	0.00	1.86	0.46	0.319	0.90	0.357	1.00	1.30	2.000	No
462	30.34	1.86	0.00	1.86	0.46	0.319	0.90	0.356	1.00	1.30	2.000	No
463	30.39	1.87	0.00	1.87	0.46	0.318	0.90	0.355	1.00	1.30	2.000	No
464	30.45	1.87	0.00	1.87	0.46	0.317	0.90	0.354	1.00	1.30	2.000	No
465	30.53	1.88	0.00	1.88	0.46	0.317	0.90	0.354	1.00	1.30	2.000	No
466	30.60	1.88	0.00	1.88	0.45	0.316	0.90	0.353	1.00	1.30	2.000	No
467	30.64	1.88	0.00	1.88	0.45	0.316	0.90	0.352	1.00	1.30	2.000	No
468	30.74	1.89	0.00	1.89	0.45	0.315	0.90	0.351	1.00	1.30	2.000	No
469	30.77	1.89	0.00	1.89	0.45	0.314	0.90	0.351	1.00	1.30	2.000	No
470	30.84	1.89	0.00	1.89	0.45	0.314	0.90	0.350	1.00	1.30	2.000	No
471	30.91	1.90	0.00	1.90	0.45	0.313	0.90	0.349	1.00	1.30	2.000	No
472	31.01	1.90	0.00	1.90	0.45	0.312	0.90	0.348	1.00	1.30	2.000	No
473	31.05	1.91	0.00	1.91	0.45	0.312	0.90	0.348	1.00	1.30	2.000	No
474	31.11	1.91	0.00	1.91	0.45	0.311	0.90	0.347	1.00	1.30	2.000	No
475	31.17	1.91	0.00	1.91	0.45	0.310	0.90	0.347	1.00	1.30	2.000	No
476	31.23	1.92	0.00	1.92	0.45	0.310	0.90	0.346	1.00	1.30	2.000	No
477	31.30	1.92	0.00	1.92	0.44	0.309	0.90	0.345	1.00	1.30	2.000	No
478	31.40	1.93	0.00	1.93	0.44	0.308	0.90	0.344	1.00	1.30	2.000	No
479	31.44	1.93	0.00	1.93	0.44	0.308	0.90	0.344	1.00	1.30	2.000	No
480	31.50	1.93	0.00	1.93	0.44	0.307	0.90	0.343	1.00	1.30	2.000	No
481	31.57	1.94	0.00	1.94	0.44	0.307	0.90	0.342	1.00	1.30	2.000	No
482	31.63	1.94	0.00	1.94	0.44	0.306	0.90	0.342	1.00	1.30	2.000	No
483	31.71	1.95	0.00	1.95	0.44	0.305	0.90	0.341	1.00	1.30	2.000	No
484	31.76	1.95	0.00	1.95	0.44	0.305	0.90	0.340	1.00	1.30	2.000	No
485	31.84	1.96	0.00	1.96	0.44	0.304	0.90	0.339	1.00	1.30	2.000	No
486	31.91	1.96	0.00	1.96	0.44	0.303	0.90	0.339	1.00	1.30	2.000	No
487	31.96	1.96	0.00	1.96	0.44	0.303	0.90	0.338	1.00	1.30	2.000	No
488	32.02	1.97	0.00	1.97	0.43	0.302	0.90	0.338	1.00	1.30	2.000	No
489	32.10	1.97	0.00	1.97	0.43	0.302	0.90	0.337	1.00	1.30	2.000	No
490	32.15	1.98	0.00	1.98	0.43	0.301	0.90	0.336	1.00	1.30	2.000	No
491	32.24	1.98	0.00	1.98	0.43	0.300	0.90	0.335	1.00	1.30	2.000	No
492	32.30	1.99	0.00	1.99	0.43	0.300	0.90	0.335	1.00	1.30	2.000	No
493	32.36	1.99	0.00	1.99	0.43	0.299	0.90	0.334	1.00	1.30	2.000	No
494	32.43	1.99	0.00	1.99	0.43	0.299	0.90	0.333	1.00	1.30	2.000	No
495	32.48	2.00	0.00	2.00	0.43	0.298	0.90	0.333	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
496	32.55	2.00	0.00	2.00	0.43	0.298	0.90	0.332	1.00	1.30	2.000	No
497	32.66	2.01	0.00	2.01	0.43	0.297	0.90	0.331	1.00	1.30	2.000	No
498	32.70	2.01	0.00	2.01	0.43	0.296	0.90	0.331	1.00	1.30	2.000	No
499	32.75	2.01	0.00	2.01	0.43	0.296	0.90	0.330	1.00	1.30	2.000	No
500	32.82	2.02	0.00	2.02	0.42	0.295	0.90	0.330	1.00	1.30	2.000	No
501	32.89	2.02	0.00	2.02	0.42	0.295	0.90	0.329	1.00	1.30	2.000	No
502	32.95	2.02	0.00	2.02	0.42	0.294	0.90	0.328	1.00	1.30	2.000	No
503	33.01	2.03	0.00	2.03	0.42	0.294	0.90	0.328	1.00	1.30	2.000	No
504	33.10	2.03	0.00	2.03	0.42	0.293	0.90	0.327	1.00	1.30	2.000	No
505	33.15	2.04	0.00	2.04	0.42	0.292	0.90	0.326	1.00	1.30	2.000	No
506	33.23	2.04	0.00	2.04	0.42	0.292	0.90	0.325	1.00	1.30	2.000	No
507	33.29	2.05	0.00	2.05	0.42	0.291	0.90	0.325	1.00	1.30	2.000	No
508	33.34	2.05	0.00	2.05	0.42	0.291	0.90	0.324	1.00	1.30	2.000	No
509	33.40	2.05	0.00	2.05	0.42	0.290	0.90	0.324	1.00	1.30	2.000	No
510	33.49	2.06	0.00	2.06	0.42	0.289	0.90	0.323	1.00	1.30	2.000	No
511	33.54	2.06	0.00	2.06	0.42	0.289	0.90	0.323	1.00	1.30	2.000	No
512	33.63	2.07	0.00	2.07	0.41	0.288	0.90	0.322	1.00	1.30	2.000	No
513	33.67	2.07	0.00	2.07	0.41	0.288	0.90	0.321	1.00	1.30	2.000	No
514	33.75	2.07	0.00	2.07	0.41	0.287	0.90	0.321	1.00	1.30	2.000	No
515	33.80	2.08	0.00	2.08	0.41	0.287	0.90	0.320	1.00	1.30	2.000	No
516	33.87	2.08	0.00	2.08	0.41	0.286	0.90	0.319	1.00	1.30	2.000	No
517	33.94	2.09	0.00	2.09	0.41	0.286	0.90	0.319	1.00	1.30	2.000	No
518	34.02	2.09	0.00	2.09	0.41	0.285	0.90	0.318	1.00	1.30	2.000	No
519	34.09	2.10	0.00	2.10	0.41	0.284	0.90	0.317	1.00	1.30	2.000	No
520	34.13	2.10	0.00	2.10	0.41	0.284	0.90	0.317	1.00	1.30	2.000	No
521	34.19	2.10	0.00	2.10	0.41	0.284	0.90	0.317	1.00	1.30	2.000	No
522	34.26	2.11	0.00	2.11	0.41	0.283	0.90	0.316	1.00	1.30	2.000	No
523	34.34	2.11	0.00	2.11	0.41	0.282	0.90	0.315	1.00	1.30	2.000	No
524	34.38	2.11	0.00	2.11	0.41	0.282	0.90	0.315	1.00	1.30	2.000	No
525	34.48	2.12	0.00	2.12	0.40	0.281	0.90	0.314	1.00	1.30	2.000	No
526	34.54	2.12	0.00	2.12	0.40	0.281	0.90	0.313	1.00	1.30	2.000	No
527	34.58	2.13	0.00	2.13	0.40	0.280	0.90	0.313	1.00	1.30	2.000	No
528	34.67	2.13	0.00	2.13	0.40	0.280	0.90	0.312	1.00	1.30	2.000	No
529	34.73	2.14	0.00	2.14	0.40	0.279	0.90	0.312	1.00	1.30	2.000	No
530	34.78	2.14	0.00	2.14	0.40	0.279	0.90	0.311	1.00	1.30	2.000	No
531	34.85	2.14	0.00	2.14	0.40	0.278	0.90	0.311	1.00	1.30	2.000	No
532	34.92	2.15	0.00	2.15	0.40	0.278	0.90	0.310	1.00	1.30	2.000	No
533	34.98	2.15	0.00	2.15	0.40	0.277	0.90	0.309	1.00	1.30	2.000	No
534	35.05	2.15	0.00	2.15	0.40	0.277	0.90	0.309	1.00	1.30	2.000	No
535	35.12	2.16	0.00	2.16	0.40	0.276	0.90	0.308	1.00	1.30	2.000	No
536	35.18	2.16	0.00	2.16	0.40	0.276	0.90	0.308	1.00	1.30	2.000	No
537	35.24	2.17	0.00	2.17	0.40	0.275	0.90	0.307	1.00	1.30	2.000	No
538	35.31	2.17	0.00	2.17	0.39	0.275	0.90	0.307	1.00	1.30	2.000	No
539	35.39	2.18	0.00	2.18	0.39	0.274	0.90	0.306	1.00	1.30	2.000	No
540	35.44	2.18	0.00	2.18	0.39	0.274	0.90	0.306	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
541	35.51	2.18	0.00	2.18	0.39	0.273	0.90	0.305	1.00	1.30	2.000	No
542	35.57	2.19	0.00	2.19	0.39	0.273	0.90	0.304	1.00	1.30	2.000	No
543	35.64	2.19	0.00	2.19	0.39	0.272	0.90	0.304	1.00	1.30	2.000	No
544	35.70	2.20	0.00	2.20	0.39	0.272	0.90	0.303	1.00	1.30	2.000	No
545	35.78	2.20	0.00	2.20	0.39	0.271	0.90	0.303	1.00	1.30	2.000	No
546	35.84	2.20	0.00	2.20	0.39	0.271	0.90	0.302	1.00	1.30	2.000	No
547	35.90	2.21	0.00	2.21	0.39	0.270	0.90	0.302	1.00	1.30	2.000	No
548	35.96	2.21	0.00	2.21	0.39	0.270	0.90	0.301	1.00	1.30	2.000	No
549	36.05	2.22	0.00	2.22	0.39	0.269	0.90	0.300	1.00	1.30	2.000	No
550	36.10	2.22	0.00	2.22	0.39	0.269	0.90	0.300	1.00	1.30	2.000	No
551	36.16	2.22	0.00	2.22	0.39	0.268	0.90	0.300	1.00	1.30	2.000	No
552	36.24	2.23	0.00	2.23	0.39	0.268	0.90	0.299	1.00	1.30	2.000	No
553	36.29	2.23	0.00	2.23	0.38	0.267	0.90	0.299	1.00	1.30	2.000	No
554	36.37	2.24	0.00	2.24	0.38	0.267	0.90	0.298	1.00	1.30	2.000	No
555	36.44	2.24	0.00	2.24	0.38	0.266	0.90	0.297	1.00	1.30	2.000	No
556	36.49	2.24	0.00	2.24	0.38	0.266	0.90	0.297	1.00	1.30	2.000	No
557	36.56	2.25	0.00	2.25	0.38	0.266	0.90	0.296	1.00	1.30	2.000	No
558	36.63	2.25	0.00	2.25	0.38	0.265	0.90	0.296	1.00	1.30	2.000	No
559	36.70	2.26	0.00	2.26	0.38	0.265	0.90	0.295	1.00	1.30	2.000	No
560	36.75	2.26	0.00	2.26	0.38	0.264	0.90	0.295	1.00	1.30	2.000	No
561	36.84	2.27	0.00	2.27	0.38	0.264	0.90	0.294	1.00	1.30	2.000	No
562	36.90	2.27	0.00	2.27	0.38	0.263	0.90	0.294	1.00	1.30	2.000	No
563	36.95	2.27	0.00	2.27	0.38	0.263	0.90	0.293	1.00	1.30	2.000	No
564	37.03	2.28	0.00	2.28	0.38	0.262	0.90	0.293	1.00	1.30	2.000	No
565	37.09	2.28	0.00	2.28	0.38	0.262	0.90	0.292	1.00	1.30	2.000	No
566	37.15	2.28	0.00	2.28	0.38	0.261	0.90	0.292	1.00	1.30	2.000	No
567	37.22	2.29	0.00	2.29	0.38	0.261	0.90	0.291	1.00	1.30	2.000	No
568	37.29	2.29	0.00	2.29	0.37	0.260	0.90	0.291	1.00	1.30	2.000	No
569	37.34	2.30	0.00	2.30	0.37	0.260	0.90	0.290	1.00	1.30	2.000	No
570	37.41	2.30	0.00	2.30	0.37	0.260	0.90	0.290	1.00	1.30	2.000	No
571	37.48	2.31	0.00	2.31	0.37	0.259	0.90	0.289	1.00	1.30	2.000	No
572	37.54	2.31	0.00	2.31	0.37	0.259	0.90	0.289	1.00	1.30	2.000	No
573	37.60	2.31	0.00	2.31	0.37	0.258	0.90	0.288	1.00	1.30	2.000	No
574	37.67	2.32	0.00	2.32	0.37	0.258	0.90	0.288	1.00	1.30	2.000	No
575	37.74	2.32	0.00	2.32	0.37	0.257	0.90	0.287	1.00	1.30	2.000	No
576	37.81	2.33	0.00	2.33	0.37	0.257	0.90	0.287	1.00	1.30	2.000	No
577	37.87	2.33	0.00	2.33	0.37	0.257	0.90	0.286	1.00	1.30	2.000	No
578	37.93	2.34	0.00	2.34	0.37	0.256	0.90	0.286	1.00	1.30	2.000	No
579	38.00	2.34	0.00	2.34	0.37	0.256	0.90	0.285	1.00	1.30	2.000	No
580	38.08	2.35	0.00	2.35	0.37	0.255	0.90	0.285	1.00	1.30	2.000	No
581	38.16	2.35	0.00	2.35	0.37	0.255	0.90	0.284	1.00	1.30	2.000	No
582	38.21	2.35	0.00	2.35	0.37	0.254	0.90	0.284	1.00	1.30	2.000	No
583	38.26	2.36	0.00	2.36	0.37	0.254	0.90	0.284	1.00	1.30	2.000	No
584	38.33	2.36	0.00	2.36	0.36	0.254	0.90	0.283	1.00	1.30	2.000	No
585	38.39	2.37	0.00	2.37	0.36	0.253	0.90	0.283	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
586	38.46	2.37	0.00	2.37	0.36	0.253	0.90	0.282	1.00	1.30	2.000	No
587	38.52	2.37	0.00	2.37	0.36	0.252	0.90	0.282	1.00	1.30	2.000	No
588	38.61	2.38	0.00	2.38	0.36	0.252	0.90	0.281	1.00	1.30	2.000	No
589	38.66	2.38	0.00	2.38	0.36	0.252	0.90	0.281	1.00	1.30	2.000	No
590	38.74	2.39	0.00	2.39	0.36	0.251	0.90	0.280	1.00	1.30	2.000	No
591	38.79	2.39	0.00	2.39	0.36	0.251	0.90	0.280	1.00	1.30	2.000	No
592	38.85	2.40	0.00	2.40	0.36	0.250	0.90	0.280	1.00	1.30	2.000	No
593	38.94	2.40	0.00	2.40	0.36	0.250	0.90	0.279	1.00	1.30	2.000	No
594	38.99	2.40	0.00	2.40	0.36	0.250	0.90	0.279	1.00	1.30	2.000	No
595	39.05	2.41	0.00	2.41	0.36	0.249	0.90	0.278	1.00	1.30	2.000	No
596	39.12	2.41	0.00	2.41	0.36	0.249	0.90	0.278	1.00	1.30	2.000	No
597	39.20	2.42	0.00	2.42	0.36	0.248	0.90	0.277	1.00	1.30	2.000	No
598	39.26	2.42	0.00	2.42	0.36	0.248	0.90	0.277	1.00	1.30	2.000	No
599	39.33	2.43	0.00	2.43	0.36	0.248	0.90	0.276	1.00	1.30	2.000	No
600	39.39	2.43	0.00	2.43	0.36	0.247	0.90	0.276	1.00	1.30	2.000	No
601	39.44	2.43	0.00	2.43	0.35	0.247	0.90	0.276	1.00	1.30	2.000	No
602	39.50	2.44	0.00	2.44	0.35	0.247	0.90	0.275	1.00	1.30	2.000	No
603	39.57	2.44	0.00	2.44	0.35	0.246	0.90	0.275	1.00	1.30	2.000	No
604	39.64	2.45	0.00	2.45	0.35	0.246	0.90	0.274	1.00	1.30	2.000	No
605	39.74	2.45	0.00	2.45	0.35	0.245	0.90	0.274	1.00	1.30	2.000	No
606	39.79	2.46	0.00	2.46	0.35	0.245	0.90	0.273	1.00	1.30	2.000	No
607	39.84	2.46	0.00	2.46	0.35	0.245	0.90	0.273	1.00	1.30	2.000	No
608	39.90	2.46	0.00	2.46	0.35	0.244	0.90	0.273	1.00	1.30	2.000	No
609	39.99	2.47	0.00	2.47	0.35	0.244	0.90	0.272	1.00	1.30	2.000	No
610	40.05	2.47	0.00	2.47	0.35	0.244	0.90	0.272	1.00	1.30	0.353	No
611	40.12	2.48	0.00	2.47	0.35	0.243	0.90	0.272	1.00	1.30	0.353	No
612	40.16	2.48	0.01	2.47	0.35	0.243	0.90	0.272	1.00	1.30	0.353	No
613	40.23	2.48	0.01	2.48	0.35	0.243	0.90	0.271	1.00	1.30	0.353	No
614	40.29	2.49	0.01	2.48	0.35	0.243	0.90	0.271	1.00	1.30	0.353	No
615	40.39	2.49	0.01	2.48	0.35	0.243	0.90	0.271	1.00	1.30	0.352	No
616	40.44	2.50	0.01	2.48	0.35	0.243	0.90	0.271	1.00	1.30	0.352	No
617	40.50	2.50	0.02	2.49	0.35	0.242	0.90	0.271	1.00	1.30	0.352	No
618	40.58	2.51	0.02	2.49	0.35	0.242	0.90	0.270	1.00	1.30	0.351	No
619	40.64	2.51	0.02	2.49	0.35	0.242	0.90	0.270	1.00	1.30	0.351	No
620	40.69	2.51	0.02	2.49	0.34	0.242	0.90	0.270	1.00	1.30	0.351	No
621	40.75	2.52	0.02	2.49	0.34	0.242	0.90	0.270	1.00	1.30	0.351	No
622	40.84	2.52	0.03	2.50	0.34	0.242	0.90	0.270	1.00	1.30	0.351	No
623	40.90	2.53	0.03	2.50	0.34	0.241	0.90	0.270	1.00	1.30	0.350	No
624	40.99	2.53	0.03	2.50	0.34	0.241	0.90	0.269	1.00	1.30	0.350	No
625	41.04	2.53	0.03	2.50	0.34	0.241	0.90	0.269	1.00	1.30	0.350	No
626	41.08	2.54	0.03	2.50	0.34	0.241	0.90	0.269	1.00	1.30	0.350	No
627	41.17	2.54	0.04	2.51	0.34	0.241	0.90	0.269	1.00	1.30	0.349	No
628	41.22	2.54	0.04	2.51	0.34	0.241	0.90	0.269	1.00	1.30	0.349	No
629	41.28	2.55	0.04	2.51	0.34	0.241	0.90	0.269	1.00	1.30	0.349	No
630	41.34	2.55	0.04	2.51	0.34	0.240	0.90	0.268	1.00	1.30	0.349	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
631	41.41	2.56	0.04	2.51	0.34	0.240	0.90	0.268	1.00	1.30	0.349	No
632	41.49	2.56	0.05	2.51	0.34	0.240	0.90	0.268	1.00	1.30	0.348	No
633	41.54	2.56	0.05	2.52	0.34	0.240	0.90	0.268	1.00	1.30	0.348	No
634	41.62	2.57	0.05	2.52	0.34	0.240	0.90	0.268	1.00	1.30	0.348	No
635	41.69	2.57	0.05	2.52	0.34	0.240	0.90	0.267	1.00	1.30	0.348	No
636	41.74	2.58	0.05	2.52	0.34	0.239	0.90	0.267	1.00	1.30	0.348	No
637	41.82	2.58	0.06	2.52	0.34	0.239	0.90	0.267	1.00	1.30	0.347	No
638	41.87	2.58	0.06	2.52	0.34	0.239	0.90	0.267	1.00	1.30	0.347	No
639	41.94	2.59	0.06	2.53	0.34	0.239	0.90	0.267	1.00	1.30	0.347	No
640	42.01	2.59	0.06	2.53	0.34	0.239	0.90	0.267	1.00	1.30	0.347	No
641	42.06	2.59	0.06	2.53	0.33	0.239	0.90	0.267	1.00	1.30	0.346	No
642	42.13	2.60	0.07	2.53	0.33	0.239	0.90	0.266	1.00	1.30	0.346	No
643	42.20	2.60	0.07	2.53	0.33	0.238	0.90	0.266	1.00	1.30	0.346	No
644	42.26	2.61	0.07	2.54	0.33	0.238	0.90	0.266	1.00	1.30	0.346	No
645	42.34	2.61	0.07	2.54	0.33	0.238	0.90	0.266	1.00	1.30	0.346	No
646	42.40	2.62	0.07	2.54	0.33	0.238	0.90	0.266	1.00	1.30	0.345	No
647	42.48	2.62	0.08	2.54	0.33	0.238	0.90	0.266	1.00	1.30	0.345	No
648	42.53	2.62	0.08	2.54	0.33	0.238	0.90	0.265	1.00	1.30	0.345	No
649	42.59	2.63	0.08	2.55	0.33	0.238	0.90	0.265	1.00	1.30	0.345	No
650	42.66	2.63	0.08	2.55	0.33	0.238	0.90	0.265	1.00	1.30	0.345	No
651	42.73	2.64	0.09	2.55	0.33	0.237	0.90	0.265	1.00	1.30	0.344	No
652	42.82	2.64	0.09	2.55	0.33	0.237	0.90	0.265	1.00	1.30	0.344	No
653	42.85	2.64	0.09	2.56	0.33	0.237	0.90	0.265	1.00	1.30	0.344	No
654	42.93	2.65	0.09	2.56	0.33	0.237	0.90	0.264	1.00	1.30	0.344	No
655	43.02	2.66	0.09	2.56	0.33	0.237	0.90	0.264	1.00	1.30	0.344	No
656	43.05	2.66	0.10	2.56	0.33	0.237	0.90	0.264	1.00	1.30	0.343	No
657	43.12	2.66	0.10	2.56	0.33	0.237	0.90	0.264	1.00	1.30	0.343	No
658	43.22	2.67	0.10	2.57	0.33	0.236	0.90	0.264	1.00	1.30	0.343	No
659	43.27	2.67	0.10	2.57	0.33	0.236	0.90	0.264	1.00	1.30	0.343	No
660	43.32	2.67	0.10	2.57	0.33	0.236	0.90	0.264	1.00	1.30	0.343	No
661	43.37	2.68	0.11	2.57	0.33	0.236	0.90	0.263	1.00	1.30	0.343	No
662	43.48	2.68	0.11	2.58	0.33	0.236	0.90	0.263	1.00	1.30	0.342	No
663	43.51	2.69	0.11	2.58	0.33	0.236	0.90	0.263	1.00	1.30	0.342	No
664	43.57	2.69	0.11	2.58	0.32	0.236	0.90	0.263	1.00	1.30	0.342	No
665	43.64	2.69	0.11	2.58	0.32	0.236	0.90	0.263	1.00	1.30	0.342	No
666	43.72	2.70	0.12	2.58	0.32	0.235	0.90	0.263	1.00	1.30	0.342	No
667	43.77	2.70	0.12	2.59	0.32	0.235	0.90	0.263	1.00	1.30	0.341	No
668	43.85	2.71	0.12	2.59	0.32	0.235	0.90	0.262	1.00	1.30	0.341	No
669	43.93	2.71	0.12	2.59	0.32	0.235	0.90	0.262	1.00	1.30	0.341	No
670	43.97	2.72	0.12	2.59	0.32	0.235	0.90	0.262	1.00	1.30	0.341	No
671	44.03	2.72	0.13	2.59	0.32	0.235	0.90	0.262	1.00	1.30	0.341	No
672	44.10	2.72	0.13	2.60	0.32	0.235	0.90	0.262	1.00	1.30	0.340	No
673	44.17	2.73	0.13	2.60	0.32	0.235	0.90	0.262	1.00	1.30	0.340	No
674	44.23	2.73	0.13	2.60	0.32	0.234	0.90	0.262	1.00	1.30	0.340	No
675	44.32	2.74	0.13	2.60	0.32	0.234	0.90	0.261	1.00	1.30	0.340	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
676	44.38	2.74	0.14	2.61	0.32	0.234	0.90	0.261	1.00	1.30	0.340	No
677	44.43	2.75	0.14	2.61	0.32	0.234	0.90	0.261	1.00	1.30	0.340	No
678	44.52	2.75	0.14	2.61	0.32	0.234	0.90	0.261	1.00	1.30	0.339	No
679	44.57	2.75	0.14	2.61	0.32	0.234	0.90	0.261	1.00	1.30	0.339	No
680	44.63	2.76	0.14	2.61	0.32	0.234	0.90	0.261	1.00	1.30	0.339	No
681	44.70	2.76	0.15	2.62	0.32	0.234	0.90	0.261	1.00	1.30	0.339	No
682	44.76	2.77	0.15	2.62	0.32	0.233	0.90	0.261	1.00	1.30	0.339	No
683	44.82	2.77	0.15	2.62	0.32	0.233	0.90	0.260	1.00	1.30	0.339	No
684	44.91	2.78	0.15	2.62	0.32	0.233	0.90	0.260	1.00	1.30	0.338	No
685	44.95	2.78	0.15	2.62	0.32	0.233	0.90	0.260	1.00	1.30	0.338	No
686	45.03	2.78	0.16	2.63	0.32	0.233	0.90	0.260	1.00	1.30	0.338	No
687	45.08	2.79	0.16	2.63	0.32	0.233	0.90	0.260	1.00	1.30	0.338	No
688	45.17	2.79	0.16	2.63	0.32	0.233	0.90	0.260	1.00	1.30	0.338	No
689	45.21	2.80	0.16	2.63	0.32	0.233	0.90	0.260	1.00	1.30	0.338	No
690	45.28	2.80	0.16	2.64	0.31	0.233	0.90	0.260	1.00	1.30	0.337	No
691	45.37	2.81	0.17	2.64	0.31	0.232	0.90	0.259	1.00	1.30	0.337	No
692	45.42	2.81	0.17	2.64	0.31	0.232	0.90	0.259	1.00	1.30	0.337	No
693	45.48	2.81	0.17	2.64	0.31	0.232	0.90	0.259	1.00	1.30	0.337	No
694	45.56	2.82	0.17	2.65	0.31	0.232	0.90	0.259	1.00	1.30	0.337	No
695	45.62	2.82	0.18	2.65	0.31	0.232	0.90	0.259	1.00	1.30	0.337	No
696	45.67	2.83	0.18	2.65	0.31	0.232	0.90	0.259	1.00	1.30	0.337	No
697	45.76	2.83	0.18	2.65	0.31	0.232	0.90	0.259	1.00	1.30	0.336	No
698	45.81	2.84	0.18	2.65	0.31	0.232	0.90	0.259	1.00	1.30	0.336	No
699	45.88	2.84	0.18	2.66	0.31	0.232	0.90	0.259	1.00	1.30	0.336	No
700	45.95	2.84	0.19	2.66	0.31	0.232	0.90	0.258	1.00	1.30	0.336	No
701	46.01	2.85	0.19	2.66	0.31	0.231	0.90	0.258	1.00	1.30	0.336	No
702	46.07	2.85	0.19	2.66	0.31	0.231	0.90	0.258	1.00	1.30	0.336	No
703	46.14	2.86	0.19	2.66	0.31	0.231	0.90	0.258	1.00	1.30	0.336	No
704	46.20	2.86	0.19	2.67	0.31	0.231	0.90	0.258	1.00	1.30	0.335	No
705	46.30	2.87	0.20	2.67	0.31	0.231	0.90	0.258	1.00	1.30	0.335	No
706	46.33	2.87	0.20	2.67	0.31	0.231	0.90	0.258	1.00	1.30	0.335	No
707	46.40	2.87	0.20	2.67	0.31	0.231	0.90	0.258	1.00	1.30	0.335	No
708	46.50	2.88	0.20	2.68	0.31	0.231	0.90	0.257	1.00	1.30	0.335	No
709	46.53	2.88	0.20	2.68	0.31	0.231	0.90	0.257	1.00	1.30	0.335	No
710	46.59	2.89	0.21	2.68	0.31	0.231	0.90	0.257	1.00	1.30	0.335	No
711	46.66	2.89	0.21	2.68	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
712	46.74	2.89	0.21	2.68	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
713	46.79	2.90	0.21	2.69	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
714	46.85	2.90	0.21	2.69	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
715	46.93	2.91	0.22	2.69	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
716	46.99	2.91	0.22	2.69	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
717	47.08	2.92	0.22	2.70	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
718	47.13	2.92	0.22	2.70	0.31	0.230	0.90	0.256	1.00	1.30	0.333	No
719	47.19	2.92	0.22	2.70	0.30	0.230	0.90	0.256	1.00	1.30	0.333	No
720	47.27	2.93	0.23	2.70	0.30	0.230	0.90	0.256	1.00	1.30	0.333	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
721	47.32	2.93	0.23	2.70	0.30	0.230	0.90	0.256	1.00	1.30	0.333	No
722	47.39	2.94	0.23	2.71	0.30	0.229	0.90	0.256	1.00	1.30	0.333	No
723	47.45	2.94	0.23	2.71	0.30	0.229	0.90	0.256	1.00	1.30	0.333	No
724	47.52	2.95	0.23	2.71	0.30	0.229	0.90	0.256	1.00	1.30	0.333	No
725	47.58	2.95	0.24	2.71	0.30	0.229	0.90	0.256	1.00	1.30	0.333	No
726	47.67	2.95	0.24	2.72	0.30	0.229	0.90	0.256	1.00	1.30	0.332	No
727	47.71	2.96	0.24	2.72	0.30	0.229	0.90	0.256	1.00	1.30	0.332	No
728	47.77	2.96	0.24	2.72	0.30	0.229	0.90	0.256	1.00	1.30	0.332	No
729	47.84	2.97	0.24	2.72	0.30	0.229	0.90	0.255	1.00	1.30	0.332	No
730	47.92	2.97	0.25	2.72	0.30	0.229	0.90	0.255	1.00	1.30	0.332	No
731	47.98	2.97	0.25	2.73	0.30	0.229	0.90	0.255	1.00	1.30	0.332	No
732	48.04	2.98	0.25	2.73	0.30	0.229	0.90	0.255	1.00	1.30	0.332	No
733	48.14	2.98	0.25	2.73	0.30	0.229	0.90	0.255	1.00	1.30	0.332	No
734	48.17	2.99	0.25	2.73	0.30	0.228	0.90	0.255	1.00	1.30	0.332	No
735	48.24	2.99	0.26	2.73	0.30	0.228	0.90	0.255	1.00	1.30	0.331	No
736	48.30	2.99	0.26	2.74	0.30	0.228	0.90	0.255	1.00	1.30	0.331	No
737	48.38	3.00	0.26	2.74	0.30	0.228	0.90	0.255	1.00	1.30	0.331	No
738	48.44	3.00	0.26	2.74	0.30	0.228	0.90	0.255	1.00	1.30	0.331	No
739	48.50	3.01	0.27	2.74	0.30	0.228	0.90	0.255	1.00	1.30	0.331	No
740	48.56	3.01	0.27	2.74	0.30	0.228	0.90	0.254	1.00	1.30	0.331	No
741	48.63	3.02	0.27	2.75	0.30	0.228	0.90	0.254	1.00	1.30	0.331	No
742	48.70	3.02	0.27	2.75	0.30	0.228	0.90	0.254	1.00	1.30	0.331	No
743	48.75	3.02	0.27	2.75	0.30	0.228	0.90	0.254	1.00	1.30	0.331	No
744	48.85	3.03	0.28	2.75	0.30	0.228	0.90	0.254	1.00	1.30	0.330	No
745	48.90	3.03	0.28	2.76	0.30	0.228	0.90	0.254	1.00	1.30	0.330	No
746	48.96	3.04	0.28	2.76	0.30	0.228	0.90	0.254	1.00	1.30	0.330	No
747	49.05	3.04	0.28	2.76	0.30	0.227	0.90	0.254	1.00	1.30	0.330	No
748	49.09	3.05	0.28	2.76	0.30	0.227	0.90	0.254	1.00	1.30	0.330	No
749	49.15	3.05	0.29	2.77	0.30	0.227	0.90	0.254	1.00	1.30	0.330	No
750	49.22	3.06	0.29	2.77	0.30	0.227	0.90	0.254	1.00	1.30	0.330	No
751	49.28	3.06	0.29	2.77	0.30	0.227	0.90	0.254	1.00	1.30	0.330	No
752	49.34	3.06	0.29	2.77	0.30	0.227	0.90	0.254	1.00	1.30	0.330	No
753	49.43	3.07	0.29	2.78	0.30	0.227	0.90	0.253	1.00	1.30	0.329	No
754	49.49	3.07	0.30	2.78	0.29	0.227	0.90	0.253	1.00	1.30	0.329	No
755	49.55	3.08	0.30	2.78	0.29	0.227	0.90	0.253	1.00	1.30	0.329	No
756	49.62	3.08	0.30	2.78	0.29	0.227	0.90	0.253	1.00	1.30	0.329	No
757	49.69	3.09	0.30	2.78	0.29	0.227	0.90	0.253	1.00	1.30	0.329	No
758	49.74	3.09	0.30	2.79	0.29	0.227	0.90	0.253	1.00	1.30	0.329	No
759	49.83	3.10	0.31	2.79	0.29	0.227	0.90	0.253	1.00	1.30	0.329	No
760	49.89	3.10	0.31	2.79	0.29	0.227	0.90	0.253	1.00	1.30	0.329	No
761	49.95	3.10	0.31	2.79	0.29	0.227	0.90	0.253	1.00	1.30	2.000	No
762	50.03	3.11	0.31	2.79	0.29	0.226	0.90	0.253	1.00	1.30	2.000	No
763	50.08	3.11	0.31	2.79	0.29	0.226	0.90	0.253	1.00	1.30	2.000	No
764	50.15	3.11	0.32	2.79	0.29	0.226	0.90	0.253	1.00	1.30	2.000	No
765	50.24	3.12	0.32	2.80	0.29	0.226	0.90	0.253	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
766	50.27	3.12	0.32	2.80	0.29	0.226	0.90	0.253	1.00	1.30	2.000	No

Abbreviations

Depth: Depth from free surface, at which CPT was performed (ft)
σ_v: Total overburden pressure at test point (tsf)
u_0: Water pressure at test point (tsf)
σ_v': Effective overburden pressure based on GWT during earthquake (tsf)
r_d: Nonlinear shear mass factor
CSR: Cyclic Stress Ratio
MSF: Magnitude Scaling Factor
CSR_{eq}: CSR adjusted for M=7.5
K_σ: Effective overburden stress factor
CSR^*: CSR fully adjusted

:: Cyclic Resistance Ratio (CRR) calculation data ::

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
1	0.07	14.05	0.00	0.96	1.70	23.89	0.00	23.89	4.000	No	No	2.00
2	0.14	20.32	0.01	0.82	1.70	34.54	0.00	34.54	4.000	No	No	2.00
3	0.21	22.56	0.01	0.73	1.70	38.35	0.00	38.35	4.000	No	No	2.00
4	0.27	23.63	0.01	0.72	1.70	40.17	0.00	40.17	4.000	No	No	2.00
5	0.34	25.33	0.02	0.64	1.70	43.06	2.30	45.36	4.000	No	No	2.00
6	0.40	26.23	0.02	0.59	1.70	44.59	4.93	49.52	4.000	No	No	2.00
7	0.47	27.12	0.02	0.59	1.70	46.10	5.00	51.10	4.000	No	No	2.00
8	0.55	27.66	0.03	0.58	1.70	47.02	5.31	52.33	4.000	No	No	2.00
9	0.59	27.93	0.03	0.58	1.70	47.48	5.51	52.99	4.000	No	No	2.00
10	0.66	26.90	0.03	0.57	1.70	45.73	6.59	52.32	4.000	No	No	2.00
11	0.72	25.87	0.04	0.56	1.70	43.98	7.86	51.84	4.000	No	No	2.00
12	0.79	26.77	0.04	0.56	1.70	45.51	8.01	53.52	4.000	No	No	2.00
13	0.88	27.03	0.05	0.55	1.70	45.95	8.61	54.56	4.000	No	No	2.00
14	0.92	26.95	0.05	0.55	1.70	45.81	9.04	54.86	4.000	No	No	2.00
15	1.01	26.50	0.05	0.55	1.70	45.05	9.30	54.35	4.000	No	No	2.00
16	1.07	26.05	0.06	0.55	1.70	44.28	9.07	53.35	4.000	No	No	2.00
17	1.12	26.54	0.06	0.56	1.70	45.12	7.91	53.03	4.000	No	No	2.00
18	1.21	26.59	0.06	0.57	1.70	45.20	6.52	51.72	4.000	No	No	2.00
19	1.25	27.39	0.07	0.58	1.70	46.56	5.63	52.19	4.000	No	No	2.00
20	1.32	28.56	0.07	0.58	1.70	48.55	4.80	53.35	4.000	No	No	2.00
21	1.40	30.35	0.07	0.58	1.70	51.59	4.29	55.88	4.000	No	No	2.00
22	1.45	31.15	0.08	0.58	1.70	52.95	3.98	56.93	4.000	No	No	2.00
23	1.54	32.76	0.08	0.57	1.70	55.69	4.28	59.97	4.000	No	No	2.00
24	1.61	33.66	0.09	0.54	1.70	57.22	6.71	63.94	4.000	No	No	2.00
25	1.65	33.93	0.09	0.53	1.70	57.68	7.34	65.02	4.000	No	No	2.00
26	1.72	33.75	0.09	0.53	1.70	57.38	7.87	65.25	4.000	No	No	2.00
27	1.82	33.75	0.10	0.52	1.70	57.38	8.96	66.33	4.000	No	No	2.00
28	1.84	33.66	0.10	0.52	1.70	57.22	9.43	66.66	4.000	No	No	2.00
29	1.92	34.11	0.10	0.50	1.70	57.99	10.90	68.89	4.000	No	No	2.00
30	1.97	32.50	0.11	0.49	1.70	55.25	13.96	69.21	4.000	No	No	2.00
31	2.05	34.46	0.11	0.47	1.70	58.58	15.72	74.30	4.000	No	No	2.00
32	2.12	34.73	0.11	0.45	1.70	59.04	18.54	77.58	4.000	No	No	2.00
33	2.17	34.64	0.12	0.45	1.70	58.89	20.03	78.92	4.000	No	No	2.00
34	2.27	33.03	0.12	0.44	1.70	56.15	23.38	79.53	4.000	No	No	2.00
35	2.32	31.78	0.13	0.44	1.70	54.03	25.21	79.23	4.000	No	No	2.00
36	2.37	31.15	0.13	0.44	1.70	52.95	26.16	79.11	4.000	No	No	2.00
37	2.46	29.36	0.13	0.46	1.70	49.91	22.47	72.38	4.000	No	No	2.00
38	2.51	28.91	0.14	0.47	1.70	49.15	20.92	70.06	4.000	No	No	2.00
39	2.57	29.09	0.14	0.47	1.70	49.45	20.41	69.87	4.000	No	No	2.00
40	2.66	30.53	0.15	0.47	1.70	51.90	19.08	70.98	4.000	No	No	2.00
41	2.72	31.33	0.15	0.47	1.70	53.26	18.48	71.74	4.000	No	No	2.00
42	2.76	31.69	0.15	0.47	1.70	53.87	18.31	72.19	4.000	No	No	2.00
43	2.83	29.72	0.16	0.47	1.70	50.52	20.26	70.79	4.000	No	No	2.00
44	2.89	30.08	0.16	0.46	1.70	51.14	20.25	71.39	4.000	No	No	2.00
45	2.95	29.99	0.16	0.46	1.70	50.98	20.74	71.72	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
46	3.05	29.45	0.17	0.46	1.70	50.06	21.81	71.88	4.000	No	No	2.00
47	3.10	28.11	0.17	0.46	1.70	47.79	22.97	70.76	4.000	No	No	2.00
48	3.15	23.90	0.17	0.47	1.70	40.63	27.47	68.10	4.000	No	No	2.00
49	3.22	22.56	0.18	0.47	1.70	38.35	27.49	65.84	4.000	No	No	2.00
50	3.29	21.48	0.18	0.48	1.70	36.52	27.66	64.17	4.000	No	No	2.00
51	3.36	20.77	0.19	0.49	1.70	35.31	25.87	61.18	4.000	No	No	2.00
52	3.43	21.22	0.19	0.50	1.70	36.07	23.00	59.08	4.000	No	No	2.00
53	3.49	21.66	0.19	0.50	1.70	36.82	21.79	58.61	4.000	No	No	2.00
54	3.56	22.38	0.20	0.50	1.70	38.05	21.11	59.15	4.000	No	No	2.00
55	3.66	22.38	0.20	0.48	1.70	38.05	25.41	63.45	4.000	No	No	2.00
56	3.70	22.47	0.21	0.48	1.70	38.20	27.21	65.41	4.000	No	No	2.00
57	3.76	22.47	0.21	0.47	1.70	38.20	30.04	68.24	4.000	No	No	2.00
58	3.81	22.20	0.21	0.46	1.70	37.74	33.74	71.48	4.000	No	No	2.00
59	3.90	22.51	0.22	0.45	1.70	38.27	36.50	74.76	4.000	No	No	2.00
60	3.94	21.75	0.22	0.45	1.70	36.98	38.45	75.43	4.000	No	Yes	2.00
61	4.01	22.56	0.22	0.45	1.70	38.35	36.88	75.24	4.000	No	No	2.00
62	4.08	23.81	0.23	0.45	1.70	40.48	33.71	74.19	4.000	No	No	2.00
63	4.15	25.60	0.23	0.45	1.70	43.52	29.20	72.72	4.000	No	No	2.00
64	4.21	26.68	0.23	0.45	1.70	45.36	26.43	71.79	4.000	No	No	2.00
65	4.28	26.77	0.24	0.46	1.70	45.51	24.33	69.83	4.000	No	No	2.00
66	4.35	25.78	0.24	0.47	1.70	43.83	23.51	67.34	4.000	No	No	2.00
67	4.40	25.16	0.25	0.47	1.70	42.77	23.69	66.46	4.000	No	No	2.00
68	4.47	23.01	0.25	0.47	1.70	39.12	27.05	66.17	4.000	No	No	2.00
69	4.53	21.57	0.25	0.48	1.70	36.67	28.21	64.88	4.000	No	No	2.00
70	4.60	20.86	0.26	0.47	1.70	35.46	31.92	67.38	4.000	No	No	2.00
71	4.69	18.98	0.26	0.46	1.70	32.27	40.27	72.54	4.000	No	Yes	2.00
72	4.74	17.90	0.26	0.46	1.70	30.43	45.27	75.70	4.000	No	Yes	2.00
73	4.80	16.83	0.27	0.47	1.70	28.61	48.73	77.34	4.000	No	Yes	2.00
74	4.90	16.11	0.27	0.47	1.70	27.39	48.93	76.32	4.000	No	Yes	2.00
75	4.93	16.74	0.28	0.49	1.70	28.46	38.77	67.22	4.000	No	Yes	2.00
76	5.00	18.89	0.28	0.53	1.70	32.11	20.45	52.56	4.000	No	No	2.00
77	5.08	23.54	0.28	0.52	1.70	40.02	15.59	55.61	4.000	No	No	2.00
78	5.13	26.23	0.29	0.52	1.70	44.59	13.56	58.15	4.000	No	No	2.00
79	5.21	29.45	0.29	0.51	1.70	50.06	12.90	62.97	4.000	No	No	2.00
80	5.26	29.18	0.29	0.50	1.70	49.61	14.59	64.19	4.000	No	No	2.00
81	5.34	27.93	0.30	0.48	1.70	47.48	17.66	65.14	4.000	No	No	2.00
82	5.39	27.93	0.30	0.48	1.70	47.48	19.26	66.74	4.000	No	No	2.00
83	5.49	27.57	0.31	0.45	1.70	46.87	25.25	72.11	4.000	No	No	2.00
84	5.54	27.48	0.31	0.44	1.70	46.72	28.98	75.70	4.000	No	No	2.00
85	5.58	28.20	0.31	0.43	1.69	47.76	31.31	79.07	4.000	No	No	2.00
86	5.64	27.39	0.32	0.43	1.67	45.83	35.44	81.27	4.000	No	No	2.00
87	5.72	25.60	0.32	0.42	1.65	42.21	43.31	85.53	4.000	No	No	2.00
88	5.79	24.80	0.32	0.42	1.64	40.57	46.90	87.47	4.000	No	Yes	2.00
89	5.84	25.69	0.33	0.41	1.63	41.76	45.81	87.57	4.000	No	Yes	2.00
90	5.93	29.36	0.33	0.41	1.61	47.40	38.11	85.51	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
91	5.99	30.62	0.34	0.42	1.61	49.41	34.74	84.15	4.000	No	No	2.00
92	6.04	33.93	0.34	0.42	1.61	54.71	29.48	84.19	4.000	No	No	2.00
93	6.12	37.06	0.34	0.43	1.61	59.79	24.75	84.53	4.000	No	No	2.00
94	6.17	39.39	0.35	0.43	1.61	63.60	21.87	85.47	4.000	No	No	2.00
95	6.24	43.33	0.35	0.44	1.62	70.11	18.08	88.19	4.000	No	No	2.00
96	6.32	45.83	0.36	0.44	1.62	74.19	15.84	90.04	4.000	No	No	2.00
97	6.37	47.18	0.36	0.45	1.62	76.39	14.72	91.11	4.000	No	No	2.00
98	6.44	49.50	0.36	0.45	1.62	80.40	12.69	93.09	4.000	No	No	2.00
99	6.52	51.92	0.37	0.46	1.63	84.44	10.99	95.43	4.000	No	No	2.00
100	6.58	54.88	0.37	0.46	1.63	89.26	9.75	99.01	4.000	No	No	2.00
101	6.63	56.85	0.37	0.47	1.63	92.43	9.00	101.43	4.000	No	No	2.00
102	6.72	58.81	0.38	0.47	1.63	95.70	7.86	103.55	4.000	No	No	2.00
103	6.77	59.26	0.38	0.48	1.63	96.36	7.46	103.83	4.000	No	No	2.00
104	6.83	58.64	0.39	0.48	1.62	95.00	7.53	102.53	4.000	No	No	2.00
105	6.91	56.49	0.39	0.47	1.60	90.33	8.90	99.22	4.000	No	No	2.00
106	6.97	54.16	0.39	0.46	1.57	85.00	11.40	96.41	4.000	No	No	2.00
107	7.02	52.91	0.40	0.45	1.55	82.02	13.26	95.28	4.000	No	No	2.00
108	7.10	50.31	0.40	0.43	1.52	76.55	16.85	93.40	4.000	No	No	2.00
109	7.18	50.22	0.41	0.42	1.50	75.18	19.71	94.89	4.000	No	No	2.00
110	7.23	51.29	0.41	0.42	1.49	76.26	20.22	96.48	4.000	No	No	2.00
111	7.29	54.79	0.41	0.42	1.48	81.11	19.12	100.23	4.000	No	No	2.00
112	7.37	58.10	0.42	0.42	1.47	85.54	18.17	103.71	4.000	No	No	2.00
113	7.42	60.87	0.42	0.42	1.47	89.31	17.39	106.70	4.000	No	No	2.00
114	7.52	72.87	0.43	0.42	1.47	106.99	13.24	120.22	4.000	No	No	2.00
115	7.57	78.15	0.43	0.46	1.51	118.02	7.75	125.77	4.000	No	No	2.00
116	7.61	81.91	0.43	0.52	1.59	129.99	2.49	132.47	4.000	No	No	2.00
117	7.71	86.12	0.44	0.54	1.62	139.15	0.80	139.94	4.000	No	No	2.00
118	7.76	86.74	0.44	0.55	1.62	140.18	0.56	140.74	4.000	No	No	2.00
119	7.83	86.83	0.45	0.55	1.62	140.26	0.36	140.62	4.000	No	No	2.00
120	7.88	85.76	0.45	0.55	1.61	138.01	0.42	138.42	4.000	No	No	2.00
121	7.98	76.63	0.45	0.54	1.58	121.19	1.44	122.63	4.000	No	No	2.00
122	8.02	77.70	0.46	0.54	1.58	122.48	1.43	123.92	4.000	No	No	2.00
123	8.08	76.09	0.46	0.53	1.56	118.64	1.96	120.61	4.000	No	No	2.00
124	8.17	73.32	0.46	0.52	1.53	112.48	2.95	115.43	4.000	No	No	2.00
125	8.21	72.33	0.47	0.51	1.52	110.11	3.47	113.58	4.000	No	No	2.00
126	8.28	71.44	0.47	0.50	1.50	107.46	4.27	111.72	4.000	No	No	2.00
127	8.37	70.81	0.48	0.49	1.48	105.09	5.15	110.24	4.000	No	No	2.00
128	8.41	70.27	0.48	0.49	1.48	103.74	5.54	109.27	4.000	No	No	2.00
129	8.47	70.23	0.48	0.49	1.47	103.01	5.92	108.93	4.000	No	No	2.00
130	8.54	69.91	0.49	0.48	1.45	101.55	6.67	108.22	4.000	No	No	2.00
131	8.60	70.18	0.49	0.48	1.44	101.28	7.05	108.33	4.000	No	No	2.00
132	8.67	70.18	0.49	0.47	1.43	100.57	7.50	108.07	4.000	No	No	2.00
133	8.74	69.65	0.50	0.47	1.42	99.18	7.97	107.15	4.000	No	No	2.00
134	8.82	68.66	0.50	0.47	1.42	97.23	8.34	105.57	4.000	No	No	2.00
135	8.87	66.78	0.51	0.47	1.41	94.20	8.82	103.01	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
136	8.97	63.20	0.51	0.46	1.40	88.35	10.09	98.44	4.000	No	No	2.00
137	9.00	59.71	0.51	0.45	1.39	82.93	11.80	94.73	4.000	No	No	2.00
138	9.07	55.32	0.52	0.44	1.37	75.86	15.26	91.12	4.000	No	No	2.00
139	9.12	51.03	0.52	0.43	1.35	69.12	19.86	88.97	4.000	No	No	2.00
140	9.22	45.48	0.53	0.41	1.34	60.73	27.11	87.84	4.000	No	No	2.00
141	9.27	41.90	0.53	0.41	1.33	55.64	31.81	87.46	4.000	No	No	2.00
142	9.32	41.90	0.53	0.41	1.32	55.32	33.79	89.11	4.000	No	No	2.00
143	9.40	41.90	0.54	0.40	1.31	54.96	35.73	90.69	4.000	No	No	2.00
144	9.47	41.90	0.54	0.40	1.31	54.80	35.79	90.59	4.000	No	No	2.00
145	9.52	49.06	0.55	0.40	1.31	64.08	28.91	92.99	4.000	No	No	2.00
146	9.59	61.14	0.55	0.41	1.31	79.80	21.63	101.42	4.000	No	No	2.00
147	9.66	70.81	0.55	0.41	1.31	92.48	17.21	109.69	4.000	No	No	2.00
148	9.72	83.97	0.56	0.43	1.31	110.37	12.17	122.54	4.000	No	No	2.00
149	9.81	90.15	0.56	0.44	1.32	119.35	9.00	128.35	4.000	No	No	2.00
150	9.86	90.59	0.57	0.45	1.33	120.19	8.07	128.25	4.000	No	No	2.00
151	9.92	88.09	0.57	0.46	1.33	116.88	7.80	124.68	4.000	No	No	2.00
152	10.01	85.04	0.57	0.46	1.32	112.32	8.20	120.53	4.000	No	No	2.00
153	10.05	84.15	0.58	0.46	1.32	110.88	8.37	119.25	4.000	No	No	2.00
154	10.11	84.06	0.58	0.45	1.31	110.34	8.57	118.92	4.000	No	No	2.00
155	10.17	85.85	0.58	0.45	1.31	112.08	8.94	121.02	4.000	No	No	2.00
156	10.26	88.53	0.59	0.44	1.30	114.70	9.41	124.10	4.000	No	No	2.00
157	10.31	89.70	0.59	0.44	1.29	115.82	9.60	125.42	4.000	No	No	2.00
158	10.40	93.19	0.60	0.44	1.28	119.58	9.73	129.32	4.000	No	No	2.00
159	10.45	93.73	0.60	0.44	1.28	119.80	10.06	129.86	4.000	No	No	2.00
160	10.51	94.35	0.61	0.43	1.27	120.20	10.19	130.39	4.000	No	No	2.00
161	10.59	94.26	0.61	0.43	1.27	119.59	10.41	130.01	4.000	No	No	2.00
162	10.66	93.55	0.61	0.43	1.26	118.14	10.84	128.98	4.000	No	No	2.00
163	10.71	93.28	0.62	0.44	1.27	118.14	9.72	127.86	4.000	No	No	2.00
164	10.78	90.68	0.62	0.48	1.29	117.27	5.19	122.46	4.000	No	No	2.00
165	10.86	87.73	0.63	0.47	1.28	112.24	6.68	118.93	4.000	No	No	2.00
166	10.89	86.66	0.63	0.47	1.27	110.43	7.28	117.72	4.000	No	No	2.00
167	11.00	83.61	0.64	0.45	1.26	105.02	9.83	114.85	4.000	No	No	2.00
168	11.05	84.15	0.64	0.44	1.25	105.33	10.19	115.53	4.000	No	No	2.00
169	11.11	79.31	0.64	0.44	1.24	98.67	11.93	110.60	4.000	No	No	2.00
170	11.16	84.69	0.65	0.43	1.24	104.84	11.96	116.80	4.000	No	No	2.00
171	11.26	93.55	0.65	0.42	1.23	114.74	12.41	127.16	4.000	No	No	2.00
172	11.31	100.35	0.65	0.42	1.23	122.94	11.46	134.40	4.000	No	No	2.00
173	11.36	106.80	0.66	0.42	1.22	130.61	10.69	141.30	4.000	No	No	2.00
174	11.45	113.42	0.66	0.43	1.22	138.45	9.71	148.16	4.000	No	No	2.00
175	11.51	117.90	0.67	0.43	1.22	143.78	8.98	152.76	4.000	No	No	2.00
176	11.56	121.30	0.67	0.43	1.22	147.92	8.26	156.18	4.000	No	No	2.00
177	11.62	125.69	0.67	0.44	1.22	153.26	7.49	160.75	4.000	No	No	2.00
178	11.70	128.46	0.68	0.44	1.22	156.42	6.96	163.37	4.000	No	No	2.00
179	11.76	129.18	0.68	0.44	1.21	156.92	6.89	163.81	4.000	No	No	2.00
180	11.86	129.45	0.69	0.44	1.21	156.68	6.78	163.46	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
181	11.90	129.45	0.69	0.44	1.21	156.34	6.88	163.23	4.000	No	No	2.00
182	11.96	129.00	0.69	0.44	1.20	155.32	7.17	162.49	4.000	No	No	2.00
183	12.01	127.48	0.70	0.44	1.20	152.82	7.82	160.64	4.000	No	No	2.00
184	12.08	123.18	0.70	0.42	1.19	146.53	9.52	156.06	4.000	No	No	2.00
185	12.14	121.39	0.71	0.41	1.18	143.53	10.97	154.50	4.000	No	No	2.00
186	12.22	118.34	0.71	0.40	1.17	138.99	12.69	151.68	4.000	No	No	2.00
187	12.29	115.57	0.72	0.40	1.17	134.99	14.27	149.26	4.000	No	No	2.00
188	12.35	114.41	0.72	0.39	1.16	133.07	15.48	148.55	4.000	No	No	2.00
189	12.40	114.14	0.72	0.39	1.16	132.20	16.66	148.85	4.000	No	No	2.00
190	12.47	110.56	0.73	0.38	1.15	127.35	19.05	146.40	4.000	No	No	2.00
191	12.54	103.93	0.73	0.37	1.15	119.07	22.24	141.30	4.000	No	No	2.00
192	12.61	118.08	0.74	0.37	1.14	134.98	20.00	154.98	4.000	No	No	2.00
193	12.67	124.97	0.74	0.36	1.14	142.39	19.98	162.37	4.000	No	No	2.00
194	12.76	134.19	0.75	0.36	1.14	152.37	19.40	171.77	4.000	No	No	2.00
195	12.81	140.28	0.75	0.36	1.13	158.99	18.94	177.92	4.000	No	No	2.00
196	12.90	147.80	0.75	0.36	1.13	166.89	18.87	185.76	4.000	No	No	2.00
197	12.94	150.84	0.76	0.36	1.13	170.08	18.68	188.76	4.000	No	No	2.00
198	12.99	159.43	0.76	0.36	1.13	179.55	17.62	197.17	4.000	No	No	2.00
199	13.06	176.53	0.76	0.36	1.13	198.64	15.71	214.35	4.000	No	No	2.00
200	13.15	187.45	0.77	0.36	1.12	210.24	15.43	225.66	4.000	No	No	2.00
201	13.20	199.99	0.77	0.36	1.12	223.92	14.79	238.71	4.000	No	No	2.00
202	13.27	210.28	0.78	0.36	1.12	234.77	14.70	249.47	4.000	No	No	2.00
203	13.35	221.65	0.78	0.36	1.11	246.79	14.43	261.22	4.000	No	No	2.00
204	13.40	229.35	0.79	0.39	1.12	257.22	9.58	266.80	4.000	No	No	2.00
205	13.46	236.78	0.79	0.41	1.13	266.93	6.74	273.67	4.000	No	No	2.00
206	13.55	245.73	0.80	0.41	1.12	275.80	7.00	282.80	4.000	No	No	2.00
207	13.60	248.33	0.80	0.41	1.12	278.22	7.06	285.28	4.000	No	No	2.00
208	13.66	254.86	0.80	0.41	1.12	285.00	6.87	291.86	4.000	No	No	2.00
209	13.72	246.89	0.81	0.41	1.12	275.29	7.30	282.59	4.000	No	No	2.00
210	13.78	243.22	0.81	0.40	1.11	270.61	7.53	278.14	4.000	No	No	2.00
211	13.85	245.46	0.82	0.40	1.11	272.47	7.51	279.98	4.000	No	No	2.00
212	13.93	240.90	0.82	0.40	1.11	266.37	8.20	274.58	4.000	No	No	2.00
213	14.00	245.91	0.83	0.40	1.10	271.08	8.48	279.56	4.000	No	No	2.00
214	14.04	238.30	0.83	0.39	1.10	261.81	9.68	271.48	4.000	No	No	2.00
215	14.11	246.36	0.83	0.38	1.09	269.45	10.80	280.25	4.000	No	No	2.00
216	14.18	257.28	0.84	0.37	1.09	280.34	11.65	291.99	4.000	No	No	2.00
217	14.25	266.68	0.84	0.36	1.08	289.25	12.97	302.22	4.000	No	No	2.00
218	14.32	269.10	0.85	0.35	1.08	290.92	14.03	304.95	4.000	No	No	2.00
219	14.38	266.59	0.85	0.35	1.08	287.35	15.25	302.60	4.000	No	No	2.00
220	14.45	269.19	0.86	0.34	1.07	289.20	16.35	305.55	4.000	No	No	2.00
221	14.51	269.28	0.86	0.34	1.07	288.63	17.20	305.83	4.000	No	No	2.00
222	14.58	271.78	0.87	0.34	1.07	290.70	17.32	308.02	4.000	No	No	2.00
223	14.63	271.24	0.87	0.33	1.07	289.66	17.49	307.15	4.000	No	No	2.00
224	14.71	268.56	0.87	0.34	1.07	286.31	17.20	303.51	4.000	No	No	2.00
225	14.77	266.86	0.88	0.34	1.06	284.14	17.10	301.24	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
226	14.85	261.84	0.88	0.34	1.06	278.13	17.54	295.67	4.000	No	No	2.00
227	14.91	258.62	0.89	0.33	1.06	274.23	17.92	292.15	4.000	No	No	2.00
228	14.97	260.32	0.89	0.33	1.06	275.54	18.21	293.75	4.000	No	No	2.00
229	15.06	264.89	0.90	0.33	1.06	279.70	18.39	298.09	4.000	No	No	2.00
230	15.11	267.13	0.90	0.33	1.05	281.64	18.60	300.24	4.000	No	No	2.00
231	15.17	270.35	0.91	0.33	1.05	284.55	18.71	303.26	4.000	No	No	2.00
232	15.26	267.31	0.91	0.33	1.05	280.61	19.63	300.23	4.000	No	No	2.00
233	15.32	265.96	0.92	0.33	1.05	278.73	19.99	298.72	4.000	No	No	2.00
234	15.37	265.43	0.92	0.32	1.05	277.82	20.14	297.97	4.000	No	No	2.00
235	15.43	264.17	0.92	0.33	1.05	276.10	20.00	296.09	4.000	No	No	2.00
236	15.51	260.68	0.93	0.32	1.04	271.91	20.26	292.17	4.000	No	No	2.00
237	15.57	258.62	0.93	0.33	1.04	269.57	19.19	288.76	4.000	No	No	2.00
238	15.62	254.41	0.94	0.34	1.04	265.07	17.77	282.84	4.000	No	No	2.00
239	15.72	248.95	0.94	0.34	1.04	258.87	17.32	276.19	4.000	No	No	2.00
240	15.77	243.58	0.95	0.34	1.04	252.95	17.88	270.83	4.000	No	No	2.00
241	15.82	232.39	0.95	0.34	1.04	240.97	18.64	259.61	4.000	No	No	2.00
242	15.88	224.97	0.95	0.34	1.04	232.96	18.71	251.67	4.000	No	No	2.00
243	15.95	179.85	0.96	0.33	1.03	185.80	23.93	209.74	4.000	No	No	2.00
244	16.01	200.71	0.96	0.34	1.03	207.22	19.96	227.18	4.000	No	No	2.00
245	16.09	204.47	0.97	0.34	1.03	210.80	18.68	229.49	4.000	No	No	2.00
246	16.15	204.65	0.97	0.34	1.03	210.69	18.65	229.34	4.000	No	No	2.00
247	16.22	201.97	0.98	0.34	1.03	207.60	18.97	226.57	4.000	No	No	2.00
248	16.28	199.19	0.98	0.34	1.03	204.44	19.43	223.87	4.000	No	No	2.00
249	16.34	201.43	0.99	0.34	1.02	206.40	19.49	225.89	4.000	No	No	2.00
250	16.41	208.94	0.99	0.34	1.02	213.78	18.76	232.53	4.000	No	No	2.00
251	16.48	210.19	0.99	0.34	1.02	214.71	18.83	233.54	4.000	No	No	2.00
252	16.56	211.09	1.00	0.34	1.02	215.24	19.25	234.49	4.000	No	No	2.00
253	16.61	214.22	1.00	0.34	1.02	218.14	19.40	237.54	4.000	No	No	2.00
254	16.67	221.30	1.01	0.34	1.02	225.03	18.93	243.96	4.000	No	No	2.00
255	16.75	229.54	1.01	0.34	1.02	233.03	17.96	250.99	4.000	No	No	2.00
256	16.81	238.94	1.02	0.34	1.01	242.24	17.21	259.45	4.000	No	No	2.00
257	16.89	249.77	1.02	0.34	1.01	252.76	16.93	269.69	4.000	No	No	2.00
258	16.93	253.98	1.02	0.34	1.01	256.76	17.03	273.79	4.000	No	No	2.00
259	17.01	260.15	1.03	0.34	1.01	262.53	17.15	279.68	4.000	No	No	2.00
260	17.07	262.75	1.03	0.34	1.01	264.84	17.13	281.97	4.000	No	No	2.00
261	17.14	266.69	1.04	0.34	1.01	268.38	16.98	285.36	4.000	No	No	2.00
262	17.21	268.75	1.04	0.34	1.00	270.03	16.98	287.01	4.000	No	No	2.00
263	17.27	271.16	1.05	0.34	1.00	272.09	16.99	289.08	4.000	No	No	2.00
264	17.34	274.12	1.05	0.34	1.00	274.62	17.23	291.86	4.000	No	No	2.00
265	17.39	276.09	1.06	0.34	1.00	276.29	17.34	293.63	4.000	No	No	2.00
266	17.46	278.68	1.06	0.33	1.00	278.47	17.48	295.95	4.000	No	No	2.00
267	17.54	281.82	1.07	0.33	1.00	281.12	17.57	298.69	4.000	No	No	2.00
268	17.60	278.86	1.07	0.33	1.00	277.83	17.99	295.81	4.000	No	No	2.00
269	17.66	281.28	1.07	0.33	1.00	279.89	17.59	297.49	4.000	No	No	2.00
270	17.73	283.16	1.08	0.34	0.99	281.25	15.84	297.09	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
271	17.80	284.95	1.08	0.34	0.99	282.62	15.32	297.94	4.000	No	No	2.00
272	17.86	287.01	1.09	0.35	0.99	284.30	14.70	299.00	4.000	No	No	2.00
273	17.93	289.61	1.09	0.35	0.99	286.38	13.83	300.21	4.000	No	No	2.00
274	18.00	290.14	1.10	0.35	0.99	286.44	13.26	299.70	4.000	No	No	2.00
275	18.09	289.86	1.10	0.36	0.99	285.56	12.72	298.28	4.000	No	No	2.00
276	18.12	289.60	1.10	0.36	0.98	285.13	12.54	297.67	4.000	No	No	2.00
277	18.18	293.45	1.11	0.36	0.98	288.44	11.97	300.41	4.000	No	No	2.00
278	18.24	296.04	1.11	0.36	0.98	290.59	11.76	302.36	4.000	No	No	2.00
279	18.31	298.82	1.12	0.36	0.98	292.90	11.61	304.50	4.000	No	No	2.00
280	18.37	300.70	1.12	0.37	0.98	294.29	11.37	305.66	4.000	No	No	2.00
281	18.45	301.96	1.13	0.37	0.98	294.98	11.12	306.11	4.000	No	No	2.00
282	18.50	301.77	1.13	0.37	0.98	294.45	11.01	305.46	4.000	No	No	2.00
283	18.58	301.14	1.14	0.37	0.97	293.34	10.84	304.19	4.000	No	No	2.00
284	18.64	301.05	1.14	0.37	0.97	292.81	10.46	303.27	4.000	No	No	2.00
285	18.71	297.92	1.14	0.38	0.97	289.20	10.04	299.24	4.000	No	No	2.00
286	18.78	295.77	1.15	0.38	0.97	286.59	9.53	296.12	4.000	No	No	2.00
287	18.84	292.73	1.15	0.38	0.97	283.17	9.10	292.27	4.000	No	No	2.00
288	18.93	284.58	1.16	0.39	0.97	274.63	8.68	283.31	4.000	No	No	2.00
289	18.97	278.94	1.16	0.39	0.96	268.89	8.63	277.52	4.000	No	No	2.00
290	19.04	269.81	1.17	0.39	0.96	259.59	8.39	267.98	4.000	No	No	2.00
291	19.13	254.95	1.17	0.40	0.96	244.71	8.35	253.06	4.000	No	No	2.00
292	19.17	244.93	1.18	0.40	0.96	234.92	8.64	243.55	4.000	No	No	2.00
293	19.24	221.38	1.18	0.40	0.96	212.04	9.59	221.63	4.000	No	No	2.00
294	19.33	199.36	1.19	0.39	0.96	190.69	11.01	201.71	4.000	No	No	2.00
295	19.38	174.12	1.19	0.38	0.96	166.53	13.48	180.01	4.000	No	No	2.00
296	19.44	149.32	1.19	0.37	0.96	142.76	16.71	159.47	4.000	No	No	2.00
297	19.50	126.67	1.20	0.36	0.96	121.11	21.46	142.57	4.000	No	No	2.00
298	19.57	106.17	1.20	0.36	0.96	101.48	27.76	129.24	4.000	No	No	2.00
299	19.63	87.73	1.20	0.36	0.95	83.76	33.48	117.24	4.000	No	No	2.00
300	19.68	71.17	1.21	0.36	0.95	67.82	39.61	107.44	4.000	No	No	2.00
301	19.76	62.93	1.21	0.37	0.95	59.79	40.28	100.07	4.000	No	No	2.00
302	19.83	70.72	1.22	0.38	0.95	67.01	31.53	98.54	4.000	No	No	2.00
303	19.88	64.10	1.22	0.40	0.94	60.55	30.21	90.75	4.000	No	No	2.00
304	19.96	70.27	1.23	0.42	0.94	66.04	20.57	86.61	4.000	No	No	2.00
305	20.02	75.02	1.23	0.42	0.94	70.43	19.72	90.15	4.000	No	No	2.00
306	20.09	74.48	1.23	0.42	0.94	69.82	19.52	89.34	4.000	No	No	2.00
307	20.18	72.06	1.24	0.42	0.94	67.39	19.86	87.25	4.000	No	No	2.00
308	20.22	61.23	1.24	0.42	0.93	57.23	24.72	81.95	4.000	No	No	2.00
309	20.28	65.62	1.25	0.42	0.93	61.26	22.82	84.08	4.000	No	No	2.00
310	20.35	64.63	1.25	0.42	0.93	60.26	23.39	83.64	4.000	No	No	2.00
311	20.41	64.50	1.25	0.42	0.93	60.06	23.68	83.74	4.000	No	No	2.00
312	20.47	64.50	1.26	0.41	0.93	60.04	25.02	85.06	4.000	No	No	2.00
313	20.56	64.36	1.26	0.40	0.93	59.90	27.81	87.71	4.000	No	No	2.00
314	20.61	67.14	1.27	0.40	0.93	62.51	28.99	91.50	4.000	No	No	2.00
315	20.67	72.15	1.27	0.39	0.93	67.21	29.44	96.65	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
316	20.76	82.09	1.28	0.38	0.93	76.45	27.82	104.27	4.000	No	No	2.00
317	20.82	92.30	1.28	0.38	0.93	85.90	25.28	111.18	4.000	No	No	2.00
318	20.87	106.63	1.28	0.38	0.93	99.13	21.89	121.02	4.000	No	No	2.00
319	20.96	134.02	1.29	0.38	0.93	124.30	16.95	141.25	4.000	No	No	2.00
320	21.00	154.88	1.29	0.39	0.93	143.38	14.09	157.46	4.000	No	No	2.00
321	21.07	177.53	1.30	0.39	0.92	163.87	11.50	175.37	4.000	No	No	2.00
322	21.15	197.94	1.30	0.41	0.92	182.01	9.22	191.23	4.000	No	No	2.00
323	21.21	205.10	1.30	0.41	0.92	188.15	8.37	196.52	4.000	No	No	2.00
324	21.26	211.19	1.31	0.41	0.92	193.38	7.81	201.19	4.000	No	No	2.00
325	21.35	221.39	1.31	0.41	0.91	202.44	7.74	210.18	4.000	No	No	2.00
326	21.41	222.20	1.32	0.41	0.91	203.15	8.19	211.34	4.000	No	No	2.00
327	21.47	219.78	1.32	0.40	0.92	201.10	9.31	210.41	4.000	No	No	2.00
328	21.53	212.35	1.33	0.39	0.92	194.37	10.43	204.80	4.000	No	No	2.00
329	21.61	202.94	1.33	0.38	0.92	185.89	12.16	198.05	4.000	No	No	2.00
330	21.67	191.84	1.34	0.38	0.92	175.63	13.13	188.76	4.000	No	No	2.00
331	21.76	178.14	1.34	0.38	0.91	162.72	13.48	176.19	4.000	No	No	2.00
332	21.80	165.34	1.34	0.38	0.91	150.92	14.32	165.24	4.000	No	No	2.00
333	21.86	156.66	1.35	0.39	0.91	142.67	14.12	156.79	4.000	No	No	2.00
334	21.95	134.82	1.35	0.39	0.91	122.38	14.90	137.28	4.000	No	No	2.00
335	21.98	125.86	1.36	0.39	0.91	114.15	15.58	129.73	4.000	No	No	2.00
336	22.05	114.76	1.36	0.40	0.90	103.81	16.03	119.85	4.000	No	No	2.00
337	22.12	103.40	1.36	0.40	0.90	93.35	17.16	110.51	4.000	No	No	2.00
338	22.20	91.85	1.37	0.42	0.90	82.48	16.40	98.87	4.000	No	No	2.00
339	22.25	80.57	1.37	0.41	0.90	72.37	20.02	92.38	4.000	No	No	2.00
340	22.31	72.96	1.38	0.41	0.90	65.48	22.77	88.25	4.000	No	No	2.00
341	22.39	58.99	1.38	0.41	0.90	52.83	28.86	81.69	4.000	No	No	2.00
342	22.44	46.28	1.38	0.42	0.89	41.34	38.36	79.71	4.000	No	Yes	2.00
343	22.54	43.33	1.39	0.42	0.89	38.61	41.31	79.92	4.000	No	Yes	2.00
344	22.58	46.51	1.39	0.42	0.89	41.44	38.16	79.60	4.000	No	Yes	2.00
345	22.65	43.51	1.40	0.42	0.89	38.69	41.37	80.07	4.000	No	Yes	2.00
346	22.71	46.73	1.40	0.42	0.89	41.53	37.76	79.29	4.000	No	Yes	2.00
347	22.80	51.29	1.41	0.42	0.89	45.51	32.84	78.34	4.000	No	No	2.00
348	22.84	53.08	1.41	0.42	0.89	47.05	31.18	78.24	4.000	No	No	2.00
349	22.91	55.59	1.41	0.42	0.89	49.20	28.91	78.11	4.000	No	No	2.00
350	22.97	58.99	1.42	0.42	0.88	52.13	26.35	78.47	4.000	No	No	2.00
351	23.04	62.13	1.42	0.43	0.88	54.79	24.01	78.80	4.000	No	No	2.00
352	23.10	63.29	1.42	0.43	0.88	55.68	22.39	78.07	4.000	No	No	2.00
353	23.20	63.92	1.43	0.44	0.88	56.03	20.79	76.82	4.000	No	No	2.00
354	23.23	63.92	1.43	0.44	0.88	55.98	20.51	76.48	4.000	No	No	2.00
355	23.30	63.47	1.44	0.44	0.87	55.51	20.58	76.09	4.000	No	No	2.00
356	23.40	60.96	1.44	0.44	0.87	53.22	21.88	75.10	4.000	No	No	2.00
357	23.44	58.72	1.45	0.44	0.87	51.25	23.51	74.76	4.000	No	No	2.00
358	23.50	56.49	1.45	0.43	0.87	49.30	25.51	74.80	4.000	No	No	2.00
359	23.57	52.37	1.45	0.43	0.87	45.64	28.45	74.09	4.000	No	No	2.00
360	23.64	49.50	1.46	0.43	0.87	43.07	30.41	73.48	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
361	23.70	45.74	1.46	0.44	0.87	39.71	33.12	72.83	4.000	No	Yes	2.00
362	23.76	39.93	1.47	0.44	0.87	34.55	38.43	72.98	4.000	No	Yes	2.00
363	23.83	36.43	1.47	0.45	0.86	31.45	43.52	74.97	4.000	No	Yes	2.00
364	23.90	35.18	1.47	0.45	0.86	30.31	45.43	75.74	4.000	No	Yes	2.00
365	23.96	35.90	1.48	0.45	0.86	30.91	44.04	74.95	4.000	No	Yes	2.00
366	24.02	35.18	1.48	0.45	0.86	30.24	44.98	75.21	4.000	No	Yes	2.00
367	24.10	34.91	1.49	0.45	0.86	29.91	43.46	73.37	4.000	No	Yes	2.00
368	24.15	37.69	1.49	0.45	0.86	32.28	38.65	70.93	4.000	No	Yes	2.00
369	24.25	43.24	1.50	0.45	0.86	37.00	31.83	68.83	4.000	No	Yes	2.00
370	24.30	47.45	1.50	0.45	0.86	40.59	28.02	68.60	4.000	No	Yes	2.00
371	24.37	49.41	1.50	0.45	0.86	42.25	27.15	69.40	4.000	No	No	2.00
372	24.43	49.68	1.51	0.44	0.86	42.50	28.23	70.73	4.000	No	No	2.00
373	24.49	48.97	1.51	0.44	0.86	41.89	29.81	71.70	4.000	No	Yes	2.00
374	24.54	48.07	1.51	0.44	0.86	41.11	31.30	72.41	4.000	No	Yes	2.00
375	24.64	45.12	1.52	0.43	0.86	38.65	37.81	76.46	4.000	No	Yes	2.00
376	24.69	47.89	1.52	0.43	0.86	41.03	35.61	76.64	4.000	No	Yes	2.00
377	24.74	44.31	1.53	0.45	0.85	37.64	32.36	69.99	4.000	No	Yes	2.00
378	24.80	47.71	1.53	0.51	0.83	39.53	14.79	54.32	4.000	No	No	2.00
379	24.89	51.29	1.53	0.50	0.83	42.54	14.31	56.85	4.000	No	No	2.00
380	24.94	54.43	1.54	0.50	0.83	45.16	13.55	58.71	4.000	No	No	2.00
381	25.00	62.84	1.54	0.50	0.83	52.14	11.36	63.50	4.000	No	No	2.00
382	25.08	62.13	1.55	0.49	0.83	51.57	12.25	63.82	4.000	No	No	2.00
383	25.14	71.62	1.55	0.49	0.83	59.52	10.72	70.25	4.000	No	No	2.00
384	25.23	66.96	1.55	0.47	0.83	55.89	14.00	69.88	4.000	No	No	2.00
385	25.27	63.38	1.56	0.46	0.84	52.97	16.01	68.98	4.000	No	No	2.00
386	25.34	55.50	1.56	0.46	0.84	46.47	20.92	67.39	4.000	No	No	2.00
387	25.41	43.78	1.57	0.46	0.84	36.62	30.09	66.71	4.000	No	Yes	2.00
388	25.47	36.34	1.57	0.46	0.83	30.26	37.78	68.04	4.000	No	Yes	2.00
389	25.53	31.24	1.57	0.48	0.83	25.85	43.85	69.70	4.000	No	Yes	2.00
390	25.62	27.66	1.58	0.49	0.82	22.73	48.84	71.56	4.000	No	Yes	2.00
391	25.68	26.95	1.58	0.49	0.82	22.09	50.17	72.27	4.000	No	Yes	2.00
392	25.73	28.56	1.59	0.49	0.82	23.43	46.87	70.30	4.000	No	Yes	2.00
393	25.80	32.67	1.59	0.48	0.82	26.88	39.65	66.53	4.000	No	Yes	2.00
394	25.88	38.76	1.59	0.47	0.82	31.97	32.35	64.33	4.000	No	Yes	2.00
395	25.94	43.86	1.60	0.46	0.83	36.27	28.66	64.93	4.000	No	Yes	2.00
396	25.98	46.37	1.60	0.45	0.83	38.45	28.74	67.19	4.000	No	Yes	2.00
397	26.06	48.70	1.61	0.44	0.83	40.46	28.86	69.32	4.000	No	Yes	2.00
398	26.13	47.71	1.61	0.44	0.83	39.66	31.17	70.83	4.000	No	Yes	2.00
399	26.18	39.93	1.61	0.45	0.83	33.05	38.18	71.23	4.000	No	Yes	2.00
400	26.28	35.54	1.62	0.46	0.82	29.19	40.48	69.66	4.000	No	Yes	2.00
401	26.33	29.99	1.62	0.48	0.81	24.41	46.23	70.64	4.000	No	Yes	2.00
402	26.43	27.48	1.63	0.50	0.80	22.11	44.35	66.47	4.000	No	Yes	2.00
403	26.48	25.60	1.63	0.52	0.80	20.46	45.42	65.88	4.000	No	Yes	2.00
404	26.52	24.89	1.63	0.53	0.80	19.79	43.99	63.78	4.000	No	Yes	2.00
405	26.58	25.16	1.64	0.53	0.79	19.94	40.58	60.51	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
406	26.68	28.74	1.64	0.53	0.79	22.80	32.77	55.57	4.000	No	Yes	2.00
407	26.72	29.27	1.64	0.53	0.79	23.19	31.40	54.59	4.000	No	Yes	2.00
408	26.78	27.84	1.65	0.53	0.79	21.98	33.06	55.04	4.000	No	Yes	2.00
409	26.88	24.89	1.65	0.55	0.78	19.51	37.45	56.96	4.000	No	Yes	2.00
410	26.91	23.45	1.66	0.55	0.78	18.30	40.08	58.38	4.000	No	Yes	2.00
411	26.98	22.29	1.66	0.56	0.78	17.32	42.35	59.67	4.000	No	Yes	2.00
412	27.07	21.66	1.67	0.57	0.77	16.74	42.47	59.21	4.000	No	Yes	2.00
413	27.10	21.57	1.67	0.57	0.77	16.64	41.87	58.51	4.000	No	Yes	2.00
414	27.17	21.13	1.67	0.58	0.77	16.22	40.66	56.88	4.000	No	Yes	2.00
415	27.23	20.32	1.68	0.59	0.76	15.50	40.67	56.17	4.000	No	Yes	2.00
416	27.32	19.60	1.68	0.60	0.76	14.86	41.23	56.09	4.000	No	Yes	2.00
417	27.37	19.16	1.68	0.60	0.76	14.48	41.99	56.46	4.000	No	Yes	2.00
418	27.43	19.16	1.69	0.60	0.75	14.46	42.24	56.71	4.000	No	Yes	2.00
419	27.50	19.25	1.69	0.60	0.75	14.50	41.17	55.67	4.000	No	Yes	2.00
420	27.57	20.23	1.69	0.61	0.75	15.17	34.40	49.57	4.000	No	Yes	2.00
421	27.65	24.53	1.70	0.55	0.77	18.87	36.57	55.44	4.000	No	Yes	2.00
422	27.71	31.69	1.70	0.52	0.78	24.75	29.67	54.42	4.000	No	Yes	2.00
423	27.76	41.00	1.71	0.50	0.79	32.32	22.88	55.20	4.000	No	Yes	2.00
424	27.84	51.38	1.71	0.48	0.79	40.74	18.49	59.23	4.000	No	No	2.00
425	27.90	57.29	1.71	0.47	0.80	45.60	17.35	62.94	4.000	No	No	2.00
426	27.97	64.19	1.72	0.46	0.80	51.26	16.28	67.54	4.000	No	No	2.00
427	28.03	68.93	1.72	0.46	0.80	55.08	15.30	70.38	4.000	No	No	2.00
428	28.10	71.17	1.73	0.46	0.80	56.72	14.20	70.92	4.000	No	No	2.00
429	28.16	71.88	1.73	0.47	0.79	57.03	12.99	70.02	4.000	No	No	2.00
430	28.22	72.24	1.73	0.48	0.79	57.06	11.96	69.02	4.000	No	No	2.00
431	28.30	70.45	1.74	0.48	0.79	55.58	12.44	68.01	4.000	No	No	2.00
432	28.35	68.48	1.74	0.47	0.79	54.13	13.70	67.83	4.000	No	No	2.00
433	28.42	63.83	1.75	0.46	0.79	50.69	17.09	67.77	4.000	No	No	2.00
434	28.50	56.84	1.75	0.45	0.80	45.30	22.14	67.43	4.000	No	No	2.00
435	28.55	50.93	1.75	0.45	0.80	40.63	26.96	67.59	4.000	No	Yes	2.00
436	28.61	41.62	1.76	0.45	0.80	33.15	36.96	70.11	4.000	No	Yes	2.00
437	28.68	35.08	1.76	0.45	0.79	27.83	47.09	74.92	4.000	No	Yes	2.00
438	28.76	32.75	1.77	0.46	0.79	25.90	49.09	74.99	4.000	No	Yes	2.00
439	28.81	32.04	1.77	0.46	0.79	25.25	49.06	74.31	4.000	No	Yes	2.00
440	28.90	28.28	1.78	0.48	0.78	22.03	49.01	71.04	4.000	No	Yes	2.00
441	28.96	24.16	1.78	0.51	0.77	18.58	48.97	67.55	4.000	No	Yes	2.00
442	29.01	22.82	1.78	0.52	0.76	17.45	48.94	66.40	4.000	No	Yes	2.00
443	29.11	25.69	1.79	0.51	0.76	19.64	48.89	68.53	4.000	No	Yes	2.00
444	29.16	33.66	1.79	0.49	0.77	25.98	35.63	61.61	4.000	No	Yes	2.00
445	29.21	44.67	1.79	0.48	0.78	34.64	23.81	58.44	4.000	No	Yes	2.00
446	29.30	74.12	1.80	0.48	0.77	57.42	11.31	68.73	4.000	No	No	2.00
447	29.34	90.33	1.80	0.48	0.77	69.80	8.36	78.16	4.000	No	No	2.00
448	29.41	111.45	1.81	0.49	0.77	85.78	5.96	91.74	4.000	No	No	2.00
449	29.49	118.08	1.81	0.50	0.77	90.42	5.01	95.44	4.000	No	No	2.00
450	29.54	118.97	1.81	0.50	0.76	90.74	4.58	95.33	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
451	29.60	117.63	1.82	0.51	0.76	89.35	4.28	93.62	4.000	No	No	2.00
452	29.66	115.21	1.82	0.51	0.76	87.36	4.33	91.68	4.000	No	No	2.00
453	29.75	111.81	1.83	0.51	0.76	84.81	4.75	89.57	4.000	No	No	2.00
454	29.79	109.93	1.83	0.50	0.76	83.47	5.09	88.55	4.000	No	No	2.00
455	29.86	107.69	1.83	0.50	0.76	81.83	5.50	87.33	4.000	No	No	2.00
456	29.95	106.89	1.84	0.50	0.76	81.27	5.85	87.12	4.000	No	No	2.00
457	29.99	107.42	1.84	0.49	0.76	81.67	5.90	87.57	4.000	No	No	2.00
458	30.05	108.14	1.85	0.49	0.76	82.31	6.13	88.44	4.000	No	No	2.00
459	30.16	110.56	1.85	0.48	0.76	84.40	6.63	91.03	4.000	No	No	2.00
460	30.19	111.00	1.85	0.48	0.76	84.79	6.78	91.56	4.000	No	No	2.00
461	30.25	111.63	1.86	0.48	0.76	85.26	6.85	92.11	4.000	No	No	2.00
462	30.34	113.78	1.86	0.48	0.76	86.60	6.41	93.01	4.000	No	No	2.00
463	30.39	114.58	1.87	0.48	0.76	87.08	6.25	93.33	4.000	No	No	2.00
464	30.45	115.03	1.87	0.51	0.75	85.95	4.24	90.19	4.000	No	No	2.00
465	30.53	112.71	1.88	0.55	0.73	82.11	2.12	84.23	4.000	No	No	2.00
466	30.60	109.48	1.88	0.54	0.73	80.10	2.73	82.83	4.000	No	No	2.00
467	30.64	107.96	1.88	0.54	0.73	79.27	3.20	82.47	4.000	No	No	2.00
468	30.74	97.84	1.89	0.51	0.75	72.90	5.65	78.56	4.000	No	No	2.00
469	30.77	81.28	1.89	0.49	0.75	61.11	8.96	70.07	4.000	No	No	2.00
470	30.84	81.64	1.89	0.47	0.76	61.94	10.82	72.76	4.000	No	No	2.00
471	30.91	75.11	1.90	0.46	0.76	57.45	14.26	71.71	4.000	No	No	2.00
472	31.01	63.65	1.90	0.44	0.77	49.05	20.90	69.95	4.000	No	No	2.00
473	31.05	60.87	1.91	0.44	0.77	47.03	23.54	70.57	4.000	No	No	2.00
474	31.11	53.44	1.91	0.43	0.77	41.34	29.46	70.80	4.000	No	Yes	2.00
475	31.17	50.85	1.91	0.44	0.77	39.22	30.64	69.86	4.000	No	Yes	2.00
476	31.23	49.06	1.92	0.45	0.77	37.55	28.90	66.45	4.000	No	Yes	2.00
477	31.30	51.29	1.92	0.46	0.76	39.08	25.46	64.54	4.000	No	Yes	2.00
478	31.40	57.29	1.93	0.46	0.76	43.56	21.34	64.89	4.000	No	No	2.00
479	31.44	67.23	1.93	0.45	0.76	51.15	17.39	68.54	4.000	No	No	2.00
480	31.50	75.38	1.93	0.45	0.76	57.31	14.95	72.26	4.000	No	No	2.00
481	31.57	82.27	1.94	0.45	0.76	62.55	13.61	76.17	4.000	No	No	2.00
482	31.63	87.37	1.94	0.44	0.77	66.85	14.34	81.19	4.000	No	No	2.00
483	31.71	89.25	1.95	0.43	0.77	68.65	15.62	84.27	4.000	No	No	2.00
484	31.76	88.00	1.95	0.42	0.77	67.86	16.79	84.65	4.000	No	No	2.00
485	31.84	82.54	1.96	0.42	0.77	63.93	19.95	83.88	4.000	No	No	2.00
486	31.91	82.90	1.96	0.41	0.78	64.29	20.63	84.92	4.000	No	No	2.00
487	31.96	82.90	1.96	0.41	0.78	64.25	20.66	84.91	4.000	No	No	2.00
488	32.02	83.25	1.97	0.42	0.77	64.36	19.93	84.29	4.000	No	No	2.00
489	32.10	90.24	1.97	0.42	0.77	69.41	16.94	86.35	4.000	No	No	2.00
490	32.15	100.08	1.98	0.43	0.77	76.66	14.20	90.86	4.000	No	No	2.00
491	32.24	101.43	1.98	0.44	0.76	77.18	12.74	89.93	4.000	No	No	2.00
492	32.30	99.46	1.99	0.44	0.76	75.25	11.96	87.21	4.000	No	No	2.00
493	32.36	96.50	1.99	0.45	0.75	72.44	10.96	83.40	4.000	No	No	2.00
494	32.43	92.83	1.99	0.46	0.75	69.25	10.51	79.76	4.000	No	No	2.00
495	32.48	89.97	2.00	0.46	0.75	67.05	10.89	77.94	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
496	32.55	84.42	2.00	0.45	0.75	63.22	13.04	76.26	4.000	No	No	2.00
497	32.66	73.67	2.01	0.45	0.75	55.11	15.66	70.78	4.000	No	No	2.00
498	32.70	66.51	2.01	0.44	0.75	50.02	19.78	69.80	4.000	No	No	2.00
499	32.75	62.48	2.01	0.44	0.76	47.18	23.23	70.42	4.000	No	No	2.00
500	32.82	47.62	2.02	0.44	0.75	35.77	32.69	68.45	4.000	No	Yes	2.00
501	32.89	36.97	2.02	0.46	0.74	27.47	43.70	71.17	4.000	No	Yes	2.00
502	32.95	35.36	2.02	0.46	0.74	26.23	46.75	72.98	4.000	No	Yes	2.00
503	33.01	33.66	2.03	0.46	0.74	24.87	46.72	71.59	4.000	No	Yes	2.00
504	33.10	29.18	2.03	0.49	0.73	21.19	46.68	67.87	4.000	No	Yes	2.00
505	33.15	27.21	2.04	0.51	0.72	19.52	46.65	66.17	4.000	No	Yes	2.00
506	33.23	26.32	2.04	0.52	0.71	18.71	46.60	65.31	4.000	No	Yes	2.00
507	33.29	25.51	2.05	0.53	0.71	17.99	46.57	64.57	4.000	No	Yes	2.00
508	33.34	26.05	2.05	0.53	0.71	18.37	46.55	64.92	4.000	No	Yes	2.00
509	33.40	35.72	2.05	0.50	0.72	25.68	32.46	58.14	4.000	No	Yes	2.00
510	33.49	49.41	2.06	0.47	0.73	36.13	23.85	59.98	4.000	No	Yes	2.00
511	33.54	62.04	2.06	0.46	0.74	45.69	18.93	64.62	4.000	No	No	2.00
512	33.63	81.46	2.07	0.44	0.74	60.52	15.28	75.80	4.000	No	No	2.00
513	33.67	89.52	2.07	0.44	0.74	66.64	14.12	80.76	4.000	No	No	2.00
514	33.75	104.29	2.07	0.44	0.74	77.53	11.74	89.28	4.000	No	No	2.00
515	33.80	113.06	2.08	0.44	0.74	84.04	10.83	94.87	4.000	No	No	2.00
516	33.87	119.78	2.08	0.44	0.74	89.09	10.43	99.52	4.000	No	No	2.00
517	33.94	123.27	2.09	0.43	0.74	91.78	10.45	102.23	4.000	No	No	2.00
518	34.02	123.90	2.09	0.43	0.75	92.38	10.81	103.19	4.000	No	No	2.00
519	34.09	122.19	2.10	0.43	0.75	91.09	11.12	102.21	4.000	No	No	2.00
520	34.13	117.54	2.10	0.43	0.75	87.65	11.75	99.40	4.000	No	No	2.00
521	34.19	110.20	2.10	0.43	0.75	82.20	12.81	95.01	4.000	No	No	2.00
522	34.26	100.26	2.11	0.42	0.75	75.04	15.21	90.25	4.000	No	No	2.00
523	34.34	84.42	2.11	0.41	0.75	63.40	19.92	83.32	4.000	No	No	2.00
524	34.38	74.30	2.11	0.41	0.75	55.82	23.67	79.49	4.000	No	No	2.00
525	34.48	56.40	2.12	0.42	0.75	42.13	32.33	74.46	4.000	No	Yes	2.00
526	34.54	46.64	2.12	0.43	0.74	34.52	38.61	73.13	4.000	No	Yes	2.00
527	34.58	41.09	2.13	0.44	0.73	30.14	42.70	72.84	4.000	No	Yes	2.00
528	34.67	36.97	2.13	0.46	0.72	26.79	44.73	71.52	4.000	No	Yes	2.00
529	34.73	35.36	2.14	0.47	0.72	25.50	45.83	71.33	4.000	No	Yes	2.00
530	34.78	34.82	2.14	0.48	0.72	24.90	42.88	67.78	4.000	No	Yes	2.00
531	34.85	34.55	2.14	0.50	0.70	24.31	35.59	59.90	4.000	No	Yes	2.00
532	34.92	34.73	2.15	0.49	0.71	24.61	39.18	63.79	4.000	No	Yes	2.00
533	34.98	34.91	2.15	0.48	0.71	24.86	41.82	66.68	4.000	No	Yes	2.00
534	35.05	33.93	2.15	0.48	0.71	24.19	45.67	69.86	4.000	No	Yes	2.00
535	35.12	33.84	2.16	0.47	0.71	24.19	45.63	69.82	4.000	No	Yes	2.00
536	35.18	33.75	2.16	0.47	0.72	24.16	45.60	69.76	4.000	No	Yes	2.00
537	35.24	34.02	2.17	0.46	0.72	24.39	45.57	69.96	4.000	No	Yes	2.00
538	35.31	33.84	2.17	0.46	0.72	24.26	45.54	69.79	4.000	No	Yes	2.00
539	35.39	33.75	2.18	0.46	0.72	24.15	45.50	69.64	4.000	No	Yes	2.00
540	35.44	33.30	2.18	0.47	0.71	23.76	45.47	69.23	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
541	35.51	33.21	2.18	0.47	0.71	23.64	45.44	69.08	4.000	No	Yes	2.00
542	35.57	33.30	2.19	0.47	0.71	23.66	45.41	69.07	4.000	No	Yes	2.00
543	35.64	33.12	2.19	0.47	0.71	23.48	45.37	68.85	4.000	No	Yes	2.00
544	35.70	33.30	2.20	0.47	0.71	23.59	45.34	68.93	4.000	No	Yes	2.00
545	35.78	34.46	2.20	0.47	0.71	24.44	45.30	69.74	4.000	No	Yes	2.00
546	35.84	35.45	2.20	0.47	0.71	25.20	45.28	70.47	4.000	No	Yes	2.00
547	35.90	36.88	2.21	0.46	0.71	26.30	45.25	71.55	4.000	No	Yes	2.00
548	35.96	38.67	2.21	0.46	0.71	27.64	43.61	71.25	4.000	No	Yes	2.00
549	36.05	39.12	2.22	0.46	0.71	27.90	41.99	69.89	4.000	No	Yes	2.00
550	36.10	39.12	2.22	0.46	0.71	27.85	41.51	69.36	4.000	No	Yes	2.00
551	36.16	40.37	2.22	0.46	0.71	28.78	40.28	69.06	4.000	No	Yes	2.00
552	36.24	43.86	2.23	0.45	0.71	31.34	36.25	67.59	4.000	No	Yes	2.00
553	36.29	46.73	2.23	0.44	0.72	33.60	35.33	68.93	4.000	No	Yes	2.00
554	36.37	49.41	2.24	0.43	0.72	35.69	34.73	70.42	4.000	No	Yes	2.00
555	36.44	46.28	2.24	0.44	0.72	33.16	35.32	68.48	4.000	No	Yes	2.00
556	36.49	41.45	2.24	0.46	0.71	29.39	37.86	67.25	4.000	No	Yes	2.00
557	36.56	36.26	2.25	0.47	0.70	25.40	42.24	67.64	4.000	No	Yes	2.00
558	36.63	33.66	2.25	0.48	0.69	23.37	44.58	67.95	4.000	No	Yes	2.00
559	36.70	34.82	2.26	0.48	0.69	24.17	41.93	66.10	4.000	No	Yes	2.00
560	36.75	38.49	2.26	0.47	0.70	26.85	36.99	63.84	4.000	No	Yes	2.00
561	36.84	56.67	2.27	0.45	0.71	40.27	24.49	64.76	4.000	No	Yes	2.00
562	36.90	68.48	2.27	0.44	0.71	48.91	20.09	69.00	4.000	No	No	2.00
563	36.95	76.45	2.27	0.44	0.72	54.75	18.09	72.83	4.000	No	No	2.00
564	37.03	93.55	2.28	0.43	0.72	67.33	15.27	82.60	4.000	No	No	2.00
565	37.09	103.22	2.28	0.43	0.72	74.23	13.58	87.81	4.000	No	No	2.00
566	37.15	117.36	2.28	0.43	0.72	84.18	11.46	95.64	4.000	No	No	2.00
567	37.22	136.07	2.29	0.43	0.72	97.29	9.47	106.77	4.000	No	No	2.00
568	37.29	151.47	2.29	0.44	0.71	107.97	8.20	116.17	4.000	No	No	2.00
569	37.34	163.10	2.30	0.44	0.71	115.95	7.38	123.33	4.000	No	No	2.00
570	37.41	173.04	2.30	0.44	0.71	122.80	6.85	129.66	4.000	No	No	2.00
571	37.48	181.72	2.31	0.44	0.71	129.12	6.76	135.88	4.000	No	No	2.00
572	37.54	189.60	2.31	0.44	0.71	134.88	6.69	141.57	4.000	No	No	2.00
573	37.60	196.32	2.31	0.43	0.71	139.99	6.79	146.78	4.000	No	No	2.00
574	37.67	204.19	2.32	0.43	0.71	145.87	6.84	152.71	4.000	No	No	2.00
575	37.74	209.57	2.32	0.43	0.71	149.43	6.56	155.99	4.000	No	No	2.00
576	37.81	215.56	2.33	0.47	0.69	148.89	3.73	152.62	4.000	No	No	2.00
577	37.87	219.95	2.33	0.46	0.70	152.90	4.19	157.09	4.000	No	No	2.00
578	37.93	222.10	2.34	0.45	0.70	155.77	4.92	160.69	4.000	No	No	2.00
579	38.00	223.98	2.34	0.44	0.70	157.89	5.40	163.29	4.000	No	No	2.00
580	38.08	221.11	2.35	0.43	0.71	156.42	5.89	162.30	4.000	No	No	2.00
581	38.16	203.39	2.35	0.43	0.71	144.81	7.12	151.93	4.000	No	No	2.00
582	38.21	202.14	2.35	0.42	0.71	144.04	7.32	151.36	4.000	No	No	2.00
583	38.26	191.12	2.36	0.42	0.71	136.63	8.16	144.79	4.000	No	No	2.00
584	38.33	184.77	2.36	0.41	0.72	132.60	9.00	141.60	4.000	No	No	2.00
585	38.39	190.23	2.37	0.41	0.72	136.64	8.98	145.62	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
586	38.46	182.71	2.37	0.41	0.72	131.53	9.71	141.24	4.000	No	No	2.00
587	38.52	189.33	2.37	0.41	0.72	136.03	9.23	145.26	4.000	No	No	2.00
588	38.61	202.86	2.38	0.41	0.72	145.26	8.41	153.66	4.000	No	No	2.00
589	38.66	210.29	2.38	0.41	0.72	150.56	8.22	158.78	4.000	No	No	2.00
590	38.74	213.69	2.39	0.41	0.72	153.15	8.33	161.47	4.000	No	No	2.00
591	38.79	213.16	2.39	0.41	0.72	152.70	8.37	161.07	4.000	No	No	2.00
592	38.85	208.95	2.40	0.41	0.72	149.43	8.38	157.81	4.000	No	No	2.00
593	38.94	197.85	2.40	0.42	0.71	140.67	8.19	148.86	4.000	No	No	2.00
594	38.99	190.24	2.40	0.42	0.71	135.01	8.33	143.34	4.000	No	No	2.00
595	39.05	178.60	2.41	0.42	0.71	126.82	8.97	135.79	4.000	No	No	2.00
596	39.12	164.37	2.41	0.41	0.71	116.93	10.06	126.99	4.000	No	No	2.00
597	39.20	156.22	2.42	0.41	0.71	111.21	10.76	121.96	4.000	No	No	2.00
598	39.26	149.87	2.42	0.41	0.71	106.68	11.29	117.97	4.000	No	No	2.00
599	39.33	145.93	2.43	0.41	0.71	103.92	11.76	115.68	4.000	No	No	2.00
600	39.39	144.94	2.43	0.41	0.71	103.29	12.07	115.37	4.000	No	No	2.00
601	39.44	142.88	2.43	0.40	0.71	102.07	12.72	114.79	4.000	No	No	2.00
602	39.50	139.84	2.44	0.40	0.72	100.20	13.63	113.83	4.000	No	No	2.00
603	39.57	134.02	2.44	0.40	0.72	96.22	14.72	110.94	4.000	No	No	2.00
604	39.64	129.37	2.45	0.40	0.72	92.88	15.37	108.25	4.000	No	No	2.00
605	39.74	119.43	2.45	0.40	0.72	85.41	16.09	101.49	4.000	No	No	2.00
606	39.79	115.67	2.46	0.40	0.71	82.58	16.40	98.98	4.000	No	No	2.00
607	39.84	109.13	2.46	0.40	0.71	77.75	17.13	94.89	4.000	No	No	2.00
608	39.90	102.78	2.46	0.40	0.71	73.02	17.80	90.82	4.000	No	No	2.00
609	39.99	96.06	2.47	0.41	0.71	67.76	17.85	85.62	4.000	No	No	2.00
610	40.05	90.42	2.47	0.42	0.70	63.45	18.16	81.61	0.126	No	No	0.36
611	40.12	88.19	2.48	0.43	0.70	61.37	17.09	78.46	0.120	No	No	0.34
612	40.16	88.19	2.48	0.43	0.69	61.10	16.31	77.41	0.118	No	No	0.33
613	40.23	87.20	2.48	0.44	0.69	60.14	15.84	75.98	0.115	No	No	0.33
614	40.29	85.86	2.49	0.44	0.69	59.00	15.59	74.60	0.113	No	No	0.32
615	40.39	82.28	2.49	0.44	0.68	56.19	15.51	71.69	0.107	No	No	0.30
616	40.44	79.95	2.50	0.44	0.68	54.58	16.18	70.76	0.105	No	No	0.30
617	40.50	77.89	2.50	0.44	0.68	53.19	16.91	70.10	0.103	No	No	0.29
618	40.58	75.65	2.51	0.44	0.68	51.75	18.16	69.92	0.102	No	No	0.29
619	40.64	73.51	2.51	0.44	0.69	50.36	19.35	69.71	0.101	No	No	0.29
620	40.69	66.97	2.51	0.44	0.69	45.94	22.53	68.47	4.000	No	Yes	2.00
621	40.75	55.96	2.52	0.44	0.68	38.13	27.66	65.79	4.000	No	Yes	2.00
622	40.84	41.46	2.52	0.47	0.67	27.57	35.98	63.55	4.000	No	Yes	2.00
623	40.90	34.39	2.53	0.52	0.64	21.94	34.03	55.97	4.000	No	Yes	2.00
624	40.99	26.96	2.53	0.58	0.60	16.27	34.85	51.13	4.000	No	Yes	2.00
625	41.04	23.11	2.53	0.61	0.59	13.53	39.45	52.98	4.000	No	Yes	2.00
626	41.08	21.58	2.54	0.63	0.57	12.40	40.94	53.34	4.000	No	Yes	2.00
627	41.17	19.26	2.54	0.68	0.55	10.64	41.31	51.95	4.000	No	Yes	2.00
628	41.22	17.20	2.54	0.72	0.53	9.14	43.17	52.32	4.000	No	Yes	2.00
629	41.28	17.65	2.55	0.72	0.53	9.37	39.81	49.18	4.000	No	Yes	2.00
630	41.34	18.72	2.55	0.71	0.54	10.02	35.30	45.32	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
631	41.41	21.41	2.56	0.67	0.56	11.88	32.19	44.07	4.000	No	Yes	2.00
632	41.49	25.43	2.56	0.62	0.58	14.71	29.26	43.97	4.000	No	Yes	2.00
633	41.54	30.36	2.56	0.58	0.60	18.12	25.66	43.78	4.000	No	Yes	2.00
634	41.62	32.15	2.57	0.56	0.61	19.48	26.34	45.82	4.000	No	Yes	2.00
635	41.69	28.12	2.57	0.57	0.60	16.89	33.37	50.26	4.000	No	Yes	2.00
636	41.74	23.91	2.58	0.60	0.59	14.02	40.88	54.91	4.000	No	Yes	2.00
637	41.82	20.24	2.58	0.64	0.56	11.40	43.07	54.48	4.000	No	Yes	2.00
638	41.87	19.61	2.58	0.66	0.56	10.91	43.07	53.98	4.000	No	Yes	2.00
639	41.94	21.67	2.59	0.64	0.57	12.26	40.71	52.98	4.000	No	Yes	2.00
640	42.01	34.03	2.59	0.56	0.60	20.58	24.21	44.79	4.000	No	Yes	2.00
641	42.06	47.63	2.59	0.53	0.62	29.53	16.03	45.56	4.000	No	Yes	2.00
642	42.13	65.45	2.60	0.52	0.63	41.06	10.63	51.69	0.079	No	No	0.23
643	42.20	80.94	2.60	0.49	0.64	52.08	10.24	62.32	0.094	No	No	0.27
644	42.26	87.56	2.61	0.47	0.66	57.46	11.61	69.07	0.105	No	No	0.30
645	42.34	97.85	2.61	0.45	0.66	64.90	11.46	76.36	0.118	No	No	0.34
646	42.40	104.75	2.62	0.44	0.67	70.20	12.00	82.20	0.131	No	No	0.38
647	42.48	102.87	2.62	0.42	0.68	70.38	15.66	86.04	0.138	No	No	0.40
648	42.53	95.71	2.62	0.41	0.69	66.10	19.08	85.19	0.134	No	No	0.39
649	42.59	90.96	2.63	0.40	0.69	63.14	21.61	84.75	0.131	No	No	0.38
650	42.66	86.58	2.63	0.40	0.70	60.17	23.43	83.61	0.127	No	No	0.37
651	42.73	83.35	2.64	0.41	0.69	57.56	23.08	80.63	4.000	No	Yes	2.00
652	42.82	100.18	2.64	0.41	0.68	68.55	16.86	85.41	0.136	No	No	0.39
653	42.85	122.56	2.64	0.42	0.68	83.31	12.53	95.84	0.166	No	No	0.48
654	42.93	158.73	2.65	0.43	0.67	106.64	8.41	115.05	0.232	No	No	0.67
655	43.02	187.20	2.66	0.44	0.67	124.84	6.58	131.42	0.305	No	No	0.89
656	43.05	196.33	2.66	0.45	0.66	130.20	5.84	136.04	0.329	No	No	0.96
657	43.12	205.55	2.66	0.46	0.65	134.31	4.57	138.88	0.343	No	No	1.00
658	43.22	214.23	2.67	0.48	0.64	137.12	3.20	140.31	0.349	No	No	1.02
659	43.27	219.78	2.67	0.48	0.64	141.45	3.44	144.88	0.377	No	No	1.10
660	43.32	225.87	2.67	0.48	0.64	145.07	3.25	148.32	0.399	No	No	1.17
661	43.37	232.31	2.68	0.48	0.64	148.39	2.89	151.28	0.419	No	No	1.22
662	43.48	244.40	2.68	0.47	0.64	157.59	3.27	160.85	0.493	No	No	1.44
663	43.51	246.37	2.69	0.47	0.65	159.21	3.38	162.59	0.509	No	No	1.49
664	43.57	249.32	2.69	0.47	0.65	160.96	3.33	164.29	0.523	No	No	1.53
665	43.64	254.96	2.69	0.47	0.64	163.58	2.95	166.53	0.541	No	No	1.58
666	43.72	258.72	2.70	0.47	0.65	166.91	3.25	170.15	0.577	No	No	1.69
667	43.77	262.75	2.70	0.47	0.65	169.68	3.28	172.97	0.606	No	No	1.77
668	43.85	263.06	2.71	0.47	0.65	169.89	3.33	173.22	0.609	No	No	1.78
669	43.93	263.38	2.71	0.47	0.64	169.47	3.17	172.64	0.602	No	No	1.76
670	43.97	264.72	2.72	0.47	0.64	169.85	3.03	172.88	0.603	No	No	1.77
671	44.03	266.24	2.72	0.47	0.64	170.45	2.94	173.39	0.608	No	No	1.78
672	44.10	263.82	2.72	0.47	0.64	169.57	3.22	172.79	0.604	No	No	1.77
673	44.17	262.84	2.73	0.46	0.64	169.33	3.41	172.74	0.604	No	No	1.78
674	44.23	259.97	2.73	0.46	0.65	168.19	3.73	171.92	0.598	No	No	1.76
675	44.32	253.71	2.74	0.46	0.65	164.16	3.89	168.05	0.561	No	No	1.65

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
676	44.38	249.14	2.74	0.46	0.65	160.82	3.86	164.68	0.529	No	No	1.56
677	44.43	245.20	2.75	0.46	0.64	157.97	3.84	161.81	0.504	No	No	1.48
678	44.52	237.15	2.75	0.46	0.64	152.38	3.89	156.27	0.459	No	No	1.35
679	44.57	230.79	2.75	0.46	0.64	148.25	4.01	152.26	0.429	No	No	1.27
680	44.63	223.18	2.76	0.46	0.64	143.17	4.12	147.29	0.395	No	No	1.16
681	44.70	217.18	2.76	0.47	0.64	138.75	4.05	142.80	0.366	No	No	1.08
682	44.76	215.66	2.77	0.47	0.64	137.38	3.94	141.32	0.357	No	No	1.05
683	44.82	214.86	2.77	0.47	0.63	136.33	3.77	140.10	0.349	No	No	1.03
684	44.91	215.04	2.78	0.48	0.63	135.64	3.50	139.14	0.343	No	No	1.01
685	44.95	215.93	2.78	0.48	0.63	136.12	3.47	139.59	0.345	No	No	1.02
686	45.03	219.33	2.78	0.48	0.63	138.19	3.43	141.62	0.357	No	No	1.06
687	45.08	222.65	2.79	0.48	0.63	140.18	3.36	143.55	0.369	No	No	1.09
688	45.17	224.70	2.79	0.47	0.63	142.15	3.64	145.79	0.384	No	No	1.14
689	45.21	225.42	2.80	0.47	0.63	142.93	3.78	146.72	0.390	No	No	1.16
690	45.28	228.20	2.80	0.46	0.64	145.39	4.05	149.45	0.410	No	No	1.21
691	45.37	232.22	2.81	0.46	0.64	148.62	4.31	152.92	0.435	No	No	1.29
692	45.42	235.09	2.81	0.45	0.64	150.85	4.45	155.31	0.454	No	No	1.35
693	45.48	238.22	2.81	0.45	0.65	153.66	4.77	158.43	0.480	No	No	1.42
694	45.56	242.61	2.82	0.44	0.65	157.05	4.98	162.02	0.511	No	No	1.52
695	45.62	244.13	2.82	0.44	0.65	158.19	5.05	163.24	0.523	No	No	1.55
696	45.67	244.13	2.83	0.44	0.65	158.33	5.15	163.48	0.525	No	No	1.56
697	45.76	241.63	2.83	0.44	0.65	156.79	5.31	162.10	0.514	No	No	1.53
698	45.81	239.93	2.84	0.44	0.65	155.96	5.51	161.47	0.509	No	No	1.51
699	45.88	232.86	2.84	0.43	0.65	151.56	5.81	157.37	0.476	No	No	1.42
700	45.95	224.45	2.84	0.44	0.65	145.36	5.70	151.05	0.426	No	No	1.27
701	46.01	215.40	2.85	0.44	0.65	139.38	5.91	145.29	0.387	No	No	1.15
702	46.07	204.75	2.85	0.44	0.65	132.27	6.13	138.40	0.344	No	No	1.02
703	46.14	194.10	2.86	0.44	0.64	125.16	6.37	131.54	0.306	No	No	0.91
704	46.20	170.54	2.86	0.44	0.65	110.01	7.34	117.35	0.241	No	No	0.72
705	46.30	169.20	2.87	0.45	0.64	108.00	6.62	114.62	0.229	No	No	0.68
706	46.33	164.99	2.87	0.45	0.64	105.07	6.64	111.71	0.218	No	No	0.65
707	46.40	155.24	2.87	0.46	0.63	98.47	6.83	105.31	0.196	No	No	0.58
708	46.50	145.84	2.88	0.46	0.63	92.14	7.09	99.23	0.177	No	No	0.53
709	46.53	139.48	2.88	0.46	0.63	88.28	7.64	95.91	0.167	No	No	0.50
710	46.59	133.21	2.89	0.45	0.63	84.47	8.28	92.75	0.158	No	No	0.47
711	46.66	125.86	2.89	0.45	0.64	80.18	9.36	89.54	0.150	No	No	0.45
712	46.74	119.69	2.89	0.44	0.64	76.89	10.93	87.82	0.145	No	No	0.43
713	46.79	111.81	2.90	0.43	0.65	72.66	13.38	86.04	0.139	No	No	0.42
714	46.85	105.54	2.90	0.41	0.66	69.85	17.30	87.15	0.140	No	No	0.42
715	46.93	100.71	2.91	0.39	0.67	67.61	21.25	88.86	0.142	No	No	0.43
716	46.99	94.80	2.91	0.39	0.67	63.96	24.12	88.09	4.000	No	Yes	2.00
717	47.08	88.71	2.92	0.39	0.68	59.95	26.77	86.72	4.000	No	Yes	2.00
718	47.13	85.13	2.92	0.39	0.67	57.36	27.52	84.88	4.000	No	Yes	2.00
719	47.19	88.36	2.92	0.39	0.67	59.36	25.65	85.01	4.000	No	Yes	2.00
720	47.27	84.42	2.93	0.39	0.67	56.57	26.70	83.27	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
721	47.32	88.00	2.93	0.39	0.67	58.97	25.47	84.44	4.000	No	Yes	2.00
722	47.39	91.67	2.94	0.39	0.67	61.30	23.84	85.14	4.000	No	Yes	2.00
723	47.45	92.47	2.94	0.40	0.66	61.48	22.41	83.88	4.000	No	Yes	2.00
724	47.52	94.26	2.95	0.41	0.66	62.02	19.93	81.95	0.126	No	No	0.38
725	47.58	97.22	2.95	0.42	0.65	63.42	17.75	81.17	0.126	No	No	0.38
726	47.67	104.47	2.95	0.42	0.65	67.75	15.49	83.24	0.132	No	No	0.40
727	47.71	106.71	2.96	0.42	0.65	69.15	15.07	84.22	0.134	No	No	0.40
728	47.77	110.02	2.96	0.42	0.65	71.22	14.47	85.69	0.138	No	No	0.42
729	47.84	114.58	2.97	0.42	0.65	74.10	13.78	87.88	0.144	No	No	0.43
730	47.92	121.30	2.97	0.42	0.65	78.31	12.80	91.11	0.153	No	No	0.46
731	47.98	126.40	2.97	0.42	0.64	81.50	12.16	93.66	0.160	No	No	0.48
732	48.04	132.94	2.98	0.43	0.64	85.61	11.44	97.06	0.170	No	No	0.51
733	48.14	144.13	2.98	0.44	0.63	91.48	9.12	100.61	0.181	No	No	0.55
734	48.17	155.85	2.99	0.44	0.63	98.59	8.12	106.71	0.201	No	No	0.61
735	48.24	168.21	2.99	0.44	0.64	107.02	8.05	115.07	0.232	No	No	0.70
736	48.30	180.29	2.99	0.43	0.64	114.94	7.73	122.67	0.264	No	No	0.80
737	48.38	192.47	3.00	0.43	0.64	123.15	7.63	130.78	0.304	No	No	0.92
738	48.44	194.79	3.00	0.42	0.64	125.39	8.11	133.50	0.320	No	No	0.97
739	48.50	197.12	3.01	0.42	0.65	127.47	8.49	135.96	0.334	No	No	1.01
740	48.56	212.70	3.01	0.42	0.65	137.36	7.87	145.23	0.392	No	No	1.18
741	48.63	221.56	3.02	0.41	0.65	143.44	7.86	151.30	0.435	No	No	1.32
742	48.70	228.01	3.02	0.41	0.65	147.94	7.92	155.86	0.472	No	No	1.43
743	48.75	234.09	3.02	0.41	0.65	152.12	7.92	160.04	0.508	No	No	1.54
744	48.85	243.31	3.03	0.41	0.65	158.66	8.04	166.70	0.572	No	No	1.73
745	48.90	247.70	3.03	0.41	0.65	161.40	7.90	169.31	0.598	No	No	1.81
746	48.96	250.03	3.04	0.41	0.65	162.79	7.82	170.62	0.611	No	No	1.85
747	49.05	254.32	3.04	0.41	0.65	165.37	7.68	173.05	0.637	No	No	1.93
748	49.09	256.74	3.05	0.41	0.65	166.84	7.60	174.44	0.652	No	No	1.98
749	49.15	258.89	3.05	0.41	0.65	168.13	7.54	175.67	0.666	No	No	2.00
750	49.22	266.68	3.06	0.41	0.65	172.83	7.24	180.07	0.717	No	No	2.00
751	49.28	271.96	3.06	0.41	0.65	176.12	7.12	183.24	0.757	No	No	2.00
752	49.34	276.53	3.06	0.41	0.65	178.79	6.94	185.72	0.789	No	No	2.00
753	49.43	279.48	3.07	0.41	0.65	180.59	6.90	187.50	0.814	No	No	2.00
754	49.49	284.49	3.07	0.41	0.65	183.60	6.75	190.35	0.854	No	No	2.00
755	49.55	286.82	3.08	0.41	0.65	185.07	6.73	191.80	0.876	No	No	2.00
756	49.62	292.82	3.08	0.41	0.64	188.66	6.56	195.22	0.928	No	No	2.00
757	49.69	294.43	3.09	0.41	0.64	189.50	6.50	196.00	0.940	No	No	2.00
758	49.74	294.34	3.09	0.41	0.64	189.35	6.50	195.85	0.938	No	No	2.00
759	49.83	290.85	3.10	0.41	0.64	186.87	6.54	193.41	0.899	No	No	2.00
760	49.89	287.27	3.10	0.41	0.64	184.61	6.66	191.27	0.867	No	No	2.00
761	49.95	280.29	3.10	0.00	1.00	280.29	0.00	280.29	4.000	No	No	2.00
762	50.03	276.08	3.11	0.00	1.00	276.08	0.00	276.08	4.000	No	No	2.00
763	50.08	273.21	3.11	0.00	1.00	273.21	0.00	273.21	4.000	No	No	2.00
764	50.15	271.51	3.11	0.00	1.00	271.51	0.00	271.51	4.000	No	No	2.00
765	50.24	268.92	3.12	0.00	1.00	268.92	0.00	268.92	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
766	50.27	268.74	3.12	0.00	1.00	268.74	0.00	268.74	4.000	No	No	2.00

Abbreviations

Depth: Depth from free surface, at which CPT was performed (ft)
q_t: Total cone resistance
I_c: Soil behavior type index
Fr: Normalized friction ratio (%)
n: Stress exponent
Q_{tn}: Normalized cone resistance
K_c: Cone resistance correction factor due to fines
$Q_{tn,cs}$: Normalized and adjusted cone resistance
$CRR_{7.5}$: Cyclic resistance ratio for M_w=7.5
FS: Factor of safety against soil liquefaction

:: Liquefaction Potential Index calculation data ::

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
0.07	2.00	0.00	0.00	0.07	0.00	0.14	2.00	0.00	0.00	0.07	0.00
0.21	2.00	0.00	0.00	0.08	0.00	0.27	2.00	0.00	0.00	0.05	0.00
0.34	2.00	0.00	0.00	0.08	0.00	0.40	2.00	0.00	0.00	0.06	0.00
0.47	2.00	0.00	0.00	0.07	0.00	0.55	2.00	0.00	0.00	0.08	0.00
0.59	2.00	0.00	0.00	0.04	0.00	0.66	2.00	0.00	0.00	0.07	0.00
0.72	2.00	0.00	0.00	0.06	0.00	0.79	2.00	0.00	0.00	0.07	0.00
0.88	2.00	0.00	0.00	0.09	0.00	0.92	2.00	0.00	0.00	0.05	0.00
1.01	2.00	0.00	0.00	0.09	0.00	1.07	2.00	0.00	0.00	0.06	0.00
1.12	2.00	0.00	0.00	0.06	0.00	1.21	2.00	0.00	0.00	0.09	0.00
1.25	2.00	0.00	0.00	0.04	0.00	1.32	2.00	0.00	0.00	0.07	0.00
1.40	2.00	0.00	0.00	0.08	0.00	1.45	2.00	0.00	0.00	0.05	0.00
1.54	2.00	0.00	0.00	0.08	0.00	1.61	2.00	0.00	0.00	0.07	0.00
1.65	2.00	0.00	0.00	0.04	0.00	1.72	2.00	0.00	0.00	0.07	0.00
1.82	2.00	0.00	0.00	0.10	0.00	1.84	2.00	0.00	0.00	0.02	0.00
1.92	2.00	0.00	0.00	0.08	0.00	1.97	2.00	0.00	0.00	0.06	0.00
2.05	2.00	0.00	0.00	0.08	0.00	2.12	2.00	0.00	0.00	0.07	0.00
2.17	2.00	0.00	0.00	0.05	0.00	2.27	2.00	0.00	0.00	0.10	0.00
2.32	2.00	0.00	0.00	0.06	0.00	2.37	2.00	0.00	0.00	0.04	0.00
2.46	2.00	0.00	0.00	0.10	0.00	2.51	2.00	0.00	0.00	0.05	0.00
2.57	2.00	0.00	0.00	0.05	0.00	2.66	2.00	0.00	0.00	0.09	0.00
2.72	2.00	0.00	0.00	0.06	0.00	2.76	2.00	0.00	0.00	0.04	0.00
2.83	2.00	0.00	0.00	0.07	0.00	2.89	2.00	0.00	0.00	0.06	0.00
2.95	2.00	0.00	0.00	0.06	0.00	3.05	2.00	0.00	0.00	0.10	0.00
3.10	2.00	0.00	0.00	0.04	0.00	3.15	2.00	0.00	0.00	0.05	0.00
3.22	2.00	0.00	0.00	0.07	0.00	3.29	2.00	0.00	0.00	0.07	0.00
3.36	2.00	0.00	0.00	0.07	0.00	3.43	2.00	0.00	0.00	0.07	0.00
3.49	2.00	0.00	0.00	0.06	0.00	3.56	2.00	0.00	0.00	0.06	0.00
3.66	2.00	0.00	0.00	0.10	0.00	3.70	2.00	0.00	0.00	0.05	0.00
3.76	2.00	0.00	0.00	0.05	0.00	3.81	2.00	0.00	0.00	0.05	0.00
3.90	2.00	0.00	0.00	0.09	0.00	3.94	2.00	0.00	0.00	0.04	0.00
4.01	2.00	0.00	0.00	0.07	0.00	4.08	2.00	0.00	0.00	0.07	0.00
4.15	2.00	0.00	0.00	0.07	0.00	4.21	2.00	0.00	0.00	0.05	0.00
4.28	2.00	0.00	0.00	0.07	0.00	4.35	2.00	0.00	0.00	0.07	0.00
4.40	2.00	0.00	0.00	0.05	0.00	4.47	2.00	0.00	0.00	0.08	0.00
4.53	2.00	0.00	0.00	0.06	0.00	4.60	2.00	0.00	0.00	0.06	0.00
4.69	2.00	0.00	0.00	0.09	0.00	4.74	2.00	0.00	0.00	0.06	0.00
4.80	2.00	0.00	0.00	0.05	0.00	4.90	2.00	0.00	0.00	0.10	0.00
4.93	2.00	0.00	0.00	0.03	0.00	5.00	2.00	0.00	0.00	0.07	0.00
5.08	2.00	0.00	0.00	0.07	0.00	5.13	2.00	0.00	0.00	0.05	0.00
5.21	2.00	0.00	0.00	0.08	0.00	5.26	2.00	0.00	0.00	0.05	0.00
5.34	2.00	0.00	0.00	0.08	0.00	5.39	2.00	0.00	0.00	0.05	0.00
5.49	2.00	0.00	0.00	0.10	0.00	5.54	2.00	0.00	0.00	0.05	0.00
5.58	2.00	0.00	0.00	0.04	0.00	5.64	2.00	0.00	0.00	0.06	0.00
5.72	2.00	0.00	0.00	0.08	0.00	5.79	2.00	0.00	0.00	0.06	0.00
5.84	2.00	0.00	0.00	0.06	0.00	5.93	2.00	0.00	0.00	0.09	0.00
5.99	2.00	0.00	0.00	0.06	0.00	6.04	2.00	0.00	0.00	0.05	0.00
6.12	2.00	0.00	0.00	0.08	0.00	6.17	2.00	0.00	0.00	0.05	0.00
6.24	2.00	0.00	0.00	0.07	0.00	6.32	2.00	0.00	0.00	0.08	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
6.37	2.00	0.00	0.00	0.05	0.00	6.44	2.00	0.00	0.00	0.07	0.00
6.52	2.00	0.00	0.00	0.09	0.00	6.58	2.00	0.00	0.00	0.06	0.00
6.63	2.00	0.00	0.00	0.05	0.00	6.72	2.00	0.00	0.00	0.09	0.00
6.77	2.00	0.00	0.00	0.05	0.00	6.83	2.00	0.00	0.00	0.06	0.00
6.91	2.00	0.00	0.00	0.07	0.00	6.97	2.00	0.00	0.00	0.07	0.00
7.02	2.00	0.00	0.00	0.05	0.00	7.10	2.00	0.00	0.00	0.08	0.00
7.18	2.00	0.00	0.00	0.08	0.00	7.23	2.00	0.00	0.00	0.05	0.00
7.29	2.00	0.00	0.00	0.05	0.00	7.37	2.00	0.00	0.00	0.08	0.00
7.42	2.00	0.00	0.00	0.06	0.00	7.52	2.00	0.00	0.00	0.10	0.00
7.57	2.00	0.00	0.00	0.04	0.00	7.61	2.00	0.00	0.00	0.05	0.00
7.71	2.00	0.00	0.00	0.09	0.00	7.76	2.00	0.00	0.00	0.06	0.00
7.83	2.00	0.00	0.00	0.06	0.00	7.88	2.00	0.00	0.00	0.05	0.00
7.98	2.00	0.00	0.00	0.10	0.00	8.02	2.00	0.00	0.00	0.04	0.00
8.08	2.00	0.00	0.00	0.07	0.00	8.17	2.00	0.00	0.00	0.09	0.00
8.21	2.00	0.00	0.00	0.04	0.00	8.28	2.00	0.00	0.00	0.07	0.00
8.37	2.00	0.00	0.00	0.09	0.00	8.41	2.00	0.00	0.00	0.04	0.00
8.47	2.00	0.00	0.00	0.06	0.00	8.54	2.00	0.00	0.00	0.07	0.00
8.60	2.00	0.00	0.00	0.06	0.00	8.67	2.00	0.00	0.00	0.07	0.00
8.74	2.00	0.00	0.00	0.07	0.00	8.82	2.00	0.00	0.00	0.08	0.00
8.87	2.00	0.00	0.00	0.05	0.00	8.97	2.00	0.00	0.00	0.10	0.00
9.00	2.00	0.00	0.00	0.03	0.00	9.07	2.00	0.00	0.00	0.07	0.00
9.12	2.00	0.00	0.00	0.06	0.00	9.22	2.00	0.00	0.00	0.09	0.00
9.27	2.00	0.00	0.00	0.05	0.00	9.32	2.00	0.00	0.00	0.05	0.00
9.40	2.00	0.00	0.00	0.08	0.00	9.47	2.00	0.00	0.00	0.06	0.00
9.52	2.00	0.00	0.00	0.05	0.00	9.59	2.00	0.00	0.00	0.07	0.00
9.66	2.00	0.00	0.00	0.08	0.00	9.72	2.00	0.00	0.00	0.06	0.00
9.81	2.00	0.00	0.00	0.08	0.00	9.86	2.00	0.00	0.00	0.06	0.00
9.92	2.00	0.00	0.00	0.06	0.00	10.01	2.00	0.00	0.00	0.09	0.00
10.05	2.00	0.00	0.00	0.04	0.00	10.11	2.00	0.00	0.00	0.06	0.00
10.17	2.00	0.00	0.00	0.06	0.00	10.26	2.00	0.00	0.00	0.09	0.00
10.31	2.00	0.00	0.00	0.04	0.00	10.40	2.00	0.00	0.00	0.09	0.00
10.45	2.00	0.00	0.00	0.05	0.00	10.51	2.00	0.00	0.00	0.06	0.00
10.59	2.00	0.00	0.00	0.08	0.00	10.66	2.00	0.00	0.00	0.08	0.00
10.71	2.00	0.00	0.00	0.04	0.00	10.78	2.00	0.00	0.00	0.08	0.00
10.86	2.00	0.00	0.00	0.08	0.00	10.89	2.00	0.00	0.00	0.03	0.00
11.00	2.00	0.00	0.00	0.11	0.00	11.05	2.00	0.00	0.00	0.04	0.00
11.11	2.00	0.00	0.00	0.06	0.00	11.16	2.00	0.00	0.00	0.06	0.00
11.26	2.00	0.00	0.00	0.10	0.00	11.31	2.00	0.00	0.00	0.04	0.00
11.36	2.00	0.00	0.00	0.06	0.00	11.45	2.00	0.00	0.00	0.08	0.00
11.51	2.00	0.00	0.00	0.06	0.00	11.56	2.00	0.00	0.00	0.05	0.00
11.62	2.00	0.00	0.00	0.06	0.00	11.70	2.00	0.00	0.00	0.08	0.00
11.76	2.00	0.00	0.00	0.06	0.00	11.86	2.00	0.00	0.00	0.10	0.00
11.90	2.00	0.00	0.00	0.04	0.00	11.96	2.00	0.00	0.00	0.05	0.00
12.01	2.00	0.00	0.00	0.06	0.00	12.08	2.00	0.00	0.00	0.07	0.00
12.14	2.00	0.00	0.00	0.06	0.00	12.22	2.00	0.00	0.00	0.08	0.00
12.29	2.00	0.00	0.00	0.07	0.00	12.35	2.00	0.00	0.00	0.06	0.00
12.40	2.00	0.00	0.00	0.06	0.00	12.47	2.00	0.00	0.00	0.07	0.00
12.54	2.00	0.00	0.00	0.07	0.00	12.61	2.00	0.00	0.00	0.07	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
12.67	2.00	0.00	0.00	0.06	0.00	12.76	2.00	0.00	0.00	0.08	0.00
12.81	2.00	0.00	0.00	0.05	0.00	12.90	2.00	0.00	0.00	0.09	0.00
12.94	2.00	0.00	0.00	0.04	0.00	12.99	2.00	0.00	0.00	0.06	0.00
13.06	2.00	0.00	0.00	0.06	0.00	13.15	2.00	0.00	0.00	0.09	0.00
13.20	2.00	0.00	0.00	0.05	0.00	13.27	2.00	0.00	0.00	0.07	0.00
13.35	2.00	0.00	0.00	0.08	0.00	13.40	2.00	0.00	0.00	0.05	0.00
13.46	2.00	0.00	0.00	0.05	0.00	13.55	2.00	0.00	0.00	0.09	0.00
13.60	2.00	0.00	0.00	0.04	0.00	13.66	2.00	0.00	0.00	0.06	0.00
13.72	2.00	0.00	0.00	0.07	0.00	13.78	2.00	0.00	0.00	0.05	0.00
13.85	2.00	0.00	0.00	0.07	0.00	13.93	2.00	0.00	0.00	0.08	0.00
14.00	2.00	0.00	0.00	0.07	0.00	14.04	2.00	0.00	0.00	0.04	0.00
14.11	2.00	0.00	0.00	0.07	0.00	14.18	2.00	0.00	0.00	0.06	0.00
14.25	2.00	0.00	0.00	0.08	0.00	14.32	2.00	0.00	0.00	0.06	0.00
14.38	2.00	0.00	0.00	0.06	0.00	14.45	2.00	0.00	0.00	0.07	0.00
14.51	2.00	0.00	0.00	0.06	0.00	14.58	2.00	0.00	0.00	0.07	0.00
14.63	2.00	0.00	0.00	0.06	0.00	14.71	2.00	0.00	0.00	0.08	0.00
14.77	2.00	0.00	0.00	0.05	0.00	14.85	2.00	0.00	0.00	0.09	0.00
14.91	2.00	0.00	0.00	0.06	0.00	14.97	2.00	0.00	0.00	0.06	0.00
15.06	2.00	0.00	0.00	0.08	0.00	15.11	2.00	0.00	0.00	0.05	0.00
15.17	2.00	0.00	0.00	0.06	0.00	15.26	2.00	0.00	0.00	0.09	0.00
15.32	2.00	0.00	0.00	0.06	0.00	15.37	2.00	0.00	0.00	0.05	0.00
15.43	2.00	0.00	0.00	0.07	0.00	15.51	2.00	0.00	0.00	0.08	0.00
15.57	2.00	0.00	0.00	0.06	0.00	15.62	2.00	0.00	0.00	0.05	0.00
15.72	2.00	0.00	0.00	0.10	0.00	15.77	2.00	0.00	0.00	0.05	0.00
15.82	2.00	0.00	0.00	0.06	0.00	15.88	2.00	0.00	0.00	0.06	0.00
15.95	2.00	0.00	0.00	0.06	0.00	16.01	2.00	0.00	0.00	0.06	0.00
16.09	2.00	0.00	0.00	0.08	0.00	16.15	2.00	0.00	0.00	0.06	0.00
16.22	2.00	0.00	0.00	0.06	0.00	16.28	2.00	0.00	0.00	0.06	0.00
16.34	2.00	0.00	0.00	0.07	0.00	16.41	2.00	0.00	0.00	0.07	0.00
16.48	2.00	0.00	0.00	0.07	0.00	16.56	2.00	0.00	0.00	0.07	0.00
16.61	2.00	0.00	0.00	0.06	0.00	16.67	2.00	0.00	0.00	0.06	0.00
16.75	2.00	0.00	0.00	0.08	0.00	16.81	2.00	0.00	0.00	0.06	0.00
16.89	2.00	0.00	0.00	0.08	0.00	16.93	2.00	0.00	0.00	0.04	0.00
17.01	2.00	0.00	0.00	0.08	0.00	17.07	2.00	0.00	0.00	0.05	0.00
17.14	2.00	0.00	0.00	0.07	0.00	17.21	2.00	0.00	0.00	0.07	0.00
17.27	2.00	0.00	0.00	0.06	0.00	17.34	2.00	0.00	0.00	0.07	0.00
17.39	2.00	0.00	0.00	0.05	0.00	17.46	2.00	0.00	0.00	0.07	0.00
17.54	2.00	0.00	0.00	0.08	0.00	17.60	2.00	0.00	0.00	0.06	0.00
17.66	2.00	0.00	0.00	0.06	0.00	17.73	2.00	0.00	0.00	0.08	0.00
17.80	2.00	0.00	0.00	0.07	0.00	17.86	2.00	0.00	0.00	0.05	0.00
17.93	2.00	0.00	0.00	0.07	0.00	18.00	2.00	0.00	0.00	0.07	0.00
18.09	2.00	0.00	0.00	0.09	0.00	18.12	2.00	0.00	0.00	0.03	0.00
18.18	2.00	0.00	0.00	0.07	0.00	18.24	2.00	0.00	0.00	0.06	0.00
18.31	2.00	0.00	0.00	0.06	0.00	18.37	2.00	0.00	0.00	0.07	0.00
18.45	2.00	0.00	0.00	0.08	0.00	18.50	2.00	0.00	0.00	0.05	0.00
18.58	2.00	0.00	0.00	0.07	0.00	18.64	2.00	0.00	0.00	0.06	0.00
18.71	2.00	0.00	0.00	0.07	0.00	18.78	2.00	0.00	0.00	0.07	0.00
18.84	2.00	0.00	0.00	0.06	0.00	18.93	2.00	0.00	0.00	0.09	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
18.97	2.00	0.00	0.00	0.04	0.00	19.04	2.00	0.00	0.00	0.07	0.00
19.13	2.00	0.00	0.00	0.09	0.00	19.17	2.00	0.00	0.00	0.04	0.00
19.24	2.00	0.00	0.00	0.07	0.00	19.33	2.00	0.00	0.00	0.09	0.00
19.38	2.00	0.00	0.00	0.05	0.00	19.44	2.00	0.00	0.00	0.06	0.00
19.50	2.00	0.00	0.00	0.06	0.00	19.57	2.00	0.00	0.00	0.07	0.00
19.63	2.00	0.00	0.00	0.06	0.00	19.68	2.00	0.00	0.00	0.06	0.00
19.76	2.00	0.00	0.00	0.07	0.00	19.83	2.00	0.00	0.00	0.07	0.00
19.88	2.00	0.00	0.00	0.05	0.00	19.96	2.00	0.00	0.00	0.07	0.00
20.02	2.00	0.00	0.00	0.07	0.00	20.09	2.00	0.00	0.00	0.06	0.00
20.18	2.00	0.00	0.00	0.09	0.00	20.22	2.00	0.00	0.00	0.04	0.00
20.28	2.00	0.00	0.00	0.06	0.00	20.35	2.00	0.00	0.00	0.07	0.00
20.41	2.00	0.00	0.00	0.07	0.00	20.47	2.00	0.00	0.00	0.06	0.00
20.56	2.00	0.00	0.00	0.08	0.00	20.61	2.00	0.00	0.00	0.06	0.00
20.67	2.00	0.00	0.00	0.06	0.00	20.76	2.00	0.00	0.00	0.09	0.00
20.82	2.00	0.00	0.00	0.05	0.00	20.87	2.00	0.00	0.00	0.05	0.00
20.96	2.00	0.00	0.00	0.08	0.00	21.00	2.00	0.00	0.00	0.04	0.00
21.07	2.00	0.00	0.00	0.07	0.00	21.15	2.00	0.00	0.00	0.08	0.00
21.21	2.00	0.00	0.00	0.06	0.00	21.26	2.00	0.00	0.00	0.05	0.00
21.35	2.00	0.00	0.00	0.09	0.00	21.41	2.00	0.00	0.00	0.05	0.00
21.47	2.00	0.00	0.00	0.06	0.00	21.53	2.00	0.00	0.00	0.06	0.00
21.61	2.00	0.00	0.00	0.08	0.00	21.67	2.00	0.00	0.00	0.06	0.00
21.76	2.00	0.00	0.00	0.09	0.00	21.80	2.00	0.00	0.00	0.04	0.00
21.86	2.00	0.00	0.00	0.06	0.00	21.95	2.00	0.00	0.00	0.09	0.00
21.98	2.00	0.00	0.00	0.03	0.00	22.05	2.00	0.00	0.00	0.07	0.00
22.12	2.00	0.00	0.00	0.06	0.00	22.20	2.00	0.00	0.00	0.08	0.00
22.25	2.00	0.00	0.00	0.05	0.00	22.31	2.00	0.00	0.00	0.06	0.00
22.39	2.00	0.00	0.00	0.08	0.00	22.44	2.00	0.00	0.00	0.05	0.00
22.54	2.00	0.00	0.00	0.10	0.00	22.58	2.00	0.00	0.00	0.04	0.00
22.65	2.00	0.00	0.00	0.08	0.00	22.71	2.00	0.00	0.00	0.05	0.00
22.80	2.00	0.00	0.00	0.09	0.00	22.84	2.00	0.00	0.00	0.04	0.00
22.91	2.00	0.00	0.00	0.07	0.00	22.97	2.00	0.00	0.00	0.06	0.00
23.04	2.00	0.00	0.00	0.07	0.00	23.10	2.00	0.00	0.00	0.06	0.00
23.20	2.00	0.00	0.00	0.10	0.00	23.23	2.00	0.00	0.00	0.03	0.00
23.30	2.00	0.00	0.00	0.06	0.00	23.40	2.00	0.00	0.00	0.10	0.00
23.44	2.00	0.00	0.00	0.04	0.00	23.50	2.00	0.00	0.00	0.06	0.00
23.57	2.00	0.00	0.00	0.07	0.00	23.64	2.00	0.00	0.00	0.06	0.00
23.70	2.00	0.00	0.00	0.06	0.00	23.76	2.00	0.00	0.00	0.06	0.00
23.83	2.00	0.00	0.00	0.07	0.00	23.90	2.00	0.00	0.00	0.07	0.00
23.96	2.00	0.00	0.00	0.06	0.00	24.02	2.00	0.00	0.00	0.06	0.00
24.10	2.00	0.00	0.00	0.08	0.00	24.15	2.00	0.00	0.00	0.05	0.00
24.25	2.00	0.00	0.00	0.09	0.00	24.30	2.00	0.00	0.00	0.05	0.00
24.37	2.00	0.00	0.00	0.07	0.00	24.43	2.00	0.00	0.00	0.06	0.00
24.49	2.00	0.00	0.00	0.06	0.00	24.54	2.00	0.00	0.00	0.05	0.00
24.64	2.00	0.00	0.00	0.09	0.00	24.69	2.00	0.00	0.00	0.05	0.00
24.74	2.00	0.00	0.00	0.05	0.00	24.80	2.00	0.00	0.00	0.06	0.00
24.89	2.00	0.00	0.00	0.09	0.00	24.94	2.00	0.00	0.00	0.05	0.00
25.00	2.00	0.00	0.00	0.06	0.00	25.08	2.00	0.00	0.00	0.08	0.00
25.14	2.00	0.00	0.00	0.05	0.00	25.23	2.00	0.00	0.00	0.09	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
25.27	2.00	0.00	0.00	0.04	0.00	25.34	2.00	0.00	0.00	0.07	0.00
25.41	2.00	0.00	0.00	0.07	0.00	25.47	2.00	0.00	0.00	0.06	0.00
25.53	2.00	0.00	0.00	0.07	0.00	25.62	2.00	0.00	0.00	0.08	0.00
25.68	2.00	0.00	0.00	0.06	0.00	25.73	2.00	0.00	0.00	0.06	0.00
25.80	2.00	0.00	0.00	0.07	0.00	25.88	2.00	0.00	0.00	0.08	0.00
25.94	2.00	0.00	0.00	0.05	0.00	25.98	2.00	0.00	0.00	0.05	0.00
26.06	2.00	0.00	0.00	0.07	0.00	26.13	2.00	0.00	0.00	0.07	0.00
26.18	2.00	0.00	0.00	0.06	0.00	26.28	2.00	0.00	0.00	0.10	0.00
26.33	2.00	0.00	0.00	0.05	0.00	26.43	2.00	0.00	0.00	0.10	0.00
26.48	2.00	0.00	0.00	0.05	0.00	26.52	2.00	0.00	0.00	0.05	0.00
26.58	2.00	0.00	0.00	0.05	0.00	26.68	2.00	0.00	0.00	0.10	0.00
26.72	2.00	0.00	0.00	0.04	0.00	26.78	2.00	0.00	0.00	0.06	0.00
26.88	2.00	0.00	0.00	0.10	0.00	26.91	2.00	0.00	0.00	0.04	0.00
26.98	2.00	0.00	0.00	0.06	0.00	27.07	2.00	0.00	0.00	0.09	0.00
27.10	2.00	0.00	0.00	0.03	0.00	27.17	2.00	0.00	0.00	0.07	0.00
27.23	2.00	0.00	0.00	0.06	0.00	27.32	2.00	0.00	0.00	0.09	0.00
27.37	2.00	0.00	0.00	0.05	0.00	27.43	2.00	0.00	0.00	0.06	0.00
27.50	2.00	0.00	0.00	0.06	0.00	27.57	2.00	0.00	0.00	0.08	0.00
27.65	2.00	0.00	0.00	0.08	0.00	27.71	2.00	0.00	0.00	0.06	0.00
27.76	2.00	0.00	0.00	0.05	0.00	27.84	2.00	0.00	0.00	0.08	0.00
27.90	2.00	0.00	0.00	0.06	0.00	27.97	2.00	0.00	0.00	0.07	0.00
28.03	2.00	0.00	0.00	0.06	0.00	28.10	2.00	0.00	0.00	0.07	0.00
28.16	2.00	0.00	0.00	0.06	0.00	28.22	2.00	0.00	0.00	0.06	0.00
28.30	2.00	0.00	0.00	0.09	0.00	28.35	2.00	0.00	0.00	0.05	0.00
28.42	2.00	0.00	0.00	0.07	0.00	28.50	2.00	0.00	0.00	0.08	0.00
28.55	2.00	0.00	0.00	0.05	0.00	28.61	2.00	0.00	0.00	0.07	0.00
28.68	2.00	0.00	0.00	0.07	0.00	28.76	2.00	0.00	0.00	0.07	0.00
28.81	2.00	0.00	0.00	0.05	0.00	28.90	2.00	0.00	0.00	0.09	0.00
28.96	2.00	0.00	0.00	0.06	0.00	29.01	2.00	0.00	0.00	0.05	0.00
29.11	2.00	0.00	0.00	0.10	0.00	29.16	2.00	0.00	0.00	0.05	0.00
29.21	2.00	0.00	0.00	0.05	0.00	29.30	2.00	0.00	0.00	0.09	0.00
29.34	2.00	0.00	0.00	0.05	0.00	29.41	2.00	0.00	0.00	0.07	0.00
29.49	2.00	0.00	0.00	0.08	0.00	29.54	2.00	0.00	0.00	0.05	0.00
29.60	2.00	0.00	0.00	0.06	0.00	29.66	2.00	0.00	0.00	0.06	0.00
29.75	2.00	0.00	0.00	0.09	0.00	29.79	2.00	0.00	0.00	0.04	0.00
29.86	2.00	0.00	0.00	0.07	0.00	29.95	2.00	0.00	0.00	0.10	0.00
29.99	2.00	0.00	0.00	0.04	0.00	30.05	2.00	0.00	0.00	0.06	0.00
30.16	2.00	0.00	0.00	0.10	0.00	30.19	2.00	0.00	0.00	0.04	0.00
30.25	2.00	0.00	0.00	0.06	0.00	30.34	2.00	0.00	0.00	0.09	0.00
30.39	2.00	0.00	0.00	0.05	0.00	30.45	2.00	0.00	0.00	0.06	0.00
30.53	2.00	0.00	0.00	0.08	0.00	30.60	2.00	0.00	0.00	0.07	0.00
30.64	2.00	0.00	0.00	0.05	0.00	30.74	2.00	0.00	0.00	0.10	0.00
30.77	2.00	0.00	0.00	0.03	0.00	30.84	2.00	0.00	0.00	0.07	0.00
30.91	2.00	0.00	0.00	0.07	0.00	31.01	2.00	0.00	0.00	0.10	0.00
31.05	2.00	0.00	0.00	0.04	0.00	31.11	2.00	0.00	0.00	0.06	0.00
31.17	2.00	0.00	0.00	0.06	0.00	31.23	2.00	0.00	0.00	0.06	0.00
31.30	2.00	0.00	0.00	0.07	0.00	31.40	2.00	0.00	0.00	0.10	0.00
31.44	2.00	0.00	0.00	0.04	0.00	31.50	2.00	0.00	0.00	0.06	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
31.57	2.00	0.00	0.00	0.07	0.00	31.63	2.00	0.00	0.00	0.07	0.00
31.71	2.00	0.00	0.00	0.08	0.00	31.76	2.00	0.00	0.00	0.05	0.00
31.84	2.00	0.00	0.00	0.08	0.00	31.91	2.00	0.00	0.00	0.07	0.00
31.96	2.00	0.00	0.00	0.05	0.00	32.02	2.00	0.00	0.00	0.06	0.00
32.10	2.00	0.00	0.00	0.08	0.00	32.15	2.00	0.00	0.00	0.06	0.00
32.24	2.00	0.00	0.00	0.09	0.00	32.30	2.00	0.00	0.00	0.06	0.00
32.36	2.00	0.00	0.00	0.05	0.00	32.43	2.00	0.00	0.00	0.07	0.00
32.48	2.00	0.00	0.00	0.05	0.00	32.55	2.00	0.00	0.00	0.06	0.00
32.66	2.00	0.00	0.00	0.11	0.00	32.70	2.00	0.00	0.00	0.05	0.00
32.75	2.00	0.00	0.00	0.05	0.00	32.82	2.00	0.00	0.00	0.07	0.00
32.89	2.00	0.00	0.00	0.07	0.00	32.95	2.00	0.00	0.00	0.06	0.00
33.01	2.00	0.00	0.00	0.06	0.00	33.10	2.00	0.00	0.00	0.09	0.00
33.15	2.00	0.00	0.00	0.05	0.00	33.23	2.00	0.00	0.00	0.08	0.00
33.29	2.00	0.00	0.00	0.06	0.00	33.34	2.00	0.00	0.00	0.05	0.00
33.40	2.00	0.00	0.00	0.06	0.00	33.49	2.00	0.00	0.00	0.09	0.00
33.54	2.00	0.00	0.00	0.05	0.00	33.63	2.00	0.00	0.00	0.09	0.00
33.67	2.00	0.00	0.00	0.03	0.00	33.75	2.00	0.00	0.00	0.08	0.00
33.80	2.00	0.00	0.00	0.06	0.00	33.87	2.00	0.00	0.00	0.07	0.00
33.94	2.00	0.00	0.00	0.07	0.00	34.02	2.00	0.00	0.00	0.07	0.00
34.09	2.00	0.00	0.00	0.07	0.00	34.13	2.00	0.00	0.00	0.05	0.00
34.19	2.00	0.00	0.00	0.06	0.00	34.26	2.00	0.00	0.00	0.07	0.00
34.34	2.00	0.00	0.00	0.08	0.00	34.38	2.00	0.00	0.00	0.04	0.00
34.48	2.00	0.00	0.00	0.09	0.00	34.54	2.00	0.00	0.00	0.06	0.00
34.58	2.00	0.00	0.00	0.04	0.00	34.67	2.00	0.00	0.00	0.08	0.00
34.73	2.00	0.00	0.00	0.06	0.00	34.78	2.00	0.00	0.00	0.05	0.00
34.85	2.00	0.00	0.00	0.07	0.00	34.92	2.00	0.00	0.00	0.07	0.00
34.98	2.00	0.00	0.00	0.06	0.00	35.05	2.00	0.00	0.00	0.07	0.00
35.12	2.00	0.00	0.00	0.07	0.00	35.18	2.00	0.00	0.00	0.06	0.00
35.24	2.00	0.00	0.00	0.06	0.00	35.31	2.00	0.00	0.00	0.07	0.00
35.39	2.00	0.00	0.00	0.08	0.00	35.44	2.00	0.00	0.00	0.05	0.00
35.51	2.00	0.00	0.00	0.07	0.00	35.57	2.00	0.00	0.00	0.07	0.00
35.64	2.00	0.00	0.00	0.07	0.00	35.70	2.00	0.00	0.00	0.05	0.00
35.78	2.00	0.00	0.00	0.08	0.00	35.84	2.00	0.00	0.00	0.06	0.00
35.90	2.00	0.00	0.00	0.06	0.00	35.96	2.00	0.00	0.00	0.07	0.00
36.05	2.00	0.00	0.00	0.09	0.00	36.10	2.00	0.00	0.00	0.05	0.00
36.16	2.00	0.00	0.00	0.06	0.00	36.24	2.00	0.00	0.00	0.08	0.00
36.29	2.00	0.00	0.00	0.05	0.00	36.37	2.00	0.00	0.00	0.08	0.00
36.44	2.00	0.00	0.00	0.08	0.00	36.49	2.00	0.00	0.00	0.05	0.00
36.56	2.00	0.00	0.00	0.06	0.00	36.63	2.00	0.00	0.00	0.07	0.00
36.70	2.00	0.00	0.00	0.07	0.00	36.75	2.00	0.00	0.00	0.05	0.00
36.84	2.00	0.00	0.00	0.09	0.00	36.90	2.00	0.00	0.00	0.06	0.00
36.95	2.00	0.00	0.00	0.05	0.00	37.03	2.00	0.00	0.00	0.09	0.00
37.09	2.00	0.00	0.00	0.06	0.00	37.15	2.00	0.00	0.00	0.05	0.00
37.22	2.00	0.00	0.00	0.07	0.00	37.29	2.00	0.00	0.00	0.07	0.00
37.34	2.00	0.00	0.00	0.06	0.00	37.41	2.00	0.00	0.00	0.06	0.00
37.48	2.00	0.00	0.00	0.08	0.00	37.54	2.00	0.00	0.00	0.05	0.00
37.60	2.00	0.00	0.00	0.06	0.00	37.67	2.00	0.00	0.00	0.07	0.00
37.74	2.00	0.00	0.00	0.07	0.00	37.81	2.00	0.00	0.00	0.07	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
37.87	2.00	0.00	0.00	0.06	0.00	37.93	2.00	0.00	0.00	0.06	0.00
38.00	2.00	0.00	0.00	0.07	0.00	38.08	2.00	0.00	0.00	0.08	0.00
38.16	2.00	0.00	0.00	0.07	0.00	38.21	2.00	0.00	0.00	0.05	0.00
38.26	2.00	0.00	0.00	0.05	0.00	38.33	2.00	0.00	0.00	0.07	0.00
38.39	2.00	0.00	0.00	0.07	0.00	38.46	2.00	0.00	0.00	0.07	0.00
38.52	2.00	0.00	0.00	0.06	0.00	38.61	2.00	0.00	0.00	0.09	0.00
38.66	2.00	0.00	0.00	0.05	0.00	38.74	2.00	0.00	0.00	0.08	0.00
38.79	2.00	0.00	0.00	0.05	0.00	38.85	2.00	0.00	0.00	0.06	0.00
38.94	2.00	0.00	0.00	0.09	0.00	38.99	2.00	0.00	0.00	0.04	0.00
39.05	2.00	0.00	0.00	0.06	0.00	39.12	2.00	0.00	0.00	0.08	0.00
39.20	2.00	0.00	0.00	0.08	0.00	39.26	2.00	0.00	0.00	0.06	0.00
39.33	2.00	0.00	0.00	0.07	0.00	39.39	2.00	0.00	0.00	0.06	0.00
39.44	2.00	0.00	0.00	0.05	0.00	39.50	2.00	0.00	0.00	0.06	0.00
39.57	2.00	0.00	0.00	0.07	0.00	39.64	2.00	0.00	0.00	0.06	0.00
39.74	2.00	0.00	0.00	0.10	0.00	39.79	2.00	0.00	0.00	0.05	0.00
39.84	2.00	0.00	0.00	0.05	0.00	39.90	2.00	0.00	0.00	0.05	0.00
39.99	2.00	0.00	0.00	0.10	0.00	40.05	0.36	0.00	0.00	0.05	0.04
40.12	0.34	0.00	0.00	0.07	0.05	40.16	0.33	0.00	0.00	0.05	0.04
40.23	0.33	0.00	0.00	0.07	0.06	40.29	0.32	0.00	0.00	0.05	0.04
40.39	0.30	0.00	0.00	0.10	0.08	40.44	0.30	0.00	0.00	0.05	0.04
40.50	0.29	0.00	0.00	0.05	0.04	40.58	0.29	0.00	0.00	0.09	0.07
40.64	0.29	0.00	0.00	0.06	0.05	40.69	2.00	0.00	0.00	0.05	0.00
40.75	2.00	0.00	0.00	0.06	0.00	40.84	2.00	0.00	0.00	0.09	0.00
40.90	2.00	0.00	0.00	0.05	0.00	40.99	2.00	0.00	0.00	0.09	0.00
41.04	2.00	0.00	0.00	0.05	0.00	41.08	2.00	0.00	0.00	0.04	0.00
41.17	2.00	0.00	0.00	0.09	0.00	41.22	2.00	0.00	0.00	0.05	0.00
41.28	2.00	0.00	0.00	0.05	0.00	41.34	2.00	0.00	0.00	0.06	0.00
41.41	2.00	0.00	0.00	0.07	0.00	41.49	2.00	0.00	0.00	0.07	0.00
41.54	2.00	0.00	0.00	0.05	0.00	41.62	2.00	0.00	0.00	0.08	0.00
41.69	2.00	0.00	0.00	0.07	0.00	41.74	2.00	0.00	0.00	0.05	0.00
41.82	2.00	0.00	0.00	0.08	0.00	41.87	2.00	0.00	0.00	0.05	0.00
41.94	2.00	0.00	0.00	0.07	0.00	42.01	2.00	0.00	0.00	0.07	0.00
42.06	2.00	0.00	0.00	0.05	0.00	42.13	0.23	0.00	0.00	0.06	0.05
42.20	0.27	0.00	0.00	0.07	0.05	42.26	0.30	0.00	0.00	0.06	0.05
42.34	0.34	0.00	0.00	0.07	0.05	42.40	0.38	0.00	0.00	0.07	0.04
42.48	0.40	0.00	0.00	0.08	0.05	42.53	0.39	0.00	0.00	0.05	0.03
42.59	0.38	0.00	0.00	0.06	0.04	42.66	0.37	0.00	0.00	0.06	0.04
42.73	2.00	0.00	0.00	0.07	0.00	42.82	0.39	0.00	0.00	0.09	0.06
42.85	0.48	0.00	0.00	0.03	0.02	42.93	0.67	0.00	0.00	0.08	0.03
43.02	0.89	0.00	0.00	0.09	0.01	43.05	0.96	0.00	0.00	0.02	0.00
43.12	1.00	0.00	0.00	0.08	0.00	43.22	1.02	0.00	0.00	0.09	0.00
43.27	1.10	0.00	0.00	0.05	0.00	43.32	1.17	0.00	0.00	0.05	0.00
43.37	1.22	0.00	0.00	0.05	0.00	43.48	1.44	0.00	0.00	0.10	0.00
43.51	1.49	0.00	0.00	0.03	0.00	43.57	1.53	0.00	0.00	0.06	0.00
43.64	1.58	0.00	0.00	0.07	0.00	43.72	1.69	0.00	0.00	0.08	0.00
43.77	1.77	0.00	0.00	0.05	0.00	43.85	1.78	0.00	0.00	0.08	0.00
43.93	1.76	0.00	0.00	0.07	0.00	43.97	1.77	0.00	0.00	0.04	0.00
44.03	1.78	0.00	0.00	0.06	0.00	44.10	1.77	0.00	0.00	0.07	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
44.17	1.78	0.00	0.00	0.07	0.00	44.23	1.76	0.00	0.00	0.06	0.00
44.32	1.65	0.00	0.00	0.09	0.00	44.38	1.56	0.00	0.00	0.06	0.00
44.43	1.48	0.00	0.00	0.05	0.00	44.52	1.35	0.00	0.00	0.10	0.00
44.57	1.27	0.00	0.00	0.04	0.00	44.63	1.16	0.00	0.00	0.06	0.00
44.70	1.08	0.00	0.00	0.08	0.00	44.76	1.05	0.00	0.00	0.05	0.00
44.82	1.03	0.00	0.00	0.06	0.00	44.91	1.01	0.00	0.00	0.09	0.00
44.95	1.02	0.00	0.00	0.04	0.00	45.03	1.06	0.00	0.00	0.08	0.00
45.08	1.09	0.00	0.00	0.05	0.00	45.17	1.14	0.00	0.00	0.09	0.00
45.21	1.16	0.00	0.00	0.04	0.00	45.28	1.21	0.00	0.00	0.07	0.00
45.37	1.29	0.00	0.00	0.09	0.00	45.42	1.35	0.00	0.00	0.05	0.00
45.48	1.42	0.00	0.00	0.06	0.00	45.56	1.52	0.00	0.00	0.08	0.00
45.62	1.55	0.00	0.00	0.05	0.00	45.67	1.56	0.00	0.00	0.05	0.00
45.76	1.53	0.00	0.00	0.09	0.00	45.81	1.51	0.00	0.00	0.05	0.00
45.88	1.42	0.00	0.00	0.06	0.00	45.95	1.27	0.00	0.00	0.08	0.00
46.01	1.15	0.00	0.00	0.06	0.00	46.07	1.02	0.00	0.00	0.06	0.00
46.14	0.91	0.00	0.00	0.07	0.01	46.20	0.72	0.00	0.00	0.07	0.02
46.30	0.68	0.00	0.00	0.09	0.03	46.33	0.65	0.00	0.00	0.03	0.01
46.40	0.58	0.00	0.00	0.07	0.03	46.50	0.53	0.00	0.00	0.10	0.04
46.53	0.50	0.00	0.00	0.03	0.01	46.59	0.47	0.00	0.00	0.06	0.03
46.66	0.45	0.00	0.00	0.06	0.03	46.74	0.43	0.00	0.00	0.09	0.04
46.79	0.42	0.00	0.00	0.05	0.02	46.85	0.42	0.00	0.00	0.06	0.03
46.93	0.43	0.00	0.00	0.08	0.04	46.99	2.00	0.00	0.00	0.06	0.00
47.08	2.00	0.00	0.00	0.09	0.00	47.13	2.00	0.00	0.00	0.05	0.00
47.19	2.00	0.00	0.00	0.06	0.00	47.27	2.00	0.00	0.00	0.08	0.00
47.32	2.00	0.00	0.00	0.05	0.00	47.39	2.00	0.00	0.00	0.06	0.00
47.45	2.00	0.00	0.00	0.06	0.00	47.52	0.38	0.00	0.00	0.08	0.04
47.58	0.38	0.00	0.00	0.06	0.03	47.67	0.40	0.00	0.00	0.08	0.04
47.71	0.40	0.00	0.00	0.04	0.02	47.77	0.42	0.00	0.00	0.06	0.03
47.84	0.43	0.00	0.00	0.07	0.03	47.92	0.46	0.00	0.00	0.08	0.03
47.98	0.48	0.00	0.00	0.06	0.03	48.04	0.51	0.00	0.00	0.07	0.03
48.14	0.55	0.00	0.00	0.09	0.03	48.17	0.61	0.00	0.00	0.03	0.01
48.24	0.70	0.00	0.00	0.07	0.02	48.30	0.80	0.00	0.00	0.06	0.01
48.38	0.92	0.00	0.00	0.08	0.01	48.44	0.97	0.00	0.00	0.06	0.00
48.50	1.01	0.00	0.00	0.06	0.00	48.56	1.18	0.00	0.00	0.06	0.00
48.63	1.32	0.00	0.00	0.07	0.00	48.70	1.43	0.00	0.00	0.07	0.00
48.75	1.54	0.00	0.00	0.05	0.00	48.85	1.73	0.00	0.00	0.09	0.00
48.90	1.81	0.00	0.00	0.05	0.00	48.96	1.85	0.00	0.00	0.06	0.00
49.05	1.93	0.00	0.00	0.09	0.00	49.09	1.98	0.00	0.00	0.05	0.00
49.15	2.00	0.00	0.00	0.06	0.00	49.22	2.00	0.00	0.00	0.06	0.00
49.28	2.00	0.00	0.00	0.07	0.00	49.34	2.00	0.00	0.00	0.06	0.00
49.43	2.00	0.00	0.00	0.09	0.00	49.49	2.00	0.00	0.00	0.06	0.00
49.55	2.00	0.00	0.00	0.05	0.00	49.62	2.00	0.00	0.00	0.07	0.00
49.69	2.00	0.00	0.00	0.07	0.00	49.74	2.00	0.00	0.00	0.05	0.00
49.83	2.00	0.00	0.00	0.09	0.00	49.89	2.00	0.00	0.00	0.06	0.00
49.95	2.00	0.00	0.00	0.06	0.00	50.03	2.00	0.00	0.00	0.08	0.00
50.08	2.00	0.00	0.00	0.06	0.00	50.15	2.00	0.00	0.00	0.06	0.00
50.24	2.00	0.00	0.00	0.10	0.00	50.27	2.00	0.00	0.00	0.03	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI

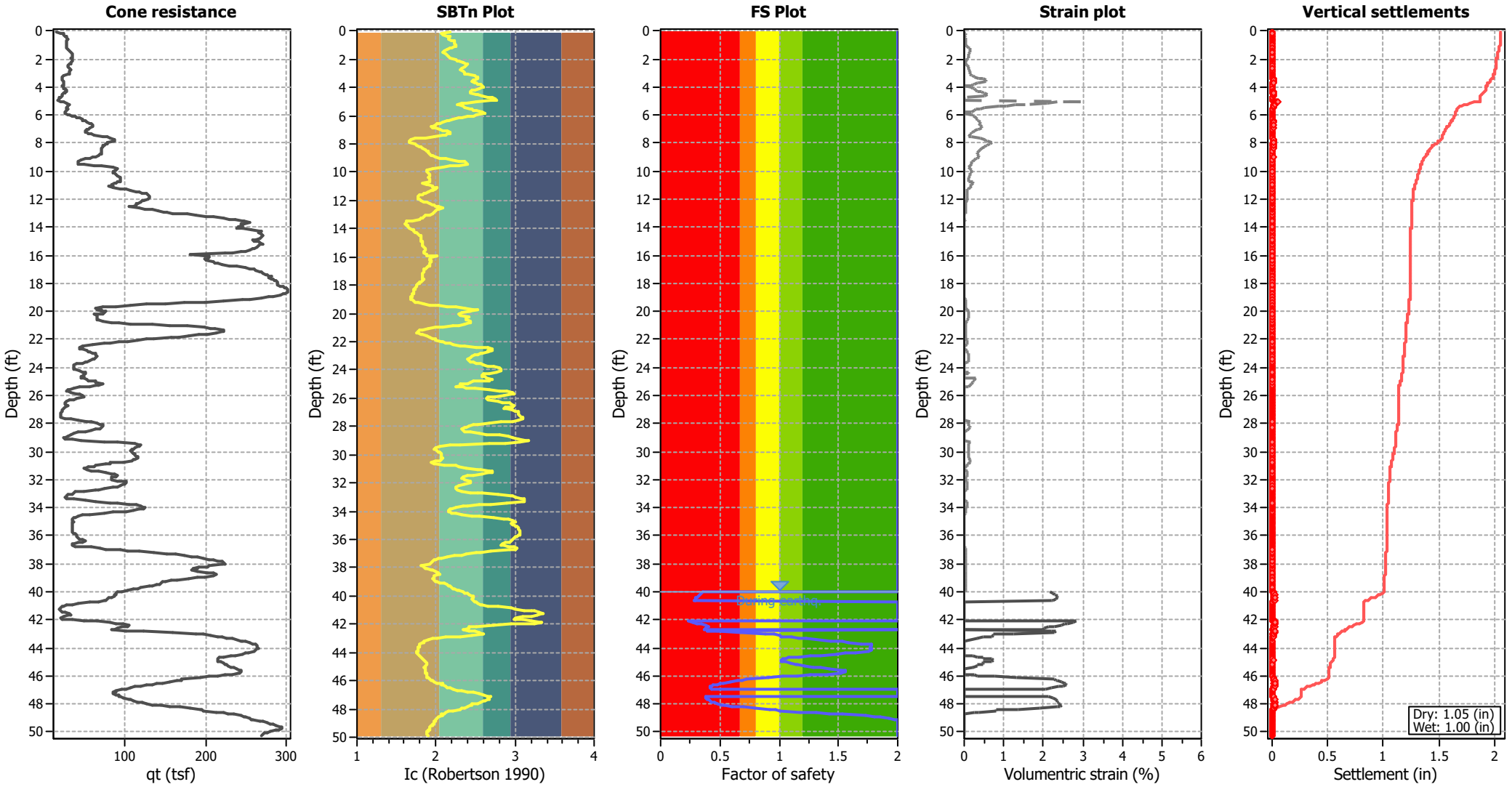
Overall liquefaction potential: 1.76

LPI = 0.00 - Liquefaction risk very low
LPI between 0.00 and 5.00 - Liquefaction risk low
LPI between 5.00 and 15.00 - Liquefaction risk high
LPI > 15.00 - Liquefaction risk very high

Abbreviations

FS: Calculated factor of safety for test point
F_L: 1 - FS
w_z: Function value of the extend of soil liquefaction according to depth
d_z: Layer thickness (ft)

Estimation of post-earthquake settlements



Abbreviations

q_t:	Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c:	Soil Behaviour Type Index
FS:	Calculated Factor of Safety against liquefaction
Volumentric strain:	Post-liquefaction volumentric strain

:: Post-earthquake settlement of dry sands ::

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
0.07	2.17	22.57	22.57	5	0.0	199	1.01	0.002	0.01	21.37	0.01	0.000
0.14	2.07	32.64	32.64	7	0.0	252	1.01	0.004	0.01	21.37	0.02	0.000
0.21	2.09	36.23	36.23	8	0.0	288	1.01	0.006	0.02	21.37	0.02	0.000
0.27	2.08	37.94	37.94	8	0.0	296	1.01	0.008	0.02	21.37	0.03	0.000
0.34	2.13	40.67	59.93	13	0.0	340	1.00	0.009	0.01	21.37	0.02	0.000
0.40	2.18	42.11	65.65	15	0.0	371	1.00	0.009	0.01	21.37	0.01	0.000
0.47	2.17	43.53	66.84	15	0.0	379	1.00	0.011	0.02	21.37	0.02	0.000
0.55	2.16	44.39	68.06	15	0.0	386	1.00	0.014	0.02	21.37	0.02	0.000
0.59	2.16	44.82	68.75	15	0.0	389	1.00	0.016	0.02	21.37	0.03	0.000
0.66	2.20	43.16	69.52	16	0.0	391	1.00	0.019	0.03	21.37	0.03	0.001
0.72	2.23	41.50	70.83	16	0.0	394	1.00	0.022	0.03	21.37	0.03	0.000
0.79	2.22	42.94	72.11	16	0.0	402	1.00	0.025	0.03	21.37	0.04	0.001
0.88	2.23	43.35	73.58	17	0.0	410	1.00	0.029	0.04	21.37	0.04	0.001
0.92	2.24	43.22	74.36	17	0.0	413	1.00	0.031	0.04	21.37	0.04	0.001
1.01	2.25	42.49	74.40	17	0.0	411	1.00	0.038	0.05	21.37	0.05	0.001
1.07	2.25	41.76	73.47	17	0.0	405	1.00	0.046	0.06	21.37	0.07	0.001
1.12	2.23	42.54	71.68	16	0.0	400	0.99	0.054	0.07	21.37	0.08	0.001
1.21	2.20	42.62	69.04	16	0.0	388	0.99	0.073	0.10	21.37	0.11	0.003
1.25	2.18	43.90	68.32	15	0.0	387	0.99	0.080	0.11	21.37	0.13	0.001
1.32	2.14	45.77	68.30	15	0.0	387	0.99	0.090	0.13	21.37	0.15	0.002
1.40	2.11	48.64	69.85	15	0.0	395	0.99	0.095	0.13	21.37	0.15	0.003
1.45	2.10	49.92	70.49	15	0.0	397	0.99	0.101	0.14	21.37	0.16	0.002
1.54	2.08	52.50	73.25	16	0.0	411	0.99	0.098	0.13	21.37	0.15	0.003
1.61	2.12	53.94	78.35	17	0.0	444	0.99	0.079	0.09	21.37	0.11	0.002
1.65	2.13	54.37	79.75	17	0.0	452	0.99	0.077	0.09	21.37	0.11	0.001
1.72	2.14	54.07	80.43	18	0.0	456	0.99	0.081	0.09	21.37	0.11	0.002
1.82	2.16	54.07	82.34	18	0.0	467	0.99	0.084	0.09	21.37	0.11	0.003
1.84	2.17	53.92	83.09	18	0.0	470	0.98	0.083	0.09	21.37	0.11	0.001
1.92	2.19	54.63	86.39	19	0.0	488	0.98	0.079	0.08	21.37	0.10	0.002
1.97	2.25	52.04	90.56	21	0.0	501	0.98	0.076	0.07	21.37	0.08	0.001
2.05	2.25	55.18	96.47	22	0.0	533	0.98	0.065	0.06	21.37	0.07	0.001
2.12	2.28	55.61	102.80	24	0.0	558	0.98	0.058	0.05	21.37	0.05	0.001
2.17	2.30	55.46	105.95	25	0.0	569	0.98	0.057	0.04	21.37	0.05	0.001
2.27	2.35	52.86	111.64	27	0.0	578	0.98	0.059	0.04	21.37	0.05	0.001
2.32	2.38	50.85	114.41	28	0.0	577	0.98	0.063	0.04	21.37	0.05	0.001
2.37	2.39	49.83	115.88	28	0.0	576	0.98	0.066	0.04	21.37	0.05	0.001
2.46	2.38	46.95	105.78	26	0.0	533	0.98	0.097	0.07	21.37	0.08	0.002
2.51	2.37	46.22	101.89	25	0.0	518	0.98	0.115	0.09	21.37	0.10	0.001
2.57	2.36	46.51	100.98	24	0.0	517	0.97	0.122	0.10	21.37	0.11	0.001
2.66	2.33	48.81	99.53	24	0.0	522	0.97	0.127	0.10	21.37	0.12	0.003
2.72	2.31	50.09	99.08	23	0.0	526	0.97	0.130	0.11	21.37	0.13	0.002
2.76	2.31	50.67	99.10	23	0.0	528	0.97	0.132	0.11	21.37	0.13	0.001
2.83	2.35	47.49	101.36	24	0.0	522	0.97	0.147	0.12	21.37	0.14	0.002
2.89	2.35	48.07	101.72	24	0.0	526	0.97	0.149	0.12	21.37	0.14	0.002
2.95	2.35	47.92	102.73	25	0.0	528	0.97	0.154	0.12	21.37	0.14	0.002
3.05	2.37	47.04	104.58	25	0.0	530	0.97	0.164	0.12	21.37	0.14	0.004
3.10	2.40	44.88	105.79	26	0.0	523	0.97	0.180	0.13	21.37	0.15	0.002
3.15	2.49	38.12	111.17	29	0.0	500	0.97	0.233	0.15	21.37	0.18	0.002

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
3.22	2.51	35.96	109.73	28	0.0	484	0.97	0.293	0.19	21.37	0.23	0.004
3.29	2.53	34.21	108.88	28	0.0	471	0.96	0.357	0.23	21.37	0.27	0.005
3.36	2.53	33.07	104.46	27	0.0	454	0.96	0.466	0.32	21.37	0.38	0.006
3.43	2.49	33.79	99.04	25	0.0	445	0.96	0.550	0.41	21.37	0.48	0.008
3.49	2.47	34.49	96.95	25	0.0	444	0.96	0.587	0.46	21.37	0.53	0.008
3.56	2.46	35.64	96.21	24	0.0	448	0.96	0.579	0.46	21.37	0.54	0.008
3.66	2.50	35.63	105.35	27	0.0	471	0.96	0.468	0.33	21.37	0.38	0.009
3.70	2.51	35.77	109.24	28	0.0	482	0.96	0.429	0.28	21.37	0.33	0.004
3.76	2.53	35.76	115.10	30	0.0	496	0.96	0.381	0.23	21.37	0.27	0.004
3.81	2.57	35.33	122.29	33	0.0	509	0.96	0.341	0.19	21.37	0.22	0.003
3.90	2.58	35.81	128.27	34	0.0	526	0.95	0.306	0.16	21.37	0.19	0.004
3.94	2.60	34.59	130.99	0	0.0	0	0.95	0.000	0.00	0.00	0.00	0.000
4.01	2.58	35.88	129.16	35	0.0	529	0.95	0.319	0.17	21.37	0.19	0.003
4.08	2.54	37.89	124.48	33	0.0	531	0.95	0.326	0.18	21.37	0.21	0.004
4.15	2.48	40.76	117.15	30	0.0	531	0.95	0.341	0.21	21.37	0.25	0.004
4.21	2.45	42.49	112.33	28	0.0	528	0.95	0.361	0.24	21.37	0.28	0.004
4.28	2.43	42.62	107.81	27	0.0	517	0.95	0.423	0.30	21.37	0.35	0.006
4.35	2.43	41.03	105.03	26	0.0	501	0.95	0.524	0.38	21.37	0.44	0.007
4.40	2.44	40.03	104.80	26	0.0	495	0.95	0.578	0.42	21.37	0.49	0.006
4.47	2.50	36.56	109.80	28	0.0	488	0.95	0.658	0.43	21.37	0.51	0.009
4.53	2.53	34.25	110.59	29	0.0	475	0.95	0.795	0.51	21.37	0.60	0.009
4.60	2.57	33.10	117.23	31	0.0	483	0.94	0.747	0.44	21.37	0.51	0.008
4.69	2.66	30.07	130.16	0	0.0	0	0.94	0.000	0.00	0.00	0.00	0.000
4.74	2.71	28.33	136.80	0	0.0	0	0.94	0.000	0.00	0.00	0.00	0.000
4.80	2.75	26.60	140.09	0	0.0	0	0.94	0.000	0.00	0.00	0.00	0.000
4.90	2.77	25.44	138.69	0	0.0	0	0.94	0.000	0.00	0.00	0.00	0.000
4.93	2.70	26.44	123.51	0	0.0	0	0.94	0.000	0.00	0.00	0.00	0.000
5.00	2.51	29.89	91.95	24	0.0	404	0.94	3.094	2.50	21.37	2.94	0.047
5.08	2.38	37.36	85.70	21	0.0	429	0.94	2.124	2.01	21.37	2.36	0.042
5.13	2.32	41.68	83.68	20	0.0	441	0.94	1.790	1.80	21.37	2.11	0.027
5.21	2.27	46.84	85.49	20	0.0	466	0.93	1.302	1.31	21.37	1.54	0.029
5.26	2.30	46.41	88.86	21	0.0	477	0.93	1.158	1.10	21.37	1.29	0.017
5.34	2.35	44.39	94.42	23	0.0	487	0.93	1.054	0.90	21.37	1.06	0.019
5.39	2.37	44.39	98.01	24	0.0	498	0.93	0.941	0.77	21.37	0.90	0.010
5.49	2.43	43.80	111.12	28	0.0	532	0.93	0.667	0.45	21.37	0.53	0.013
5.54	2.46	43.65	119.38	30	0.0	553	0.93	0.549	0.33	21.37	0.39	0.004
5.58	2.47	44.81	125.40	32	0.0	575	0.93	0.453	0.26	21.37	0.30	0.003
5.64	2.51	43.50	133.53	35	0.0	587	0.93	0.417	0.22	21.37	0.25	0.004
5.72	2.59	40.61	147.67	40	0.0	602	0.93	0.380	0.17	21.37	0.20	0.004
5.79	2.62	39.32	153.62	0	0.0	0	0.92	0.000	0.00	0.00	0.00	0.000
5.84	2.60	40.75	152.98	0	0.0	0	0.92	0.000	0.00	0.00	0.00	0.000
5.93	2.51	46.63	142.13	37	0.0	627	0.92	0.335	0.16	21.37	0.19	0.004
5.99	2.47	48.65	136.23	35	0.0	625	0.92	0.350	0.18	21.37	0.21	0.003
6.04	2.40	53.97	127.98	31	0.0	631	0.92	0.338	0.20	21.37	0.23	0.003
6.12	2.33	58.99	120.47	29	0.0	631	0.92	0.347	0.23	21.37	0.26	0.005
6.17	2.28	62.73	116.53	27	0.0	632	0.92	0.353	0.24	21.37	0.29	0.004
6.24	2.21	69.05	113.01	26	0.0	634	0.92	0.354	0.26	21.37	0.31	0.005
6.32	2.16	73.06	111.80	25	0.0	633	0.92	0.367	0.28	21.37	0.33	0.006

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
6.37	2.14	75.22	111.56	25	0.0	632	0.92	0.376	0.29	21.37	0.35	0.004
6.44	2.09	78.94	111.39	24	0.0	627	0.91	0.401	0.32	21.37	0.38	0.007
6.52	2.05	82.83	112.46	24	0.0	624	0.91	0.424	0.34	21.37	0.40	0.008
6.58	2.01	87.58	115.51	24	0.0	628	0.91	0.419	0.33	21.37	0.39	0.006
6.63	1.99	90.74	117.79	24	0.0	631	0.91	0.417	0.33	21.37	0.39	0.004
6.72	1.96	93.88	119.63	24	0.0	626	0.91	0.445	0.35	21.37	0.41	0.009
6.77	1.95	94.59	119.89	24	0.0	623	0.91	0.465	0.37	21.37	0.43	0.005
6.83	1.95	93.60	118.94	24	0.0	620	0.91	0.486	0.38	21.37	0.45	0.006
6.91	1.99	90.13	117.06	24	0.0	627	0.91	0.469	0.37	21.37	0.44	0.008
6.97	2.05	86.38	116.67	25	0.0	646	0.90	0.413	0.32	21.37	0.38	0.006
7.02	2.08	84.37	117.60	25	0.0	660	0.90	0.375	0.28	21.37	0.33	0.004
7.10	2.15	80.19	120.17	27	0.0	681	0.90	0.329	0.23	21.37	0.28	0.005
7.18	2.18	80.03	125.83	28	0.0	711	0.90	0.276	0.18	21.37	0.21	0.004
7.23	2.18	81.75	128.37	29	0.0	725	0.90	0.256	0.17	21.37	0.19	0.002
7.29	2.15	87.37	131.09	29	0.0	743	0.90	0.233	0.15	21.37	0.18	0.002
7.37	2.12	92.68	134.17	29	0.0	759	0.90	0.217	0.14	21.37	0.16	0.003
7.42	2.09	97.12	137.00	30	0.0	772	0.90	0.205	0.13	21.37	0.15	0.002
7.52	1.98	116.39	150.35	31	0.0	801	0.90	0.181	0.11	21.37	0.13	0.003
7.57	1.86	123.92	150.14	30	0.0	741	0.89	0.254	0.16	21.37	0.19	0.002
7.61	1.74	124.04	131.69	25	0.0	661	0.89	0.441	0.34	21.37	0.40	0.005
7.71	1.68	126.86	126.86	23	0.0	644	0.89	0.519	0.43	21.37	0.50	0.011
7.76	1.67	126.95	126.95	23	0.0	642	0.89	0.536	0.44	21.37	0.52	0.007
7.83	1.66	126.35	126.35	23	0.0	638	0.89	0.561	0.47	21.37	0.55	0.008
7.88	1.67	124.67	124.67	23	0.0	636	0.89	0.580	0.49	21.37	0.57	0.007
7.98	1.74	113.10	120.27	23	0.0	619	0.89	0.688	0.59	21.37	0.69	0.016
8.02	1.73	114.27	120.72	23	0.0	625	0.89	0.660	0.56	21.37	0.66	0.006
8.08	1.76	112.21	122.89	23	0.0	630	0.89	0.644	0.53	21.37	0.63	0.010
8.17	1.80	108.79	124.88	24	0.0	637	0.88	0.617	0.49	21.37	0.58	0.012
8.21	1.81	107.63	125.64	24	0.0	643	0.88	0.594	0.47	21.37	0.55	0.005
8.28	1.84	106.65	126.86	25	0.0	654	0.88	0.552	0.43	21.37	0.50	0.008
8.37	1.86	105.79	127.90	25	0.0	668	0.88	0.505	0.38	21.37	0.45	0.010
8.41	1.87	105.04	127.88	25	0.0	672	0.88	0.493	0.37	21.37	0.43	0.004
8.47	1.88	104.84	128.34	26	0.0	680	0.88	0.473	0.35	21.37	0.41	0.006
8.54	1.90	104.38	129.05	26	0.0	692	0.88	0.439	0.32	21.37	0.38	0.007
8.60	1.91	104.55	129.76	26	0.0	701	0.88	0.417	0.30	21.37	0.36	0.005
8.67	1.92	104.33	130.18	26	0.0	710	0.87	0.398	0.29	21.37	0.34	0.006
8.74	1.93	103.40	129.84	26	0.0	716	0.87	0.389	0.28	21.37	0.33	0.005
8.82	1.94	101.66	128.53	26	0.0	717	0.87	0.392	0.28	21.37	0.33	0.006
8.87	1.96	99.05	126.42	26	0.0	713	0.87	0.407	0.30	21.37	0.35	0.004
8.97	2.00	94.05	122.86	26	0.0	709	0.87	0.427	0.32	21.37	0.37	0.009
9.00	2.04	89.68	120.82	26	0.0	708	0.87	0.433	0.32	21.37	0.38	0.003
9.07	2.11	84.23	121.28	26	0.0	717	0.87	0.412	0.30	21.37	0.35	0.005
9.12	2.19	78.93	125.80	28	0.0	729	0.87	0.384	0.25	21.37	0.30	0.004
9.22	2.30	71.67	136.91	32	0.0	741	0.86	0.363	0.21	21.37	0.24	0.005
9.27	2.36	66.47	144.64	35	0.0	739	0.86	0.371	0.19	21.37	0.22	0.003
9.32	2.38	66.46	149.62	36	0.0	754	0.86	0.341	0.17	21.37	0.20	0.003
9.40	2.39	66.46	154.54	38	0.0	769	0.86	0.318	0.15	21.37	0.17	0.003
9.47	2.39	66.19	154.52	38	0.0	770	0.86	0.319	0.15	21.37	0.17	0.003

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
9.52	2.30	75.45	144.39	34	0.0	801	0.86	0.271	0.14	21.37	0.17	0.002
9.59	2.17	90.79	140.02	31	0.0	850	0.86	0.213	0.13	21.37	0.15	0.002
9.66	2.08	102.34	142.27	31	0.0	880	0.86	0.188	0.11	21.37	0.13	0.002
9.72	1.96	117.61	150.44	31	0.0	902	0.85	0.173	0.10	21.37	0.12	0.002
9.81	1.89	123.48	152.09	30	0.0	885	0.85	0.188	0.11	21.37	0.13	0.003
9.86	1.88	123.13	150.18	30	0.0	871	0.85	0.203	0.13	21.37	0.15	0.002
9.92	1.88	119.41	146.02	29	0.0	851	0.85	0.224	0.14	21.37	0.17	0.002
10.01	1.90	115.17	142.42	29	0.0	842	0.85	0.237	0.15	21.37	0.18	0.004
10.05	1.91	113.82	141.28	28	0.0	841	0.85	0.240	0.16	21.37	0.18	0.002
10.11	1.91	113.41	141.16	28	0.0	846	0.85	0.237	0.16	21.37	0.18	0.003
10.17	1.91	115.45	143.81	29	0.0	865	0.85	0.218	0.14	21.37	0.16	0.002
10.26	1.91	118.43	147.57	30	0.0	893	0.84	0.195	0.12	21.37	0.14	0.003
10.31	1.91	119.69	149.16	30	0.0	905	0.84	0.186	0.11	21.37	0.13	0.001
10.40	1.91	123.49	153.30	31	0.0	932	0.84	0.169	0.10	21.37	0.12	0.003
10.45	1.91	123.94	154.27	31	0.0	943	0.84	0.163	0.10	21.37	0.11	0.001
10.51	1.91	124.36	154.89	31	0.0	951	0.84	0.159	0.09	21.37	0.11	0.002
10.59	1.92	123.81	154.66	31	0.0	957	0.84	0.157	0.09	21.37	0.11	0.002
10.66	1.93	122.57	153.98	31	0.0	963	0.84	0.155	0.09	21.37	0.11	0.002
10.71	1.91	121.48	151.24	30	0.0	939	0.84	0.171	0.10	21.37	0.12	0.001
10.78	1.83	115.70	137.30	27	0.0	826	0.83	0.288	0.20	21.37	0.24	0.004
10.86	1.88	112.39	137.25	27	0.0	845	0.83	0.265	0.18	21.37	0.21	0.004
10.89	1.89	111.17	137.02	27	0.0	852	0.83	0.257	0.18	21.37	0.21	0.002
11.00	1.95	107.80	137.11	28	0.0	885	0.83	0.223	0.15	21.37	0.17	0.005
11.05	1.96	108.32	138.14	28	0.0	897	0.83	0.213	0.14	21.37	0.16	0.002
11.11	2.00	102.60	134.51	28	0.0	896	0.83	0.215	0.14	21.37	0.17	0.002
11.16	1.99	108.86	141.10	29	0.0	936	0.83	0.183	0.12	21.37	0.14	0.002
11.26	1.97	119.15	152.61	31	0.0	1007	0.83	0.142	0.08	21.37	0.10	0.002
11.31	1.93	126.74	159.33	32	0.0	1034	0.82	0.131	0.07	21.37	0.09	0.001
11.36	1.90	133.77	165.50	33	0.0	1060	0.82	0.121	0.07	21.37	0.08	0.001
11.45	1.87	140.60	170.69	34	0.0	1080	0.82	0.116	0.06	21.37	0.07	0.001
11.51	1.84	145.07	173.40	34	0.0	1089	0.82	0.113	0.06	21.37	0.07	0.001
11.56	1.82	148.33	174.44	34	0.0	1091	0.82	0.113	0.06	21.37	0.07	0.001
11.62	1.80	152.61	175.42	34	0.0	1095	0.82	0.113	0.06	21.37	0.07	0.001
11.70	1.78	154.95	174.98	34	0.0	1096	0.82	0.113	0.06	21.37	0.07	0.001
11.76	1.78	155.27	174.92	34	0.0	1099	0.82	0.113	0.06	21.37	0.07	0.001
11.86	1.78	154.77	174.08	33	0.0	1100	0.81	0.114	0.06	21.37	0.07	0.002
11.90	1.78	154.50	174.38	33	0.0	1104	0.81	0.113	0.06	21.37	0.07	0.001
11.96	1.79	153.77	175.10	34	0.0	1111	0.81	0.111	0.06	21.37	0.07	0.001
12.01	1.81	151.96	176.20	34	0.0	1123	0.81	0.108	0.06	21.37	0.07	0.001
12.08	1.85	147.30	176.88	35	0.0	1148	0.81	0.102	0.05	21.37	0.06	0.001
12.14	1.88	145.41	177.99	35	0.0	1176	0.81	0.096	0.05	21.37	0.06	0.001
12.22	1.92	141.95	177.27	36	0.0	1201	0.81	0.091	0.05	21.37	0.05	0.001
12.29	1.95	138.74	176.22	36	0.0	1221	0.80	0.087	0.04	21.37	0.05	0.001
12.35	1.97	137.34	176.49	36	0.0	1242	0.80	0.084	0.04	21.37	0.05	0.001
12.40	1.99	136.92	177.79	37	0.0	1267	0.80	0.080	0.04	21.37	0.04	0.001
12.47	2.03	132.89	177.29	37	0.0	1292	0.80	0.076	0.04	21.37	0.04	0.001
12.54	2.09	125.33	175.25	38	0.0	1303	0.80	0.075	0.03	21.37	0.04	0.001
12.61	2.03	140.78	187.23	39	0.0	1373	0.80	0.066	0.03	21.37	0.03	0.001

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
12.67	2.01	148.22	195.13	41	0.0	1427	0.80	0.061	0.03	21.37	0.03	0.000
12.76	1.99	157.93	204.64	42	0.0	1485	0.80	0.056	0.02	21.37	0.03	0.001
12.81	1.97	164.30	210.82	43	0.0	1519	0.79	0.053	0.02	21.37	0.02	0.000
12.90	1.96	172.02	219.10	45	0.0	1574	0.79	0.050	0.02	21.37	0.02	0.000
12.94	1.95	175.03	222.06	45	0.0	1592	0.79	0.049	0.02	21.37	0.02	0.000
12.99	1.92	183.85	229.84	46	0.0	1625	0.79	0.047	0.02	21.37	0.02	0.000
13.06	1.87	201.65	244.75	48	0.0	1682	0.79	0.044	0.02	21.37	0.02	0.000
13.15	1.85	212.74	255.12	50	0.0	1745	0.79	0.041	0.01	21.37	0.02	0.000
13.20	1.82	225.71	265.48	52	0.0	1802	0.79	0.039	0.01	21.37	0.01	0.000
13.27	1.81	236.17	274.59	53	0.0	1863	0.78	0.037	0.01	21.37	0.01	0.000
13.35	1.79	247.58	283.20	55	0.0	1923	0.78	0.035	0.01	21.37	0.01	0.000
13.40	1.70	252.81	252.81	47	0.0	1761	0.78	0.041	0.01	21.37	0.02	0.000
13.46	1.62	258.38	258.38	47	0.0	1662	0.78	0.046	0.02	21.37	0.02	0.000
13.55	1.62	267.07	267.07	49	0.0	1719	0.78	0.044	0.02	21.37	0.02	0.000
13.60	1.62	269.40	269.40	49	0.0	1735	0.78	0.043	0.01	21.37	0.02	0.000
13.66	1.61	275.48	275.48	50	0.0	1756	0.78	0.042	0.01	21.37	0.02	0.000
13.72	1.63	266.68	266.68	49	0.0	1745	0.78	0.043	0.01	21.37	0.02	0.000
13.78	1.64	262.38	262.38	48	0.0	1741	0.77	0.043	0.02	21.37	0.02	0.000
13.85	1.64	264.00	264.00	48	0.0	1752	0.77	0.043	0.01	21.37	0.02	0.000
13.93	1.66	258.80	258.80	48	0.0	1768	0.77	0.042	0.01	21.37	0.02	0.000
14.00	1.66	263.48	263.48	49	0.0	1808	0.77	0.041	0.01	21.37	0.02	0.000
14.04	1.70	255.65	255.65	48	0.0	1830	0.77	0.040	0.01	21.37	0.02	0.000
14.11	1.71	263.91	266.32	50	0.0	1928	0.77	0.036	0.01	21.37	0.01	0.000
14.18	1.72	275.05	281.12	53	0.0	2029	0.77	0.033	0.01	21.37	0.01	0.000
14.25	1.73	284.58	299.92	57	0.0	2146	0.76	0.031	0.01	21.37	0.01	0.000
14.32	1.75	286.79	310.81	59	0.0	2213	0.76	0.029	0.01	21.37	0.01	0.000
14.38	1.77	283.93	317.68	61	0.0	2258	0.76	0.028	0.01	21.37	0.01	0.000
14.45	1.79	286.13	326.08	63	0.0	2326	0.76	0.027	0.01	21.37	0.01	0.000
14.51	1.80	285.82	330.28	64	0.0	2367	0.76	0.027	0.01	21.37	0.01	0.000
14.58	1.80	287.56	332.46	64	0.0	2391	0.76	0.026	0.01	21.37	0.01	0.000
14.63	1.81	286.35	332.21	64	0.0	2397	0.76	0.026	0.01	21.37	0.01	0.000
14.71	1.81	282.49	327.49	63	0.0	2371	0.76	0.027	0.01	21.37	0.01	0.000
14.77	1.81	280.04	324.86	63	0.0	2358	0.75	0.027	0.01	21.37	0.01	0.000
14.85	1.82	273.95	321.27	63	0.0	2350	0.75	0.027	0.01	21.37	0.01	0.000
14.91	1.83	270.02	319.08	62	0.0	2348	0.75	0.028	0.01	21.37	0.01	0.000
14.97	1.83	271.14	321.25	63	0.0	2374	0.75	0.027	0.01	21.37	0.01	0.000
15.06	1.83	274.86	325.51	64	0.0	2414	0.75	0.027	0.01	21.37	0.01	0.000
15.11	1.83	276.58	327.98	64	0.0	2440	0.75	0.026	0.01	21.37	0.01	0.000
15.17	1.83	279.15	330.87	65	0.0	2467	0.75	0.026	0.01	21.37	0.01	0.000
15.26	1.85	275.20	330.13	65	0.0	2492	0.74	0.026	0.01	21.37	0.01	0.000
15.32	1.86	273.17	329.21	65	0.0	2501	0.74	0.026	0.01	21.37	0.01	0.000
15.37	1.86	272.08	328.58	65	0.0	2506	0.74	0.026	0.01	21.37	0.01	0.000
15.43	1.86	269.99	326.06	64	0.0	2494	0.74	0.026	0.01	21.37	0.01	0.000
15.51	1.87	265.56	322.31	64	0.0	2486	0.74	0.026	0.01	21.37	0.01	0.000
15.57	1.85	262.67	316.38	62	0.0	2429	0.74	0.027	0.01	21.37	0.01	0.000
15.62	1.84	257.60	306.99	60	0.0	2343	0.74	0.029	0.01	21.37	0.01	0.000
15.72	1.84	251.01	299.16	59	0.0	2293	0.73	0.030	0.01	21.37	0.01	0.000
15.77	1.85	245.23	295.16	58	0.0	2284	0.73	0.030	0.01	21.37	0.01	0.000

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
15.82	1.88	233.56	285.24	57	0.0	2244	0.73	0.031	0.01	21.37	0.01	0.000
15.88	1.89	225.57	277.07	55	0.0	2200	0.73	0.032	0.01	21.37	0.01	0.000
15.95	2.01	180.48	237.75	50	0.0	2057	0.73	0.036	0.01	21.37	0.01	0.000
16.01	1.94	200.38	252.55	51	0.0	2085	0.73	0.035	0.01	21.37	0.01	0.000
16.09	1.91	203.31	253.45	51	0.0	2069	0.73	0.036	0.01	21.37	0.01	0.000
16.15	1.91	202.96	253.03	51	0.0	2071	0.73	0.036	0.01	21.37	0.01	0.000
16.22	1.92	199.79	250.22	51	0.0	2067	0.72	0.036	0.01	21.37	0.01	0.000
16.28	1.93	196.58	247.59	50	0.0	2066	0.72	0.036	0.01	21.37	0.01	0.000
16.34	1.93	198.21	249.48	51	0.0	2086	0.72	0.036	0.01	21.37	0.01	0.000
16.41	1.91	204.93	255.43	51	0.0	2113	0.72	0.035	0.01	21.37	0.01	0.000
16.48	1.91	205.57	256.28	52	0.0	2127	0.72	0.035	0.01	21.37	0.01	0.000
16.56	1.92	205.85	257.36	52	0.0	2151	0.72	0.034	0.01	21.37	0.01	0.000
16.61	1.92	208.42	260.43	53	0.0	2180	0.72	0.034	0.01	21.37	0.01	0.000
16.67	1.91	214.72	266.31	53	0.0	2213	0.71	0.033	0.01	21.37	0.01	0.000
16.75	1.88	221.95	271.96	54	0.0	2232	0.71	0.033	0.01	21.37	0.01	0.000
16.81	1.86	230.41	278.89	55	0.0	2264	0.71	0.032	0.01	21.37	0.01	0.000
16.89	1.85	240.09	287.81	57	0.0	2324	0.71	0.031	0.01	21.37	0.01	0.000
16.93	1.85	243.72	291.73	57	0.0	2356	0.71	0.030	0.01	21.37	0.01	0.000
17.01	1.84	248.91	297.20	58	0.0	2403	0.71	0.029	0.01	21.37	0.01	0.000
17.07	1.84	250.86	299.10	59	0.0	2421	0.71	0.029	0.01	21.37	0.01	0.000
17.14	1.83	253.91	301.58	59	0.0	2441	0.71	0.029	0.01	21.37	0.01	0.000
17.21	1.83	255.16	302.83	59	0.0	2457	0.70	0.029	0.01	21.37	0.01	0.000
17.27	1.83	256.86	304.51	60	0.0	2474	0.70	0.028	0.01	21.37	0.01	0.000
17.34	1.83	258.94	307.41	60	0.0	2507	0.70	0.028	0.01	21.37	0.01	0.000
17.39	1.83	260.29	309.12	60	0.0	2527	0.70	0.028	0.01	21.37	0.01	0.000
17.46	1.84	262.04	311.33	61	0.0	2552	0.70	0.027	0.01	21.37	0.01	0.000
17.54	1.83	264.18	313.78	61	0.0	2580	0.70	0.027	0.01	21.37	0.01	0.000
17.60	1.84	260.80	311.91	61	0.0	2584	0.70	0.027	0.01	21.37	0.01	0.000
17.66	1.84	262.50	312.30	61	0.0	2582	0.69	0.027	0.01	21.37	0.01	0.000
17.73	1.81	263.52	306.40	59	0.0	2509	0.69	0.028	0.01	21.37	0.01	0.000
17.80	1.80	264.57	304.95	59	0.0	2495	0.69	0.029	0.01	21.37	0.01	0.000
17.86	1.79	265.98	302.91	58	0.0	2476	0.69	0.029	0.01	21.37	0.01	0.000
17.93	1.77	267.74	299.11	57	0.0	2447	0.69	0.030	0.01	21.37	0.01	0.000
18.00	1.76	267.60	295.15	56	0.0	2421	0.69	0.030	0.01	21.37	0.01	0.000
18.09	1.75	266.51	290.38	55	0.0	2393	0.69	0.031	0.01	21.37	0.01	0.000
18.12	1.75	266.03	288.69	55	0.0	2382	0.69	0.031	0.01	21.37	0.01	0.000
18.18	1.74	269.01	285.63	54	0.0	2373	0.68	0.031	0.01	21.37	0.01	0.000
18.24	1.73	270.86	284.77	54	0.0	2377	0.68	0.031	0.01	21.37	0.01	0.000
18.31	1.73	272.84	284.30	54	0.0	2385	0.68	0.031	0.01	21.37	0.01	0.000
18.37	1.72	273.98	282.43	53	0.0	2383	0.68	0.031	0.01	21.37	0.01	0.000
18.45	1.72	274.43	279.94	53	0.0	2377	0.68	0.031	0.01	21.37	0.01	0.000
18.50	1.71	273.78	278.36	52	0.0	2371	0.68	0.032	0.01	21.37	0.01	0.000
18.58	1.71	272.57	275.93	52	0.0	2360	0.68	0.032	0.01	21.37	0.01	0.000
18.64	1.70	272.00	272.00	51	0.0	2337	0.67	0.032	0.01	21.37	0.01	0.000
18.71	1.70	268.54	268.54	50	0.0	2297	0.67	0.033	0.01	21.37	0.01	0.000
18.78	1.69	266.07	266.07	50	0.0	2257	0.67	0.034	0.01	21.37	0.01	0.000
18.84	1.68	262.87	262.87	49	0.0	2216	0.67	0.035	0.01	21.37	0.01	0.000
18.93	1.68	254.82	254.82	47	0.0	2152	0.67	0.037	0.01	21.37	0.02	0.000

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
18.97	1.69	249.36	249.36	46	0.0	2123	0.67	0.038	0.01	21.37	0.02	0.000
19.04	1.69	240.59	240.59	45	0.0	2065	0.67	0.040	0.02	21.37	0.02	0.000
19.13	1.71	226.48	228.38	43	0.0	1992	0.66	0.043	0.02	21.37	0.02	0.000
19.17	1.73	217.13	227.26	43	0.0	1958	0.66	0.044	0.02	21.37	0.02	0.000
19.24	1.78	195.28	220.38	42	0.0	1888	0.66	0.047	0.02	21.37	0.02	0.000
19.33	1.84	174.79	208.48	41	0.0	1834	0.66	0.050	0.02	21.37	0.02	0.001
19.38	1.93	151.70	190.20	38	0.0	1783	0.66	0.052	0.02	21.37	0.03	0.000
19.44	2.02	129.08	171.29	36	0.0	1727	0.66	0.056	0.03	21.37	0.03	0.000
19.50	2.13	108.54	160.11	35	0.0	1686	0.66	0.059	0.03	21.37	0.03	0.000
19.57	2.26	90.02	159.61	37	0.0	1645	0.66	0.062	0.03	21.37	0.03	0.001
19.63	2.37	73.62	162.39	39	0.0	1559	0.65	0.069	0.03	21.37	0.04	0.001
19.68	2.48	59.03	167.43	43	0.0	1453	0.65	0.081	0.03	21.37	0.04	0.001
19.76	2.52	51.79	162.87	42	0.0	1357	0.65	0.096	0.04	21.37	0.05	0.001
19.83	2.42	58.45	145.48	36	0.0	1342	0.65	0.099	0.05	21.37	0.06	0.001
19.88	2.44	52.69	137.72	35	0.0	1248	0.65	0.120	0.06	21.37	0.07	0.001
19.96	2.32	58.08	116.21	28	0.0	1172	0.65	0.144	0.10	21.37	0.11	0.002
20.02	2.29	62.01	116.81	27	0.0	1205	0.65	0.133	0.09	21.37	0.11	0.002
20.09	2.29	61.40	115.91	27	0.0	1198	0.64	0.135	0.09	21.37	0.11	0.002
20.18	2.31	59.08	115.20	27	0.0	1183	0.64	0.140	0.10	21.37	0.11	0.003
20.22	2.41	49.64	121.52	30	0.0	1148	0.64	0.153	0.09	21.37	0.11	0.001
20.28	2.37	53.28	119.03	29	0.0	1169	0.64	0.145	0.09	21.37	0.11	0.001
20.35	2.38	52.27	119.89	29	0.0	1168	0.64	0.145	0.09	21.37	0.11	0.002
20.41	2.39	52.00	120.52	30	0.0	1173	0.64	0.144	0.09	21.37	0.11	0.002
20.47	2.40	51.82	123.97	31	0.0	1194	0.64	0.136	0.08	21.37	0.10	0.001
20.56	2.43	51.42	131.06	33	0.0	1235	0.64	0.124	0.07	21.37	0.08	0.002
20.61	2.43	53.57	135.75	34	0.0	1285	0.63	0.111	0.06	21.37	0.07	0.001
20.67	2.41	57.57	139.95	35	0.0	1351	0.63	0.098	0.05	21.37	0.06	0.001
20.76	2.36	65.65	141.56	34	0.0	1436	0.63	0.084	0.04	21.37	0.05	0.001
20.82	2.29	74.10	141.02	33	0.0	1497	0.63	0.077	0.04	21.37	0.05	0.001
20.87	2.21	86.09	141.74	32	0.0	1562	0.63	0.070	0.04	21.37	0.05	0.001
20.96	2.08	109.21	151.83	33	0.0	1663	0.63	0.062	0.03	21.37	0.04	0.001
21.00	1.99	127.02	165.21	34	0.0	1722	0.63	0.057	0.03	21.37	0.04	0.000
21.07	1.91	146.39	181.63	36	0.0	1772	0.63	0.054	0.03	21.37	0.03	0.000
21.15	1.83	163.89	193.63	38	0.0	1791	0.62	0.053	0.02	21.37	0.03	0.001
21.21	1.80	169.94	195.70	38	0.0	1789	0.62	0.053	0.02	21.37	0.03	0.000
21.26	1.78	175.03	196.98	38	0.0	1794	0.62	0.053	0.02	21.37	0.03	0.000
21.35	1.76	183.28	202.29	39	0.0	1845	0.62	0.051	0.02	21.37	0.03	0.001
21.41	1.77	183.50	205.19	39	0.0	1875	0.62	0.049	0.02	21.37	0.03	0.000
21.47	1.80	180.68	208.60	40	0.0	1924	0.62	0.047	0.02	21.37	0.02	0.000
21.53	1.84	173.71	206.47	40	0.0	1942	0.62	0.046	0.02	21.37	0.02	0.000
21.61	1.88	164.85	202.09	40	0.0	1971	0.61	0.045	0.02	21.37	0.02	0.000
21.67	1.92	154.97	193.63	39	0.0	1948	0.61	0.046	0.02	21.37	0.02	0.000
21.76	1.95	143.02	181.49	37	0.0	1876	0.61	0.049	0.02	21.37	0.03	0.001
21.80	1.99	132.04	171.11	35	0.0	1825	0.61	0.052	0.03	21.37	0.03	0.000
21.86	2.00	124.63	162.94	34	0.0	1760	0.61	0.056	0.03	21.37	0.03	0.001
21.95	2.06	106.18	145.20	31	0.0	1634	0.61	0.064	0.04	21.37	0.04	0.001
21.98	2.09	98.65	139.08	30	0.0	1588	0.61	0.068	0.04	21.37	0.05	0.000
22.05	2.13	89.31	131.22	29	0.0	1517	0.61	0.075	0.05	21.37	0.06	0.001

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
22.12	2.18	79.79	125.39	28	0.0	1456	0.60	0.083	0.06	21.37	0.06	0.001
22.20	2.21	70.34	115.79	26	0.0	1342	0.60	0.100	0.07	21.37	0.08	0.002
22.25	2.30	60.90	118.06	28	0.0	1318	0.60	0.105	0.07	21.37	0.08	0.001
22.31	2.37	54.57	121.10	29	0.0	1294	0.60	0.110	0.07	21.37	0.08	0.001
22.39	2.50	43.20	129.31	33	0.0	1233	0.60	0.125	0.07	21.37	0.08	0.001
22.44	2.66	33.05	142.51	0	0.0	0	0.60	0.000	0.00	0.00	0.00	0.000
22.54	2.71	30.61	145.80	0	0.0	0	0.60	0.000	0.00	0.00	0.00	0.000
22.58	2.66	33.03	142.15	0	0.0	0	0.60	0.000	0.00	0.00	0.00	0.000
22.65	2.71	30.59	145.99	0	0.0	0	0.59	0.000	0.00	0.00	0.00	0.000
22.71	2.66	33.01	141.40	0	0.0	0	0.59	0.000	0.00	0.00	0.00	0.000
22.80	2.59	36.46	133.86	36	0.0	1194	0.59	0.136	0.07	21.37	0.08	0.002
22.84	2.57	37.80	131.15	35	0.0	1199	0.59	0.135	0.07	21.37	0.08	0.001
22.91	2.53	39.68	127.18	33	0.0	1203	0.59	0.133	0.07	21.37	0.08	0.001
22.97	2.49	42.26	122.67	31	0.0	1211	0.59	0.131	0.08	21.37	0.09	0.001
23.04	2.45	44.64	118.29	30	0.0	1214	0.59	0.130	0.08	21.37	0.09	0.002
23.10	2.43	45.50	114.64	29	0.0	1203	0.59	0.133	0.09	21.37	0.10	0.001
23.20	2.41	45.89	110.73	27	0.0	1186	0.58	0.138	0.10	21.37	0.11	0.003
23.23	2.40	45.85	109.97	27	0.0	1182	0.58	0.140	0.10	21.37	0.11	0.001
23.30	2.41	45.39	109.93	27	0.0	1180	0.58	0.140	0.10	21.37	0.11	0.002
23.40	2.44	43.23	112.05	28	0.0	1176	0.58	0.141	0.09	21.37	0.11	0.003
23.44	2.47	41.38	115.12	29	0.0	1177	0.58	0.141	0.09	21.37	0.10	0.001
23.50	2.50	39.52	119.00	31	0.0	1181	0.58	0.139	0.08	21.37	0.10	0.001
23.57	2.56	36.21	123.85	33	0.0	1172	0.58	0.142	0.08	21.37	0.09	0.002
23.64	2.60	33.93	126.64	34	0.0	1160	0.58	0.146	0.08	21.37	0.09	0.001
23.70	2.65	31.00	130.03	0	0.0	0	0.57	0.000	0.00	0.00	0.00	0.000
23.76	2.74	26.57	135.79	0	0.0	0	0.57	0.000	0.00	0.00	0.00	0.000
23.83	2.80	23.88	141.16	0	0.0	0	0.57	0.000	0.00	0.00	0.00	0.000
23.90	2.83	22.88	142.74	0	0.0	0	0.57	0.000	0.00	0.00	0.00	0.000
23.96	2.82	23.35	141.27	0	0.0	0	0.57	0.000	0.00	0.00	0.00	0.000
24.02	2.83	22.76	141.87	0	0.0	0	0.57	0.000	0.00	0.00	0.00	0.000
24.10	2.82	22.51	138.90	0	0.0	0	0.57	0.000	0.00	0.00	0.00	0.000
24.15	2.77	24.52	133.64	0	0.0	0	0.57	0.000	0.00	0.00	0.00	0.000
24.25	2.67	28.53	125.11	0	0.0	0	0.56	0.000	0.00	0.00	0.00	0.000
24.30	2.60	31.61	119.60	0	0.0	0	0.56	0.000	0.00	0.00	0.00	0.000
24.37	2.58	32.96	118.75	32	0.0	1135	0.56	0.154	0.09	21.37	0.10	0.002
24.43	2.59	33.02	121.39	33	0.0	1154	0.56	0.147	0.08	21.37	0.10	0.001
24.49	2.61	32.37	124.54	0	0.0	0	0.56	0.000	0.00	0.00	0.00	0.000
24.54	2.63	31.61	127.27	0	0.0	0	0.56	0.000	0.00	0.00	0.00	0.000
24.64	2.70	29.20	138.75	0	0.0	0	0.56	0.000	0.00	0.00	0.00	0.000
24.69	2.67	31.14	136.44	0	0.0	0	0.56	0.000	0.00	0.00	0.00	0.000
24.74	2.67	28.66	126.76	0	0.0	0	0.55	0.000	0.00	0.00	0.00	0.000
24.80	2.47	31.76	87.78	22	0.0	946	0.55	0.275	0.24	21.37	0.28	0.004
24.89	2.43	34.27	87.87	22	0.0	977	0.55	0.245	0.22	21.37	0.26	0.006
24.94	2.40	36.54	87.09	21	0.0	997	0.55	0.229	0.21	21.37	0.25	0.003
25.00	2.31	42.80	84.78	20	0.0	1034	0.55	0.202	0.20	21.37	0.24	0.003
25.08	2.33	42.07	86.73	21	0.0	1048	0.55	0.194	0.19	21.37	0.22	0.004
25.14	2.26	49.13	87.14	20	0.0	1098	0.55	0.168	0.17	21.37	0.19	0.002
25.23	2.33	45.19	93.26	22	0.0	1132	0.55	0.153	0.13	21.37	0.16	0.004

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
25.27	2.38	42.36	97.00	24	0.0	1138	0.55	0.150	0.12	21.37	0.14	0.001
25.34	2.49	36.28	106.40	27	0.0	1141	0.54	0.149	0.10	21.37	0.12	0.002
25.41	2.67	27.59	121.29	0	0.0	0	0.54	0.000	0.00	0.00	0.00	0.000
25.47	2.80	22.24	129.61	0	0.0	0	0.54	0.000	0.00	0.00	0.00	0.000
25.53	2.89	18.85	133.60	0	0.0	0	0.54	0.000	0.00	0.00	0.00	0.000
25.62	2.96	16.52	135.46	0	0.0	0	0.54	0.000	0.00	0.00	0.00	0.000
25.68	2.98	16.04	136.02	0	0.0	0	0.54	0.000	0.00	0.00	0.00	0.000
25.73	2.94	17.01	134.03	0	0.0	0	0.54	0.000	0.00	0.00	0.00	0.000
25.80	2.86	19.55	128.47	0	0.0	0	0.54	0.000	0.00	0.00	0.00	0.000
25.88	2.74	23.60	121.70	0	0.0	0	0.53	0.000	0.00	0.00	0.00	0.000
25.94	2.67	27.10	118.08	0	0.0	0	0.53	0.000	0.00	0.00	0.00	0.000
25.98	2.65	28.74	119.90	0	0.0	0	0.53	0.000	0.00	0.00	0.00	0.000
26.06	2.63	30.23	121.64	0	0.0	0	0.53	0.000	0.00	0.00	0.00	0.000
26.13	2.66	29.39	126.04	0	0.0	0	0.53	0.000	0.00	0.00	0.00	0.000
26.18	2.78	23.91	133.51	0	0.0	0	0.53	0.000	0.00	0.00	0.00	0.000
26.28	2.84	20.96	132.80	0	0.0	0	0.53	0.000	0.00	0.00	0.00	0.000
26.33	2.93	17.49	134.74	0	0.0	0	0.53	0.000	0.00	0.00	0.00	0.000
26.43	2.96	15.88	128.18	0	0.0	0	0.52	0.000	0.00	0.00	0.00	0.000
26.48	2.99	14.70	126.59	0	0.0	0	0.52	0.000	0.00	0.00	0.00	0.000
26.52	2.99	14.24	123.47	0	0.0	0	0.52	0.000	0.00	0.00	0.00	0.000
26.58	2.97	14.37	119.24	0	0.0	0	0.52	0.000	0.00	0.00	0.00	0.000
26.68	2.87	16.50	112.19	0	0.0	0	0.52	0.000	0.00	0.00	0.00	0.000
26.72	2.86	16.80	110.49	0	0.0	0	0.52	0.000	0.00	0.00	0.00	0.000
26.78	2.89	15.89	111.58	0	0.0	0	0.52	0.000	0.00	0.00	0.00	0.000
26.88	2.96	14.05	114.26	0	0.0	0	0.52	0.000	0.00	0.00	0.00	0.000
26.91	3.00	13.16	115.62	0	0.0	0	0.52	0.000	0.00	0.00	0.00	0.000
26.98	3.03	12.43	116.53	0	0.0	0	0.52	0.000	0.00	0.00	0.00	0.000
27.07	3.05	12.00	115.47	0	0.0	0	0.51	0.000	0.00	0.00	0.00	0.000
27.10	3.05	11.94	114.55	0	0.0	0	0.51	0.000	0.00	0.00	0.00	0.000
27.17	3.05	11.64	112.22	0	0.0	0	0.51	0.000	0.00	0.00	0.00	0.000
27.23	3.07	11.13	110.70	0	0.0	0	0.51	0.000	0.00	0.00	0.00	0.000
27.32	3.08	10.67	109.94	0	0.0	0	0.51	0.000	0.00	0.00	0.00	0.000
27.37	3.10	10.38	109.89	0	0.0	0	0.51	0.000	0.00	0.00	0.00	0.000
27.43	3.10	10.36	110.14	0	0.0	0	0.51	0.000	0.00	0.00	0.00	0.000
27.50	3.09	10.39	109.04	0	0.0	0	0.51	0.000	0.00	0.00	0.00	0.000
27.57	3.03	10.94	102.58	0	0.0	0	0.51	0.000	0.00	0.00	0.00	0.000
27.65	2.97	13.43	112.02	0	0.0	0	0.50	0.000	0.00	0.00	0.00	0.000
27.71	2.83	17.61	109.46	0	0.0	0	0.50	0.000	0.00	0.00	0.00	0.000
27.76	2.67	23.62	103.34	0	0.0	0	0.50	0.000	0.00	0.00	0.00	0.000
27.84	2.53	30.52	98.05	26	0.0	1105	0.50	0.154	0.11	21.37	0.13	0.003
27.90	2.48	34.42	97.44	25	0.0	1153	0.50	0.137	0.11	21.37	0.12	0.002
27.97	2.42	39.01	97.21	24	0.0	1207	0.50	0.121	0.10	21.37	0.11	0.002
28.03	2.38	42.20	96.37	24	0.0	1236	0.50	0.114	0.09	21.37	0.11	0.002
28.10	2.36	43.73	94.26	23	0.0	1234	0.50	0.115	0.10	21.37	0.12	0.002
28.16	2.33	44.27	91.26	22	0.0	1213	0.50	0.120	0.11	21.37	0.13	0.002
28.22	2.32	44.57	88.62	21	0.0	1192	0.49	0.125	0.12	21.37	0.14	0.002
28.30	2.33	43.17	89.14	21	0.0	1190	0.49	0.125	0.12	21.37	0.14	0.003
28.35	2.37	41.63	91.76	22	0.0	1202	0.49	0.122	0.11	21.37	0.13	0.001

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
28.42	2.44	38.08	99.13	25	0.0	1230	0.49	0.115	0.09	21.37	0.10	0.002
28.50	2.55	33.04	109.42	29	0.0	1246	0.49	0.111	0.07	21.37	0.08	0.002
28.55	2.64	28.94	117.95	0	0.0	0	0.49	0.000	0.00	0.00	0.00	0.000
28.61	2.79	22.70	131.34	0	0.0	0	0.49	0.000	0.00	0.00	0.00	0.000
28.68	2.92	18.91	141.33	0	0.0	0	0.49	0.000	0.00	0.00	0.00	0.000
28.76	2.97	17.54	144.87	0	0.0	0	0.49	0.000	0.00	0.00	0.00	0.000
28.81	2.98	17.10	143.39	0	0.0	0	0.49	0.000	0.00	0.00	0.00	0.000
28.90	3.04	14.93	141.22	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
28.96	3.13	12.58	142.02	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
29.01	3.17	11.81	142.12	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
29.11	3.06	13.37	132.37	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
29.16	2.87	17.79	120.92	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
29.21	2.67	24.52	107.11	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
29.30	2.31	44.32	87.10	21	0.0	1214	0.48	0.117	0.11	21.37	0.13	0.003
29.34	2.18	55.64	87.14	19	0.0	1259	0.48	0.107	0.11	21.37	0.13	0.001
29.41	2.05	70.68	95.45	20	0.0	1316	0.48	0.096	0.09	21.37	0.11	0.002
29.49	2.00	75.51	98.71	21	0.0	1317	0.47	0.096	0.09	21.37	0.11	0.002
29.54	1.99	76.21	98.76	20	0.0	1303	0.47	0.098	0.10	21.37	0.11	0.001
29.60	1.98	75.28	97.34	20	0.0	1283	0.47	0.102	0.10	21.37	0.12	0.002
29.66	1.99	73.45	95.55	20	0.0	1272	0.47	0.104	0.10	21.37	0.12	0.002
29.75	2.02	70.73	93.48	20	0.0	1273	0.47	0.103	0.11	21.37	0.12	0.003
29.79	2.03	69.21	92.53	20	0.0	1277	0.47	0.102	0.11	21.37	0.12	0.001
29.86	2.05	67.38	91.47	19	0.0	1281	0.47	0.101	0.11	21.37	0.12	0.002
29.95	2.07	66.52	91.31	19	0.0	1293	0.47	0.099	0.10	21.37	0.12	0.003
29.99	2.07	66.79	91.65	20	0.0	1299	0.47	0.098	0.10	21.37	0.12	0.001
30.05	2.07	67.08	92.38	20	0.0	1314	0.47	0.095	0.10	21.37	0.11	0.002
30.16	2.07	68.35	94.55	20	0.0	1352	0.47	0.089	0.09	21.37	0.10	0.003
30.19	2.08	68.53	95.00	20	0.0	1362	0.46	0.088	0.09	21.37	0.10	0.001
30.25	2.08	68.81	95.43	20	0.0	1371	0.46	0.087	0.08	21.37	0.10	0.001
30.34	2.06	70.24	95.96	20	0.0	1368	0.46	0.087	0.08	21.37	0.10	0.002
30.39	2.05	70.75	96.16	20	0.0	1367	0.46	0.087	0.08	21.37	0.10	0.001
30.45	2.00	71.76	93.76	20	0.0	1281	0.46	0.101	0.10	21.37	0.12	0.002
30.53	1.94	71.06	89.81	18	0.0	1165	0.46	0.126	0.14	21.37	0.16	0.003
30.60	1.97	68.38	87.99	18	0.0	1179	0.46	0.122	0.14	21.37	0.16	0.003
30.64	2.00	67.02	87.34	18	0.0	1194	0.46	0.118	0.13	21.37	0.16	0.002
30.74	2.10	59.05	84.14	18	0.0	1240	0.46	0.108	0.12	21.37	0.14	0.003
30.77	2.25	47.26	83.01	19	0.0	1236	0.46	0.109	0.11	21.37	0.13	0.001
30.84	2.29	47.02	87.95	21	0.0	1296	0.46	0.097	0.09	21.37	0.11	0.002
30.91	2.37	42.24	94.89	23	0.0	1333	0.45	0.091	0.08	21.37	0.09	0.001
31.01	2.53	34.32	108.72	28	0.0	1363	0.45	0.087	0.06	21.37	0.07	0.002
31.05	2.57	32.39	114.29	31	0.0	1380	0.45	0.084	0.05	21.37	0.06	0.001
31.11	2.68	27.59	124.27	0	0.0	0	0.45	0.000	0.00	0.00	0.00	0.000
31.17	2.71	25.97	125.11	0	0.0	0	0.45	0.000	0.00	0.00	0.00	0.000
31.23	2.71	24.97	120.19	0	0.0	0	0.45	0.000	0.00	0.00	0.00	0.000
31.30	2.66	26.37	114.00	0	0.0	0	0.45	0.000	0.00	0.00	0.00	0.000
31.40	2.58	30.05	107.12	29	0.0	1303	0.45	0.095	0.06	21.37	0.07	0.002
31.44	2.47	36.29	100.63	26	0.0	1340	0.45	0.090	0.07	21.37	0.08	0.001
31.50	2.39	41.49	96.72	24	0.0	1366	0.45	0.086	0.07	21.37	0.08	0.001

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
31.57	2.34	45.85	95.46	23	0.0	1398	0.44	0.082	0.07	21.37	0.08	0.001
31.63	2.33	48.78	99.41	24	0.0	1467	0.44	0.074	0.06	21.37	0.07	0.001
31.71	2.34	49.60	103.70	25	0.0	1523	0.44	0.069	0.05	21.37	0.06	0.001
31.76	2.36	48.56	106.50	26	0.0	1545	0.44	0.067	0.05	21.37	0.06	0.001
31.84	2.43	44.66	113.32	28	0.0	1573	0.44	0.065	0.04	21.37	0.05	0.001
31.91	2.44	44.68	115.36	29	0.0	1596	0.44	0.063	0.04	21.37	0.05	0.001
31.96	2.44	44.60	115.44	29	0.0	1598	0.44	0.063	0.04	21.37	0.05	0.001
32.02	2.43	44.81	113.49	28	0.0	1585	0.44	0.064	0.04	21.37	0.05	0.001
32.10	2.36	49.36	107.62	26	0.0	1579	0.44	0.064	0.05	21.37	0.05	0.001
32.15	2.28	55.81	103.86	24	0.0	1590	0.44	0.063	0.05	21.37	0.06	0.001
32.24	2.25	56.81	100.46	23	0.0	1556	0.44	0.066	0.06	21.37	0.06	0.001
32.30	2.25	55.66	97.48	22	0.0	1514	0.44	0.069	0.06	21.37	0.07	0.001
32.36	2.24	53.96	93.54	21	0.0	1457	0.43	0.074	0.07	21.37	0.08	0.001
32.43	2.25	51.67	90.73	21	0.0	1414	0.43	0.079	0.07	21.37	0.09	0.002
32.48	2.27	49.73	90.50	21	0.0	1404	0.43	0.080	0.08	21.37	0.09	0.001
32.55	2.33	45.81	94.23	22	0.0	1424	0.43	0.078	0.07	21.37	0.08	0.001
32.66	2.43	38.80	97.83	24	0.0	1394	0.43	0.081	0.06	21.37	0.07	0.002
32.70	2.52	34.09	106.62	28	0.0	1414	0.43	0.079	0.05	21.37	0.06	0.001
32.75	2.59	31.42	113.92	31	0.0	1437	0.43	0.076	0.05	21.37	0.05	0.001
32.82	2.78	22.61	126.20	0	0.0	0	0.43	0.000	0.00	0.00	0.00	0.000
32.89	2.94	17.29	135.62	0	0.0	0	0.43	0.000	0.00	0.00	0.00	0.000
32.95	2.98	16.46	138.59	0	0.0	0	0.43	0.000	0.00	0.00	0.00	0.000
33.01	3.01	15.59	140.02	0	0.0	0	0.43	0.000	0.00	0.00	0.00	0.000
33.10	3.08	13.35	137.03	0	0.0	0	0.42	0.000	0.00	0.00	0.00	0.000
33.15	3.11	12.36	133.12	0	0.0	0	0.42	0.000	0.00	0.00	0.00	0.000
33.23	3.11	11.89	129.33	0	0.0	0	0.42	0.000	0.00	0.00	0.00	0.000
33.29	3.12	11.47	126.48	0	0.0	0	0.42	0.000	0.00	0.00	0.00	0.000
33.34	3.10	11.72	124.91	0	0.0	0	0.42	0.000	0.00	0.00	0.00	0.000
33.40	2.89	16.41	115.74	0	0.0	0	0.42	0.000	0.00	0.00	0.00	0.000
33.49	2.69	23.42	108.77	0	0.0	0	0.42	0.000	0.00	0.00	0.00	0.000
33.54	2.55	30.71	102.58	27	0.0	1363	0.42	0.084	0.06	21.37	0.07	0.001
33.63	2.40	42.18	99.16	24	0.0	1485	0.42	0.071	0.06	21.37	0.07	0.001
33.67	2.34	47.05	98.66	24	0.0	1528	0.42	0.067	0.05	21.37	0.06	0.000
33.75	2.25	56.25	97.85	22	0.0	1580	0.42	0.063	0.05	21.37	0.06	0.001
33.80	2.20	61.73	99.44	22	0.0	1617	0.42	0.060	0.05	21.37	0.06	0.001
33.87	2.17	65.82	101.70	23	0.0	1654	0.42	0.058	0.05	21.37	0.06	0.001
33.94	2.16	67.82	103.44	23	0.0	1683	0.41	0.056	0.05	21.37	0.06	0.001
34.02	2.17	67.93	104.47	23	0.0	1705	0.41	0.055	0.05	21.37	0.05	0.001
34.09	2.18	66.65	104.22	23	0.0	1706	0.41	0.055	0.05	21.37	0.05	0.001
34.13	2.21	63.55	103.45	23	0.0	1697	0.41	0.055	0.05	21.37	0.05	0.001
34.19	2.25	58.74	102.83	24	0.0	1679	0.41	0.056	0.05	21.37	0.05	0.001
34.26	2.32	52.20	105.48	25	0.0	1677	0.41	0.056	0.04	21.37	0.05	0.001
34.34	2.45	42.18	113.30	29	0.0	1659	0.41	0.057	0.04	21.37	0.04	0.001
34.38	2.55	36.07	119.82	32	0.0	1635	0.41	0.059	0.03	21.37	0.04	0.000
34.48	2.74	25.73	131.08	0	0.0	0	0.41	0.000	0.00	0.00	0.00	0.000
34.54	2.85	20.96	136.22	0	0.0	0	0.41	0.000	0.00	0.00	0.00	0.000
34.58	2.92	18.32	137.81	0	0.0	0	0.41	0.000	0.00	0.00	0.00	0.000
34.67	2.97	16.34	136.12	0	0.0	0	0.41	0.000	0.00	0.00	0.00	0.000

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
34.73	3.00	15.56	136.21	0	0.0	0	0.41	0.000	0.00	0.00	0.00	0.000
34.78	2.99	15.28	130.57	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
34.85	2.94	15.13	119.04	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
34.92	2.97	15.18	124.81	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
34.98	2.98	15.23	129.00	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
35.05	3.01	14.75	133.28	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
35.12	3.03	14.67	136.58	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
35.18	3.04	14.60	138.84	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
35.24	3.04	14.70	140.58	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
35.31	3.05	14.59	141.56	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
35.39	3.05	14.51	141.07	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
35.44	3.06	14.28	140.52	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
35.51	3.06	14.21	139.47	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
35.57	3.05	14.22	138.35	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
35.64	3.05	14.11	137.63	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
35.70	3.05	14.17	137.05	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
35.78	3.03	14.66	136.18	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
35.84	3.01	15.09	136.41	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
35.90	3.00	15.71	136.75	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
35.96	2.97	16.49	135.75	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.05	2.95	16.65	133.69	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.10	2.95	16.62	132.90	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.16	2.93	17.16	132.26	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.24	2.88	18.68	128.74	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.29	2.85	19.94	129.51	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.37	2.83	21.09	130.46	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.44	2.85	19.65	129.05	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.49	2.91	17.47	129.17	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.56	2.99	15.13	130.41	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.63	3.03	13.95	130.39	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
36.70	3.01	14.43	128.09	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
36.75	2.94	16.03	124.63	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
36.84	2.70	24.31	113.22	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
36.90	2.57	30.60	107.58	29	0.0	1547	0.38	0.064	0.04	21.37	0.05	0.001
36.95	2.50	34.92	104.88	27	0.0	1590	0.38	0.061	0.04	21.37	0.05	0.001
37.03	2.39	44.38	102.18	25	0.0	1686	0.38	0.055	0.04	21.37	0.05	0.001
37.09	2.32	49.93	100.42	24	0.0	1719	0.38	0.053	0.04	21.37	0.05	0.001
37.15	2.24	58.29	99.76	23	0.0	1758	0.38	0.051	0.04	21.37	0.05	0.001
37.22	2.14	69.57	103.38	23	0.0	1811	0.38	0.049	0.04	21.37	0.05	0.001
37.29	2.07	79.03	109.13	23	0.0	1851	0.38	0.047	0.04	21.37	0.05	0.001
37.34	2.02	86.27	114.67	24	0.0	1880	0.38	0.046	0.04	21.37	0.04	0.001
37.41	1.99	92.43	120.05	25	0.0	1909	0.38	0.045	0.03	21.37	0.04	0.001
37.48	1.97	97.53	125.21	26	0.0	1956	0.38	0.043	0.03	21.37	0.04	0.001
37.54	1.95	102.21	129.99	27	0.0	1998	0.38	0.042	0.03	21.37	0.03	0.000
37.60	1.94	106.02	134.17	27	0.0	2046	0.37	0.040	0.03	21.37	0.03	0.000
37.67	1.93	110.56	139.01	28	0.0	2096	0.37	0.039	0.03	21.37	0.03	0.000
37.74	1.91	113.90	141.98	29	0.0	2107	0.37	0.039	0.03	21.37	0.03	0.000
37.81	1.81	120.56	140.93	27	0.0	1911	0.37	0.045	0.03	21.37	0.04	0.001

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
37.87	1.82	122.54	144.34	28	0.0	1973	0.37	0.043	0.03	21.37	0.03	0.001
37.93	1.85	122.81	146.99	29	0.0	2047	0.37	0.040	0.03	21.37	0.03	0.000
38.00	1.86	123.18	148.73	29	0.0	2099	0.37	0.039	0.02	21.37	0.03	0.001
38.08	1.88	120.63	147.46	29	0.0	2126	0.37	0.038	0.02	21.37	0.03	0.001
38.16	1.94	108.49	137.41	28	0.0	2124	0.37	0.038	0.03	21.37	0.03	0.001
38.21	1.95	107.42	136.66	28	0.0	2133	0.37	0.038	0.03	21.37	0.03	0.000
38.26	2.00	100.08	130.45	27	0.0	2126	0.37	0.038	0.03	21.37	0.03	0.000
38.33	2.03	95.60	127.42	27	0.0	2143	0.37	0.038	0.03	21.37	0.03	0.000
38.39	2.02	98.62	130.49	27	0.0	2178	0.37	0.037	0.03	21.37	0.03	0.000
38.46	2.05	93.60	126.86	27	0.0	2178	0.37	0.037	0.03	21.37	0.03	0.000
38.52	2.03	97.59	129.96	27	0.0	2193	0.37	0.037	0.03	21.37	0.03	0.000
38.61	1.98	105.85	136.99	28	0.0	2224	0.37	0.036	0.02	21.37	0.03	0.001
38.66	1.97	110.22	141.25	29	0.0	2257	0.37	0.035	0.02	21.37	0.03	0.000
38.74	1.96	111.90	143.24	29	0.0	2288	0.36	0.034	0.02	21.37	0.03	0.000
38.79	1.97	111.40	142.79	29	0.0	2290	0.36	0.034	0.02	21.37	0.03	0.000
38.85	1.97	108.77	140.04	29	0.0	2266	0.36	0.035	0.02	21.37	0.03	0.000
38.94	1.99	102.21	132.83	28	0.0	2188	0.36	0.037	0.02	21.37	0.03	0.001
38.99	2.01	97.58	128.27	27	0.0	2151	0.36	0.038	0.03	21.37	0.03	0.000
39.05	2.05	90.29	122.13	26	0.0	2121	0.36	0.038	0.03	21.37	0.03	0.000
39.12	2.10	81.41	115.97	25	0.0	2092	0.36	0.039	0.03	21.37	0.03	0.001
39.20	2.14	76.35	113.12	25	0.0	2076	0.36	0.040	0.03	21.37	0.04	0.001
39.26	2.17	72.48	111.19	25	0.0	2059	0.36	0.040	0.03	21.37	0.04	0.001
39.33	2.19	69.98	110.44	25	0.0	2055	0.36	0.040	0.03	21.37	0.04	0.001
39.39	2.19	69.19	110.70	25	0.0	2065	0.36	0.040	0.03	21.37	0.04	0.001
39.44	2.21	67.71	111.43	25	0.0	2082	0.36	0.039	0.03	21.37	0.03	0.000
39.50	2.24	65.63	112.55	26	0.0	2102	0.36	0.039	0.03	21.37	0.03	0.000
39.57	2.27	62.04	113.32	26	0.0	2105	0.36	0.039	0.03	21.37	0.03	0.001
39.64	2.30	59.29	113.44	27	0.0	2094	0.36	0.039	0.03	21.37	0.03	0.000
39.74	2.34	53.77	112.04	27	0.0	2037	0.36	0.041	0.03	21.37	0.03	0.001
39.79	2.36	51.68	111.70	27	0.0	2015	0.36	0.041	0.03	21.37	0.03	0.000
39.84	2.39	48.11	111.80	27	0.0	1981	0.35	0.042	0.03	21.37	0.03	0.000
39.90	2.42	44.70	111.79	28	0.0	1943	0.35	0.044	0.03	21.37	0.03	0.000
39.99	2.45	41.20	109.79	28	0.0	1878	0.35	0.046	0.03	21.37	0.04	0.001

Total estimated settlement: 1.05

:: Post-earthquake settlement due to soil liquefaction ::

Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)
40.05	81.61	77.13	0.36	2.18	1.00	0.01	40.12	78.46	74.15	0.34	2.24	1.00	0.02
40.16	77.41	73.16	0.33	2.29	1.00	0.01	40.23	75.98	71.81	0.33	2.32	1.00	0.02
40.29	74.60	70.50	0.32	2.34	1.00	0.02	40.39	71.69	67.76	0.30	2.37	1.00	0.03
40.44	70.76	66.87	0.30	2.34	1.00	0.01	40.50	70.10	66.25	0.29	2.31	1.00	0.01
40.58	69.92	66.08	0.29	2.26	1.00	0.02	40.64	69.71	65.88	0.29	2.22	1.00	0.02
40.69	68.47	64.71	2.00	0.00	1.00	0.00	40.75	65.79	62.18	2.00	0.00	1.00	0.00
40.84	63.55	60.06	2.00	0.00	1.00	0.00	40.90	55.97	52.89	2.00	0.00	1.00	0.00
40.99	51.13	48.32	2.00	0.00	1.00	0.00	41.04	52.98	50.07	2.00	0.00	1.00	0.00
41.08	53.34	50.41	2.00	0.00	1.00	0.00	41.17	51.95	49.10	2.00	0.00	1.00	0.00

:: Post-earthquake settlement due to soil liquefaction :: (continued)

Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)
41.22	52.32	49.44	2.00	0.00	1.00	0.00	41.28	49.18	46.47	2.00	0.00	1.00	0.00
41.34	45.32	42.84	2.00	0.00	1.00	0.00	41.41	44.07	41.65	2.00	0.00	1.00	0.00
41.49	43.97	41.56	2.00	0.00	1.00	0.00	41.54	43.78	41.38	2.00	0.00	1.00	0.00
41.62	45.82	43.31	2.00	0.00	1.00	0.00	41.69	50.26	47.50	2.00	0.00	1.00	0.00
41.74	54.91	51.89	2.00	0.00	1.00	0.00	41.82	54.48	51.48	2.00	0.00	1.00	0.00
41.87	53.98	51.01	2.00	0.00	1.00	0.00	41.94	52.98	50.07	2.00	0.00	1.00	0.00
42.01	44.79	42.33	2.00	0.00	1.00	0.00	42.06	45.56	43.06	2.00	0.00	1.00	0.00
42.13	51.69	48.85	0.23	2.82	1.00	0.02	42.20	62.32	58.90	0.27	2.75	1.00	0.02
42.26	69.07	65.28	0.30	2.60	1.00	0.02	42.34	76.36	72.16	0.34	2.55	1.00	0.02
42.40	82.20	77.69	0.38	2.47	1.00	0.02	42.48	86.04	81.31	0.40	2.26	1.00	0.02
42.53	85.19	80.51	0.39	2.13	1.00	0.01	42.59	84.75	80.09	0.38	2.04	1.00	0.02
42.66	83.61	79.01	0.37	2.00	1.00	0.02	42.73	80.63	76.21	2.00	0.00	1.00	0.00
42.82	85.41	80.72	0.39	2.22	1.00	0.03	42.85	95.84	90.58	0.48	2.33	1.00	0.01
42.93	115.05	108.73	0.67	2.27	1.00	0.02	43.02	131.42	124.20	0.89	1.26	1.00	0.01
43.05	136.04	128.57	0.96	0.74	1.00	0.00	43.12	138.88	131.25	1.00	0.72	1.00	0.01
43.22	140.31	132.61	1.02	0.70	1.00	0.01	43.27	144.88	136.93	1.10	0.46	1.00	0.00
43.32	148.32	140.17	1.17	0.33	1.00	0.00	43.37	151.28	142.97	1.22	0.33	1.00	0.00
43.48	160.85	152.02	1.44	0.00	1.00	0.00	43.51	162.59	153.66	1.49	0.00	1.00	0.00
43.57	164.29	155.26	1.53	0.00	1.00	0.00	43.64	166.53	157.39	1.58	0.00	1.00	0.00
43.72	170.15	160.81	1.69	0.00	1.00	0.00	43.77	172.97	163.47	1.77	0.00	1.00	0.00
43.85	173.22	163.71	1.78	0.00	1.00	0.00	43.93	172.64	163.16	1.76	0.00	1.00	0.00
43.97	172.88	163.39	1.77	0.00	1.00	0.00	44.03	173.39	163.87	1.78	0.00	1.00	0.00
44.10	172.79	163.31	1.77	0.00	1.00	0.00	44.17	172.74	163.25	1.78	0.00	1.00	0.00
44.23	171.92	162.48	1.76	0.00	1.00	0.00	44.32	168.05	158.82	1.65	0.00	1.00	0.00
44.38	164.68	155.63	1.56	0.00	1.00	0.00	44.43	161.81	152.92	1.48	0.00	1.00	0.00
44.52	156.27	147.69	1.35	0.00	1.00	0.00	44.57	152.26	143.90	1.27	0.23	1.00	0.00
44.63	147.29	139.20	1.16	0.34	1.00	0.00	44.70	142.80	134.95	1.08	0.47	1.00	0.00
44.76	141.32	133.56	1.05	0.47	1.00	0.00	44.82	140.10	132.41	1.03	0.72	1.00	0.01
44.91	139.14	131.50	1.01	0.72	1.00	0.01	44.95	139.59	131.92	1.02	0.72	1.00	0.00
45.03	141.62	133.84	1.06	0.47	1.00	0.00	45.08	143.55	135.66	1.09	0.47	1.00	0.00
45.17	145.79	137.79	1.14	0.47	1.00	0.01	45.21	146.72	138.66	1.16	0.34	1.00	0.00
45.28	149.45	141.24	1.21	0.33	1.00	0.00	45.37	152.92	144.53	1.29	0.24	1.00	0.00
45.42	155.31	146.78	1.35	0.23	1.00	0.00	45.48	158.43	149.73	1.42	0.00	1.00	0.00
45.56	162.02	153.13	1.52	0.00	1.00	0.00	45.62	163.24	154.28	1.55	0.00	1.00	0.00
45.67	163.48	154.50	1.56	0.00	1.00	0.00	45.76	162.10	153.20	1.53	0.00	1.00	0.00
45.81	161.47	152.61	1.51	0.00	1.00	0.00	45.88	157.37	148.73	1.42	0.00	1.00	0.00
45.95	151.05	142.76	1.27	0.24	1.00	0.00	46.01	145.29	137.31	1.15	0.35	1.00	0.00
46.07	138.40	130.80	1.02	0.75	1.00	0.01	46.14	131.54	124.31	0.91	1.31	1.00	0.01
46.20	117.35	110.90	0.72	2.30	1.00	0.02	46.30	114.62	108.33	0.68	2.33	1.00	0.03
46.33	111.71	105.58	0.65	2.37	1.00	0.01	46.40	105.31	99.52	0.58	2.46	1.00	0.02
46.50	99.23	93.78	0.53	2.54	1.00	0.03	46.53	95.91	90.65	0.50	2.57	1.00	0.01
46.59	92.75	87.66	0.47	2.58	1.00	0.02	46.66	89.54	84.62	0.45	2.57	1.00	0.02
46.74	87.82	83.00	0.43	2.51	1.00	0.03	46.79	86.04	81.31	0.42	2.40	1.00	0.01
46.85	87.15	82.36	0.42	2.21	1.00	0.02	46.93	88.86	83.98	0.43	2.05	1.00	0.02
46.99	88.09	83.25	2.00	0.00	1.00	0.00	47.08	86.72	81.95	2.00	0.00	1.00	0.00
47.13	84.88	80.22	2.00	0.00	1.00	0.00	47.19	85.01	80.35	2.00	0.00	1.00	0.00
47.27	83.27	78.70	2.00	0.00	1.00	0.00	47.32	84.44	79.80	2.00	0.00	1.00	0.00
47.39	85.14	80.46	2.00	0.00	1.00	0.00	47.45	83.88	79.27	2.00	0.00	1.00	0.00

:: Post-earthquake settlement due to soil liquefaction :: (continued)

Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)
47.52	81.95	77.45	0.38	2.14	1.00	0.02	47.58	81.17	76.71	0.38	2.23	1.00	0.02
47.67	83.24	78.67	0.40	2.32	1.00	0.02	47.71	84.22	79.59	0.40	2.33	1.00	0.01
47.77	85.69	80.98	0.42	2.35	1.00	0.02	47.84	87.88	83.05	0.43	2.37	1.00	0.02
47.92	91.11	86.11	0.46	2.40	1.00	0.02	47.98	93.66	88.51	0.48	2.41	1.00	0.02
48.04	97.06	91.73	0.51	2.42	1.00	0.02	48.14	100.61	95.08	0.55	2.48	1.00	0.03
48.17	106.71	100.85	0.61	2.44	1.00	0.01	48.24	115.07	108.75	0.70	2.35	1.00	0.02
48.30	122.67	115.94	0.80	1.92	1.00	0.01	48.38	130.78	123.59	0.92	1.38	1.00	0.01
48.44	133.50	126.17	0.97	0.80	1.00	0.01	48.50	135.96	128.49	1.01	0.79	1.00	0.01
48.56	145.23	137.25	1.18	0.36	1.00	0.00	48.63	151.30	142.99	1.32	0.25	1.00	0.00
48.70	155.86	147.30	1.43	0.00	1.00	0.00	48.75	160.04	151.25	1.54	0.00	1.00	0.00
48.85	166.70	157.54	1.73	0.00	1.00	0.00	48.90	169.31	160.01	1.81	0.00	1.00	0.00
48.96	170.62	161.25	1.85	0.00	1.00	0.00	49.05	173.05	163.54	1.93	0.00	1.00	0.00
49.09	174.44	164.86	1.98	0.00	1.00	0.00	49.15	175.67	166.03	2.00	0.00	1.00	0.00
49.22	180.07	170.18	2.00	0.00	1.00	0.00	49.28	183.24	173.18	2.00	0.00	1.00	0.00
49.34	185.72	175.52	2.00	0.00	1.00	0.00	49.43	187.50	177.20	2.00	0.00	1.00	0.00
49.49	190.35	179.89	2.00	0.00	1.00	0.00	49.55	191.80	181.27	2.00	0.00	1.00	0.00
49.62	195.22	184.50	2.00	0.00	1.00	0.00	49.69	196.00	185.24	2.00	0.00	1.00	0.00
49.74	195.85	185.09	2.00	0.00	1.00	0.00	49.83	193.41	182.79	2.00	0.00	1.00	0.00
49.89	191.27	180.77	2.00	0.00	1.00	0.00	49.95	280.29	264.90	2.00	0.00	1.00	0.00
50.03	276.08	260.92	2.00	0.00	1.00	0.00	50.08	273.21	258.21	2.00	0.00	1.00	0.00
50.15	271.51	256.60	2.00	0.00	1.00	0.00	50.24	268.92	254.15	2.00	0.00	1.00	0.00
50.27	268.74	253.98	2.00	0.00	1.00	0.00							

Total estimated settlement: 1.00

Abbreviations

$q_{c,1,mod}$: Equivalent clean sand cone resistance
$q_{c,1N,mod}$: Equivalent clean sand normalized cone resistance
FS: Factor of safety against liquefaction
e_v (%): Post-liquefaction volumentric strain
DF: e_v depth weighting factor
Settlement: Calculated settlement

:: Strength loss calculation (Robertson (2009) ::

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
0.07	14.05	22.57	1.00	22.57	2.17	0.02	0.62
0.14	20.32	32.64	1.00	32.64	2.07	0.02	0.62
0.21	22.56	36.23	1.00	36.23	2.09	0.03	0.62
0.27	23.63	37.94	1.00	37.94	2.08	0.03	0.62
0.34	25.33	40.67	1.47	59.93	2.13	0.04	0.62
0.40	26.23	42.11	1.56	65.65	2.18	0.05	0.62
0.47	27.12	43.53	1.54	66.84	2.17	0.06	0.63
0.55	27.66	44.39	1.53	68.06	2.16	0.06	0.63
0.59	27.93	44.82	1.53	68.75	2.16	0.07	0.64
0.66	26.90	43.16	1.61	69.52	2.20	0.06	0.63
0.72	25.87	41.50	1.71	70.83	2.23	0.06	0.63
0.79	26.77	42.94	1.68	72.11	2.22	0.07	0.64
0.88	27.03	43.35	1.70	73.58	2.23	0.07	0.64
0.92	26.95	43.22	1.72	74.36	2.24	0.08	0.64
1.01	26.50	42.49	1.75	74.40	2.25	0.07	0.64
1.07	26.05	41.76	1.76	73.47	2.25	0.07	0.64
1.12	26.54	42.54	1.68	71.68	2.23	0.07	0.64
1.21	26.59	42.62	1.62	69.04	2.20	0.06	0.63
1.25	27.39	43.90	1.56	68.32	2.18	0.06	0.63
1.32	28.56	45.77	1.49	68.30	2.14	0.07	0.64
1.40	30.35	48.64	1.44	69.85	2.11	0.08	0.64
1.45	31.15	49.92	1.41	70.49	2.10	0.09	0.65
1.54	32.76	52.50	1.40	73.25	2.08	0.11	0.66
1.61	33.66	53.94	1.45	78.35	2.12	0.16	0.67
1.65	33.93	54.37	1.47	79.75	2.13	0.17	0.67
1.72	33.75	54.07	1.49	80.43	2.14	0.17	0.67
1.82	33.75	54.07	1.52	82.34	2.16	0.19	0.67
1.84	33.66	53.92	1.54	83.09	2.17	0.19	0.67
1.92	34.11	54.63	1.58	86.39	2.19	0.23	0.68
1.97	32.50	52.04	1.74	90.56	2.25	0.24	0.68
2.05	34.46	55.18	1.75	96.47	2.25	0.36	0.69
2.12	34.73	55.61	1.85	102.80	2.28	0.48	0.70
2.17	34.64	55.46	1.91	105.95	2.30	0.53	0.70
2.27	33.03	52.86	2.11	111.64	2.35	0.56	0.71
2.32	31.78	50.85	2.25	114.41	2.38	0.55	0.71
2.37	31.15	49.83	2.33	115.88	2.39	0.54	0.71
2.46	29.36	46.95	2.25	105.78	2.38	0.31	0.69
2.51	28.91	46.22	2.20	101.89	2.37	0.26	0.68
2.57	29.09	46.51	2.17	100.98	2.36	0.25	0.68
2.66	30.53	48.81	2.04	99.53	2.33	0.28	0.69
2.72	31.33	50.09	1.98	99.08	2.31	0.29	0.69
2.76	31.69	50.67	1.96	99.10	2.31	0.31	0.69
2.83	29.72	47.49	2.13	101.36	2.35	0.27	0.69
2.89	30.08	48.07	2.12	101.72	2.35	0.29	0.69
2.95	29.99	47.92	2.14	102.73	2.35	0.29	0.69
3.05	29.45	47.04	2.22	104.58	2.37	0.30	0.69
3.10	28.11	44.88	2.36	105.79	2.40	0.27	0.69
3.15	23.90	38.12	2.92	111.17	2.49	0.22	0.68

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
3.22	22.56	35.96	3.05	109.73	2.51	0.18	0.67
3.29	21.48	34.21	3.18	108.88	2.53	0.16	0.67
3.36	20.77	33.07	3.16	104.46	2.53	0.12	0.66
3.43	21.22	33.79	2.93	99.04	2.49	0.11	0.65
3.49	21.66	34.49	2.81	96.95	2.47	0.10	0.65
3.56	22.38	35.64	2.70	96.21	2.46	0.11	0.65
3.66	22.38	35.63	2.96	105.35	2.50	0.15	0.67
3.70	22.47	35.77	3.05	109.24	2.51	0.17	0.67
3.76	22.47	35.76	3.22	115.10	2.53	0.22	0.68
3.81	22.20	35.33	3.46	122.29	2.57	0.29	0.69
3.90	22.51	35.81	3.58	128.27	2.58	0.38	0.70
3.94	21.75	34.59	3.79	130.99	2.60	3.31	7.03
4.01	22.56	35.88	3.60	129.16	2.58	0.39	0.70
4.08	23.81	37.89	3.29	124.48	2.54	0.36	0.69
4.15	25.60	40.76	2.87	117.15	2.48	0.32	0.69
4.21	26.68	42.49	2.64	112.33	2.45	0.30	0.69
4.28	26.77	42.62	2.53	107.81	2.43	0.25	0.68
4.35	25.78	41.03	2.56	105.03	2.43	0.20	0.68
4.40	25.16	40.03	2.62	104.80	2.44	0.19	0.67
4.47	23.01	36.56	3.00	109.80	2.50	0.19	0.67
4.53	21.57	34.25	3.23	110.59	2.53	0.17	0.67
4.60	20.86	33.10	3.54	117.23	2.57	0.21	0.68
4.69	18.98	30.07	4.33	130.16	2.66	2.52	5.11
4.74	17.90	28.33	4.83	136.80	2.71	2.60	4.75
4.80	16.83	26.60	5.27	140.09	2.75	2.58	4.41
4.90	16.11	25.44	5.45	138.69	2.77	2.42	4.13
4.93	16.74	26.44	4.67	123.51	2.70	2.04	4.26
5.00	18.89	29.89	3.08	91.95	2.51	0.06	0.63
5.08	23.54	37.36	2.29	85.70	2.38	0.08	0.64
5.13	26.23	41.68	2.01	83.68	2.32	0.10	0.65
5.21	29.45	46.84	1.83	85.49	2.27	0.14	0.66
5.26	29.18	46.41	1.91	88.86	2.30	0.16	0.67
5.34	27.93	44.39	2.13	94.42	2.35	0.17	0.67
5.39	27.93	44.39	2.21	98.01	2.37	0.19	0.67
5.49	27.57	43.80	2.54	111.12	2.43	0.30	0.69
5.54	27.48	43.65	2.73	119.38	2.46	0.41	0.70
5.58	28.20	44.81	2.80	125.40	2.47	0.54	0.71
5.64	27.39	43.50	3.07	133.53	2.51	0.65	0.71
5.72	25.60	40.61	3.64	147.67	2.59	0.72	0.72
5.79	24.80	39.32	3.91	153.62	2.62	3.05	5.39
5.84	25.69	40.75	3.75	152.98	2.60	3.06	5.53
5.93	29.36	46.63	3.05	142.13	2.51	0.72	0.72
5.99	30.62	48.65	2.80	136.23	2.47	0.72	0.72
6.04	33.93	53.97	2.37	127.98	2.40	0.72	0.72
6.12	37.06	58.99	2.04	120.47	2.33	0.72	0.72
6.17	39.39	62.73	1.86	116.53	2.28	0.72	0.72
6.24	43.33	69.05	1.64	113.01	2.21	0.72	0.72
6.32	45.83	73.06	1.53	111.80	2.16	0.73	0.73

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
6.37	47.18	75.22	1.48	111.56	2.14	0.73	0.73
6.44	49.50	78.94	1.41	111.39	2.09	0.73	0.73
6.52	51.92	82.83	1.36	112.46	2.05	0.74	0.74
6.58	54.88	87.58	1.32	115.51	2.01	0.75	0.75
6.63	56.85	90.74	1.30	117.79	1.99	0.75	0.75
6.72	58.81	93.88	1.27	119.63	1.96	0.75	0.75
6.77	59.26	94.59	1.27	119.89	1.95	0.76	0.76
6.83	58.64	93.60	1.27	118.94	1.95	0.75	0.75
6.91	56.49	90.13	1.30	117.06	1.99	0.75	0.75
6.97	54.16	86.38	1.35	116.67	2.05	0.74	0.74
7.02	52.91	84.37	1.39	117.60	2.08	0.74	0.74
7.10	50.31	80.19	1.50	120.17	2.15	0.74	0.74
7.18	50.22	80.03	1.57	125.83	2.18	0.74	0.74
7.23	51.29	81.75	1.57	128.37	2.18	0.74	0.74
7.29	54.79	87.37	1.50	131.09	2.15	0.75	0.75
7.37	58.10	92.68	1.45	134.17	2.12	0.75	0.75
7.42	60.87	97.12	1.41	137.00	2.09	0.76	0.76
7.52	72.87	116.39	1.29	150.35	1.98	0.78	0.78
7.57	78.15	123.92	1.21	150.14	1.86	0.79	0.79
7.61	81.91	124.04	1.06	131.69	1.74	0.80	0.80
7.71	86.12	126.86	1.00	126.86	1.68	0.81	0.81
7.76	86.74	126.95	1.00	126.95	1.67	0.81	0.81
7.83	86.83	126.35	1.00	126.35	1.66	0.81	0.81
7.88	85.76	124.67	1.00	124.67	1.67	0.81	0.81
7.98	76.63	113.10	1.06	120.27	1.74	0.79	0.79
8.02	77.70	114.27	1.06	120.72	1.73	0.79	0.79
8.08	76.09	112.21	1.10	122.89	1.76	0.78	0.78
8.17	73.32	108.79	1.15	124.88	1.80	0.78	0.78
8.21	72.33	107.63	1.17	125.64	1.81	0.77	0.77
8.28	71.44	106.65	1.19	126.86	1.84	0.77	0.77
8.37	70.81	105.79	1.21	127.90	1.86	0.77	0.77
8.41	70.27	105.04	1.22	127.88	1.87	0.76	0.76
8.47	70.23	104.84	1.22	128.34	1.88	0.76	0.76
8.54	69.91	104.38	1.24	129.05	1.90	0.76	0.76
8.60	70.18	104.55	1.24	129.76	1.91	0.76	0.76
8.67	70.18	104.33	1.25	130.18	1.92	0.76	0.76
8.74	69.65	103.40	1.26	129.84	1.93	0.76	0.76
8.82	68.66	101.66	1.26	128.53	1.94	0.76	0.76
8.87	66.78	99.05	1.28	126.42	1.96	0.75	0.75
8.97	63.20	94.05	1.31	122.86	2.00	0.75	0.75
9.00	59.71	89.68	1.35	120.82	2.04	0.74	0.74
9.07	55.32	84.23	1.44	121.28	2.11	0.73	0.73
9.12	51.03	78.93	1.59	125.80	2.19	0.73	0.73
9.22	45.48	71.67	1.91	136.91	2.30	0.72	0.72
9.27	41.90	66.47	2.18	144.64	2.36	0.72	0.72
9.32	41.90	66.46	2.25	149.62	2.38	0.73	0.73
9.40	41.90	66.46	2.33	154.54	2.39	0.73	0.73
9.47	41.90	66.19	2.33	154.52	2.39	0.73	0.73

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
9.52	49.06	75.45	1.91	144.39	2.30	0.73	0.73
9.59	61.14	90.79	1.54	140.02	2.17	0.75	0.75
9.66	70.81	102.34	1.39	142.27	2.08	0.77	0.77
9.72	83.97	117.61	1.28	150.44	1.96	0.79	0.79
9.81	90.15	123.48	1.23	152.09	1.89	0.80	0.80
9.86	90.59	123.13	1.22	150.18	1.88	0.80	0.80
9.92	88.09	119.41	1.22	146.02	1.88	0.79	0.79
10.01	85.04	115.17	1.24	142.42	1.90	0.78	0.78
10.05	84.15	113.82	1.24	141.28	1.91	0.78	0.78
10.11	84.06	113.41	1.24	141.16	1.91	0.78	0.78
10.17	85.85	115.45	1.25	143.81	1.91	0.78	0.78
10.26	88.53	118.43	1.25	147.57	1.91	0.79	0.79
10.31	89.70	119.69	1.25	149.16	1.91	0.79	0.79
10.40	93.19	123.49	1.24	153.30	1.91	0.80	0.80
10.45	93.73	123.94	1.24	154.27	1.91	0.80	0.80
10.51	94.35	124.36	1.25	154.89	1.91	0.80	0.80
10.59	94.26	123.81	1.25	154.66	1.92	0.80	0.80
10.66	93.55	122.57	1.26	153.98	1.93	0.80	0.80
10.71	93.28	121.48	1.25	151.24	1.91	0.80	0.80
10.78	90.68	115.70	1.19	137.30	1.83	0.79	0.79
10.86	87.73	112.39	1.22	137.25	1.88	0.78	0.78
10.89	86.66	111.17	1.23	137.02	1.89	0.78	0.78
11.00	83.61	107.80	1.27	137.11	1.95	0.77	0.77
11.05	84.15	108.32	1.28	138.14	1.96	0.78	0.78
11.11	79.31	102.60	1.31	134.51	2.00	0.77	0.77
11.16	84.69	108.86	1.30	141.10	1.99	0.78	0.78
11.26	93.55	119.15	1.28	152.61	1.97	0.79	0.79
11.31	100.35	126.74	1.26	159.33	1.93	0.81	0.81
11.36	106.80	133.77	1.24	165.50	1.90	0.81	0.81
11.45	113.42	140.60	1.21	170.69	1.87	0.82	0.82
11.51	117.90	145.07	1.20	173.40	1.84	0.83	0.83
11.56	121.30	148.33	1.18	174.44	1.82	0.84	0.84
11.62	125.69	152.61	1.15	175.42	1.80	0.84	0.84
11.70	128.46	154.95	1.13	174.98	1.78	0.84	0.84
11.76	129.18	155.27	1.13	174.92	1.78	0.84	0.84
11.86	129.45	154.77	1.12	174.08	1.78	0.84	0.84
11.90	129.45	154.50	1.13	174.38	1.78	0.84	0.84
11.96	129.00	153.77	1.14	175.10	1.79	0.84	0.84
12.01	127.48	151.96	1.16	176.20	1.81	0.84	0.84
12.08	123.18	147.30	1.20	176.88	1.85	0.83	0.83
12.14	121.39	145.41	1.22	177.99	1.88	0.83	0.83
12.22	118.34	141.95	1.25	177.27	1.92	0.83	0.83
12.29	115.57	138.74	1.27	176.22	1.95	0.83	0.83
12.35	114.41	137.34	1.29	176.49	1.97	0.82	0.82
12.40	114.14	136.92	1.30	177.79	1.99	0.83	0.83
12.47	110.56	132.89	1.33	177.29	2.03	0.82	0.82
12.54	103.93	125.33	1.40	175.25	2.09	0.81	0.81
12.61	118.08	140.78	1.33	187.23	2.03	0.83	0.83

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
12.67	124.97	148.22	1.32	195.13	2.01	0.84	0.84
12.76	134.19	157.93	1.30	204.64	1.99	0.85	0.85
12.81	140.28	164.30	1.28	210.82	1.97	0.86	0.86
12.90	147.80	172.02	1.27	219.10	1.96	0.87	0.87
12.94	150.84	175.03	1.27	222.06	1.95	0.87	0.87
12.99	159.43	183.85	1.25	229.84	1.92	0.88	0.88
13.06	176.53	201.65	1.21	244.75	1.87	0.90	0.90
13.15	187.45	212.74	1.20	255.12	1.85	0.91	0.91
13.20	199.99	225.71	1.18	265.48	1.82	0.93	0.93
13.27	210.28	236.17	1.16	274.59	1.81	0.94	0.94
13.35	221.65	247.58	1.14	283.20	1.79	0.95	0.95
13.40	229.35	252.81	1.00	252.81	1.70	0.95	0.95
13.46	236.78	258.38	1.00	258.38	1.62	0.96	0.96
13.55	245.73	267.07	1.00	267.07	1.62	0.96	0.96
13.60	248.33	269.40	1.00	269.40	1.62	0.97	0.97
13.66	254.86	275.48	1.00	275.48	1.61	0.97	0.97
13.72	246.89	266.68	1.00	266.68	1.63	0.96	0.96
13.78	243.22	262.38	1.00	262.38	1.64	0.96	0.96
13.85	245.46	264.00	1.00	264.00	1.64	0.96	0.96
13.93	240.90	258.80	1.00	258.80	1.66	0.96	0.96
14.00	245.91	263.48	1.00	263.48	1.66	0.96	0.96
14.04	238.30	255.65	1.00	255.65	1.70	0.95	0.95
14.11	246.36	263.91	1.01	266.32	1.71	0.96	0.96
14.18	257.28	275.05	1.02	281.12	1.72	0.97	0.97
14.25	266.68	284.58	1.05	299.92	1.73	0.98	0.98
14.32	269.10	286.79	1.08	310.81	1.75	0.98	0.98
14.38	266.59	283.93	1.12	317.68	1.77	0.98	0.98
14.45	269.19	286.13	1.14	326.08	1.79	0.98	0.98
14.51	269.28	285.82	1.16	330.28	1.80	0.98	0.98
14.58	271.78	287.56	1.16	332.46	1.80	0.98	0.98
14.63	271.24	286.35	1.16	332.21	1.81	0.98	0.98
14.71	268.56	282.49	1.16	327.49	1.81	0.98	0.98
14.77	266.86	280.04	1.16	324.86	1.81	0.98	0.98
14.85	261.84	273.95	1.17	321.27	1.82	0.97	0.97
14.91	258.62	270.02	1.18	319.08	1.83	0.97	0.97
14.97	260.32	271.14	1.18	321.25	1.83	0.97	0.97
15.06	264.89	274.86	1.18	325.51	1.83	0.98	0.98
15.11	267.13	276.58	1.19	327.98	1.83	0.98	0.98
15.17	270.35	279.15	1.19	330.87	1.83	0.98	0.98
15.26	267.31	275.20	1.20	330.13	1.85	0.98	0.98
15.32	265.96	273.17	1.21	329.21	1.86	0.98	0.98
15.37	265.43	272.08	1.21	328.58	1.86	0.98	0.98
15.43	264.17	269.99	1.21	326.06	1.86	0.97	0.97
15.51	260.68	265.56	1.21	322.31	1.87	0.97	0.97
15.57	258.62	262.67	1.20	316.38	1.85	0.97	0.97
15.62	254.41	257.60	1.19	306.99	1.84	0.96	0.96
15.72	248.95	251.01	1.19	299.16	1.84	0.96	0.96
15.77	243.58	245.23	1.20	295.16	1.85	0.95	0.95

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
15.82	232.39	233.56	1.22	285.24	1.88	0.94	0.94
15.88	224.97	225.57	1.23	277.07	1.89	0.94	0.94
15.95	179.85	180.48	1.32	237.75	2.01	0.90	0.90
16.01	200.71	200.38	1.26	252.55	1.94	0.91	0.91
16.09	204.47	203.31	1.25	253.45	1.91	0.92	0.92
16.15	204.65	202.96	1.25	253.03	1.91	0.92	0.92
16.22	201.97	199.79	1.25	250.22	1.92	0.91	0.91
16.28	199.19	196.58	1.26	247.59	1.93	0.91	0.91
16.34	201.43	198.21	1.26	249.48	1.93	0.91	0.91
16.41	208.94	204.93	1.25	255.43	1.91	0.92	0.92
16.48	210.19	205.57	1.25	256.28	1.91	0.92	0.92
16.56	211.09	205.85	1.25	257.36	1.92	0.92	0.92
16.61	214.22	208.42	1.25	260.43	1.92	0.92	0.92
16.67	221.30	214.72	1.24	266.31	1.91	0.93	0.93
16.75	229.54	221.95	1.23	271.96	1.88	0.94	0.94
16.81	238.94	230.41	1.21	278.89	1.86	0.94	0.94
16.89	249.77	240.09	1.20	287.81	1.85	0.95	0.95
16.93	253.98	243.72	1.20	291.73	1.85	0.96	0.96
17.01	260.15	248.91	1.19	297.20	1.84	0.96	0.96
17.07	262.75	250.86	1.19	299.10	1.84	0.96	0.96
17.14	266.69	253.91	1.19	301.58	1.83	0.97	0.97
17.21	268.75	255.16	1.19	302.83	1.83	0.97	0.97
17.27	271.16	256.86	1.19	304.51	1.83	0.97	0.97
17.34	274.12	258.94	1.19	307.41	1.83	0.97	0.97
17.39	276.09	260.29	1.19	309.12	1.83	0.97	0.97
17.46	278.68	262.04	1.19	311.33	1.84	0.97	0.97
17.54	281.82	264.18	1.19	313.78	1.83	0.98	0.98
17.60	278.86	260.80	1.20	311.91	1.84	0.97	0.97
17.66	281.28	262.50	1.19	312.30	1.84	0.98	0.98
17.73	283.16	263.52	1.16	306.40	1.81	0.98	0.98
17.80	284.95	264.57	1.15	304.95	1.80	0.98	0.98
17.86	287.01	265.98	1.14	302.91	1.79	0.98	0.98
17.93	289.61	267.74	1.12	299.11	1.77	0.98	0.98
18.00	290.14	267.60	1.10	295.15	1.76	0.98	0.98
18.09	289.86	266.51	1.09	290.38	1.75	0.98	0.98
18.12	289.60	266.03	1.09	288.69	1.75	0.98	0.98
18.18	293.45	269.01	1.06	285.63	1.74	0.98	0.98
18.24	296.04	270.86	1.05	284.77	1.73	0.98	0.98
18.31	298.82	272.84	1.04	284.30	1.73	0.98	0.98
18.37	300.70	273.98	1.03	282.43	1.72	0.98	0.98
18.45	301.96	274.43	1.02	279.94	1.72	0.98	0.98
18.50	301.77	273.78	1.02	278.36	1.71	0.98	0.98
18.58	301.14	272.57	1.01	275.93	1.71	0.98	0.98
18.64	301.05	272.00	1.00	272.00	1.70	0.98	0.98
18.71	297.92	268.54	1.00	268.54	1.70	0.98	0.98
18.78	295.77	266.07	1.00	266.07	1.69	0.97	0.97
18.84	292.73	262.87	1.00	262.87	1.68	0.97	0.97
18.93	284.58	254.82	1.00	254.82	1.68	0.96	0.96

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
18.97	278.94	249.36	1.00	249.36	1.69	0.96	0.96
19.04	269.81	240.59	1.00	240.59	1.69	0.95	0.95
19.13	254.95	226.48	1.01	228.38	1.71	0.94	0.94
19.17	244.93	217.13	1.05	227.26	1.73	0.93	0.93
19.24	221.38	195.28	1.13	220.38	1.78	0.91	0.91
19.33	199.36	174.79	1.19	208.48	1.84	0.89	0.89
19.38	174.12	151.70	1.25	190.20	1.93	0.86	0.86
19.44	149.32	129.08	1.33	171.29	2.02	0.84	0.84
19.50	126.67	108.54	1.48	160.11	2.13	0.82	0.82
19.57	106.17	90.02	1.77	159.61	2.26	0.80	0.80
19.63	87.73	73.62	2.21	162.39	2.37	0.78	0.78
19.68	71.17	59.03	2.84	167.43	2.48	0.76	0.76
19.76	62.93	51.79	3.14	162.87	2.52	0.75	0.75
19.83	70.72	58.45	2.49	145.48	2.42	0.75	0.75
19.88	64.10	52.69	2.61	137.72	2.44	0.73	0.73
19.96	70.27	58.08	2.00	116.21	2.32	0.72	0.72
20.02	75.02	62.01	1.88	116.81	2.29	0.73	0.73
20.09	74.48	61.40	1.89	115.91	2.29	0.73	0.73
20.18	72.06	59.08	1.95	115.20	2.31	0.72	0.72
20.22	61.23	49.64	2.45	121.52	2.41	0.69	0.71
20.28	65.62	53.28	2.23	119.03	2.37	0.72	0.72
20.35	64.63	52.27	2.29	119.89	2.38	0.72	0.72
20.41	64.50	52.00	2.32	120.52	2.39	0.72	0.72
20.47	64.50	51.82	2.39	123.97	2.40	0.72	0.72
20.56	64.36	51.42	2.55	131.06	2.43	0.72	0.72
20.61	67.14	53.57	2.53	135.75	2.43	0.73	0.73
20.67	72.15	57.57	2.43	139.95	2.41	0.74	0.74
20.76	82.09	65.65	2.16	141.56	2.36	0.76	0.76
20.82	92.30	74.10	1.90	141.02	2.29	0.77	0.77
20.87	106.63	86.09	1.65	141.74	2.21	0.78	0.78
20.96	134.02	109.21	1.39	151.83	2.08	0.81	0.81
21.00	154.88	127.02	1.30	165.21	1.99	0.84	0.84
21.07	177.53	146.39	1.24	181.63	1.91	0.86	0.86
21.15	197.94	163.89	1.18	193.63	1.83	0.88	0.88
21.21	205.10	169.94	1.15	195.70	1.80	0.88	0.88
21.26	211.19	175.03	1.13	196.98	1.78	0.89	0.89
21.35	221.39	183.28	1.10	202.29	1.76	0.90	0.90
21.41	222.20	183.50	1.12	205.19	1.77	0.90	0.90
21.47	219.78	180.68	1.15	208.60	1.80	0.90	0.90
21.53	212.35	173.71	1.19	206.47	1.84	0.89	0.89
21.61	202.94	164.85	1.23	202.09	1.88	0.88	0.88
21.67	191.84	154.97	1.25	193.63	1.92	0.87	0.87
21.76	178.14	143.02	1.27	181.49	1.95	0.86	0.86
21.80	165.34	132.04	1.30	171.11	1.99	0.85	0.85
21.86	156.66	124.63	1.31	162.94	2.00	0.84	0.84
21.95	134.82	106.18	1.37	145.20	2.06	0.81	0.81
21.98	125.86	98.65	1.41	139.08	2.09	0.80	0.80
22.05	114.76	89.31	1.47	131.22	2.13	0.78	0.78

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
22.12	103.40	79.79	1.57	125.39	2.18	0.77	0.77
22.20	91.85	70.34	1.65	115.79	2.21	0.75	0.75
22.25	80.57	60.90	1.94	118.06	2.30	0.73	0.73
22.31	72.96	54.57	2.22	121.10	2.37	0.72	0.72
22.39	58.99	43.20	2.99	129.31	2.50	0.67	0.71
22.44	46.28	33.05	4.31	142.51	2.66	1.26	2.32
22.54	43.33	30.61	4.76	145.80	2.71	1.25	2.15
22.58	46.51	33.03	4.30	142.15	2.66	1.26	2.31
22.65	43.51	30.59	4.77	145.99	2.71	1.26	2.15
22.71	46.73	33.01	4.28	141.40	2.66	1.24	2.31
22.80	51.29	36.46	3.67	133.86	2.59	0.51	0.70
22.84	53.08	37.80	3.47	131.15	2.57	0.50	0.70
22.91	55.59	39.68	3.21	127.18	2.53	0.50	0.70
22.97	58.99	42.26	2.90	122.67	2.49	0.51	0.70
23.04	62.13	44.64	2.65	118.29	2.45	0.53	0.70
23.10	63.29	45.50	2.52	114.64	2.43	0.50	0.70
23.20	63.92	45.89	2.41	110.73	2.41	0.45	0.70
23.23	63.92	45.85	2.40	109.97	2.40	0.44	0.70
23.30	63.47	45.39	2.42	109.93	2.41	0.42	0.70
23.40	60.96	43.23	2.59	112.05	2.44	0.39	0.70
23.44	58.72	41.38	2.78	115.12	2.47	0.38	0.70
23.50	56.49	39.52	3.01	119.00	2.50	0.38	0.70
23.57	52.37	36.21	3.42	123.85	2.56	0.36	0.69
23.64	49.50	33.93	3.73	126.64	2.60	0.34	0.69
23.70	45.74	31.00	4.19	130.03	2.65	1.05	2.16
23.76	39.93	26.57	5.11	135.79	2.74	1.04	1.87
23.83	36.43	23.88	5.91	141.16	2.80	1.06	1.70
23.90	35.18	22.88	6.24	142.74	2.83	1.06	1.63
23.96	35.90	23.35	6.05	141.27	2.82	1.05	1.66
24.02	35.18	22.76	6.23	141.87	2.83	1.05	1.63
24.10	34.91	22.51	6.17	138.90	2.82	1.00	1.61
24.15	37.69	24.52	5.45	133.64	2.77	0.98	1.74
24.25	43.24	28.53	4.39	125.11	2.67	0.95	1.99
24.30	47.45	31.61	3.78	119.60	2.60	0.93	2.19
24.37	49.41	32.96	3.60	118.75	2.58	0.24	0.68
24.43	49.68	33.02	3.68	121.39	2.59	0.27	0.69
24.49	48.97	32.37	3.85	124.54	2.61	1.01	2.24
24.54	48.07	31.61	4.03	127.27	2.63	1.03	2.20
24.64	45.12	29.20	4.75	138.75	2.70	1.13	2.05
24.69	47.89	31.14	4.38	136.44	2.67	1.14	2.18
24.74	44.31	28.66	4.42	126.76	2.67	0.97	2.00
24.80	47.71	31.76	2.76	87.78	2.47	0.07	0.64
24.89	51.29	34.27	2.56	87.87	2.43	0.09	0.65
24.94	54.43	36.54	2.38	87.09	2.40	0.10	0.65
25.00	62.84	42.80	1.98	84.78	2.31	0.15	0.67
25.08	62.13	42.07	2.06	86.73	2.33	0.15	0.67
25.14	71.62	49.13	1.77	87.14	2.26	0.26	0.68
25.23	66.96	45.19	2.06	93.26	2.33	0.25	0.68

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
25.27	63.38	42.36	2.29	97.00	2.38	0.23	0.68
25.34	55.50	36.28	2.93	106.40	2.49	0.21	0.68
25.41	43.78	27.59	4.40	121.29	2.67	0.88	1.93
25.47	36.34	22.24	5.83	129.61	2.80	0.89	1.58
25.53	31.24	18.85	7.09	133.60	2.89	0.87	1.35
25.62	27.66	16.52	8.20	135.46	2.96	0.84	1.18
25.68	26.95	16.04	8.48	136.02	2.98	0.84	1.15
25.73	28.56	17.01	7.88	134.03	2.94	0.84	1.22
25.80	32.67	19.55	6.57	128.47	2.86	0.82	1.40
25.88	38.76	23.60	5.16	121.70	2.74	0.82	1.66
25.94	43.86	27.10	4.36	118.08	2.67	0.84	1.89
25.98	46.37	28.74	4.17	119.90	2.65	0.88	2.00
26.06	48.70	30.23	4.02	121.64	2.63	0.93	2.10
26.13	47.71	29.39	4.29	126.04	2.66	0.97	2.05
26.18	39.93	23.91	5.58	133.51	2.78	0.96	1.70
26.28	35.54	20.96	6.34	132.80	2.84	0.90	1.50
26.33	29.99	17.49	7.70	134.74	2.93	0.85	1.25
26.43	27.48	15.88	8.07	128.18	2.96	0.75	1.13
26.48	25.60	14.70	8.61	126.59	2.99	0.72	1.05
26.52	24.89	14.24	8.67	123.47	2.99	0.67	1.02
26.58	25.16	14.37	8.30	119.24	2.97	0.63	1.03
26.68	28.74	16.50	6.80	112.19	2.87	0.60	1.18
26.72	29.27	16.80	6.58	110.49	2.86	0.59	1.20
26.78	27.84	15.89	7.02	111.58	2.89	0.58	1.13
26.88	24.89	14.05	8.13	114.26	2.96	0.58	1.00
26.91	23.45	13.16	8.79	115.62	3.00	0.58	0.94
26.98	22.29	12.43	9.38	116.53	3.03	0.58	0.89
27.07	21.66	12.00	9.62	115.47	3.05	0.56	0.86
27.10	21.57	11.94	9.60	114.55	3.05	0.55	0.85
27.17	21.13	11.64	9.64	112.22	3.05	0.53	0.83
27.23	20.32	11.13	9.95	110.70	3.07	0.50	0.79
27.32	19.60	10.67	10.31	109.94	3.08	0.49	0.76
27.37	19.16	10.38	10.59	109.89	3.10	0.49	0.74
27.43	19.16	10.36	10.63	110.14	3.10	0.49	0.74
27.50	19.25	10.39	10.50	109.04	3.09	0.48	0.74
27.57	20.23	10.94	9.38	102.58	3.03	0.43	0.78
27.65	24.53	13.43	8.34	112.02	2.97	0.55	0.96
27.71	31.69	17.61	6.22	109.46	2.83	0.59	1.26
27.76	41.00	23.62	4.37	103.34	2.67	0.62	1.65
27.84	51.38	30.52	3.21	98.05	2.53	0.11	0.65
27.90	57.29	34.42	2.83	97.44	2.48	0.14	0.66
27.97	64.19	39.01	2.49	97.21	2.42	0.21	0.68
28.03	68.93	42.20	2.28	96.37	2.38	0.26	0.68
28.10	71.17	43.73	2.16	94.26	2.36	0.27	0.69
28.16	71.88	44.27	2.06	91.26	2.33	0.26	0.68
28.22	72.24	44.57	1.99	88.62	2.32	0.23	0.68
28.30	70.45	43.17	2.06	89.14	2.33	0.22	0.68
28.35	68.48	41.63	2.20	91.76	2.37	0.21	0.68

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
28.42	63.83	38.08	2.60	99.13	2.44	0.21	0.68
28.50	56.84	33.04	3.31	109.42	2.55	0.21	0.68
28.55	50.93	28.94	4.08	117.95	2.64	0.86	2.00
28.61	41.62	22.70	5.79	131.34	2.79	0.92	1.62
28.68	35.08	18.91	7.47	141.33	2.92	0.96	1.35
28.76	32.75	17.54	8.26	144.87	2.97	0.97	1.25
28.81	32.04	17.10	8.38	143.39	2.98	0.95	1.22
28.90	28.28	14.93	9.46	141.22	3.04	0.88	1.07
28.96	24.16	12.58	11.29	142.02	3.13	0.85	0.90
29.01	22.82	11.81	12.04	142.12	3.17	0.84	0.84
29.11	25.69	13.37	9.90	132.37	3.06	0.75	0.95
29.16	33.66	17.79	6.80	120.92	2.87	0.71	1.27
29.21	44.67	24.52	4.37	107.11	2.67	0.67	1.71
29.30	74.12	44.32	1.97	87.10	2.31	0.23	0.68
29.34	90.33	55.64	1.57	87.14	2.18	0.50	0.70
29.41	111.45	70.68	1.35	95.45	2.05	0.73	0.73
29.49	118.08	75.51	1.31	98.71	2.00	0.74	0.74
29.54	118.97	76.21	1.30	98.76	1.99	0.74	0.74
29.60	117.63	75.28	1.29	97.34	1.98	0.74	0.74
29.66	115.21	73.45	1.30	95.55	1.99	0.73	0.73
29.75	111.81	70.73	1.32	93.48	2.02	0.73	0.73
29.79	109.93	69.21	1.34	92.53	2.03	0.73	0.73
29.86	107.69	67.38	1.36	91.47	2.05	0.72	0.72
29.95	106.89	66.52	1.37	91.31	2.07	0.72	0.72
29.99	107.42	66.79	1.37	91.65	2.07	0.72	0.72
30.05	108.14	67.08	1.38	92.38	2.07	0.73	0.73
30.16	110.56	68.35	1.38	94.55	2.07	0.73	0.73
30.19	111.00	68.53	1.39	95.00	2.08	0.73	0.73
30.25	111.63	68.81	1.39	95.43	2.08	0.73	0.73
30.34	113.78	70.24	1.37	95.96	2.06	0.73	0.73
30.39	114.58	70.75	1.36	96.16	2.05	0.74	0.74
30.45	115.03	71.76	1.31	93.76	2.00	0.73	0.73
30.53	112.71	71.06	1.26	89.81	1.94	0.72	0.72
30.60	109.48	68.38	1.29	87.99	1.97	0.71	0.71
30.64	107.96	67.02	1.30	87.34	2.00	0.71	0.71
30.74	97.84	59.05	1.42	84.14	2.10	0.52	0.70
30.77	81.28	47.26	1.76	83.01	2.25	0.26	0.68
30.84	81.64	47.02	1.87	87.95	2.29	0.32	0.69
30.91	75.11	42.24	2.25	94.89	2.37	0.29	0.69
31.01	63.65	34.32	3.17	108.72	2.53	0.25	0.68
31.05	60.87	32.39	3.53	114.29	2.57	0.27	0.68
31.11	53.44	27.59	4.50	124.27	2.68	0.92	1.93
31.17	50.85	25.97	4.82	125.11	2.71	0.90	1.83
31.23	49.06	24.97	4.81	120.19	2.71	0.83	1.76
31.30	51.29	26.37	4.32	114.00	2.66	0.77	1.83
31.40	57.29	30.05	3.56	107.12	2.58	0.17	0.67
31.44	67.23	36.29	2.77	100.63	2.47	0.23	0.68
31.50	75.38	41.49	2.33	96.72	2.39	0.31	0.69

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
31.57	82.27	45.85	2.08	95.46	2.34	0.42	0.70
31.63	87.37	48.78	2.04	99.41	2.33	0.64	0.71
31.71	89.25	49.60	2.09	103.70	2.34	0.72	0.72
31.76	88.00	48.56	2.19	106.50	2.36	0.72	0.72
31.84	82.54	44.66	2.54	113.32	2.43	0.72	0.72
31.91	82.90	44.68	2.58	115.36	2.44	0.72	0.72
31.96	82.90	44.60	2.59	115.44	2.44	0.72	0.72
32.02	83.25	44.81	2.53	113.49	2.43	0.72	0.72
32.10	90.24	49.36	2.18	107.62	2.36	0.72	0.72
32.15	100.08	55.81	1.86	103.86	2.28	0.73	0.73
32.24	101.43	56.81	1.77	100.46	2.25	0.73	0.73
32.30	99.46	55.66	1.75	97.48	2.25	0.72	0.72
32.36	96.50	53.96	1.73	93.54	2.24	0.71	0.71
32.43	92.83	51.67	1.76	90.73	2.25	0.57	0.71
32.48	89.97	49.73	1.82	90.50	2.27	0.49	0.70
32.55	84.42	45.81	2.06	94.23	2.33	0.43	0.70
32.66	73.67	38.80	2.52	97.83	2.43	0.27	0.69
32.70	66.51	34.09	3.13	106.62	2.52	0.25	0.68
32.75	62.48	31.42	3.63	113.92	2.59	0.26	0.68
32.82	47.62	22.61	5.58	126.20	2.78	0.86	1.61
32.89	36.97	17.29	7.84	135.62	2.94	0.86	1.24
32.95	35.36	16.46	8.42	138.59	2.98	0.88	1.18
33.01	33.66	15.59	8.98	140.02	3.01	0.88	1.11
33.10	29.18	13.35	10.27	137.03	3.08	0.81	0.95
33.15	27.21	12.36	10.77	133.12	3.11	0.75	0.88
33.23	26.32	11.89	10.88	129.33	3.11	0.70	0.85
33.29	25.51	11.47	11.03	126.48	3.12	0.66	0.82
33.34	26.05	11.72	10.66	124.91	3.10	0.65	0.84
33.40	35.72	16.41	7.06	115.74	2.89	0.63	1.17
33.49	49.41	23.42	4.65	108.77	2.69	0.67	1.64
33.54	62.04	30.71	3.34	102.58	2.55	0.16	0.67
33.63	81.46	42.18	2.35	99.16	2.40	0.41	0.70
33.67	89.52	47.05	2.10	98.66	2.34	0.62	0.71
33.75	104.29	56.25	1.74	97.85	2.25	0.73	0.73
33.80	113.06	61.73	1.61	99.44	2.20	0.74	0.74
33.87	119.78	65.82	1.55	101.70	2.17	0.75	0.75
33.94	123.27	67.82	1.53	103.44	2.16	0.75	0.75
34.02	123.90	67.93	1.54	104.47	2.17	0.75	0.75
34.09	122.19	66.65	1.56	104.22	2.18	0.75	0.75
34.13	117.54	63.55	1.63	103.45	2.21	0.75	0.75
34.19	110.20	58.74	1.75	102.83	2.25	0.74	0.74
34.26	100.26	52.20	2.02	105.48	2.32	0.73	0.73
34.34	84.42	42.18	2.69	113.30	2.45	0.71	0.71
34.38	74.30	36.07	3.32	119.82	2.55	0.56	0.71
34.48	56.40	25.73	5.09	131.08	2.74	0.98	1.83
34.54	46.64	20.96	6.50	136.22	2.85	0.94	1.50
34.58	41.09	18.32	7.52	137.81	2.92	0.91	1.31
34.67	36.97	16.34	8.33	136.12	2.97	0.85	1.17

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
34.73	35.36	15.56	8.75	136.21	3.00	0.83	1.11
34.78	34.82	15.28	8.54	130.57	2.99	0.77	1.09
34.85	34.55	15.13	7.87	119.04	2.94	0.64	1.08
34.92	34.73	15.18	8.22	124.81	2.97	0.70	1.08
34.98	34.91	15.23	8.47	129.00	2.98	0.75	1.09
35.05	33.93	14.75	9.04	133.28	3.01	0.79	1.05
35.12	33.84	14.67	9.31	136.58	3.03	0.82	1.05
35.18	33.75	14.60	9.51	138.84	3.04	0.85	1.04
35.24	34.02	14.70	9.56	140.58	3.04	0.87	1.05
35.31	33.84	14.59	9.70	141.56	3.05	0.88	1.04
35.39	33.75	14.51	9.72	141.07	3.05	0.87	1.04
35.44	33.30	14.28	9.84	140.52	3.06	0.86	1.02
35.51	33.21	14.21	9.81	139.47	3.06	0.85	1.02
35.57	33.30	14.22	9.73	138.35	3.05	0.83	1.02
35.64	33.12	14.11	9.75	137.63	3.05	0.82	1.01
35.70	33.30	14.17	9.67	137.05	3.05	0.82	1.01
35.78	34.46	14.66	9.29	136.18	3.03	0.82	1.05
35.84	35.45	15.09	9.04	136.41	3.01	0.83	1.08
35.90	36.88	15.71	8.70	136.75	3.00	0.84	1.12
35.96	38.67	16.49	8.23	135.75	2.97	0.85	1.18
36.05	39.12	16.65	8.03	133.69	2.95	0.83	1.19
36.10	39.12	16.62	8.00	132.90	2.95	0.82	1.19
36.16	40.37	17.16	7.71	132.26	2.93	0.82	1.23
36.24	43.86	18.68	6.89	128.74	2.88	0.81	1.33
36.29	46.73	19.94	6.49	129.51	2.85	0.84	1.42
36.37	49.41	21.09	6.18	130.46	2.83	0.88	1.51
36.44	46.28	19.65	6.57	129.05	2.85	0.83	1.40
36.49	41.45	17.47	7.39	129.17	2.91	0.79	1.25
36.56	36.26	15.13	8.62	130.41	2.99	0.76	1.08
36.63	33.66	13.95	9.35	130.39	3.03	0.74	1.00
36.70	34.82	14.43	8.88	128.09	3.01	0.73	1.03
36.75	38.49	16.03	7.77	124.63	2.94	0.72	1.15
36.84	56.67	24.31	4.66	113.22	2.70	0.74	1.72
36.90	68.48	30.60	3.52	107.58	2.57	0.23	0.68
36.95	76.45	34.92	3.00	104.88	2.50	0.32	0.69
37.03	93.55	44.38	2.30	102.18	2.39	0.71	0.71
37.09	103.22	49.93	2.01	100.42	2.32	0.72	0.72
37.15	117.36	58.29	1.71	99.76	2.24	0.74	0.74
37.22	136.07	69.57	1.49	103.38	2.14	0.76	0.76
37.29	151.47	79.03	1.38	109.13	2.07	0.78	0.78
37.34	163.10	86.27	1.33	114.67	2.02	0.79	0.79
37.41	173.04	92.43	1.30	120.05	1.99	0.80	0.80
37.48	181.72	97.53	1.28	125.21	1.97	0.81	0.81
37.54	189.60	102.21	1.27	129.99	1.95	0.82	0.82
37.60	196.32	106.02	1.27	134.17	1.94	0.82	0.82
37.67	204.19	110.56	1.26	139.01	1.93	0.83	0.83
37.74	209.57	113.90	1.25	141.98	1.91	0.83	0.83
37.81	215.56	120.56	1.17	140.93	1.81	0.83	0.83

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
37.87	219.95	122.54	1.18	144.34	1.82	0.84	0.84
37.93	222.10	122.81	1.20	146.99	1.85	0.84	0.84
38.00	223.98	123.18	1.21	148.73	1.86	0.84	0.84
38.08	221.11	120.63	1.22	147.46	1.88	0.84	0.84
38.16	203.39	108.49	1.27	137.41	1.94	0.83	0.83
38.21	202.14	107.42	1.27	136.66	1.95	0.83	0.83
38.26	191.12	100.08	1.30	130.45	2.00	0.82	0.82
38.33	184.77	95.60	1.33	127.42	2.03	0.82	0.82
38.39	190.23	98.62	1.32	130.49	2.02	0.82	0.82
38.46	182.71	93.60	1.36	126.86	2.05	0.81	0.81
38.52	189.33	97.59	1.33	129.96	2.03	0.82	0.82
38.61	202.86	105.85	1.29	136.99	1.98	0.83	0.83
38.66	210.29	110.22	1.28	141.25	1.97	0.84	0.84
38.74	213.69	111.90	1.28	143.24	1.96	0.84	0.84
38.79	213.16	111.40	1.28	142.79	1.97	0.84	0.84
38.85	208.95	108.77	1.29	140.04	1.97	0.84	0.84
38.94	197.85	102.21	1.30	132.83	1.99	0.83	0.83
38.99	190.24	97.58	1.31	128.27	2.01	0.82	0.82
39.05	178.60	90.29	1.35	122.13	2.05	0.81	0.81
39.12	164.37	81.41	1.42	115.97	2.10	0.79	0.79
39.20	156.22	76.35	1.48	113.12	2.14	0.79	0.79
39.26	149.87	72.48	1.53	111.19	2.17	0.78	0.78
39.33	145.93	69.98	1.58	110.44	2.19	0.78	0.78
39.39	144.94	69.19	1.60	110.70	2.19	0.78	0.78
39.44	142.88	67.71	1.65	111.43	2.21	0.77	0.77
39.50	139.84	65.63	1.71	112.55	2.24	0.77	0.77
39.57	134.02	62.04	1.83	113.32	2.27	0.77	0.77
39.64	129.37	59.29	1.91	113.44	2.30	0.76	0.76
39.74	119.43	53.77	2.08	112.04	2.34	0.75	0.75
39.79	115.67	51.68	2.16	111.70	2.36	0.75	0.75
39.84	109.13	48.11	2.32	111.80	2.39	0.74	0.74
39.90	102.78	44.70	2.50	111.79	2.42	0.73	0.73
39.99	96.06	41.20	2.67	109.79	2.45	0.72	0.72
40.05	90.42	38.31	2.84	108.91	2.48	0.67	0.71
40.12	88.19	37.32	2.81	105.04	2.48	0.51	0.70
40.16	88.19	37.41	2.75	102.70	2.46	0.47	0.70
40.23	87.20	36.92	2.73	100.98	2.46	0.42	0.70
40.29	85.86	36.25	2.75	99.84	2.47	0.37	0.69
40.39	82.28	34.42	2.86	98.52	2.48	0.29	0.69
40.44	79.95	33.13	3.01	99.78	2.50	0.27	0.69
40.50	77.89	31.98	3.17	101.25	2.53	0.26	0.68
40.58	75.65	30.65	3.39	104.03	2.56	0.25	0.68
40.64	73.51	29.45	3.62	106.52	2.58	0.25	0.68
40.69	66.97	26.04	4.31	112.15	2.66	0.76	1.83
40.75	55.96	21.24	5.59	118.70	2.78	0.76	1.52
40.84	41.46	15.44	8.01	123.71	2.95	0.70	1.10
40.90	34.39	12.62	8.99	113.38	3.01	0.56	0.90
40.99	26.96	9.65	10.92	105.43	3.12	0.45	0.69

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
41.04	23.11	8.12	12.93	105.01	3.21	0.43	0.58
41.08	21.58	7.51	13.84	103.91	3.25	0.41	0.54
41.17	19.26	6.58	15.17	99.79	3.30	0.37	0.47
41.22	17.20	5.76	16.95	97.62	3.36	0.35	0.41
41.28	17.65	5.93	16.03	95.00	3.33	0.33	0.42
41.34	18.72	6.34	14.63	92.66	3.28	0.31	0.45
41.41	21.41	7.38	12.72	93.83	3.20	0.33	0.53
41.49	25.43	8.93	10.73	95.83	3.11	0.36	0.64
41.54	30.36	10.84	8.86	96.09	3.00	0.38	0.77
41.62	32.15	11.52	8.58	98.82	2.99	0.42	0.82
41.69	28.12	9.93	10.53	104.57	3.10	0.44	0.71
41.74	23.91	8.28	12.97	107.44	3.21	0.45	0.59
41.82	20.24	6.84	15.63	106.99	3.32	0.44	0.49
41.87	19.61	6.59	16.01	105.57	3.33	0.42	0.47
41.94	21.67	7.38	13.99	103.20	3.25	0.41	0.53
42.01	34.03	12.13	7.98	96.77	2.95	0.41	0.87
42.06	47.63	17.36	5.08	88.18	2.73	0.41	1.24
42.13	65.45	25.71	3.09	79.48	2.52	0.06	0.63
42.20	80.94	33.09	2.47	81.89	2.42	0.14	0.66
42.26	87.56	35.91	2.44	87.61	2.41	0.24	0.68
42.34	97.85	40.85	2.20	89.84	2.36	0.43	0.70
42.40	104.75	43.99	2.12	93.36	2.35	0.70	0.71
42.48	102.87	42.07	2.47	103.94	2.42	0.72	0.72
42.53	95.71	37.95	2.95	112.07	2.50	0.72	0.72
42.59	90.96	35.31	3.34	117.81	2.55	0.72	0.72
42.66	86.58	33.03	3.67	121.26	2.59	0.72	0.72
42.73	83.35	31.57	3.77	119.04	2.60	0.95	2.19
42.82	100.18	40.10	2.66	106.61	2.45	0.72	0.72
42.85	122.56	51.95	1.93	100.09	2.30	0.74	0.74
42.93	158.73	72.02	1.44	103.79	2.11	0.77	0.77
43.02	187.20	88.33	1.31	115.78	2.00	0.80	0.80
43.05	196.33	93.95	1.28	120.28	1.96	0.81	0.81
43.12	205.55	100.26	1.24	124.51	1.91	0.81	0.81
43.22	214.23	106.77	1.19	127.52	1.84	0.81	0.81
43.27	219.78	109.47	1.19	130.71	1.84	0.82	0.82
43.32	225.87	113.12	1.18	133.30	1.82	0.82	0.82
43.37	232.31	117.30	1.15	135.19	1.80	0.83	0.83
43.48	244.40	123.39	1.15	141.69	1.80	0.84	0.84
43.51	246.37	124.26	1.15	142.91	1.80	0.84	0.84
43.57	249.32	125.89	1.14	143.86	1.79	0.85	0.85
43.64	254.96	129.65	1.11	144.25	1.77	0.85	0.85
43.72	258.72	131.07	1.12	147.07	1.78	0.85	0.85
43.77	262.75	133.19	1.12	148.71	1.77	0.86	0.86
43.85	263.06	133.06	1.12	148.94	1.77	0.86	0.86
43.93	263.38	133.33	1.11	148.07	1.77	0.86	0.86
43.97	264.72	134.26	1.10	147.64	1.76	0.86	0.86
44.03	266.24	135.16	1.09	147.43	1.75	0.86	0.86
44.10	263.82	133.01	1.11	148.19	1.77	0.86	0.86

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
44.17	262.84	131.89	1.13	148.63	1.78	0.86	0.86
44.23	259.97	129.50	1.15	148.67	1.80	0.85	0.85
44.32	253.71	125.39	1.17	146.17	1.81	0.85	0.85
44.38	249.14	122.69	1.17	143.81	1.82	0.85	0.85
44.43	245.20	120.36	1.18	141.76	1.82	0.84	0.84
44.52	237.15	115.50	1.19	137.65	1.84	0.84	0.84
44.57	230.79	111.64	1.20	134.47	1.85	0.83	0.83
44.63	223.18	107.12	1.22	130.43	1.87	0.82	0.82
44.70	217.18	103.72	1.22	126.92	1.88	0.82	0.82
44.76	215.66	102.89	1.22	125.88	1.88	0.81	0.81
44.82	214.86	102.55	1.22	125.14	1.88	0.81	0.81
44.91	215.04	102.82	1.21	124.74	1.87	0.81	0.81
44.95	215.93	103.27	1.21	125.10	1.86	0.81	0.81
45.03	219.33	105.03	1.21	126.66	1.86	0.82	0.82
45.08	222.65	106.85	1.20	128.16	1.85	0.82	0.82
45.17	224.70	107.34	1.21	129.42	1.86	0.82	0.82
45.21	225.42	107.45	1.21	129.90	1.86	0.82	0.82
45.28	228.20	108.43	1.21	131.54	1.87	0.83	0.83
45.37	232.22	110.04	1.22	133.75	1.87	0.83	0.83
45.42	235.09	111.28	1.22	135.31	1.87	0.83	0.83
45.48	238.22	112.38	1.22	137.16	1.88	0.84	0.84
45.56	242.61	114.27	1.22	139.53	1.88	0.84	0.84
45.62	244.13	114.84	1.22	140.28	1.88	0.84	0.84
45.67	244.13	114.57	1.22	140.25	1.88	0.84	0.84
45.76	241.63	112.75	1.23	138.80	1.89	0.84	0.84
45.81	239.93	111.44	1.24	137.89	1.90	0.84	0.84
45.88	232.86	107.13	1.25	134.06	1.92	0.84	0.84
45.95	224.45	102.62	1.26	129.17	1.93	0.83	0.83
46.01	215.40	97.48	1.27	124.19	1.96	0.82	0.82
46.07	204.75	91.57	1.29	118.42	1.98	0.81	0.81
46.14	194.10	85.69	1.32	112.81	2.01	0.80	0.80
46.20	170.54	72.85	1.40	102.21	2.09	0.78	0.78
46.30	169.20	72.56	1.38	100.30	2.07	0.77	0.77
46.33	164.99	70.37	1.40	98.29	2.08	0.77	0.77
46.40	155.24	65.29	1.44	94.11	2.11	0.76	0.76
46.50	145.84	60.37	1.50	90.50	2.15	0.75	0.75
46.53	139.48	56.94	1.57	89.21	2.18	0.74	0.74
46.59	133.21	53.53	1.65	88.48	2.22	0.73	0.73
46.66	125.86	49.52	1.80	88.94	2.26	0.73	0.73
46.74	119.69	45.98	1.99	91.67	2.32	0.72	0.72
46.79	111.81	41.64	2.33	97.00	2.39	0.72	0.72
46.85	105.54	37.87	2.83	107.26	2.48	0.72	0.72
46.93	100.71	35.04	3.35	117.39	2.55	0.73	0.73
46.99	94.80	32.15	3.84	123.31	2.61	1.08	2.26
47.08	88.71	29.42	4.35	127.83	2.66	1.10	2.10
47.13	85.13	28.16	4.56	128.41	2.69	1.08	2.01
47.19	88.36	29.22	4.27	124.70	2.66	1.06	2.09
47.27	84.42	27.82	4.53	125.96	2.68	1.04	1.99

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
47.32	88.00	29.01	4.27	124.02	2.66	1.04	2.07
47.39	91.67	30.57	3.96	121.16	2.62	1.03	2.16
47.45	92.47	31.03	3.79	117.60	2.60	0.98	2.18
47.52	94.26	32.06	3.47	111.34	2.57	0.69	0.71
47.58	97.22	33.58	3.16	105.96	2.52	0.64	0.71
47.67	104.47	36.96	2.74	101.12	2.46	0.71	0.71
47.71	106.71	37.95	2.64	100.37	2.45	0.72	0.72
47.77	110.02	39.43	2.52	99.34	2.43	0.72	0.72
47.84	114.58	41.54	2.37	98.35	2.40	0.72	0.72
47.92	121.30	44.66	2.17	97.01	2.36	0.73	0.73
47.98	126.40	47.03	2.05	96.36	2.33	0.74	0.74
48.04	132.94	50.11	1.92	96.01	2.30	0.74	0.74
48.14	144.13	56.07	1.66	92.92	2.22	0.75	0.75
48.17	155.85	62.01	1.53	94.72	2.16	0.76	0.76
48.24	168.21	67.77	1.47	99.43	2.13	0.77	0.77
48.30	180.29	73.65	1.41	103.97	2.10	0.79	0.79
48.38	192.47	79.44	1.37	109.23	2.07	0.80	0.80
48.44	194.79	80.04	1.39	110.91	2.08	0.80	0.80
48.50	197.12	80.74	1.39	112.44	2.08	0.81	0.81
48.56	212.70	88.68	1.34	118.89	2.04	0.82	0.82
48.63	221.56	92.85	1.33	123.12	2.02	0.83	0.83
48.70	228.01	95.79	1.32	126.25	2.01	0.83	0.83
48.75	234.09	98.66	1.31	129.21	2.00	0.84	0.84
48.85	243.31	102.83	1.30	133.80	1.99	0.85	0.85
48.90	247.70	105.03	1.29	135.84	1.98	0.85	0.85
48.96	250.03	106.12	1.29	136.84	1.98	0.85	0.85
49.05	254.32	108.19	1.28	138.74	1.97	0.86	0.86
49.09	256.74	109.36	1.28	139.83	1.96	0.86	0.86
49.15	258.89	110.35	1.28	140.77	1.96	0.86	0.86
49.22	266.68	114.45	1.26	144.52	1.94	0.86	0.86
49.28	271.96	117.07	1.26	147.04	1.93	0.87	0.87
49.34	276.53	119.44	1.25	149.16	1.92	0.87	0.87
49.43	279.48	120.73	1.25	150.43	1.91	0.87	0.87
49.49	284.49	123.31	1.24	152.77	1.90	0.88	0.88
49.55	286.82	124.36	1.24	153.81	1.90	0.88	0.88
49.62	292.82	127.47	1.23	156.59	1.89	0.88	0.88
49.69	294.43	128.17	1.23	157.16	1.88	0.88	0.88
49.74	294.34	127.97	1.23	156.97	1.88	0.88	0.88
49.83	290.85	125.89	1.23	154.95	1.89	0.88	0.88
49.89	287.27	123.75	1.24	153.04	1.90	0.88	0.88
49.95	280.29	89.34	1.00	89.34	-1.00	0.96	0.96
50.03	276.08	87.89	1.00	87.89	-1.00	0.96	0.96
50.08	273.21	86.89	1.00	86.89	-1.00	0.96	0.96
50.15	271.51	86.27	1.00	86.27	-1.00	0.95	0.95
50.24	268.92	85.32	1.00	85.32	-1.00	0.95	0.95
50.27	268.74	85.23	1.00	85.23	-1.00	0.95	0.95

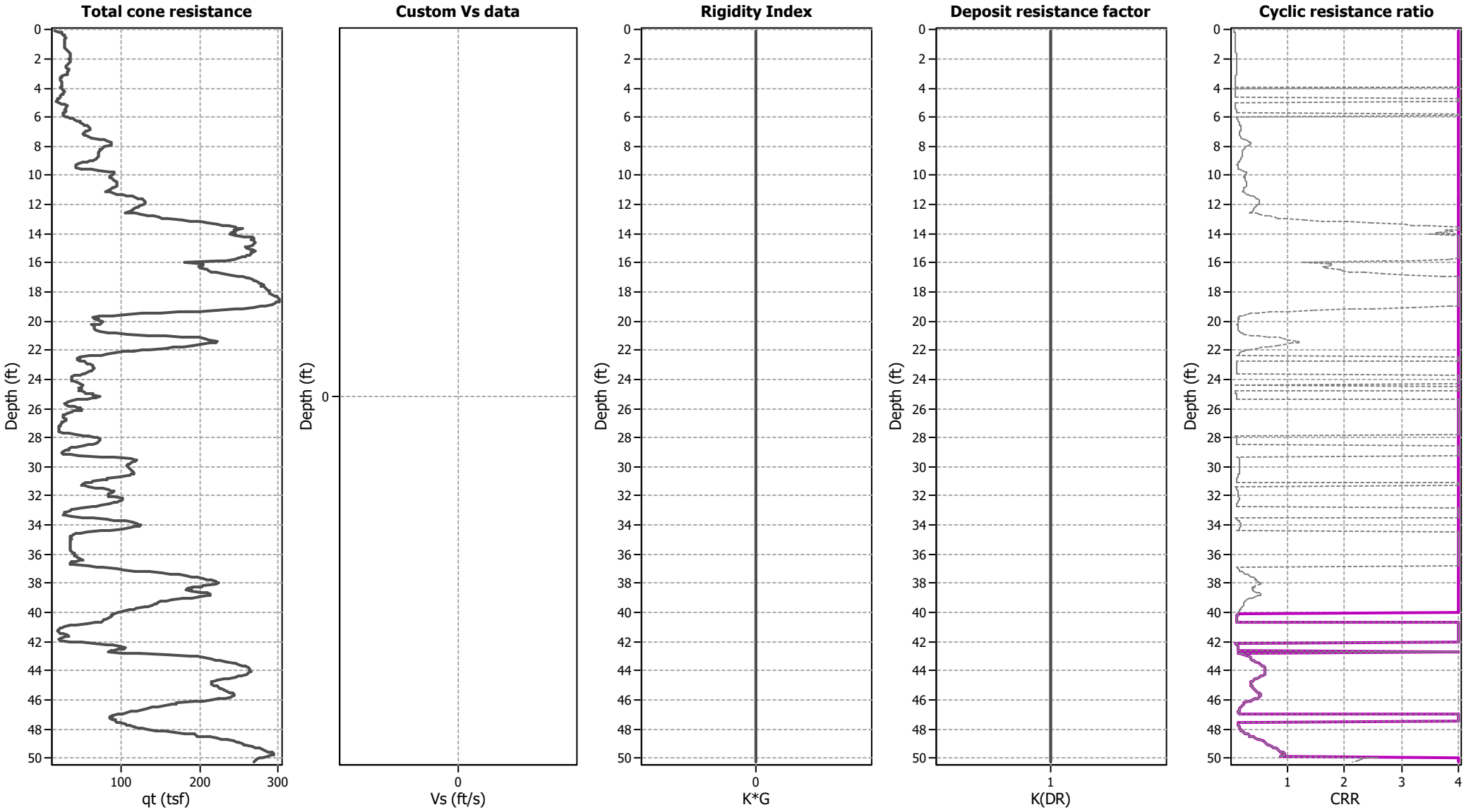
:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$

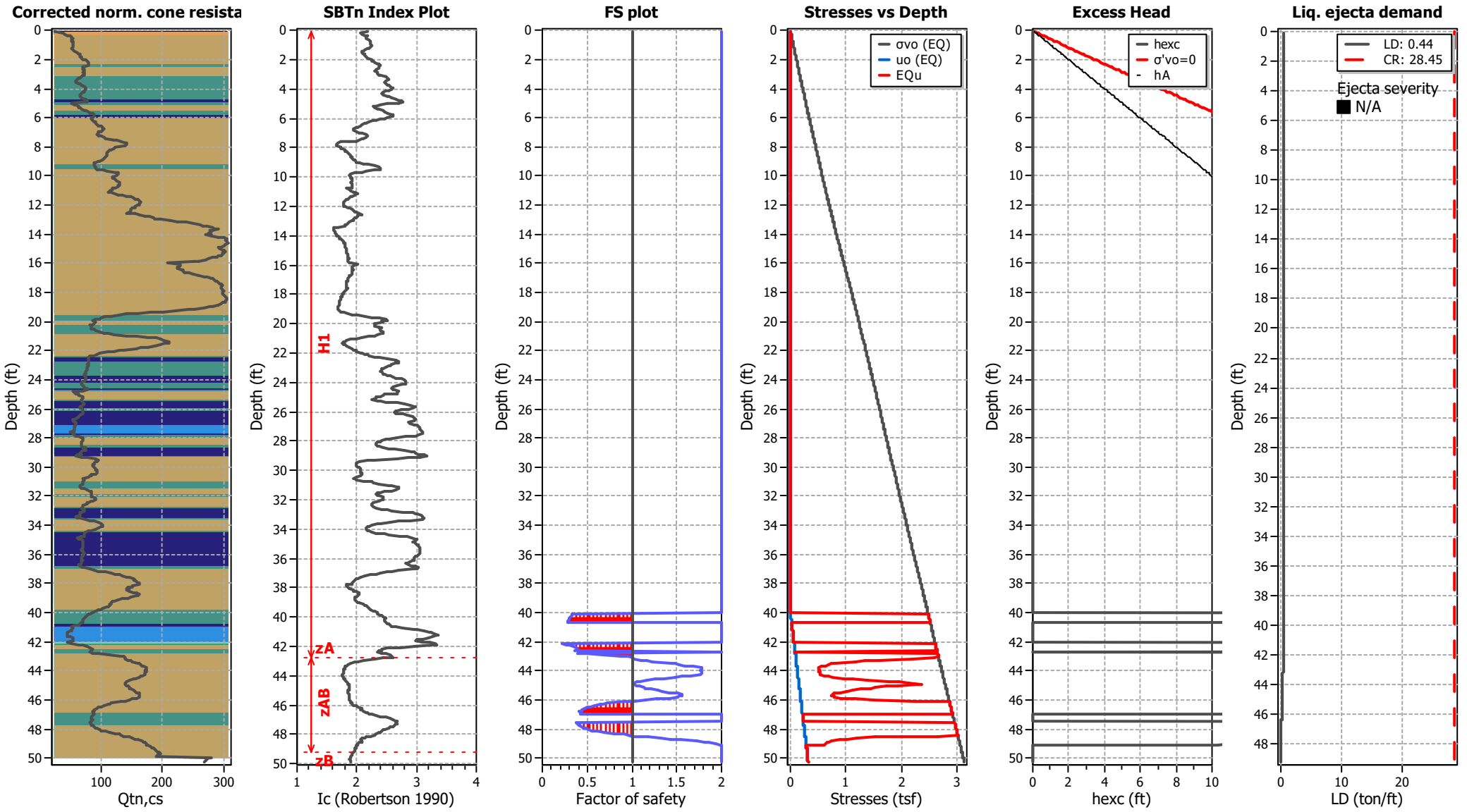
Abbreviations

q_t:	Total cone resistance
K_c:	Cone resistance correction factor due to fines
$Q_{tn,cs}$:	Adjusted and corrected cone resistance due to fines
I_c:	Soil behavior type index
$S_{u(liq)}/\sigma'_v$:	Calculated liquefied undrained strength ratio
$S_{u(peak)}/\sigma'_v$:	Calculated peak undrained strength ratio

Aging Calculation Estimation



Ejecta Severity Estimation



Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

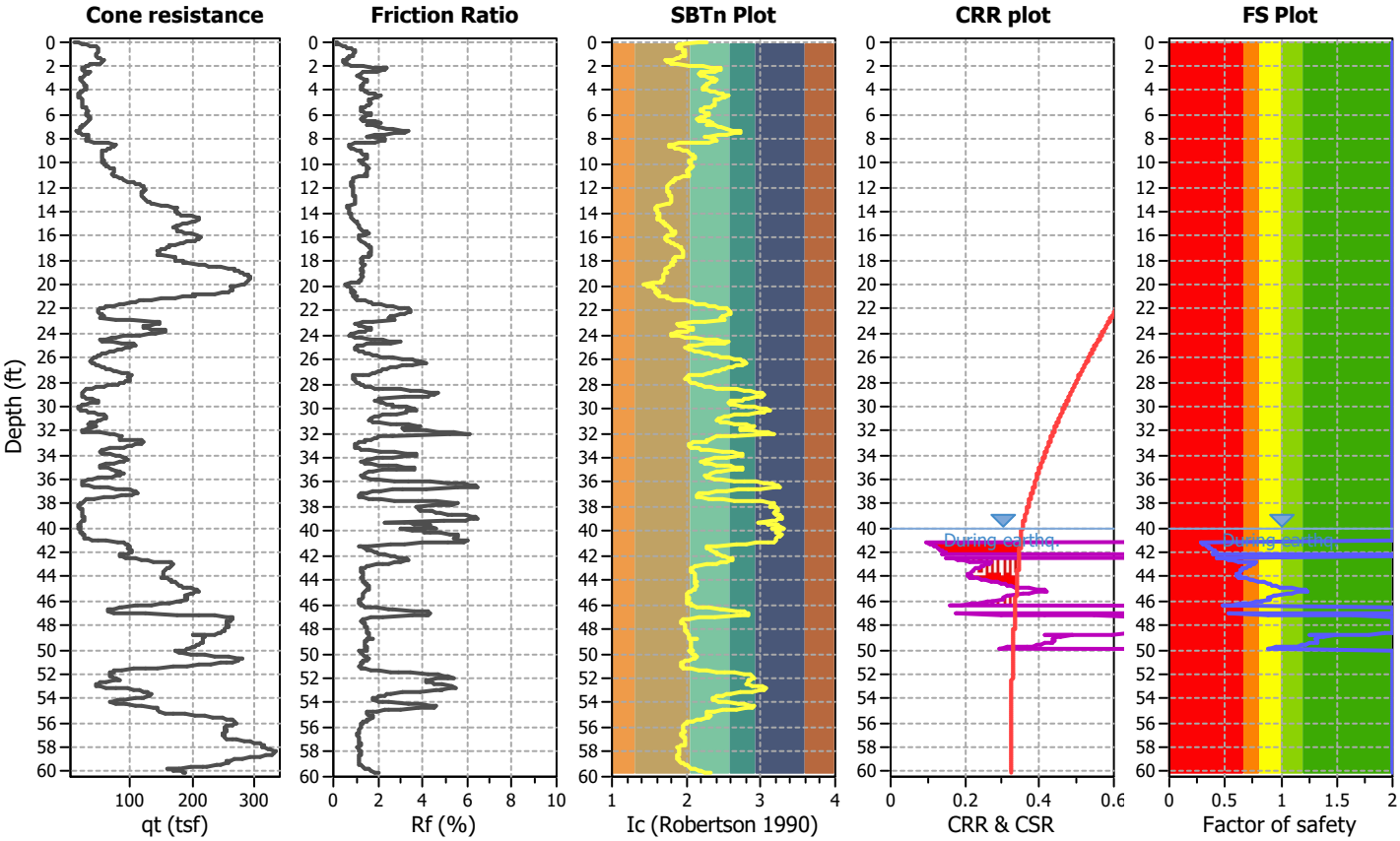
LIQUEFACTION ANALYSIS REPORT

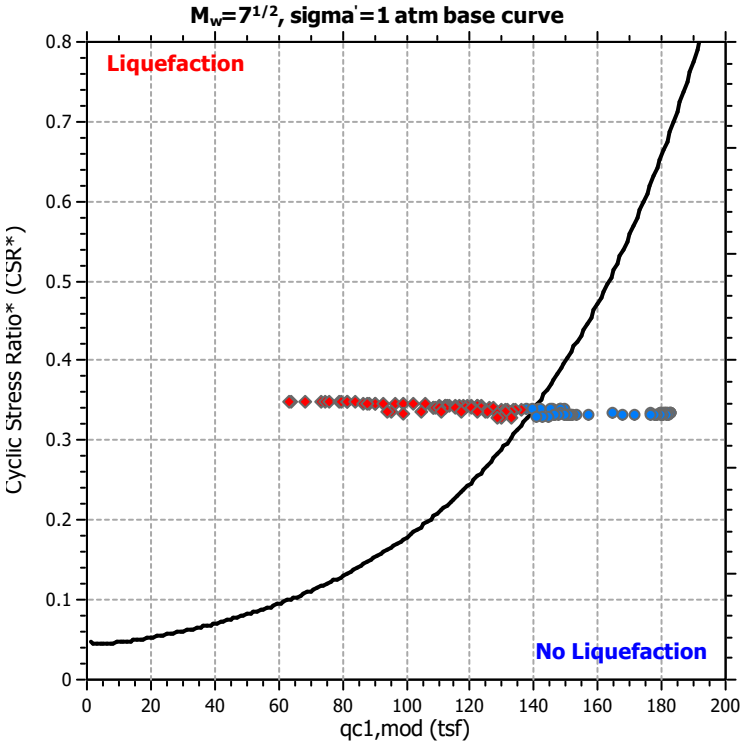
Project title : GeoSoils / Bradley Gardens **Location : 980 W. 7th St, San Jacinto, CA**

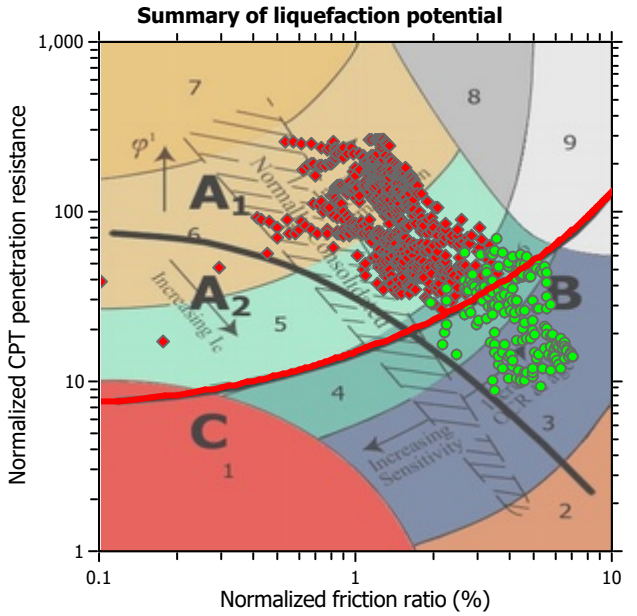
CPT file : CPT-3

Input parameters and analysis data

Analysis method:	Moss et al. (2006)	G.W.T. (in-situ):	100.00 ft	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	Moss et al. (2006)	G.W.T. (earthq.):	40.00 ft	Fill height:	N/A	Limit depth applied:	Yes
Points to test:	Based on Ic value	Average results interval:	1	Fill weight:	N/A	Limit depth:	50.00 ft
Earthquake magnitude M_w:	8.10	Ic cut-off value:	2.60	Trans. detect. applied:	No	MSF method:	Method based
Peak ground acceleration:	1.07	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		

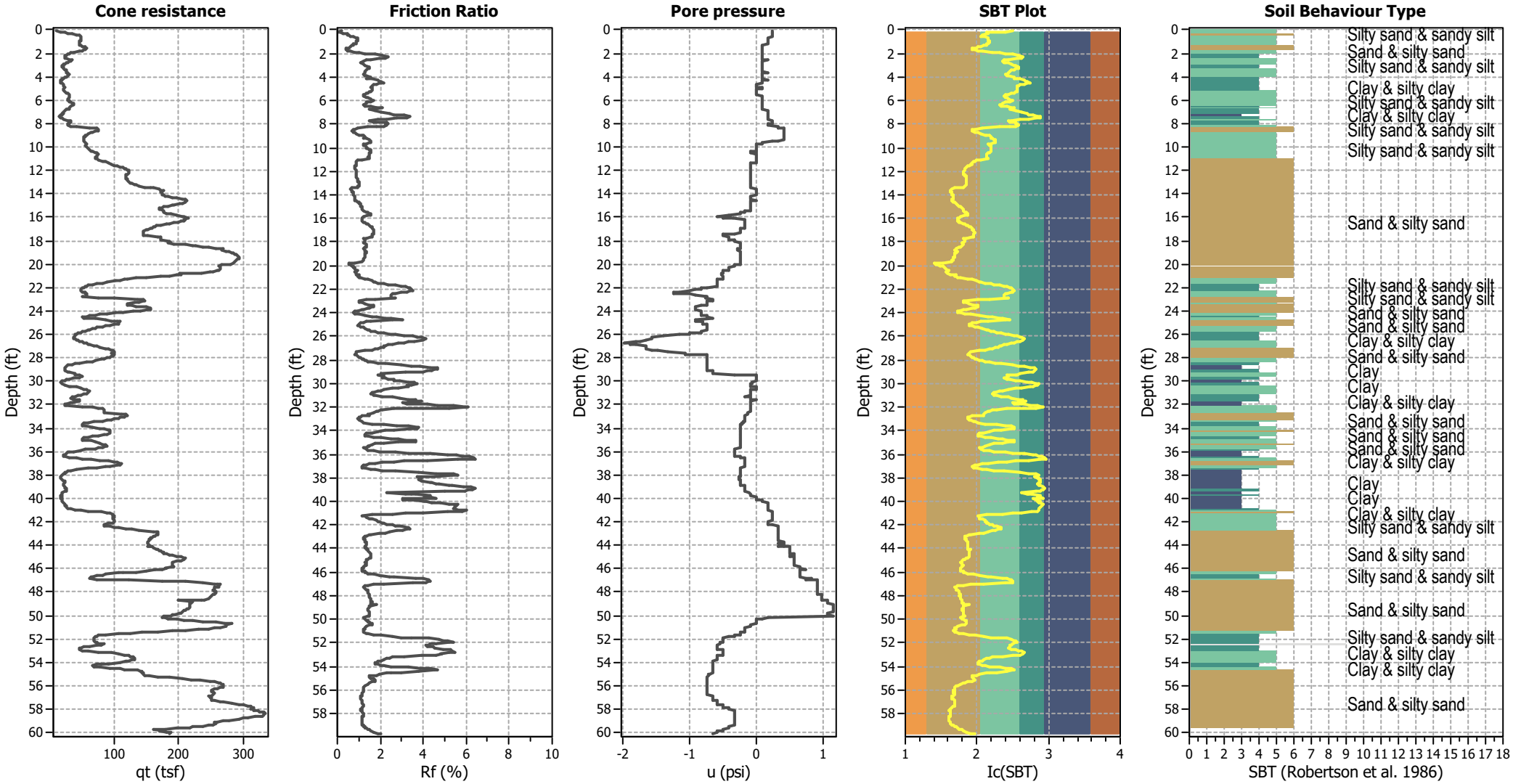






Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

CPT basic interpretation plots



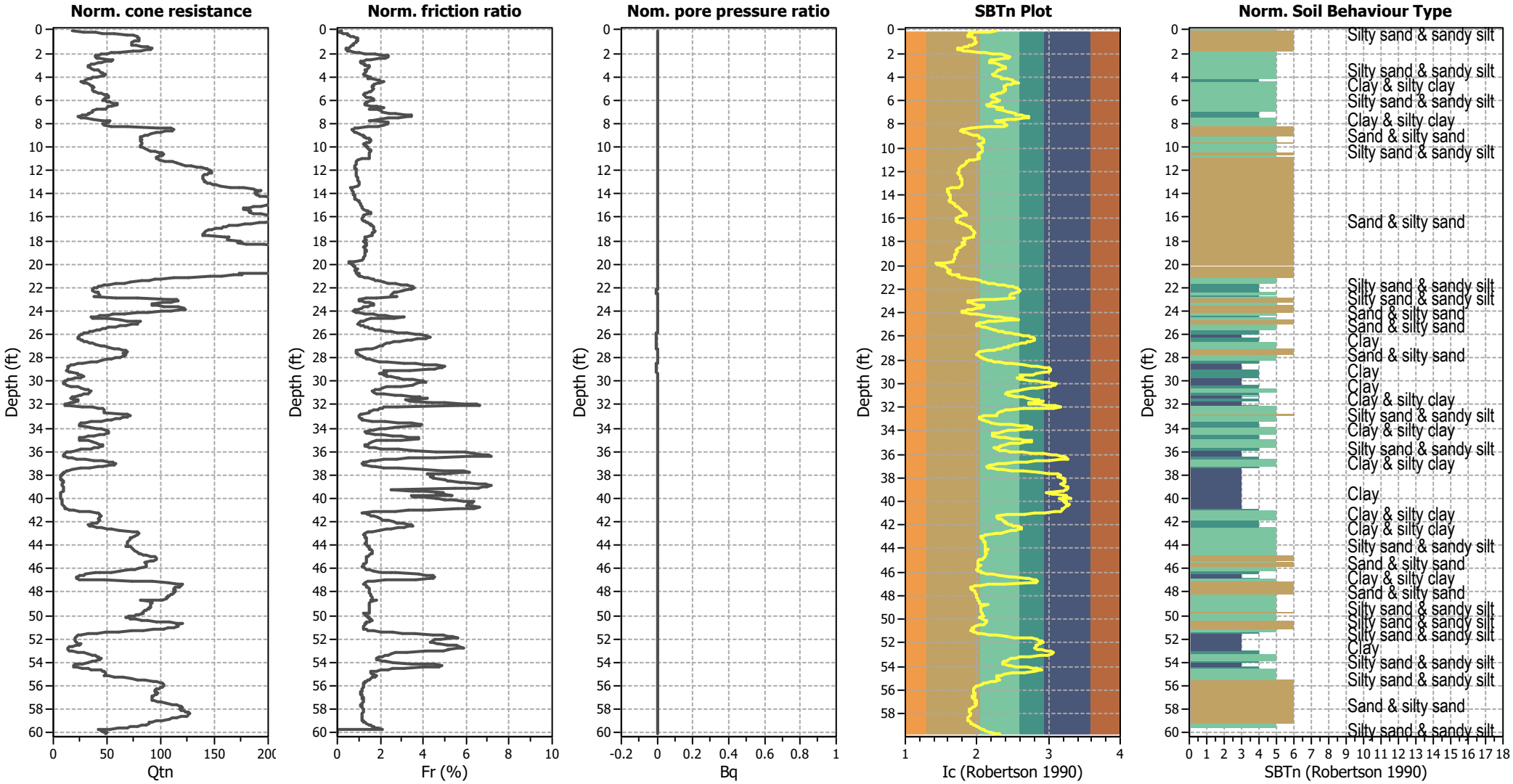
Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CPT basic interpretation plots (normalized)



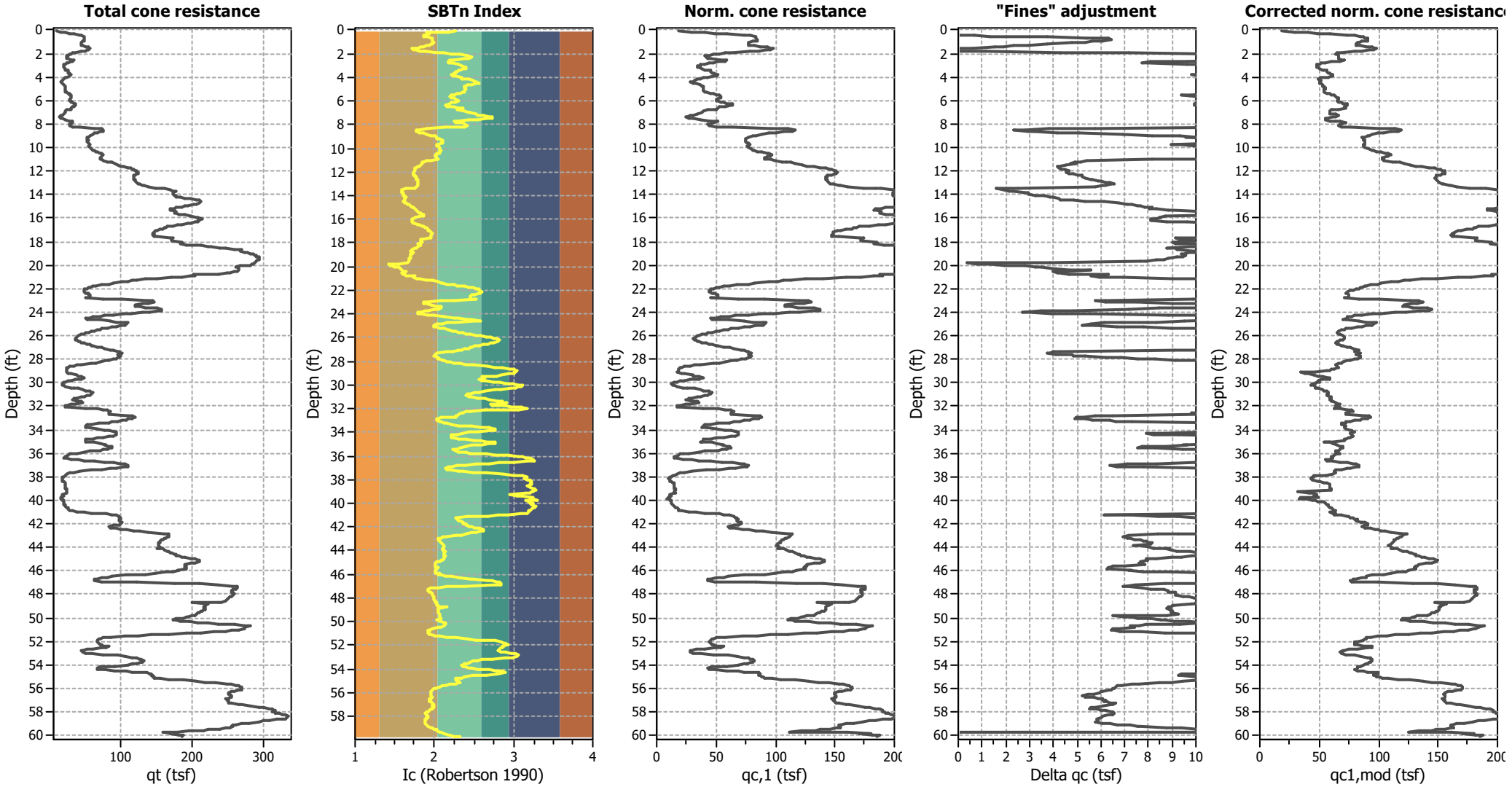
Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

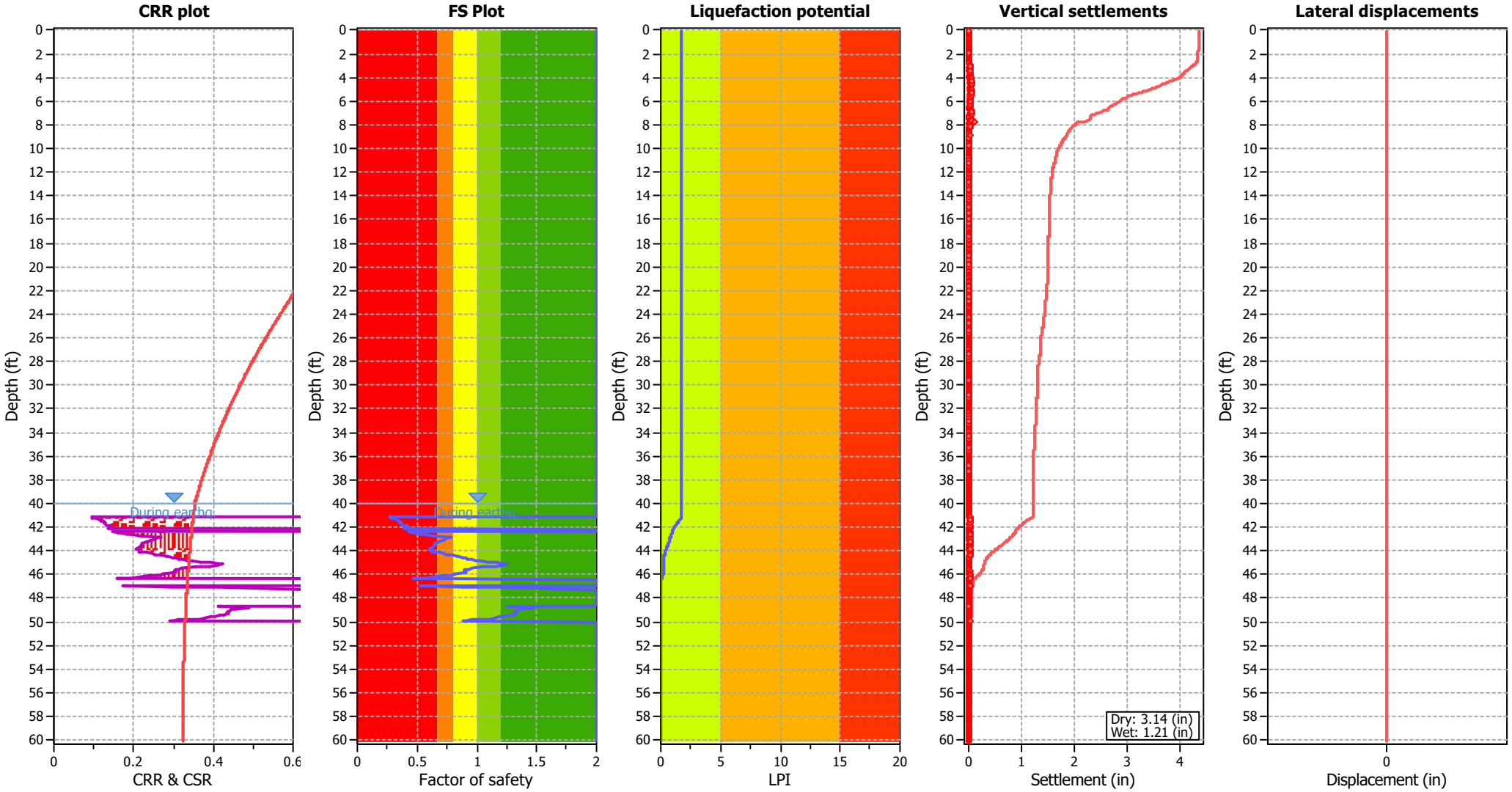
Liquefaction analysis overall plots (intermediate results)



Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

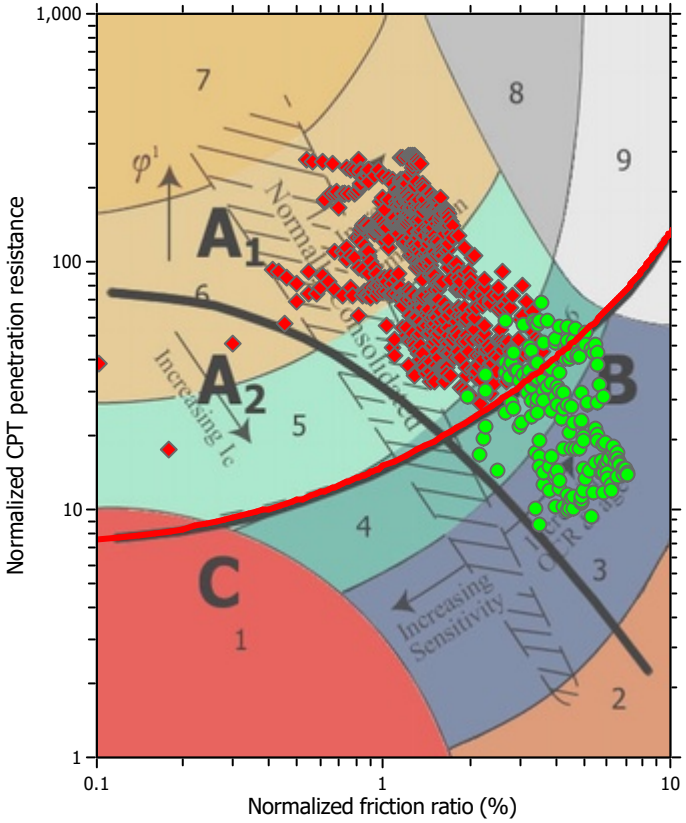
F.S. color scheme

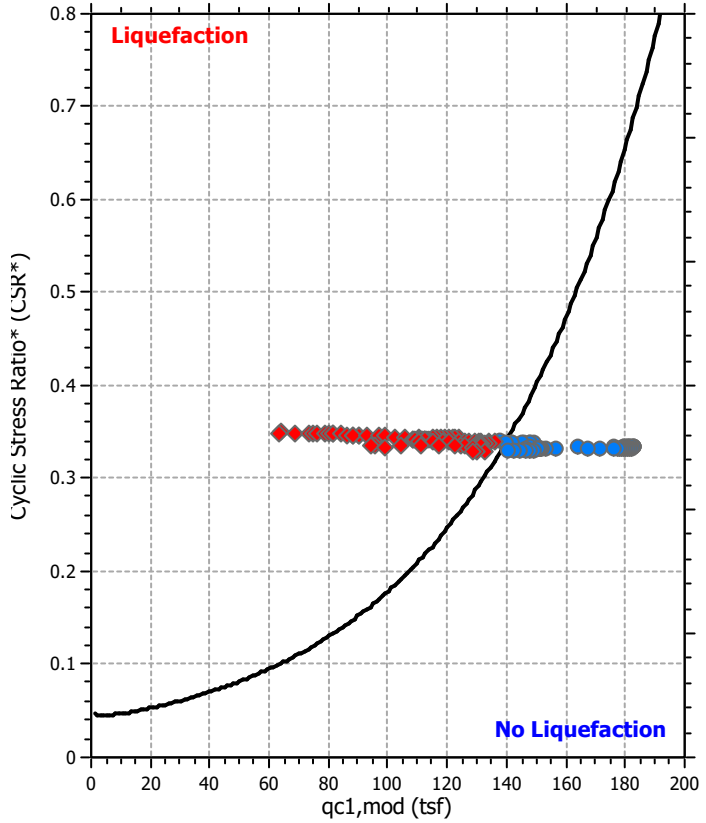
- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

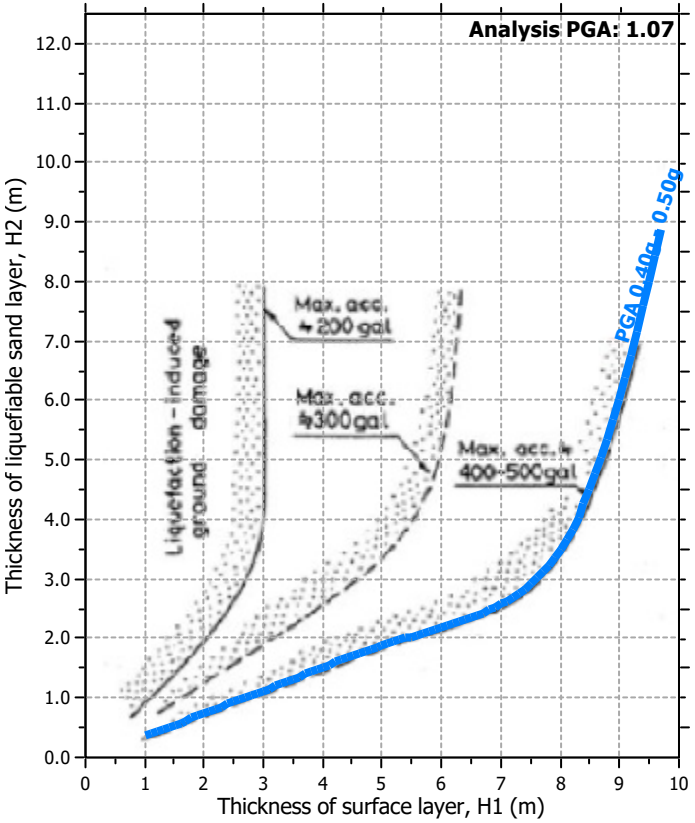
LPI color scheme

- Very high risk
- High risk
- Low risk

Liquefaction analysis summary plots



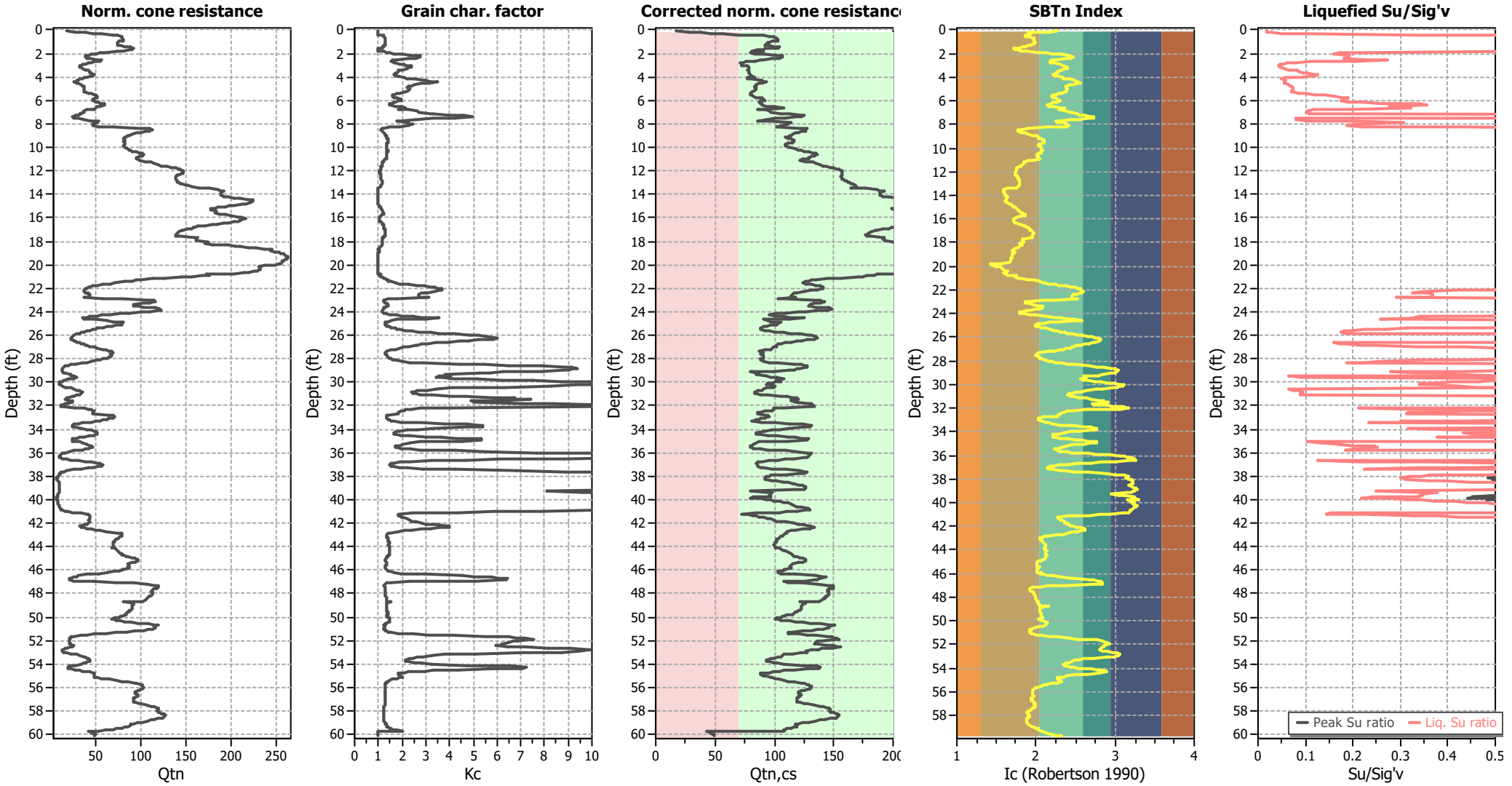




Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

Check for strength loss plots (Robertson (2010))



Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

:: Field input data ::

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
1	0.08	10.82	0.02	0.25	5.00	87.36
2	0.14	17.35	0.00	0.25	5.00	87.36
3	0.20	24.05	0.02	0.25	5.00	90.86
4	0.26	28.88	0.09	0.25	5.00	100.47
5	0.33	34.96	0.16	0.25	5.00	105.48
6	0.40	43.19	0.22	0.25	5.00	108.21
7	0.46	46.40	0.25	0.25	9.54	109.63
8	0.53	49.09	0.29	0.25	9.52	110.82
9	0.60	49.18	0.38	0.25	10.97	112.69
10	0.66	48.91	0.44	0.17	11.96	113.70
11	0.74	49.44	0.47	0.17	12.34	114.32
12	0.79	49.98	0.48	0.17	12.31	114.49
13	0.88	50.07	0.47	0.17	12.12	114.33
14	0.92	49.18	0.46	0.17	12.23	114.09
15	0.99	47.30	0.43	0.17	12.39	113.50
16	1.06	45.78	0.41	0.17	12.55	113.03
17	1.13	45.73	0.39	0.17	12.23	112.65
18	1.19	45.73	0.35	0.17	11.65	112.00
19	1.25	45.69	0.33	0.08	11.17	111.41
20	1.32	48.37	0.32	0.08	10.27	111.47
21	1.38	51.32	0.33	0.08	9.52	111.73
22	1.47	54.81	0.33	0.08	8.73	112.03
23	1.52	56.51	0.31	0.08	7.91	111.49
24	1.58	57.40	0.24	0.08	5.00	109.60
25	1.65	56.51	0.24	0.08	5.00	109.72
26	1.72	53.92	0.25	0.08	5.00	109.79
27	1.78	50.70	0.25	0.08	5.00	109.76
28	1.85	46.23	0.27	0.08	9.92	110.04
29	1.93	37.73	0.31	0.08	13.84	110.48
30	1.98	34.16	0.35	0.08	16.57	111.19
31	2.04	31.20	0.41	0.08	19.71	112.13
32	2.10	28.25	0.49	0.08	23.59	113.16
33	2.17	26.20	0.55	0.08	26.77	113.88
34	2.24	24.14	0.57	0.08	29.34	113.95
35	2.32	24.23	0.57	0.08	29.10	113.87
36	2.37	25.12	0.56	0.08	27.98	113.86
37	2.44	26.82	0.53	0.08	25.76	113.66
38	2.51	32.01	0.49	0.08	20.93	113.57
39	2.57	34.87	0.47	0.17	18.67	113.41
40	2.63	33.98	0.41	0.08	17.98	112.34
41	2.73	30.40	0.33	0.08	18.45	110.53
42	2.77	28.08	0.30	0.08	19.22	109.59
43	2.83	25.93	0.28	0.08	20.33	108.92
44	2.93	23.69	0.29	0.08	22.45	108.82
45	2.97	22.00	0.28	0.08	23.97	108.49

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
46	3.02	21.55	0.28	0.08	24.31	108.32
47	3.11	20.48	0.30	0.08	26.34	108.79
48	3.15	20.48	0.31	0.08	26.59	108.97
49	3.22	21.19	0.31	0.08	26.00	109.23
50	3.29	22.35	0.32	0.08	24.97	109.55
51	3.37	24.05	0.33	0.08	23.49	109.92
52	3.42	25.21	0.34	0.08	22.57	110.15
53	3.48	26.38	0.34	0.08	21.82	110.47
54	3.54	26.82	0.35	0.08	21.64	110.66
55	3.62	27.54	0.36	0.17	21.20	110.83
56	3.68	28.43	0.36	0.08	20.60	110.98
57	3.75	29.51	0.37	0.08	19.93	111.17
58	3.81	30.22	0.37	0.08	19.52	111.30
59	3.90	29.60	0.38	0.08	20.11	111.37
60	3.94	28.43	0.38	0.08	21.12	111.38
61	4.02	25.48	0.39	0.08	23.85	111.30
62	4.10	23.25	0.32	0.08	24.01	109.60
63	4.14	21.82	0.31	0.08	25.12	109.14
64	4.20	20.30	0.33	0.08	27.59	109.43
65	4.30	18.96	0.35	0.17	30.33	109.87
66	4.34	18.60	0.36	0.08	31.01	109.92
67	4.41	17.88	0.36	0.08	32.04	109.77
68	4.47	16.63	0.35	0.08	34.06	109.55
69	4.54	18.06	0.35	0.08	31.69	109.75
70	4.60	19.49	0.36	0.08	29.70	110.00
71	4.68	21.55	0.37	0.00	27.30	110.40
72	4.73	22.17	0.37	0.00	26.59	110.47
73	4.80	22.98	0.37	0.00	25.79	110.62
74	4.86	23.43	0.37	0.00	25.31	110.67
75	4.93	23.25	0.38	0.08	25.74	110.82
76	5.00	23.07	0.38	0.08	26.03	110.86
77	5.08	23.07	0.38	0.00	25.95	110.80
78	5.14	23.07	0.37	0.00	25.79	110.68
79	5.20	23.07	0.36	0.00	25.53	110.50
80	5.28	23.69	0.36	0.00	24.70	110.43
81	5.35	24.59	0.36	0.00	23.81	110.52
82	5.39	26.38	0.36	0.00	22.25	110.73
83	5.45	28.34	0.36	0.00	20.76	110.99
84	5.53	29.95	0.37	0.00	19.73	111.24
85	5.58	31.38	0.38	0.00	18.96	111.51
86	5.66	32.01	0.40	0.08	19.04	111.97
87	5.73	31.92	0.43	0.08	19.72	112.48
88	5.79	31.65	0.45	0.08	20.46	112.90
89	5.84	30.94	0.47	0.08	21.33	113.13
90	5.93	29.60	0.49	0.08	22.68	113.28

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
91	5.98	29.24	0.49	0.08	23.02	113.29
92	6.07	30.31	0.46	0.08	21.67	112.98
93	6.12	31.74	0.46	0.08	20.47	112.95
94	6.17	33.44	0.45	0.08	19.32	113.04
95	6.24	34.87	0.46	0.08	18.59	113.26
96	6.32	37.37	0.46	0.08	17.27	113.47
97	6.37	37.73	0.47	0.08	17.17	113.57
98	6.43	37.11	0.48	0.08	17.70	113.70
99	6.52	34.33	0.53	0.08	20.21	114.24
100	6.57	32.28	0.59	0.08	22.62	114.85
101	6.63	31.56	0.67	0.08	24.53	115.73
102	6.72	30.31	0.52	0.08	22.84	113.82
103	6.76	28.88	0.43	0.08	21.92	112.22
104	6.83	25.84	0.46	0.08	25.39	112.55
105	6.92	23.34	0.47	0.17	28.18	112.43
106	6.98	22.80	0.47	0.17	28.80	112.37
107	7.02	22.89	0.47	0.17	28.70	112.38
108	7.10	20.83	0.50	0.17	32.07	112.61
109	7.17	21.46	0.57	0.17	32.87	113.62
110	7.23	19.49	0.61	0.17	36.66	113.85
111	7.29	17.26	0.58	0.17	39.93	113.23
112	7.36	15.83	0.54	0.17	41.64	112.44
113	7.42	15.11	0.49	0.17	41.74	111.61
114	7.52	16.45	0.46	0.17	38.03	111.35
115	7.57	19.31	0.45	0.17	32.87	111.60
116	7.62	23.07	0.44	0.17	27.71	111.88
117	7.72	28.79	0.44	0.25	22.26	112.38
118	7.76	31.92	0.47	0.25	20.80	113.27
119	7.82	33.26	0.57	0.25	21.73	114.74
120	7.90	32.37	0.75	0.25	25.22	116.60
121	7.95	31.65	0.74	0.25	25.68	116.48
122	8.02	30.49	0.69	0.25	25.82	115.89
123	8.07	28.97	0.67	0.17	26.81	115.57
124	8.16	29.68	0.64	0.17	25.59	115.24
125	8.21	33.71	0.63	0.33	22.34	115.41
126	8.27	43.10	0.61	0.33	16.96	115.87
127	8.35	63.39	0.59	0.33	10.48	116.58
128	8.41	73.14	0.57	0.41	8.50	116.69
129	8.47	76.45	0.55	0.41	7.73	116.41
130	8.54	76.45	0.52	0.41	7.50	116.01
131	8.60	75.64	0.55	0.41	7.92	116.39
132	8.67	71.35	0.53	0.41	8.50	116.04
133	8.74	67.60	0.55	0.41	9.42	116.20
134	8.80	64.38	0.57	0.41	10.27	116.32
135	8.90	60.80	0.62	0.41	11.66	116.82

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
136	8.95	58.21	0.65	0.41	12.62	117.04
137	8.99	56.69	0.68	0.41	13.40	117.35
138	9.07	54.90	0.69	0.41	14.02	117.33
139	9.14	54.09	0.66	0.41	14.00	117.00
140	9.20	53.83	0.73	0.41	14.87	117.72
141	9.29	53.83	0.79	0.41	15.52	118.28
142	9.33	54.00	0.81	0.41	15.68	118.45
143	9.40	54.63	0.84	0.41	15.83	118.76
144	9.47	54.59	0.85	0.33	15.94	118.80
145	9.53	54.54	0.83	0.25	15.87	118.69
146	9.59	55.97	0.81	0.08	15.29	118.58
147	9.65	56.60	0.75	0.08	14.51	118.01
148	9.72	57.49	0.68	0.08	13.59	117.34
149	9.78	57.04	0.69	0.00	13.88	117.45
150	9.85	56.51	0.71	0.00	14.29	117.65
151	9.92	56.51	0.75	0.00	14.71	118.01
152	9.98	57.22	0.78	0.00	14.82	118.30
153	10.04	57.67	0.80	0.00	14.93	118.52
154	10.11	60.17	0.86	0.00	14.86	119.19
155	10.19	61.96	0.92	0.00	14.95	119.76
156	10.24	62.86	0.97	0.00	15.13	120.15
157	10.31	64.82	1.01	0.00	15.00	120.53
158	10.42	68.04	1.07	-0.08	14.70	121.06
159	10.44	71.80	1.08	0.00	13.87	121.24
160	10.50	73.85	1.11	-0.08	13.66	121.50
161	10.56	75.82	1.12	0.00	13.35	121.64
162	10.64	75.46	1.11	0.00	13.46	121.61
163	10.70	74.75	1.10	0.00	13.53	121.48
164	10.77	73.59	1.06	0.00	13.56	121.20
165	10.84	72.69	1.06	0.00	13.74	121.12
166	10.90	71.71	1.05	0.00	13.96	121.06
167	10.96	71.89	1.07	0.00	14.12	121.22
168	11.04	74.21	0.84	0.00	11.82	119.47
169	11.10	76.80	0.70	0.00	10.23	118.29
170	11.18	82.26	0.74	0.00	9.62	118.80
171	11.22	85.30	0.75	0.00	9.26	119.01
172	11.30	87.80	0.77	0.00	9.08	119.30
173	11.36	91.47	0.79	0.00	8.70	119.56
174	11.42	91.56	0.81	-0.08	8.84	119.72
175	11.50	96.56	0.82	-0.08	8.27	119.96
176	11.56	100.32	0.83	-0.08	7.90	120.15
177	11.63	105.06	0.86	-0.08	7.57	120.54
178	11.69	109.98	0.91	-0.08	7.32	121.03
179	11.76	114.45	0.95	-0.08	7.10	121.42
180	11.82	117.40	0.98	-0.08	7.01	121.75

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
181	11.88	119.01	1.01	-0.08	7.02	121.98
182	11.95	120.97	1.04	-0.08	7.01	122.24
183	12.03	122.58	1.05	-0.08	6.95	122.37
184	12.08	123.39	1.05	-0.08	6.90	122.40
185	12.16	124.01	1.06	-0.08	6.88	122.43
186	12.22	124.10	1.07	-0.08	6.94	122.50
187	12.29	122.76	1.07	-0.08	7.12	122.51
188	12.35	121.15	1.08	-0.08	7.31	122.51
189	12.42	118.92	1.08	-0.08	7.55	122.46
190	12.49	118.92	1.07	-0.08	7.56	122.44
191	12.53	118.92	1.08	-0.08	7.60	122.47
192	12.60	118.92	1.09	-0.08	7.69	122.55
193	12.68	119.45	1.11	-0.08	7.78	122.72
194	12.73	120.17	1.13	-0.08	7.80	122.83
195	12.82	121.06	1.16	-0.08	7.89	123.05
196	12.87	121.60	1.18	-0.08	7.93	123.16
197	12.93	122.49	1.20	-0.08	7.99	123.34
198	13.00	123.57	1.23	-0.08	8.06	123.56
199	13.08	125.27	1.27	-0.08	8.08	123.79
200	13.14	127.50	1.28	-0.08	7.93	123.91
201	13.22	131.61	1.30	-0.08	7.64	124.08
202	13.26	133.49	1.30	-0.08	7.51	124.15
203	13.32	138.32	1.31	-0.08	7.15	124.30
204	13.43	148.96	1.04	-0.08	5.11	122.73
205	13.48	157.45	0.98	-0.08	4.32	122.48
206	13.52	161.21	1.01	-0.08	4.21	122.71
207	13.62	170.69	1.10	0.00	4.09	123.53
208	13.66	173.19	1.15	0.00	4.15	123.90
209	13.72	177.03	1.21	0.00	4.15	124.26
210	13.80	173.46	1.25	0.00	4.52	124.47
211	13.89	173.73	1.27	0.00	4.61	124.61
212	13.92	174.17	1.27	0.00	4.60	124.63
213	13.98	174.53	1.28	0.00	4.62	124.67
214	14.05	175.42	1.33	0.00	4.75	124.95
215	14.13	176.86	1.39	0.00	4.90	125.29
216	14.18	178.38	1.43	-0.08	4.98	125.54
217	14.25	183.83	1.50	-0.08	4.90	125.93
218	14.34	191.07	1.59	-0.08	4.83	126.48
219	14.38	197.33	1.65	-0.08	4.69	126.81
220	14.44	207.08	1.73	-0.08	4.47	127.30
221	14.52	211.37	1.87	-0.08	4.66	127.89
222	14.57	212.26	1.95	0.00	4.86	128.24
223	14.64	211.82	2.08	-0.08	5.24	128.69
224	14.71	209.94	2.17	-0.08	5.58	128.98
225	14.78	205.82	2.19	-0.08	5.86	128.99

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
226	14.83	201.62	2.17	-0.08	6.06	128.89
227	14.93	193.22	2.12	-0.08	6.42	128.61
228	14.97	189.64	2.10	-0.08	6.60	128.50
229	15.03	184.99	2.08	-0.08	6.82	128.34
230	15.10	178.11	2.04	-0.08	7.19	128.12
231	15.16	174.98	1.99	-0.08	7.28	127.91
232	15.24	170.33	1.98	-0.08	7.58	127.79
233	15.32	170.51	2.05	-0.08	7.81	128.04
234	15.36	172.56	2.10	-0.08	7.83	128.26
235	15.46	177.21	2.35	-0.08	8.27	129.15
236	15.50	176.94	2.45	-0.17	8.60	129.46
237	15.57	176.77	2.63	-0.17	9.13	129.97
238	15.62	176.86	2.73	-0.25	9.42	130.25
239	15.69	181.77	2.86	-0.25	9.39	130.64
240	15.76	189.19	2.73	-0.25	8.53	130.41
241	15.82	197.24	2.35	-0.41	7.02	129.42
242	15.91	206.36	2.43	-0.58	6.70	129.77
243	15.96	208.95	2.47	-0.39	6.66	129.91
244	16.02	214.68	2.49	-0.50	6.42	130.05
245	16.09	214.14	2.46	-0.36	6.39	129.96
246	16.16	209.40	2.43	-0.17	6.59	129.81
247	16.21	211.01	2.42	-0.17	6.49	129.80
248	16.30	208.69	2.51	-0.17	6.86	130.03
249	16.35	204.93	2.60	-0.17	7.33	130.26
250	16.44	198.67	2.73	-0.17	8.06	130.53
251	16.49	193.13	2.75	-0.17	8.49	130.51
252	16.55	185.80	2.75	-0.17	9.04	130.43
253	16.60	180.79	2.74	-0.17	9.41	130.33
254	16.67	173.46	2.72	-0.17	9.96	130.18
255	16.74	165.41	2.71	-0.17	10.62	130.02
256	16.80	163.09	2.69	-0.17	10.80	129.93
257	16.88	161.92	2.67	-0.17	10.89	129.88
258	16.93	160.31	2.67	-0.17	11.06	129.85
259	17.00	155.93	2.62	-0.25	11.33	129.63
260	17.08	151.46	2.57	-0.25	11.65	129.42
261	17.13	149.50	2.55	-0.25	11.81	129.33
262	17.20	146.46	2.52	-0.25	12.06	129.19
263	17.28	145.74	2.43	-0.25	11.88	128.93
264	17.33	146.55	2.39	-0.25	11.65	128.80
265	17.39	146.81	2.39	-0.33	11.64	128.81
266	17.48	145.65	2.39	-0.50	11.79	128.79
267	17.52	146.28	2.39	-0.50	11.74	128.80
268	17.59	151.82	2.37	-0.50	11.13	128.85
269	17.67	168.90	2.23	-0.41	9.12	128.65
270	17.72	173.01	2.15	-0.41	8.56	128.45

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
271	17.79	171.76	2.16	-0.41	8.71	128.47
272	17.87	172.21	2.23	-0.41	8.89	128.68
273	17.93	172.21	2.25	-0.41	8.98	128.76
274	17.98	172.65	2.26	-0.33	9.00	128.81
275	18.07	186.33	2.30	-0.33	8.09	129.11
276	18.12	187.85	2.34	-0.25	8.14	129.27
277	18.18	184.54	2.44	-0.25	8.67	129.53
278	18.25	193.04	2.65	-0.25	8.66	130.24
279	18.32	211.90	2.87	-0.25	7.99	131.04
280	18.40	221.92	3.00	-0.25	7.71	131.48
281	18.45	227.19	2.94	-0.25	7.30	131.41
282	18.52	238.55	2.90	-0.25	6.63	131.43
283	18.57	246.69	3.08	-0.25	6.60	131.93
284	18.64	258.58	3.24	-0.25	6.40	132.43
285	18.72	268.50	3.38	-0.28	6.24	132.83
286	18.77	267.52	3.49	-0.28	6.50	133.05
287	18.86	266.53	3.59	-0.28	6.75	133.25
288	18.91	273.51	3.61	-0.25	6.47	133.35
289	18.96	278.16	3.60	-0.25	6.28	133.38
290	19.06	282.18	3.62	-0.25	6.15	133.44
291	19.11	285.31	3.63	-0.25	6.06	133.50
292	19.18	287.19	3.69	-0.25	6.09	133.63
293	19.24	288.89	3.73	-0.25	6.10	133.72
294	19.30	290.85	3.72	-0.25	6.02	133.72
295	19.36	293.00	3.68	-0.25	5.88	133.67
296	19.45	293.81	3.62	-0.25	5.75	133.54
297	19.50	293.18	3.56	-0.25	5.68	133.41
298	19.58	291.12	3.46	-0.25	5.61	133.20
299	19.64	289.96	3.35	-0.25	5.46	132.95
300	19.69	289.07	3.28	-0.25	5.37	132.78
301	19.76	288.44	2.37	-0.25	3.63	130.40
302	19.84	287.01	1.53	-0.25	1.80	127.18
303	19.89	286.29	1.62	-0.25	2.06	127.62
304	19.95	284.33	1.75	-0.25	2.41	128.14
305	20.02	280.84	1.87	-0.25	2.80	128.59
306	20.08	267.61	1.97	-0.33	3.49	128.85
307	20.14	262.06	2.02	-0.33	3.81	128.98
308	20.21	263.85	2.09	-0.33	3.93	129.25
309	20.28	265.02	2.20	-0.41	4.15	129.64
310	20.37	265.46	2.36	-0.41	4.52	130.17
311	20.43	264.93	2.55	-0.41	4.98	130.74
312	20.49	263.14	2.32	-0.41	4.55	130.03
313	20.55	259.56	2.16	-0.50	4.31	129.46
314	20.61	253.03	2.15	-0.50	4.57	129.38
315	20.68	248.83	2.12	-0.50	4.68	129.23

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
316	20.74	236.76	2.10	-0.50	5.18	129.04
317	20.80	202.07	2.08	-0.52	7.00	128.59
318	20.87	205.11	2.03	-0.52	6.68	128.45
319	20.94	197.51	1.92	-0.52	6.79	127.92
320	21.01	185.35	1.86	-0.51	7.41	127.53
321	21.06	172.65	1.87	-0.51	8.41	127.40
322	21.15	150.93	1.90	-0.50	10.49	127.19
323	21.21	135.37	1.93	-0.50	12.38	127.05
324	21.27	121.87	1.95	-0.50	14.33	126.87
325	21.34	115.88	1.93	-0.58	15.20	126.68
326	21.41	110.24	1.91	-0.58	16.09	126.49
327	21.46	102.47	1.93	-0.58	17.65	126.38
328	21.53	89.68	1.92	-0.58	20.47	126.01
329	21.60	83.69	1.97	-0.58	22.36	126.02
330	21.68	73.59	1.98	-0.58	25.63	125.74
331	21.74	66.61	1.96	-0.58	28.18	125.43
332	21.79	61.34	1.94	-0.58	30.40	125.17
333	21.86	57.31	1.91	-0.58	32.21	124.89
334	21.93	54.90	1.87	-0.58	33.24	124.63
335	21.98	52.84	1.82	-0.74	34.05	124.34
336	22.08	50.52	1.76	-0.83	35.01	123.97
337	22.14	49.62	1.67	-0.83	34.84	123.54
338	22.20	48.82	1.57	-0.91	34.47	123.04
339	22.26	49.36	1.48	-0.99	33.32	122.63
340	22.34	52.22	1.42	-1.16	31.12	122.46
341	22.38	53.47	1.41	-1.24	30.39	122.48
342	22.44	55.26	1.43	-1.24	29.68	122.67
343	22.53	56.60	1.42	-1.24	29.01	122.70
344	22.58	57.04	1.42	-0.99	28.80	122.71
345	22.64	57.40	1.42	-0.91	28.62	122.70
346	22.72	57.22	1.41	-0.74	28.73	122.68
347	22.77	51.32	1.39	-0.77	31.70	122.30
348	22.85	76.80	1.37	-0.77	21.01	123.19
349	22.91	101.75	1.37	-0.77	15.13	123.85
350	22.99	136.26	1.40	-0.66	10.34	124.73
351	23.05	145.20	1.45	-0.66	9.61	125.12
352	23.10	147.62	1.53	-0.66	9.73	125.54
353	23.18	146.28	1.68	-0.74	10.58	126.22
354	23.24	139.93	1.78	-0.74	11.76	126.55
355	23.31	131.26	1.94	-0.74	13.57	127.02
356	23.38	121.51	2.04	-0.74	15.46	127.18
357	23.44	121.38	2.03	-0.74	15.47	127.16
358	23.51	121.24	1.99	-0.74	15.33	127.01
359	23.57	127.05	1.93	-0.83	14.20	126.90
360	23.63	134.65	1.89	-0.91	13.00	126.89

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
361	23.69	151.02	1.86	-0.91	10.96	127.04
362	23.77	157.54	1.76	-0.91	9.94	126.77
363	23.84	157.99	1.46	-0.91	8.61	125.37
364	23.89	153.16	1.23	-0.91	7.98	124.05
365	23.98	141.45	1.04	-0.83	8.10	122.64
366	24.03	131.08	1.00	-0.83	8.91	122.13
367	24.11	115.25	0.97	-0.83	10.67	121.60
368	24.17	104.07	1.03	-0.83	12.81	121.80
369	24.24	89.59	1.14	-0.83	16.45	122.18
370	24.31	77.25	1.27	-0.83	20.72	122.64
371	24.36	71.80	1.33	-0.83	22.96	122.79
372	24.43	62.59	1.38	-0.74	26.93	122.71
373	24.48	58.21	1.45	-0.74	29.60	122.89
374	24.56	51.95	1.58	-0.74	34.25	123.25
375	24.62	54.36	1.38	-0.66	31.04	122.38
376	24.68	71.17	1.10	-0.66	21.28	121.36
377	24.77	86.46	1.15	-0.91	17.49	122.19
378	24.82	95.22	1.17	-0.83	15.69	122.53
379	24.88	105.68	1.17	-0.91	13.72	122.76
380	24.94	109.71	1.14	-0.81	12.88	122.68
381	25.02	107.83	1.07	-0.81	12.71	122.15
382	25.07	107.11	1.02	-0.81	12.55	121.85
383	25.14	100.41	1.01	-0.74	13.63	121.61
384	25.20	94.42	1.03	-0.74	14.90	121.57
385	25.27	88.16	1.05	-0.74	16.42	121.54
386	25.33	81.81	1.06	-0.74	18.05	121.41
387	25.42	74.39	1.06	-0.74	20.19	121.18
388	25.47	71.26	1.05	-0.74	21.18	121.06
389	25.53	67.42	1.06	-0.74	22.56	120.95
390	25.61	63.21	1.10	-0.74	24.59	121.05
391	25.66	59.82	1.14	-0.74	26.52	121.20
392	25.72	56.15	1.20	-0.83	28.93	121.43
393	25.80	51.77	1.27	-0.83	32.11	121.65
394	25.86	49.62	1.33	-0.83	34.10	121.88
395	25.93	45.69	1.43	-0.99	37.89	122.19
396	26.00	42.29	1.49	-0.99	41.29	122.30
397	26.06	40.68	1.52	-1.16	43.09	122.36
398	26.12	39.16	1.54	-1.40	44.85	122.38
399	26.21	37.28	1.54	-1.57	46.77	122.23
400	26.26	37.28	1.53	-1.57	46.69	122.18
401	26.31	37.73	1.50	-1.57	45.94	122.07
402	26.41	39.97	1.43	-1.57	43.06	121.88
403	26.46	42.11	1.39	-1.65	40.79	121.83
404	26.51	43.72	1.36	-1.65	39.09	121.73
405	26.61	46.49	1.31	-1.73	36.47	121.59

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
406	26.65	50.34	1.28	-1.82	33.63	121.63
407	26.72	53.92	1.27	-1.98	31.45	121.75
408	26.79	57.13	1.27	-1.82	29.80	121.91
409	26.86	60.71	1.29	-1.90	28.30	122.17
410	26.90	62.32	1.33	-1.82	27.92	122.44
411	26.99	68.67	1.38	-1.65	25.78	122.96
412	27.04	74.03	1.40	-1.65	23.98	123.22
413	27.10	78.50	1.40	-1.65	22.51	123.35
414	27.20	86.91	1.39	-1.65	20.07	123.55
415	27.24	91.29	1.20	-1.65	17.61	122.62
416	27.31	95.40	0.85	-1.57	13.86	120.18
417	27.39	98.26	0.85	-1.49	13.33	120.24
418	27.43	100.05	0.85	-1.32	13.05	120.31
419	27.50	101.84	0.86	-1.32	12.81	120.41
420	27.56	100.32	0.87	-1.06	13.22	120.51
421	27.64	97.19	0.91	-1.06	14.12	120.72
422	27.70	100.59	0.94	-1.06	13.81	121.09
423	27.76	100.50	0.99	-0.74	14.19	121.42
424	27.84	98.98	1.05	-0.74	15.02	121.85
425	27.89	97.28	1.09	-0.74	15.69	122.09
426	27.96	94.42	1.12	-0.74	16.50	122.17
427	28.03	89.41	1.12	-0.74	17.70	122.07
428	28.08	84.67	1.13	-0.74	18.94	121.97
429	28.16	79.49	1.14	-0.74	20.55	121.93
430	28.23	72.24	1.18	-0.74	23.27	121.95
431	28.30	66.08	1.25	-0.74	26.28	122.14
432	28.35	59.01	1.31	-0.74	30.11	122.22
433	28.45	45.96	1.37	-0.74	38.88	121.94
434	28.49	39.88	1.38	-0.74	44.23	121.64
435	28.55	34.96	1.35	-0.74	48.94	121.15
436	28.62	29.77	1.29	-0.74	54.70	120.44
437	28.70	26.56	1.24	-0.74	58.86	119.83
438	28.74	25.66	1.20	-0.74	59.90	119.54
439	28.84	24.23	1.09	-0.74	60.80	118.71
440	28.89	24.28	1.06	-0.74	60.15	118.48
441	28.95	24.28	1.02	-0.74	59.51	118.21
442	29.01	24.32	0.97	-0.74	58.46	117.80
443	29.09	24.14	0.76	-0.74	54.66	116.01
444	29.14	24.23	0.49	-0.66	47.91	112.87
445	29.23	27.81	0.59	-0.66	45.26	114.50
446	29.28	30.67	0.66	-0.66	43.14	115.55
447	29.34	39.88	0.75	-0.66	35.64	117.15
448	29.42	40.95	0.89	-0.33	37.16	118.49
449	29.47	46.23	0.97	0.00	34.23	119.36
450	29.55	50.25	1.10	0.00	33.40	120.55

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
451	29.61	49.09	1.18	0.00	35.08	120.96
452	29.66	46.40	1.24	0.00	37.74	121.18
453	29.76	36.93	0.99	0.00	42.61	118.97
454	29.82	31.38	0.90	0.00	47.51	117.93
455	29.87	27.00	0.89	0.00	53.28	117.46
456	29.92	23.60	0.84	0.00	58.16	116.73
457	30.01	20.30	0.74	0.00	62.66	115.37
458	30.06	18.06	0.67	-0.06	66.60	114.39
459	30.13	18.06	0.62	-0.06	65.26	113.84
460	30.20	18.87	0.62	-0.07	63.14	113.91
461	30.27	20.74	0.69	-0.08	60.65	114.91
462	30.33	23.87	0.77	-0.08	56.54	116.14
463	30.41	30.49	0.86	-0.08	48.23	117.47
464	30.45	34.42	0.88	0.00	44.02	117.95
465	30.52	42.11	0.92	0.00	37.32	118.77
466	30.59	48.10	0.97	0.00	33.65	119.48
467	30.65	52.48	0.99	0.00	31.23	119.86
468	30.73	57.85	0.99	-0.08	28.41	120.12
469	30.79	60.08	0.99	-0.08	27.27	120.16
470	30.87	61.43	0.97	-0.08	26.51	120.10
471	30.92	60.53	0.97	-0.08	26.99	120.09
472	30.98	59.37	0.99	-0.08	27.74	120.15
473	31.04	57.58	1.03	-0.08	29.15	120.38
474	31.12	53.20	1.10	-0.08	32.45	120.67
475	31.19	48.91	1.27	-0.08	37.29	121.52
476	31.24	45.60	1.31	-0.08	40.28	121.57
477	31.32	39.16	1.30	-0.17	45.98	121.15
478	31.37	35.23	1.29	-0.08	49.95	120.85
479	31.45	38.80	1.28	-0.08	46.15	121.01
480	31.50	32.64	1.29	-0.08	52.98	120.61
481	31.57	38.45	1.33	-0.08	47.15	121.25
482	31.64	45.78	1.40	0.00	41.43	122.05
483	31.69	46.49	1.50	-0.08	42.00	122.59
484	31.77	36.57	1.53	-0.08	51.60	122.16
485	31.83	32.19	1.50	-0.08	56.63	121.73
486	31.91	26.02	1.41	-0.08	65.14	120.75
487	31.99	23.52	1.40	-0.08	69.98	120.44
488	32.04	23.34	1.42	-0.08	70.66	120.50
489	32.09	27.18	1.42	-0.08	63.27	120.87
490	32.17	52.04	1.39	-0.08	37.05	122.30
491	32.24	67.51	1.41	-0.08	29.04	123.08
492	32.30	75.64	1.52	-0.08	26.70	123.88
493	32.38	82.62	1.58	-0.08	24.79	124.38
494	32.42	84.32	1.55	-0.08	24.08	124.31
495	32.48	85.48	1.42	-0.08	22.71	123.67

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
496	32.55	84.40	1.27	-0.08	21.88	122.85
497	32.62	84.49	1.22	-0.08	21.43	122.54
498	32.68	84.14	1.23	-0.12	21.64	122.58
499	32.77	111.50	1.25	-0.12	15.57	123.42
500	32.81	117.75	1.24	-0.12	14.43	123.49
501	32.88	120.44	1.21	-0.17	13.81	123.36
502	32.94	119.54	1.17	-0.17	13.70	123.10
503	33.01	117.22	1.14	-0.17	13.90	122.87
504	33.12	110.69	1.12	-0.17	14.87	122.59
505	33.14	107.92	1.13	-0.17	15.44	122.57
506	33.22	101.48	1.13	-0.17	16.78	122.46
507	33.27	95.94	1.09	-0.17	17.68	122.06
508	33.35	89.14	1.08	-0.17	19.20	121.76
509	33.41	83.42	1.32	-0.17	22.96	123.12
510	33.48	69.29	1.50	-0.19	29.66	123.58
511	33.55	59.73	1.65	-0.19	35.79	123.93
512	33.61	54.36	1.79	-0.22	40.43	124.29
513	33.70	52.22	1.94	-0.22	43.32	124.76
514	33.73	51.41	1.93	-0.25	43.84	124.69
515	33.81	50.96	1.89	-0.25	43.92	124.53
516	33.86	54.99	1.85	-0.25	40.63	124.53
517	33.95	67.51	1.77	-0.25	33.00	124.74
518	34.01	77.79	1.71	-0.25	28.18	124.81
519	34.06	84.76	1.62	-0.25	25.13	124.64
520	34.16	91.38	1.49	-0.25	22.24	124.21
521	34.20	93.79	1.43	-0.25	21.16	123.96
522	34.26	94.69	1.27	-0.25	19.75	123.13
523	34.34	94.95	1.21	-0.25	19.20	122.76
524	34.40	95.13	1.24	-0.25	19.45	122.97
525	34.46	93.97	1.32	-0.25	20.38	123.39
526	34.55	90.39	1.54	-0.25	23.06	124.44
527	34.60	83.96	1.71	-0.25	26.27	125.00
528	34.66	75.28	1.88	-0.25	30.72	125.42
529	34.72	67.86	1.93	-0.25	34.50	125.38
530	34.78	60.89	1.93	-0.25	38.21	125.09
531	34.86	52.57	1.93	-0.25	43.71	124.73
532	34.94	52.40	1.90	-0.25	43.68	124.63
533	35.00	52.40	1.49	-0.25	39.69	122.84
534	35.04	52.22	1.14	-0.25	35.84	120.88
535	35.11	64.73	1.15	-0.25	29.08	121.46
536	35.18	71.53	1.14	-0.25	26.17	121.67
537	35.28	79.22	1.14	-0.25	23.35	121.86
538	35.32	78.24	1.14	-0.25	23.72	121.85
539	35.39	82.62	1.13	-0.25	22.26	121.92
540	35.44	87.71	1.11	-0.25	20.63	121.95

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
541	35.50	88.70	1.11	-0.25	20.35	121.95
542	35.59	86.46	1.14	-0.25	21.33	122.13
543	35.65	82.79	1.19	-0.25	22.87	122.32
544	35.72	76.89	1.32	-0.25	26.06	122.90
545	35.77	71.35	1.41	-0.33	29.05	123.18
546	35.85	56.69	1.54	-0.33	37.89	123.28
547	35.90	48.73	1.62	-0.33	44.29	123.27
548	35.99	38.45	1.66	-0.33	53.98	122.89
549	36.04	31.56	1.63	-0.33	62.27	122.26
550	36.09	28.25	1.56	-0.33	66.67	121.67
551	36.16	26.11	1.51	-0.33	70.04	121.26
552	36.24	24.05	1.47	-0.33	73.74	120.85
553	36.29	22.71	1.44	-0.33	76.33	120.54
554	36.37	22.00	1.42	-0.33	77.86	120.37
555	36.43	24.86	1.39	-0.25	70.94	120.51
556	36.50	31.47	1.32	-0.25	58.67	120.69
557	36.57	41.58	1.30	-0.17	47.16	121.30
558	36.63	50.52	1.33	-0.17	40.29	121.93
559	36.68	64.20	1.36	-0.17	32.32	122.68
560	36.77	78.68	1.37	-0.17	26.28	123.21
561	36.82	91.11	1.36	-0.17	22.33	123.55
562	36.88	100.59	1.35	-0.17	19.79	123.70
563	36.95	106.40	1.29	-0.17	18.10	123.53
564	37.01	109.98	1.28	-0.17	17.29	123.54
565	37.08	111.41	1.28	-0.17	17.01	123.55
566	37.14	110.07	1.29	-0.17	17.41	123.61
567	37.22	104.34	1.34	-0.17	19.00	123.76
568	37.30	93.88	1.46	-0.17	22.46	124.10
569	37.35	86.55	1.50	-0.17	24.99	124.13
570	37.41	74.03	1.56	-0.25	30.04	124.03
571	37.47	59.28	1.61	-0.25	37.88	123.70
572	37.56	42.56	1.61	-0.25	50.33	122.92
573	37.61	34.42	1.59	-0.25	59.01	122.30
574	37.67	28.61	1.55	-0.25	67.16	121.65
575	37.76	25.84	1.45	-0.25	70.89	120.90
576	37.81	25.30	1.34	-0.25	70.47	120.31
577	37.87	23.96	1.09	-0.25	69.01	118.63
578	37.95	22.35	0.83	-0.25	67.41	116.52
579	38.00	20.21	0.79	-0.25	71.52	115.85
580	38.06	18.78	0.74	-0.25	74.20	115.19
581	38.13	17.97	0.69	-0.25	75.49	114.65
582	38.20	18.55	0.70	-0.26	73.92	114.77
583	38.26	18.33	0.72	-0.26	75.17	114.94
584	38.35	19.13	0.83	-0.26	75.84	116.11
585	38.40	20.56	0.91	-0.25	73.77	116.94

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
586	38.47	22.62	1.04	-0.25	71.58	118.18
587	38.53	23.96	1.14	-0.25	70.47	118.98
588	38.61	23.43	1.21	-0.25	72.97	119.37
589	38.65	23.25	1.24	-0.25	73.85	119.51
590	38.74	22.62	1.33	-0.25	76.98	119.97
591	38.80	22.80	1.41	-0.25	77.88	120.42
592	38.85	22.62	1.44	-0.25	78.89	120.57
593	38.92	22.89	1.47	-0.17	78.70	120.73
594	38.99	23.78	1.49	-0.17	76.87	120.90
595	39.05	24.50	1.49	-0.17	75.39	121.00
596	39.12	25.12	1.49	-0.17	74.03	121.04
597	39.18	25.57	1.28	-0.17	69.94	119.96
598	39.24	25.75	0.59	-0.17	55.72	114.28
599	39.33	25.75	0.83	-0.17	61.45	116.79
600	39.38	25.48	0.88	-0.17	63.06	117.21
601	39.44	24.68	0.90	-0.17	65.14	117.33
602	39.52	19.31	0.83	-0.11	76.42	116.16
603	39.58	20.12	0.81	-0.08	73.67	116.06
604	39.65	19.31	0.83	-0.08	76.48	116.14
605	39.71	17.53	0.81	-0.08	81.47	115.69
606	39.80	19.27	0.58	-0.08	69.74	113.50
607	39.83	17.26	0.53	0.00	73.80	112.50
608	39.91	19.22	0.68	0.00	72.81	114.61
609	39.97	18.69	0.75	0.00	76.55	115.34
610	40.04	20.30	0.83	0.00	74.09	116.28
611	40.10	20.43	0.89	0.00	75.25	116.82
612	40.18	20.92	1.00	0.08	76.27	117.67
613	40.23	20.56	1.07	0.08	78.70	118.12
614	40.30	20.74	1.16	0.08	80.07	118.75
615	40.38	21.91	1.22	0.17	78.13	119.24
616	40.43	22.71	1.24	0.17	76.51	119.44
617	40.50	23.87	1.30	0.17	75.00	119.95
618	40.59	25.21	1.37	0.17	73.19	120.44
619	40.64	25.75	1.41	0.17	72.81	120.73
620	40.69	26.29	1.48	0.17	72.74	121.12
621	40.78	27.63	1.67	0.17	72.72	122.10
622	40.83	29.06	1.70	0.17	70.54	122.35
623	40.89	32.28	1.66	0.17	65.01	122.47
624	40.97	40.06	1.60	0.17	54.61	122.69
625	41.02	49.27	1.56	0.17	46.05	123.01
626	41.08	60.62	1.57	0.25	38.69	123.58
627	41.16	79.93	1.30	0.25	27.04	122.90
628	41.22	88.87	1.01	0.25	21.39	121.31
629	41.28	93.97	1.18	0.25	21.56	122.56
630	41.38	97.91	1.35	0.25	21.95	123.65

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
631	41.43	98.53	1.44	0.25	22.52	124.14
632	41.48	98.58	1.53	0.25	23.16	124.56
633	41.54	100.23	1.65	0.25	23.67	125.19
634	41.64	98.62	1.79	0.25	25.11	125.74
635	41.69	100.19	1.87	0.25	25.21	126.09
636	41.73	97.99	1.93	0.25	26.27	126.28
637	41.82	100.14	2.07	0.25	26.56	126.84
638	41.88	101.48	2.19	0.25	26.89	127.27
639	41.93	101.66	2.35	0.25	27.81	127.79
640	42.02	100.23	2.57	0.17	29.53	128.42
641	42.07	97.73	2.65	0.17	30.79	128.59
642	42.13	90.93	2.69	0.17	33.36	128.52
643	42.22	84.94	2.75	0.17	36.05	128.50
644	42.26	83.96	2.79	0.25	36.71	128.57
645	42.33	85.75	2.92	0.33	36.76	128.97
646	42.39	93.43	3.02	0.33	34.39	129.44
647	42.46	101.21	3.08	0.33	32.07	129.77
648	42.52	108.46	2.99	0.33	29.46	129.72
649	42.61	117.84	2.89	0.33	26.53	129.66
650	42.65	126.87	2.82	0.33	24.15	129.66
651	42.72	138.23	2.70	0.33	21.40	129.55
652	42.81	161.66	2.55	0.33	17.12	129.53
653	42.87	166.75	2.45	0.33	16.06	129.31
654	42.92	167.47	2.31	0.33	15.41	128.89
655	43.00	168.63	2.11	0.33	14.44	128.24
656	43.07	167.47	2.05	0.33	14.34	128.02
657	43.12	165.95	2.04	0.33	14.50	127.97
658	43.21	163.44	2.04	0.33	14.83	127.93
659	43.26	161.57	2.04	0.33	15.06	127.89
660	43.31	158.97	2.03	0.33	15.39	127.83
661	43.40	157.18	2.05	0.33	15.72	127.86
662	43.44	156.20	2.06	0.33	15.92	127.88
663	43.51	155.84	2.08	0.33	16.06	127.94
664	43.58	154.86	2.09	0.33	16.25	127.95
665	43.66	153.88	2.09	0.33	16.41	127.94
666	43.70	153.25	2.07	0.41	16.45	127.88
667	43.80	152.45	1.95	0.41	15.99	127.41
668	43.85	152.45	1.97	0.41	16.12	127.50
669	43.90	153.07	2.00	0.33	16.20	127.62
670	43.99	154.50	2.08	0.41	16.38	127.92
671	44.05	156.02	2.13	0.33	16.41	128.12
672	44.10	151.64	2.18	0.41	17.27	128.21
673	44.16	158.88	2.26	0.50	16.62	128.59
674	44.23	162.46	2.34	0.50	16.52	128.91
675	44.30	164.87	2.43	0.50	16.57	129.21

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
676	44.38	167.74	2.57	0.50	16.77	129.66
677	44.45	170.33	2.67	0.50	16.85	129.98
678	44.49	171.85	2.70	0.50	16.79	130.09
679	44.57	175.16	2.75	0.50	16.57	130.27
680	44.64	177.21	2.78	0.50	16.46	130.38
681	44.69	178.29	2.79	0.50	16.38	130.43
682	44.75	182.22	2.80	0.58	15.93	130.49
683	44.82	186.51	2.78	0.50	15.40	130.50
684	44.88	190.89	2.76	0.58	14.86	130.51
685	44.95	198.14	2.73	0.50	14.03	130.53
686	45.03	205.11	2.73	0.58	13.38	130.61
687	45.09	208.69	2.79	0.58	13.23	130.79
688	45.15	210.30	2.82	0.58	13.20	130.90
689	45.23	209.76	2.75	0.58	13.04	130.71
690	45.30	205.29	2.71	0.58	13.32	130.54
691	45.38	201.80	2.64	0.58	13.45	130.31
692	45.41	198.40	2.61	0.58	13.68	130.19
693	45.48	189.64	2.52	0.58	14.28	129.82
694	45.56	191.16	2.37	0.58	13.58	129.40
695	45.63	190.45	2.26	0.58	13.25	129.04
696	45.67	190.18	2.24	0.58	13.20	128.96
697	45.78	191.70	2.23	0.58	13.06	128.98
698	45.80	191.97	2.23	0.66	13.03	128.98
699	45.88	191.25	2.25	0.66	13.18	129.02
700	45.95	179.36	2.28	0.66	14.59	128.95
701	46.01	180.97	2.28	0.66	14.44	128.99
702	46.09	174.44	2.31	0.74	15.33	128.99
703	46.15	164.07	2.37	0.66	16.92	129.03
704	46.21	149.94	2.49	0.66	19.54	129.16
705	46.28	134.56	2.64	0.66	23.02	129.34
706	46.35	113.55	2.77	0.66	28.52	129.26
707	46.40	108.19	2.88	0.66	30.62	129.43
708	46.48	87.44	3.18	0.66	39.52	129.63
709	46.53	82.35	3.29	0.66	42.12	129.74
710	46.60	73.50	3.14	0.66	45.46	129.13
711	46.68	67.77	2.87	0.66	46.99	128.28
712	46.74	63.75	2.74	0.66	48.56	127.79
713	46.79	63.62	2.72	0.74	48.48	127.71
714	46.90	63.48	2.62	0.83	47.97	127.43
715	46.93	73.94	2.60	0.74	42.32	127.75
716	46.99	123.75	2.71	0.91	25.93	129.33
717	47.08	175.78	2.91	0.91	17.74	130.70
718	47.13	210.21	2.99	0.91	14.18	131.33
719	47.18	237.66	3.06	0.91	12.03	131.79
720	47.27	256.61	3.19	0.91	11.03	132.29

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
721	47.33	261.35	3.23	0.91	10.81	132.42
722	47.38	263.94	3.31	0.91	10.86	132.62
723	47.47	263.32	3.48	0.91	11.35	132.99
724	47.53	261.97	3.57	0.91	11.69	133.17
725	47.58	260.81	3.61	0.91	11.87	133.24
726	47.64	256.79	3.64	0.91	12.24	133.26
727	47.71	255.00	3.68	0.91	12.47	133.31
728	47.77	256.79	3.70	0.91	12.42	133.38
729	47.86	254.73	3.75	0.91	12.70	133.46
730	47.90	256.79	3.77	0.91	12.62	133.52
731	47.99	258.31	3.80	0.91	12.59	133.59
732	48.06	258.22	3.81	0.91	12.62	133.60
733	48.11	257.24	3.81	0.91	12.72	133.60
734	48.18	254.91	3.84	0.91	12.97	133.63
735	48.23	253.66	3.88	0.99	13.17	133.69
736	48.32	251.78	3.93	0.99	13.45	133.76
737	48.38	250.71	3.93	0.99	13.55	133.76
738	48.45	249.73	3.95	0.99	13.70	133.79
739	48.51	249.01	3.96	0.99	13.78	133.79
740	48.57	247.13	3.94	0.99	13.90	133.75
741	48.65	241.32	3.81	0.99	14.06	133.44
742	48.71	235.96	3.69	0.99	14.22	133.15
743	48.76	200.46	3.59	1.07	17.45	132.56
744	48.83	221.74	3.43	1.07	14.80	132.47
745	48.93	219.15	3.22	1.07	14.45	131.98
746	48.98	217.98	3.18	1.07	14.45	131.88
747	49.02	217.27	3.16	1.16	14.46	131.82
748	49.12	217.94	3.14	1.16	14.35	131.77
749	49.16	216.82	3.13	1.16	14.44	131.74
750	49.22	217.90	3.13	1.16	14.35	131.75
751	49.30	217.63	3.15	1.16	14.45	131.80
752	49.36	216.91	3.17	1.16	14.58	131.82
753	49.41	215.48	3.14	1.16	14.66	131.75
754	49.48	213.07	3.12	1.16	14.83	131.67
755	49.54	211.28	3.09	1.16	14.95	131.59
756	49.62	209.04	3.04	1.16	15.02	131.44
757	49.71	205.47	3.06	1.16	15.45	131.43
758	49.75	204.30	2.93	1.07	15.16	131.11
759	49.80	201.09	2.40	1.07	13.62	129.61
760	49.89	194.92	2.43	1.07	14.41	129.64
761	49.95	191.52	2.45	1.07	14.85	129.65
762	50.01	187.67	2.45	1.16	15.29	129.60
763	50.09	177.75	2.43	1.16	16.41	129.41
764	50.15	174.08	2.46	0.17	17.01	129.44
765	50.22	178.82	2.56	0.17	16.85	129.81

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
766	50.26	182.94	2.69	0.08	16.85	130.22
767	50.35	196.79	3.02	0.00	16.42	131.24
768	50.41	207.79	3.34	0.00	16.28	132.12
769	50.46	221.92	3.55	0.00	15.48	132.71
770	50.53	237.12	3.55	0.00	14.12	132.87
771	50.60	258.49	3.48	0.00	12.28	132.95
772	50.67	272.79	3.58	0.00	11.54	133.28
773	50.73	282.09	3.59	0.00	10.97	133.38
774	50.79	272.84	3.54	-0.08	11.45	133.19
775	50.88	273.96	3.36	-0.08	10.96	132.84
776	50.93	272.88	3.26	-0.08	10.79	132.61
777	51.00	265.91	3.16	-0.17	11.00	132.32
778	51.06	255.81	3.07	-0.17	11.45	132.00
779	51.12	247.22	3.03	-0.17	11.99	131.83
780	51.19	231.31	3.06	-0.17	13.35	131.73
781	51.25	211.90	3.03	-0.17	15.06	131.45
782	51.33	191.52	3.19	-0.17	17.87	131.58
783	51.39	168.63	3.38	-0.17	21.70	131.70
784	51.47	143.59	3.64	-0.25	27.21	131.84
785	51.53	125.80	3.71	-0.25	31.69	131.66
786	51.58	107.38	3.74	-0.25	37.25	131.32
787	51.64	86.19	3.67	-0.25	44.46	130.66
788	51.72	75.91	3.59	-0.33	48.83	130.19
789	51.78	72.87	3.58	-0.33	50.38	130.06
790	51.84	70.46	3.60	-0.41	51.86	130.03
791	51.93	68.40	3.68	-0.50	53.47	130.10
792	51.98	68.40	3.54	-0.50	52.78	129.82
793	52.06	68.40	3.12	-0.50	50.56	128.90
794	52.11	68.40	2.96	-0.50	49.67	128.52
795	52.17	69.83	2.98	-0.50	48.99	128.61
796	52.24	71.89	2.97	-0.50	47.88	128.67
797	52.31	73.41	3.07	-0.54	47.64	128.95
798	52.38	76.89	3.42	-0.54	47.75	129.85
799	52.45	83.96	3.83	-0.54	46.42	130.89
800	52.52	80.38	3.94	-0.58	48.59	131.00
801	52.58	73.50	3.87	-0.58	51.82	130.66
802	52.65	62.05	3.32	-0.58	55.95	129.12
803	52.72	53.02	2.82	-0.58	59.67	127.54
804	52.76	48.19	2.64	-0.58	62.74	126.82
805	52.82	46.23	2.41	-0.58	62.90	126.06
806	52.91	46.58	2.23	-0.58	61.06	125.50
807	52.97	46.94	2.28	-0.50	61.19	125.69
808	53.02	50.79	2.35	-0.50	58.25	126.10
809	53.09	60.17	2.36	-0.50	51.29	126.56
810	53.17	76.89	2.40	-0.50	42.42	127.28

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
811	53.22	95.85	2.48	-0.50	35.56	128.04
812	53.29	106.76	2.59	-0.50	32.46	128.62
813	53.37	117.04	2.68	-0.50	29.97	129.11
814	53.42	122.58	2.65	-0.58	28.33	129.12
815	53.50	125.98	2.56	-0.58	27.04	128.93
816	53.55	129.65	2.49	-0.58	25.85	128.82
817	53.62	132.60	2.39	-0.58	24.67	128.56
818	53.70	133.31	2.35	-0.58	24.35	128.46
819	53.74	131.61	2.34	-0.58	24.69	128.40
820	53.81	128.57	2.39	-0.58	25.68	128.51
821	53.91	123.21	2.51	-0.66	27.62	128.74
822	53.94	117.67	2.55	-0.66	29.33	128.76
823	54.01	109.89	2.71	-0.66	32.49	129.04
824	54.09	91.29	3.05	-0.66	40.46	129.44
825	54.16	80.65	3.11	-0.66	45.14	129.28
826	54.21	72.69	3.14	-0.66	49.21	129.09
827	54.29	67.77	3.14	-0.66	52.03	128.93
828	54.34	68.76	3.11	-0.66	51.30	128.90
829	54.45	77.43	2.95	-0.66	45.88	128.79
830	54.50	93.08	2.79	-0.66	38.64	128.83
831	54.56	109.35	2.72	-0.66	32.95	129.05
832	54.59	117.49	2.70	-0.66	30.40	129.15
833	54.69	137.69	2.70	-0.66	25.53	129.56
834	54.73	141.54	2.56	-0.66	24.07	129.24
835	54.79	143.51	2.16	-0.66	21.69	128.03
836	54.86	143.95	2.16	-0.66	21.59	128.01
837	54.94	145.29	2.18	-0.66	21.50	128.12
838	55.01	145.74	2.29	-0.69	22.02	128.50
839	55.07	146.28	2.45	-0.72	22.70	128.98
840	55.13	147.26	2.62	-0.72	23.36	129.49
841	55.18	155.75	2.77	-0.72	22.50	130.03
842	55.26	168.27	2.95	-0.74	21.22	130.68
843	55.33	187.14	3.03	-0.74	18.86	131.14
844	55.40	206.00	3.13	-0.74	16.96	131.61
845	55.46	219.33	3.21	-0.74	15.84	131.95
846	55.52	232.65	3.28	-0.74	14.80	132.26
847	55.60	249.73	3.29	-0.74	13.37	132.44
848	55.66	255.00	3.27	-0.74	12.93	132.46
849	55.73	262.24	3.25	-0.74	12.33	132.48
850	55.81	265.46	3.23	-0.74	12.08	132.47
851	55.86	268.14	3.25	-0.74	11.93	132.53
852	55.91	268.95	3.27	-0.74	11.94	132.58
853	56.02	269.75	3.25	-0.74	11.85	132.54
854	56.07	269.75	3.23	-0.74	11.82	132.51
855	56.12	268.77	3.21	-0.74	11.83	132.45

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
856	56.17	265.28	3.15	-0.74	11.93	132.29
857	56.26	259.74	3.00	-0.74	11.90	131.86
858	56.30	254.91	2.92	-0.74	12.05	131.63
859	56.37	250.62	2.86	-0.74	12.21	131.44
860	56.45	250.89	2.80	-0.74	12.01	131.28
861	56.51	253.12	2.75	-0.74	11.71	131.17
862	56.58	255.90	2.72	-0.74	11.42	131.12
863	56.66	255.98	2.72	-0.74	11.44	131.13
864	56.71	254.82	2.74	-0.74	11.57	131.15
865	56.78	252.68	2.81	-0.74	11.97	131.32
866	56.84	250.62	2.83	-0.66	12.21	131.36
867	56.91	248.03	2.87	-0.66	12.52	131.42
868	57.00	250.62	2.90	-0.66	12.43	131.52
869	57.05	248.65	2.90	-0.66	12.61	131.52
870	57.11	250.62	2.90	-0.66	12.48	131.55
871	57.19	250.98	2.95	-0.66	12.59	131.65
872	57.23	251.51	2.99	-0.66	12.68	131.76
873	57.30	255.72	3.10	-0.58	12.71	132.08
874	57.40	265.55	3.19	-0.58	12.23	132.36
875	57.43	269.84	3.21	-0.58	12.01	132.47
876	57.50	282.72	3.26	-0.58	11.27	132.68
877	57.58	293.72	3.29	-0.58	10.68	132.84
878	57.63	300.60	3.30	-0.50	10.31	132.93
879	57.69	308.38	3.38	-0.50	10.07	133.17
880	57.77	312.31	3.52	-0.50	10.20	133.50
881	57.83	315.26	3.61	-0.50	10.25	133.70
882	57.89	315.80	3.68	-0.41	10.38	133.84
883	57.95	313.21	3.74	-0.41	10.67	133.94
884	58.01	316.20	3.78	-0.41	10.61	134.05
885	58.08	316.61	3.82	-0.33	10.68	134.12
886	58.17	322.51	3.88	-0.33	10.50	134.28
887	58.21	326.35	3.91	-0.33	10.36	134.36
888	58.27	331.54	3.91	-0.33	10.09	134.39
889	58.35	334.67	3.86	-0.33	9.84	134.33
890	58.41	332.25	3.84	-0.33	9.93	134.27
891	58.47	332.52	3.81	-0.33	9.86	134.22
892	58.56	330.02	3.72	-0.33	9.81	134.02
893	58.60	326.89	3.68	-0.33	9.89	133.92
894	58.67	318.93	3.62	-0.33	10.21	133.75
895	58.73	308.29	3.50	-0.33	10.53	133.42
896	58.80	301.05	3.41	-0.33	10.73	133.16
897	58.87	293.27	3.30	-0.33	10.94	132.85
898	58.94	279.41	3.23	-0.33	11.66	132.58
899	59.01	268.86	3.19	-0.33	12.31	132.40
900	59.06	261.35	3.19	-0.33	12.87	132.33

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
901	59.16	256.34	3.29	-0.33	13.55	132.50
902	59.21	255.90	3.36	-0.33	13.81	132.66
903	59.26	257.95	3.42	-0.33	13.84	132.82
904	59.34	253.84	3.66	-0.33	14.84	133.27
905	59.40	247.13	3.74	-0.33	15.66	133.36
906	59.46	238.82	3.77	-0.41	16.53	133.34
907	59.55	223.26	3.74	-0.41	18.04	133.12
908	59.60	216.91	3.70	-0.41	18.62	132.96
909	59.67	197.06	3.68	-0.41	21.00	132.69
910	59.72	179.81	3.67	-0.50	23.48	132.45
911	59.79	160.49	0.00	-0.50	N/A	87.36
912	59.85	180.52	0.00	-0.50	N/A	87.36
913	59.91	170.24	0.00	-0.58	N/A	87.36
914	60.00	181.24	0.00	-0.58	N/A	87.36
915	60.04	187.94	0.00	-0.58	N/A	87.36
916	60.11	185.62	0.00	-0.66	N/A	87.36

Abbreviations

Depth:	Depth from free surface, at which CPT was performed (ft)
q_c:	Measured cone resistance (tsf)
f_s:	Sleeve friction resistance (tsf)
u:	Pore pressure (tsf)
Fines content:	Percentage of fines in soil (%)
Unit weight:	Bulk soil unit weight (pcf)

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data ::

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
1	0.08	0.00	0.00	0.00	1.00	0.695	0.90	0.776	1.00	1.30	2.000	No
2	0.14	0.01	0.00	0.01	1.00	0.694	0.90	0.775	1.00	1.30	2.000	No
3	0.20	0.01	0.00	0.01	1.00	0.694	0.90	0.774	1.00	1.30	2.000	No
4	0.26	0.01	0.00	0.01	1.00	0.693	0.90	0.774	1.00	1.30	2.000	No
5	0.33	0.02	0.00	0.02	1.00	0.693	0.90	0.773	1.00	1.30	2.000	No
6	0.40	0.02	0.00	0.02	0.99	0.692	0.90	0.772	1.00	1.30	2.000	No
7	0.46	0.02	0.00	0.02	0.99	0.691	0.90	0.772	1.00	1.30	2.000	No
8	0.53	0.03	0.00	0.03	0.99	0.691	0.90	0.771	1.00	1.30	2.000	No
9	0.60	0.03	0.00	0.03	0.99	0.690	0.90	0.770	1.00	1.30	2.000	No
10	0.66	0.03	0.00	0.03	0.99	0.690	0.90	0.770	1.00	1.30	2.000	No
11	0.74	0.04	0.00	0.04	0.99	0.689	0.90	0.769	1.00	1.30	2.000	No
12	0.79	0.04	0.00	0.04	0.99	0.688	0.90	0.768	1.00	1.30	2.000	No
13	0.88	0.05	0.00	0.05	0.99	0.688	0.90	0.768	1.00	1.30	2.000	No
14	0.92	0.05	0.00	0.05	0.99	0.687	0.90	0.767	1.00	1.30	2.000	No
15	0.99	0.05	0.00	0.05	0.99	0.687	0.90	0.767	1.00	1.30	2.000	No
16	1.06	0.06	0.00	0.06	0.99	0.686	0.90	0.766	1.00	1.30	2.000	No
17	1.13	0.06	0.00	0.06	0.99	0.685	0.90	0.765	1.00	1.30	2.000	No
18	1.19	0.06	0.00	0.06	0.98	0.685	0.90	0.764	1.00	1.30	2.000	No
19	1.25	0.07	0.00	0.07	0.98	0.684	0.90	0.764	1.00	1.30	2.000	No
20	1.32	0.07	0.00	0.07	0.98	0.684	0.90	0.763	1.00	1.30	2.000	No
21	1.38	0.07	0.00	0.07	0.98	0.683	0.90	0.762	1.00	1.30	2.000	No
22	1.47	0.08	0.00	0.08	0.98	0.682	0.90	0.762	1.00	1.30	2.000	No
23	1.52	0.08	0.00	0.08	0.98	0.682	0.90	0.761	1.00	1.30	2.000	No
24	1.58	0.09	0.00	0.09	0.98	0.681	0.90	0.760	1.00	1.30	2.000	No
25	1.65	0.09	0.00	0.09	0.98	0.681	0.90	0.760	1.00	1.30	2.000	No
26	1.72	0.09	0.00	0.09	0.98	0.680	0.90	0.759	1.00	1.30	2.000	No
27	1.78	0.10	0.00	0.10	0.98	0.679	0.90	0.758	1.00	1.30	2.000	No
28	1.85	0.10	0.00	0.10	0.98	0.679	0.90	0.758	1.00	1.30	2.000	No
29	1.93	0.10	0.00	0.10	0.97	0.678	0.90	0.757	1.00	1.30	2.000	No
30	1.98	0.11	0.00	0.11	0.97	0.677	0.90	0.756	1.00	1.30	2.000	No
31	2.04	0.11	0.00	0.11	0.97	0.677	0.90	0.755	1.00	1.30	2.000	No
32	2.10	0.11	0.00	0.11	0.97	0.676	0.90	0.755	1.00	1.30	2.000	No
33	2.17	0.12	0.00	0.12	0.97	0.676	0.90	0.754	1.00	1.30	2.000	No
34	2.24	0.12	0.00	0.12	0.97	0.675	0.90	0.753	1.00	1.30	2.000	No
35	2.32	0.13	0.00	0.13	0.97	0.674	0.90	0.752	1.00	1.30	2.000	No
36	2.37	0.13	0.00	0.13	0.97	0.674	0.90	0.752	1.00	1.30	2.000	No
37	2.44	0.13	0.00	0.13	0.97	0.673	0.90	0.751	1.00	1.30	2.000	No
38	2.51	0.14	0.00	0.14	0.97	0.672	0.90	0.750	1.00	1.30	2.000	No
39	2.57	0.14	0.00	0.14	0.97	0.672	0.90	0.750	1.00	1.30	2.000	No
40	2.63	0.14	0.00	0.14	0.96	0.671	0.90	0.749	1.00	1.30	2.000	No
41	2.73	0.15	0.00	0.15	0.96	0.670	0.90	0.748	1.00	1.30	2.000	No
42	2.77	0.15	0.00	0.15	0.96	0.670	0.90	0.747	1.00	1.30	2.000	No
43	2.83	0.16	0.00	0.16	0.96	0.669	0.90	0.747	1.00	1.30	2.000	No
44	2.93	0.16	0.00	0.16	0.96	0.668	0.90	0.746	1.00	1.30	2.000	No
45	2.97	0.16	0.00	0.16	0.96	0.668	0.90	0.745	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
46	3.02	0.17	0.00	0.17	0.96	0.667	0.90	0.745	1.00	1.30	2.000	No
47	3.11	0.17	0.00	0.17	0.96	0.666	0.90	0.744	1.00	1.30	2.000	No
48	3.15	0.17	0.00	0.17	0.96	0.666	0.90	0.743	1.00	1.30	2.000	No
49	3.22	0.18	0.00	0.18	0.96	0.665	0.90	0.742	1.00	1.30	2.000	No
50	3.29	0.18	0.00	0.18	0.96	0.664	0.90	0.742	1.00	1.30	2.000	No
51	3.37	0.18	0.00	0.18	0.95	0.664	0.90	0.741	1.00	1.30	2.000	No
52	3.42	0.19	0.00	0.19	0.95	0.663	0.90	0.740	1.00	1.30	2.000	No
53	3.48	0.19	0.00	0.19	0.95	0.662	0.90	0.739	1.00	1.30	2.000	No
54	3.54	0.19	0.00	0.19	0.95	0.662	0.90	0.739	1.00	1.30	2.000	No
55	3.62	0.20	0.00	0.20	0.95	0.661	0.90	0.738	1.00	1.30	2.000	No
56	3.68	0.20	0.00	0.20	0.95	0.660	0.90	0.737	1.00	1.30	2.000	No
57	3.75	0.21	0.00	0.21	0.95	0.660	0.90	0.736	1.00	1.30	2.000	No
58	3.81	0.21	0.00	0.21	0.95	0.659	0.90	0.736	1.00	1.30	2.000	No
59	3.90	0.21	0.00	0.21	0.95	0.658	0.90	0.735	1.00	1.30	2.000	No
60	3.94	0.22	0.00	0.22	0.95	0.658	0.90	0.734	1.00	1.30	2.000	No
61	4.02	0.22	0.00	0.22	0.94	0.657	0.90	0.733	1.00	1.30	2.000	No
62	4.10	0.23	0.00	0.23	0.94	0.656	0.90	0.732	1.00	1.30	2.000	No
63	4.14	0.23	0.00	0.23	0.94	0.656	0.90	0.732	1.00	1.30	2.000	No
64	4.20	0.23	0.00	0.23	0.94	0.655	0.90	0.731	1.00	1.30	2.000	No
65	4.30	0.24	0.00	0.24	0.94	0.654	0.90	0.730	1.00	1.30	2.000	No
66	4.34	0.24	0.00	0.24	0.94	0.653	0.90	0.729	1.00	1.30	2.000	No
67	4.41	0.24	0.00	0.24	0.94	0.653	0.90	0.729	1.00	1.30	2.000	No
68	4.47	0.25	0.00	0.25	0.94	0.652	0.90	0.728	1.00	1.30	2.000	No
69	4.54	0.25	0.00	0.25	0.94	0.651	0.90	0.727	1.00	1.30	2.000	No
70	4.60	0.25	0.00	0.25	0.94	0.651	0.90	0.726	1.00	1.30	2.000	No
71	4.68	0.26	0.00	0.26	0.93	0.650	0.90	0.725	1.00	1.30	2.000	No
72	4.73	0.26	0.00	0.26	0.93	0.649	0.90	0.725	1.00	1.30	2.000	No
73	4.80	0.26	0.00	0.26	0.93	0.648	0.90	0.724	1.00	1.30	2.000	No
74	4.86	0.27	0.00	0.27	0.93	0.648	0.90	0.723	1.00	1.30	2.000	No
75	4.93	0.27	0.00	0.27	0.93	0.647	0.90	0.722	1.00	1.30	2.000	No
76	5.00	0.28	0.00	0.28	0.93	0.646	0.90	0.721	1.00	1.30	2.000	No
77	5.08	0.28	0.00	0.28	0.93	0.645	0.90	0.720	1.00	1.30	2.000	No
78	5.14	0.28	0.00	0.28	0.93	0.645	0.90	0.720	1.00	1.30	2.000	No
79	5.20	0.29	0.00	0.29	0.93	0.644	0.90	0.719	1.00	1.30	2.000	No
80	5.28	0.29	0.00	0.29	0.92	0.643	0.90	0.718	1.00	1.30	2.000	No
81	5.35	0.29	0.00	0.29	0.92	0.642	0.90	0.717	1.00	1.30	2.000	No
82	5.39	0.30	0.00	0.30	0.92	0.642	0.90	0.716	1.00	1.30	2.000	No
83	5.45	0.30	0.00	0.30	0.92	0.641	0.90	0.716	1.00	1.30	2.000	No
84	5.53	0.30	0.00	0.30	0.92	0.640	0.90	0.715	1.00	1.30	2.000	No
85	5.58	0.31	0.00	0.31	0.92	0.640	0.90	0.714	1.00	1.30	2.000	No
86	5.66	0.31	0.00	0.31	0.92	0.639	0.90	0.713	1.00	1.30	2.000	No
87	5.73	0.32	0.00	0.32	0.92	0.638	0.90	0.712	1.00	1.30	2.000	No
88	5.79	0.32	0.00	0.32	0.92	0.637	0.90	0.711	1.00	1.30	2.000	No
89	5.84	0.32	0.00	0.32	0.92	0.637	0.90	0.711	1.00	1.30	2.000	No
90	5.93	0.33	0.00	0.33	0.91	0.636	0.90	0.709	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
91	5.98	0.33	0.00	0.33	0.91	0.635	0.90	0.709	1.00	1.30	2.000	No
92	6.07	0.33	0.00	0.33	0.91	0.634	0.90	0.708	1.00	1.30	2.000	No
93	6.12	0.34	0.00	0.34	0.91	0.634	0.90	0.707	1.00	1.30	2.000	No
94	6.17	0.34	0.00	0.34	0.91	0.633	0.90	0.706	1.00	1.30	2.000	No
95	6.24	0.34	0.00	0.34	0.91	0.632	0.90	0.706	1.00	1.30	2.000	No
96	6.32	0.35	0.00	0.35	0.91	0.631	0.90	0.704	1.00	1.30	2.000	No
97	6.37	0.35	0.00	0.35	0.91	0.631	0.90	0.704	1.00	1.30	2.000	No
98	6.43	0.36	0.00	0.36	0.91	0.630	0.90	0.703	1.00	1.30	2.000	No
99	6.52	0.36	0.00	0.36	0.90	0.629	0.90	0.702	1.00	1.30	2.000	No
100	6.57	0.36	0.00	0.36	0.90	0.628	0.90	0.701	1.00	1.30	2.000	No
101	6.63	0.37	0.00	0.37	0.90	0.628	0.90	0.700	1.00	1.30	2.000	No
102	6.72	0.37	0.00	0.37	0.90	0.627	0.90	0.699	1.00	1.30	2.000	No
103	6.76	0.37	0.00	0.37	0.90	0.626	0.90	0.699	1.00	1.30	2.000	No
104	6.83	0.38	0.00	0.38	0.90	0.625	0.90	0.698	1.00	1.30	2.000	No
105	6.92	0.38	0.00	0.38	0.90	0.624	0.90	0.697	1.00	1.30	2.000	No
106	6.98	0.39	0.00	0.39	0.90	0.623	0.90	0.696	1.00	1.30	2.000	No
107	7.02	0.39	0.00	0.39	0.90	0.623	0.90	0.695	1.00	1.30	2.000	No
108	7.10	0.39	0.00	0.39	0.89	0.622	0.90	0.694	1.00	1.30	2.000	No
109	7.17	0.40	0.00	0.40	0.89	0.621	0.90	0.693	1.00	1.30	2.000	No
110	7.23	0.40	0.00	0.40	0.89	0.620	0.90	0.692	1.00	1.30	2.000	No
111	7.29	0.40	0.00	0.40	0.89	0.620	0.90	0.692	1.00	1.30	2.000	No
112	7.36	0.41	0.00	0.41	0.89	0.619	0.90	0.691	1.00	1.30	2.000	No
113	7.42	0.41	0.00	0.41	0.89	0.618	0.90	0.690	1.00	1.30	2.000	No
114	7.52	0.42	0.00	0.42	0.89	0.617	0.90	0.688	1.00	1.30	2.000	No
115	7.57	0.42	0.00	0.42	0.89	0.616	0.90	0.688	1.00	1.30	2.000	No
116	7.62	0.42	0.00	0.42	0.89	0.616	0.90	0.687	1.00	1.30	2.000	No
117	7.72	0.43	0.00	0.43	0.88	0.614	0.90	0.686	1.00	1.30	2.000	No
118	7.76	0.43	0.00	0.43	0.88	0.614	0.90	0.685	1.00	1.30	2.000	No
119	7.82	0.43	0.00	0.43	0.88	0.613	0.90	0.684	1.00	1.30	2.000	No
120	7.90	0.44	0.00	0.44	0.88	0.612	0.90	0.683	1.00	1.30	2.000	No
121	7.95	0.44	0.00	0.44	0.88	0.612	0.90	0.683	1.00	1.30	2.000	No
122	8.02	0.45	0.00	0.45	0.88	0.611	0.90	0.682	1.00	1.30	2.000	No
123	8.07	0.45	0.00	0.45	0.88	0.610	0.90	0.681	1.00	1.30	2.000	No
124	8.16	0.45	0.00	0.45	0.88	0.609	0.90	0.680	1.00	1.30	2.000	No
125	8.21	0.46	0.00	0.46	0.87	0.608	0.90	0.679	1.00	1.30	2.000	No
126	8.27	0.46	0.00	0.46	0.87	0.608	0.90	0.678	1.00	1.30	2.000	No
127	8.35	0.46	0.00	0.46	0.87	0.607	0.90	0.677	1.00	1.30	2.000	No
128	8.41	0.47	0.00	0.47	0.87	0.606	0.90	0.676	1.00	1.30	2.000	No
129	8.47	0.47	0.00	0.47	0.87	0.605	0.90	0.675	1.00	1.30	2.000	No
130	8.54	0.48	0.00	0.48	0.87	0.604	0.90	0.674	1.00	1.30	2.000	No
131	8.60	0.48	0.00	0.48	0.87	0.603	0.90	0.674	1.00	1.30	2.000	No
132	8.67	0.48	0.00	0.48	0.87	0.603	0.90	0.673	1.00	1.30	2.000	No
133	8.74	0.49	0.00	0.49	0.87	0.602	0.90	0.672	1.00	1.30	2.000	No
134	8.80	0.49	0.00	0.49	0.86	0.601	0.90	0.671	1.00	1.30	2.000	No
135	8.90	0.50	0.00	0.50	0.86	0.600	0.90	0.669	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
136	8.95	0.50	0.00	0.50	0.86	0.599	0.90	0.669	1.00	1.30	2.000	No
137	8.99	0.50	0.00	0.50	0.86	0.598	0.90	0.668	1.00	1.30	2.000	No
138	9.07	0.51	0.00	0.51	0.86	0.597	0.90	0.667	1.00	1.30	2.000	No
139	9.14	0.51	0.00	0.51	0.86	0.597	0.90	0.666	1.00	1.30	2.000	No
140	9.20	0.51	0.00	0.51	0.86	0.596	0.90	0.665	1.00	1.30	2.000	No
141	9.29	0.52	0.00	0.52	0.85	0.595	0.90	0.664	1.00	1.30	2.000	No
142	9.33	0.52	0.00	0.52	0.85	0.594	0.90	0.663	1.00	1.30	2.000	No
143	9.40	0.53	0.00	0.53	0.85	0.593	0.90	0.662	1.00	1.30	2.000	No
144	9.47	0.53	0.00	0.53	0.85	0.592	0.90	0.661	1.00	1.30	2.000	No
145	9.53	0.53	0.00	0.53	0.85	0.592	0.90	0.660	1.00	1.30	2.000	No
146	9.59	0.54	0.00	0.54	0.85	0.591	0.90	0.659	1.00	1.30	2.000	No
147	9.65	0.54	0.00	0.54	0.85	0.590	0.90	0.658	1.00	1.30	2.000	No
148	9.72	0.54	0.00	0.54	0.85	0.589	0.90	0.658	1.00	1.30	2.000	No
149	9.78	0.55	0.00	0.55	0.85	0.588	0.90	0.657	1.00	1.30	2.000	No
150	9.85	0.55	0.00	0.55	0.84	0.587	0.90	0.656	1.00	1.30	2.000	No
151	9.92	0.56	0.00	0.56	0.84	0.586	0.90	0.655	1.00	1.30	2.000	No
152	9.98	0.56	0.00	0.56	0.84	0.586	0.90	0.654	1.00	1.30	2.000	No
153	10.04	0.56	0.00	0.56	0.84	0.585	0.90	0.653	1.00	1.30	2.000	No
154	10.11	0.57	0.00	0.57	0.84	0.584	0.90	0.652	1.00	1.30	2.000	No
155	10.19	0.57	0.00	0.57	0.84	0.583	0.90	0.651	1.00	1.30	2.000	No
156	10.24	0.58	0.00	0.58	0.84	0.582	0.90	0.650	1.00	1.30	2.000	No
157	10.31	0.58	0.00	0.58	0.84	0.581	0.90	0.649	1.00	1.30	2.000	No
158	10.42	0.59	0.00	0.59	0.83	0.580	0.90	0.647	1.00	1.30	2.000	No
159	10.44	0.59	0.00	0.59	0.83	0.580	0.90	0.647	1.00	1.30	2.000	No
160	10.50	0.59	0.00	0.59	0.83	0.579	0.90	0.646	1.00	1.30	2.000	No
161	10.56	0.60	0.00	0.60	0.83	0.578	0.90	0.645	1.00	1.30	2.000	No
162	10.64	0.60	0.00	0.60	0.83	0.577	0.90	0.644	1.00	1.30	2.000	No
163	10.70	0.60	0.00	0.60	0.83	0.576	0.90	0.643	1.00	1.30	2.000	No
164	10.77	0.61	0.00	0.61	0.83	0.575	0.90	0.642	1.00	1.30	2.000	No
165	10.84	0.61	0.00	0.61	0.83	0.574	0.90	0.641	1.00	1.30	2.000	No
166	10.90	0.62	0.00	0.62	0.82	0.573	0.90	0.640	1.00	1.30	2.000	No
167	10.96	0.62	0.00	0.62	0.82	0.573	0.90	0.639	1.00	1.30	2.000	No
168	11.04	0.62	0.00	0.62	0.82	0.572	0.90	0.638	1.00	1.30	2.000	No
169	11.10	0.63	0.00	0.63	0.82	0.571	0.90	0.637	1.00	1.30	2.000	No
170	11.18	0.63	0.00	0.63	0.82	0.570	0.90	0.636	1.00	1.30	2.000	No
171	11.22	0.63	0.00	0.63	0.82	0.569	0.90	0.635	1.00	1.30	2.000	No
172	11.30	0.64	0.00	0.64	0.82	0.568	0.90	0.634	1.00	1.30	2.000	No
173	11.36	0.64	0.00	0.64	0.82	0.567	0.90	0.633	1.00	1.30	2.000	No
174	11.42	0.65	0.00	0.65	0.81	0.566	0.90	0.632	1.00	1.30	2.000	No
175	11.50	0.65	0.00	0.65	0.81	0.565	0.90	0.631	1.00	1.30	2.000	No
176	11.56	0.66	0.00	0.66	0.81	0.565	0.90	0.630	1.00	1.30	2.000	No
177	11.63	0.66	0.00	0.66	0.81	0.564	0.90	0.629	1.00	1.30	2.000	No
178	11.69	0.66	0.00	0.66	0.81	0.563	0.90	0.628	1.00	1.30	2.000	No
179	11.76	0.67	0.00	0.67	0.81	0.562	0.90	0.627	1.00	1.30	2.000	No
180	11.82	0.67	0.00	0.67	0.81	0.561	0.90	0.626	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
181	11.88	0.67	0.00	0.67	0.81	0.560	0.90	0.625	1.00	1.30	2.000	No
182	11.95	0.68	0.00	0.68	0.80	0.559	0.90	0.624	1.00	1.30	2.000	No
183	12.03	0.68	0.00	0.68	0.80	0.558	0.90	0.623	1.00	1.30	2.000	No
184	12.08	0.69	0.00	0.69	0.80	0.557	0.90	0.622	1.00	1.30	2.000	No
185	12.16	0.69	0.00	0.69	0.80	0.556	0.90	0.621	1.00	1.30	2.000	No
186	12.22	0.70	0.00	0.70	0.80	0.555	0.90	0.620	1.00	1.30	2.000	No
187	12.29	0.70	0.00	0.70	0.80	0.555	0.90	0.619	1.00	1.30	2.000	No
188	12.35	0.70	0.00	0.70	0.80	0.554	0.90	0.618	1.00	1.30	2.000	No
189	12.42	0.71	0.00	0.71	0.79	0.553	0.90	0.617	1.00	1.30	2.000	No
190	12.49	0.71	0.00	0.71	0.79	0.552	0.90	0.616	1.00	1.30	2.000	No
191	12.53	0.71	0.00	0.71	0.79	0.551	0.90	0.615	1.00	1.30	2.000	No
192	12.60	0.72	0.00	0.72	0.79	0.550	0.90	0.614	1.00	1.30	2.000	No
193	12.68	0.72	0.00	0.72	0.79	0.549	0.90	0.613	1.00	1.30	2.000	No
194	12.73	0.73	0.00	0.73	0.79	0.548	0.90	0.612	1.00	1.30	2.000	No
195	12.82	0.73	0.00	0.73	0.79	0.547	0.90	0.611	1.00	1.30	2.000	No
196	12.87	0.74	0.00	0.74	0.79	0.547	0.90	0.610	1.00	1.30	2.000	No
197	12.93	0.74	0.00	0.74	0.78	0.546	0.90	0.609	1.00	1.30	2.000	No
198	13.00	0.74	0.00	0.74	0.78	0.545	0.90	0.608	1.00	1.30	2.000	No
199	13.08	0.75	0.00	0.75	0.78	0.544	0.90	0.607	1.00	1.30	2.000	No
200	13.14	0.75	0.00	0.75	0.78	0.543	0.90	0.606	1.00	1.30	2.000	No
201	13.22	0.76	0.00	0.76	0.78	0.542	0.90	0.605	1.00	1.30	2.000	No
202	13.26	0.76	0.00	0.76	0.78	0.541	0.90	0.604	1.00	1.30	2.000	No
203	13.32	0.76	0.00	0.76	0.78	0.540	0.90	0.603	1.00	1.30	2.000	No
204	13.43	0.77	0.00	0.77	0.77	0.539	0.90	0.601	1.00	1.30	2.000	No
205	13.48	0.77	0.00	0.77	0.77	0.538	0.90	0.601	1.00	1.30	2.000	No
206	13.52	0.78	0.00	0.78	0.77	0.537	0.90	0.600	1.00	1.30	2.000	No
207	13.62	0.78	0.00	0.78	0.77	0.536	0.90	0.598	1.00	1.30	2.000	No
208	13.66	0.78	0.00	0.78	0.77	0.536	0.90	0.598	1.00	1.30	2.000	No
209	13.72	0.79	0.00	0.79	0.77	0.535	0.90	0.597	1.00	1.30	2.000	No
210	13.80	0.79	0.00	0.79	0.77	0.534	0.90	0.596	1.00	1.30	2.000	No
211	13.89	0.80	0.00	0.80	0.77	0.532	0.90	0.594	1.00	1.30	2.000	No
212	13.92	0.80	0.00	0.80	0.76	0.532	0.90	0.594	1.00	1.30	2.000	No
213	13.98	0.80	0.00	0.80	0.76	0.531	0.90	0.593	1.00	1.30	2.000	No
214	14.05	0.81	0.00	0.81	0.76	0.530	0.90	0.592	1.00	1.30	2.000	No
215	14.13	0.81	0.00	0.81	0.76	0.529	0.90	0.590	1.00	1.30	2.000	No
216	14.18	0.82	0.00	0.82	0.76	0.528	0.90	0.590	1.00	1.30	2.000	No
217	14.25	0.82	0.00	0.82	0.76	0.527	0.90	0.588	1.00	1.30	2.000	No
218	14.34	0.83	0.00	0.83	0.76	0.526	0.90	0.587	1.00	1.30	2.000	No
219	14.38	0.83	0.00	0.83	0.76	0.525	0.90	0.586	1.00	1.30	2.000	No
220	14.44	0.83	0.00	0.83	0.75	0.524	0.90	0.585	1.00	1.30	2.000	No
221	14.52	0.84	0.00	0.84	0.75	0.523	0.90	0.584	1.00	1.30	2.000	No
222	14.57	0.84	0.00	0.84	0.75	0.523	0.90	0.583	1.00	1.30	2.000	No
223	14.64	0.85	0.00	0.85	0.75	0.522	0.90	0.582	1.00	1.30	2.000	No
224	14.71	0.85	0.00	0.85	0.75	0.521	0.90	0.581	1.00	1.30	2.000	No
225	14.78	0.85	0.00	0.85	0.75	0.520	0.90	0.580	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
226	14.83	0.86	0.00	0.86	0.75	0.519	0.90	0.579	1.00	1.30	2.000	No
227	14.93	0.86	0.00	0.86	0.74	0.518	0.90	0.578	1.00	1.30	2.000	No
228	14.97	0.87	0.00	0.87	0.74	0.517	0.90	0.577	1.00	1.30	2.000	No
229	15.03	0.87	0.00	0.87	0.74	0.516	0.90	0.576	1.00	1.30	2.000	No
230	15.10	0.88	0.00	0.88	0.74	0.515	0.90	0.575	1.00	1.30	2.000	No
231	15.16	0.88	0.00	0.88	0.74	0.514	0.90	0.574	1.00	1.30	2.000	No
232	15.24	0.88	0.00	0.88	0.74	0.513	0.90	0.573	1.00	1.30	2.000	No
233	15.32	0.89	0.00	0.89	0.74	0.512	0.90	0.571	1.00	1.30	2.000	No
234	15.36	0.89	0.00	0.89	0.74	0.511	0.90	0.571	1.00	1.30	2.000	No
235	15.46	0.90	0.00	0.90	0.73	0.510	0.90	0.569	1.00	1.30	2.000	No
236	15.50	0.90	0.00	0.90	0.73	0.509	0.90	0.569	1.00	1.30	2.000	No
237	15.57	0.91	0.00	0.91	0.73	0.508	0.90	0.568	1.00	1.30	2.000	No
238	15.62	0.91	0.00	0.91	0.73	0.508	0.90	0.567	1.00	1.30	2.000	No
239	15.69	0.91	0.00	0.91	0.73	0.507	0.90	0.566	1.00	1.30	2.000	No
240	15.76	0.92	0.00	0.92	0.73	0.506	0.90	0.565	1.00	1.30	2.000	No
241	15.82	0.92	0.00	0.92	0.73	0.505	0.90	0.564	1.00	1.30	2.000	No
242	15.91	0.93	0.00	0.93	0.72	0.504	0.90	0.562	1.00	1.30	2.000	No
243	15.96	0.93	0.00	0.93	0.72	0.503	0.90	0.561	1.00	1.30	2.000	No
244	16.02	0.93	0.00	0.93	0.72	0.502	0.90	0.560	1.00	1.30	2.000	No
245	16.09	0.94	0.00	0.94	0.72	0.501	0.90	0.559	1.00	1.30	2.000	No
246	16.16	0.94	0.00	0.94	0.72	0.500	0.90	0.558	1.00	1.30	2.000	No
247	16.21	0.95	0.00	0.95	0.72	0.499	0.90	0.557	1.00	1.30	2.000	No
248	16.30	0.95	0.00	0.95	0.72	0.498	0.90	0.556	1.00	1.30	2.000	No
249	16.35	0.96	0.00	0.96	0.72	0.497	0.90	0.555	1.00	1.30	2.000	No
250	16.44	0.96	0.00	0.96	0.71	0.496	0.90	0.554	1.00	1.30	2.000	No
251	16.49	0.97	0.00	0.97	0.71	0.495	0.90	0.553	1.00	1.30	2.000	No
252	16.55	0.97	0.00	0.97	0.71	0.494	0.90	0.552	1.00	1.30	2.000	No
253	16.60	0.97	0.00	0.97	0.71	0.494	0.90	0.551	1.00	1.30	2.000	No
254	16.67	0.98	0.00	0.98	0.71	0.493	0.90	0.550	1.00	1.30	2.000	No
255	16.74	0.98	0.00	0.98	0.71	0.492	0.90	0.549	1.00	1.30	2.000	No
256	16.80	0.99	0.00	0.99	0.71	0.491	0.90	0.548	1.00	1.30	2.000	No
257	16.88	0.99	0.00	0.99	0.70	0.490	0.90	0.547	1.00	1.30	2.000	No
258	16.93	0.99	0.00	0.99	0.70	0.489	0.90	0.546	1.00	1.30	2.000	No
259	17.00	1.00	0.00	1.00	0.70	0.488	0.90	0.545	1.00	1.30	2.000	No
260	17.08	1.00	0.00	1.00	0.70	0.487	0.90	0.543	1.00	1.30	2.000	No
261	17.13	1.01	0.00	1.01	0.70	0.486	0.90	0.543	1.00	1.30	2.000	No
262	17.20	1.01	0.00	1.01	0.70	0.485	0.90	0.542	1.00	1.30	2.000	No
263	17.28	1.02	0.00	1.02	0.70	0.484	0.90	0.540	1.00	1.30	2.000	No
264	17.33	1.02	0.00	1.02	0.69	0.483	0.90	0.539	1.00	1.30	2.000	No
265	17.39	1.02	0.00	1.02	0.69	0.482	0.90	0.538	1.00	1.30	2.000	No
266	17.48	1.03	0.00	1.03	0.69	0.481	0.90	0.537	1.00	1.30	2.000	No
267	17.52	1.03	0.00	1.03	0.69	0.481	0.90	0.536	1.00	1.30	2.000	No
268	17.59	1.04	0.00	1.04	0.69	0.480	0.90	0.535	1.00	1.30	2.000	No
269	17.67	1.04	0.00	1.04	0.69	0.478	0.90	0.534	1.00	1.30	2.000	No
270	17.72	1.05	0.00	1.05	0.69	0.478	0.90	0.533	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
271	17.79	1.05	0.00	1.05	0.69	0.477	0.90	0.532	1.00	1.30	2.000	No
272	17.87	1.05	0.00	1.05	0.68	0.476	0.90	0.531	1.00	1.30	2.000	No
273	17.93	1.06	0.00	1.06	0.68	0.475	0.90	0.530	1.00	1.30	2.000	No
274	17.98	1.06	0.00	1.06	0.68	0.474	0.90	0.529	1.00	1.30	2.000	No
275	18.07	1.07	0.00	1.07	0.68	0.473	0.90	0.528	1.00	1.30	2.000	No
276	18.12	1.07	0.00	1.07	0.68	0.472	0.90	0.527	1.00	1.30	2.000	No
277	18.18	1.07	0.00	1.07	0.68	0.471	0.90	0.526	1.00	1.30	2.000	No
278	18.25	1.08	0.00	1.08	0.68	0.470	0.90	0.525	1.00	1.30	2.000	No
279	18.32	1.08	0.00	1.08	0.67	0.469	0.90	0.524	1.00	1.30	2.000	No
280	18.40	1.09	0.00	1.09	0.67	0.468	0.90	0.522	1.00	1.30	2.000	No
281	18.45	1.09	0.00	1.09	0.67	0.467	0.90	0.522	1.00	1.30	2.000	No
282	18.52	1.10	0.00	1.10	0.67	0.466	0.90	0.520	1.00	1.30	2.000	No
283	18.57	1.10	0.00	1.10	0.67	0.466	0.90	0.520	1.00	1.30	2.000	No
284	18.64	1.10	0.00	1.10	0.67	0.465	0.90	0.519	1.00	1.30	2.000	No
285	18.72	1.11	0.00	1.11	0.67	0.464	0.90	0.517	1.00	1.30	2.000	No
286	18.77	1.11	0.00	1.11	0.67	0.463	0.90	0.517	1.00	1.30	2.000	No
287	18.86	1.12	0.00	1.12	0.66	0.462	0.90	0.515	1.00	1.30	2.000	No
288	18.91	1.12	0.00	1.12	0.66	0.461	0.90	0.514	1.00	1.30	2.000	No
289	18.96	1.13	0.00	1.13	0.66	0.460	0.90	0.514	1.00	1.30	2.000	No
290	19.06	1.13	0.00	1.13	0.66	0.459	0.90	0.512	1.00	1.30	2.000	No
291	19.11	1.14	0.00	1.14	0.66	0.458	0.90	0.511	1.00	1.30	2.000	No
292	19.18	1.14	0.00	1.14	0.66	0.457	0.90	0.510	1.00	1.30	2.000	No
293	19.24	1.14	0.00	1.14	0.66	0.456	0.90	0.509	1.00	1.30	2.000	No
294	19.30	1.15	0.00	1.15	0.65	0.455	0.90	0.508	1.00	1.30	2.000	No
295	19.36	1.15	0.00	1.15	0.65	0.455	0.90	0.507	1.00	1.30	2.000	No
296	19.45	1.16	0.00	1.16	0.65	0.453	0.90	0.506	1.00	1.30	2.000	No
297	19.50	1.16	0.00	1.16	0.65	0.453	0.90	0.505	1.00	1.30	2.000	No
298	19.58	1.17	0.00	1.17	0.65	0.451	0.90	0.504	1.00	1.30	2.000	No
299	19.64	1.17	0.00	1.17	0.65	0.450	0.90	0.503	1.00	1.30	2.000	No
300	19.69	1.18	0.00	1.18	0.65	0.450	0.90	0.502	1.00	1.30	2.000	No
301	19.76	1.18	0.00	1.18	0.65	0.449	0.90	0.501	1.00	1.30	2.000	No
302	19.84	1.18	0.00	1.18	0.64	0.448	0.90	0.500	1.00	1.30	2.000	No
303	19.89	1.19	0.00	1.19	0.64	0.447	0.90	0.499	1.00	1.30	2.000	No
304	19.95	1.19	0.00	1.19	0.64	0.446	0.90	0.498	1.00	1.30	2.000	No
305	20.02	1.20	0.00	1.20	0.64	0.445	0.90	0.497	1.00	1.30	2.000	No
306	20.08	1.20	0.00	1.20	0.64	0.444	0.90	0.496	1.00	1.30	2.000	No
307	20.14	1.20	0.00	1.20	0.64	0.443	0.90	0.495	1.00	1.30	2.000	No
308	20.21	1.21	0.00	1.21	0.64	0.443	0.90	0.494	1.00	1.30	2.000	No
309	20.28	1.21	0.00	1.21	0.63	0.442	0.90	0.493	1.00	1.30	2.000	No
310	20.37	1.22	0.00	1.22	0.63	0.440	0.90	0.492	1.00	1.30	2.000	No
311	20.43	1.22	0.00	1.22	0.63	0.439	0.90	0.491	1.00	1.30	2.000	No
312	20.49	1.23	0.00	1.23	0.63	0.439	0.90	0.490	1.00	1.30	2.000	No
313	20.55	1.23	0.00	1.23	0.63	0.438	0.90	0.489	1.00	1.30	2.000	No
314	20.61	1.23	0.00	1.23	0.63	0.437	0.90	0.488	1.00	1.30	2.000	No
315	20.68	1.24	0.00	1.24	0.63	0.436	0.90	0.487	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
316	20.74	1.24	0.00	1.24	0.63	0.435	0.90	0.486	1.00	1.30	2.000	No
317	20.80	1.25	0.00	1.25	0.62	0.434	0.90	0.485	1.00	1.30	2.000	No
318	20.87	1.25	0.00	1.25	0.62	0.433	0.90	0.484	1.00	1.30	2.000	No
319	20.94	1.26	0.00	1.26	0.62	0.432	0.90	0.483	1.00	1.30	2.000	No
320	21.01	1.26	0.00	1.26	0.62	0.432	0.90	0.482	1.00	1.30	2.000	No
321	21.06	1.26	0.00	1.26	0.62	0.431	0.90	0.481	1.00	1.30	2.000	No
322	21.15	1.27	0.00	1.27	0.62	0.430	0.90	0.480	1.00	1.30	2.000	No
323	21.21	1.27	0.00	1.27	0.62	0.429	0.90	0.479	1.00	1.30	2.000	No
324	21.27	1.28	0.00	1.28	0.62	0.428	0.90	0.478	1.00	1.30	2.000	No
325	21.34	1.28	0.00	1.28	0.61	0.427	0.90	0.477	1.00	1.30	2.000	No
326	21.41	1.28	0.00	1.28	0.61	0.426	0.90	0.476	1.00	1.30	2.000	No
327	21.46	1.29	0.00	1.29	0.61	0.425	0.90	0.475	1.00	1.30	2.000	No
328	21.53	1.29	0.00	1.29	0.61	0.424	0.90	0.474	1.00	1.30	2.000	No
329	21.60	1.30	0.00	1.30	0.61	0.423	0.90	0.473	1.00	1.30	2.000	No
330	21.68	1.30	0.00	1.30	0.61	0.422	0.90	0.471	1.00	1.30	2.000	No
331	21.74	1.31	0.00	1.31	0.61	0.422	0.90	0.471	1.00	1.30	2.000	No
332	21.79	1.31	0.00	1.31	0.61	0.421	0.90	0.470	1.00	1.30	2.000	No
333	21.86	1.31	0.00	1.31	0.60	0.420	0.90	0.469	1.00	1.30	2.000	No
334	21.93	1.32	0.00	1.32	0.60	0.419	0.90	0.468	1.00	1.30	2.000	No
335	21.98	1.32	0.00	1.32	0.60	0.418	0.90	0.467	1.00	1.30	2.000	No
336	22.08	1.33	0.00	1.33	0.60	0.417	0.90	0.465	1.00	1.30	2.000	No
337	22.14	1.33	0.00	1.33	0.60	0.416	0.90	0.465	1.00	1.30	2.000	No
338	22.20	1.33	0.00	1.33	0.60	0.415	0.90	0.464	1.00	1.30	2.000	No
339	22.26	1.34	0.00	1.34	0.60	0.415	0.90	0.463	1.00	1.30	2.000	No
340	22.34	1.34	0.00	1.34	0.59	0.413	0.90	0.461	1.00	1.30	2.000	No
341	22.38	1.35	0.00	1.35	0.59	0.413	0.90	0.461	1.00	1.30	2.000	No
342	22.44	1.35	0.00	1.35	0.59	0.412	0.90	0.460	1.00	1.30	2.000	No
343	22.53	1.35	0.00	1.35	0.59	0.411	0.90	0.459	1.00	1.30	2.000	No
344	22.58	1.36	0.00	1.36	0.59	0.410	0.90	0.458	1.00	1.30	2.000	No
345	22.64	1.36	0.00	1.36	0.59	0.409	0.90	0.457	1.00	1.30	2.000	No
346	22.72	1.37	0.00	1.37	0.59	0.408	0.90	0.456	1.00	1.30	2.000	No
347	22.77	1.37	0.00	1.37	0.59	0.408	0.90	0.455	1.00	1.30	2.000	No
348	22.85	1.37	0.00	1.37	0.58	0.407	0.90	0.454	1.00	1.30	2.000	No
349	22.91	1.38	0.00	1.38	0.58	0.406	0.90	0.453	1.00	1.30	2.000	No
350	22.99	1.38	0.00	1.38	0.58	0.405	0.90	0.452	1.00	1.30	2.000	No
351	23.05	1.39	0.00	1.39	0.58	0.404	0.90	0.451	1.00	1.30	2.000	No
352	23.10	1.39	0.00	1.39	0.58	0.403	0.90	0.450	1.00	1.30	2.000	No
353	23.18	1.40	0.00	1.40	0.58	0.402	0.90	0.449	1.00	1.30	2.000	No
354	23.24	1.40	0.00	1.40	0.58	0.401	0.90	0.448	1.00	1.30	2.000	No
355	23.31	1.40	0.00	1.40	0.58	0.401	0.90	0.447	1.00	1.30	2.000	No
356	23.38	1.41	0.00	1.41	0.57	0.400	0.90	0.446	1.00	1.30	2.000	No
357	23.44	1.41	0.00	1.41	0.57	0.399	0.90	0.445	1.00	1.30	2.000	No
358	23.51	1.42	0.00	1.42	0.57	0.398	0.90	0.444	1.00	1.30	2.000	No
359	23.57	1.42	0.00	1.42	0.57	0.397	0.90	0.443	1.00	1.30	2.000	No
360	23.63	1.42	0.00	1.42	0.57	0.396	0.90	0.442	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
361	23.69	1.43	0.00	1.43	0.57	0.396	0.90	0.442	1.00	1.30	2.000	No
362	23.77	1.43	0.00	1.43	0.57	0.395	0.90	0.441	1.00	1.30	2.000	No
363	23.84	1.44	0.00	1.44	0.57	0.394	0.90	0.439	1.00	1.30	2.000	No
364	23.89	1.44	0.00	1.44	0.57	0.393	0.90	0.439	1.00	1.30	2.000	No
365	23.98	1.45	0.00	1.45	0.56	0.392	0.90	0.437	1.00	1.30	2.000	No
366	24.03	1.45	0.00	1.45	0.56	0.391	0.90	0.437	1.00	1.30	2.000	No
367	24.11	1.45	0.00	1.45	0.56	0.390	0.90	0.436	1.00	1.30	2.000	No
368	24.17	1.46	0.00	1.46	0.56	0.389	0.90	0.435	1.00	1.30	2.000	No
369	24.24	1.46	0.00	1.46	0.56	0.389	0.90	0.434	1.00	1.30	2.000	No
370	24.31	1.47	0.00	1.47	0.56	0.388	0.90	0.433	1.00	1.30	2.000	No
371	24.36	1.47	0.00	1.47	0.56	0.387	0.90	0.432	1.00	1.30	2.000	No
372	24.43	1.47	0.00	1.47	0.56	0.386	0.90	0.431	1.00	1.30	2.000	No
373	24.48	1.48	0.00	1.48	0.55	0.385	0.90	0.430	1.00	1.30	2.000	No
374	24.56	1.48	0.00	1.48	0.55	0.385	0.90	0.429	1.00	1.30	2.000	No
375	24.62	1.48	0.00	1.48	0.55	0.384	0.90	0.428	1.00	1.30	2.000	No
376	24.68	1.49	0.00	1.49	0.55	0.383	0.90	0.427	1.00	1.30	2.000	No
377	24.77	1.49	0.00	1.49	0.55	0.382	0.90	0.426	1.00	1.30	2.000	No
378	24.82	1.50	0.00	1.50	0.55	0.381	0.90	0.425	1.00	1.30	2.000	No
379	24.88	1.50	0.00	1.50	0.55	0.380	0.90	0.425	1.00	1.30	2.000	No
380	24.94	1.50	0.00	1.50	0.55	0.380	0.90	0.424	1.00	1.30	2.000	No
381	25.02	1.51	0.00	1.51	0.54	0.379	0.90	0.423	1.00	1.30	2.000	No
382	25.07	1.51	0.00	1.51	0.54	0.378	0.90	0.422	1.00	1.30	2.000	No
383	25.14	1.52	0.00	1.52	0.54	0.377	0.90	0.421	1.00	1.30	2.000	No
384	25.20	1.52	0.00	1.52	0.54	0.376	0.90	0.420	1.00	1.30	2.000	No
385	25.27	1.52	0.00	1.52	0.54	0.376	0.90	0.419	1.00	1.30	2.000	No
386	25.33	1.53	0.00	1.53	0.54	0.375	0.90	0.418	1.00	1.30	2.000	No
387	25.42	1.53	0.00	1.53	0.54	0.374	0.90	0.417	1.00	1.30	2.000	No
388	25.47	1.54	0.00	1.54	0.54	0.373	0.90	0.417	1.00	1.30	2.000	No
389	25.53	1.54	0.00	1.54	0.54	0.372	0.90	0.416	1.00	1.30	2.000	No
390	25.61	1.54	0.00	1.54	0.53	0.371	0.90	0.415	1.00	1.30	2.000	No
391	25.66	1.55	0.00	1.55	0.53	0.371	0.90	0.414	1.00	1.30	2.000	No
392	25.72	1.55	0.00	1.55	0.53	0.370	0.90	0.413	1.00	1.30	2.000	No
393	25.80	1.56	0.00	1.56	0.53	0.369	0.90	0.412	1.00	1.30	2.000	No
394	25.86	1.56	0.00	1.56	0.53	0.368	0.90	0.411	1.00	1.30	2.000	No
395	25.93	1.56	0.00	1.56	0.53	0.368	0.90	0.410	1.00	1.30	2.000	No
396	26.00	1.57	0.00	1.57	0.53	0.367	0.90	0.409	1.00	1.30	2.000	No
397	26.06	1.57	0.00	1.57	0.53	0.366	0.90	0.409	1.00	1.30	2.000	No
398	26.12	1.58	0.00	1.58	0.53	0.365	0.90	0.408	1.00	1.30	2.000	No
399	26.21	1.58	0.00	1.58	0.52	0.364	0.90	0.406	1.00	1.30	2.000	No
400	26.26	1.58	0.00	1.58	0.52	0.364	0.90	0.406	1.00	1.30	2.000	No
401	26.31	1.59	0.00	1.59	0.52	0.363	0.90	0.405	1.00	1.30	2.000	No
402	26.41	1.59	0.00	1.59	0.52	0.362	0.90	0.404	1.00	1.30	2.000	No
403	26.46	1.60	0.00	1.60	0.52	0.361	0.90	0.403	1.00	1.30	2.000	No
404	26.51	1.60	0.00	1.60	0.52	0.361	0.90	0.402	1.00	1.30	2.000	No
405	26.61	1.61	0.00	1.61	0.52	0.359	0.90	0.401	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
406	26.65	1.61	0.00	1.61	0.52	0.359	0.90	0.401	1.00	1.30	2.000	No
407	26.72	1.61	0.00	1.61	0.51	0.358	0.90	0.400	1.00	1.30	2.000	No
408	26.79	1.62	0.00	1.62	0.51	0.357	0.90	0.399	1.00	1.30	2.000	No
409	26.86	1.62	0.00	1.62	0.51	0.356	0.90	0.398	1.00	1.30	2.000	No
410	26.90	1.62	0.00	1.62	0.51	0.356	0.90	0.397	1.00	1.30	2.000	No
411	26.99	1.63	0.00	1.63	0.51	0.355	0.90	0.396	1.00	1.30	2.000	No
412	27.04	1.63	0.00	1.63	0.51	0.354	0.90	0.396	1.00	1.30	2.000	No
413	27.10	1.64	0.00	1.64	0.51	0.354	0.90	0.395	1.00	1.30	2.000	No
414	27.20	1.64	0.00	1.64	0.51	0.353	0.90	0.394	1.00	1.30	2.000	No
415	27.24	1.64	0.00	1.64	0.51	0.352	0.90	0.393	1.00	1.30	2.000	No
416	27.31	1.65	0.00	1.65	0.51	0.351	0.90	0.392	1.00	1.30	2.000	No
417	27.39	1.65	0.00	1.65	0.50	0.350	0.90	0.391	1.00	1.30	2.000	No
418	27.43	1.66	0.00	1.66	0.50	0.350	0.90	0.391	1.00	1.30	2.000	No
419	27.50	1.66	0.00	1.66	0.50	0.349	0.90	0.390	1.00	1.30	2.000	No
420	27.56	1.66	0.00	1.66	0.50	0.348	0.90	0.389	1.00	1.30	2.000	No
421	27.64	1.67	0.00	1.67	0.50	0.347	0.90	0.388	1.00	1.30	2.000	No
422	27.70	1.67	0.00	1.67	0.50	0.347	0.90	0.387	1.00	1.30	2.000	No
423	27.76	1.68	0.00	1.68	0.50	0.346	0.90	0.386	1.00	1.30	2.000	No
424	27.84	1.68	0.00	1.68	0.50	0.345	0.90	0.385	1.00	1.30	2.000	No
425	27.89	1.68	0.00	1.68	0.50	0.345	0.90	0.385	1.00	1.30	2.000	No
426	27.96	1.69	0.00	1.69	0.49	0.344	0.90	0.384	1.00	1.30	2.000	No
427	28.03	1.69	0.00	1.69	0.49	0.343	0.90	0.383	1.00	1.30	2.000	No
428	28.08	1.70	0.00	1.70	0.49	0.343	0.90	0.382	1.00	1.30	2.000	No
429	28.16	1.70	0.00	1.70	0.49	0.342	0.90	0.381	1.00	1.30	2.000	No
430	28.23	1.70	0.00	1.70	0.49	0.341	0.90	0.381	1.00	1.30	2.000	No
431	28.30	1.71	0.00	1.71	0.49	0.340	0.90	0.380	1.00	1.30	2.000	No
432	28.35	1.71	0.00	1.71	0.49	0.340	0.90	0.379	1.00	1.30	2.000	No
433	28.45	1.72	0.00	1.72	0.49	0.338	0.90	0.378	1.00	1.30	2.000	No
434	28.49	1.72	0.00	1.72	0.49	0.338	0.90	0.377	1.00	1.30	2.000	No
435	28.55	1.72	0.00	1.72	0.49	0.337	0.90	0.377	1.00	1.30	2.000	No
436	28.62	1.73	0.00	1.73	0.48	0.337	0.90	0.376	1.00	1.30	2.000	No
437	28.70	1.73	0.00	1.73	0.48	0.336	0.90	0.375	1.00	1.30	2.000	No
438	28.74	1.74	0.00	1.74	0.48	0.335	0.90	0.374	1.00	1.30	2.000	No
439	28.84	1.74	0.00	1.74	0.48	0.334	0.90	0.373	1.00	1.30	2.000	No
440	28.89	1.74	0.00	1.74	0.48	0.334	0.90	0.372	1.00	1.30	2.000	No
441	28.95	1.75	0.00	1.75	0.48	0.333	0.90	0.372	1.00	1.30	2.000	No
442	29.01	1.75	0.00	1.75	0.48	0.332	0.90	0.371	1.00	1.30	2.000	No
443	29.09	1.76	0.00	1.76	0.48	0.332	0.90	0.370	1.00	1.30	2.000	No
444	29.14	1.76	0.00	1.76	0.48	0.331	0.90	0.369	1.00	1.30	2.000	No
445	29.23	1.76	0.00	1.76	0.47	0.330	0.90	0.368	1.00	1.30	2.000	No
446	29.28	1.77	0.00	1.77	0.47	0.330	0.90	0.368	1.00	1.30	2.000	No
447	29.34	1.77	0.00	1.77	0.47	0.329	0.90	0.367	1.00	1.30	2.000	No
448	29.42	1.78	0.00	1.78	0.47	0.328	0.90	0.366	1.00	1.30	2.000	No
449	29.47	1.78	0.00	1.78	0.47	0.328	0.90	0.366	1.00	1.30	2.000	No
450	29.55	1.78	0.00	1.78	0.47	0.327	0.90	0.365	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
451	29.61	1.79	0.00	1.79	0.47	0.326	0.90	0.364	1.00	1.30	2.000	No
452	29.66	1.79	0.00	1.79	0.47	0.326	0.90	0.363	1.00	1.30	2.000	No
453	29.76	1.80	0.00	1.80	0.47	0.325	0.90	0.362	1.00	1.30	2.000	No
454	29.82	1.80	0.00	1.80	0.47	0.324	0.90	0.362	1.00	1.30	2.000	No
455	29.87	1.80	0.00	1.80	0.47	0.323	0.90	0.361	1.00	1.30	2.000	No
456	29.92	1.81	0.00	1.81	0.46	0.323	0.90	0.360	1.00	1.30	2.000	No
457	30.01	1.81	0.00	1.81	0.46	0.322	0.90	0.359	1.00	1.30	2.000	No
458	30.06	1.81	0.00	1.81	0.46	0.321	0.90	0.359	1.00	1.30	2.000	No
459	30.13	1.82	0.00	1.82	0.46	0.321	0.90	0.358	1.00	1.30	2.000	No
460	30.20	1.82	0.00	1.82	0.46	0.320	0.90	0.357	1.00	1.30	2.000	No
461	30.27	1.82	0.00	1.82	0.46	0.319	0.90	0.356	1.00	1.30	2.000	No
462	30.33	1.83	0.00	1.83	0.46	0.319	0.90	0.356	1.00	1.30	2.000	No
463	30.41	1.83	0.00	1.83	0.46	0.318	0.90	0.355	1.00	1.30	2.000	No
464	30.45	1.84	0.00	1.84	0.46	0.318	0.90	0.354	1.00	1.30	2.000	No
465	30.52	1.84	0.00	1.84	0.46	0.317	0.90	0.354	1.00	1.30	2.000	No
466	30.59	1.84	0.00	1.84	0.45	0.316	0.90	0.353	1.00	1.30	2.000	No
467	30.65	1.85	0.00	1.85	0.45	0.316	0.90	0.352	1.00	1.30	2.000	No
468	30.73	1.85	0.00	1.85	0.45	0.315	0.90	0.351	1.00	1.30	2.000	No
469	30.79	1.86	0.00	1.86	0.45	0.314	0.90	0.351	1.00	1.30	2.000	No
470	30.87	1.86	0.00	1.86	0.45	0.313	0.90	0.350	1.00	1.30	2.000	No
471	30.92	1.86	0.00	1.86	0.45	0.313	0.90	0.349	1.00	1.30	2.000	No
472	30.98	1.87	0.00	1.87	0.45	0.312	0.90	0.349	1.00	1.30	2.000	No
473	31.04	1.87	0.00	1.87	0.45	0.312	0.90	0.348	1.00	1.30	2.000	No
474	31.12	1.88	0.00	1.88	0.45	0.311	0.90	0.347	1.00	1.30	2.000	No
475	31.19	1.88	0.00	1.88	0.45	0.310	0.90	0.346	1.00	1.30	2.000	No
476	31.24	1.88	0.00	1.88	0.45	0.310	0.90	0.346	1.00	1.30	2.000	No
477	31.32	1.89	0.00	1.89	0.44	0.309	0.90	0.345	1.00	1.30	2.000	No
478	31.37	1.89	0.00	1.89	0.44	0.309	0.90	0.344	1.00	1.30	2.000	No
479	31.45	1.90	0.00	1.90	0.44	0.308	0.90	0.344	1.00	1.30	2.000	No
480	31.50	1.90	0.00	1.90	0.44	0.307	0.90	0.343	1.00	1.30	2.000	No
481	31.57	1.90	0.00	1.90	0.44	0.307	0.90	0.342	1.00	1.30	2.000	No
482	31.64	1.91	0.00	1.91	0.44	0.306	0.90	0.342	1.00	1.30	2.000	No
483	31.69	1.91	0.00	1.91	0.44	0.305	0.90	0.341	1.00	1.30	2.000	No
484	31.77	1.92	0.00	1.92	0.44	0.305	0.90	0.340	1.00	1.30	2.000	No
485	31.83	1.92	0.00	1.92	0.44	0.304	0.90	0.340	1.00	1.30	2.000	No
486	31.91	1.92	0.00	1.92	0.44	0.303	0.90	0.339	1.00	1.30	2.000	No
487	31.99	1.93	0.00	1.93	0.44	0.303	0.90	0.338	1.00	1.30	2.000	No
488	32.04	1.93	0.00	1.93	0.43	0.302	0.90	0.337	1.00	1.30	2.000	No
489	32.09	1.93	0.00	1.93	0.43	0.302	0.90	0.337	1.00	1.30	2.000	No
490	32.17	1.94	0.00	1.94	0.43	0.301	0.90	0.336	1.00	1.30	2.000	No
491	32.24	1.94	0.00	1.94	0.43	0.300	0.90	0.335	1.00	1.30	2.000	No
492	32.30	1.95	0.00	1.95	0.43	0.300	0.90	0.335	1.00	1.30	2.000	No
493	32.38	1.95	0.00	1.95	0.43	0.299	0.90	0.334	1.00	1.30	2.000	No
494	32.42	1.95	0.00	1.95	0.43	0.299	0.90	0.334	1.00	1.30	2.000	No
495	32.48	1.96	0.00	1.96	0.43	0.298	0.90	0.333	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
496	32.55	1.96	0.00	1.96	0.43	0.298	0.90	0.332	1.00	1.30	2.000	No
497	32.62	1.97	0.00	1.97	0.43	0.297	0.90	0.331	1.00	1.30	2.000	No
498	32.68	1.97	0.00	1.97	0.43	0.296	0.90	0.331	1.00	1.30	2.000	No
499	32.77	1.98	0.00	1.98	0.43	0.296	0.90	0.330	1.00	1.30	2.000	No
500	32.81	1.98	0.00	1.98	0.42	0.295	0.90	0.330	1.00	1.30	2.000	No
501	32.88	1.98	0.00	1.98	0.42	0.295	0.90	0.329	1.00	1.30	2.000	No
502	32.94	1.99	0.00	1.99	0.42	0.294	0.90	0.328	1.00	1.30	2.000	No
503	33.01	1.99	0.00	1.99	0.42	0.294	0.90	0.328	1.00	1.30	2.000	No
504	33.12	2.00	0.00	2.00	0.42	0.293	0.90	0.327	1.00	1.30	2.000	No
505	33.14	2.00	0.00	2.00	0.42	0.292	0.90	0.326	1.00	1.30	2.000	No
506	33.22	2.00	0.00	2.00	0.42	0.292	0.90	0.326	1.00	1.30	2.000	No
507	33.27	2.01	0.00	2.01	0.42	0.291	0.90	0.325	1.00	1.30	2.000	No
508	33.35	2.01	0.00	2.01	0.42	0.291	0.90	0.324	1.00	1.30	2.000	No
509	33.41	2.02	0.00	2.02	0.42	0.290	0.90	0.324	1.00	1.30	2.000	No
510	33.48	2.02	0.00	2.02	0.42	0.290	0.90	0.323	1.00	1.30	2.000	No
511	33.55	2.02	0.00	2.02	0.42	0.289	0.90	0.322	1.00	1.30	2.000	No
512	33.61	2.03	0.00	2.03	0.41	0.288	0.90	0.322	1.00	1.30	2.000	No
513	33.70	2.03	0.00	2.03	0.41	0.288	0.90	0.321	1.00	1.30	2.000	No
514	33.73	2.04	0.00	2.04	0.41	0.287	0.90	0.321	1.00	1.30	2.000	No
515	33.81	2.04	0.00	2.04	0.41	0.287	0.90	0.320	1.00	1.30	2.000	No
516	33.86	2.04	0.00	2.04	0.41	0.286	0.90	0.320	1.00	1.30	2.000	No
517	33.95	2.05	0.00	2.05	0.41	0.286	0.90	0.319	1.00	1.30	2.000	No
518	34.01	2.05	0.00	2.05	0.41	0.285	0.90	0.318	1.00	1.30	2.000	No
519	34.06	2.06	0.00	2.06	0.41	0.285	0.90	0.318	1.00	1.30	2.000	No
520	34.16	2.06	0.00	2.06	0.41	0.284	0.90	0.317	1.00	1.30	2.000	No
521	34.20	2.06	0.00	2.06	0.41	0.283	0.90	0.316	1.00	1.30	2.000	No
522	34.26	2.07	0.00	2.07	0.41	0.283	0.90	0.316	1.00	1.30	2.000	No
523	34.34	2.07	0.00	2.07	0.41	0.282	0.90	0.315	1.00	1.30	2.000	No
524	34.40	2.08	0.00	2.08	0.41	0.282	0.90	0.315	1.00	1.30	2.000	No
525	34.46	2.08	0.00	2.08	0.40	0.281	0.90	0.314	1.00	1.30	2.000	No
526	34.55	2.09	0.00	2.09	0.40	0.281	0.90	0.313	1.00	1.30	2.000	No
527	34.60	2.09	0.00	2.09	0.40	0.280	0.90	0.313	1.00	1.30	2.000	No
528	34.66	2.09	0.00	2.09	0.40	0.280	0.90	0.312	1.00	1.30	2.000	No
529	34.72	2.10	0.00	2.10	0.40	0.279	0.90	0.312	1.00	1.30	2.000	No
530	34.78	2.10	0.00	2.10	0.40	0.279	0.90	0.311	1.00	1.30	2.000	No
531	34.86	2.11	0.00	2.11	0.40	0.278	0.90	0.311	1.00	1.30	2.000	No
532	34.94	2.11	0.00	2.11	0.40	0.278	0.90	0.310	1.00	1.30	2.000	No
533	35.00	2.11	0.00	2.11	0.40	0.277	0.90	0.309	1.00	1.30	2.000	No
534	35.04	2.12	0.00	2.12	0.40	0.277	0.90	0.309	1.00	1.30	2.000	No
535	35.11	2.12	0.00	2.12	0.40	0.276	0.90	0.308	1.00	1.30	2.000	No
536	35.18	2.13	0.00	2.13	0.40	0.276	0.90	0.308	1.00	1.30	2.000	No
537	35.28	2.13	0.00	2.13	0.40	0.275	0.90	0.307	1.00	1.30	2.000	No
538	35.32	2.13	0.00	2.13	0.39	0.275	0.90	0.307	1.00	1.30	2.000	No
539	35.39	2.14	0.00	2.14	0.39	0.274	0.90	0.306	1.00	1.30	2.000	No
540	35.44	2.14	0.00	2.14	0.39	0.274	0.90	0.306	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
541	35.50	2.15	0.00	2.15	0.39	0.273	0.90	0.305	1.00	1.30	2.000	No
542	35.59	2.15	0.00	2.15	0.39	0.273	0.90	0.304	1.00	1.30	2.000	No
543	35.65	2.15	0.00	2.15	0.39	0.272	0.90	0.304	1.00	1.30	2.000	No
544	35.72	2.16	0.00	2.16	0.39	0.272	0.90	0.303	1.00	1.30	2.000	No
545	35.77	2.16	0.00	2.16	0.39	0.271	0.90	0.303	1.00	1.30	2.000	No
546	35.85	2.17	0.00	2.17	0.39	0.271	0.90	0.302	1.00	1.30	2.000	No
547	35.90	2.17	0.00	2.17	0.39	0.270	0.90	0.302	1.00	1.30	2.000	No
548	35.99	2.18	0.00	2.18	0.39	0.270	0.90	0.301	1.00	1.30	2.000	No
549	36.04	2.18	0.00	2.18	0.39	0.269	0.90	0.301	1.00	1.30	2.000	No
550	36.09	2.18	0.00	2.18	0.39	0.269	0.90	0.300	1.00	1.30	2.000	No
551	36.16	2.19	0.00	2.19	0.39	0.268	0.90	0.300	1.00	1.30	2.000	No
552	36.24	2.19	0.00	2.19	0.39	0.268	0.90	0.299	1.00	1.30	2.000	No
553	36.29	2.19	0.00	2.19	0.38	0.267	0.90	0.299	1.00	1.30	2.000	No
554	36.37	2.20	0.00	2.20	0.38	0.267	0.90	0.298	1.00	1.30	2.000	No
555	36.43	2.20	0.00	2.20	0.38	0.266	0.90	0.297	1.00	1.30	2.000	No
556	36.50	2.21	0.00	2.21	0.38	0.266	0.90	0.297	1.00	1.30	2.000	No
557	36.57	2.21	0.00	2.21	0.38	0.265	0.90	0.296	1.00	1.30	2.000	No
558	36.63	2.21	0.00	2.21	0.38	0.265	0.90	0.296	1.00	1.30	2.000	No
559	36.68	2.22	0.00	2.22	0.38	0.265	0.90	0.295	1.00	1.30	2.000	No
560	36.77	2.22	0.00	2.22	0.38	0.264	0.90	0.295	1.00	1.30	2.000	No
561	36.82	2.23	0.00	2.23	0.38	0.264	0.90	0.294	1.00	1.30	2.000	No
562	36.88	2.23	0.00	2.23	0.38	0.263	0.90	0.294	1.00	1.30	2.000	No
563	36.95	2.23	0.00	2.23	0.38	0.263	0.90	0.293	1.00	1.30	2.000	No
564	37.01	2.24	0.00	2.24	0.38	0.262	0.90	0.293	1.00	1.30	2.000	No
565	37.08	2.24	0.00	2.24	0.38	0.262	0.90	0.292	1.00	1.30	2.000	No
566	37.14	2.25	0.00	2.25	0.38	0.261	0.90	0.292	1.00	1.30	2.000	No
567	37.22	2.25	0.00	2.25	0.38	0.261	0.90	0.291	1.00	1.30	2.000	No
568	37.30	2.26	0.00	2.26	0.37	0.260	0.90	0.291	1.00	1.30	2.000	No
569	37.35	2.26	0.00	2.26	0.37	0.260	0.90	0.290	1.00	1.30	2.000	No
570	37.41	2.26	0.00	2.26	0.37	0.260	0.90	0.290	1.00	1.30	2.000	No
571	37.47	2.27	0.00	2.27	0.37	0.259	0.90	0.289	1.00	1.30	2.000	No
572	37.56	2.27	0.00	2.27	0.37	0.259	0.90	0.289	1.00	1.30	2.000	No
573	37.61	2.27	0.00	2.27	0.37	0.258	0.90	0.288	1.00	1.30	2.000	No
574	37.67	2.28	0.00	2.28	0.37	0.258	0.90	0.288	1.00	1.30	2.000	No
575	37.76	2.28	0.00	2.28	0.37	0.257	0.90	0.287	1.00	1.30	2.000	No
576	37.81	2.29	0.00	2.29	0.37	0.257	0.90	0.287	1.00	1.30	2.000	No
577	37.87	2.29	0.00	2.29	0.37	0.257	0.90	0.286	1.00	1.30	2.000	No
578	37.95	2.29	0.00	2.29	0.37	0.256	0.90	0.286	1.00	1.30	2.000	No
579	38.00	2.30	0.00	2.30	0.37	0.256	0.90	0.285	1.00	1.30	2.000	No
580	38.06	2.30	0.00	2.30	0.37	0.255	0.90	0.285	1.00	1.30	2.000	No
581	38.13	2.31	0.00	2.31	0.37	0.255	0.90	0.285	1.00	1.30	2.000	No
582	38.20	2.31	0.00	2.31	0.37	0.254	0.90	0.284	1.00	1.30	2.000	No
583	38.26	2.31	0.00	2.31	0.37	0.254	0.90	0.284	1.00	1.30	2.000	No
584	38.35	2.32	0.00	2.32	0.36	0.254	0.90	0.283	1.00	1.30	2.000	No
585	38.40	2.32	0.00	2.32	0.36	0.253	0.90	0.283	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
586	38.47	2.32	0.00	2.32	0.36	0.253	0.90	0.282	1.00	1.30	2.000	No
587	38.53	2.33	0.00	2.33	0.36	0.252	0.90	0.282	1.00	1.30	2.000	No
588	38.61	2.33	0.00	2.33	0.36	0.252	0.90	0.281	1.00	1.30	2.000	No
589	38.65	2.34	0.00	2.34	0.36	0.252	0.90	0.281	1.00	1.30	2.000	No
590	38.74	2.34	0.00	2.34	0.36	0.251	0.90	0.280	1.00	1.30	2.000	No
591	38.80	2.34	0.00	2.34	0.36	0.251	0.90	0.280	1.00	1.30	2.000	No
592	38.85	2.35	0.00	2.35	0.36	0.250	0.90	0.280	1.00	1.30	2.000	No
593	38.92	2.35	0.00	2.35	0.36	0.250	0.90	0.279	1.00	1.30	2.000	No
594	38.99	2.36	0.00	2.36	0.36	0.250	0.90	0.279	1.00	1.30	2.000	No
595	39.05	2.36	0.00	2.36	0.36	0.249	0.90	0.278	1.00	1.30	2.000	No
596	39.12	2.36	0.00	2.36	0.36	0.249	0.90	0.278	1.00	1.30	2.000	No
597	39.18	2.37	0.00	2.37	0.36	0.248	0.90	0.277	1.00	1.30	2.000	No
598	39.24	2.37	0.00	2.37	0.36	0.248	0.90	0.277	1.00	1.30	2.000	No
599	39.33	2.38	0.00	2.38	0.36	0.248	0.90	0.276	1.00	1.30	2.000	No
600	39.38	2.38	0.00	2.38	0.36	0.247	0.90	0.276	1.00	1.30	2.000	No
601	39.44	2.38	0.00	2.38	0.35	0.247	0.90	0.276	1.00	1.30	2.000	No
602	39.52	2.39	0.00	2.39	0.35	0.246	0.90	0.275	1.00	1.30	2.000	No
603	39.58	2.39	0.00	2.39	0.35	0.246	0.90	0.275	1.00	1.30	2.000	No
604	39.65	2.40	0.00	2.40	0.35	0.246	0.90	0.274	1.00	1.30	2.000	No
605	39.71	2.40	0.00	2.40	0.35	0.245	0.90	0.274	1.00	1.30	2.000	No
606	39.80	2.40	0.00	2.40	0.35	0.245	0.90	0.273	1.00	1.30	2.000	No
607	39.83	2.41	0.00	2.41	0.35	0.245	0.90	0.273	1.00	1.30	2.000	No
608	39.91	2.41	0.00	2.41	0.35	0.244	0.90	0.273	1.00	1.30	2.000	No
609	39.97	2.41	0.00	2.41	0.35	0.244	0.90	0.272	1.00	1.30	2.000	No
610	40.04	2.42	0.00	2.42	0.35	0.244	0.90	0.272	1.00	1.30	0.353	No
611	40.10	2.42	0.00	2.42	0.35	0.243	0.90	0.272	1.00	1.30	0.353	No
612	40.18	2.43	0.01	2.42	0.35	0.243	0.90	0.271	1.00	1.30	0.353	No
613	40.23	2.43	0.01	2.42	0.35	0.243	0.90	0.271	1.00	1.30	0.353	No
614	40.30	2.43	0.01	2.42	0.35	0.243	0.90	0.271	1.00	1.30	0.353	No
615	40.38	2.44	0.01	2.43	0.35	0.243	0.90	0.271	1.00	1.30	0.352	No
616	40.43	2.44	0.01	2.43	0.35	0.243	0.90	0.271	1.00	1.30	0.352	No
617	40.50	2.44	0.02	2.43	0.35	0.242	0.90	0.271	1.00	1.30	0.352	No
618	40.59	2.45	0.02	2.43	0.35	0.242	0.90	0.270	1.00	1.30	0.351	No
619	40.64	2.45	0.02	2.43	0.35	0.242	0.90	0.270	1.00	1.30	0.351	No
620	40.69	2.46	0.02	2.43	0.34	0.242	0.90	0.270	1.00	1.30	0.351	No
621	40.78	2.46	0.02	2.44	0.34	0.242	0.90	0.270	1.00	1.30	0.351	No
622	40.83	2.46	0.03	2.44	0.34	0.242	0.90	0.270	1.00	1.30	0.351	No
623	40.89	2.47	0.03	2.44	0.34	0.242	0.90	0.270	1.00	1.30	0.350	No
624	40.97	2.47	0.03	2.44	0.34	0.241	0.90	0.269	1.00	1.30	0.350	No
625	41.02	2.48	0.03	2.44	0.34	0.241	0.90	0.269	1.00	1.30	0.350	No
626	41.08	2.48	0.03	2.45	0.34	0.241	0.90	0.269	1.00	1.30	0.350	No
627	41.16	2.48	0.04	2.45	0.34	0.241	0.90	0.269	1.00	1.30	0.350	No
628	41.22	2.49	0.04	2.45	0.34	0.241	0.90	0.269	1.00	1.30	0.349	No
629	41.28	2.49	0.04	2.45	0.34	0.241	0.90	0.269	1.00	1.30	0.349	No
630	41.38	2.50	0.04	2.46	0.34	0.240	0.90	0.268	1.00	1.30	0.349	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
631	41.43	2.50	0.04	2.46	0.34	0.240	0.90	0.268	1.00	1.30	0.349	No
632	41.48	2.50	0.05	2.46	0.34	0.240	0.90	0.268	1.00	1.30	0.349	No
633	41.54	2.51	0.05	2.46	0.34	0.240	0.90	0.268	1.00	1.30	0.348	No
634	41.64	2.51	0.05	2.46	0.34	0.240	0.90	0.268	1.00	1.30	0.348	No
635	41.69	2.52	0.05	2.46	0.34	0.240	0.90	0.268	1.00	1.30	0.348	No
636	41.73	2.52	0.05	2.47	0.34	0.240	0.90	0.267	1.00	1.30	0.348	No
637	41.82	2.53	0.06	2.47	0.34	0.239	0.90	0.267	1.00	1.30	0.347	No
638	41.88	2.53	0.06	2.47	0.34	0.239	0.90	0.267	1.00	1.30	0.347	No
639	41.93	2.53	0.06	2.47	0.34	0.239	0.90	0.267	1.00	1.30	0.347	No
640	42.02	2.54	0.06	2.48	0.34	0.239	0.90	0.267	1.00	1.30	0.347	No
641	42.07	2.54	0.06	2.48	0.33	0.239	0.90	0.267	1.00	1.30	0.347	No
642	42.13	2.55	0.07	2.48	0.33	0.239	0.90	0.266	1.00	1.30	0.346	No
643	42.22	2.55	0.07	2.48	0.33	0.239	0.90	0.266	1.00	1.30	0.346	No
644	42.26	2.55	0.07	2.48	0.33	0.238	0.90	0.266	1.00	1.30	0.346	No
645	42.33	2.56	0.07	2.49	0.33	0.238	0.90	0.266	1.00	1.30	0.346	No
646	42.39	2.56	0.07	2.49	0.33	0.238	0.90	0.266	1.00	1.30	0.346	No
647	42.46	2.57	0.08	2.49	0.33	0.238	0.90	0.266	1.00	1.30	0.345	No
648	42.52	2.57	0.08	2.49	0.33	0.238	0.90	0.266	1.00	1.30	0.345	No
649	42.61	2.58	0.08	2.50	0.33	0.238	0.90	0.265	1.00	1.30	0.345	No
650	42.65	2.58	0.08	2.50	0.33	0.238	0.90	0.265	1.00	1.30	0.345	No
651	42.72	2.58	0.08	2.50	0.33	0.238	0.90	0.265	1.00	1.30	0.345	No
652	42.81	2.59	0.09	2.50	0.33	0.237	0.90	0.265	1.00	1.30	0.344	No
653	42.87	2.59	0.09	2.50	0.33	0.237	0.90	0.265	1.00	1.30	0.344	No
654	42.92	2.60	0.09	2.51	0.33	0.237	0.90	0.265	1.00	1.30	0.344	No
655	43.00	2.60	0.09	2.51	0.33	0.237	0.90	0.264	1.00	1.30	0.344	No
656	43.07	2.61	0.10	2.51	0.33	0.237	0.90	0.264	1.00	1.30	0.344	No
657	43.12	2.61	0.10	2.51	0.33	0.237	0.90	0.264	1.00	1.30	0.344	No
658	43.21	2.62	0.10	2.52	0.33	0.237	0.90	0.264	1.00	1.30	0.343	No
659	43.26	2.62	0.10	2.52	0.33	0.236	0.90	0.264	1.00	1.30	0.343	No
660	43.31	2.62	0.10	2.52	0.33	0.236	0.90	0.264	1.00	1.30	0.343	No
661	43.40	2.63	0.11	2.52	0.33	0.236	0.90	0.264	1.00	1.30	0.343	No
662	43.44	2.63	0.11	2.52	0.33	0.236	0.90	0.264	1.00	1.30	0.343	No
663	43.51	2.63	0.11	2.53	0.33	0.236	0.90	0.263	1.00	1.30	0.342	No
664	43.58	2.64	0.11	2.53	0.32	0.236	0.90	0.263	1.00	1.30	0.342	No
665	43.66	2.64	0.11	2.53	0.32	0.236	0.90	0.263	1.00	1.30	0.342	No
666	43.70	2.65	0.12	2.53	0.32	0.236	0.90	0.263	1.00	1.30	0.342	No
667	43.80	2.65	0.12	2.53	0.32	0.235	0.90	0.263	1.00	1.30	0.342	No
668	43.85	2.66	0.12	2.54	0.32	0.235	0.90	0.263	1.00	1.30	0.341	No
669	43.90	2.66	0.12	2.54	0.32	0.235	0.90	0.263	1.00	1.30	0.341	No
670	43.99	2.67	0.12	2.54	0.32	0.235	0.90	0.262	1.00	1.30	0.341	No
671	44.05	2.67	0.13	2.54	0.32	0.235	0.90	0.262	1.00	1.30	0.341	No
672	44.10	2.67	0.13	2.54	0.32	0.235	0.90	0.262	1.00	1.30	0.341	No
673	44.16	2.68	0.13	2.55	0.32	0.235	0.90	0.262	1.00	1.30	0.341	No
674	44.23	2.68	0.13	2.55	0.32	0.235	0.90	0.262	1.00	1.30	0.340	No
675	44.30	2.68	0.13	2.55	0.32	0.235	0.90	0.262	1.00	1.30	0.340	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
676	44.38	2.69	0.14	2.55	0.32	0.234	0.90	0.262	1.00	1.30	0.340	No
677	44.45	2.69	0.14	2.56	0.32	0.234	0.90	0.261	1.00	1.30	0.340	No
678	44.49	2.70	0.14	2.56	0.32	0.234	0.90	0.261	1.00	1.30	0.340	No
679	44.57	2.70	0.14	2.56	0.32	0.234	0.90	0.261	1.00	1.30	0.340	No
680	44.64	2.71	0.14	2.56	0.32	0.234	0.90	0.261	1.00	1.30	0.339	No
681	44.69	2.71	0.15	2.56	0.32	0.234	0.90	0.261	1.00	1.30	0.339	No
682	44.75	2.71	0.15	2.57	0.32	0.234	0.90	0.261	1.00	1.30	0.339	No
683	44.82	2.72	0.15	2.57	0.32	0.234	0.90	0.261	1.00	1.30	0.339	No
684	44.88	2.72	0.15	2.57	0.32	0.234	0.90	0.261	1.00	1.30	0.339	No
685	44.95	2.73	0.15	2.57	0.32	0.233	0.90	0.261	1.00	1.30	0.339	No
686	45.03	2.73	0.16	2.58	0.32	0.233	0.90	0.260	1.00	1.30	0.338	No
687	45.09	2.74	0.16	2.58	0.32	0.233	0.90	0.260	1.00	1.30	0.338	No
688	45.15	2.74	0.16	2.58	0.32	0.233	0.90	0.260	1.00	1.30	0.338	No
689	45.23	2.75	0.16	2.58	0.32	0.233	0.90	0.260	1.00	1.30	0.338	No
690	45.30	2.75	0.17	2.58	0.31	0.233	0.90	0.260	1.00	1.30	0.338	No
691	45.38	2.76	0.17	2.59	0.31	0.233	0.90	0.260	1.00	1.30	0.338	No
692	45.41	2.76	0.17	2.59	0.31	0.233	0.90	0.260	1.00	1.30	0.338	No
693	45.48	2.76	0.17	2.59	0.31	0.233	0.90	0.260	1.00	1.30	0.337	No
694	45.56	2.77	0.17	2.59	0.31	0.232	0.90	0.259	1.00	1.30	0.337	No
695	45.63	2.77	0.18	2.60	0.31	0.232	0.90	0.259	1.00	1.30	0.337	No
696	45.67	2.77	0.18	2.60	0.31	0.232	0.90	0.259	1.00	1.30	0.337	No
697	45.78	2.78	0.18	2.60	0.31	0.232	0.90	0.259	1.00	1.30	0.337	No
698	45.80	2.78	0.18	2.60	0.31	0.232	0.90	0.259	1.00	1.30	0.337	No
699	45.88	2.79	0.18	2.60	0.31	0.232	0.90	0.259	1.00	1.30	0.337	No
700	45.95	2.79	0.19	2.61	0.31	0.232	0.90	0.259	1.00	1.30	0.336	No
701	46.01	2.80	0.19	2.61	0.31	0.232	0.90	0.259	1.00	1.30	0.336	No
702	46.09	2.80	0.19	2.61	0.31	0.232	0.90	0.259	1.00	1.30	0.336	No
703	46.15	2.81	0.19	2.61	0.31	0.232	0.90	0.258	1.00	1.30	0.336	No
704	46.21	2.81	0.19	2.62	0.31	0.231	0.90	0.258	1.00	1.30	0.336	No
705	46.28	2.81	0.20	2.62	0.31	0.231	0.90	0.258	1.00	1.30	0.336	No
706	46.35	2.82	0.20	2.62	0.31	0.231	0.90	0.258	1.00	1.30	0.335	No
707	46.40	2.82	0.20	2.62	0.31	0.231	0.90	0.258	1.00	1.30	0.335	No
708	46.48	2.83	0.20	2.62	0.31	0.231	0.90	0.258	1.00	1.30	0.335	No
709	46.53	2.83	0.20	2.63	0.31	0.231	0.90	0.258	1.00	1.30	0.335	No
710	46.60	2.83	0.21	2.63	0.31	0.231	0.90	0.258	1.00	1.30	0.335	No
711	46.68	2.84	0.21	2.63	0.31	0.231	0.90	0.258	1.00	1.30	0.335	No
712	46.74	2.84	0.21	2.63	0.31	0.231	0.90	0.257	1.00	1.30	0.335	No
713	46.79	2.85	0.21	2.63	0.31	0.231	0.90	0.257	1.00	1.30	0.335	No
714	46.90	2.85	0.22	2.64	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
715	46.93	2.86	0.22	2.64	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
716	46.99	2.86	0.22	2.64	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
717	47.08	2.87	0.22	2.64	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
718	47.13	2.87	0.22	2.65	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
719	47.18	2.87	0.22	2.65	0.30	0.230	0.90	0.257	1.00	1.30	0.334	No
720	47.27	2.88	0.23	2.65	0.30	0.230	0.90	0.257	1.00	1.30	0.334	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
721	47.33	2.88	0.23	2.65	0.30	0.230	0.90	0.257	1.00	1.30	0.334	No
722	47.38	2.89	0.23	2.65	0.30	0.230	0.90	0.257	1.00	1.30	0.333	No
723	47.47	2.89	0.23	2.66	0.30	0.230	0.90	0.256	1.00	1.30	0.333	No
724	47.53	2.90	0.24	2.66	0.30	0.230	0.90	0.256	1.00	1.30	0.333	No
725	47.58	2.90	0.24	2.66	0.30	0.230	0.90	0.256	1.00	1.30	0.333	No
726	47.64	2.90	0.24	2.66	0.30	0.229	0.90	0.256	1.00	1.30	0.333	No
727	47.71	2.91	0.24	2.67	0.30	0.229	0.90	0.256	1.00	1.30	0.333	No
728	47.77	2.91	0.24	2.67	0.30	0.229	0.90	0.256	1.00	1.30	0.333	No
729	47.86	2.92	0.25	2.67	0.30	0.229	0.90	0.256	1.00	1.30	0.333	No
730	47.90	2.92	0.25	2.67	0.30	0.229	0.90	0.256	1.00	1.30	0.333	No
731	47.99	2.93	0.25	2.68	0.30	0.229	0.90	0.256	1.00	1.30	0.332	No
732	48.06	2.93	0.25	2.68	0.30	0.229	0.90	0.256	1.00	1.30	0.332	No
733	48.11	2.93	0.25	2.68	0.30	0.229	0.90	0.255	1.00	1.30	0.332	No
734	48.18	2.94	0.26	2.68	0.30	0.229	0.90	0.255	1.00	1.30	0.332	No
735	48.23	2.94	0.26	2.69	0.30	0.229	0.90	0.255	1.00	1.30	0.332	No
736	48.32	2.95	0.26	2.69	0.30	0.229	0.90	0.255	1.00	1.30	0.332	No
737	48.38	2.95	0.26	2.69	0.30	0.229	0.90	0.255	1.00	1.30	0.332	No
738	48.45	2.96	0.26	2.69	0.30	0.228	0.90	0.255	1.00	1.30	0.332	No
739	48.51	2.96	0.27	2.70	0.30	0.228	0.90	0.255	1.00	1.30	0.331	No
740	48.57	2.96	0.27	2.70	0.30	0.228	0.90	0.255	1.00	1.30	0.331	No
741	48.65	2.97	0.27	2.70	0.30	0.228	0.90	0.255	1.00	1.30	0.331	No
742	48.71	2.97	0.27	2.70	0.30	0.228	0.90	0.255	1.00	1.30	0.331	No
743	48.76	2.98	0.27	2.70	0.30	0.228	0.90	0.255	1.00	1.30	0.331	No
744	48.83	2.98	0.28	2.71	0.30	0.228	0.90	0.255	1.00	1.30	0.331	No
745	48.93	2.99	0.28	2.71	0.30	0.228	0.90	0.254	1.00	1.30	0.331	No
746	48.98	2.99	0.28	2.71	0.30	0.228	0.90	0.254	1.00	1.30	0.331	No
747	49.02	2.99	0.28	2.71	0.30	0.228	0.90	0.254	1.00	1.30	0.331	No
748	49.12	3.00	0.28	2.72	0.30	0.228	0.90	0.254	1.00	1.30	0.330	No
749	49.16	3.00	0.29	2.72	0.30	0.228	0.90	0.254	1.00	1.30	0.330	No
750	49.22	3.01	0.29	2.72	0.30	0.228	0.90	0.254	1.00	1.30	0.330	No
751	49.30	3.01	0.29	2.72	0.30	0.228	0.90	0.254	1.00	1.30	0.330	No
752	49.36	3.02	0.29	2.72	0.30	0.228	0.90	0.254	1.00	1.30	0.330	No
753	49.41	3.02	0.29	2.73	0.30	0.227	0.90	0.254	1.00	1.30	0.330	No
754	49.48	3.02	0.30	2.73	0.29	0.227	0.90	0.254	1.00	1.30	0.330	No
755	49.54	3.03	0.30	2.73	0.29	0.227	0.90	0.254	1.00	1.30	0.330	No
756	49.62	3.03	0.30	2.73	0.29	0.227	0.90	0.254	1.00	1.30	0.330	No
757	49.71	3.04	0.30	2.74	0.29	0.227	0.90	0.254	1.00	1.30	0.330	No
758	49.75	3.04	0.30	2.74	0.29	0.227	0.90	0.254	1.00	1.30	0.330	No
759	49.80	3.05	0.31	2.74	0.29	0.227	0.90	0.253	1.00	1.30	0.329	No
760	49.89	3.05	0.31	2.74	0.29	0.227	0.90	0.253	1.00	1.30	0.329	No
761	49.95	3.06	0.31	2.75	0.29	0.227	0.90	0.253	1.00	1.30	0.329	No
762	50.01	3.06	0.31	2.75	0.29	0.227	0.90	0.253	1.00	1.30	2.000	No
763	50.09	3.06	0.31	2.75	0.29	0.227	0.90	0.253	1.00	1.30	2.000	No
764	50.15	3.07	0.32	2.75	0.29	0.227	0.90	0.253	1.00	1.30	2.000	No
765	50.22	3.07	0.32	2.75	0.29	0.227	0.90	0.253	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
766	50.26	3.08	0.32	2.76	0.29	0.227	0.90	0.253	1.00	1.30	2.000	No
767	50.35	3.08	0.32	2.76	0.29	0.227	0.90	0.253	1.00	1.30	2.000	No
768	50.41	3.09	0.32	2.76	0.29	0.227	0.90	0.253	1.00	1.30	2.000	No
769	50.46	3.09	0.33	2.76	0.29	0.226	0.90	0.253	1.00	1.30	2.000	No
770	50.53	3.09	0.33	2.76	0.29	0.226	0.90	0.253	1.00	1.30	2.000	No
771	50.60	3.10	0.33	2.77	0.29	0.226	0.90	0.253	1.00	1.30	2.000	No
772	50.67	3.10	0.33	2.77	0.29	0.226	0.90	0.253	1.00	1.30	2.000	No
773	50.73	3.11	0.33	2.77	0.29	0.226	0.90	0.253	1.00	1.30	2.000	No
774	50.79	3.11	0.34	2.77	0.29	0.226	0.90	0.252	1.00	1.30	2.000	No
775	50.88	3.12	0.34	2.78	0.29	0.226	0.90	0.252	1.00	1.30	2.000	No
776	50.93	3.12	0.34	2.78	0.29	0.226	0.90	0.252	1.00	1.30	2.000	No
777	51.00	3.12	0.34	2.78	0.29	0.226	0.90	0.252	1.00	1.30	2.000	No
778	51.06	3.13	0.35	2.78	0.29	0.226	0.90	0.252	1.00	1.30	2.000	No
779	51.12	3.13	0.35	2.79	0.29	0.226	0.90	0.252	1.00	1.30	2.000	No
780	51.19	3.14	0.35	2.79	0.29	0.226	0.90	0.252	1.00	1.30	2.000	No
781	51.25	3.14	0.35	2.79	0.29	0.226	0.90	0.252	1.00	1.30	2.000	No
782	51.33	3.15	0.35	2.79	0.29	0.226	0.90	0.252	1.00	1.30	2.000	No
783	51.39	3.15	0.36	2.79	0.29	0.226	0.90	0.252	1.00	1.30	2.000	No
784	51.47	3.16	0.36	2.80	0.29	0.226	0.90	0.252	1.00	1.30	2.000	No
785	51.53	3.16	0.36	2.80	0.29	0.226	0.90	0.252	1.00	1.30	2.000	No
786	51.58	3.16	0.36	2.80	0.29	0.226	0.90	0.252	1.00	1.30	2.000	No
787	51.64	3.17	0.36	2.80	0.29	0.226	0.90	0.252	1.00	1.30	2.000	No
788	51.72	3.17	0.37	2.81	0.29	0.225	0.90	0.252	1.00	1.30	2.000	No
789	51.78	3.18	0.37	2.81	0.29	0.225	0.90	0.252	1.00	1.30	2.000	No
790	51.84	3.18	0.37	2.81	0.29	0.225	0.90	0.252	1.00	1.30	2.000	No
791	51.93	3.19	0.37	2.81	0.29	0.225	0.90	0.252	1.00	1.30	2.000	No
792	51.98	3.19	0.37	2.82	0.29	0.225	0.90	0.251	1.00	1.30	2.000	No
793	52.06	3.19	0.38	2.82	0.29	0.225	0.90	0.251	1.00	1.30	2.000	No
794	52.11	3.20	0.38	2.82	0.29	0.225	0.90	0.251	1.00	1.30	2.000	No
795	52.17	3.20	0.38	2.82	0.29	0.225	0.90	0.251	1.00	1.30	2.000	No
796	52.24	3.21	0.38	2.82	0.29	0.225	0.90	0.251	1.00	1.30	2.000	No
797	52.31	3.21	0.38	2.83	0.28	0.225	0.90	0.251	1.00	1.30	2.000	No
798	52.38	3.21	0.39	2.83	0.28	0.225	0.90	0.251	1.00	1.30	2.000	No
799	52.45	3.22	0.39	2.83	0.28	0.225	0.90	0.251	1.00	1.30	2.000	No
800	52.52	3.22	0.39	2.83	0.28	0.225	0.90	0.251	1.00	1.30	2.000	No
801	52.58	3.23	0.39	2.84	0.28	0.225	0.90	0.251	1.00	1.30	2.000	No
802	52.65	3.23	0.39	2.84	0.28	0.225	0.90	0.251	1.00	1.30	2.000	No
803	52.72	3.24	0.40	2.84	0.28	0.225	0.90	0.251	1.00	1.30	2.000	No
804	52.76	3.24	0.40	2.84	0.28	0.225	0.90	0.251	1.00	1.30	2.000	No
805	52.82	3.24	0.40	2.84	0.28	0.225	0.90	0.251	1.00	1.30	2.000	No
806	52.91	3.25	0.40	2.85	0.28	0.225	0.90	0.251	1.00	1.30	2.000	No
807	52.97	3.25	0.40	2.85	0.28	0.225	0.90	0.251	1.00	1.30	2.000	No
808	53.02	3.26	0.41	2.85	0.28	0.225	0.90	0.251	1.00	1.30	2.000	No
809	53.09	3.26	0.41	2.85	0.28	0.225	0.90	0.251	1.00	1.30	2.000	No
810	53.17	3.27	0.41	2.85	0.28	0.225	0.90	0.251	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
811	53.22	3.27	0.41	2.86	0.28	0.225	0.90	0.251	1.00	1.30	2.000	No
812	53.29	3.27	0.41	2.86	0.28	0.225	0.90	0.251	1.00	1.30	2.000	No
813	53.37	3.28	0.42	2.86	0.28	0.224	0.90	0.251	1.00	1.30	2.000	No
814	53.42	3.28	0.42	2.86	0.28	0.224	0.90	0.251	1.00	1.30	2.000	No
815	53.50	3.29	0.42	2.87	0.28	0.224	0.90	0.251	1.00	1.30	2.000	No
816	53.55	3.29	0.42	2.87	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
817	53.62	3.29	0.43	2.87	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
818	53.70	3.30	0.43	2.87	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
819	53.74	3.30	0.43	2.87	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
820	53.81	3.31	0.43	2.88	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
821	53.91	3.31	0.43	2.88	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
822	53.94	3.31	0.44	2.88	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
823	54.01	3.32	0.44	2.88	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
824	54.09	3.32	0.44	2.88	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
825	54.16	3.33	0.44	2.89	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
826	54.21	3.33	0.44	2.89	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
827	54.29	3.34	0.45	2.89	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
828	54.34	3.34	0.45	2.89	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
829	54.45	3.35	0.45	2.90	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
830	54.50	3.35	0.45	2.90	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
831	54.56	3.35	0.45	2.90	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
832	54.59	3.36	0.46	2.90	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
833	54.69	3.36	0.46	2.90	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
834	54.73	3.37	0.46	2.91	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
835	54.79	3.37	0.46	2.91	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
836	54.86	3.37	0.46	2.91	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
837	54.94	3.38	0.47	2.91	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
838	55.01	3.38	0.47	2.92	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
839	55.07	3.39	0.47	2.92	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
840	55.13	3.39	0.47	2.92	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
841	55.18	3.39	0.47	2.92	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
842	55.26	3.40	0.48	2.92	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
843	55.33	3.40	0.48	2.93	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
844	55.40	3.41	0.48	2.93	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
845	55.46	3.41	0.48	2.93	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
846	55.52	3.42	0.48	2.93	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
847	55.60	3.42	0.49	2.94	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
848	55.66	3.43	0.49	2.94	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
849	55.73	3.43	0.49	2.94	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
850	55.81	3.44	0.49	2.94	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
851	55.86	3.44	0.49	2.94	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
852	55.91	3.44	0.50	2.95	0.28	0.224	0.90	0.250	1.00	1.30	2.000	No
853	56.02	3.45	0.50	2.95	0.27	0.224	0.90	0.249	1.00	1.30	2.000	No
854	56.07	3.45	0.50	2.95	0.27	0.224	0.90	0.249	1.00	1.30	2.000	No
855	56.12	3.46	0.50	2.95	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
856	56.17	3.46	0.50	2.96	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
857	56.26	3.47	0.51	2.96	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
858	56.30	3.47	0.51	2.96	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
859	56.37	3.47	0.51	2.96	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
860	56.45	3.48	0.51	2.97	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
861	56.51	3.48	0.52	2.97	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
862	56.58	3.49	0.52	2.97	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
863	56.66	3.49	0.52	2.97	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
864	56.71	3.50	0.52	2.97	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
865	56.78	3.50	0.52	2.98	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
866	56.84	3.50	0.53	2.98	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
867	56.91	3.51	0.53	2.98	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
868	57.00	3.51	0.53	2.98	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
869	57.05	3.52	0.53	2.99	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
870	57.11	3.52	0.53	2.99	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
871	57.19	3.53	0.54	2.99	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
872	57.23	3.53	0.54	2.99	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
873	57.30	3.53	0.54	2.99	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
874	57.40	3.54	0.54	3.00	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
875	57.43	3.54	0.54	3.00	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
876	57.50	3.55	0.55	3.00	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
877	57.58	3.55	0.55	3.00	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
878	57.63	3.56	0.55	3.01	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
879	57.69	3.56	0.55	3.01	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
880	57.77	3.57	0.55	3.01	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
881	57.83	3.57	0.56	3.01	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
882	57.89	3.57	0.56	3.02	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
883	57.95	3.58	0.56	3.02	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
884	58.01	3.58	0.56	3.02	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
885	58.08	3.59	0.56	3.02	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
886	58.17	3.59	0.57	3.03	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
887	58.21	3.60	0.57	3.03	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
888	58.27	3.60	0.57	3.03	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
889	58.35	3.60	0.57	3.03	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
890	58.41	3.61	0.57	3.03	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
891	58.47	3.61	0.58	3.04	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
892	58.56	3.62	0.58	3.04	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
893	58.60	3.62	0.58	3.04	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
894	58.67	3.63	0.58	3.04	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
895	58.73	3.63	0.58	3.05	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
896	58.80	3.63	0.59	3.05	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
897	58.87	3.64	0.59	3.05	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
898	58.94	3.64	0.59	3.05	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
899	59.01	3.65	0.59	3.06	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
900	59.06	3.65	0.59	3.06	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
901	59.16	3.66	0.60	3.06	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
902	59.21	3.66	0.60	3.06	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
903	59.26	3.66	0.60	3.06	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
904	59.34	3.67	0.60	3.07	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
905	59.40	3.67	0.61	3.07	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
906	59.46	3.68	0.61	3.07	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
907	59.55	3.68	0.61	3.07	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
908	59.60	3.69	0.61	3.08	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
909	59.67	3.69	0.61	3.08	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
910	59.72	3.70	0.62	3.08	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
911	59.79	3.70	0.62	3.08	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
912	59.85	3.70	0.62	3.08	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
913	59.91	3.70	0.62	3.08	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
914	60.00	3.71	0.62	3.08	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
915	60.04	3.71	0.63	3.08	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No
916	60.11	3.71	0.63	3.09	0.27	0.223	0.90	0.249	1.00	1.30	2.000	No

Abbreviations

Depth: Depth from free surface, at which CPT was performed (ft)
σ_v: Total overburden pressure at test point (tsf)
u_0: Water pressure at test point (tsf)
σ_v': Effective overburden pressure based on GWT during earthquake (tsf)
r_d: Nonlinear shear mass factor
CSR: Cyclic Stress Ratio
MSF: Magnitude Scaling Factor
CSR_{eq}: CSR adjusted for M=7.5
K_σ: Effective overburden stress factor
CSR^*: CSR fully adjusted

:: Cyclic Resistance Ratio (CRR) calculation data ::

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
1	0.08	10.82	0.00	1.02	1.70	18.39	0.00	18.39	4.000	No	No	2.00
2	0.14	17.35	0.01	1.82	1.70	29.50	0.00	29.50	4.000	No	No	2.00
3	0.20	24.05	0.01	1.03	1.70	40.88	0.00	40.88	4.000	No	No	2.00
4	0.26	28.88	0.01	0.76	1.70	49.10	0.00	49.10	4.000	No	No	2.00
5	0.33	34.96	0.02	0.66	1.70	59.43	0.00	59.43	4.000	No	No	2.00
6	0.40	43.19	0.02	0.62	1.70	73.42	0.00	73.42	4.000	No	No	2.00
7	0.46	46.40	0.02	0.60	1.70	78.88	0.68	79.56	4.000	No	No	2.00
8	0.53	49.09	0.03	0.58	1.70	83.45	1.37	84.82	4.000	No	No	2.00
9	0.60	49.18	0.03	0.54	1.70	83.61	3.75	87.36	4.000	No	No	2.00
10	0.66	48.91	0.03	0.52	1.70	83.15	5.42	88.57	4.000	No	No	2.00
11	0.74	49.44	0.04	0.50	1.70	84.05	6.30	90.35	4.000	No	No	2.00
12	0.79	49.98	0.04	0.50	1.70	84.97	6.42	91.38	4.000	No	No	2.00
13	0.88	50.07	0.05	0.51	1.70	85.12	6.10	91.22	4.000	No	No	2.00
14	0.92	49.18	0.05	0.51	1.70	83.61	5.98	89.59	4.000	No	No	2.00
15	0.99	47.30	0.05	0.52	1.70	80.41	5.61	86.02	4.000	No	No	2.00
16	1.06	45.78	0.06	0.52	1.70	77.83	5.36	83.19	4.000	No	No	2.00
17	1.13	45.73	0.06	0.53	1.70	77.74	4.76	82.50	4.000	No	No	2.00
18	1.19	45.73	0.06	0.54	1.70	77.74	3.77	81.51	4.000	No	No	2.00
19	1.25	45.69	0.07	0.56	1.70	77.67	2.95	80.62	4.000	No	No	2.00
20	1.32	48.37	0.07	0.56	1.70	82.23	2.32	84.54	4.000	No	No	2.00
21	1.38	51.32	0.07	0.56	1.70	87.24	1.92	89.17	4.000	No	No	2.00
22	1.47	54.81	0.08	0.56	1.70	93.18	1.52	94.70	4.000	No	No	2.00
23	1.52	56.51	0.08	0.58	1.70	96.07	0.62	96.68	4.000	No	No	2.00
24	1.58	57.40	0.09	0.63	1.70	97.58	0.00	97.58	4.000	No	No	2.00
25	1.65	56.51	0.09	0.62	1.70	96.07	0.00	96.07	4.000	No	No	2.00
26	1.72	53.92	0.09	0.61	1.70	91.66	0.00	91.66	4.000	No	No	2.00
27	1.78	50.70	0.10	0.60	1.70	86.19	0.00	86.19	4.000	No	No	2.00
28	1.85	46.23	0.10	0.59	1.70	78.59	1.15	79.74	4.000	No	No	2.00
29	1.93	37.73	0.10	0.56	1.70	64.14	4.29	68.43	4.000	No	No	2.00
30	1.98	34.16	0.11	0.53	1.70	58.07	7.15	65.23	4.000	No	No	2.00
31	2.04	31.20	0.11	0.51	1.70	53.04	11.13	64.17	4.000	No	No	2.00
32	2.10	28.25	0.11	0.49	1.70	48.02	16.79	64.81	4.000	No	No	2.00
33	2.17	26.20	0.12	0.47	1.70	44.54	21.98	66.52	4.000	No	No	2.00
34	2.24	24.14	0.12	0.47	1.70	41.04	25.61	66.65	4.000	No	No	2.00
35	2.32	24.23	0.13	0.47	1.70	41.19	25.09	66.28	4.000	No	No	2.00
36	2.37	25.12	0.13	0.47	1.70	42.70	23.51	66.22	4.000	No	No	2.00
37	2.44	26.82	0.13	0.48	1.70	45.59	20.22	65.81	4.000	No	No	2.00
38	2.51	32.01	0.14	0.49	1.70	54.42	14.29	68.70	4.000	No	No	2.00
39	2.57	34.87	0.14	0.49	1.70	59.28	11.60	70.88	4.000	No	No	2.00
40	2.63	33.98	0.14	0.51	1.70	57.77	9.63	67.40	4.000	No	No	2.00
41	2.73	30.40	0.15	0.54	1.70	51.68	8.08	59.76	4.000	No	No	2.00
42	2.77	28.08	0.15	0.55	1.70	47.74	7.75	55.49	4.000	No	No	2.00
43	2.83	25.93	0.16	0.56	1.70	44.08	7.96	52.04	4.000	No	No	2.00
44	2.93	23.69	0.16	0.56	1.70	40.27	9.62	49.89	4.000	No	No	2.00
45	2.97	22.00	0.16	0.56	1.70	37.40	10.54	47.94	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
46	3.02	21.55	0.17	0.57	1.70	36.63	10.61	47.25	4.000	No	No	2.00
47	3.11	20.48	0.17	0.56	1.70	34.82	13.05	47.87	4.000	No	No	2.00
48	3.15	20.48	0.17	0.55	1.70	34.82	13.54	48.35	4.000	No	No	2.00
49	3.22	21.19	0.18	0.55	1.70	36.02	13.34	49.36	4.000	No	No	2.00
50	3.29	22.35	0.18	0.54	1.70	37.99	12.80	50.80	4.000	No	No	2.00
51	3.37	24.05	0.18	0.54	1.70	40.88	11.88	52.76	4.000	No	No	2.00
52	3.42	25.21	0.19	0.54	1.70	42.86	11.32	54.17	4.000	No	No	2.00
53	3.48	26.38	0.19	0.53	1.70	44.85	11.00	55.84	4.000	No	No	2.00
54	3.54	26.82	0.19	0.53	1.70	45.59	11.06	56.65	4.000	No	No	2.00
55	3.62	27.54	0.20	0.53	1.70	46.82	10.86	57.67	4.000	No	No	2.00
56	3.68	28.43	0.20	0.53	1.70	48.33	10.46	58.79	4.000	No	No	2.00
57	3.75	29.51	0.21	0.53	1.70	50.17	10.05	60.22	4.000	No	No	2.00
58	3.81	30.22	0.21	0.53	1.70	51.37	9.81	61.19	4.000	No	No	2.00
59	3.90	29.60	0.21	0.52	1.70	50.32	10.45	60.77	4.000	No	No	2.00
60	3.94	28.43	0.22	0.52	1.70	48.33	11.43	59.76	4.000	No	No	2.00
61	4.02	25.48	0.22	0.52	1.70	43.32	14.05	57.37	4.000	No	No	2.00
62	4.10	23.25	0.23	0.55	1.70	39.52	11.86	51.39	4.000	No	No	2.00
63	4.14	21.82	0.23	0.55	1.70	37.09	12.28	49.37	4.000	No	No	2.00
64	4.20	20.30	0.23	0.54	1.70	34.51	15.06	49.57	4.000	No	No	2.00
65	4.30	18.96	0.24	0.54	1.70	32.23	18.61	50.84	4.000	No	No	2.00
66	4.34	18.60	0.24	0.54	1.70	31.62	19.44	51.06	4.000	No	No	2.00
67	4.41	17.88	0.24	0.54	1.70	30.40	20.30	50.69	4.000	No	No	2.00
68	4.47	16.63	0.25	0.54	1.70	28.27	22.13	50.40	4.000	No	No	2.00
69	4.54	18.06	0.25	0.54	1.70	30.70	19.83	50.54	4.000	No	No	2.00
70	4.60	19.49	0.25	0.53	1.70	33.13	18.09	51.23	4.000	No	No	2.00
71	4.68	21.55	0.26	0.53	1.70	36.63	16.19	52.82	4.000	No	No	2.00
72	4.73	22.17	0.26	0.53	1.70	37.69	15.56	53.25	4.000	No	No	2.00
73	4.80	22.98	0.26	0.53	1.70	39.07	14.96	54.02	4.000	No	No	2.00
74	4.86	23.43	0.27	0.53	1.70	39.83	14.54	54.37	4.000	No	No	2.00
75	4.93	23.25	0.27	0.52	1.70	39.52	15.19	54.71	4.000	No	No	2.00
76	5.00	23.07	0.28	0.52	1.70	39.22	15.53	54.75	4.000	No	No	2.00
77	5.08	23.07	0.28	0.52	1.70	39.22	15.36	54.58	4.000	No	No	2.00
78	5.14	23.07	0.28	0.53	1.70	39.22	15.01	54.22	4.000	No	No	2.00
79	5.20	23.07	0.29	0.53	1.70	39.22	14.46	53.68	4.000	No	No	2.00
80	5.28	23.69	0.29	0.53	1.70	40.27	13.52	53.79	4.000	No	No	2.00
81	5.35	24.59	0.29	0.53	1.70	41.80	12.77	54.58	4.000	No	No	2.00
82	5.39	26.38	0.30	0.53	1.70	44.85	11.54	56.39	4.000	No	No	2.00
83	5.45	28.34	0.30	0.53	1.70	48.18	10.46	58.64	4.000	No	No	2.00
84	5.53	29.95	0.30	0.53	1.70	50.91	9.79	60.71	4.000	No	No	2.00
85	5.58	31.38	0.31	0.52	1.70	53.35	9.39	62.74	4.000	No	No	2.00
86	5.66	32.01	0.31	0.52	1.70	54.42	9.99	64.40	4.000	No	No	2.00
87	5.73	31.92	0.32	0.51	1.70	54.26	11.25	65.51	4.000	No	No	2.00
88	5.79	31.65	0.32	0.50	1.70	53.80	12.51	66.32	4.000	No	No	2.00
89	5.84	30.94	0.32	0.49	1.70	52.60	13.75	66.35	4.000	No	No	2.00
90	5.93	29.60	0.33	0.49	1.70	50.32	15.44	65.76	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
91	5.98	29.24	0.33	0.49	1.70	49.71	15.83	65.53	4.000	No	No	2.00
92	6.07	30.31	0.33	0.49	1.70	51.53	13.87	65.40	4.000	No	No	2.00
93	6.12	31.74	0.34	0.50	1.70	53.96	12.57	66.52	4.000	No	No	2.00
94	6.17	33.44	0.34	0.50	1.70	56.85	11.49	68.34	4.000	No	No	2.00
95	6.24	34.87	0.34	0.50	1.70	59.28	11.01	70.28	4.000	No	No	2.00
96	6.32	37.37	0.35	0.50	1.70	63.53	9.93	73.46	4.000	No	No	2.00
97	6.37	37.73	0.35	0.50	1.70	64.14	9.93	74.07	4.000	No	No	2.00
98	6.43	37.11	0.36	0.49	1.70	63.09	10.61	73.70	4.000	No	No	2.00
99	6.52	34.33	0.36	0.48	1.68	57.63	13.96	71.59	4.000	No	No	2.00
100	6.57	32.28	0.36	0.47	1.65	53.33	17.67	71.01	4.000	No	No	2.00
101	6.63	31.56	0.37	0.46	1.62	51.17	21.63	72.80	4.000	No	No	2.00
102	6.72	30.31	0.37	0.48	1.66	50.29	16.31	66.61	4.000	No	No	2.00
103	6.76	28.88	0.37	0.51	1.69	48.92	13.02	61.93	4.000	No	No	2.00
104	6.83	25.84	0.38	0.50	1.67	43.19	17.23	60.42	4.000	No	No	2.00
105	6.92	23.34	0.38	0.50	1.66	38.79	20.24	59.03	4.000	No	No	2.00
106	6.98	22.80	0.39	0.50	1.66	37.77	20.87	58.64	4.000	No	No	2.00
107	7.02	22.89	0.39	0.50	1.65	37.82	20.76	58.57	4.000	No	No	2.00
108	7.10	20.83	0.39	0.50	1.64	34.10	25.40	59.49	4.000	No	No	2.00
109	7.17	21.46	0.40	0.48	1.61	34.49	28.71	63.19	4.000	No	No	2.00
110	7.23	19.49	0.40	0.48	1.60	31.14	34.85	65.98	4.000	No	Yes	2.00
111	7.29	17.26	0.40	0.49	1.61	27.74	38.18	65.92	4.000	No	Yes	2.00
112	7.36	15.83	0.41	0.51	1.62	25.64	38.50	64.14	4.000	No	Yes	2.00
113	7.42	15.11	0.41	0.52	1.63	24.68	36.20	60.88	4.000	No	Yes	2.00
114	7.52	16.45	0.42	0.52	1.62	26.73	30.27	57.00	4.000	No	Yes	2.00
115	7.57	19.31	0.42	0.52	1.61	31.14	24.17	55.30	4.000	No	No	2.00
116	7.62	23.07	0.42	0.51	1.60	36.97	18.60	55.57	4.000	No	No	2.00
117	7.72	28.79	0.43	0.51	1.59	45.76	13.47	59.23	4.000	No	No	2.00
118	7.76	31.92	0.43	0.50	1.57	50.15	13.15	63.29	4.000	No	No	2.00
119	7.82	33.26	0.43	0.48	1.54	51.08	16.24	67.32	4.000	No	No	2.00
120	7.90	32.37	0.44	0.45	1.49	48.27	23.96	72.23	4.000	No	No	2.00
121	7.95	31.65	0.44	0.45	1.49	47.12	24.38	71.50	4.000	No	No	2.00
122	8.02	30.49	0.45	0.46	1.49	45.52	23.43	68.95	4.000	No	No	2.00
123	8.07	28.97	0.45	0.47	1.49	43.26	24.18	67.43	4.000	No	No	2.00
124	8.16	29.68	0.45	0.47	1.49	44.31	21.86	66.17	4.000	No	No	2.00
125	8.21	33.71	0.46	0.47	1.49	50.21	17.98	68.19	4.000	No	No	2.00
126	8.27	43.10	0.46	0.48	1.49	64.25	12.24	76.49	4.000	No	No	2.00
127	8.35	63.39	0.46	0.50	1.50	95.35	5.79	101.14	4.000	No	No	2.00
128	8.41	73.15	0.47	0.51	1.51	110.73	3.79	114.52	4.000	No	No	2.00
129	8.47	76.46	0.47	0.52	1.52	116.37	2.82	119.19	4.000	No	No	2.00
130	8.54	76.46	0.48	0.53	1.52	116.56	2.32	118.88	4.000	No	No	2.00
131	8.60	75.65	0.48	0.52	1.51	114.13	2.93	117.06	4.000	No	No	2.00
132	8.67	71.36	0.48	0.52	1.50	107.24	3.22	110.46	4.000	No	No	2.00
133	8.74	67.61	0.49	0.51	1.49	100.48	4.18	104.66	4.000	No	No	2.00
134	8.80	64.39	0.49	0.50	1.47	94.88	5.10	99.98	4.000	No	No	2.00
135	8.90	60.81	0.50	0.49	1.45	88.13	6.92	95.05	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
136	8.95	58.22	0.50	0.48	1.44	83.67	8.17	91.84	4.000	No	No	2.00
137	8.99	56.70	0.50	0.48	1.43	80.87	9.35	90.22	4.000	No	No	2.00
138	9.07	54.91	0.51	0.47	1.42	77.86	10.00	87.86	4.000	No	No	2.00
139	9.14	54.10	0.51	0.48	1.42	76.72	9.58	86.29	4.000	No	No	2.00
140	9.20	53.84	0.51	0.47	1.40	75.41	11.36	86.77	4.000	No	No	2.00
141	9.29	53.84	0.52	0.46	1.39	74.58	12.78	87.36	4.000	No	No	2.00
142	9.33	54.01	0.52	0.46	1.38	74.54	13.16	87.70	4.000	No	No	2.00
143	9.40	54.64	0.53	0.45	1.37	74.94	13.69	88.63	4.000	No	No	2.00
144	9.47	54.59	0.53	0.45	1.37	74.61	13.81	88.42	4.000	No	No	2.00
145	9.53	54.54	0.53	0.45	1.36	74.42	13.52	87.94	4.000	No	No	2.00
146	9.59	55.97	0.54	0.46	1.36	76.32	12.56	88.88	4.000	No	No	2.00
147	9.65	56.60	0.54	0.47	1.37	77.48	10.85	88.33	4.000	No	No	2.00
148	9.72	57.49	0.54	0.48	1.38	79.13	8.99	88.11	4.000	No	No	2.00
149	9.78	57.04	0.55	0.48	1.37	78.13	9.39	87.52	4.000	No	No	2.00
150	9.85	56.51	0.55	0.47	1.36	76.96	10.03	86.99	4.000	No	No	2.00
151	9.92	56.51	0.56	0.47	1.35	76.39	10.86	87.26	4.000	No	No	2.00
152	9.98	57.22	0.56	0.47	1.34	76.93	11.28	88.20	4.000	No	No	2.00
153	10.04	57.67	0.56	0.46	1.34	77.16	11.61	88.77	4.000	No	No	2.00
154	10.11	60.17	0.57	0.45	1.33	79.84	12.25	92.09	4.000	No	No	2.00
155	10.19	61.96	0.57	0.45	1.32	81.58	12.99	94.57	4.000	No	No	2.00
156	10.24	62.86	0.58	0.44	1.31	82.30	13.66	95.96	4.000	No	No	2.00
157	10.31	64.82	0.58	0.44	1.30	84.38	13.88	98.26	4.000	No	No	2.00
158	10.42	68.04	0.59	0.43	1.29	87.90	14.02	101.92	4.000	No	No	2.00
159	10.44	71.80	0.59	0.44	1.29	92.75	13.08	105.83	4.000	No	No	2.00
160	10.50	73.85	0.59	0.43	1.29	95.00	13.04	108.04	4.000	No	No	2.00
161	10.56	75.82	0.60	0.43	1.28	97.27	12.72	109.99	4.000	No	No	2.00
162	10.64	75.46	0.60	0.43	1.28	96.49	12.77	109.27	4.000	No	No	2.00
163	10.70	74.75	0.60	0.44	1.28	95.42	12.67	108.09	4.000	No	No	2.00
164	10.77	73.59	0.61	0.44	1.28	93.84	12.32	106.16	4.000	No	No	2.00
165	10.84	72.69	0.61	0.44	1.27	92.44	12.43	104.87	4.000	No	No	2.00
166	10.90	71.71	0.62	0.44	1.27	90.98	12.59	103.58	4.000	No	No	2.00
167	10.96	71.89	0.62	0.44	1.26	90.85	12.96	103.81	4.000	No	No	2.00
168	11.04	74.21	0.62	0.47	1.28	95.09	8.17	103.26	4.000	No	No	2.00
169	11.10	76.80	0.63	0.50	1.30	99.47	5.42	104.89	4.000	No	No	2.00
170	11.18	82.26	0.63	0.49	1.29	105.99	5.16	111.15	4.000	No	No	2.00
171	11.22	85.30	0.63	0.49	1.29	109.71	4.94	114.65	4.000	No	No	2.00
172	11.30	87.80	0.64	0.49	1.28	112.41	4.94	117.34	4.000	No	No	2.00
173	11.36	91.47	0.64	0.49	1.28	116.78	4.72	121.50	4.000	No	No	2.00
174	11.42	91.56	0.65	0.49	1.27	116.37	4.95	121.33	4.000	No	No	2.00
175	11.50	96.56	0.65	0.49	1.27	122.40	4.52	126.92	4.000	No	No	2.00
176	11.56	100.32	0.66	0.49	1.26	126.88	4.24	131.12	4.000	No	No	2.00
177	11.63	105.06	0.66	0.49	1.26	132.35	4.17	136.52	4.000	No	No	2.00
178	11.69	109.98	0.66	0.48	1.25	137.93	4.22	142.15	4.000	No	No	2.00
179	11.76	114.45	0.67	0.48	1.25	142.92	4.23	147.15	4.000	No	No	2.00
180	11.82	117.40	0.67	0.48	1.24	145.95	4.33	150.29	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
181	11.88	119.01	0.67	0.48	1.24	147.40	4.49	151.89	4.000	No	No	2.00
182	11.95	120.97	0.68	0.47	1.23	149.23	4.64	153.87	4.000	No	No	2.00
183	12.03	122.58	0.68	0.47	1.23	150.67	4.63	155.30	4.000	No	No	2.00
184	12.08	123.39	0.69	0.47	1.23	151.34	4.57	155.92	4.000	No	No	2.00
185	12.16	124.01	0.69	0.47	1.22	151.60	4.55	156.15	4.000	No	No	2.00
186	12.22	124.10	0.70	0.47	1.22	151.24	4.63	155.87	4.000	No	No	2.00
187	12.29	122.76	0.70	0.47	1.21	149.10	4.82	153.92	4.000	No	No	2.00
188	12.35	121.15	0.70	0.47	1.21	146.74	5.00	151.74	4.000	No	No	2.00
189	12.42	118.92	0.71	0.47	1.21	143.57	5.21	148.78	4.000	No	No	2.00
190	12.49	118.92	0.71	0.47	1.20	143.19	5.18	148.38	4.000	No	No	2.00
191	12.53	118.92	0.71	0.47	1.20	142.90	5.22	148.12	4.000	No	No	2.00
192	12.60	118.92	0.72	0.47	1.20	142.42	5.36	147.78	4.000	No	No	2.00
193	12.68	119.45	0.72	0.46	1.19	142.49	5.56	148.04	4.000	No	No	2.00
194	12.73	120.17	0.73	0.46	1.19	143.00	5.64	148.64	4.000	No	No	2.00
195	12.82	121.06	0.73	0.46	1.18	143.42	5.88	149.30	4.000	No	No	2.00
196	12.87	121.60	0.74	0.46	1.18	143.67	6.00	149.67	4.000	No	No	2.00
197	12.93	122.49	0.74	0.46	1.18	144.29	6.17	150.46	4.000	No	No	2.00
198	13.00	123.57	0.74	0.45	1.17	145.02	6.40	151.43	4.000	No	No	2.00
199	13.08	125.27	0.75	0.45	1.17	146.43	6.56	152.99	4.000	No	No	2.00
200	13.14	127.50	0.75	0.45	1.17	148.74	6.47	155.20	4.000	No	No	2.00
201	13.22	131.61	0.76	0.45	1.16	153.06	6.22	159.28	4.000	No	No	2.00
202	13.26	133.49	0.76	0.45	1.16	155.04	6.10	161.15	4.000	No	No	2.00
203	13.32	138.32	0.76	0.45	1.16	160.38	5.77	166.15	4.000	No	No	2.00
204	13.43	148.96	0.77	0.49	1.17	174.31	2.50	176.81	4.000	No	No	2.00
205	13.48	157.45	0.77	0.51	1.17	184.64	1.58	186.22	4.000	No	No	2.00
206	13.52	161.21	0.78	0.51	1.17	188.67	1.58	190.25	4.000	No	No	2.00
207	13.62	170.69	0.78	0.50	1.16	198.46	1.88	200.33	4.000	No	No	2.00
208	13.66	173.19	0.78	0.49	1.16	200.69	2.13	202.82	4.000	No	No	2.00
209	13.72	177.03	0.79	0.49	1.15	204.42	2.31	206.72	4.000	No	No	2.00
210	13.80	173.46	0.79	0.48	1.15	199.27	2.80	202.08	4.000	No	No	2.00
211	13.89	173.73	0.80	0.48	1.14	198.79	2.95	201.74	4.000	No	No	2.00
212	13.92	174.17	0.80	0.48	1.14	199.01	2.95	201.96	4.000	No	No	2.00
213	13.98	174.53	0.80	0.48	1.14	198.95	2.97	201.92	4.000	No	No	2.00
214	14.05	175.42	0.81	0.47	1.14	199.24	3.27	202.51	4.000	No	No	2.00
215	14.13	176.86	0.81	0.47	1.13	200.01	3.62	203.63	4.000	No	No	2.00
216	14.18	178.38	0.82	0.46	1.13	201.16	3.84	205.00	4.000	No	No	2.00
217	14.25	183.83	0.82	0.46	1.12	206.59	3.98	210.58	4.000	No	No	2.00
218	14.34	191.07	0.83	0.45	1.12	213.78	4.22	217.99	4.000	No	No	2.00
219	14.38	197.33	0.83	0.45	1.12	220.31	4.24	224.55	4.000	No	No	2.00
220	14.44	207.08	0.83	0.45	1.11	230.57	4.27	234.84	4.000	No	No	2.00
221	14.52	211.37	0.84	0.44	1.11	234.24	4.86	239.09	4.000	No	No	2.00
222	14.57	212.26	0.84	0.43	1.10	234.48	5.32	239.80	4.000	No	No	2.00
223	14.64	211.82	0.85	0.43	1.10	233.04	6.11	239.15	4.000	No	No	2.00
224	14.71	209.94	0.85	0.42	1.10	230.09	6.75	236.84	4.000	No	No	2.00
225	14.78	205.82	0.85	0.42	1.09	224.95	7.12	232.07	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
226	14.83	201.62	0.86	0.42	1.09	220.00	7.30	227.30	4.000	No	No	2.00
227	14.93	193.22	0.86	0.42	1.09	210.22	7.55	217.77	4.000	No	No	2.00
228	14.97	189.64	0.87	0.42	1.09	206.04	7.69	213.72	4.000	No	No	2.00
229	15.03	184.99	0.87	0.42	1.08	200.62	7.85	208.47	4.000	No	No	2.00
230	15.10	178.11	0.88	0.42	1.08	192.73	8.13	200.86	4.000	No	No	2.00
231	15.16	174.98	0.88	0.42	1.08	189.04	8.06	197.10	4.000	No	No	2.00
232	15.24	170.33	0.88	0.42	1.08	183.58	8.32	191.90	4.000	No	No	2.00
233	15.32	170.51	0.89	0.41	1.07	183.18	8.81	191.99	4.000	No	No	2.00
234	15.36	172.56	0.89	0.41	1.07	185.12	9.02	194.14	4.000	No	No	2.00
235	15.46	177.21	0.90	0.40	1.07	189.14	10.39	199.52	4.000	No	No	2.00
236	15.50	176.94	0.90	0.39	1.07	188.48	11.13	199.61	4.000	No	No	2.00
237	15.57	176.77	0.91	0.38	1.06	187.68	12.42	200.10	4.000	No	No	2.00
238	15.62	176.86	0.91	0.38	1.06	187.40	13.12	200.52	4.000	No	No	2.00
239	15.69	181.77	0.91	0.38	1.06	192.13	13.45	205.58	4.000	No	No	2.00
240	15.76	189.19	0.92	0.38	1.06	199.84	11.83	211.67	4.000	No	No	2.00
241	15.82	197.23	0.92	0.41	1.06	208.62	8.68	217.31	4.000	No	No	2.00
242	15.91	206.35	0.93	0.41	1.05	217.63	8.49	226.12	4.000	No	No	2.00
243	15.96	208.94	0.93	0.40	1.05	220.08	8.52	228.60	4.000	No	No	2.00
244	16.02	214.67	0.93	0.41	1.05	225.73	8.27	234.00	4.000	No	No	2.00
245	16.09	214.13	0.94	0.41	1.05	224.77	8.13	232.89	4.000	No	No	2.00
246	16.16	209.40	0.94	0.41	1.05	219.35	8.27	227.63	4.000	No	No	2.00
247	16.21	211.01	0.95	0.41	1.05	220.77	8.10	228.87	4.000	No	No	2.00
248	16.30	208.69	0.95	0.40	1.04	217.64	8.77	226.42	4.000	No	No	2.00
249	16.35	204.93	0.96	0.40	1.04	213.32	9.62	222.94	4.000	No	No	2.00
250	16.44	198.67	0.96	0.39	1.04	206.17	10.91	217.08	4.000	No	No	2.00
251	16.49	193.13	0.97	0.39	1.04	200.08	11.51	211.59	4.000	No	No	2.00
252	16.55	185.80	0.97	0.38	1.03	192.13	12.23	204.36	4.000	No	No	2.00
253	16.60	180.79	0.97	0.38	1.03	186.70	12.66	199.36	4.000	No	No	2.00
254	16.67	173.46	0.98	0.38	1.03	178.80	13.31	192.11	4.000	No	No	2.00
255	16.74	165.41	0.98	0.38	1.03	170.18	14.12	184.30	4.000	No	No	2.00
256	16.80	163.09	0.99	0.38	1.03	167.54	14.26	181.80	4.000	No	No	2.00
257	16.88	161.92	0.99	0.38	1.03	166.01	14.29	180.30	4.000	No	No	2.00
258	16.93	160.31	0.99	0.38	1.02	164.14	14.50	178.64	4.000	No	No	2.00
259	17.00	155.93	1.00	0.38	1.02	159.38	14.62	174.00	4.000	No	No	2.00
260	17.08	151.46	1.00	0.38	1.02	154.54	14.81	169.36	4.000	No	No	2.00
261	17.13	149.50	1.01	0.38	1.02	152.36	14.93	167.30	4.000	No	No	2.00
262	17.20	146.46	1.01	0.38	1.02	149.01	15.10	164.11	4.000	No	No	2.00
263	17.28	145.74	1.02	0.39	1.02	148.01	14.46	162.47	4.000	No	No	2.00
264	17.33	146.55	1.02	0.39	1.01	148.66	13.96	162.62	4.000	No	No	2.00
265	17.39	146.81	1.02	0.39	1.01	148.70	13.91	162.61	4.000	No	No	2.00
266	17.48	145.64	1.03	0.39	1.01	147.21	14.06	161.27	4.000	No	No	2.00
267	17.52	146.27	1.03	0.39	1.01	147.69	13.96	161.65	4.000	No	No	2.00
268	17.59	151.81	1.04	0.39	1.01	153.05	13.11	166.16	4.000	No	No	2.00
269	17.67	168.89	1.04	0.41	1.01	169.97	10.10	180.07	4.000	No	No	2.00
270	17.72	173.00	1.05	0.41	1.01	173.89	9.16	183.05	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
271	17.79	171.75	1.05	0.41	1.00	172.35	9.34	181.70	4.000	No	No	2.00
272	17.87	172.20	1.05	0.41	1.00	172.45	9.74	182.20	4.000	No	No	2.00
273	17.93	172.20	1.06	0.41	1.00	172.17	9.90	182.07	4.000	No	No	2.00
274	17.98	172.65	1.06	0.41	1.00	172.41	9.95	182.36	4.000	No	No	2.00
275	18.07	186.33	1.07	0.41	1.00	185.67	9.00	194.67	4.000	No	No	2.00
276	18.12	187.85	1.07	0.41	1.00	186.92	9.17	196.09	4.000	No	No	2.00
277	18.18	184.54	1.07	0.40	0.99	183.38	10.08	193.46	4.000	No	No	2.00
278	18.25	193.04	1.08	0.39	0.99	191.55	10.71	202.26	4.000	No	No	2.00
279	18.32	211.90	1.08	0.39	0.99	209.94	10.45	220.39	4.000	No	No	2.00
280	18.40	221.92	1.09	0.39	0.99	219.44	10.40	229.84	4.000	No	No	2.00
281	18.45	227.19	1.09	0.39	0.99	224.40	9.74	234.14	4.000	No	No	2.00
282	18.52	238.55	1.10	0.40	0.99	235.13	8.77	243.90	4.000	No	No	2.00
283	18.57	246.69	1.10	0.39	0.98	242.94	9.13	252.07	4.000	No	No	2.00
284	18.64	258.58	1.10	0.39	0.98	254.27	9.20	263.47	4.000	No	No	2.00
285	18.72	268.50	1.11	0.39	0.98	263.57	9.26	272.83	4.000	No	No	2.00
286	18.77	267.52	1.11	0.38	0.98	262.34	9.81	272.15	4.000	No	No	2.00
287	18.86	266.53	1.12	0.38	0.98	260.91	10.33	271.23	4.000	No	No	2.00
288	18.91	273.51	1.12	0.38	0.98	267.43	9.97	277.40	4.000	No	No	2.00
289	18.96	278.16	1.13	0.38	0.98	271.59	9.68	281.27	4.000	No	No	2.00
290	19.06	282.18	1.13	0.38	0.97	274.93	9.51	284.44	4.000	No	No	2.00
291	19.11	285.31	1.14	0.38	0.97	277.64	9.39	287.03	4.000	No	No	2.00
292	19.18	287.19	1.14	0.38	0.97	279.07	9.52	288.59	4.000	No	No	2.00
293	19.24	288.89	1.14	0.38	0.97	280.37	9.59	289.96	4.000	No	No	2.00
294	19.30	290.85	1.15	0.38	0.97	281.86	9.45	291.31	4.000	No	No	2.00
295	19.36	293.00	1.15	0.38	0.97	283.54	9.18	292.72	4.000	No	No	2.00
296	19.45	293.81	1.16	0.39	0.97	283.68	8.85	292.53	4.000	No	No	2.00
297	19.50	293.18	1.16	0.39	0.96	282.70	8.62	291.33	4.000	No	No	2.00
298	19.58	291.12	1.17	0.39	0.96	280.16	8.34	288.49	4.000	No	No	2.00
299	19.64	289.96	1.17	0.39	0.96	278.50	7.92	286.42	4.000	No	No	2.00
300	19.69	289.07	1.18	0.40	0.96	277.26	7.66	284.92	4.000	No	No	2.00
301	19.76	288.44	1.18	0.44	0.95	274.92	3.88	278.79	4.000	No	No	2.00
302	19.84	287.01	1.18	0.51	0.94	270.89	0.39	271.28	4.000	No	No	2.00
303	19.89	286.29	1.19	0.50	0.94	270.21	0.81	271.02	4.000	No	No	2.00
304	19.95	284.33	1.19	0.49	0.94	268.30	1.38	269.68	4.000	No	No	2.00
305	20.02	280.84	1.20	0.48	0.94	264.90	1.98	266.88	4.000	No	No	2.00
306	20.08	267.61	1.20	0.46	0.94	252.43	2.83	255.26	4.000	No	No	2.00
307	20.14	262.06	1.20	0.46	0.94	247.00	3.23	250.23	4.000	No	No	2.00
308	20.21	263.85	1.21	0.45	0.94	248.41	3.49	251.90	4.000	No	No	2.00
309	20.28	265.01	1.21	0.45	0.94	249.36	3.95	253.31	4.000	No	No	2.00
310	20.37	265.45	1.22	0.44	0.94	249.60	4.67	254.26	4.000	No	No	2.00
311	20.43	264.92	1.22	0.43	0.94	249.12	5.55	254.67	4.000	No	No	2.00
312	20.49	263.13	1.23	0.44	0.94	246.65	4.58	251.24	4.000	No	No	2.00
313	20.55	259.55	1.23	0.45	0.93	242.65	3.97	246.62	4.000	No	No	2.00
314	20.61	253.02	1.23	0.45	0.93	236.26	4.19	240.46	4.000	No	No	2.00
315	20.68	248.82	1.24	0.45	0.93	231.91	4.21	236.12	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
316	20.74	236.75	1.24	0.44	0.93	220.48	4.64	225.12	4.000	No	No	2.00
317	20.80	202.06	1.25	0.43	0.93	188.25	6.34	194.59	4.000	No	No	2.00
318	20.87	205.10	1.25	0.44	0.93	190.66	5.86	196.52	4.000	No	No	2.00
319	20.94	197.50	1.26	0.44	0.93	183.13	5.60	188.72	4.000	No	No	2.00
320	21.01	185.34	1.26	0.44	0.93	171.60	5.97	177.58	4.000	No	No	2.00
321	21.06	172.64	1.26	0.44	0.93	159.82	6.92	166.74	4.000	No	No	2.00
322	21.15	150.92	1.27	0.43	0.93	139.72	9.00	148.72	4.000	No	No	2.00
323	21.21	135.36	1.27	0.42	0.93	125.34	10.99	136.33	4.000	No	No	2.00
324	21.27	121.86	1.28	0.41	0.93	112.82	13.06	125.88	4.000	No	No	2.00
325	21.34	115.87	1.28	0.41	0.92	107.14	13.85	120.99	4.000	No	No	2.00
326	21.41	110.23	1.28	0.41	0.92	101.81	14.67	116.48	4.000	No	No	2.00
327	21.46	102.46	1.29	0.41	0.92	94.60	16.42	111.02	4.000	No	No	2.00
328	21.53	89.67	1.29	0.40	0.92	82.72	19.43	102.15	4.000	No	No	2.00
329	21.60	83.68	1.30	0.40	0.92	77.15	21.91	99.06	4.000	No	No	2.00
330	21.68	73.58	1.30	0.40	0.92	67.76	25.87	93.63	4.000	No	No	2.00
331	21.74	66.60	1.31	0.40	0.92	61.26	28.87	90.12	4.000	No	No	2.00
332	21.79	61.33	1.31	0.40	0.92	56.33	31.50	87.84	4.000	No	No	2.00
333	21.86	57.30	1.31	0.40	0.92	52.54	33.49	86.03	4.000	No	No	2.00
334	21.93	54.89	1.32	0.41	0.91	50.22	34.33	84.55	4.000	No	No	2.00
335	21.98	52.83	1.32	0.41	0.91	48.25	34.75	83.00	4.000	No	No	2.00
336	22.08	50.51	1.33	0.41	0.91	46.00	35.15	81.14	4.000	No	No	2.00
337	22.14	49.61	1.33	0.42	0.91	45.06	33.71	78.77	4.000	No	No	2.00
338	22.20	48.81	1.33	0.43	0.91	44.21	31.87	76.08	4.000	No	No	2.00
339	22.26	49.35	1.34	0.43	0.90	44.57	29.27	73.84	4.000	No	No	2.00
340	22.34	52.20	1.34	0.44	0.90	47.03	25.97	73.00	4.000	No	No	2.00
341	22.38	53.45	1.35	0.44	0.90	48.12	25.07	73.19	4.000	No	No	2.00
342	22.44	55.24	1.35	0.44	0.90	49.69	24.47	74.17	4.000	No	No	2.00
343	22.53	56.58	1.35	0.44	0.90	50.81	23.63	74.44	4.000	No	No	2.00
344	22.58	57.03	1.36	0.44	0.90	51.15	23.34	74.49	4.000	No	No	2.00
345	22.64	57.39	1.36	0.44	0.90	51.40	23.05	74.46	4.000	No	No	2.00
346	22.72	57.21	1.37	0.44	0.89	51.15	23.05	74.20	4.000	No	No	2.00
347	22.77	51.31	1.37	0.44	0.89	45.79	25.89	71.68	4.000	No	No	2.00
348	22.85	76.79	1.37	0.44	0.89	68.40	15.06	83.46	4.000	No	No	2.00
349	22.91	101.74	1.38	0.45	0.89	90.32	9.89	100.21	4.000	No	No	2.00
350	22.99	136.25	1.38	0.46	0.88	120.36	6.17	126.54	4.000	No	No	2.00
351	23.05	145.19	1.39	0.46	0.88	128.11	5.79	133.90	4.000	No	No	2.00
352	23.10	147.61	1.39	0.46	0.88	130.33	6.21	136.54	4.000	No	No	2.00
353	23.18	146.27	1.40	0.44	0.88	129.43	7.54	136.97	4.000	No	No	2.00
354	23.24	139.92	1.40	0.43	0.89	124.02	9.00	133.01	4.000	No	No	2.00
355	23.31	131.25	1.40	0.42	0.89	116.65	11.36	128.02	4.000	No	No	2.00
356	23.38	121.50	1.41	0.41	0.89	108.13	13.65	121.78	4.000	No	No	2.00
357	23.44	121.37	1.41	0.41	0.89	107.87	13.61	121.49	4.000	No	No	2.00
358	23.51	121.23	1.42	0.41	0.89	107.54	13.23	120.76	4.000	No	No	2.00
359	23.57	127.04	1.42	0.42	0.88	112.36	11.81	124.17	4.000	No	No	2.00
360	23.63	134.64	1.42	0.42	0.88	118.76	10.47	129.24	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
361	23.69	151.01	1.43	0.43	0.88	132.70	8.44	141.15	4.000	No	No	2.00
362	23.77	157.53	1.43	0.44	0.87	137.84	7.17	145.00	4.000	No	No	2.00
363	23.84	157.98	1.44	0.47	0.87	136.87	4.87	141.74	4.000	No	No	2.00
364	23.89	153.15	1.44	0.49	0.86	131.61	3.49	135.10	4.000	No	No	2.00
365	23.98	141.44	1.45	0.51	0.85	120.58	2.71	123.29	4.000	No	No	2.00
366	24.03	131.07	1.45	0.51	0.85	111.56	2.99	114.54	4.000	No	No	2.00
367	24.11	115.24	1.45	0.51	0.85	98.05	3.90	101.95	4.000	No	No	2.00
368	24.17	104.06	1.46	0.49	0.85	88.84	5.61	94.45	4.000	No	No	2.00
369	24.24	89.58	1.46	0.47	0.86	76.87	8.86	85.73	4.000	No	No	2.00
370	24.31	77.24	1.47	0.46	0.86	66.58	13.18	79.76	4.000	No	No	2.00
371	24.36	71.79	1.47	0.45	0.86	61.96	15.55	77.51	4.000	No	No	2.00
372	24.43	62.58	1.47	0.44	0.86	54.02	19.53	73.55	4.000	No	No	2.00
373	24.48	58.20	1.48	0.44	0.86	50.28	22.80	73.08	4.000	No	No	2.00
374	24.56	51.94	1.48	0.43	0.86	44.93	29.08	74.02	4.000	No	No	2.00
375	24.62	54.35	1.48	0.45	0.86	46.73	23.35	70.09	4.000	No	No	2.00
376	24.68	71.16	1.49	0.47	0.85	60.52	11.93	72.45	4.000	No	No	2.00
377	24.77	86.45	1.49	0.47	0.85	73.45	9.52	82.97	4.000	No	No	2.00
378	24.82	95.21	1.50	0.47	0.85	80.78	8.32	89.10	4.000	No	No	2.00
379	24.88	105.67	1.50	0.48	0.85	89.40	6.88	96.28	4.000	No	No	2.00
380	24.94	109.70	1.50	0.48	0.84	92.54	6.13	98.67	4.000	No	No	2.00
381	25.02	107.82	1.51	0.49	0.84	90.52	5.56	96.08	4.000	No	No	2.00
382	25.07	107.10	1.51	0.50	0.84	89.64	5.20	94.84	4.000	No	No	2.00
383	25.14	100.40	1.52	0.50	0.84	83.96	5.80	89.76	4.000	No	No	2.00
384	25.20	94.41	1.52	0.49	0.84	78.99	6.70	85.69	4.000	No	No	2.00
385	25.27	88.15	1.52	0.49	0.84	73.78	7.82	81.60	4.000	No	No	2.00
386	25.33	81.80	1.53	0.48	0.84	68.47	8.97	77.44	4.000	No	No	2.00
387	25.42	74.38	1.53	0.48	0.84	62.20	10.44	72.64	4.000	No	No	2.00
388	25.47	71.25	1.54	0.48	0.84	59.53	11.10	70.64	4.000	No	No	2.00
389	25.53	67.41	1.54	0.48	0.83	56.28	12.11	68.39	4.000	No	No	2.00
390	25.61	63.20	1.54	0.48	0.83	52.78	13.95	66.73	4.000	No	No	2.00
391	25.66	59.81	1.55	0.47	0.84	49.99	15.89	65.88	4.000	No	No	2.00
392	25.72	56.14	1.55	0.47	0.84	46.98	18.50	65.47	4.000	No	No	2.00
393	25.80	51.76	1.56	0.46	0.84	43.34	22.06	65.40	4.000	No	No	2.00
394	25.86	49.61	1.56	0.46	0.84	41.57	24.61	66.18	4.000	No	No	2.00
395	25.93	45.68	1.56	0.45	0.84	38.31	29.58	67.89	4.000	No	Yes	2.00
396	26.00	42.28	1.57	0.45	0.84	35.43	33.96	69.39	4.000	No	Yes	2.00
397	26.06	40.66	1.57	0.45	0.84	34.05	36.36	70.42	4.000	No	Yes	2.00
398	26.12	39.14	1.58	0.45	0.84	32.74	38.67	71.41	4.000	No	Yes	2.00
399	26.21	37.26	1.58	0.45	0.83	31.08	40.68	71.76	4.000	No	Yes	2.00
400	26.26	37.26	1.58	0.45	0.83	31.04	40.36	71.40	4.000	No	Yes	2.00
401	26.31	37.71	1.59	0.45	0.83	31.37	38.93	70.29	4.000	No	Yes	2.00
402	26.41	39.95	1.59	0.46	0.83	33.14	34.54	67.68	4.000	No	Yes	2.00
403	26.46	42.09	1.60	0.46	0.83	34.88	31.53	66.41	4.000	No	Yes	2.00
404	26.51	43.70	1.60	0.46	0.83	36.15	29.22	65.37	4.000	No	Yes	2.00
405	26.61	46.47	1.61	0.46	0.82	38.34	25.86	64.20	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
406	26.65	50.31	1.61	0.46	0.82	41.48	22.85	64.33	4.000	No	No	2.00
407	26.72	53.89	1.61	0.46	0.82	44.39	20.75	65.13	4.000	No	No	2.00
408	26.79	57.10	1.62	0.46	0.82	47.00	19.33	66.33	4.000	No	No	2.00
409	26.86	60.68	1.62	0.46	0.82	49.93	18.22	68.15	4.000	No	No	2.00
410	26.90	62.29	1.62	0.45	0.82	51.29	18.24	69.53	4.000	No	No	2.00
411	26.99	68.65	1.63	0.45	0.82	56.55	16.86	73.41	4.000	No	No	2.00
412	27.04	74.01	1.63	0.45	0.82	60.94	15.46	76.40	4.000	No	No	2.00
413	27.10	78.48	1.64	0.45	0.82	64.52	14.21	78.73	4.000	No	No	2.00
414	27.20	86.89	1.64	0.45	0.82	71.23	12.16	83.39	4.000	No	No	2.00
415	27.24	91.27	1.64	0.47	0.81	74.09	9.05	83.14	4.000	No	No	2.00
416	27.31	95.38	1.65	0.53	0.79	75.56	4.32	79.88	4.000	No	No	2.00
417	27.39	98.24	1.65	0.53	0.79	77.65	4.01	81.66	4.000	No	No	2.00
418	27.43	100.03	1.66	0.53	0.79	78.98	3.87	82.86	4.000	No	No	2.00
419	27.50	101.82	1.66	0.53	0.79	80.29	3.77	84.06	4.000	No	No	2.00
420	27.56	100.30	1.66	0.52	0.79	79.12	4.09	83.21	4.000	No	No	2.00
421	27.64	97.17	1.67	0.52	0.79	76.79	4.78	81.58	4.000	No	No	2.00
422	27.70	100.57	1.67	0.51	0.79	79.56	4.84	84.40	4.000	No	No	2.00
423	27.76	100.49	1.68	0.51	0.79	79.63	5.32	84.96	4.000	No	No	2.00
424	27.84	98.97	1.68	0.50	0.79	78.67	6.21	84.88	4.000	No	No	2.00
425	27.89	97.27	1.68	0.49	0.80	77.47	6.88	84.34	4.000	No	No	2.00
426	27.96	94.41	1.69	0.49	0.80	75.25	7.52	82.77	4.000	No	No	2.00
427	28.03	89.40	1.69	0.48	0.80	71.24	8.31	79.55	4.000	No	No	2.00
428	28.08	84.66	1.70	0.48	0.80	67.46	9.13	76.59	4.000	No	No	2.00
429	28.16	79.48	1.70	0.48	0.80	63.36	10.32	73.67	4.000	No	No	2.00
430	28.23	72.23	1.70	0.47	0.80	57.67	12.51	70.18	4.000	No	No	2.00
431	28.30	66.07	1.71	0.46	0.80	52.88	15.32	68.20	4.000	No	No	2.00
432	28.35	59.00	1.71	0.46	0.80	47.29	18.93	66.23	4.000	No	No	2.00
433	28.45	45.95	1.72	0.46	0.80	36.75	27.28	64.04	4.000	No	Yes	2.00
434	28.49	39.87	1.72	0.47	0.80	31.78	32.51	64.29	4.000	No	Yes	2.00
435	28.55	34.95	1.72	0.48	0.79	27.68	36.87	64.55	4.000	No	Yes	2.00
436	28.62	29.76	1.73	0.50	0.78	23.33	42.07	65.40	4.000	No	Yes	2.00
437	28.70	26.55	1.73	0.51	0.78	20.61	45.44	66.05	4.000	No	Yes	2.00
438	28.74	25.65	1.74	0.52	0.77	19.83	45.73	65.56	4.000	No	Yes	2.00
439	28.84	24.22	1.74	0.54	0.76	18.51	43.81	62.32	4.000	No	Yes	2.00
440	28.89	24.27	1.74	0.54	0.76	18.50	42.15	60.64	4.000	No	Yes	2.00
441	28.95	24.27	1.75	0.55	0.76	18.44	40.39	58.83	4.000	No	Yes	2.00
442	29.01	24.31	1.75	0.56	0.76	18.38	37.77	56.15	4.000	No	Yes	2.00
443	29.09	24.13	1.76	0.59	0.74	17.93	28.73	46.66	4.000	No	Yes	2.00
444	29.14	24.22	1.76	0.64	0.72	17.46	16.66	34.12	4.000	No	Yes	2.00
445	29.23	27.80	1.76	0.61	0.73	20.40	17.54	37.94	4.000	No	Yes	2.00
446	29.28	30.66	1.77	0.58	0.74	22.76	17.82	40.58	4.000	No	Yes	2.00
447	29.34	39.87	1.77	0.55	0.75	30.09	14.95	45.04	4.000	No	Yes	2.00
448	29.42	40.95	1.78	0.52	0.76	31.24	18.16	49.40	4.000	No	Yes	2.00
449	29.47	46.23	1.78	0.51	0.77	35.51	17.17	52.69	4.000	No	No	2.00
450	29.55	50.25	1.78	0.49	0.78	38.95	18.33	57.28	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
451	29.61	49.09	1.79	0.48	0.78	38.16	20.49	58.65	4.000	No	No	2.00
452	29.66	46.40	1.79	0.48	0.78	36.12	23.37	59.49	4.000	No	Yes	2.00
453	29.76	36.93	1.80	0.52	0.76	28.10	23.38	51.47	4.000	No	Yes	2.00
454	29.82	31.38	1.80	0.54	0.75	23.56	25.62	49.17	4.000	No	Yes	2.00
455	29.87	27.00	1.80	0.56	0.74	20.07	30.10	50.17	4.000	No	Yes	2.00
456	29.92	23.60	1.81	0.58	0.73	17.31	33.07	50.38	4.000	No	Yes	2.00
457	30.01	20.30	1.81	0.62	0.72	14.55	33.60	48.15	4.000	No	Yes	2.00
458	30.06	18.06	1.81	0.65	0.70	12.70	34.44	47.14	4.000	No	Yes	2.00
459	30.13	18.06	1.82	0.66	0.70	12.62	31.51	44.12	4.000	No	Yes	2.00
460	30.20	18.87	1.82	0.66	0.70	13.21	29.75	42.97	4.000	No	Yes	2.00
461	30.27	20.74	1.82	0.63	0.71	14.73	30.10	44.84	4.000	No	Yes	2.00
462	30.33	23.87	1.83	0.59	0.72	17.27	29.41	46.68	4.000	No	Yes	2.00
463	30.41	30.49	1.83	0.55	0.74	22.51	24.71	47.22	4.000	No	Yes	2.00
464	30.45	34.42	1.84	0.54	0.74	25.58	21.93	47.51	4.000	No	Yes	2.00
465	30.52	42.11	1.84	0.52	0.75	31.56	17.96	49.52	4.000	No	Yes	2.00
466	30.59	48.10	1.84	0.51	0.75	36.25	16.16	52.42	4.000	No	No	2.00
467	30.65	52.48	1.85	0.50	0.76	39.63	14.80	54.43	4.000	No	No	2.00
468	30.73	57.85	1.85	0.50	0.75	43.67	12.97	56.64	4.000	No	No	2.00
469	30.79	60.08	1.86	0.50	0.75	45.30	12.15	57.45	4.000	No	No	2.00
470	30.87	61.43	1.86	0.50	0.75	46.19	11.51	57.70	4.000	No	No	2.00
471	30.92	60.53	1.86	0.50	0.75	45.49	11.81	57.30	4.000	No	No	2.00
472	30.98	59.37	1.87	0.50	0.75	44.62	12.40	57.02	4.000	No	No	2.00
473	31.04	57.58	1.87	0.50	0.75	43.35	13.70	57.05	4.000	No	No	2.00
474	31.12	53.20	1.88	0.49	0.76	40.17	16.66	56.83	4.000	No	No	2.00
475	31.19	48.91	1.88	0.47	0.76	37.23	22.27	59.50	4.000	No	Yes	2.00
476	31.24	45.60	1.88	0.47	0.76	34.69	25.16	59.85	4.000	No	Yes	2.00
477	31.32	39.16	1.89	0.48	0.76	29.60	29.91	59.51	4.000	No	Yes	2.00
478	31.37	35.23	1.89	0.49	0.75	26.49	33.60	60.08	4.000	No	Yes	2.00
479	31.45	38.80	1.90	0.49	0.75	29.22	29.62	58.84	4.000	No	Yes	2.00
480	31.50	32.64	1.90	0.50	0.75	24.38	36.32	60.70	4.000	No	Yes	2.00
481	31.57	38.45	1.90	0.48	0.75	28.96	31.20	60.16	4.000	No	Yes	2.00
482	31.64	45.78	1.91	0.47	0.76	34.77	26.94	61.70	4.000	No	Yes	2.00
483	31.69	46.49	1.91	0.46	0.76	35.46	28.66	64.13	4.000	No	Yes	2.00
484	31.77	36.57	1.92	0.47	0.76	27.67	38.80	66.47	4.000	No	Yes	2.00
485	31.83	32.19	1.92	0.48	0.75	24.15	43.91	68.07	4.000	No	Yes	2.00
486	31.91	26.02	1.92	0.51	0.74	19.14	47.31	66.45	4.000	No	Yes	2.00
487	31.99	23.52	1.93	0.53	0.73	17.12	47.27	64.39	4.000	No	Yes	2.00
488	32.04	23.34	1.93	0.53	0.73	16.97	47.24	64.22	4.000	No	Yes	2.00
489	32.09	27.18	1.93	0.51	0.74	19.99	47.22	67.21	4.000	No	Yes	2.00
490	32.17	52.04	1.94	0.46	0.75	39.28	22.70	61.98	4.000	No	Yes	2.00
491	32.24	67.51	1.94	0.46	0.76	51.12	16.70	67.82	4.000	No	No	2.00
492	32.30	75.64	1.95	0.45	0.76	57.55	15.79	73.34	4.000	No	No	2.00
493	32.38	82.62	1.95	0.44	0.76	62.95	14.76	77.72	4.000	No	No	2.00
494	32.42	84.32	1.95	0.45	0.76	64.12	14.04	78.16	4.000	No	No	2.00
495	32.48	85.48	1.96	0.46	0.75	64.44	12.09	76.53	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
496	32.55	84.40	1.96	0.47	0.75	63.00	10.50	73.50	4.000	No	No	2.00
497	32.62	84.49	1.97	0.48	0.74	62.77	9.82	72.59	4.000	No	No	2.00
498	32.68	84.14	1.97	0.48	0.74	62.49	9.99	72.48	4.000	No	No	2.00
499	32.77	111.50	1.98	0.48	0.74	82.41	6.49	88.91	4.000	No	No	2.00
500	32.81	117.75	1.98	0.49	0.74	86.77	5.78	92.55	4.000	No	No	2.00
501	32.88	120.44	1.98	0.49	0.73	88.38	5.26	93.64	4.000	No	No	2.00
502	32.94	119.54	1.99	0.50	0.73	87.38	4.99	92.37	4.000	No	No	2.00
503	33.01	117.22	1.99	0.50	0.73	85.44	4.93	90.37	4.000	No	No	2.00
504	33.12	110.69	2.00	0.50	0.73	80.53	5.32	85.85	4.000	No	No	2.00
505	33.14	107.92	2.00	0.50	0.73	78.59	5.65	84.24	4.000	No	No	2.00
506	33.22	101.48	2.00	0.50	0.73	73.95	6.39	80.35	4.000	No	No	2.00
507	33.27	95.94	2.01	0.50	0.73	69.71	6.63	76.34	4.000	No	No	2.00
508	33.35	89.14	2.01	0.50	0.73	64.68	7.32	71.99	4.000	No	No	2.00
509	33.41	83.42	2.02	0.47	0.74	61.67	11.25	72.91	4.000	No	No	2.00
510	33.48	69.29	2.02	0.45	0.75	51.74	17.22	68.96	4.000	No	No	2.00
511	33.55	59.73	2.02	0.44	0.75	44.84	23.42	68.26	4.000	No	Yes	2.00
512	33.61	54.36	2.03	0.43	0.75	40.97	28.88	69.85	4.000	No	Yes	2.00
513	33.70	52.22	2.03	0.43	0.76	39.49	33.10	72.60	4.000	No	Yes	2.00
514	33.73	51.41	2.04	0.43	0.76	38.83	33.49	72.32	4.000	No	Yes	2.00
515	33.81	50.96	2.04	0.43	0.75	38.39	33.09	71.48	4.000	No	Yes	2.00
516	33.86	54.99	2.04	0.43	0.75	41.39	29.36	70.75	4.000	No	Yes	2.00
517	33.95	67.51	2.05	0.43	0.75	50.73	21.86	72.59	4.000	No	No	2.00
518	34.01	77.79	2.05	0.44	0.75	58.27	17.43	75.69	4.000	No	No	2.00
519	34.06	84.76	2.06	0.44	0.74	63.14	14.51	77.65	4.000	No	No	2.00
520	34.16	91.38	2.06	0.46	0.74	67.43	11.60	79.03	4.000	No	No	2.00
521	34.20	93.79	2.06	0.46	0.73	68.87	10.50	79.37	4.000	No	No	2.00
522	34.26	94.69	2.07	0.48	0.73	68.71	8.64	77.34	4.000	No	No	2.00
523	34.34	94.95	2.07	0.49	0.72	68.47	7.90	76.37	4.000	No	No	2.00
524	34.40	95.13	2.08	0.48	0.72	68.72	8.23	76.95	4.000	No	No	2.00
525	34.46	93.97	2.08	0.47	0.73	68.24	9.25	77.49	4.000	No	No	2.00
526	34.55	90.39	2.09	0.45	0.74	66.53	12.34	78.87	4.000	No	No	2.00
527	34.60	83.96	2.09	0.44	0.74	62.35	15.68	78.03	4.000	No	No	2.00
528	34.66	75.28	2.09	0.43	0.75	56.31	20.31	76.62	4.000	No	No	2.00
529	34.72	67.86	2.10	0.42	0.75	50.81	23.94	74.75	4.000	No	No	2.00
530	34.78	60.89	2.10	0.43	0.75	45.48	27.13	72.61	4.000	No	Yes	2.00
531	34.86	52.57	2.11	0.43	0.74	39.10	32.17	71.27	4.000	No	Yes	2.00
532	34.94	52.40	2.11	0.43	0.74	38.89	31.82	70.70	4.000	No	Yes	2.00
533	35.00	52.40	2.11	0.46	0.73	38.07	23.79	61.86	4.000	No	Yes	2.00
534	35.04	52.22	2.12	0.50	0.71	37.02	17.09	54.11	4.000	No	Yes	2.00
535	35.11	64.73	2.12	0.49	0.71	46.02	12.94	58.95	4.000	No	No	2.00
536	35.18	71.53	2.13	0.49	0.71	50.79	11.15	61.94	4.000	No	No	2.00
537	35.28	79.22	2.13	0.49	0.71	56.09	9.44	65.53	4.000	No	No	2.00
538	35.32	78.24	2.13	0.49	0.71	55.38	9.65	65.04	4.000	No	No	2.00
539	35.39	82.62	2.14	0.49	0.71	58.35	8.76	67.10	4.000	No	No	2.00
540	35.44	87.71	2.14	0.50	0.70	61.74	7.74	69.48	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
541	35.50	88.70	2.15	0.50	0.70	62.35	7.55	69.90	4.000	No	No	2.00
542	35.59	86.46	2.15	0.49	0.70	60.91	8.29	69.21	4.000	No	No	2.00
543	35.65	82.79	2.15	0.49	0.71	58.55	9.45	68.00	4.000	No	No	2.00
544	35.72	76.89	2.16	0.47	0.71	54.90	12.26	67.17	4.000	No	No	2.00
545	35.77	71.35	2.16	0.46	0.72	51.22	14.84	66.06	4.000	No	No	2.00
546	35.85	56.69	2.17	0.46	0.72	40.88	22.31	63.19	4.000	No	Yes	2.00
547	35.90	48.73	2.17	0.46	0.72	35.12	28.35	63.47	4.000	No	Yes	2.00
548	35.99	38.45	2.18	0.47	0.71	27.44	38.43	65.87	4.000	No	Yes	2.00
549	36.04	31.56	2.18	0.49	0.70	22.17	45.18	67.35	4.000	No	Yes	2.00
550	36.09	28.25	2.18	0.51	0.69	19.57	45.15	64.72	4.000	No	Yes	2.00
551	36.16	26.11	2.19	0.52	0.68	17.88	45.12	63.00	4.000	No	Yes	2.00
552	36.24	24.05	2.19	0.54	0.68	16.26	45.08	61.34	4.000	No	Yes	2.00
553	36.29	22.71	2.19	0.55	0.67	15.20	45.06	60.26	4.000	No	Yes	2.00
554	36.37	22.00	2.20	0.56	0.66	14.62	45.02	59.64	4.000	No	Yes	2.00
555	36.43	24.86	2.20	0.54	0.67	16.73	44.99	61.72	4.000	No	Yes	2.00
556	36.50	31.47	2.21	0.52	0.68	21.53	36.76	58.29	4.000	No	Yes	2.00
557	36.57	41.58	2.21	0.49	0.69	28.89	26.30	55.19	4.000	No	Yes	2.00
558	36.63	50.52	2.21	0.48	0.70	35.43	21.29	56.72	4.000	No	Yes	2.00
559	36.68	64.20	2.22	0.47	0.71	45.31	16.15	61.46	4.000	No	No	2.00
560	36.77	78.68	2.22	0.47	0.71	55.52	12.33	67.86	4.000	No	No	2.00
561	36.82	91.11	2.23	0.47	0.70	64.16	9.94	74.10	4.000	No	No	2.00
562	36.88	100.59	2.23	0.48	0.70	70.56	8.36	78.92	4.000	No	No	2.00
563	36.95	106.40	2.23	0.48	0.70	74.12	7.10	81.21	4.000	No	No	2.00
564	37.01	109.98	2.24	0.49	0.69	76.40	6.59	82.98	4.000	No	No	2.00
565	37.08	111.41	2.24	0.49	0.69	77.27	6.41	83.68	4.000	No	No	2.00
566	37.14	110.07	2.25	0.49	0.69	76.40	6.69	83.09	4.000	No	No	2.00
567	37.22	104.34	2.25	0.48	0.70	72.75	7.80	80.55	4.000	No	No	2.00
568	37.30	93.88	2.26	0.46	0.70	66.08	10.42	76.49	4.000	No	No	2.00
569	37.35	86.55	2.26	0.46	0.71	61.14	12.24	73.38	4.000	No	No	2.00
570	37.41	74.03	2.26	0.45	0.71	52.47	15.92	68.39	4.000	No	No	2.00
571	37.47	59.28	2.27	0.45	0.71	41.99	21.85	63.84	4.000	No	Yes	2.00
572	37.56	42.56	2.27	0.47	0.70	29.76	32.49	62.25	4.000	No	Yes	2.00
573	37.61	34.42	2.27	0.49	0.69	23.70	40.70	64.40	4.000	No	Yes	2.00
574	37.67	28.61	2.28	0.51	0.68	19.32	44.41	63.73	4.000	No	Yes	2.00
575	37.76	25.84	2.28	0.54	0.66	17.12	44.37	61.49	4.000	No	Yes	2.00
576	37.81	25.30	2.29	0.55	0.66	16.59	44.35	60.94	4.000	No	Yes	2.00
577	37.87	23.96	2.29	0.58	0.64	15.27	39.77	55.04	4.000	No	Yes	2.00
578	37.95	22.35	2.29	0.63	0.61	13.70	31.78	45.48	4.000	No	Yes	2.00
579	38.00	20.21	2.30	0.66	0.60	12.11	33.39	45.50	4.000	No	Yes	2.00
580	38.06	18.78	2.30	0.69	0.59	11.01	33.67	44.68	4.000	No	Yes	2.00
581	38.13	17.97	2.31	0.71	0.58	10.36	33.06	43.42	4.000	No	Yes	2.00
582	38.20	18.55	2.31	0.70	0.58	10.75	32.05	42.80	4.000	No	Yes	2.00
583	38.26	18.33	2.31	0.70	0.58	10.61	33.52	44.14	4.000	No	Yes	2.00
584	38.35	19.13	2.32	0.67	0.59	11.32	37.65	48.97	4.000	No	Yes	2.00
585	38.40	20.56	2.32	0.64	0.61	12.44	38.35	50.80	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
586	38.47	22.62	2.32	0.60	0.62	14.08	40.23	54.31	4.000	No	Yes	2.00
587	38.53	23.96	2.33	0.58	0.63	15.16	41.66	56.82	4.000	No	Yes	2.00
588	38.61	23.43	2.33	0.58	0.63	14.85	43.99	58.84	4.000	No	Yes	2.00
589	38.65	23.25	2.34	0.58	0.63	14.74	43.97	58.71	4.000	No	Yes	2.00
590	38.74	22.62	2.34	0.57	0.63	14.36	43.93	58.30	4.000	No	Yes	2.00
591	38.80	22.80	2.34	0.56	0.64	14.56	43.90	58.47	4.000	No	Yes	2.00
592	38.85	22.62	2.35	0.56	0.64	14.45	43.88	58.33	4.000	No	Yes	2.00
593	38.92	22.89	2.35	0.56	0.64	14.66	43.85	58.51	4.000	No	Yes	2.00
594	38.99	23.78	2.36	0.55	0.64	15.31	43.82	59.13	4.000	No	Yes	2.00
595	39.05	24.50	2.36	0.54	0.65	15.83	43.80	59.63	4.000	No	Yes	2.00
596	39.12	25.12	2.36	0.54	0.65	16.26	43.77	60.02	4.000	No	Yes	2.00
597	39.18	25.57	2.37	0.56	0.64	16.32	43.64	59.96	4.000	No	Yes	2.00
598	39.24	25.75	2.37	0.66	0.58	15.06	17.24	32.30	4.000	No	Yes	2.00
599	39.33	25.75	2.38	0.62	0.61	15.65	26.25	41.90	4.000	No	Yes	2.00
600	39.38	25.48	2.38	0.61	0.61	15.55	28.54	44.09	4.000	No	Yes	2.00
601	39.44	24.68	2.38	0.61	0.61	15.03	30.56	45.59	4.000	No	Yes	2.00
602	39.52	19.31	2.39	0.67	0.58	11.16	36.97	48.13	4.000	No	Yes	2.00
603	39.58	20.12	2.39	0.67	0.58	11.67	34.19	45.87	4.000	No	Yes	2.00
604	39.65	19.31	2.40	0.67	0.58	11.13	36.82	47.95	4.000	No	Yes	2.00
605	39.71	17.53	2.40	0.71	0.56	9.84	39.72	49.57	4.000	No	Yes	2.00
606	39.80	19.27	2.40	0.73	0.55	10.61	24.26	34.87	4.000	No	Yes	2.00
607	39.83	17.26	2.41	0.77	0.53	9.16	24.55	33.71	4.000	No	Yes	2.00
608	39.91	19.22	2.41	0.71	0.56	10.74	29.09	39.83	4.000	No	Yes	2.00
609	39.97	18.69	2.41	0.70	0.56	10.50	34.05	44.56	4.000	No	Yes	2.00
610	40.04	20.30	2.42	0.66	0.58	11.72	34.74	46.46	4.000	No	Yes	2.00
611	40.10	20.43	2.42	0.65	0.58	11.89	37.40	49.30	4.000	No	Yes	2.00
612	40.18	20.92	2.43	0.63	0.59	12.38	41.15	53.53	4.000	No	Yes	2.00
613	40.23	20.56	2.43	0.63	0.59	12.19	43.35	55.54	4.000	No	Yes	2.00
614	40.30	20.74	2.43	0.62	0.60	12.43	43.34	55.77	4.000	No	Yes	2.00
615	40.38	21.91	2.44	0.60	0.61	13.31	43.33	56.63	4.000	No	Yes	2.00
616	40.43	22.71	2.44	0.59	0.61	13.89	43.32	57.21	4.000	No	Yes	2.00
617	40.50	23.87	2.44	0.57	0.62	14.78	43.31	58.09	4.000	No	Yes	2.00
618	40.59	25.21	2.45	0.56	0.63	15.79	43.29	59.08	4.000	No	Yes	2.00
619	40.64	25.75	2.45	0.55	0.63	16.22	43.28	59.51	4.000	No	Yes	2.00
620	40.69	26.29	2.46	0.54	0.63	16.68	43.27	59.96	4.000	No	Yes	2.00
621	40.78	27.63	2.46	0.52	0.65	17.84	43.26	61.09	4.000	No	Yes	2.00
622	40.83	29.06	2.46	0.51	0.65	18.89	43.25	62.14	4.000	No	Yes	2.00
623	40.89	32.28	2.47	0.50	0.66	21.17	43.24	64.41	4.000	No	Yes	2.00
624	40.97	40.06	2.47	0.48	0.66	26.60	33.45	60.05	4.000	No	Yes	2.00
625	41.02	49.27	2.48	0.47	0.67	33.00	25.52	58.51	4.000	No	Yes	2.00
626	41.08	60.62	2.48	0.46	0.67	40.89	20.04	60.93	4.000	No	Yes	2.00
627	41.16	79.93	2.48	0.48	0.66	52.91	10.85	63.77	0.096	No	No	0.27
628	41.22	88.87	2.49	0.52	0.64	56.89	6.14	63.02	0.097	No	No	0.28
629	41.28	93.97	2.49	0.50	0.65	61.24	7.25	68.49	0.106	No	No	0.30
630	41.38	97.91	2.50	0.48	0.66	64.75	8.42	73.18	0.114	No	No	0.33

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
631	41.43	98.53	2.50	0.47	0.67	65.63	9.22	74.85	0.116	No	No	0.33
632	41.48	98.58	2.50	0.46	0.67	66.08	10.04	76.12	0.119	No	No	0.34
633	41.54	100.23	2.51	0.45	0.68	67.77	11.03	78.80	0.124	No	No	0.35
634	41.64	98.62	2.51	0.44	0.68	67.24	12.63	79.87	0.125	No	No	0.36
635	41.69	100.19	2.52	0.44	0.68	68.59	13.10	81.69	0.129	No	No	0.37
636	41.73	97.99	2.52	0.43	0.69	67.32	14.12	81.44	0.128	No	No	0.37
637	41.82	100.14	2.53	0.42	0.69	69.24	15.04	84.28	0.134	No	No	0.39
638	41.88	101.48	2.53	0.42	0.69	70.52	15.84	86.37	0.139	No	No	0.40
639	41.93	101.66	2.53	0.41	0.70	71.16	17.33	88.49	0.143	No	No	0.41
640	42.02	100.23	2.54	0.40	0.71	70.78	19.77	90.55	0.147	No	No	0.42
641	42.07	97.73	2.54	0.39	0.71	69.21	21.19	90.41	0.146	No	No	0.42
642	42.13	90.93	2.55	0.39	0.71	64.46	23.52	87.98	0.137	No	No	0.40
643	42.22	84.94	2.55	0.39	0.71	60.28	26.12	86.40	4.000	No	Yes	2.00
644	42.26	83.96	2.55	0.39	0.71	59.64	26.93	86.57	4.000	No	Yes	2.00
645	42.33	85.75	2.56	0.38	0.71	61.17	27.77	88.93	4.000	No	Yes	2.00
646	42.39	93.43	2.56	0.38	0.72	66.84	26.15	92.99	0.149	No	No	0.43
647	42.46	101.21	2.57	0.38	0.72	72.46	24.32	96.79	0.162	No	No	0.47
648	42.52	108.46	2.57	0.38	0.71	77.31	21.56	98.87	0.170	No	No	0.49
649	42.61	117.84	2.58	0.39	0.71	83.51	18.62	102.13	0.183	No	No	0.53
650	42.65	126.87	2.58	0.39	0.71	89.49	16.41	105.89	0.197	No	No	0.57
651	42.72	138.23	2.58	0.40	0.70	96.75	13.83	110.58	0.215	No	No	0.62
652	42.81	161.66	2.59	0.41	0.69	111.71	10.29	122.00	0.262	No	No	0.76
653	42.87	166.75	2.59	0.42	0.69	114.45	9.26	123.71	0.270	No	No	0.78
654	42.92	167.47	2.60	0.43	0.68	114.02	8.39	122.40	0.263	No	No	0.76
655	43.00	168.63	2.60	0.44	0.67	113.37	7.16	120.53	0.254	No	No	0.74
656	43.07	167.47	2.61	0.44	0.67	112.14	6.90	119.04	0.247	No	No	0.72
657	43.12	165.95	2.61	0.44	0.67	111.06	6.97	118.03	0.243	No	No	0.71
658	43.21	163.44	2.62	0.44	0.67	109.34	7.14	116.48	0.237	No	No	0.69
659	43.26	161.57	2.62	0.44	0.67	108.06	7.26	115.31	0.232	No	No	0.68
660	43.31	158.97	2.62	0.44	0.67	106.30	7.43	113.73	0.226	No	No	0.66
661	43.40	157.18	2.63	0.44	0.67	105.16	7.66	112.81	0.223	No	No	0.65
662	43.44	156.20	2.63	0.44	0.67	104.55	7.80	112.36	0.221	No	No	0.64
663	43.51	155.84	2.63	0.44	0.67	104.35	7.93	112.28	0.221	No	No	0.64
664	43.58	154.86	2.64	0.44	0.67	103.68	8.06	111.74	0.219	No	No	0.64
665	43.66	153.88	2.64	0.44	0.67	102.97	8.14	111.11	0.216	No	No	0.63
666	43.70	153.26	2.65	0.44	0.67	102.43	8.11	110.53	0.214	No	No	0.63
667	43.80	152.46	2.65	0.45	0.66	100.98	7.39	108.37	0.206	No	No	0.60
668	43.85	152.46	2.66	0.45	0.66	101.09	7.54	108.62	0.207	No	No	0.61
669	43.90	153.07	2.66	0.44	0.66	101.63	7.68	109.31	0.210	No	No	0.61
670	43.99	154.51	2.67	0.44	0.67	102.92	8.03	110.96	0.216	No	No	0.63
671	44.05	156.02	2.67	0.44	0.67	104.14	8.21	112.35	0.221	No	No	0.65
672	44.10	151.65	2.67	0.43	0.67	101.56	8.88	110.44	0.214	No	No	0.63
673	44.16	158.89	2.68	0.43	0.67	106.61	8.74	115.35	0.233	No	No	0.68
674	44.23	162.47	2.68	0.43	0.67	109.34	8.94	118.28	0.245	No	No	0.72
675	44.30	164.88	2.68	0.42	0.68	111.31	9.23	120.54	0.255	No	No	0.75

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
676	44.38	167.75	2.69	0.42	0.68	113.84	9.77	123.61	0.270	No	No	0.79
677	44.45	170.34	2.69	0.41	0.68	115.98	10.11	126.09	0.282	No	No	0.83
678	44.49	171.86	2.70	0.41	0.68	117.10	10.16	127.27	0.288	No	No	0.85
679	44.57	175.17	2.70	0.41	0.68	119.41	10.14	129.55	0.300	No	No	0.88
680	44.64	177.22	2.71	0.41	0.68	120.83	10.14	130.96	0.307	No	No	0.91
681	44.69	178.30	2.71	0.41	0.68	121.53	10.11	131.64	0.311	No	No	0.92
682	44.75	182.23	2.71	0.41	0.68	124.01	9.80	133.81	0.323	No	No	0.95
683	44.82	186.52	2.72	0.41	0.68	126.60	9.38	135.98	0.335	No	No	0.99
684	44.88	190.90	2.72	0.41	0.68	129.21	8.95	138.17	0.347	No	No	1.03
685	44.95	198.15	2.73	0.42	0.67	133.60	8.32	141.92	0.370	No	No	1.09
686	45.03	205.12	2.73	0.42	0.67	137.91	7.89	145.80	0.395	No	No	1.17
687	45.09	208.70	2.74	0.42	0.67	140.44	7.90	148.34	0.413	No	No	1.22
688	45.15	210.31	2.74	0.42	0.67	141.59	7.96	149.55	0.422	No	No	1.25
689	45.23	209.77	2.75	0.42	0.67	140.68	7.68	148.35	0.412	No	No	1.22
690	45.30	205.30	2.75	0.42	0.67	137.45	7.74	145.19	0.390	No	No	1.16
691	45.38	201.81	2.76	0.42	0.67	134.69	7.64	142.33	0.371	No	No	1.10
692	45.41	198.41	2.76	0.42	0.67	132.31	7.71	140.02	0.357	No	No	1.06
693	45.48	189.65	2.76	0.43	0.66	126.11	7.83	133.94	0.321	No	No	0.95
694	45.56	191.17	2.77	0.43	0.66	125.91	6.99	132.90	0.314	No	No	0.93
695	45.63	190.46	2.77	0.44	0.65	124.57	6.49	131.06	0.304	No	No	0.90
696	45.67	190.19	2.77	0.44	0.65	124.17	6.39	130.57	0.301	No	No	0.89
697	45.78	191.71	2.78	0.44	0.65	124.95	6.29	131.24	0.304	No	No	0.90
698	45.80	191.98	2.78	0.44	0.65	125.07	6.27	131.34	0.305	No	No	0.91
699	45.88	191.26	2.79	0.44	0.65	124.65	6.39	131.04	0.304	No	No	0.90
700	45.95	179.37	2.79	0.44	0.65	117.42	7.27	124.69	0.273	No	No	0.81
701	46.01	180.98	2.80	0.44	0.65	118.40	7.19	125.59	0.277	No	No	0.82
702	46.09	174.45	2.80	0.43	0.66	114.44	7.79	122.23	0.262	No	No	0.78
703	46.15	164.08	2.81	0.43	0.66	108.25	8.92	117.17	0.241	No	No	0.72
704	46.21	149.95	2.81	0.42	0.67	99.89	10.94	110.83	0.216	No	No	0.64
705	46.28	134.57	2.81	0.40	0.67	90.60	13.81	104.41	0.193	No	No	0.57
706	46.35	113.56	2.82	0.39	0.68	77.12	18.26	95.39	0.162	No	No	0.48
707	46.40	108.20	2.82	0.39	0.68	73.85	20.39	94.24	0.157	No	No	0.47
708	46.48	87.45	2.83	0.38	0.69	60.34	29.54	89.88	4.000	No	Yes	2.00
709	46.53	82.36	2.83	0.37	0.69	56.99	32.94	89.93	4.000	No	Yes	2.00
710	46.60	73.51	2.83	0.38	0.69	50.48	35.60	86.08	4.000	No	Yes	2.00
711	46.68	67.78	2.84	0.39	0.68	45.96	35.24	81.20	4.000	No	Yes	2.00
712	46.74	63.76	2.84	0.40	0.67	42.87	35.86	78.74	4.000	No	Yes	2.00
713	46.79	63.63	2.85	0.40	0.67	42.71	35.51	78.21	4.000	No	Yes	2.00
714	46.90	63.49	2.85	0.41	0.67	42.38	34.10	76.48	4.000	No	Yes	2.00
715	46.93	73.95	2.86	0.40	0.67	49.54	28.37	77.91	4.000	No	Yes	2.00
716	46.99	123.76	2.86	0.40	0.67	83.19	15.95	99.14	0.175	No	No	0.52
717	47.08	175.79	2.87	0.40	0.67	117.63	10.88	128.52	0.296	No	No	0.88
718	47.13	210.22	2.87	0.41	0.66	139.79	8.69	148.48	0.416	No	No	1.25
719	47.18	237.67	2.87	0.41	0.66	157.21	7.40	164.62	0.547	No	No	1.64
720	47.27	256.62	2.88	0.41	0.66	169.69	6.99	176.69	0.673	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
721	47.33	261.36	2.88	0.41	0.66	172.77	6.91	179.68	0.709	No	No	2.00
722	47.38	263.95	2.89	0.41	0.66	174.88	7.09	181.97	0.740	No	No	2.00
723	47.47	263.33	2.89	0.40	0.67	175.56	7.73	183.29	0.763	No	No	2.00
724	47.53	261.98	2.90	0.40	0.67	175.23	8.13	183.36	0.767	No	No	2.00
725	47.58	260.82	2.90	0.40	0.67	174.69	8.33	183.02	0.765	No	No	2.00
726	47.64	256.80	2.90	0.40	0.67	172.25	8.64	180.89	0.739	No	No	2.00
727	47.71	255.01	2.91	0.39	0.67	171.22	8.85	180.07	0.730	No	No	2.00
728	47.77	256.80	2.91	0.39	0.67	172.41	8.86	181.27	0.746	No	No	2.00
729	47.86	254.74	2.92	0.39	0.67	171.27	9.14	180.41	0.737	No	No	2.00
730	47.90	256.80	2.92	0.39	0.67	172.64	9.12	181.75	0.755	No	No	2.00
731	47.99	258.32	2.93	0.39	0.67	173.61	9.13	182.74	0.768	No	No	2.00
732	48.06	258.23	2.93	0.39	0.67	173.47	9.15	182.62	0.767	No	No	2.00
733	48.11	257.25	2.93	0.39	0.67	172.80	9.22	182.02	0.759	No	No	2.00
734	48.18	254.92	2.94	0.39	0.67	171.40	9.45	180.85	0.745	No	No	2.00
735	48.23	253.67	2.94	0.39	0.67	170.75	9.67	180.42	0.741	No	No	2.00
736	48.32	251.79	2.95	0.39	0.67	169.70	9.95	179.65	0.733	No	No	2.00
737	48.38	250.72	2.95	0.38	0.67	168.94	10.02	178.96	0.725	No	No	2.00
738	48.45	249.74	2.96	0.38	0.67	168.35	10.16	178.51	0.720	No	No	2.00
739	48.51	249.02	2.96	0.38	0.67	167.82	10.22	178.03	0.715	No	No	2.00
740	48.57	247.14	2.96	0.38	0.67	166.46	10.27	176.73	0.698	No	No	2.00
741	48.65	241.33	2.97	0.39	0.67	161.93	10.11	172.04	0.641	No	No	1.94
742	48.71	235.97	2.97	0.39	0.67	157.80	9.98	167.78	0.593	No	No	1.79
743	48.76	200.48	2.98	0.38	0.67	134.77	12.13	146.90	0.414	No	No	1.25
744	48.83	221.76	2.98	0.40	0.66	147.25	9.83	157.08	0.489	No	No	1.48
745	48.93	219.17	2.99	0.40	0.66	144.25	9.11	153.36	0.456	No	No	1.38
746	48.98	218.00	2.99	0.40	0.66	143.22	9.01	152.23	0.446	No	No	1.35
747	49.02	217.29	2.99	0.40	0.66	142.58	8.96	151.53	0.441	No	No	1.33
748	49.12	217.96	3.00	0.41	0.65	142.71	8.81	151.52	0.440	No	No	1.33
749	49.16	216.84	3.00	0.41	0.65	141.93	8.85	150.78	0.434	No	No	1.31
750	49.22	217.92	3.01	0.41	0.65	142.50	8.78	151.28	0.438	No	No	1.33
751	49.30	217.65	3.01	0.41	0.65	142.35	8.88	151.23	0.438	No	No	1.33
752	49.36	216.93	3.02	0.40	0.65	141.92	8.99	150.91	0.436	No	No	1.32
753	49.41	215.50	3.02	0.41	0.65	140.83	8.98	149.80	0.427	No	No	1.30
754	49.48	213.09	3.02	0.41	0.65	139.11	9.03	148.14	0.415	No	No	1.26
755	49.54	211.30	3.03	0.41	0.65	137.78	9.04	146.82	0.406	No	No	1.23
756	49.62	209.06	3.03	0.41	0.65	135.99	8.95	144.94	0.392	No	No	1.19
757	49.71	205.49	3.04	0.41	0.65	133.77	9.25	143.01	0.380	No	No	1.15
758	49.75	204.32	3.04	0.41	0.65	132.21	8.75	140.96	0.365	No	No	1.11
759	49.80	201.11	3.05	0.44	0.63	126.41	6.48	132.89	0.314	No	No	0.95
760	49.89	194.94	3.05	0.44	0.63	122.95	7.01	129.96	0.299	No	No	0.91
761	49.95	191.54	3.06	0.43	0.63	120.99	7.30	128.28	0.291	No	No	0.88
762	50.01	187.69	3.06	0.43	0.63	118.64	7.55	126.18	4.000	No	No	2.00
763	50.09	177.77	3.06	0.43	0.63	112.48	8.12	120.60	4.000	No	No	2.00
764	50.15	174.08	3.07	0.43	0.63	110.40	8.53	118.93	4.000	No	No	2.00
765	50.22	178.82	3.07	0.42	0.64	113.88	8.74	122.62	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
766	50.26	182.94	3.08	0.42	0.64	117.13	9.09	126.22	4.000	No	No	2.00
767	50.35	196.79	3.08	0.41	0.65	127.45	9.68	137.13	4.000	No	No	2.00
768	50.41	207.79	3.09	0.40	0.65	136.02	10.37	146.40	4.000	No	No	2.00
769	50.46	221.92	3.09	0.39	0.66	145.82	10.27	156.09	4.000	No	No	2.00
770	50.53	237.12	3.09	0.40	0.65	155.08	9.31	164.39	4.000	No	No	2.00
771	50.60	258.49	3.10	0.40	0.65	167.52	7.93	175.45	4.000	No	No	2.00
772	50.67	272.79	3.10	0.40	0.65	176.65	7.59	184.24	4.000	No	No	2.00
773	50.73	282.09	3.11	0.41	0.65	182.19	7.22	189.40	4.000	No	No	2.00
774	50.79	272.84	3.11	0.41	0.65	176.18	7.44	183.62	4.000	No	No	2.00
775	50.88	273.96	3.12	0.41	0.64	175.40	6.80	182.20	4.000	No	No	2.00
776	50.93	272.88	3.12	0.42	0.64	173.89	6.51	180.39	4.000	No	No	2.00
777	51.00	265.91	3.12	0.42	0.64	168.88	6.44	175.32	4.000	No	No	2.00
778	51.06	255.81	3.13	0.42	0.63	162.11	6.54	168.65	4.000	No	No	2.00
779	51.12	247.22	3.13	0.42	0.63	156.70	6.79	163.49	4.000	No	No	2.00
780	51.19	231.31	3.14	0.41	0.64	147.40	7.68	155.08	4.000	No	No	2.00
781	51.25	211.90	3.14	0.41	0.64	135.55	8.69	144.24	4.000	No	No	2.00
782	51.33	191.52	3.15	0.40	0.65	124.08	10.90	134.98	4.000	No	No	2.00
783	51.39	168.63	3.15	0.39	0.66	110.76	14.08	124.83	4.000	No	No	2.00
784	51.47	143.59	3.16	0.37	0.67	95.71	19.00	114.71	4.000	No	No	2.00
785	51.53	125.80	3.16	0.37	0.67	84.29	22.89	107.17	4.000	No	No	2.00
786	51.58	107.38	3.16	0.36	0.67	72.11	27.82	99.92	4.000	No	Yes	2.00
787	51.64	86.19	3.17	0.37	0.67	57.68	35.14	92.83	4.000	No	Yes	2.00
788	51.72	75.91	3.17	0.37	0.67	50.51	39.53	90.04	4.000	No	Yes	2.00
789	51.78	72.87	3.18	0.37	0.66	48.38	41.19	89.57	4.000	No	Yes	2.00
790	51.84	70.45	3.18	0.37	0.66	46.71	42.00	88.71	4.000	No	Yes	2.00
791	51.93	68.39	3.19	0.37	0.66	45.37	42.00	87.37	4.000	No	Yes	2.00
792	51.98	68.39	3.19	0.38	0.66	45.14	42.00	87.13	4.000	No	Yes	2.00
793	52.06	68.39	3.19	0.39	0.65	44.41	37.90	82.30	4.000	No	Yes	2.00
794	52.11	68.39	3.20	0.40	0.64	44.10	35.73	79.83	4.000	No	Yes	2.00
795	52.17	69.82	3.20	0.40	0.65	45.06	35.12	80.18	4.000	No	Yes	2.00
796	52.24	71.88	3.21	0.40	0.65	46.39	33.92	80.31	4.000	No	Yes	2.00
797	52.31	73.40	3.21	0.39	0.65	47.56	34.31	81.87	4.000	No	Yes	2.00
798	52.38	76.88	3.21	0.38	0.66	50.57	36.79	87.36	4.000	No	Yes	2.00
799	52.45	83.95	3.22	0.36	0.67	56.06	37.83	93.89	4.000	No	Yes	2.00
800	52.52	80.37	3.22	0.36	0.67	53.78	41.04	94.83	4.000	No	Yes	2.00
801	52.58	73.49	3.23	0.36	0.67	48.94	41.97	90.91	4.000	No	Yes	2.00
802	52.65	62.04	3.23	0.39	0.65	40.21	41.96	82.18	4.000	No	Yes	2.00
803	52.72	53.01	3.24	0.42	0.63	33.30	41.96	75.26	4.000	No	Yes	2.00
804	52.76	48.18	3.24	0.43	0.62	29.77	41.96	71.73	4.000	No	Yes	2.00
805	52.82	46.22	3.24	0.44	0.61	28.09	41.96	70.04	4.000	No	Yes	2.00
806	52.91	46.57	3.25	0.45	0.60	27.98	39.91	67.89	4.000	No	Yes	2.00
807	52.97	46.93	3.25	0.45	0.60	28.30	40.62	68.92	4.000	No	Yes	2.00
808	53.02	50.78	3.26	0.44	0.61	30.94	38.45	69.39	4.000	No	Yes	2.00
809	53.09	60.16	3.26	0.43	0.62	37.07	31.95	69.02	4.000	No	Yes	2.00
810	53.17	76.88	3.27	0.42	0.62	47.89	24.49	72.38	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
811	53.22	95.84	3.27	0.41	0.63	60.12	19.45	79.58	4.000	No	Yes	2.00
812	53.29	106.75	3.27	0.41	0.63	67.29	17.94	85.23	4.000	No	No	2.00
813	53.37	117.03	3.28	0.41	0.63	74.00	16.70	90.70	4.000	No	No	2.00
814	53.42	122.57	3.28	0.41	0.63	77.24	15.46	92.70	4.000	No	No	2.00
815	53.50	125.97	3.29	0.41	0.63	78.87	14.24	93.11	4.000	No	No	2.00
816	53.55	129.64	3.29	0.42	0.62	80.76	13.25	94.01	4.000	No	No	2.00
817	53.62	132.59	3.29	0.42	0.62	81.96	12.11	94.07	4.000	No	No	2.00
818	53.70	133.30	3.30	0.43	0.62	82.13	11.77	93.90	4.000	No	No	2.00
819	53.74	131.60	3.30	0.43	0.62	81.04	11.92	92.96	4.000	No	No	2.00
820	53.81	128.56	3.31	0.42	0.62	79.45	12.69	92.14	4.000	No	No	2.00
821	53.91	123.20	3.31	0.42	0.62	76.68	14.30	90.97	4.000	No	No	2.00
822	53.94	117.66	3.31	0.41	0.62	73.49	15.57	89.05	4.000	No	No	2.00
823	54.01	109.88	3.32	0.40	0.63	69.27	18.34	87.61	4.000	No	No	2.00
824	54.09	91.28	3.32	0.39	0.64	58.47	26.48	84.95	4.000	No	Yes	2.00
825	54.16	80.64	3.33	0.39	0.64	51.63	31.27	82.90	4.000	No	Yes	2.00
826	54.21	72.68	3.33	0.39	0.64	46.43	35.55	81.98	4.000	No	Yes	2.00
827	54.29	67.76	3.34	0.39	0.64	43.15	38.54	81.69	4.000	No	Yes	2.00
828	54.34	68.75	3.34	0.39	0.64	43.73	37.51	81.24	4.000	No	Yes	2.00
829	54.45	77.42	3.35	0.40	0.63	49.04	30.82	79.86	4.000	No	Yes	2.00
830	54.50	93.07	3.35	0.40	0.63	58.69	23.25	81.93	4.000	No	Yes	2.00
831	54.56	109.34	3.35	0.40	0.63	68.64	18.54	87.18	4.000	No	No	2.00
832	54.59	117.48	3.36	0.41	0.63	73.53	16.71	90.24	4.000	No	No	2.00
833	54.69	137.68	3.36	0.41	0.62	85.77	13.62	99.39	4.000	No	No	2.00
834	54.73	141.53	3.37	0.42	0.62	87.35	12.20	99.56	4.000	No	No	2.00
835	54.79	143.50	3.37	0.44	0.60	86.14	9.39	95.53	4.000	No	No	2.00
836	54.86	143.94	3.37	0.44	0.60	86.29	9.29	95.58	4.000	No	No	2.00
837	54.94	145.28	3.38	0.44	0.60	87.15	9.32	96.47	4.000	No	No	2.00
838	55.01	145.73	3.38	0.43	0.60	88.07	10.00	98.07	4.000	No	No	2.00
839	55.07	146.27	3.39	0.42	0.61	89.25	10.92	100.17	4.000	No	No	2.00
840	55.13	147.25	3.39	0.42	0.62	90.73	11.90	102.63	4.000	No	No	2.00
841	55.18	155.74	3.39	0.41	0.62	96.50	11.88	108.37	4.000	No	No	2.00
842	55.26	168.26	3.40	0.41	0.62	104.82	11.64	116.47	4.000	No	No	2.00
843	55.33	187.13	3.40	0.41	0.62	116.35	10.40	126.74	4.000	No	No	2.00
844	55.40	205.99	3.41	0.41	0.62	127.91	9.47	137.38	4.000	No	No	2.00
845	55.46	219.32	3.41	0.41	0.62	136.11	8.96	145.07	4.000	No	No	2.00
846	55.52	232.64	3.42	0.41	0.62	144.22	8.47	152.70	4.000	No	No	2.00
847	55.60	249.72	3.42	0.41	0.62	153.91	7.59	161.50	4.000	No	No	2.00
848	55.66	254.99	3.43	0.41	0.61	156.72	7.29	164.01	4.000	No	No	2.00
849	55.73	262.23	3.43	0.42	0.61	160.52	6.87	167.39	4.000	No	No	2.00
850	55.81	265.45	3.44	0.42	0.61	162.10	6.68	168.79	4.000	No	No	2.00
851	55.86	268.13	3.44	0.42	0.61	163.64	6.62	170.26	4.000	No	No	2.00
852	55.91	268.94	3.44	0.42	0.61	164.18	6.64	170.82	4.000	No	No	2.00
853	56.02	269.74	3.45	0.42	0.61	164.31	6.55	170.85	4.000	No	No	2.00
854	56.07	269.74	3.45	0.42	0.61	164.10	6.49	170.59	4.000	No	No	2.00
855	56.12	268.76	3.46	0.42	0.61	163.30	6.46	169.76	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
856	56.17	265.27	3.46	0.42	0.61	160.80	6.40	167.21	4.000	No	No	2.00
857	56.26	259.73	3.47	0.43	0.60	156.24	6.08	162.31	4.000	No	No	2.00
858	56.30	254.90	3.47	0.43	0.60	152.87	6.01	158.88	4.000	No	No	2.00
859	56.37	250.61	3.47	0.43	0.60	149.91	5.98	155.89	4.000	No	No	2.00
860	56.45	250.88	3.48	0.44	0.60	149.34	5.72	155.07	4.000	No	No	2.00
861	56.51	253.11	3.48	0.44	0.59	150.04	5.46	155.50	4.000	No	No	2.00
862	56.58	255.89	3.49	0.44	0.59	151.16	5.24	156.40	4.000	No	No	2.00
863	56.66	255.97	3.49	0.44	0.59	151.12	5.25	156.37	4.000	No	No	2.00
864	56.71	254.81	3.50	0.44	0.59	150.55	5.34	155.89	4.000	No	No	2.00
865	56.78	252.67	3.50	0.44	0.59	149.97	5.69	155.66	4.000	No	No	2.00
866	56.84	250.61	3.50	0.43	0.59	149.01	5.86	154.87	4.000	No	No	2.00
867	56.91	248.02	3.51	0.43	0.60	147.81	6.10	153.90	4.000	No	No	2.00
868	57.00	250.61	3.51	0.43	0.60	149.36	6.09	155.45	4.000	No	No	2.00
869	57.05	248.64	3.52	0.43	0.60	148.28	6.20	154.48	4.000	No	No	2.00
870	57.11	250.61	3.52	0.43	0.60	149.30	6.13	155.42	4.000	No	No	2.00
871	57.19	250.97	3.53	0.43	0.60	149.75	6.27	156.02	4.000	No	No	2.00
872	57.23	251.50	3.53	0.43	0.60	150.35	6.39	156.74	4.000	No	No	2.00
873	57.30	255.71	3.53	0.42	0.60	153.57	6.64	160.20	4.000	No	No	2.00
874	57.40	265.54	3.54	0.42	0.60	159.55	6.51	166.05	4.000	No	No	2.00
875	57.43	269.83	3.54	0.42	0.60	162.09	6.42	168.52	4.000	No	No	2.00
876	57.50	282.71	3.55	0.42	0.60	169.44	6.06	175.51	4.000	No	No	2.00
877	57.58	293.71	3.55	0.42	0.60	175.59	5.76	181.35	4.000	No	No	2.00
878	57.63	300.59	3.56	0.43	0.60	179.37	5.57	184.94	4.000	No	No	2.00
879	57.69	308.37	3.56	0.42	0.60	184.23	5.55	189.78	4.000	No	No	2.00
880	57.77	312.30	3.57	0.42	0.60	187.57	5.84	193.41	4.000	No	No	2.00
881	57.83	315.25	3.57	0.42	0.60	189.89	6.00	195.90	4.000	No	No	2.00
882	57.89	315.79	3.57	0.41	0.60	190.70	6.18	196.88	4.000	No	No	2.00
883	57.95	313.20	3.58	0.41	0.61	189.69	6.45	196.14	4.000	No	No	2.00
884	58.01	316.19	3.58	0.41	0.61	191.63	6.47	198.10	4.000	No	No	2.00
885	58.08	316.61	3.59	0.41	0.61	192.06	6.57	198.63	4.000	No	No	2.00
886	58.17	322.51	3.59	0.41	0.61	195.69	6.54	202.23	4.000	No	No	2.00
887	58.21	326.35	3.60	0.41	0.61	197.99	6.49	204.47	4.000	No	No	2.00
888	58.27	331.54	3.60	0.41	0.61	200.70	6.30	207.01	4.000	No	No	2.00
889	58.35	334.67	3.60	0.41	0.60	201.84	6.06	207.90	4.000	No	No	2.00
890	58.41	332.25	3.61	0.41	0.60	200.25	6.09	206.35	4.000	No	No	2.00
891	58.47	332.52	3.61	0.41	0.60	200.03	6.00	206.02	4.000	No	No	2.00
892	58.56	330.02	3.62	0.42	0.60	197.69	5.82	203.51	4.000	No	No	2.00
893	58.60	326.89	3.62	0.42	0.60	195.57	5.81	201.38	4.000	No	No	2.00
894	58.67	318.93	3.63	0.42	0.60	190.65	5.91	196.56	4.000	No	No	2.00
895	58.73	308.29	3.63	0.42	0.60	183.66	5.90	189.56	4.000	No	No	2.00
896	58.80	301.05	3.63	0.42	0.59	178.79	5.87	184.66	4.000	No	No	2.00
897	58.87	293.27	3.64	0.43	0.59	173.49	5.80	179.28	4.000	No	No	2.00
898	58.94	279.41	3.64	0.42	0.59	165.29	6.08	171.37	4.000	No	No	2.00
899	59.01	268.86	3.65	0.42	0.59	159.18	6.38	165.56	4.000	No	No	2.00
900	59.06	261.35	3.65	0.42	0.59	155.03	6.69	161.72	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
901	59.16	256.34	3.66	0.42	0.60	153.00	7.26	160.26	4.000	No	No	2.00
902	59.21	255.90	3.66	0.41	0.60	153.28	7.55	160.82	4.000	No	No	2.00
903	59.26	257.95	3.66	0.41	0.60	154.86	7.69	162.56	4.000	No	No	2.00
904	59.34	253.84	3.67	0.40	0.61	154.21	8.75	162.96	4.000	No	No	2.00
905	59.40	247.13	3.67	0.40	0.61	150.91	9.41	160.32	4.000	No	No	2.00
906	59.46	238.81	3.68	0.39	0.61	146.36	10.04	156.40	4.000	No	No	2.00
907	59.55	223.25	3.68	0.39	0.61	137.19	10.94	148.13	4.000	No	No	2.00
908	59.60	216.90	3.69	0.39	0.61	133.23	11.20	144.43	4.000	No	No	2.00
909	59.67	197.05	3.69	0.39	0.62	121.57	12.70	134.27	4.000	No	No	2.00
910	59.72	179.80	3.70	0.38	0.62	111.40	14.32	125.72	4.000	No	No	2.00
911	59.79	160.48	3.70	0.00	1.00	160.49	0.00	160.49	4.000	No	No	2.00
912	59.85	180.51	3.70	0.00	1.00	180.52	0.00	180.52	4.000	No	No	2.00
913	59.91	170.23	3.70	0.00	1.00	170.24	0.00	170.24	4.000	No	No	2.00
914	60.00	181.23	3.71	0.00	1.00	181.24	0.00	181.24	4.000	No	No	2.00
915	60.04	187.93	3.71	0.00	1.00	187.94	0.00	187.94	4.000	No	No	2.00
916	60.11	185.61	3.71	0.00	1.00	185.62	0.00	185.62	4.000	No	No	2.00

Abbreviations

Depth: Depth from free surface, at which CPT was performed (ft)
q_t: Total cone resistance
I_c: Soil behavior type index
Fr: Normalized friction ratio (%)
n: Stress exponent
Q_{tn}: Normalized cone resistance
K_c: Cone resistance correction factor due to fines
$Q_{tn,cs}$: Normalized and adjusted cone resistance
$CRR_{7.5}$: Cyclic resistance ratio for M_w=7.5
FS: Factor of safety against soil liquefaction

:: Liquefaction Potential Index calculation data ::

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
0.08	2.00	0.00	0.00	0.07	0.00	0.14	2.00	0.00	0.00	0.07	0.00
0.20	2.00	0.00	0.00	0.06	0.00	0.26	2.00	0.00	0.00	0.06	0.00
0.33	2.00	0.00	0.00	0.07	0.00	0.40	2.00	0.00	0.00	0.07	0.00
0.46	2.00	0.00	0.00	0.07	0.00	0.53	2.00	0.00	0.00	0.06	0.00
0.60	2.00	0.00	0.00	0.07	0.00	0.66	2.00	0.00	0.00	0.07	0.00
0.74	2.00	0.00	0.00	0.08	0.00	0.79	2.00	0.00	0.00	0.05	0.00
0.88	2.00	0.00	0.00	0.09	0.00	0.92	2.00	0.00	0.00	0.04	0.00
0.99	2.00	0.00	0.00	0.07	0.00	1.06	2.00	0.00	0.00	0.07	0.00
1.13	2.00	0.00	0.00	0.07	0.00	1.19	2.00	0.00	0.00	0.06	0.00
1.25	2.00	0.00	0.00	0.07	0.00	1.32	2.00	0.00	0.00	0.07	0.00
1.38	2.00	0.00	0.00	0.06	0.00	1.47	2.00	0.00	0.00	0.09	0.00
1.52	2.00	0.00	0.00	0.05	0.00	1.58	2.00	0.00	0.00	0.06	0.00
1.65	2.00	0.00	0.00	0.07	0.00	1.72	2.00	0.00	0.00	0.07	0.00
1.78	2.00	0.00	0.00	0.06	0.00	1.85	2.00	0.00	0.00	0.08	0.00
1.93	2.00	0.00	0.00	0.07	0.00	1.98	2.00	0.00	0.00	0.06	0.00
2.04	2.00	0.00	0.00	0.06	0.00	2.10	2.00	0.00	0.00	0.06	0.00
2.17	2.00	0.00	0.00	0.07	0.00	2.24	2.00	0.00	0.00	0.07	0.00
2.32	2.00	0.00	0.00	0.08	0.00	2.37	2.00	0.00	0.00	0.05	0.00
2.44	2.00	0.00	0.00	0.06	0.00	2.51	2.00	0.00	0.00	0.07	0.00
2.57	2.00	0.00	0.00	0.06	0.00	2.63	2.00	0.00	0.00	0.06	0.00
2.73	2.00	0.00	0.00	0.10	0.00	2.77	2.00	0.00	0.00	0.04	0.00
2.83	2.00	0.00	0.00	0.06	0.00	2.93	2.00	0.00	0.00	0.10	0.00
2.97	2.00	0.00	0.00	0.05	0.00	3.02	2.00	0.00	0.00	0.05	0.00
3.11	2.00	0.00	0.00	0.09	0.00	3.15	2.00	0.00	0.00	0.04	0.00
3.22	2.00	0.00	0.00	0.07	0.00	3.29	2.00	0.00	0.00	0.07	0.00
3.37	2.00	0.00	0.00	0.08	0.00	3.42	2.00	0.00	0.00	0.05	0.00
3.48	2.00	0.00	0.00	0.07	0.00	3.54	2.00	0.00	0.00	0.06	0.00
3.62	2.00	0.00	0.00	0.08	0.00	3.68	2.00	0.00	0.00	0.06	0.00
3.75	2.00	0.00	0.00	0.07	0.00	3.81	2.00	0.00	0.00	0.06	0.00
3.90	2.00	0.00	0.00	0.08	0.00	3.94	2.00	0.00	0.00	0.04	0.00
4.02	2.00	0.00	0.00	0.08	0.00	4.10	2.00	0.00	0.00	0.08	0.00
4.14	2.00	0.00	0.00	0.04	0.00	4.20	2.00	0.00	0.00	0.06	0.00
4.30	2.00	0.00	0.00	0.10	0.00	4.34	2.00	0.00	0.00	0.04	0.00
4.41	2.00	0.00	0.00	0.06	0.00	4.47	2.00	0.00	0.00	0.06	0.00
4.54	2.00	0.00	0.00	0.07	0.00	4.60	2.00	0.00	0.00	0.06	0.00
4.68	2.00	0.00	0.00	0.08	0.00	4.73	2.00	0.00	0.00	0.05	0.00
4.80	2.00	0.00	0.00	0.07	0.00	4.86	2.00	0.00	0.00	0.06	0.00
4.93	2.00	0.00	0.00	0.07	0.00	5.00	2.00	0.00	0.00	0.07	0.00
5.08	2.00	0.00	0.00	0.08	0.00	5.14	2.00	0.00	0.00	0.06	0.00
5.20	2.00	0.00	0.00	0.06	0.00	5.28	2.00	0.00	0.00	0.08	0.00
5.35	2.00	0.00	0.00	0.07	0.00	5.39	2.00	0.00	0.00	0.05	0.00
5.45	2.00	0.00	0.00	0.06	0.00	5.53	2.00	0.00	0.00	0.08	0.00
5.58	2.00	0.00	0.00	0.06	0.00	5.66	2.00	0.00	0.00	0.08	0.00
5.73	2.00	0.00	0.00	0.07	0.00	5.79	2.00	0.00	0.00	0.06	0.00
5.84	2.00	0.00	0.00	0.05	0.00	5.93	2.00	0.00	0.00	0.09	0.00
5.98	2.00	0.00	0.00	0.04	0.00	6.07	2.00	0.00	0.00	0.09	0.00
6.12	2.00	0.00	0.00	0.05	0.00	6.17	2.00	0.00	0.00	0.05	0.00
6.24	2.00	0.00	0.00	0.07	0.00	6.32	2.00	0.00	0.00	0.08	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
6.37	2.00	0.00	0.00	0.05	0.00	6.43	2.00	0.00	0.00	0.06	0.00
6.52	2.00	0.00	0.00	0.09	0.00	6.57	2.00	0.00	0.00	0.05	0.00
6.63	2.00	0.00	0.00	0.06	0.00	6.72	2.00	0.00	0.00	0.09	0.00
6.76	2.00	0.00	0.00	0.04	0.00	6.83	2.00	0.00	0.00	0.07	0.00
6.92	2.00	0.00	0.00	0.09	0.00	6.98	2.00	0.00	0.00	0.06	0.00
7.02	2.00	0.00	0.00	0.04	0.00	7.10	2.00	0.00	0.00	0.08	0.00
7.17	2.00	0.00	0.00	0.08	0.00	7.23	2.00	0.00	0.00	0.06	0.00
7.29	2.00	0.00	0.00	0.06	0.00	7.36	2.00	0.00	0.00	0.07	0.00
7.42	2.00	0.00	0.00	0.05	0.00	7.52	2.00	0.00	0.00	0.10	0.00
7.57	2.00	0.00	0.00	0.04	0.00	7.62	2.00	0.00	0.00	0.05	0.00
7.72	2.00	0.00	0.00	0.10	0.00	7.76	2.00	0.00	0.00	0.04	0.00
7.82	2.00	0.00	0.00	0.06	0.00	7.90	2.00	0.00	0.00	0.08	0.00
7.95	2.00	0.00	0.00	0.05	0.00	8.02	2.00	0.00	0.00	0.07	0.00
8.07	2.00	0.00	0.00	0.05	0.00	8.16	2.00	0.00	0.00	0.09	0.00
8.21	2.00	0.00	0.00	0.06	0.00	8.27	2.00	0.00	0.00	0.05	0.00
8.35	2.00	0.00	0.00	0.08	0.00	8.41	2.00	0.00	0.00	0.06	0.00
8.47	2.00	0.00	0.00	0.05	0.00	8.54	2.00	0.00	0.00	0.08	0.00
8.60	2.00	0.00	0.00	0.06	0.00	8.67	2.00	0.00	0.00	0.07	0.00
8.74	2.00	0.00	0.00	0.07	0.00	8.80	2.00	0.00	0.00	0.05	0.00
8.90	2.00	0.00	0.00	0.10	0.00	8.95	2.00	0.00	0.00	0.05	0.00
8.99	2.00	0.00	0.00	0.04	0.00	9.07	2.00	0.00	0.00	0.08	0.00
9.14	2.00	0.00	0.00	0.06	0.00	9.20	2.00	0.00	0.00	0.06	0.00
9.29	2.00	0.00	0.00	0.09	0.00	9.33	2.00	0.00	0.00	0.04	0.00
9.40	2.00	0.00	0.00	0.07	0.00	9.47	2.00	0.00	0.00	0.07	0.00
9.53	2.00	0.00	0.00	0.06	0.00	9.59	2.00	0.00	0.00	0.06	0.00
9.65	2.00	0.00	0.00	0.06	0.00	9.72	2.00	0.00	0.00	0.06	0.00
9.78	2.00	0.00	0.00	0.07	0.00	9.85	2.00	0.00	0.00	0.06	0.00
9.92	2.00	0.00	0.00	0.07	0.00	9.98	2.00	0.00	0.00	0.06	0.00
10.04	2.00	0.00	0.00	0.06	0.00	10.11	2.00	0.00	0.00	0.07	0.00
10.19	2.00	0.00	0.00	0.07	0.00	10.24	2.00	0.00	0.00	0.05	0.00
10.31	2.00	0.00	0.00	0.08	0.00	10.42	2.00	0.00	0.00	0.10	0.00
10.44	2.00	0.00	0.00	0.02	0.00	10.50	2.00	0.00	0.00	0.07	0.00
10.56	2.00	0.00	0.00	0.06	0.00	10.64	2.00	0.00	0.00	0.08	0.00
10.70	2.00	0.00	0.00	0.06	0.00	10.77	2.00	0.00	0.00	0.07	0.00
10.84	2.00	0.00	0.00	0.07	0.00	10.90	2.00	0.00	0.00	0.06	0.00
10.96	2.00	0.00	0.00	0.06	0.00	11.04	2.00	0.00	0.00	0.08	0.00
11.10	2.00	0.00	0.00	0.05	0.00	11.18	2.00	0.00	0.00	0.09	0.00
11.22	2.00	0.00	0.00	0.04	0.00	11.30	2.00	0.00	0.00	0.08	0.00
11.36	2.00	0.00	0.00	0.06	0.00	11.42	2.00	0.00	0.00	0.07	0.00
11.50	2.00	0.00	0.00	0.08	0.00	11.56	2.00	0.00	0.00	0.06	0.00
11.63	2.00	0.00	0.00	0.06	0.00	11.69	2.00	0.00	0.00	0.06	0.00
11.76	2.00	0.00	0.00	0.07	0.00	11.82	2.00	0.00	0.00	0.07	0.00
11.88	2.00	0.00	0.00	0.06	0.00	11.95	2.00	0.00	0.00	0.06	0.00
12.03	2.00	0.00	0.00	0.08	0.00	12.08	2.00	0.00	0.00	0.05	0.00
12.16	2.00	0.00	0.00	0.08	0.00	12.22	2.00	0.00	0.00	0.06	0.00
12.29	2.00	0.00	0.00	0.07	0.00	12.35	2.00	0.00	0.00	0.06	0.00
12.42	2.00	0.00	0.00	0.07	0.00	12.49	2.00	0.00	0.00	0.07	0.00
12.53	2.00	0.00	0.00	0.05	0.00	12.60	2.00	0.00	0.00	0.07	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
12.68	2.00	0.00	0.00	0.08	0.00	12.73	2.00	0.00	0.00	0.05	0.00
12.82	2.00	0.00	0.00	0.09	0.00	12.87	2.00	0.00	0.00	0.05	0.00
12.93	2.00	0.00	0.00	0.06	0.00	13.00	2.00	0.00	0.00	0.07	0.00
13.08	2.00	0.00	0.00	0.08	0.00	13.14	2.00	0.00	0.00	0.05	0.00
13.22	2.00	0.00	0.00	0.09	0.00	13.26	2.00	0.00	0.00	0.04	0.00
13.32	2.00	0.00	0.00	0.06	0.00	13.43	2.00	0.00	0.00	0.10	0.00
13.48	2.00	0.00	0.00	0.05	0.00	13.52	2.00	0.00	0.00	0.04	0.00
13.62	2.00	0.00	0.00	0.10	0.00	13.66	2.00	0.00	0.00	0.04	0.00
13.72	2.00	0.00	0.00	0.06	0.00	13.80	2.00	0.00	0.00	0.08	0.00
13.89	2.00	0.00	0.00	0.09	0.00	13.92	2.00	0.00	0.00	0.04	0.00
13.98	2.00	0.00	0.00	0.06	0.00	14.05	2.00	0.00	0.00	0.06	0.00
14.13	2.00	0.00	0.00	0.08	0.00	14.18	2.00	0.00	0.00	0.05	0.00
14.25	2.00	0.00	0.00	0.07	0.00	14.34	2.00	0.00	0.00	0.09	0.00
14.38	2.00	0.00	0.00	0.05	0.00	14.44	2.00	0.00	0.00	0.06	0.00
14.52	2.00	0.00	0.00	0.08	0.00	14.57	2.00	0.00	0.00	0.05	0.00
14.64	2.00	0.00	0.00	0.06	0.00	14.71	2.00	0.00	0.00	0.08	0.00
14.78	2.00	0.00	0.00	0.07	0.00	14.83	2.00	0.00	0.00	0.05	0.00
14.93	2.00	0.00	0.00	0.09	0.00	14.97	2.00	0.00	0.00	0.04	0.00
15.03	2.00	0.00	0.00	0.06	0.00	15.10	2.00	0.00	0.00	0.07	0.00
15.16	2.00	0.00	0.00	0.06	0.00	15.24	2.00	0.00	0.00	0.08	0.00
15.32	2.00	0.00	0.00	0.08	0.00	15.36	2.00	0.00	0.00	0.03	0.00
15.46	2.00	0.00	0.00	0.10	0.00	15.50	2.00	0.00	0.00	0.04	0.00
15.57	2.00	0.00	0.00	0.07	0.00	15.62	2.00	0.00	0.00	0.05	0.00
15.69	2.00	0.00	0.00	0.07	0.00	15.76	2.00	0.00	0.00	0.07	0.00
15.82	2.00	0.00	0.00	0.06	0.00	15.91	2.00	0.00	0.00	0.10	0.00
15.96	2.00	0.00	0.00	0.04	0.00	16.02	2.00	0.00	0.00	0.06	0.00
16.09	2.00	0.00	0.00	0.07	0.00	16.16	2.00	0.00	0.00	0.07	0.00
16.21	2.00	0.00	0.00	0.05	0.00	16.30	2.00	0.00	0.00	0.10	0.00
16.35	2.00	0.00	0.00	0.05	0.00	16.44	2.00	0.00	0.00	0.09	0.00
16.49	2.00	0.00	0.00	0.06	0.00	16.55	2.00	0.00	0.00	0.06	0.00
16.60	2.00	0.00	0.00	0.05	0.00	16.67	2.00	0.00	0.00	0.07	0.00
16.74	2.00	0.00	0.00	0.07	0.00	16.80	2.00	0.00	0.00	0.06	0.00
16.88	2.00	0.00	0.00	0.08	0.00	16.93	2.00	0.00	0.00	0.05	0.00
17.00	2.00	0.00	0.00	0.07	0.00	17.08	2.00	0.00	0.00	0.07	0.00
17.13	2.00	0.00	0.00	0.05	0.00	17.20	2.00	0.00	0.00	0.07	0.00
17.28	2.00	0.00	0.00	0.08	0.00	17.33	2.00	0.00	0.00	0.05	0.00
17.39	2.00	0.00	0.00	0.06	0.00	17.48	2.00	0.00	0.00	0.09	0.00
17.52	2.00	0.00	0.00	0.04	0.00	17.59	2.00	0.00	0.00	0.07	0.00
17.67	2.00	0.00	0.00	0.08	0.00	17.72	2.00	0.00	0.00	0.05	0.00
17.79	2.00	0.00	0.00	0.06	0.00	17.87	2.00	0.00	0.00	0.08	0.00
17.93	2.00	0.00	0.00	0.07	0.00	17.98	2.00	0.00	0.00	0.05	0.00
18.07	2.00	0.00	0.00	0.09	0.00	18.12	2.00	0.00	0.00	0.06	0.00
18.18	2.00	0.00	0.00	0.06	0.00	18.25	2.00	0.00	0.00	0.06	0.00
18.32	2.00	0.00	0.00	0.07	0.00	18.40	2.00	0.00	0.00	0.08	0.00
18.45	2.00	0.00	0.00	0.04	0.00	18.52	2.00	0.00	0.00	0.08	0.00
18.57	2.00	0.00	0.00	0.05	0.00	18.64	2.00	0.00	0.00	0.07	0.00
18.72	2.00	0.00	0.00	0.08	0.00	18.77	2.00	0.00	0.00	0.05	0.00
18.86	2.00	0.00	0.00	0.09	0.00	18.91	2.00	0.00	0.00	0.05	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
18.96	2.00	0.00	0.00	0.06	0.00	19.06	2.00	0.00	0.00	0.09	0.00
19.11	2.00	0.00	0.00	0.05	0.00	19.18	2.00	0.00	0.00	0.07	0.00
19.24	2.00	0.00	0.00	0.06	0.00	19.30	2.00	0.00	0.00	0.06	0.00
19.36	2.00	0.00	0.00	0.06	0.00	19.45	2.00	0.00	0.00	0.09	0.00
19.50	2.00	0.00	0.00	0.05	0.00	19.58	2.00	0.00	0.00	0.08	0.00
19.64	2.00	0.00	0.00	0.07	0.00	19.69	2.00	0.00	0.00	0.05	0.00
19.76	2.00	0.00	0.00	0.07	0.00	19.84	2.00	0.00	0.00	0.09	0.00
19.89	2.00	0.00	0.00	0.04	0.00	19.95	2.00	0.00	0.00	0.06	0.00
20.02	2.00	0.00	0.00	0.07	0.00	20.08	2.00	0.00	0.00	0.06	0.00
20.14	2.00	0.00	0.00	0.06	0.00	20.21	2.00	0.00	0.00	0.07	0.00
20.28	2.00	0.00	0.00	0.07	0.00	20.37	2.00	0.00	0.00	0.09	0.00
20.43	2.00	0.00	0.00	0.07	0.00	20.49	2.00	0.00	0.00	0.06	0.00
20.55	2.00	0.00	0.00	0.05	0.00	20.61	2.00	0.00	0.00	0.06	0.00
20.68	2.00	0.00	0.00	0.07	0.00	20.74	2.00	0.00	0.00	0.06	0.00
20.80	2.00	0.00	0.00	0.07	0.00	20.87	2.00	0.00	0.00	0.07	0.00
20.94	2.00	0.00	0.00	0.07	0.00	21.01	2.00	0.00	0.00	0.07	0.00
21.06	2.00	0.00	0.00	0.05	0.00	21.15	2.00	0.00	0.00	0.08	0.00
21.21	2.00	0.00	0.00	0.06	0.00	21.27	2.00	0.00	0.00	0.07	0.00
21.34	2.00	0.00	0.00	0.07	0.00	21.41	2.00	0.00	0.00	0.06	0.00
21.46	2.00	0.00	0.00	0.05	0.00	21.53	2.00	0.00	0.00	0.07	0.00
21.60	2.00	0.00	0.00	0.07	0.00	21.68	2.00	0.00	0.00	0.08	0.00
21.74	2.00	0.00	0.00	0.05	0.00	21.79	2.00	0.00	0.00	0.06	0.00
21.86	2.00	0.00	0.00	0.06	0.00	21.93	2.00	0.00	0.00	0.07	0.00
21.98	2.00	0.00	0.00	0.05	0.00	22.08	2.00	0.00	0.00	0.09	0.00
22.14	2.00	0.00	0.00	0.06	0.00	22.20	2.00	0.00	0.00	0.06	0.00
22.26	2.00	0.00	0.00	0.06	0.00	22.34	2.00	0.00	0.00	0.08	0.00
22.38	2.00	0.00	0.00	0.03	0.00	22.44	2.00	0.00	0.00	0.06	0.00
22.53	2.00	0.00	0.00	0.09	0.00	22.58	2.00	0.00	0.00	0.05	0.00
22.64	2.00	0.00	0.00	0.06	0.00	22.72	2.00	0.00	0.00	0.08	0.00
22.77	2.00	0.00	0.00	0.05	0.00	22.85	2.00	0.00	0.00	0.08	0.00
22.91	2.00	0.00	0.00	0.06	0.00	22.99	2.00	0.00	0.00	0.09	0.00
23.05	2.00	0.00	0.00	0.06	0.00	23.10	2.00	0.00	0.00	0.05	0.00
23.18	2.00	0.00	0.00	0.07	0.00	23.24	2.00	0.00	0.00	0.07	0.00
23.31	2.00	0.00	0.00	0.06	0.00	23.38	2.00	0.00	0.00	0.07	0.00
23.44	2.00	0.00	0.00	0.06	0.00	23.51	2.00	0.00	0.00	0.07	0.00
23.57	2.00	0.00	0.00	0.06	0.00	23.63	2.00	0.00	0.00	0.06	0.00
23.69	2.00	0.00	0.00	0.06	0.00	23.77	2.00	0.00	0.00	0.07	0.00
23.84	2.00	0.00	0.00	0.08	0.00	23.89	2.00	0.00	0.00	0.05	0.00
23.98	2.00	0.00	0.00	0.09	0.00	24.03	2.00	0.00	0.00	0.05	0.00
24.11	2.00	0.00	0.00	0.07	0.00	24.17	2.00	0.00	0.00	0.06	0.00
24.24	2.00	0.00	0.00	0.07	0.00	24.31	2.00	0.00	0.00	0.07	0.00
24.36	2.00	0.00	0.00	0.05	0.00	24.43	2.00	0.00	0.00	0.07	0.00
24.48	2.00	0.00	0.00	0.05	0.00	24.56	2.00	0.00	0.00	0.07	0.00
24.62	2.00	0.00	0.00	0.06	0.00	24.68	2.00	0.00	0.00	0.07	0.00
24.77	2.00	0.00	0.00	0.09	0.00	24.82	2.00	0.00	0.00	0.05	0.00
24.88	2.00	0.00	0.00	0.05	0.00	24.94	2.00	0.00	0.00	0.06	0.00
25.02	2.00	0.00	0.00	0.08	0.00	25.07	2.00	0.00	0.00	0.05	0.00
25.14	2.00	0.00	0.00	0.07	0.00	25.20	2.00	0.00	0.00	0.06	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
25.27	2.00	0.00	0.00	0.07	0.00	25.33	2.00	0.00	0.00	0.06	0.00
25.42	2.00	0.00	0.00	0.09	0.00	25.47	2.00	0.00	0.00	0.05	0.00
25.53	2.00	0.00	0.00	0.06	0.00	25.61	2.00	0.00	0.00	0.08	0.00
25.66	2.00	0.00	0.00	0.05	0.00	25.72	2.00	0.00	0.00	0.06	0.00
25.80	2.00	0.00	0.00	0.08	0.00	25.86	2.00	0.00	0.00	0.06	0.00
25.93	2.00	0.00	0.00	0.07	0.00	26.00	2.00	0.00	0.00	0.08	0.00
26.06	2.00	0.00	0.00	0.05	0.00	26.12	2.00	0.00	0.00	0.06	0.00
26.21	2.00	0.00	0.00	0.09	0.00	26.26	2.00	0.00	0.00	0.05	0.00
26.31	2.00	0.00	0.00	0.06	0.00	26.41	2.00	0.00	0.00	0.10	0.00
26.46	2.00	0.00	0.00	0.05	0.00	26.51	2.00	0.00	0.00	0.05	0.00
26.61	2.00	0.00	0.00	0.09	0.00	26.65	2.00	0.00	0.00	0.05	0.00
26.72	2.00	0.00	0.00	0.07	0.00	26.79	2.00	0.00	0.00	0.07	0.00
26.86	2.00	0.00	0.00	0.07	0.00	26.90	2.00	0.00	0.00	0.04	0.00
26.99	2.00	0.00	0.00	0.09	0.00	27.04	2.00	0.00	0.00	0.05	0.00
27.10	2.00	0.00	0.00	0.06	0.00	27.20	2.00	0.00	0.00	0.09	0.00
27.24	2.00	0.00	0.00	0.04	0.00	27.31	2.00	0.00	0.00	0.07	0.00
27.39	2.00	0.00	0.00	0.08	0.00	27.43	2.00	0.00	0.00	0.04	0.00
27.50	2.00	0.00	0.00	0.07	0.00	27.56	2.00	0.00	0.00	0.06	0.00
27.64	2.00	0.00	0.00	0.08	0.00	27.70	2.00	0.00	0.00	0.06	0.00
27.76	2.00	0.00	0.00	0.06	0.00	27.84	2.00	0.00	0.00	0.08	0.00
27.89	2.00	0.00	0.00	0.05	0.00	27.96	2.00	0.00	0.00	0.06	0.00
28.03	2.00	0.00	0.00	0.07	0.00	28.08	2.00	0.00	0.00	0.05	0.00
28.16	2.00	0.00	0.00	0.07	0.00	28.23	2.00	0.00	0.00	0.07	0.00
28.30	2.00	0.00	0.00	0.07	0.00	28.35	2.00	0.00	0.00	0.05	0.00
28.45	2.00	0.00	0.00	0.10	0.00	28.49	2.00	0.00	0.00	0.04	0.00
28.55	2.00	0.00	0.00	0.06	0.00	28.62	2.00	0.00	0.00	0.07	0.00
28.70	2.00	0.00	0.00	0.08	0.00	28.74	2.00	0.00	0.00	0.04	0.00
28.84	2.00	0.00	0.00	0.10	0.00	28.89	2.00	0.00	0.00	0.05	0.00
28.95	2.00	0.00	0.00	0.05	0.00	29.01	2.00	0.00	0.00	0.06	0.00
29.09	2.00	0.00	0.00	0.08	0.00	29.14	2.00	0.00	0.00	0.06	0.00
29.23	2.00	0.00	0.00	0.09	0.00	29.28	2.00	0.00	0.00	0.05	0.00
29.34	2.00	0.00	0.00	0.05	0.00	29.42	2.00	0.00	0.00	0.08	0.00
29.47	2.00	0.00	0.00	0.05	0.00	29.55	2.00	0.00	0.00	0.08	0.00
29.61	2.00	0.00	0.00	0.05	0.00	29.66	2.00	0.00	0.00	0.05	0.00
29.76	2.00	0.00	0.00	0.10	0.00	29.82	2.00	0.00	0.00	0.06	0.00
29.87	2.00	0.00	0.00	0.05	0.00	29.92	2.00	0.00	0.00	0.05	0.00
30.01	2.00	0.00	0.00	0.08	0.00	30.06	2.00	0.00	0.00	0.05	0.00
30.13	2.00	0.00	0.00	0.07	0.00	30.20	2.00	0.00	0.00	0.07	0.00
30.27	2.00	0.00	0.00	0.07	0.00	30.33	2.00	0.00	0.00	0.06	0.00
30.41	2.00	0.00	0.00	0.08	0.00	30.45	2.00	0.00	0.00	0.04	0.00
30.52	2.00	0.00	0.00	0.07	0.00	30.59	2.00	0.00	0.00	0.07	0.00
30.65	2.00	0.00	0.00	0.06	0.00	30.73	2.00	0.00	0.00	0.09	0.00
30.79	2.00	0.00	0.00	0.05	0.00	30.87	2.00	0.00	0.00	0.09	0.00
30.92	2.00	0.00	0.00	0.05	0.00	30.98	2.00	0.00	0.00	0.05	0.00
31.04	2.00	0.00	0.00	0.06	0.00	31.12	2.00	0.00	0.00	0.08	0.00
31.19	2.00	0.00	0.00	0.07	0.00	31.24	2.00	0.00	0.00	0.06	0.00
31.32	2.00	0.00	0.00	0.08	0.00	31.37	2.00	0.00	0.00	0.05	0.00
31.45	2.00	0.00	0.00	0.07	0.00	31.50	2.00	0.00	0.00	0.05	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
31.57	2.00	0.00	0.00	0.08	0.00	31.64	2.00	0.00	0.00	0.06	0.00
31.69	2.00	0.00	0.00	0.06	0.00	31.77	2.00	0.00	0.00	0.08	0.00
31.83	2.00	0.00	0.00	0.06	0.00	31.91	2.00	0.00	0.00	0.08	0.00
31.99	2.00	0.00	0.00	0.08	0.00	32.04	2.00	0.00	0.00	0.05	0.00
32.09	2.00	0.00	0.00	0.05	0.00	32.17	2.00	0.00	0.00	0.08	0.00
32.24	2.00	0.00	0.00	0.07	0.00	32.30	2.00	0.00	0.00	0.06	0.00
32.38	2.00	0.00	0.00	0.08	0.00	32.42	2.00	0.00	0.00	0.04	0.00
32.48	2.00	0.00	0.00	0.07	0.00	32.55	2.00	0.00	0.00	0.07	0.00
32.62	2.00	0.00	0.00	0.07	0.00	32.68	2.00	0.00	0.00	0.06	0.00
32.77	2.00	0.00	0.00	0.09	0.00	32.81	2.00	0.00	0.00	0.05	0.00
32.88	2.00	0.00	0.00	0.07	0.00	32.94	2.00	0.00	0.00	0.06	0.00
33.01	2.00	0.00	0.00	0.07	0.00	33.12	2.00	0.00	0.00	0.10	0.00
33.14	2.00	0.00	0.00	0.02	0.00	33.22	2.00	0.00	0.00	0.08	0.00
33.27	2.00	0.00	0.00	0.05	0.00	33.35	2.00	0.00	0.00	0.08	0.00
33.41	2.00	0.00	0.00	0.06	0.00	33.48	2.00	0.00	0.00	0.07	0.00
33.55	2.00	0.00	0.00	0.07	0.00	33.61	2.00	0.00	0.00	0.06	0.00
33.70	2.00	0.00	0.00	0.10	0.00	33.73	2.00	0.00	0.00	0.03	0.00
33.81	2.00	0.00	0.00	0.08	0.00	33.86	2.00	0.00	0.00	0.05	0.00
33.95	2.00	0.00	0.00	0.09	0.00	34.01	2.00	0.00	0.00	0.05	0.00
34.06	2.00	0.00	0.00	0.05	0.00	34.16	2.00	0.00	0.00	0.10	0.00
34.20	2.00	0.00	0.00	0.05	0.00	34.26	2.00	0.00	0.00	0.06	0.00
34.34	2.00	0.00	0.00	0.08	0.00	34.40	2.00	0.00	0.00	0.06	0.00
34.46	2.00	0.00	0.00	0.06	0.00	34.55	2.00	0.00	0.00	0.09	0.00
34.60	2.00	0.00	0.00	0.05	0.00	34.66	2.00	0.00	0.00	0.06	0.00
34.72	2.00	0.00	0.00	0.06	0.00	34.78	2.00	0.00	0.00	0.06	0.00
34.86	2.00	0.00	0.00	0.08	0.00	34.94	2.00	0.00	0.00	0.08	0.00
35.00	2.00	0.00	0.00	0.06	0.00	35.04	2.00	0.00	0.00	0.04	0.00
35.11	2.00	0.00	0.00	0.07	0.00	35.18	2.00	0.00	0.00	0.07	0.00
35.28	2.00	0.00	0.00	0.10	0.00	35.32	2.00	0.00	0.00	0.04	0.00
35.39	2.00	0.00	0.00	0.07	0.00	35.44	2.00	0.00	0.00	0.05	0.00
35.50	2.00	0.00	0.00	0.06	0.00	35.59	2.00	0.00	0.00	0.09	0.00
35.65	2.00	0.00	0.00	0.06	0.00	35.72	2.00	0.00	0.00	0.07	0.00
35.77	2.00	0.00	0.00	0.05	0.00	35.85	2.00	0.00	0.00	0.08	0.00
35.90	2.00	0.00	0.00	0.05	0.00	35.99	2.00	0.00	0.00	0.09	0.00
36.04	2.00	0.00	0.00	0.05	0.00	36.09	2.00	0.00	0.00	0.05	0.00
36.16	2.00	0.00	0.00	0.07	0.00	36.24	2.00	0.00	0.00	0.08	0.00
36.29	2.00	0.00	0.00	0.05	0.00	36.37	2.00	0.00	0.00	0.08	0.00
36.43	2.00	0.00	0.00	0.06	0.00	36.50	2.00	0.00	0.00	0.07	0.00
36.57	2.00	0.00	0.00	0.08	0.00	36.63	2.00	0.00	0.00	0.05	0.00
36.68	2.00	0.00	0.00	0.05	0.00	36.77	2.00	0.00	0.00	0.09	0.00
36.82	2.00	0.00	0.00	0.04	0.00	36.88	2.00	0.00	0.00	0.06	0.00
36.95	2.00	0.00	0.00	0.07	0.00	37.01	2.00	0.00	0.00	0.06	0.00
37.08	2.00	0.00	0.00	0.06	0.00	37.14	2.00	0.00	0.00	0.07	0.00
37.22	2.00	0.00	0.00	0.07	0.00	37.30	2.00	0.00	0.00	0.09	0.00
37.35	2.00	0.00	0.00	0.04	0.00	37.41	2.00	0.00	0.00	0.06	0.00
37.47	2.00	0.00	0.00	0.06	0.00	37.56	2.00	0.00	0.00	0.09	0.00
37.61	2.00	0.00	0.00	0.05	0.00	37.67	2.00	0.00	0.00	0.06	0.00
37.76	2.00	0.00	0.00	0.08	0.00	37.81	2.00	0.00	0.00	0.05	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
37.87	2.00	0.00	0.00	0.06	0.00	37.95	2.00	0.00	0.00	0.07	0.00
38.00	2.00	0.00	0.00	0.06	0.00	38.06	2.00	0.00	0.00	0.06	0.00
38.13	2.00	0.00	0.00	0.07	0.00	38.20	2.00	0.00	0.00	0.07	0.00
38.26	2.00	0.00	0.00	0.06	0.00	38.35	2.00	0.00	0.00	0.09	0.00
38.40	2.00	0.00	0.00	0.04	0.00	38.47	2.00	0.00	0.00	0.07	0.00
38.53	2.00	0.00	0.00	0.06	0.00	38.61	2.00	0.00	0.00	0.08	0.00
38.65	2.00	0.00	0.00	0.04	0.00	38.74	2.00	0.00	0.00	0.09	0.00
38.80	2.00	0.00	0.00	0.06	0.00	38.85	2.00	0.00	0.00	0.05	0.00
38.92	2.00	0.00	0.00	0.08	0.00	38.99	2.00	0.00	0.00	0.06	0.00
39.05	2.00	0.00	0.00	0.06	0.00	39.12	2.00	0.00	0.00	0.07	0.00
39.18	2.00	0.00	0.00	0.06	0.00	39.24	2.00	0.00	0.00	0.06	0.00
39.33	2.00	0.00	0.00	0.09	0.00	39.38	2.00	0.00	0.00	0.05	0.00
39.44	2.00	0.00	0.00	0.06	0.00	39.52	2.00	0.00	0.00	0.08	0.00
39.58	2.00	0.00	0.00	0.06	0.00	39.65	2.00	0.00	0.00	0.07	0.00
39.71	2.00	0.00	0.00	0.06	0.00	39.80	2.00	0.00	0.00	0.09	0.00
39.83	2.00	0.00	0.00	0.03	0.00	39.91	2.00	0.00	0.00	0.08	0.00
39.97	2.00	0.00	0.00	0.06	0.00	40.04	2.00	0.00	0.00	0.07	0.00
40.10	2.00	0.00	0.00	0.06	0.00	40.18	2.00	0.00	0.00	0.08	0.00
40.23	2.00	0.00	0.00	0.05	0.00	40.30	2.00	0.00	0.00	0.07	0.00
40.38	2.00	0.00	0.00	0.09	0.00	40.43	2.00	0.00	0.00	0.04	0.00
40.50	2.00	0.00	0.00	0.07	0.00	40.59	2.00	0.00	0.00	0.10	0.00
40.64	2.00	0.00	0.00	0.05	0.00	40.69	2.00	0.00	0.00	0.04	0.00
40.78	2.00	0.00	0.00	0.09	0.00	40.83	2.00	0.00	0.00	0.05	0.00
40.89	2.00	0.00	0.00	0.05	0.00	40.97	2.00	0.00	0.00	0.09	0.00
41.02	2.00	0.00	0.00	0.05	0.00	41.08	2.00	0.00	0.00	0.06	0.00
41.16	0.27	0.00	0.00	0.08	0.06	41.22	0.28	0.00	0.00	0.06	0.05
41.28	0.30	0.00	0.00	0.06	0.05	41.38	0.33	0.00	0.00	0.10	0.07
41.43	0.33	0.00	0.00	0.05	0.04	41.48	0.34	0.00	0.00	0.05	0.03
41.54	0.35	0.00	0.00	0.06	0.05	41.64	0.36	0.00	0.00	0.10	0.07
41.69	0.37	0.00	0.00	0.05	0.04	41.73	0.37	0.00	0.00	0.05	0.03
41.82	0.39	0.00	0.00	0.09	0.06	41.88	0.40	0.00	0.00	0.05	0.04
41.93	0.41	0.00	0.00	0.05	0.04	42.02	0.42	0.00	0.00	0.08	0.05
42.07	0.42	0.00	0.00	0.05	0.03	42.13	0.40	0.00	0.00	0.07	0.04
42.22	2.00	0.00	0.00	0.09	0.00	42.26	2.00	0.00	0.00	0.04	0.00
42.33	2.00	0.00	0.00	0.06	0.00	42.39	0.43	0.00	0.00	0.07	0.04
42.46	0.47	0.00	0.00	0.07	0.04	42.52	0.49	0.00	0.00	0.06	0.03
42.61	0.53	0.00	0.00	0.09	0.04	42.65	0.57	0.00	0.00	0.04	0.02
42.72	0.62	0.00	0.00	0.07	0.03	42.81	0.76	0.00	0.00	0.09	0.02
42.87	0.78	0.00	0.00	0.06	0.01	42.92	0.76	0.00	0.00	0.06	0.01
43.00	0.74	0.00	0.00	0.08	0.02	43.07	0.72	0.00	0.00	0.06	0.02
43.12	0.71	0.00	0.00	0.05	0.02	43.21	0.69	0.00	0.00	0.09	0.03
43.26	0.68	0.00	0.00	0.05	0.02	43.31	0.66	0.00	0.00	0.06	0.02
43.40	0.65	0.00	0.00	0.09	0.03	43.44	0.64	0.00	0.00	0.04	0.01
43.51	0.64	0.00	0.00	0.07	0.02	43.58	0.64	0.00	0.00	0.08	0.03
43.66	0.63	0.00	0.00	0.08	0.03	43.70	0.63	0.00	0.00	0.04	0.02
43.80	0.60	0.00	0.00	0.10	0.04	43.85	0.61	0.00	0.00	0.05	0.02
43.90	0.61	0.00	0.00	0.05	0.02	43.99	0.63	0.00	0.00	0.09	0.03
44.05	0.65	0.00	0.00	0.06	0.02	44.10	0.63	0.00	0.00	0.05	0.02

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
44.16	0.68	0.00	0.00	0.06	0.02	44.23	0.72	0.00	0.00	0.07	0.02
44.30	0.75	0.00	0.00	0.06	0.02	44.38	0.79	0.00	0.00	0.09	0.02
44.45	0.83	0.00	0.00	0.07	0.01	44.49	0.85	0.00	0.00	0.04	0.01
44.57	0.88	0.00	0.00	0.08	0.01	44.64	0.91	0.00	0.00	0.07	0.01
44.69	0.92	0.00	0.00	0.05	0.00	44.75	0.95	0.00	0.00	0.06	0.00
44.82	0.99	0.00	0.00	0.07	0.00	44.88	1.03	0.00	0.00	0.06	0.00
44.95	1.09	0.00	0.00	0.07	0.00	45.03	1.17	0.00	0.00	0.09	0.00
45.09	1.22	0.00	0.00	0.05	0.00	45.15	1.25	0.00	0.00	0.06	0.00
45.23	1.22	0.00	0.00	0.08	0.00	45.30	1.16	0.00	0.00	0.07	0.00
45.38	1.10	0.00	0.00	0.08	0.00	45.41	1.06	0.00	0.00	0.03	0.00
45.48	0.95	0.00	0.00	0.07	0.00	45.56	0.93	0.00	0.00	0.09	0.01
45.63	0.90	0.00	0.00	0.06	0.01	45.67	0.89	0.00	0.00	0.05	0.00
45.78	0.90	0.00	0.00	0.10	0.01	45.80	0.91	0.00	0.00	0.03	0.00
45.88	0.90	0.00	0.00	0.07	0.01	45.95	0.81	0.00	0.00	0.08	0.01
46.01	0.82	0.00	0.00	0.05	0.01	46.09	0.78	0.00	0.00	0.09	0.02
46.15	0.72	0.00	0.00	0.06	0.02	46.21	0.64	0.00	0.00	0.06	0.02
46.28	0.57	0.00	0.00	0.07	0.03	46.35	0.48	0.00	0.00	0.07	0.03
46.40	0.47	0.00	0.00	0.04	0.02	46.48	2.00	0.00	0.00	0.08	0.00
46.53	2.00	0.00	0.00	0.05	0.00	46.60	2.00	0.00	0.00	0.07	0.00
46.68	2.00	0.00	0.00	0.08	0.00	46.74	2.00	0.00	0.00	0.06	0.00
46.79	2.00	0.00	0.00	0.05	0.00	46.90	2.00	0.00	0.00	0.11	0.00
46.93	2.00	0.00	0.00	0.03	0.00	46.99	0.52	0.00	0.00	0.06	0.03
47.08	0.88	0.00	0.00	0.10	0.01	47.13	1.25	0.00	0.00	0.05	0.00
47.18	1.64	0.00	0.00	0.05	0.00	47.27	2.00	0.00	0.00	0.09	0.00
47.33	2.00	0.00	0.00	0.06	0.00	47.38	2.00	0.00	0.00	0.05	0.00
47.47	2.00	0.00	0.00	0.09	0.00	47.53	2.00	0.00	0.00	0.06	0.00
47.58	2.00	0.00	0.00	0.05	0.00	47.64	2.00	0.00	0.00	0.06	0.00
47.71	2.00	0.00	0.00	0.08	0.00	47.77	2.00	0.00	0.00	0.06	0.00
47.86	2.00	0.00	0.00	0.08	0.00	47.90	2.00	0.00	0.00	0.04	0.00
47.99	2.00	0.00	0.00	0.09	0.00	48.06	2.00	0.00	0.00	0.07	0.00
48.11	2.00	0.00	0.00	0.05	0.00	48.18	2.00	0.00	0.00	0.06	0.00
48.23	2.00	0.00	0.00	0.06	0.00	48.32	2.00	0.00	0.00	0.09	0.00
48.38	2.00	0.00	0.00	0.06	0.00	48.45	2.00	0.00	0.00	0.07	0.00
48.51	2.00	0.00	0.00	0.06	0.00	48.57	2.00	0.00	0.00	0.06	0.00
48.65	1.94	0.00	0.00	0.08	0.00	48.71	1.79	0.00	0.00	0.06	0.00
48.76	1.25	0.00	0.00	0.05	0.00	48.83	1.48	0.00	0.00	0.07	0.00
48.93	1.38	0.00	0.00	0.10	0.00	48.98	1.35	0.00	0.00	0.05	0.00
49.02	1.33	0.00	0.00	0.05	0.00	49.12	1.33	0.00	0.00	0.10	0.00
49.16	1.31	0.00	0.00	0.04	0.00	49.22	1.33	0.00	0.00	0.06	0.00
49.30	1.33	0.00	0.00	0.08	0.00	49.36	1.32	0.00	0.00	0.06	0.00
49.41	1.30	0.00	0.00	0.05	0.00	49.48	1.26	0.00	0.00	0.06	0.00
49.54	1.23	0.00	0.00	0.06	0.00	49.62	1.19	0.00	0.00	0.07	0.00
49.71	1.15	0.00	0.00	0.10	0.00	49.75	1.11	0.00	0.00	0.04	0.00
49.80	0.95	0.00	0.00	0.05	0.00	49.89	0.91	0.00	0.00	0.08	0.01
49.95	0.88	0.00	0.00	0.06	0.01	50.01	2.00	0.00	0.00	0.06	0.00
50.09	2.00	0.00	0.00	0.08	0.00	50.15	2.00	0.00	0.00	0.06	0.00
50.22	2.00	0.00	0.00	0.06	0.00	50.26	2.00	0.00	0.00	0.05	0.00
50.35	2.00	0.00	0.00	0.09	0.00	50.41	2.00	0.00	0.00	0.06	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
50.46	2.00	0.00	0.00	0.05	0.00	50.53	2.00	0.00	0.00	0.06	0.00
50.60	2.00	0.00	0.00	0.07	0.00	50.67	2.00	0.00	0.00	0.07	0.00
50.73	2.00	0.00	0.00	0.06	0.00	50.79	2.00	0.00	0.00	0.06	0.00
50.88	2.00	0.00	0.00	0.08	0.00	50.93	2.00	0.00	0.00	0.05	0.00
51.00	2.00	0.00	0.00	0.06	0.00	51.06	2.00	0.00	0.00	0.06	0.00
51.12	2.00	0.00	0.00	0.06	0.00	51.19	2.00	0.00	0.00	0.07	0.00
51.25	2.00	0.00	0.00	0.06	0.00	51.33	2.00	0.00	0.00	0.08	0.00
51.39	2.00	0.00	0.00	0.06	0.00	51.47	2.00	0.00	0.00	0.08	0.00
51.53	2.00	0.00	0.00	0.06	0.00	51.58	2.00	0.00	0.00	0.05	0.00
51.64	2.00	0.00	0.00	0.06	0.00	51.72	2.00	0.00	0.00	0.08	0.00
51.78	2.00	0.00	0.00	0.07	0.00	51.84	2.00	0.00	0.00	0.06	0.00
51.93	2.00	0.00	0.00	0.09	0.00	51.98	2.00	0.00	0.00	0.05	0.00
52.06	2.00	0.00	0.00	0.08	0.00	52.11	2.00	0.00	0.00	0.04	0.00
52.17	2.00	0.00	0.00	0.06	0.00	52.24	2.00	0.00	0.00	0.07	0.00
52.31	2.00	0.00	0.00	0.07	0.00	52.38	2.00	0.00	0.00	0.07	0.00
52.45	2.00	0.00	0.00	0.07	0.00	52.52	2.00	0.00	0.00	0.07	0.00
52.58	2.00	0.00	0.00	0.06	0.00	52.65	2.00	0.00	0.00	0.07	0.00
52.72	2.00	0.00	0.00	0.07	0.00	52.76	2.00	0.00	0.00	0.04	0.00
52.82	2.00	0.00	0.00	0.06	0.00	52.91	2.00	0.00	0.00	0.09	0.00
52.97	2.00	0.00	0.00	0.06	0.00	53.02	2.00	0.00	0.00	0.05	0.00
53.09	2.00	0.00	0.00	0.07	0.00	53.17	2.00	0.00	0.00	0.08	0.00
53.22	2.00	0.00	0.00	0.05	0.00	53.29	2.00	0.00	0.00	0.07	0.00
53.37	2.00	0.00	0.00	0.08	0.00	53.42	2.00	0.00	0.00	0.05	0.00
53.50	2.00	0.00	0.00	0.08	0.00	53.55	2.00	0.00	0.00	0.05	0.00
53.62	2.00	0.00	0.00	0.08	0.00	53.70	2.00	0.00	0.00	0.08	0.00
53.74	2.00	0.00	0.00	0.04	0.00	53.81	2.00	0.00	0.00	0.06	0.00
53.91	2.00	0.00	0.00	0.10	0.00	53.94	2.00	0.00	0.00	0.03	0.00
54.01	2.00	0.00	0.00	0.06	0.00	54.09	2.00	0.00	0.00	0.09	0.00
54.16	2.00	0.00	0.00	0.06	0.00	54.21	2.00	0.00	0.00	0.06	0.00
54.29	2.00	0.00	0.00	0.08	0.00	54.34	2.00	0.00	0.00	0.05	0.00
54.45	2.00	0.00	0.00	0.10	0.00	54.50	2.00	0.00	0.00	0.05	0.00
54.56	2.00	0.00	0.00	0.06	0.00	54.59	2.00	0.00	0.00	0.04	0.00
54.69	2.00	0.00	0.00	0.10	0.00	54.73	2.00	0.00	0.00	0.04	0.00
54.79	2.00	0.00	0.00	0.06	0.00	54.86	2.00	0.00	0.00	0.07	0.00
54.94	2.00	0.00	0.00	0.08	0.00	55.01	2.00	0.00	0.00	0.07	0.00
55.07	2.00	0.00	0.00	0.06	0.00	55.13	2.00	0.00	0.00	0.06	0.00
55.18	2.00	0.00	0.00	0.06	0.00	55.26	2.00	0.00	0.00	0.08	0.00
55.33	2.00	0.00	0.00	0.06	0.00	55.40	2.00	0.00	0.00	0.07	0.00
55.46	2.00	0.00	0.00	0.07	0.00	55.52	2.00	0.00	0.00	0.05	0.00
55.60	2.00	0.00	0.00	0.09	0.00	55.66	2.00	0.00	0.00	0.06	0.00
55.73	2.00	0.00	0.00	0.07	0.00	55.81	2.00	0.00	0.00	0.08	0.00
55.86	2.00	0.00	0.00	0.05	0.00	55.91	2.00	0.00	0.00	0.05	0.00
56.02	2.00	0.00	0.00	0.11	0.00	56.07	2.00	0.00	0.00	0.05	0.00
56.12	2.00	0.00	0.00	0.05	0.00	56.17	2.00	0.00	0.00	0.05	0.00
56.26	2.00	0.00	0.00	0.09	0.00	56.30	2.00	0.00	0.00	0.04	0.00
56.37	2.00	0.00	0.00	0.06	0.00	56.45	2.00	0.00	0.00	0.09	0.00
56.51	2.00	0.00	0.00	0.05	0.00	56.58	2.00	0.00	0.00	0.07	0.00
56.66	2.00	0.00	0.00	0.08	0.00	56.71	2.00	0.00	0.00	0.05	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
56.78	2.00	0.00	0.00	0.07	0.00	56.84	2.00	0.00	0.00	0.06	0.00
56.91	2.00	0.00	0.00	0.07	0.00	57.00	2.00	0.00	0.00	0.09	0.00
57.05	2.00	0.00	0.00	0.05	0.00	57.11	2.00	0.00	0.00	0.06	0.00
57.19	2.00	0.00	0.00	0.08	0.00	57.23	2.00	0.00	0.00	0.04	0.00
57.30	2.00	0.00	0.00	0.07	0.00	57.40	2.00	0.00	0.00	0.09	0.00
57.43	2.00	0.00	0.00	0.04	0.00	57.50	2.00	0.00	0.00	0.06	0.00
57.58	2.00	0.00	0.00	0.09	0.00	57.63	2.00	0.00	0.00	0.04	0.00
57.69	2.00	0.00	0.00	0.06	0.00	57.77	2.00	0.00	0.00	0.08	0.00
57.83	2.00	0.00	0.00	0.06	0.00	57.89	2.00	0.00	0.00	0.06	0.00
57.95	2.00	0.00	0.00	0.06	0.00	58.01	2.00	0.00	0.00	0.06	0.00
58.08	2.00	0.00	0.00	0.07	0.00	58.17	2.00	0.00	0.00	0.09	0.00
58.21	2.00	0.00	0.00	0.04	0.00	58.27	2.00	0.00	0.00	0.06	0.00
58.35	2.00	0.00	0.00	0.08	0.00	58.41	2.00	0.00	0.00	0.06	0.00
58.47	2.00	0.00	0.00	0.06	0.00	58.56	2.00	0.00	0.00	0.09	0.00
58.60	2.00	0.00	0.00	0.04	0.00	58.67	2.00	0.00	0.00	0.07	0.00
58.73	2.00	0.00	0.00	0.07	0.00	58.80	2.00	0.00	0.00	0.06	0.00
58.87	2.00	0.00	0.00	0.07	0.00	58.94	2.00	0.00	0.00	0.08	0.00
59.01	2.00	0.00	0.00	0.07	0.00	59.06	2.00	0.00	0.00	0.05	0.00
59.16	2.00	0.00	0.00	0.09	0.00	59.21	2.00	0.00	0.00	0.05	0.00
59.26	2.00	0.00	0.00	0.05	0.00	59.34	2.00	0.00	0.00	0.09	0.00
59.40	2.00	0.00	0.00	0.06	0.00	59.46	2.00	0.00	0.00	0.06	0.00
59.55	2.00	0.00	0.00	0.09	0.00	59.60	2.00	0.00	0.00	0.06	0.00
59.67	2.00	0.00	0.00	0.07	0.00	59.72	2.00	0.00	0.00	0.05	0.00
59.79	2.00	0.00	0.00	0.07	0.00	59.85	2.00	0.00	0.00	0.06	0.00
59.91	2.00	0.00	0.00	0.06	0.00	60.00	2.00	0.00	0.00	0.09	0.00
60.04	2.00	0.00	0.00	0.04	0.00	60.11	2.00	0.00	0.00	0.07	0.00

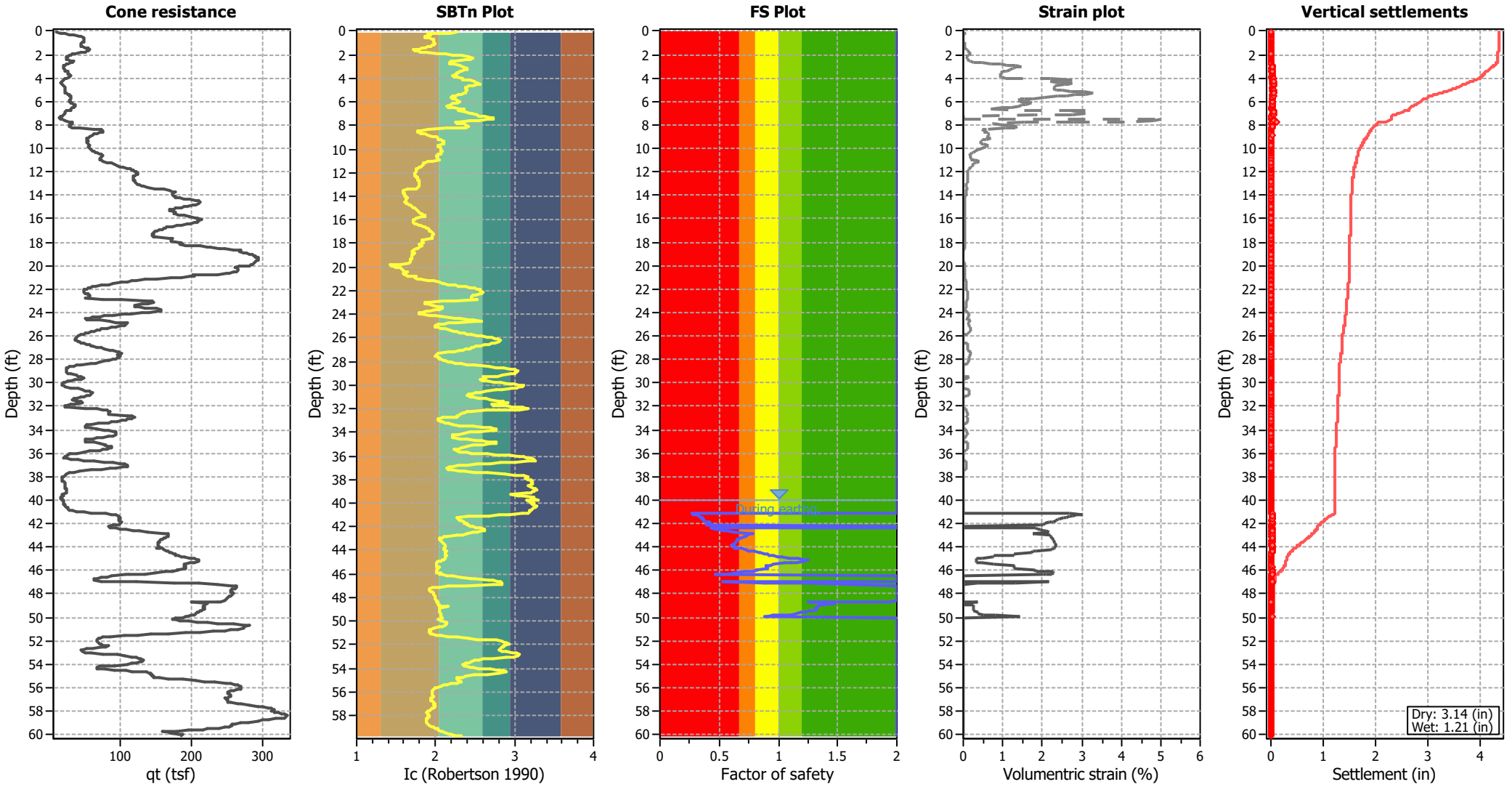
Overall liquefaction potential: 1.78

LPI = 0.00 - Liquefaction risk very low
LPI between 0.00 and 5.00 - Liquefaction risk low
LPI between 5.00 and 15.00 - Liquefaction risk high
LPI > 15.00 - Liquefaction risk very high

Abbreviations

FS: Calculated factor of safety for test point
F_L: 1 - FS
w_z: Function value of the extend of soil liquefaction according to depth
d_z: Layer thickness (ft)

Estimation of post-earthquake settlements



Abbreviations

q_t:	Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c:	Soil Behaviour Type Index
FS:	Calculated Factor of Safety against liquefaction
Volumentric strain:	Post-liquefaction volumentric strain

:: Post-earthquake settlement of dry sands ::

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
0.08	2.28	17.38	17.38	4	0.0	174	1.01	0.003	0.02	21.37	0.03	0.000
0.14	2.17	27.87	27.87	6	0.0	245	1.01	0.004	0.02	21.37	0.02	0.000
0.20	1.90	38.63	38.63	8	0.0	239	1.01	0.007	0.02	21.37	0.03	0.000
0.26	1.93	46.39	46.39	9	0.0	300	1.01	0.007	0.02	21.37	0.02	0.000
0.33	1.93	56.15	56.15	11	0.0	363	1.01	0.006	0.01	21.37	0.01	0.000
0.40	1.87	69.37	69.37	14	0.0	415	1.00	0.006	0.01	21.37	0.01	0.000
0.46	1.86	74.52	90.28	18	0.0	442	1.00	0.007	0.01	21.37	0.01	0.000
0.53	1.86	78.83	95.46	19	0.0	467	1.00	0.008	0.01	21.37	0.01	0.000
0.60	1.92	78.97	98.92	20	0.0	506	1.00	0.008	0.01	21.37	0.01	0.000
0.66	1.96	78.53	100.43	21	0.0	528	1.00	0.009	0.01	21.37	0.01	0.000
0.74	1.98	79.37	102.34	21	0.0	544	1.00	0.010	0.01	21.37	0.01	0.000
0.79	1.98	80.24	103.37	21	0.0	549	1.00	0.011	0.01	21.37	0.01	0.000
0.88	1.97	80.37	103.14	21	0.0	545	1.00	0.013	0.01	21.37	0.01	0.000
0.92	1.97	78.94	101.52	21	0.0	538	1.00	0.014	0.01	21.37	0.02	0.000
0.99	1.98	75.91	97.98	20	0.0	521	1.00	0.017	0.02	21.37	0.02	0.000
1.06	1.99	73.46	95.17	20	0.0	508	1.00	0.021	0.02	21.37	0.03	0.000
1.13	1.97	73.38	94.37	19	0.0	500	0.99	0.025	0.03	21.37	0.03	0.000
1.19	1.95	73.37	93.22	19	0.0	486	0.99	0.030	0.03	21.37	0.04	0.001
1.25	1.93	73.30	92.19	19	0.0	474	0.99	0.037	0.04	21.37	0.05	0.001
1.32	1.89	77.60	95.72	19	0.0	479	0.99	0.040	0.04	21.37	0.05	0.001
1.38	1.86	82.33	99.69	20	0.0	488	0.99	0.041	0.04	21.37	0.05	0.001
1.47	1.83	87.93	103.90	20	0.0	499	0.99	0.043	0.04	21.37	0.05	0.001
1.52	1.79	90.66	103.45	20	0.0	490	0.99	0.049	0.05	21.37	0.06	0.001
1.58	1.72	92.09	92.09	17	0.0	457	0.99	0.069	0.08	21.37	0.10	0.001
1.65	1.74	90.65	90.65	17	0.0	458	0.99	0.076	0.09	21.37	0.11	0.002
1.72	1.77	86.48	86.48	17	0.0	455	0.99	0.085	0.11	21.37	0.12	0.002
1.78	1.81	81.30	81.30	16	0.0	450	0.99	0.096	0.13	21.37	0.15	0.002
1.85	1.88	74.12	90.67	18	0.0	449	0.98	0.107	0.12	21.37	0.14	0.003
1.93	2.03	60.45	80.80	17	0.0	444	0.98	0.123	0.15	21.37	0.17	0.003
1.98	2.12	54.71	79.77	17	0.0	452	0.98	0.122	0.14	21.37	0.17	0.002
2.04	2.22	49.95	83.36	19	0.0	466	0.98	0.113	0.12	21.37	0.14	0.002
2.10	2.33	45.21	92.10	22	0.0	483	0.98	0.104	0.09	21.37	0.11	0.002
2.17	2.41	41.91	101.41	25	0.0	496	0.98	0.100	0.08	21.37	0.09	0.001
2.24	2.47	38.59	107.16	27	0.0	493	0.98	0.110	0.08	21.37	0.09	0.002
2.32	2.46	38.73	106.18	27	0.0	491	0.98	0.121	0.09	21.37	0.10	0.002
2.37	2.44	40.15	103.72	26	0.0	493	0.98	0.126	0.09	21.37	0.11	0.001
2.44	2.38	42.88	98.26	24	0.0	492	0.98	0.136	0.11	21.37	0.13	0.002
2.51	2.26	51.21	90.77	21	0.0	499	0.98	0.136	0.13	21.37	0.15	0.003
2.57	2.19	55.80	88.74	20	0.0	501	0.97	0.142	0.14	21.37	0.17	0.002
2.63	2.17	54.36	83.90	19	0.0	475	0.97	0.193	0.21	21.37	0.25	0.004
2.73	2.18	48.60	76.55	17	0.0	432	0.97	0.345	0.42	21.37	0.49	0.012
2.77	2.21	44.87	73.19	17	0.0	411	0.97	0.481	0.60	21.37	0.71	0.007
2.83	2.24	41.41	71.25	16	0.0	395	0.97	0.643	0.82	21.37	0.96	0.013
2.93	2.30	37.80	72.49	17	0.0	389	0.97	0.783	0.95	21.37	1.11	0.026
2.97	2.34	35.09	72.96	17	0.0	380	0.97	0.954	1.12	21.37	1.32	0.015
3.02	2.35	34.36	72.75	17	0.0	376	0.97	1.068	1.26	21.37	1.47	0.017
3.11	2.40	32.63	77.16	19	0.0	381	0.97	1.063	1.13	21.37	1.33	0.027
3.15	2.40	32.63	78.21	19	0.0	384	0.97	1.053	1.10	21.37	1.29	0.014

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
3.22	2.39	33.76	78.38	19	0.0	390	0.97	1.011	1.06	21.37	1.25	0.020
3.29	2.36	35.62	78.21	19	0.0	398	0.96	0.937	1.00	21.37	1.17	0.019
3.37	2.33	38.34	77.71	18	0.0	408	0.96	0.855	0.94	21.37	1.10	0.021
3.42	2.30	40.20	77.59	18	0.0	415	0.96	0.805	0.90	21.37	1.05	0.013
3.48	2.28	42.08	78.05	18	0.0	423	0.96	0.752	0.84	21.37	0.99	0.016
3.54	2.28	42.78	78.64	18	0.0	428	0.96	0.740	0.82	21.37	0.96	0.014
3.62	2.26	43.93	78.95	18	0.0	433	0.96	0.734	0.82	21.37	0.96	0.017
3.68	2.25	45.35	79.08	18	0.0	437	0.96	0.722	0.81	21.37	0.95	0.014
3.75	2.23	47.08	79.44	18	0.0	443	0.96	0.702	0.79	21.37	0.93	0.015
3.81	2.22	48.22	79.76	18	0.0	447	0.96	0.698	0.79	21.37	0.92	0.014
3.90	2.23	47.21	80.35	18	0.0	447	0.95	0.735	0.81	21.37	0.95	0.018
3.94	2.26	45.33	81.12	19	0.0	445	0.95	0.779	0.84	21.37	0.99	0.010
4.02	2.34	40.58	83.85	20	0.0	438	0.95	0.916	0.91	21.37	1.07	0.021
4.10	2.34	36.99	77.09	18	0.0	401	0.95	1.720	1.89	21.37	2.22	0.044
4.14	2.37	34.69	76.77	19	0.0	390	0.95	2.153	2.35	21.37	2.75	0.026
4.20	2.43	32.25	81.58	20	0.0	391	0.95	2.188	2.14	21.37	2.52	0.036
4.30	2.49	30.09	87.97	23	0.0	396	0.95	2.177	1.88	21.37	2.21	0.055
4.34	2.51	29.50	89.38	23	0.0	395	0.95	2.242	1.88	21.37	2.21	0.022
4.41	2.53	28.34	90.47	24	0.0	391	0.95	2.536	2.07	21.37	2.43	0.035
4.47	2.57	26.33	92.84	25	0.0	384	0.95	3.046	2.35	21.37	2.76	0.043
4.54	2.52	28.62	89.74	23	0.0	391	0.94	2.778	2.30	21.37	2.70	0.046
4.60	2.48	30.91	87.46	22	0.0	399	0.94	2.492	2.19	21.37	2.56	0.037
4.68	2.42	34.21	85.18	21	0.0	411	0.94	2.115	1.98	21.37	2.32	0.043
4.73	2.40	35.20	84.36	21	0.0	414	0.94	2.081	1.99	21.37	2.33	0.029
4.80	2.38	36.50	83.75	20	0.0	419	0.94	2.005	1.95	21.37	2.29	0.036
4.86	2.37	37.21	83.23	20	0.0	421	0.94	2.016	1.99	21.37	2.33	0.034
4.93	2.38	36.92	84.53	21	0.0	423	0.94	2.022	1.95	21.37	2.28	0.039
5.00	2.39	36.63	85.14	21	0.0	423	0.94	2.099	2.00	21.37	2.34	0.042
5.08	2.39	36.62	84.78	21	0.0	422	0.94	2.230	2.13	21.37	2.50	0.046
5.14	2.38	36.61	84.02	21	0.0	420	0.94	2.396	2.32	21.37	2.72	0.040
5.20	2.38	36.61	82.82	20	0.0	417	0.93	2.626	2.60	21.37	3.05	0.042
5.28	2.36	37.60	81.32	20	0.0	417	0.93	2.737	2.80	21.37	3.28	0.061
5.35	2.33	39.03	80.49	19	0.0	420	0.93	2.674	2.80	21.37	3.29	0.056
5.39	2.29	41.91	79.50	19	0.0	428	0.93	2.412	2.62	21.37	3.08	0.035
5.45	2.25	45.05	79.19	18	0.0	437	0.93	2.159	2.41	21.37	2.83	0.039
5.53	2.22	47.63	79.58	18	0.0	445	0.93	1.984	2.24	21.37	2.62	0.048
5.58	2.20	49.92	80.44	18	0.0	453	0.93	1.805	2.03	21.37	2.38	0.031
5.66	2.20	50.93	82.37	19	0.0	463	0.93	1.606	1.75	21.37	2.06	0.038
5.73	2.22	50.78	84.81	19	0.0	474	0.93	1.430	1.49	21.37	1.75	0.028
5.79	2.24	50.34	87.13	20	0.0	483	0.92	1.311	1.31	21.37	1.54	0.023
5.84	2.27	49.19	88.99	21	0.0	487	0.92	1.274	1.23	21.37	1.44	0.019
5.93	2.30	47.03	91.29	22	0.0	488	0.92	1.312	1.20	21.37	1.41	0.031
5.98	2.31	46.45	91.80	22	0.0	487	0.92	1.347	1.22	21.37	1.43	0.015
6.07	2.28	48.16	88.63	21	0.0	482	0.92	1.494	1.44	21.37	1.69	0.035
6.12	2.24	50.45	87.40	20	0.0	484	0.92	1.490	1.48	21.37	1.74	0.022
6.17	2.21	53.18	87.14	20	0.0	489	0.92	1.425	1.45	21.37	1.70	0.021
6.24	2.19	55.47	87.92	20	0.0	496	0.92	1.337	1.36	21.37	1.59	0.028
6.32	2.15	59.48	89.14	20	0.0	505	0.92	1.232	1.26	21.37	1.47	0.029

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
6.37	2.14	60.06	89.62	20	0.0	508	0.92	1.213	1.23	21.37	1.44	0.016
6.43	2.16	59.05	90.06	20	0.0	510	0.91	1.210	1.21	21.37	1.42	0.021
6.52	2.24	54.58	93.34	21	0.0	519	0.91	1.132	1.05	21.37	1.23	0.025
6.57	2.30	51.28	99.20	23	0.0	530	0.91	1.008	0.84	21.37	0.98	0.012
6.63	2.35	50.12	107.44	26	0.0	553	0.91	0.809	0.59	21.37	0.70	0.010
6.72	2.31	48.10	94.14	22	0.0	501	0.91	1.513	1.33	21.37	1.56	0.033
6.76	2.28	45.80	85.41	20	0.0	463	0.91	2.633	2.64	21.37	3.10	0.033
6.83	2.37	40.91	91.89	22	0.0	464	0.91	2.661	2.33	21.37	2.73	0.046
6.92	2.44	36.89	96.32	24	0.0	456	0.91	3.116	2.48	21.37	2.91	0.062
6.98	2.46	36.01	97.22	25	0.0	453	0.90	3.315	2.59	21.37	3.04	0.044
7.02	2.45	36.16	97.07	24	0.0	453	0.90	3.346	2.62	21.37	3.08	0.031
7.10	2.53	32.84	104.99	27	0.0	453	0.90	3.445	2.36	21.37	2.76	0.050
7.17	2.55	33.84	112.64	30	0.0	478	0.90	2.459	1.53	21.37	1.79	0.033
7.23	2.63	30.67	122.26	0	0.0	0	0.90	0.000	0.00	0.00	0.00	0.000
7.29	2.69	27.09	124.68	0	0.0	0	0.90	0.000	0.00	0.00	0.00	0.000
7.36	2.72	24.78	122.51	0	0.0	0	0.90	0.000	0.00	0.00	0.00	0.000
7.42	2.72	23.62	117.25	0	0.0	0	0.90	0.000	0.00	0.00	0.00	0.000
7.52	2.65	25.76	109.23	0	0.0	0	0.90	0.000	0.00	0.00	0.00	0.000
7.57	2.55	30.35	100.99	27	0.0	428	0.89	6.229	4.42	21.37	5.00	0.054
7.62	2.43	36.39	92.67	23	0.0	443	0.89	4.903	4.12	21.37	4.83	0.059
7.72	2.29	45.57	86.50	20	0.0	466	0.89	3.533	3.47	21.37	4.07	0.098
7.76	2.25	50.60	89.11	21	0.0	491	0.89	2.466	2.39	21.37	2.80	0.028
7.82	2.28	52.75	97.37	23	0.0	529	0.89	1.545	1.33	21.37	1.56	0.023
7.90	2.37	51.31	114.16	28	0.0	578	0.89	0.920	0.62	21.37	0.73	0.013
7.95	2.38	50.15	114.40	28	0.0	574	0.89	0.980	0.66	21.37	0.77	0.009
8.02	2.39	48.28	111.00	27	0.0	555	0.89	1.221	0.85	21.37	0.99	0.017
8.07	2.41	45.83	111.17	27	0.0	543	0.89	1.413	0.97	21.37	1.13	0.014
8.16	2.38	46.96	106.59	26	0.0	535	0.88	1.581	1.15	21.37	1.35	0.028
8.21	2.30	53.43	101.86	24	0.0	547	0.88	1.397	1.13	21.37	1.32	0.018
8.27	2.14	68.52	101.41	22	0.0	575	0.88	1.054	0.93	21.37	1.08	0.014
8.35	1.90	97.29	120.58	24	0.0	631	0.88	0.636	0.51	21.37	0.59	0.012
8.41	1.82	108.85	127.54	25	0.0	654	0.88	0.536	0.41	21.37	0.49	0.007
8.47	1.78	112.14	126.81	24	0.0	653	0.88	0.546	0.43	21.37	0.51	0.006
8.54	1.77	111.18	124.05	24	0.0	644	0.88	0.599	0.49	21.37	0.57	0.011
8.60	1.79	110.26	125.92	24	0.0	653	0.88	0.562	0.45	21.37	0.52	0.007
8.67	1.82	104.33	122.25	24	0.0	637	0.87	0.650	0.53	21.37	0.62	0.010
8.74	1.86	99.53	120.19	24	0.0	636	0.87	0.670	0.55	21.37	0.64	0.011
8.80	1.90	95.43	117.72	24	0.0	634	0.87	0.690	0.57	21.37	0.67	0.009
8.90	1.95	90.97	115.58	24	0.0	642	0.87	0.659	0.54	21.37	0.63	0.015
8.95	1.99	87.66	113.73	24	0.0	644	0.87	0.656	0.54	21.37	0.63	0.008
8.99	2.02	85.79	113.37	24	0.0	650	0.87	0.628	0.51	21.37	0.60	0.006
9.07	2.04	83.06	111.53	24	0.0	647	0.87	0.655	0.54	21.37	0.63	0.013
9.14	2.04	81.43	109.30	23	0.0	637	0.87	0.724	0.61	21.37	0.71	0.011
9.20	2.07	81.31	111.89	24	0.0	659	0.86	0.614	0.50	21.37	0.58	0.009
9.29	2.09	81.24	114.15	25	0.0	677	0.86	0.540	0.42	21.37	0.49	0.011
9.33	2.10	81.38	114.94	25	0.0	684	0.86	0.518	0.40	21.37	0.47	0.004
9.40	2.10	82.03	116.48	25	0.0	696	0.86	0.479	0.36	21.37	0.43	0.007
9.47	2.10	81.63	116.33	25	0.0	699	0.86	0.477	0.36	21.37	0.42	0.007

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
9.53	2.10	81.15	115.38	25	0.0	696	0.86	0.492	0.38	21.37	0.44	0.006
9.59	2.08	82.44	114.98	25	0.0	697	0.86	0.494	0.38	21.37	0.45	0.007
9.65	2.06	82.44	112.25	24	0.0	682	0.86	0.561	0.45	21.37	0.53	0.008
9.72	2.02	82.69	109.79	23	0.0	664	0.85	0.649	0.55	21.37	0.64	0.010
9.78	2.03	81.88	109.54	23	0.0	668	0.85	0.639	0.54	21.37	0.63	0.010
9.85	2.05	81.05	109.66	23	0.0	674	0.85	0.617	0.52	21.37	0.60	0.009
9.92	2.06	80.92	110.82	24	0.0	686	0.85	0.569	0.47	21.37	0.55	0.010
9.98	2.07	81.67	112.21	24	0.0	698	0.85	0.527	0.42	21.37	0.50	0.007
10.04	2.07	82.04	113.11	24	0.0	707	0.85	0.499	0.40	21.37	0.47	0.007
10.11	2.07	85.17	117.20	25	0.0	736	0.85	0.415	0.32	21.37	0.37	0.006
10.19	2.07	87.36	120.54	26	0.0	761	0.85	0.359	0.26	21.37	0.31	0.005
10.24	2.08	88.44	122.71	26	0.0	778	0.84	0.327	0.24	21.37	0.28	0.003
10.31	2.07	90.65	125.25	27	0.0	798	0.84	0.296	0.21	21.37	0.24	0.005
10.42	2.06	94.29	129.09	28	0.0	827	0.84	0.258	0.18	21.37	0.21	0.005
10.44	2.03	98.80	132.17	28	0.0	842	0.84	0.240	0.16	21.37	0.19	0.001
10.50	2.03	101.02	134.39	28	0.0	858	0.84	0.225	0.15	21.37	0.17	0.003
10.56	2.01	103.06	136.04	28	0.0	868	0.84	0.216	0.14	21.37	0.17	0.002
10.64	2.02	102.14	135.17	28	0.0	868	0.84	0.218	0.14	21.37	0.17	0.003
10.70	2.02	100.84	133.68	28	0.0	863	0.84	0.226	0.15	21.37	0.18	0.003
10.77	2.02	98.83	131.11	28	0.0	850	0.83	0.242	0.16	21.37	0.19	0.003
10.84	2.03	97.32	129.74	27	0.0	847	0.83	0.248	0.17	21.37	0.20	0.003
10.90	2.04	95.79	128.43	27	0.0	844	0.83	0.255	0.18	21.37	0.21	0.003
10.96	2.04	95.76	128.96	27	0.0	852	0.83	0.246	0.17	21.37	0.20	0.003
11.04	1.96	96.71	123.31	25	0.0	790	0.83	0.346	0.26	21.37	0.31	0.006
11.10	1.89	98.55	121.46	24	0.0	754	0.83	0.432	0.34	21.37	0.40	0.005
11.18	1.87	104.57	126.96	25	0.0	782	0.83	0.369	0.28	21.37	0.33	0.007
11.22	1.85	107.91	129.68	26	0.0	795	0.83	0.344	0.26	21.37	0.30	0.003
11.30	1.84	110.46	132.04	26	0.0	810	0.82	0.319	0.23	21.37	0.27	0.005
11.36	1.83	114.40	135.01	26	0.0	826	0.82	0.295	0.21	21.37	0.25	0.003
11.42	1.83	114.23	135.47	26	0.0	833	0.82	0.287	0.20	21.37	0.24	0.004
11.50	1.81	119.45	138.66	27	0.0	851	0.82	0.265	0.19	21.37	0.22	0.004
11.56	1.79	123.35	140.67	27	0.0	865	0.82	0.250	0.17	21.37	0.20	0.003
11.63	1.77	128.44	143.90	28	0.0	888	0.82	0.226	0.15	21.37	0.18	0.003
11.69	1.76	133.79	147.52	28	0.0	916	0.82	0.202	0.13	21.37	0.16	0.002
11.76	1.75	138.51	150.30	29	0.0	940	0.82	0.184	0.12	21.37	0.14	0.002
11.82	1.75	141.51	152.57	29	0.0	959	0.81	0.172	0.11	21.37	0.13	0.002
11.88	1.75	143.07	154.35	29	0.0	973	0.81	0.165	0.10	21.37	0.12	0.002
11.95	1.75	144.98	156.33	30	0.0	988	0.81	0.157	0.10	21.37	0.11	0.002
12.03	1.74	146.29	156.98	30	0.0	997	0.81	0.153	0.09	21.37	0.11	0.002
12.08	1.74	146.81	156.86	30	0.0	1001	0.81	0.152	0.09	21.37	0.11	0.001
12.16	1.74	146.96	156.79	30	0.0	1005	0.81	0.151	0.09	21.37	0.11	0.002
12.22	1.74	146.69	157.24	30	0.0	1009	0.81	0.150	0.09	21.37	0.11	0.002
12.29	1.75	144.84	157.46	30	0.0	1009	0.80	0.151	0.09	21.37	0.11	0.002
12.35	1.76	142.76	157.31	30	0.0	1008	0.80	0.152	0.09	21.37	0.11	0.001
12.42	1.77	139.92	156.57	30	0.0	1004	0.80	0.155	0.10	21.37	0.11	0.002
12.49	1.77	139.46	156.14	30	0.0	1005	0.80	0.156	0.10	21.37	0.11	0.002
12.53	1.77	139.18	156.15	30	0.0	1007	0.80	0.155	0.10	21.37	0.11	0.001
12.60	1.78	138.81	156.54	30	0.0	1012	0.80	0.153	0.09	21.37	0.11	0.002

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
12.68	1.78	139.02	157.56	30	0.0	1023	0.80	0.149	0.09	21.37	0.11	0.002
12.73	1.78	139.55	158.31	30	0.0	1030	0.80	0.146	0.09	21.37	0.10	0.001
12.82	1.79	140.11	159.74	31	0.0	1043	0.79	0.141	0.08	21.37	0.10	0.002
12.87	1.79	140.42	160.46	31	0.0	1051	0.79	0.139	0.08	21.37	0.10	0.001
12.93	1.79	141.12	161.68	31	0.0	1062	0.79	0.134	0.08	21.37	0.09	0.001
13.00	1.80	141.98	163.25	32	0.0	1076	0.79	0.130	0.08	21.37	0.09	0.001
13.08	1.80	143.39	164.97	32	0.0	1092	0.79	0.125	0.07	21.37	0.08	0.002
13.14	1.79	145.47	166.21	32	0.0	1102	0.79	0.122	0.07	21.37	0.08	0.001
13.22	1.78	149.30	167.97	32	0.0	1118	0.79	0.117	0.07	21.37	0.08	0.002
13.26	1.77	151.06	168.60	32	0.0	1125	0.79	0.115	0.06	21.37	0.08	0.001
13.32	1.75	155.79	169.72	32	0.0	1140	0.78	0.111	0.06	21.37	0.07	0.001
13.43	1.64	164.89	164.89	30	0.0	1070	0.78	0.137	0.08	21.37	0.10	0.002
13.48	1.60	172.99	172.99	31	0.0	1066	0.78	0.139	0.08	21.37	0.10	0.001
13.52	1.59	176.73	176.73	32	0.0	1082	0.78	0.133	0.08	21.37	0.09	0.001
13.62	1.58	186.32	186.32	33	0.0	1135	0.78	0.115	0.06	21.37	0.07	0.002
13.66	1.59	188.84	188.84	34	0.0	1158	0.78	0.109	0.06	21.37	0.07	0.001
13.72	1.59	192.60	192.60	35	0.0	1183	0.78	0.103	0.05	21.37	0.06	0.001
13.80	1.61	188.60	188.60	34	0.0	1193	0.77	0.101	0.05	21.37	0.06	0.001
13.89	1.61	188.35	188.35	34	0.0	1203	0.77	0.099	0.05	21.37	0.06	0.001
13.92	1.61	188.55	188.55	34	0.0	1205	0.77	0.099	0.05	21.37	0.06	0.001
13.98	1.62	188.51	188.51	34	0.0	1209	0.77	0.098	0.05	21.37	0.06	0.001
14.05	1.62	189.18	189.18	34	0.0	1228	0.77	0.094	0.05	21.37	0.06	0.001
14.13	1.63	190.33	190.33	35	0.0	1252	0.77	0.090	0.05	21.37	0.05	0.001
14.18	1.64	191.66	191.66	35	0.0	1269	0.77	0.087	0.04	21.37	0.05	0.001
14.25	1.63	196.92	196.92	36	0.0	1301	0.77	0.082	0.04	21.37	0.05	0.001
14.34	1.63	203.93	203.93	37	0.0	1346	0.76	0.075	0.04	21.37	0.04	0.001
14.38	1.62	210.09	210.09	38	0.0	1375	0.76	0.072	0.03	21.37	0.04	0.000
14.44	1.61	219.77	219.77	40	0.0	1420	0.76	0.067	0.03	21.37	0.03	0.000
14.52	1.62	223.90	223.90	41	0.0	1470	0.76	0.062	0.03	21.37	0.03	0.001
14.57	1.63	224.61	224.61	41	0.0	1499	0.76	0.059	0.03	21.37	0.03	0.000
14.64	1.65	224.01	224.01	41	0.0	1537	0.76	0.056	0.02	21.37	0.03	0.000
14.71	1.67	221.70	221.70	41	0.0	1561	0.76	0.055	0.02	21.37	0.03	0.000
14.78	1.69	217.01	217.01	40	0.0	1560	0.75	0.055	0.02	21.37	0.03	0.000
14.83	1.70	212.33	212.33	40	0.0	1549	0.75	0.056	0.02	21.37	0.03	0.000
14.93	1.72	202.98	207.26	39	0.0	1521	0.75	0.059	0.03	21.37	0.03	0.001
14.97	1.73	198.99	206.92	39	0.0	1510	0.75	0.060	0.03	21.37	0.03	0.000
15.03	1.74	193.81	205.77	39	0.0	1494	0.75	0.061	0.03	21.37	0.03	0.000
15.10	1.76	186.28	203.55	39	0.0	1472	0.75	0.064	0.03	21.37	0.03	0.001
15.16	1.76	182.57	200.76	38	0.0	1454	0.75	0.066	0.03	21.37	0.04	0.001
15.24	1.77	177.33	198.72	38	0.0	1442	0.74	0.067	0.03	21.37	0.04	0.001
15.32	1.79	177.05	201.00	39	0.0	1464	0.74	0.065	0.03	21.37	0.03	0.001
15.36	1.79	178.96	203.44	39	0.0	1484	0.74	0.063	0.03	21.37	0.03	0.000
15.46	1.81	183.24	212.67	41	0.0	1564	0.74	0.057	0.02	21.37	0.03	0.001
15.50	1.82	182.83	214.97	42	0.0	1591	0.74	0.055	0.02	21.37	0.03	0.000
15.57	1.85	182.39	218.39	43	0.0	1639	0.74	0.052	0.02	21.37	0.02	0.000
15.62	1.86	182.24	220.02	43	0.0	1666	0.74	0.050	0.02	21.37	0.02	0.000
15.69	1.86	186.74	225.29	44	0.0	1710	0.74	0.048	0.02	21.37	0.02	0.000
15.76	1.82	193.43	226.90	44	0.0	1696	0.73	0.049	0.02	21.37	0.02	0.000

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
15.82	1.75	200.44	216.25	41	0.0	1613	0.73	0.054	0.02	21.37	0.03	0.000
15.91	1.73	208.77	219.26	41	0.0	1654	0.73	0.052	0.02	21.37	0.03	0.001
15.96	1.73	211.05	220.74	42	0.0	1670	0.73	0.051	0.02	21.37	0.02	0.000
16.02	1.72	216.20	220.67	41	0.0	1689	0.73	0.050	0.02	21.37	0.02	0.000
16.09	1.71	215.07	218.82	41	0.0	1682	0.73	0.050	0.02	21.37	0.02	0.000
16.16	1.72	209.83	218.04	41	0.0	1667	0.73	0.051	0.02	21.37	0.03	0.000
16.21	1.72	211.02	216.94	41	0.0	1668	0.72	0.051	0.02	21.37	0.03	0.000
16.30	1.74	208.09	221.58	42	0.0	1690	0.72	0.050	0.02	21.37	0.02	0.001
16.35	1.76	204.15	225.23	43	0.0	1709	0.72	0.049	0.02	21.37	0.02	0.000
16.44	1.80	197.48	227.08	44	0.0	1733	0.72	0.048	0.02	21.37	0.02	0.000
16.49	1.82	191.66	224.49	44	0.0	1727	0.72	0.049	0.02	21.37	0.02	0.000
16.55	1.84	184.05	219.77	43	0.0	1714	0.72	0.049	0.02	21.37	0.02	0.000
16.60	1.86	178.80	215.82	43	0.0	1702	0.72	0.050	0.02	21.37	0.02	0.000
16.67	1.88	171.16	209.58	42	0.0	1682	0.71	0.052	0.02	21.37	0.03	0.000
16.74	1.91	162.84	202.46	41	0.0	1661	0.71	0.053	0.02	21.37	0.03	0.000
16.80	1.92	160.19	199.89	40	0.0	1652	0.71	0.054	0.02	21.37	0.03	0.000
16.88	1.92	158.51	198.20	40	0.0	1648	0.71	0.054	0.02	21.37	0.03	0.001
16.93	1.93	156.61	196.52	40	0.0	1646	0.71	0.055	0.02	21.37	0.03	0.000
17.00	1.94	151.89	191.68	39	0.0	1623	0.71	0.056	0.03	21.37	0.03	0.001
17.08	1.95	147.10	186.89	38	0.0	1601	0.71	0.058	0.03	21.37	0.03	0.001
17.13	1.96	144.91	184.73	38	0.0	1593	0.71	0.059	0.03	21.37	0.03	0.000
17.20	1.97	141.55	181.40	37	0.0	1579	0.70	0.060	0.03	21.37	0.03	0.001
17.28	1.96	140.35	179.16	37	0.0	1557	0.70	0.062	0.03	21.37	0.04	0.001
17.33	1.95	140.83	178.93	37	0.0	1549	0.70	0.063	0.03	21.37	0.04	0.000
17.39	1.95	140.73	178.75	37	0.0	1551	0.70	0.063	0.03	21.37	0.04	0.001
17.48	1.96	139.12	177.27	36	0.0	1550	0.70	0.063	0.03	21.37	0.04	0.001
17.52	1.95	139.47	177.51	36	0.0	1552	0.70	0.063	0.03	21.37	0.04	0.000
17.59	1.93	144.38	181.45	37	0.0	1563	0.70	0.062	0.03	21.37	0.04	0.001
17.67	1.85	160.13	191.67	38	0.0	1563	0.69	0.062	0.03	21.37	0.03	0.001
17.72	1.82	163.72	192.21	37	0.0	1551	0.69	0.064	0.03	21.37	0.04	0.000
17.79	1.83	162.15	191.43	37	0.0	1553	0.69	0.063	0.03	21.37	0.04	0.001
17.87	1.84	162.09	192.58	38	0.0	1574	0.69	0.062	0.03	21.37	0.03	0.001
17.93	1.84	161.69	192.68	38	0.0	1582	0.69	0.061	0.03	21.37	0.03	0.001
17.98	1.84	161.84	192.96	38	0.0	1587	0.69	0.061	0.03	21.37	0.03	0.000
18.07	1.80	174.21	200.60	39	0.0	1626	0.69	0.058	0.03	21.37	0.03	0.001
18.12	1.80	175.27	202.21	39	0.0	1644	0.68	0.057	0.03	21.37	0.03	0.000
18.18	1.83	171.77	202.52	39	0.0	1666	0.68	0.055	0.02	21.37	0.03	0.000
18.25	1.82	179.31	211.35	41	0.0	1742	0.68	0.051	0.02	21.37	0.03	0.000
18.32	1.79	196.48	225.09	43	0.0	1839	0.68	0.046	0.02	21.37	0.02	0.000
18.40	1.78	205.24	231.73	44	0.0	1894	0.68	0.044	0.02	21.37	0.02	0.000
18.45	1.76	209.86	231.11	44	0.0	1891	0.68	0.044	0.02	21.37	0.02	0.000
18.52	1.73	219.90	229.29	43	0.0	1903	0.68	0.044	0.02	21.37	0.02	0.000
18.57	1.73	227.09	236.27	44	0.0	1965	0.68	0.041	0.02	21.37	0.02	0.000
18.64	1.71	237.57	241.88	45	0.0	2032	0.67	0.039	0.01	21.37	0.02	0.000
18.72	1.71	246.11	246.11	46	0.0	2088	0.67	0.037	0.01	21.37	0.02	0.000
18.77	1.72	244.70	251.82	47	0.0	2117	0.67	0.037	0.01	21.37	0.02	0.000
18.86	1.73	243.02	256.21	48	0.0	2143	0.67	0.036	0.01	21.37	0.01	0.000
18.91	1.72	249.08	255.75	48	0.0	2161	0.67	0.035	0.01	21.37	0.01	0.000

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
18.96	1.71	252.89	254.08	48	0.0	2169	0.67	0.035	0.01	21.37	0.01	0.000
19.06	1.70	255.83	255.83	48	0.0	2182	0.67	0.035	0.01	21.37	0.01	0.000
19.11	1.70	258.26	258.26	48	0.0	2193	0.66	0.035	0.01	21.37	0.01	0.000
19.18	1.70	259.38	259.38	48	0.0	2212	0.66	0.034	0.01	21.37	0.01	0.000
19.24	1.70	260.40	260.40	49	0.0	2227	0.66	0.034	0.01	21.37	0.01	0.000
19.30	1.69	261.68	261.68	49	0.0	2230	0.66	0.034	0.01	21.37	0.01	0.000
19.36	1.69	263.20	263.20	49	0.0	2225	0.66	0.034	0.01	21.37	0.01	0.000
19.45	1.68	263.22	263.22	49	0.0	2211	0.66	0.035	0.01	21.37	0.01	0.000
19.50	1.68	262.27	262.27	49	0.0	2195	0.66	0.035	0.01	21.37	0.01	0.000
19.58	1.67	259.82	259.82	48	0.0	2169	0.66	0.036	0.01	21.37	0.01	0.000
19.64	1.66	258.30	258.30	48	0.0	2138	0.65	0.037	0.01	21.37	0.02	0.000
19.69	1.66	257.17	257.17	47	0.0	2118	0.65	0.037	0.01	21.37	0.02	0.000
19.76	1.55	257.22	257.22	46	0.0	1849	0.65	0.047	0.02	21.37	0.02	0.000
19.84	1.42	256.78	256.78	44	0.0	1558	0.65	0.067	0.03	21.37	0.03	0.001
19.89	1.44	255.63	255.63	44	0.0	1594	0.65	0.063	0.02	21.37	0.03	0.000
19.95	1.47	253.17	253.17	44	0.0	1638	0.65	0.060	0.02	21.37	0.03	0.000
20.02	1.50	249.26	249.26	43	0.0	1677	0.65	0.057	0.02	21.37	0.03	0.000
20.08	1.54	236.56	236.56	42	0.0	1695	0.64	0.056	0.02	21.37	0.03	0.000
20.14	1.57	231.00	231.00	41	0.0	1705	0.64	0.056	0.02	21.37	0.03	0.000
20.21	1.57	232.06	232.06	41	0.0	1732	0.64	0.054	0.02	21.37	0.03	0.000
20.28	1.59	232.50	232.50	42	0.0	1771	0.64	0.052	0.02	21.37	0.03	0.000
20.37	1.61	232.01	232.01	42	0.0	1826	0.64	0.049	0.02	21.37	0.02	0.001
20.43	1.64	230.77	230.77	42	0.0	1886	0.64	0.046	0.02	21.37	0.02	0.000
20.49	1.61	229.16	229.16	41	0.0	1813	0.64	0.050	0.02	21.37	0.02	0.000
20.55	1.60	225.87	225.87	41	0.0	1756	0.64	0.053	0.02	21.37	0.03	0.000
20.61	1.61	219.58	219.58	40	0.0	1746	0.63	0.054	0.02	21.37	0.03	0.000
20.68	1.62	215.37	215.37	39	0.0	1731	0.63	0.054	0.02	21.37	0.03	0.001
20.74	1.65	204.19	204.19	37	0.0	1708	0.63	0.056	0.03	21.37	0.03	0.000
20.80	1.75	172.73	186.04	35	0.0	1648	0.63	0.060	0.03	21.37	0.04	0.001
20.87	1.73	175.18	183.50	35	0.0	1639	0.63	0.061	0.03	21.37	0.04	0.001
20.94	1.74	168.22	178.07	34	0.0	1589	0.63	0.065	0.03	21.37	0.04	0.001
21.01	1.77	157.16	174.37	33	0.0	1551	0.63	0.068	0.04	21.37	0.04	0.001
21.06	1.81	145.61	169.97	33	0.0	1533	0.63	0.070	0.04	21.37	0.05	0.001
21.15	1.90	126.03	156.23	31	0.0	1501	0.62	0.074	0.04	21.37	0.05	0.001
21.21	1.98	112.11	144.68	30	0.0	1479	0.62	0.076	0.05	21.37	0.06	0.001
21.27	2.05	100.09	135.55	29	0.0	1454	0.62	0.079	0.05	21.37	0.06	0.001
21.34	2.08	94.68	131.63	28	0.0	1436	0.62	0.081	0.05	21.37	0.06	0.001
21.41	2.11	89.62	128.40	28	0.0	1417	0.62	0.084	0.06	21.37	0.07	0.001
21.46	2.16	82.75	125.95	28	0.0	1402	0.62	0.086	0.06	21.37	0.07	0.001
21.53	2.24	71.64	124.08	28	0.0	1362	0.62	0.092	0.06	21.37	0.07	0.001
21.60	2.30	66.34	126.61	30	0.0	1357	0.61	0.093	0.06	21.37	0.07	0.001
21.68	2.38	57.63	131.13	32	0.0	1326	0.61	0.099	0.06	21.37	0.07	0.001
21.74	2.44	51.69	135.00	34	0.0	1296	0.61	0.105	0.06	21.37	0.07	0.001
21.79	2.49	47.21	138.59	36	0.0	1271	0.61	0.110	0.06	21.37	0.06	0.001
21.86	2.53	43.78	140.91	37	0.0	1247	0.61	0.116	0.06	21.37	0.07	0.001
21.93	2.56	41.68	141.25	37	0.0	1227	0.61	0.121	0.06	21.37	0.07	0.001
21.98	2.57	39.92	140.77	38	0.0	1206	0.61	0.127	0.06	21.37	0.07	0.001
22.08	2.59	37.90	139.94	38	0.0	1181	0.61	0.135	0.06	21.37	0.07	0.002

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
22.14	2.59	37.12	135.92	37	0.0	1154	0.60	0.144	0.07	21.37	0.08	0.001
22.20	2.58	36.44	131.07	35	0.0	1123	0.60	0.156	0.08	21.37	0.09	0.001
22.26	2.56	36.83	125.31	33	0.0	1102	0.60	0.165	0.09	21.37	0.11	0.002
22.34	2.51	39.06	118.99	31	0.0	1099	0.60	0.166	0.10	21.37	0.12	0.002
22.38	2.49	40.02	117.43	30	0.0	1103	0.60	0.164	0.10	21.37	0.12	0.001
22.44	2.48	41.34	116.87	30	0.0	1117	0.60	0.158	0.10	21.37	0.11	0.002
22.53	2.46	42.29	115.40	29	0.0	1123	0.60	0.155	0.10	21.37	0.12	0.002
22.58	2.46	42.55	114.86	29	0.0	1125	0.60	0.154	0.10	21.37	0.12	0.002
22.64	2.45	42.74	114.28	29	0.0	1126	0.59	0.154	0.10	21.37	0.12	0.002
22.72	2.46	42.46	114.14	29	0.0	1126	0.59	0.154	0.10	21.37	0.12	0.002
22.77	2.52	37.65	118.10	31	0.0	1096	0.59	0.167	0.10	21.37	0.12	0.001
22.85	2.26	58.19	103.53	24	0.0	1185	0.59	0.133	0.11	21.37	0.13	0.002
22.91	2.08	78.70	109.18	23	0.0	1254	0.59	0.114	0.09	21.37	0.11	0.002
22.99	1.90	107.42	132.70	27	0.0	1342	0.59	0.096	0.07	21.37	0.08	0.002
23.05	1.87	114.70	139.21	28	0.0	1376	0.59	0.090	0.06	21.37	0.07	0.001
23.10	1.87	116.38	141.71	28	0.0	1409	0.59	0.085	0.06	21.37	0.07	0.001
23.18	1.91	114.63	142.37	29	0.0	1460	0.58	0.079	0.05	21.37	0.06	0.001
23.24	1.95	108.84	138.59	28	0.0	1482	0.58	0.076	0.05	21.37	0.06	0.001
23.31	2.02	101.08	134.16	28	0.0	1514	0.58	0.073	0.05	21.37	0.06	0.001
23.38	2.09	92.60	129.84	28	0.0	1521	0.58	0.072	0.05	21.37	0.06	0.001
23.44	2.09	92.30	129.48	28	0.0	1521	0.58	0.072	0.05	21.37	0.06	0.001
23.51	2.08	92.04	128.49	28	0.0	1509	0.58	0.073	0.05	21.37	0.06	0.001
23.57	2.05	96.72	130.54	28	0.0	1507	0.58	0.074	0.05	21.37	0.06	0.001
23.63	2.00	102.88	134.66	28	0.0	1513	0.58	0.073	0.05	21.37	0.06	0.001
23.69	1.92	116.35	145.69	29	0.0	1537	0.57	0.071	0.04	21.37	0.05	0.001
23.77	1.88	121.74	149.00	30	0.0	1521	0.57	0.072	0.04	21.37	0.05	0.001
23.84	1.82	122.65	144.26	28	0.0	1416	0.57	0.084	0.06	21.37	0.07	0.001
23.89	1.79	119.11	136.44	26	0.0	1323	0.57	0.099	0.07	21.37	0.08	0.001
23.98	1.80	109.59	126.21	24	0.0	1229	0.57	0.119	0.09	21.37	0.11	0.002
24.03	1.84	100.87	119.93	23	0.0	1193	0.57	0.129	0.11	21.37	0.12	0.002
24.11	1.91	87.58	109.00	22	0.0	1153	0.57	0.142	0.13	21.37	0.15	0.003
24.17	1.99	78.04	101.68	21	0.0	1155	0.57	0.141	0.13	21.37	0.15	0.002
24.24	2.12	65.85	95.61	21	0.0	1164	0.56	0.138	0.13	21.37	0.15	0.003
24.31	2.25	55.59	97.52	22	0.0	1179	0.56	0.133	0.12	21.37	0.14	0.002
24.36	2.31	51.11	100.69	24	0.0	1182	0.56	0.132	0.11	21.37	0.13	0.002
24.43	2.41	43.75	106.79	26	0.0	1167	0.56	0.136	0.10	21.37	0.11	0.002
24.48	2.48	40.21	113.21	29	0.0	1173	0.56	0.134	0.09	21.37	0.10	0.001
24.56	2.58	35.21	125.34	34	0.0	1187	0.56	0.130	0.07	21.37	0.08	0.001
24.62	2.51	37.14	112.69	29	0.0	1140	0.56	0.146	0.09	21.37	0.11	0.002
24.68	2.27	50.38	90.89	21	0.0	1105	0.56	0.159	0.15	21.37	0.18	0.003
24.77	2.15	62.17	93.97	21	0.0	1170	0.55	0.135	0.13	21.37	0.15	0.003
24.82	2.10	68.99	97.49	21	0.0	1199	0.55	0.126	0.12	21.37	0.14	0.002
24.88	2.03	77.26	102.93	22	0.0	1223	0.55	0.120	0.11	21.37	0.13	0.002
24.94	2.00	80.44	104.99	22	0.0	1222	0.55	0.120	0.11	21.37	0.13	0.002
25.02	1.99	78.92	102.59	21	0.0	1191	0.55	0.128	0.12	21.37	0.14	0.003
25.07	1.99	78.33	101.46	21	0.0	1174	0.55	0.133	0.13	21.37	0.15	0.002
25.14	2.02	72.81	96.78	20	0.0	1156	0.55	0.139	0.14	21.37	0.16	0.003
25.20	2.07	67.87	93.49	20	0.0	1149	0.55	0.141	0.14	21.37	0.17	0.002

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
25.27	2.12	62.71	90.93	20	0.0	1142	0.54	0.143	0.14	21.37	0.17	0.003
25.33	2.17	57.60	89.14	20	0.0	1130	0.54	0.147	0.15	21.37	0.17	0.002
25.42	2.23	51.66	88.24	20	0.0	1111	0.54	0.154	0.15	21.37	0.18	0.004
25.47	2.26	49.15	88.23	20	0.0	1102	0.54	0.158	0.15	21.37	0.18	0.002
25.53	2.30	46.11	88.92	21	0.0	1092	0.54	0.162	0.15	21.37	0.18	0.003
25.61	2.35	42.71	91.85	22	0.0	1094	0.54	0.161	0.14	21.37	0.17	0.003
25.66	2.40	40.01	95.53	24	0.0	1099	0.54	0.159	0.13	21.37	0.15	0.002
25.72	2.46	37.10	100.81	25	0.0	1107	0.54	0.155	0.12	21.37	0.14	0.002
25.80	2.53	33.67	107.88	28	0.0	1115	0.54	0.152	0.10	21.37	0.12	0.002
25.86	2.57	31.96	112.96	30	0.0	1126	0.53	0.147	0.09	21.37	0.11	0.001
25.93	2.65	28.94	121.91	0	0.0	0	0.53	0.000	0.00	0.00	0.00	0.000
26.00	2.72	26.37	128.48	0	0.0	0	0.53	0.000	0.00	0.00	0.00	0.000
26.06	2.75	25.14	131.73	0	0.0	0	0.53	0.000	0.00	0.00	0.00	0.000
26.12	2.78	23.98	134.50	0	0.0	0	0.53	0.000	0.00	0.00	0.00	0.000
26.21	2.81	22.58	135.97	0	0.0	0	0.53	0.000	0.00	0.00	0.00	0.000
26.26	2.81	22.55	135.36	0	0.0	0	0.53	0.000	0.00	0.00	0.00	0.000
26.31	2.80	22.82	133.29	0	0.0	0	0.53	0.000	0.00	0.00	0.00	0.000
26.41	2.75	24.34	127.35	0	0.0	0	0.52	0.000	0.00	0.00	0.00	0.000
26.46	2.71	25.81	123.17	0	0.0	0	0.52	0.000	0.00	0.00	0.00	0.000
26.51	2.67	26.92	119.53	0	0.0	0	0.52	0.000	0.00	0.00	0.00	0.000
26.61	2.62	28.82	113.89	0	0.0	0	0.52	0.000	0.00	0.00	0.00	0.000
26.65	2.56	31.53	108.90	29	0.0	1127	0.52	0.145	0.09	21.37	0.11	0.001
26.72	2.52	34.02	105.37	27	0.0	1140	0.52	0.140	0.10	21.37	0.11	0.002
26.79	2.48	36.24	103.12	26	0.0	1155	0.52	0.135	0.10	21.37	0.11	0.002
26.86	2.45	38.70	101.67	26	0.0	1176	0.52	0.129	0.10	21.37	0.11	0.002
26.90	2.44	39.75	102.37	26	0.0	1195	0.52	0.123	0.09	21.37	0.11	0.001
26.99	2.38	44.15	101.28	25	0.0	1235	0.52	0.113	0.09	21.37	0.10	0.002
27.04	2.34	47.96	99.77	24	0.0	1259	0.51	0.108	0.09	21.37	0.10	0.001
27.10	2.30	51.16	98.41	23	0.0	1272	0.51	0.105	0.09	21.37	0.10	0.002
27.20	2.23	57.24	97.21	22	0.0	1295	0.51	0.100	0.09	21.37	0.10	0.002
27.24	2.16	60.86	92.44	20	0.0	1240	0.51	0.112	0.11	21.37	0.13	0.001
27.31	2.03	64.87	86.74	18	0.0	1107	0.51	0.150	0.17	21.37	0.20	0.003
27.39	2.01	66.92	88.29	18	0.0	1114	0.51	0.147	0.16	21.37	0.19	0.004
27.43	2.00	68.20	89.36	19	0.0	1120	0.51	0.145	0.16	21.37	0.19	0.002
27.50	1.99	69.42	90.44	19	0.0	1127	0.51	0.142	0.15	21.37	0.18	0.003
27.56	2.01	68.07	89.57	19	0.0	1132	0.51	0.141	0.15	21.37	0.18	0.003
27.64	2.04	65.40	88.07	19	0.0	1141	0.50	0.137	0.15	21.37	0.18	0.003
27.70	2.03	67.76	90.48	19	0.0	1166	0.50	0.130	0.14	21.37	0.16	0.002
27.76	2.04	67.42	90.97	19	0.0	1185	0.50	0.124	0.13	21.37	0.15	0.002
27.84	2.07	65.90	91.11	20	0.0	1209	0.50	0.117	0.12	21.37	0.14	0.003
27.89	2.10	64.39	91.00	20	0.0	1223	0.50	0.114	0.12	21.37	0.14	0.002
27.96	2.12	62.06	90.25	20	0.0	1227	0.50	0.113	0.12	21.37	0.13	0.002
28.03	2.16	58.18	88.75	20	0.0	1218	0.50	0.115	0.12	21.37	0.14	0.002
28.08	2.20	54.59	87.89	20	0.0	1208	0.50	0.117	0.12	21.37	0.14	0.002
28.16	2.25	50.64	88.08	20	0.0	1202	0.50	0.119	0.12	21.37	0.14	0.002
28.23	2.32	45.20	90.52	21	0.0	1198	0.49	0.119	0.11	21.37	0.13	0.002
28.30	2.40	40.58	95.63	23	0.0	1205	0.49	0.118	0.10	21.37	0.11	0.002
28.35	2.49	35.47	102.53	26	0.0	1202	0.49	0.118	0.09	21.37	0.10	0.001

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
28.45	2.67	26.39	116.16	0	0.0	0	0.49	0.000	0.00	0.00	0.00	0.000
28.49	2.77	22.32	122.21	0	0.0	0	0.49	0.000	0.00	0.00	0.00	0.000
28.55	2.85	19.27	125.33	0	0.0	0	0.49	0.000	0.00	0.00	0.00	0.000
28.62	2.94	16.22	127.30	0	0.0	0	0.49	0.000	0.00	0.00	0.00	0.000
28.70	3.01	14.32	127.14	0	0.0	0	0.49	0.000	0.00	0.00	0.00	0.000
28.74	3.02	13.78	125.99	0	0.0	0	0.49	0.000	0.00	0.00	0.00	0.000
28.84	3.03	12.91	120.99	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
28.89	3.02	12.91	118.90	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
28.95	3.02	12.89	116.56	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
29.01	3.00	12.88	113.07	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
29.09	2.94	12.74	99.89	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
29.14	2.83	12.77	80.10	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
29.23	2.79	14.79	84.22	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
29.28	2.75	16.51	86.66	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
29.34	2.61	22.35	84.96	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
29.42	2.64	22.78	92.88	0	0.0	0	0.48	0.000	0.00	0.00	0.00	0.000
29.47	2.58	26.11	92.84	25	0.0	1045	0.48	0.168	0.13	21.37	0.15	0.002
29.55	2.56	28.49	97.32	26	0.0	1115	0.47	0.140	0.10	21.37	0.12	0.002
29.61	2.59	27.56	102.09	28	0.0	1137	0.47	0.133	0.09	21.37	0.11	0.001
29.66	2.65	25.68	107.45	0	0.0	0	0.47	0.000	0.00	0.00	0.00	0.000
29.76	2.74	19.79	101.69	0	0.0	0	0.47	0.000	0.00	0.00	0.00	0.000
29.82	2.83	16.44	101.69	0	0.0	0	0.47	0.000	0.00	0.00	0.00	0.000
29.87	2.92	13.98	104.98	0	0.0	0	0.47	0.000	0.00	0.00	0.00	0.000
29.92	3.00	12.07	105.06	0	0.0	0	0.47	0.000	0.00	0.00	0.00	0.000
30.01	3.06	10.21	100.74	0	0.0	0	0.47	0.000	0.00	0.00	0.00	0.000
30.06	3.12	8.96	97.84	0	0.0	0	0.47	0.000	0.00	0.00	0.00	0.000
30.13	3.10	8.94	94.35	0	0.0	0	0.47	0.000	0.00	0.00	0.00	0.000
30.20	3.07	9.36	93.50	0	0.0	0	0.46	0.000	0.00	0.00	0.00	0.000
30.27	3.03	10.36	96.77	0	0.0	0	0.46	0.000	0.00	0.00	0.00	0.000
30.33	2.97	12.05	100.02	0	0.0	0	0.46	0.000	0.00	0.00	0.00	0.000
30.41	2.84	15.63	99.16	0	0.0	0	0.46	0.000	0.00	0.00	0.00	0.000
30.45	2.77	17.84	96.90	0	0.0	0	0.46	0.000	0.00	0.00	0.00	0.000
30.52	2.64	22.59	92.81	0	0.0	0	0.46	0.000	0.00	0.00	0.00	0.000
30.59	2.56	26.31	90.97	24	0.0	1071	0.46	0.152	0.12	21.37	0.14	0.002
30.65	2.51	29.06	89.03	23	0.0	1097	0.46	0.142	0.12	21.37	0.14	0.002
30.73	2.45	32.49	85.89	22	0.0	1119	0.46	0.135	0.12	21.37	0.14	0.003
30.79	2.42	33.93	84.35	21	0.0	1124	0.46	0.133	0.13	21.37	0.15	0.002
30.87	2.40	34.77	82.99	20	0.0	1123	0.45	0.133	0.13	21.37	0.15	0.003
30.92	2.41	34.10	83.53	21	0.0	1123	0.45	0.133	0.13	21.37	0.15	0.002
30.98	2.43	33.24	84.77	21	0.0	1126	0.45	0.132	0.12	21.37	0.14	0.002
31.04	2.47	31.91	87.74	22	0.0	1137	0.45	0.128	0.11	21.37	0.13	0.002
31.12	2.54	28.87	94.07	25	0.0	1150	0.45	0.124	0.10	21.37	0.11	0.002
31.19	2.64	25.83	105.95	0	0.0	0	0.45	0.000	0.00	0.00	0.00	0.000
31.24	2.70	23.66	110.55	0	0.0	0	0.45	0.000	0.00	0.00	0.00	0.000
31.32	2.80	19.74	115.45	0	0.0	0	0.45	0.000	0.00	0.00	0.00	0.000
31.37	2.87	17.63	118.69	0	0.0	0	0.45	0.000	0.00	0.00	0.00	0.000
31.45	2.80	19.47	114.58	0	0.0	0	0.45	0.000	0.00	0.00	0.00	0.000
31.50	2.92	16.19	120.42	0	0.0	0	0.45	0.000	0.00	0.00	0.00	0.000

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
31.57	2.82	19.20	117.23	0	0.0	0	0.44	0.000	0.00	0.00	0.00	0.000
31.64	2.72	23.33	114.33	0	0.0	0	0.44	0.000	0.00	0.00	0.00	0.000
31.69	2.73	23.61	118.40	0	0.0	0	0.44	0.000	0.00	0.00	0.00	0.000
31.77	2.89	18.09	128.69	0	0.0	0	0.44	0.000	0.00	0.00	0.00	0.000
31.83	2.97	15.77	131.27	0	0.0	0	0.44	0.000	0.00	0.00	0.00	0.000
31.91	3.10	12.52	131.81	0	0.0	0	0.44	0.000	0.00	0.00	0.00	0.000
31.99	3.16	11.19	132.81	0	0.0	0	0.44	0.000	0.00	0.00	0.00	0.000
32.04	3.17	11.08	133.63	0	0.0	0	0.44	0.000	0.00	0.00	0.00	0.000
32.09	3.07	13.05	130.79	0	0.0	0	0.44	0.000	0.00	0.00	0.00	0.000
32.17	2.63	26.70	108.34	0	0.0	0	0.44	0.000	0.00	0.00	0.00	0.000
32.24	2.46	36.27	99.12	25	0.0	1334	0.44	0.087	0.07	21.37	0.08	0.001
32.30	2.41	41.24	99.41	25	0.0	1398	0.44	0.079	0.06	21.37	0.07	0.001
32.38	2.36	45.53	99.00	24	0.0	1441	0.43	0.074	0.06	21.37	0.07	0.001
32.42	2.34	46.64	97.58	23	0.0	1438	0.43	0.074	0.06	21.37	0.07	0.001
32.48	2.31	47.61	92.54	22	0.0	1392	0.43	0.079	0.07	21.37	0.08	0.001
32.55	2.28	47.15	87.75	20	0.0	1336	0.43	0.086	0.08	21.37	0.10	0.002
32.62	2.27	47.25	85.92	20	0.0	1316	0.43	0.089	0.09	21.37	0.10	0.002
32.68	2.28	46.91	86.19	20	0.0	1320	0.43	0.088	0.09	21.37	0.10	0.001
32.77	2.09	65.17	91.71	20	0.0	1394	0.43	0.079	0.08	21.37	0.09	0.002
32.81	2.05	69.44	94.34	20	0.0	1403	0.43	0.078	0.08	21.37	0.09	0.001
32.88	2.03	71.30	95.23	20	0.0	1396	0.43	0.078	0.08	21.37	0.09	0.002
32.94	2.03	70.72	94.19	20	0.0	1379	0.43	0.080	0.08	21.37	0.10	0.001
33.01	2.03	69.09	92.48	20	0.0	1363	0.43	0.082	0.08	21.37	0.10	0.002
33.12	2.07	64.48	88.75	19	0.0	1343	0.42	0.084	0.09	21.37	0.11	0.003
33.14	2.09	62.51	87.59	19	0.0	1341	0.42	0.085	0.09	21.37	0.11	0.001
33.22	2.13	57.97	85.19	19	0.0	1331	0.42	0.086	0.09	21.37	0.11	0.002
33.27	2.16	54.29	82.72	18	0.0	1303	0.42	0.090	0.10	21.37	0.12	0.001
33.35	2.21	49.70	80.97	18	0.0	1281	0.42	0.093	0.10	21.37	0.12	0.002
33.41	2.31	45.17	88.97	21	0.0	1368	0.42	0.081	0.08	21.37	0.09	0.001
33.48	2.48	35.76	100.97	26	0.0	1394	0.42	0.078	0.06	21.37	0.07	0.001
33.55	2.61	29.63	113.50	0	0.0	0	0.42	0.000	0.00	0.00	0.00	0.000
33.61	2.70	26.23	123.35	0	0.0	0	0.42	0.000	0.00	0.00	0.00	0.000
33.70	2.75	24.75	130.80	0	0.0	0	0.42	0.000	0.00	0.00	0.00	0.000
33.73	2.76	24.27	130.96	0	0.0	0	0.42	0.000	0.00	0.00	0.00	0.000
33.81	2.76	23.98	129.77	0	0.0	0	0.42	0.000	0.00	0.00	0.00	0.000
33.86	2.70	26.30	124.71	0	0.0	0	0.42	0.000	0.00	0.00	0.00	0.000
33.95	2.55	33.69	112.81	30	0.0	1489	0.41	0.068	0.04	21.37	0.05	0.001
34.01	2.44	39.99	104.40	26	0.0	1502	0.41	0.067	0.05	21.37	0.06	0.001
34.06	2.37	44.45	98.44	24	0.0	1493	0.41	0.068	0.05	21.37	0.06	0.001
34.16	2.29	48.81	92.55	22	0.0	1465	0.41	0.070	0.06	21.37	0.07	0.002
34.20	2.26	50.44	90.46	21	0.0	1449	0.41	0.072	0.07	21.37	0.08	0.001
34.26	2.22	51.38	85.93	20	0.0	1390	0.41	0.078	0.08	21.37	0.09	0.001
34.34	2.21	51.63	84.14	19	0.0	1366	0.41	0.080	0.09	21.37	0.10	0.002
34.40	2.21	51.56	85.00	19	0.0	1381	0.41	0.079	0.08	21.37	0.10	0.001
34.46	2.24	50.48	87.05	20	0.0	1411	0.41	0.075	0.08	21.37	0.09	0.001
34.55	2.31	47.48	94.03	22	0.0	1489	0.41	0.068	0.06	21.37	0.07	0.002
34.60	2.40	43.04	101.37	25	0.0	1532	0.41	0.064	0.05	21.37	0.06	0.001
34.66	2.50	37.37	111.51	29	0.0	1563	0.41	0.062	0.04	21.37	0.05	0.001

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
34.72	2.58	32.82	118.26	32	0.0	1558	0.41	0.062	0.04	21.37	0.04	0.001
34.78	2.66	28.72	122.75	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
34.86	2.76	23.96	128.61	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
34.94	2.76	23.82	127.72	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
35.00	2.69	24.22	110.39	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
35.04	2.61	24.59	94.36	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
35.11	2.46	31.87	87.31	22	0.0	1276	0.40	0.092	0.08	21.37	0.10	0.002
35.18	2.39	35.93	84.17	21	0.0	1295	0.40	0.089	0.09	21.37	0.10	0.002
35.28	2.32	40.57	81.63	19	0.0	1313	0.40	0.086	0.09	21.37	0.10	0.003
35.32	2.33	39.92	81.89	20	0.0	1312	0.40	0.086	0.09	21.37	0.10	0.001
35.39	2.29	42.58	80.80	19	0.0	1321	0.40	0.085	0.09	21.37	0.11	0.002
35.44	2.25	45.76	79.89	18	0.0	1326	0.40	0.084	0.09	21.37	0.11	0.001
35.50	2.24	46.32	79.74	18	0.0	1328	0.40	0.084	0.09	21.37	0.11	0.002
35.59	2.27	44.68	80.80	19	0.0	1340	0.40	0.082	0.09	21.37	0.10	0.002
35.65	2.31	42.19	82.69	20	0.0	1351	0.39	0.081	0.08	21.37	0.10	0.001
35.72	2.39	38.17	88.89	22	0.0	1390	0.39	0.077	0.07	21.37	0.08	0.001
35.77	2.46	34.59	94.60	24	0.0	1408	0.39	0.075	0.06	21.37	0.07	0.001
35.85	2.65	25.85	108.91	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
35.90	2.77	21.46	117.78	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
35.99	2.93	16.67	127.97	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.04	3.06	13.49	131.60	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.09	3.12	11.95	130.72	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.16	3.16	10.94	130.03	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.24	3.21	9.98	129.22	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.29	3.24	9.35	128.35	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.37	3.26	9.01	127.77	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.43	3.17	10.29	124.88	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.50	3.00	13.27	117.15	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.57	2.82	17.81	108.76	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.63	2.70	22.11	103.33	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
36.68	2.54	29.62	95.91	25	0.0	1384	0.38	0.076	0.06	21.37	0.07	0.001
36.77	2.40	37.93	89.39	22	0.0	1431	0.38	0.072	0.06	21.37	0.08	0.002
36.82	2.29	45.33	86.39	20	0.0	1463	0.38	0.069	0.07	21.37	0.08	0.001
36.88	2.22	51.11	85.65	20	0.0	1479	0.38	0.067	0.07	21.37	0.08	0.001
36.95	2.17	54.81	85.01	19	0.0	1469	0.38	0.068	0.07	21.37	0.09	0.002
37.01	2.15	57.02	85.51	19	0.0	1472	0.38	0.068	0.07	21.37	0.09	0.001
37.08	2.14	57.83	85.77	19	0.0	1475	0.38	0.068	0.07	21.37	0.08	0.001
37.14	2.15	56.83	85.63	19	0.0	1480	0.38	0.067	0.07	21.37	0.08	0.001
37.22	2.20	52.97	85.53	19	0.0	1490	0.38	0.066	0.07	21.37	0.08	0.001
37.30	2.30	46.11	88.47	21	0.0	1514	0.38	0.064	0.06	21.37	0.07	0.002
37.35	2.36	41.58	91.36	22	0.0	1515	0.38	0.064	0.06	21.37	0.07	0.001
37.41	2.49	34.11	98.28	25	0.0	1504	0.38	0.065	0.05	21.37	0.06	0.001
37.47	2.65	25.80	108.65	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
37.56	2.87	17.74	120.95	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
37.61	3.01	14.13	126.01	0	0.0	0	0.37	0.000	0.00	0.00	0.00	0.000
37.67	3.12	11.56	127.99	0	0.0	0	0.37	0.000	0.00	0.00	0.00	0.000
37.76	3.17	10.32	125.05	0	0.0	0	0.37	0.000	0.00	0.00	0.00	0.000
37.81	3.17	10.06	120.81	0	0.0	0	0.37	0.000	0.00	0.00	0.00	0.000

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
37.87	3.15	9.46	109.64	0	0.0	0	0.37	0.000	0.00	0.00	0.00	0.000
37.95	3.13	8.74	97.39	0	0.0	0	0.37	0.000	0.00	0.00	0.00	0.000
38.00	3.18	7.79	95.88	0	0.0	0	0.37	0.000	0.00	0.00	0.00	0.000
38.06	3.22	7.16	93.69	0	0.0	0	0.37	0.000	0.00	0.00	0.00	0.000
38.13	3.23	6.79	91.51	0	0.0	0	0.37	0.000	0.00	0.00	0.00	0.000
38.20	3.21	7.03	91.43	0	0.0	0	0.37	0.000	0.00	0.00	0.00	0.000
38.26	3.23	6.92	92.61	0	0.0	0	0.37	0.000	0.00	0.00	0.00	0.000
38.35	3.24	7.25	98.44	0	0.0	0	0.37	0.000	0.00	0.00	0.00	0.000
38.40	3.21	7.86	101.85	0	0.0	0	0.37	0.000	0.00	0.00	0.00	0.000
38.47	3.18	8.73	107.57	0	0.0	0	0.37	0.000	0.00	0.00	0.00	0.000
38.53	3.17	9.29	111.50	0	0.0	0	0.37	0.000	0.00	0.00	0.00	0.000
38.61	3.20	9.04	115.05	0	0.0	0	0.37	0.000	0.00	0.00	0.00	0.000
38.65	3.21	8.95	116.23	0	0.0	0	0.37	0.000	0.00	0.00	0.00	0.000
38.74	3.25	8.66	120.55	0	0.0	0	0.36	0.000	0.00	0.00	0.00	0.000
38.80	3.26	8.72	123.81	0	0.0	0	0.36	0.000	0.00	0.00	0.00	0.000
38.85	3.27	8.63	125.23	0	0.0	0	0.36	0.000	0.00	0.00	0.00	0.000
38.92	3.27	8.73	126.13	0	0.0	0	0.36	0.000	0.00	0.00	0.00	0.000
38.99	3.25	9.09	126.27	0	0.0	0	0.36	0.000	0.00	0.00	0.00	0.000
39.05	3.23	9.38	126.10	0	0.0	0	0.36	0.000	0.00	0.00	0.00	0.000
39.12	3.21	9.63	125.49	0	0.0	0	0.36	0.000	0.00	0.00	0.00	0.000
39.18	3.16	9.80	116.15	0	0.0	0	0.36	0.000	0.00	0.00	0.00	0.000
39.24	2.96	9.86	79.84	0	0.0	0	0.36	0.000	0.00	0.00	0.00	0.000
39.33	3.04	9.83	93.87	0	0.0	0	0.36	0.000	0.00	0.00	0.00	0.000
39.38	3.07	9.71	96.76	0	0.0	0	0.36	0.000	0.00	0.00	0.00	0.000
39.44	3.10	9.36	98.45	0	0.0	0	0.36	0.000	0.00	0.00	0.00	0.000
39.52	3.24	7.09	97.46	0	0.0	0	0.36	0.000	0.00	0.00	0.00	0.000
39.58	3.21	7.41	95.88	0	0.0	0	0.36	0.000	0.00	0.00	0.00	0.000
39.65	3.24	7.06	97.24	0	0.0	0	0.36	0.000	0.00	0.00	0.00	0.000
39.71	3.30	6.31	96.59	0	0.0	0	0.36	0.000	0.00	0.00	0.00	0.000
39.80	3.16	7.02	82.76	0	0.0	0	0.36	0.000	0.00	0.00	0.00	0.000
39.83	3.21	6.18	80.08	0	0.0	0	0.35	0.000	0.00	0.00	0.00	0.000
39.91	3.20	6.98	88.45	0	0.0	0	0.35	0.000	0.00	0.00	0.00	0.000
39.97	3.24	6.75	93.01	0	0.0	0	0.35	0.000	0.00	0.00	0.00	0.000

Total estimated settlement: 3.14

:: Post-earthquake settlement due to soil liquefaction ::

Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)
40.04	46.46	43.91	2.00	0.00	1.00	0.00	40.10	49.30	46.59	2.00	0.00	1.00	0.00
40.18	53.53	50.59	2.00	0.00	1.00	0.00	40.23	55.54	52.49	2.00	0.00	1.00	0.00
40.30	55.77	52.71	2.00	0.00	1.00	0.00	40.38	56.63	53.52	2.00	0.00	1.00	0.00
40.43	57.21	54.07	2.00	0.00	1.00	0.00	40.50	58.09	54.90	2.00	0.00	1.00	0.00
40.59	59.08	55.84	2.00	0.00	1.00	0.00	40.64	59.51	56.24	2.00	0.00	1.00	0.00
40.69	59.96	56.66	2.00	0.00	1.00	0.00	40.78	61.09	57.74	2.00	0.00	1.00	0.00
40.83	62.14	58.73	2.00	0.00	1.00	0.00	40.89	64.41	60.87	2.00	0.00	1.00	0.00
40.97	60.05	56.75	2.00	0.00	1.00	0.00	41.02	58.51	55.30	2.00	0.00	1.00	0.00
41.08	60.93	57.59	2.00	0.00	1.00	0.00	41.16	63.77	60.26	0.27	2.69	1.00	0.02

:: Post-earthquake settlement due to soil liquefaction :: (continued)

Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)
41.22	63.02	59.56	0.28	3.04	1.00	0.02	41.28	68.49	64.73	0.30	2.88	1.00	0.02
41.38	73.18	69.16	0.33	2.75	1.00	0.03	41.43	74.85	70.74	0.33	2.68	1.00	0.02
41.48	76.12	71.94	0.34	2.62	1.00	0.01	41.54	78.80	74.47	0.35	2.54	1.00	0.02
41.64	79.87	75.49	0.36	2.45	1.00	0.03	41.69	81.69	77.20	0.37	2.41	1.00	0.02
41.73	81.44	76.97	0.37	2.36	1.00	0.01	41.82	84.28	79.65	0.39	2.30	1.00	0.02
41.88	86.37	81.62	0.40	2.24	1.00	0.01	41.93	88.49	83.63	0.41	2.17	1.00	0.01
42.02	90.55	85.57	0.42	2.06	1.00	0.02	42.07	90.41	85.44	0.42	2.01	1.00	0.01
42.13	87.98	83.15	0.40	1.96	1.00	0.02	42.22	86.40	81.66	2.00	0.00	1.00	0.00
42.26	86.57	81.82	2.00	0.00	1.00	0.00	42.33	88.93	84.05	2.00	0.00	1.00	0.00
42.39	92.99	87.88	0.43	1.86	1.00	0.02	42.46	96.79	91.47	0.47	1.88	1.00	0.02
42.52	98.87	93.44	0.49	1.96	1.00	0.01	42.61	102.13	96.52	0.53	2.04	1.00	0.02
42.65	105.89	100.08	0.57	2.10	1.00	0.01	42.72	110.58	104.51	0.62	2.16	1.00	0.02
42.81	122.00	115.30	0.76	1.76	1.00	0.02	42.87	123.71	116.91	0.78	1.75	1.00	0.01
42.92	122.40	115.68	0.76	1.78	1.00	0.01	43.00	120.53	113.91	0.74	2.19	1.00	0.02
43.07	119.04	112.51	0.72	2.21	1.00	0.02	43.12	118.03	111.55	0.71	2.23	1.00	0.01
43.21	116.48	110.08	0.69	2.25	1.00	0.02	43.26	115.31	108.98	0.68	2.26	1.00	0.01
43.31	113.73	107.48	0.66	2.28	1.00	0.02	43.40	112.81	106.62	0.65	2.29	1.00	0.02
43.44	112.36	106.19	0.64	2.30	1.00	0.01	43.51	112.28	106.12	0.64	2.30	1.00	0.02
43.58	111.74	105.60	0.64	2.31	1.00	0.02	43.66	111.11	105.01	0.63	2.31	1.00	0.02
43.70	110.53	104.46	0.63	2.32	1.00	0.01	43.80	108.37	102.42	0.60	2.36	1.00	0.03
43.85	108.62	102.66	0.61	2.36	1.00	0.01	43.90	109.31	103.31	0.61	2.35	1.00	0.01
43.99	110.96	104.86	0.63	2.32	1.00	0.03	44.05	112.35	106.18	0.65	2.30	1.00	0.02
44.10	110.44	104.38	0.63	2.32	1.00	0.01	44.16	115.35	109.01	0.68	2.26	1.00	0.02
44.23	118.28	111.78	0.72	2.23	1.00	0.02	44.30	120.54	113.92	0.75	1.83	1.00	0.01
44.38	123.61	116.82	0.79	1.77	1.00	0.02	44.45	126.09	119.17	0.83	1.73	1.00	0.01
44.49	127.27	120.28	0.85	1.72	1.00	0.01	44.57	129.55	122.44	0.88	1.30	1.00	0.01
44.64	130.96	123.77	0.91	1.29	1.00	0.01	44.69	131.64	124.41	0.92	1.28	1.00	0.01
44.75	133.81	126.46	0.95	0.77	1.00	0.01	44.82	135.98	128.51	0.99	0.76	1.00	0.01
44.88	138.17	130.58	1.03	0.75	1.00	0.01	44.95	141.92	134.13	1.09	0.49	1.00	0.00
45.03	145.80	137.79	1.17	0.35	1.00	0.00	45.09	148.34	140.20	1.22	0.34	1.00	0.00
45.15	149.55	141.34	1.25	0.34	1.00	0.00	45.23	148.35	140.21	1.22	0.34	1.00	0.00
45.30	145.19	137.22	1.16	0.35	1.00	0.00	45.38	142.33	134.51	1.10	0.49	1.00	0.00
45.41	140.02	132.33	1.06	0.49	1.00	0.00	45.48	133.94	126.58	0.95	0.78	1.00	0.01
45.56	132.90	125.60	0.93	1.28	1.00	0.01	45.63	131.06	123.87	0.90	1.30	1.00	0.01
45.67	130.57	123.40	0.89	1.30	1.00	0.01	45.78	131.24	124.03	0.90	1.29	1.00	0.02
45.80	131.34	124.13	0.91	1.29	1.00	0.00	45.88	131.04	123.84	0.90	1.30	1.00	0.01
45.95	124.69	117.85	0.81	1.81	1.00	0.02	46.01	125.59	118.69	0.82	1.80	1.00	0.01
46.09	122.23	115.52	0.78	1.86	1.00	0.02	46.15	117.17	110.74	0.72	2.27	1.00	0.02
46.21	110.83	104.75	0.64	2.29	1.00	0.02	46.28	104.41	98.68	0.57	2.23	1.00	0.02
46.35	95.39	90.15	0.48	2.11	1.00	0.02	46.40	94.24	89.06	0.47	2.04	1.00	0.01
46.48	89.88	84.95	2.00	0.00	1.00	0.00	46.53	89.93	84.99	2.00	0.00	1.00	0.00
46.60	86.08	81.36	2.00	0.00	1.00	0.00	46.68	81.20	76.74	2.00	0.00	1.00	0.00
46.74	78.74	74.41	2.00	0.00	1.00	0.00	46.79	78.21	73.92	2.00	0.00	1.00	0.00
46.90	76.48	72.28	2.00	0.00	1.00	0.00	46.93	77.91	73.64	2.00	0.00	1.00	0.00
46.99	99.14	93.69	0.52	2.18	1.00	0.02	47.08	128.52	121.46	0.88	1.34	1.00	0.02
47.13	148.48	140.32	1.25	0.35	1.00	0.00	47.18	164.62	155.58	1.64	0.00	1.00	0.00
47.27	176.69	166.98	2.00	0.00	1.00	0.00	47.33	179.68	169.82	2.00	0.00	1.00	0.00
47.38	181.97	171.97	2.00	0.00	1.00	0.00	47.47	183.29	173.22	2.00	0.00	1.00	0.00

:: Post-earthquake settlement due to soil liquefaction :: (continued)

Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)
47.53	183.36	173.29	2.00	0.00	1.00	0.00	47.58	183.02	172.96	2.00	0.00	1.00	0.00
47.64	180.89	170.95	2.00	0.00	1.00	0.00	47.71	180.07	170.18	2.00	0.00	1.00	0.00
47.77	181.27	171.31	2.00	0.00	1.00	0.00	47.86	180.41	170.51	2.00	0.00	1.00	0.00
47.90	181.75	171.77	2.00	0.00	1.00	0.00	47.99	182.74	172.71	2.00	0.00	1.00	0.00
48.06	182.62	172.59	2.00	0.00	1.00	0.00	48.11	182.02	172.03	2.00	0.00	1.00	0.00
48.18	180.85	170.92	2.00	0.00	1.00	0.00	48.23	180.42	170.51	2.00	0.00	1.00	0.00
48.32	179.65	169.78	2.00	0.00	1.00	0.00	48.38	178.96	169.13	2.00	0.00	1.00	0.00
48.45	178.51	168.70	2.00	0.00	1.00	0.00	48.51	178.03	168.25	2.00	0.00	1.00	0.00
48.57	176.73	167.03	2.00	0.00	1.00	0.00	48.65	172.04	162.59	1.94	0.00	1.00	0.00
48.71	167.78	158.57	1.79	0.00	1.00	0.00	48.76	146.90	138.83	1.25	0.35	1.00	0.00
48.83	157.08	148.45	1.48	0.00	1.00	0.00	48.93	153.36	144.94	1.38	0.00	1.00	0.00
48.98	152.23	143.87	1.35	0.25	1.00	0.00	49.02	151.53	143.21	1.33	0.25	1.00	0.00
49.12	151.52	143.20	1.33	0.25	1.00	0.00	49.16	150.78	142.49	1.31	0.25	1.00	0.00
49.22	151.28	142.97	1.33	0.25	1.00	0.00	49.30	151.23	142.92	1.33	0.25	1.00	0.00
49.36	150.91	142.62	1.32	0.25	1.00	0.00	49.41	149.80	141.58	1.30	0.25	1.00	0.00
49.48	148.14	140.01	1.26	0.25	1.00	0.00	49.54	146.82	138.76	1.23	0.36	1.00	0.00
49.62	144.94	136.98	1.19	0.36	1.00	0.00	49.71	143.01	135.16	1.15	0.36	1.00	0.00
49.75	140.96	133.21	1.11	0.50	1.00	0.00	49.80	132.89	125.59	0.95	0.80	1.00	0.01
49.89	129.96	122.82	0.91	1.40	1.00	0.01	49.95	128.28	121.24	0.88	1.42	1.00	0.01
50.01	126.18	119.25	2.00	0.00	1.00	0.00	50.09	120.60	113.98	2.00	0.00	1.00	0.00
50.15	118.93	112.40	2.00	0.00	1.00	0.00	50.22	122.62	115.89	2.00	0.00	1.00	0.00
50.26	126.22	119.29	2.00	0.00	1.00	0.00	50.35	137.13	129.60	2.00	0.00	1.00	0.00
50.41	146.40	138.36	2.00	0.00	1.00	0.00	50.46	156.09	147.52	2.00	0.00	1.00	0.00
50.53	164.39	155.36	2.00	0.00	1.00	0.00	50.60	175.45	165.82	2.00	0.00	1.00	0.00
50.67	184.24	174.12	2.00	0.00	1.00	0.00	50.73	189.40	179.00	2.00	0.00	1.00	0.00
50.79	183.62	173.53	2.00	0.00	1.00	0.00	50.88	182.20	172.19	2.00	0.00	1.00	0.00
50.93	180.39	170.49	2.00	0.00	1.00	0.00	51.00	175.32	165.70	2.00	0.00	1.00	0.00
51.06	168.65	159.39	2.00	0.00	1.00	0.00	51.12	163.49	154.51	2.00	0.00	1.00	0.00
51.19	155.08	146.56	2.00	0.00	1.00	0.00	51.25	144.24	136.31	2.00	0.00	1.00	0.00
51.33	134.98	127.57	2.00	0.00	1.00	0.00	51.39	124.83	117.98	2.00	0.00	1.00	0.00
51.47	114.71	108.41	2.00	0.00	1.00	0.00	51.53	107.17	101.29	2.00	0.00	1.00	0.00
51.58	99.92	94.44	2.00	0.00	1.00	0.00	51.64	92.83	87.73	2.00	0.00	1.00	0.00
51.72	90.04	85.09	2.00	0.00	1.00	0.00	51.78	89.57	84.65	2.00	0.00	1.00	0.00
51.84	88.71	83.84	2.00	0.00	1.00	0.00	51.93	87.37	82.57	2.00	0.00	1.00	0.00
51.98	87.13	82.35	2.00	0.00	1.00	0.00	52.06	82.30	77.78	2.00	0.00	1.00	0.00
52.11	79.83	75.44	2.00	0.00	1.00	0.00	52.17	80.18	75.78	2.00	0.00	1.00	0.00
52.24	80.31	75.90	2.00	0.00	1.00	0.00	52.31	81.87	77.38	2.00	0.00	1.00	0.00
52.38	87.36	82.56	2.00	0.00	1.00	0.00	52.45	93.89	88.74	2.00	0.00	1.00	0.00
52.52	94.83	89.62	2.00	0.00	1.00	0.00	52.58	90.91	85.92	2.00	0.00	1.00	0.00
52.65	82.18	77.66	2.00	0.00	1.00	0.00	52.72	75.26	71.13	2.00	0.00	1.00	0.00
52.76	71.73	67.79	2.00	0.00	1.00	0.00	52.82	70.04	66.20	2.00	0.00	1.00	0.00
52.91	67.89	64.16	2.00	0.00	1.00	0.00	52.97	68.92	65.13	2.00	0.00	1.00	0.00
53.02	69.39	65.58	2.00	0.00	1.00	0.00	53.09	69.02	65.22	2.00	0.00	1.00	0.00
53.17	72.38	68.40	2.00	0.00	1.00	0.00	53.22	79.58	75.21	2.00	0.00	1.00	0.00
53.29	85.23	80.55	2.00	0.00	1.00	0.00	53.37	90.70	85.71	2.00	0.00	1.00	0.00
53.42	92.70	87.61	2.00	0.00	1.00	0.00	53.50	93.11	88.00	2.00	0.00	1.00	0.00
53.55	94.01	88.85	2.00	0.00	1.00	0.00	53.62	94.07	88.91	2.00	0.00	1.00	0.00
53.70	93.90	88.74	2.00	0.00	1.00	0.00	53.74	92.96	87.85	2.00	0.00	1.00	0.00

:: Post-earthquake settlement due to soil liquefaction :: (continued)

Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)
53.81	92.14	87.08	2.00	0.00	1.00	0.00	53.91	90.97	85.98	2.00	0.00	1.00	0.00
53.94	89.05	84.16	2.00	0.00	1.00	0.00	54.01	87.61	82.80	2.00	0.00	1.00	0.00
54.09	84.95	80.28	2.00	0.00	1.00	0.00	54.16	82.90	78.35	2.00	0.00	1.00	0.00
54.21	81.98	77.48	2.00	0.00	1.00	0.00	54.29	81.69	77.20	2.00	0.00	1.00	0.00
54.34	81.24	76.78	2.00	0.00	1.00	0.00	54.45	79.86	75.47	2.00	0.00	1.00	0.00
54.50	81.93	77.43	2.00	0.00	1.00	0.00	54.56	87.18	82.39	2.00	0.00	1.00	0.00
54.59	90.24	85.29	2.00	0.00	1.00	0.00	54.69	99.39	93.93	2.00	0.00	1.00	0.00
54.73	99.56	94.09	2.00	0.00	1.00	0.00	54.79	95.53	90.28	2.00	0.00	1.00	0.00
54.86	95.58	90.33	2.00	0.00	1.00	0.00	54.94	96.47	91.18	2.00	0.00	1.00	0.00
55.01	98.07	92.68	2.00	0.00	1.00	0.00	55.07	100.17	94.67	2.00	0.00	1.00	0.00
55.13	102.63	97.00	2.00	0.00	1.00	0.00	55.18	108.37	102.42	2.00	0.00	1.00	0.00
55.26	116.47	110.07	2.00	0.00	1.00	0.00	55.33	126.74	119.78	2.00	0.00	1.00	0.00
55.40	137.38	129.84	2.00	0.00	1.00	0.00	55.46	145.07	137.11	2.00	0.00	1.00	0.00
55.52	152.70	144.31	2.00	0.00	1.00	0.00	55.60	161.50	152.63	2.00	0.00	1.00	0.00
55.66	164.01	155.01	2.00	0.00	1.00	0.00	55.73	167.39	158.20	2.00	0.00	1.00	0.00
55.81	168.79	159.52	2.00	0.00	1.00	0.00	55.86	170.26	160.91	2.00	0.00	1.00	0.00
55.91	170.82	161.44	2.00	0.00	1.00	0.00	56.02	170.85	161.47	2.00	0.00	1.00	0.00
56.07	170.59	161.23	2.00	0.00	1.00	0.00	56.12	169.76	160.44	2.00	0.00	1.00	0.00
56.17	167.21	158.03	2.00	0.00	1.00	0.00	56.26	162.31	153.40	2.00	0.00	1.00	0.00
56.30	158.88	150.16	2.00	0.00	1.00	0.00	56.37	155.89	147.33	2.00	0.00	1.00	0.00
56.45	155.07	146.55	2.00	0.00	1.00	0.00	56.51	155.50	146.96	2.00	0.00	1.00	0.00
56.58	156.40	147.81	2.00	0.00	1.00	0.00	56.66	156.37	147.78	2.00	0.00	1.00	0.00
56.71	155.89	147.33	2.00	0.00	1.00	0.00	56.78	155.66	147.11	2.00	0.00	1.00	0.00
56.84	154.87	146.36	2.00	0.00	1.00	0.00	56.91	153.90	145.45	2.00	0.00	1.00	0.00
57.00	155.45	146.91	2.00	0.00	1.00	0.00	57.05	154.48	146.00	2.00	0.00	1.00	0.00
57.11	155.42	146.89	2.00	0.00	1.00	0.00	57.19	156.02	147.45	2.00	0.00	1.00	0.00
57.23	156.74	148.14	2.00	0.00	1.00	0.00	57.30	160.20	151.40	2.00	0.00	1.00	0.00
57.40	166.05	156.93	2.00	0.00	1.00	0.00	57.43	168.52	159.26	2.00	0.00	1.00	0.00
57.50	175.51	165.87	2.00	0.00	1.00	0.00	57.58	181.35	171.39	2.00	0.00	1.00	0.00
57.63	184.94	174.78	2.00	0.00	1.00	0.00	57.69	189.78	179.36	2.00	0.00	1.00	0.00
57.77	193.41	182.79	2.00	0.00	1.00	0.00	57.83	195.90	185.14	2.00	0.00	1.00	0.00
57.89	196.88	186.07	2.00	0.00	1.00	0.00	57.95	196.14	185.36	2.00	0.00	1.00	0.00
58.01	198.10	187.23	2.00	0.00	1.00	0.00	58.08	198.63	187.72	2.00	0.00	1.00	0.00
58.17	202.23	191.12	2.00	0.00	1.00	0.00	58.21	204.47	193.24	2.00	0.00	1.00	0.00
58.27	207.01	195.64	2.00	0.00	1.00	0.00	58.35	207.90	196.49	2.00	0.00	1.00	0.00
58.41	206.35	195.01	2.00	0.00	1.00	0.00	58.47	206.02	194.71	2.00	0.00	1.00	0.00
58.56	203.51	192.33	2.00	0.00	1.00	0.00	58.60	201.38	190.32	2.00	0.00	1.00	0.00
58.67	196.56	185.77	2.00	0.00	1.00	0.00	58.73	189.56	179.15	2.00	0.00	1.00	0.00
58.80	184.66	174.52	2.00	0.00	1.00	0.00	58.87	179.28	169.44	2.00	0.00	1.00	0.00
58.94	171.37	161.96	2.00	0.00	1.00	0.00	59.01	165.56	156.47	2.00	0.00	1.00	0.00
59.06	161.72	152.84	2.00	0.00	1.00	0.00	59.16	160.26	151.46	2.00	0.00	1.00	0.00
59.21	160.82	151.99	2.00	0.00	1.00	0.00	59.26	162.56	153.63	2.00	0.00	1.00	0.00
59.34	162.96	154.01	2.00	0.00	1.00	0.00	59.40	160.32	151.52	2.00	0.00	1.00	0.00
59.46	156.40	147.81	2.00	0.00	1.00	0.00	59.55	148.13	139.99	2.00	0.00	1.00	0.00
59.60	144.43	136.50	2.00	0.00	1.00	0.00	59.67	134.27	126.90	2.00	0.00	1.00	0.00
59.72	125.72	118.82	2.00	0.00	1.00	0.00	59.79	160.49	151.68	2.00	0.00	1.00	0.00
59.85	180.52	170.61	2.00	0.00	1.00	0.00	59.91	170.24	160.89	2.00	0.00	1.00	0.00
60.00	181.24	171.29	2.00	0.00	1.00	0.00	60.04	187.94	177.62	2.00	0.00	1.00	0.00

:: Post-earthquake settlement due to soil liquefaction :: (continued)

Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)
60.11	185.62	175.43	2.00	0.00	1.00	0.00							

Total estimated settlement: 1.21

Abbreviations

$q_{c,1,mod}$: Equivalent clean sand cone resistance
$q_{c,1N,mod}$: Equivalent clean sand normalized cone resistance
FS: Factor of safety against liquefaction
e_v (%): Post-liquefaction volumentric strain
DF: e_v depth weighting factor
Settlement: Calculated settlement

:: Strength loss calculation (Robertson (2009) ::

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
0.08	10.82	17.38	1.00	17.38	2.28	0.02	0.62
0.14	17.35	27.87	1.00	27.87	2.17	0.02	0.62
0.20	24.05	38.63	1.00	38.63	1.90	0.03	0.62
0.26	28.88	46.39	1.00	46.39	1.93	0.05	0.62
0.33	34.96	56.15	1.00	56.15	1.93	0.11	0.65
0.40	43.19	69.37	1.00	69.37	1.87	0.34	0.69
0.46	46.40	74.52	1.21	90.28	1.86	0.56	0.71
0.53	49.09	78.83	1.21	95.46	1.86	0.72	0.72
0.60	49.18	78.97	1.25	98.92	1.92	0.72	0.72
0.66	48.91	78.53	1.28	100.43	1.96	0.73	0.73
0.74	49.44	79.37	1.29	102.34	1.98	0.73	0.73
0.79	49.98	80.24	1.29	103.37	1.98	0.73	0.73
0.88	50.07	80.37	1.28	103.14	1.97	0.73	0.73
0.92	49.18	78.94	1.29	101.52	1.97	0.73	0.73
0.99	47.30	75.91	1.29	97.98	1.98	0.72	0.72
1.06	45.78	73.46	1.30	95.17	1.99	0.71	0.71
1.13	45.73	73.38	1.29	94.37	1.97	0.71	0.71
1.19	45.73	73.37	1.27	93.22	1.95	0.66	0.71
1.25	45.69	73.30	1.26	92.19	1.93	0.62	0.71
1.32	48.37	77.60	1.23	95.72	1.89	0.72	0.72
1.38	51.32	82.33	1.21	99.69	1.86	0.73	0.73
1.47	54.81	87.93	1.18	103.90	1.83	0.74	0.74
1.52	56.51	90.66	1.14	103.45	1.79	0.74	0.74
1.58	57.40	92.09	1.00	92.09	1.72	0.74	0.74
1.65	56.51	90.65	1.00	90.65	1.74	0.74	0.74
1.72	53.92	86.48	1.00	86.48	1.77	0.73	0.73
1.78	50.70	81.30	1.00	81.30	1.81	0.72	0.72
1.85	46.23	74.12	1.22	90.67	1.88	0.57	0.71
1.93	37.73	60.45	1.34	80.80	2.03	0.22	0.68
1.98	34.16	54.71	1.46	79.77	2.12	0.17	0.67
2.04	31.20	49.95	1.67	83.36	2.22	0.16	0.67
2.10	28.25	45.21	2.04	92.10	2.33	0.17	0.67
2.17	26.20	41.91	2.42	101.41	2.41	0.19	0.67
2.24	24.14	38.59	2.78	107.16	2.47	0.19	0.67
2.32	24.23	38.73	2.74	106.18	2.46	0.19	0.67
2.37	25.12	40.15	2.58	103.72	2.44	0.19	0.67
2.44	26.82	42.88	2.29	98.26	2.38	0.18	0.67
2.51	32.01	51.21	1.77	90.77	2.26	0.23	0.68
2.57	34.87	55.80	1.59	88.74	2.19	0.27	0.69
2.63	33.98	54.36	1.54	83.90	2.17	0.21	0.68
2.73	30.40	48.60	1.58	76.55	2.18	0.11	0.66
2.77	28.08	44.87	1.63	73.19	2.21	0.08	0.64
2.83	25.93	41.41	1.72	71.25	2.24	0.06	0.63
2.93	23.69	37.80	1.92	72.49	2.30	0.05	0.63
2.97	22.00	35.09	2.08	72.96	2.34	0.05	0.62
3.02	21.55	34.36	2.12	72.75	2.35	0.04	0.62
3.11	20.48	32.63	2.36	77.16	2.40	0.05	0.62
3.15	20.48	32.63	2.40	78.21	2.40	0.05	0.62

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
3.22	21.19	33.76	2.32	78.38	2.39	0.05	0.62
3.29	22.35	35.62	2.20	78.21	2.36	0.06	0.63
3.37	24.05	38.34	2.03	77.71	2.33	0.06	0.63
3.42	25.21	40.20	1.93	77.59	2.30	0.07	0.64
3.48	26.38	42.08	1.85	78.05	2.28	0.08	0.64
3.54	26.82	42.78	1.84	78.64	2.28	0.09	0.65
3.62	27.54	43.93	1.80	78.95	2.26	0.09	0.65
3.68	28.43	45.35	1.74	79.08	2.25	0.10	0.65
3.75	29.51	47.08	1.69	79.44	2.23	0.12	0.66
3.81	30.22	48.22	1.65	79.76	2.22	0.12	0.66
3.90	29.60	47.21	1.70	80.35	2.23	0.12	0.66
3.94	28.43	45.33	1.79	81.12	2.26	0.11	0.66
4.02	25.48	40.58	2.07	83.85	2.34	0.09	0.65
4.10	23.25	36.99	2.08	77.09	2.34	0.06	0.63
4.14	21.82	34.69	2.21	76.77	2.37	0.05	0.62
4.20	20.30	32.25	2.53	81.58	2.43	0.05	0.62
4.30	18.96	30.09	2.92	87.97	2.49	0.06	0.63
4.34	18.60	29.50	3.03	89.38	2.51	0.06	0.63
4.41	17.88	28.34	3.19	90.47	2.53	0.06	0.63
4.47	16.63	26.33	3.53	92.84	2.57	0.05	0.63
4.54	18.06	28.62	3.14	89.74	2.52	0.05	0.63
4.60	19.49	30.91	2.83	87.46	2.48	0.06	0.63
4.68	21.55	34.21	2.49	85.18	2.42	0.06	0.63
4.73	22.17	35.20	2.40	84.36	2.40	0.07	0.64
4.80	22.98	36.50	2.29	83.75	2.38	0.07	0.64
4.86	23.43	37.21	2.24	83.23	2.37	0.07	0.64
4.93	23.25	36.92	2.29	84.53	2.38	0.07	0.64
5.00	23.07	36.63	2.32	85.14	2.39	0.08	0.64
5.08	23.07	36.62	2.32	84.78	2.39	0.07	0.64
5.14	23.07	36.61	2.29	84.02	2.38	0.07	0.64
5.20	23.07	36.61	2.26	82.82	2.38	0.07	0.64
5.28	23.69	37.60	2.16	81.32	2.36	0.07	0.64
5.35	24.59	39.03	2.06	80.49	2.33	0.07	0.64
5.39	26.38	41.91	1.90	79.50	2.29	0.09	0.65
5.45	28.34	45.05	1.76	79.19	2.25	0.10	0.65
5.53	29.95	47.63	1.67	79.58	2.22	0.12	0.66
5.58	31.38	49.92	1.61	80.44	2.20	0.14	0.66
5.66	32.01	50.93	1.62	82.37	2.20	0.16	0.67
5.73	31.92	50.78	1.67	84.81	2.22	0.18	0.67
5.79	31.65	50.34	1.73	87.13	2.24	0.19	0.67
5.84	30.94	49.19	1.81	88.99	2.27	0.19	0.67
5.93	29.60	47.03	1.94	91.29	2.30	0.18	0.67
5.98	29.24	46.45	1.98	91.80	2.31	0.18	0.67
6.07	30.31	48.16	1.84	88.63	2.28	0.17	0.67
6.12	31.74	50.45	1.73	87.40	2.24	0.19	0.67
6.17	33.44	53.18	1.64	87.14	2.21	0.22	0.68
6.24	34.87	55.47	1.59	87.92	2.19	0.26	0.68
6.32	37.37	59.48	1.50	89.14	2.15	0.34	0.69

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
6.37	37.73	60.06	1.49	89.62	2.14	0.36	0.69
6.43	37.11	59.05	1.53	90.06	2.16	0.35	0.69
6.52	34.33	54.58	1.71	93.34	2.24	0.29	0.69
6.57	32.28	51.28	1.93	99.20	2.30	0.28	0.69
6.63	31.56	50.12	2.14	107.44	2.35	0.32	0.69
6.72	30.31	48.10	1.96	94.14	2.31	0.19	0.67
6.76	28.88	45.80	1.86	85.41	2.28	0.13	0.66
6.83	25.84	40.91	2.25	91.89	2.37	0.12	0.66
6.92	23.34	36.89	2.61	96.32	2.44	0.10	0.65
6.98	22.80	36.01	2.70	97.22	2.46	0.10	0.65
7.02	22.89	36.16	2.68	97.07	2.45	0.10	0.65
7.10	20.83	32.84	3.20	104.99	2.53	0.11	0.66
7.17	21.46	33.84	3.33	112.64	2.55	0.15	0.67
7.23	19.49	30.67	3.99	122.26	2.63	1.51	3.40
7.29	17.26	27.09	4.60	124.68	2.69	1.44	2.98
7.36	15.83	24.78	4.94	122.51	2.72	1.31	2.70
7.42	15.11	23.62	4.96	117.25	2.72	1.18	2.55
7.52	16.45	25.76	4.24	109.23	2.65	1.09	2.75
7.57	19.31	30.35	3.33	100.99	2.55	0.08	0.64
7.62	23.07	36.39	2.55	92.67	2.43	0.08	0.64
7.72	28.79	45.57	1.90	86.50	2.29	0.11	0.65
7.76	31.92	50.60	1.76	89.11	2.25	0.15	0.67
7.82	33.26	52.75	1.85	97.37	2.28	0.20	0.68
7.90	32.37	51.31	2.22	114.16	2.37	0.31	0.69
7.95	31.65	50.15	2.28	114.40	2.38	0.29	0.69
8.02	30.49	48.28	2.30	111.00	2.39	0.23	0.68
8.07	28.97	45.83	2.43	111.17	2.41	0.21	0.68
8.16	29.68	46.96	2.27	106.59	2.38	0.19	0.67
8.21	33.71	53.43	1.91	101.86	2.30	0.22	0.68
8.27	43.10	68.52	1.48	101.41	2.14	0.44	0.70
8.35	63.39	97.29	1.24	120.58	1.90	0.75	0.75
8.41	73.15	108.85	1.17	127.54	1.82	0.77	0.77
8.47	76.46	112.14	1.13	126.81	1.78	0.78	0.78
8.54	76.46	111.18	1.12	124.05	1.77	0.78	0.78
8.60	75.65	110.26	1.14	125.92	1.79	0.78	0.78
8.67	71.36	104.33	1.17	122.25	1.82	0.77	0.77
8.74	67.61	99.53	1.21	120.19	1.86	0.76	0.76
8.80	64.39	95.43	1.23	117.72	1.90	0.75	0.75
8.90	60.81	90.97	1.27	115.58	1.95	0.74	0.74
8.95	58.22	87.66	1.30	113.73	1.99	0.73	0.73
8.99	56.70	85.79	1.32	113.37	2.02	0.73	0.73
9.07	54.91	83.06	1.34	111.53	2.04	0.72	0.72
9.14	54.10	81.43	1.34	109.30	2.04	0.72	0.72
9.20	53.84	81.31	1.38	111.89	2.07	0.72	0.72
9.29	53.84	81.24	1.41	114.15	2.09	0.72	0.72
9.33	54.01	81.38	1.41	114.94	2.10	0.72	0.72
9.40	54.64	82.03	1.42	116.48	2.10	0.73	0.73
9.47	54.59	81.63	1.43	116.33	2.10	0.73	0.73

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
9.53	54.54	81.15	1.42	115.38	2.10	0.72	0.72
9.59	55.97	82.44	1.39	114.98	2.08	0.73	0.73
9.65	56.60	82.44	1.36	112.25	2.06	0.73	0.73
9.72	57.49	82.69	1.33	109.79	2.02	0.72	0.72
9.78	57.04	81.88	1.34	109.54	2.03	0.72	0.72
9.85	56.51	81.05	1.35	109.66	2.05	0.72	0.72
9.92	56.51	80.92	1.37	110.82	2.06	0.72	0.72
9.98	57.22	81.67	1.37	112.21	2.07	0.72	0.72
10.04	57.67	82.04	1.38	113.11	2.07	0.73	0.73
10.11	60.17	85.17	1.38	117.20	2.07	0.73	0.73
10.19	61.96	87.36	1.38	120.54	2.07	0.74	0.74
10.24	62.86	88.44	1.39	122.71	2.08	0.74	0.74
10.31	64.82	90.65	1.38	125.25	2.07	0.74	0.74
10.42	68.04	94.29	1.37	129.09	2.06	0.75	0.75
10.44	71.80	98.80	1.34	132.17	2.03	0.76	0.76
10.50	73.85	101.02	1.33	134.39	2.03	0.76	0.76
10.56	75.82	103.06	1.32	136.04	2.01	0.77	0.77
10.64	75.46	102.14	1.32	135.17	2.02	0.76	0.76
10.70	74.75	100.84	1.33	133.68	2.02	0.76	0.76
10.77	73.59	98.83	1.33	131.11	2.02	0.76	0.76
10.84	72.69	97.32	1.33	129.74	2.03	0.76	0.76
10.90	71.71	95.79	1.34	128.43	2.04	0.75	0.75
10.96	71.89	95.76	1.35	128.96	2.04	0.76	0.76
11.04	74.21	96.71	1.28	123.31	1.96	0.75	0.75
11.10	76.80	98.55	1.23	121.46	1.89	0.76	0.76
11.18	82.26	104.57	1.21	126.96	1.87	0.77	0.77
11.22	85.30	107.91	1.20	129.68	1.85	0.77	0.77
11.30	87.80	110.46	1.20	132.04	1.84	0.78	0.78
11.36	91.47	114.40	1.18	135.01	1.83	0.79	0.79
11.42	91.56	114.23	1.19	135.47	1.83	0.78	0.78
11.50	96.56	119.45	1.16	138.66	1.81	0.79	0.79
11.56	100.32	123.35	1.14	140.67	1.79	0.80	0.80
11.63	105.06	128.44	1.12	143.90	1.77	0.81	0.81
11.69	109.98	133.79	1.10	147.52	1.76	0.82	0.82
11.76	114.45	138.51	1.09	150.30	1.75	0.82	0.82
11.82	117.40	141.51	1.08	152.57	1.75	0.83	0.83
11.88	119.01	143.07	1.08	154.35	1.75	0.83	0.83
11.95	120.97	144.98	1.08	156.33	1.75	0.83	0.83
12.03	122.58	146.29	1.07	156.98	1.74	0.83	0.83
12.08	123.39	146.81	1.07	156.86	1.74	0.83	0.83
12.16	124.01	146.96	1.07	156.79	1.74	0.84	0.84
12.22	124.10	146.69	1.07	157.24	1.74	0.83	0.83
12.29	122.76	144.84	1.09	157.46	1.75	0.83	0.83
12.35	121.15	142.76	1.10	157.31	1.76	0.83	0.83
12.42	118.92	139.92	1.12	156.57	1.77	0.83	0.83
12.49	118.92	139.46	1.12	156.14	1.77	0.82	0.82
12.53	118.92	139.18	1.12	156.15	1.77	0.82	0.82
12.60	118.92	138.81	1.13	156.54	1.78	0.82	0.82

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
12.68	119.45	139.02	1.13	157.56	1.78	0.82	0.82
12.73	120.17	139.55	1.13	158.31	1.78	0.83	0.83
12.82	121.06	140.11	1.14	159.74	1.79	0.83	0.83
12.87	121.60	140.42	1.14	160.46	1.79	0.83	0.83
12.93	122.49	141.12	1.15	161.68	1.79	0.83	0.83
13.00	123.57	141.98	1.15	163.25	1.80	0.83	0.83
13.08	125.27	143.39	1.15	164.97	1.80	0.83	0.83
13.14	127.50	145.47	1.14	166.21	1.79	0.83	0.83
13.22	131.61	149.30	1.13	167.97	1.78	0.84	0.84
13.26	133.49	151.06	1.12	168.60	1.77	0.84	0.84
13.32	138.32	155.79	1.09	169.72	1.75	0.85	0.85
13.43	148.96	164.89	1.00	164.89	1.64	0.86	0.86
13.48	157.45	172.99	1.00	172.99	1.60	0.87	0.87
13.52	161.21	176.73	1.00	176.73	1.59	0.88	0.88
13.62	170.69	186.32	1.00	186.32	1.58	0.89	0.89
13.66	173.19	188.84	1.00	188.84	1.59	0.89	0.89
13.72	177.03	192.60	1.00	192.60	1.59	0.89	0.89
13.80	173.46	188.60	1.00	188.60	1.61	0.89	0.89
13.89	173.73	188.35	1.00	188.35	1.61	0.89	0.89
13.92	174.17	188.55	1.00	188.55	1.61	0.89	0.89
13.98	174.53	188.51	1.00	188.51	1.62	0.89	0.89
14.05	175.42	189.18	1.00	189.18	1.62	0.89	0.89
14.13	176.86	190.33	1.00	190.33	1.63	0.89	0.89
14.18	178.38	191.66	1.00	191.66	1.64	0.89	0.89
14.25	183.83	196.92	1.00	196.92	1.63	0.90	0.90
14.34	191.07	203.93	1.00	203.93	1.63	0.91	0.91
14.38	197.33	210.09	1.00	210.09	1.62	0.91	0.91
14.44	207.08	219.77	1.00	219.77	1.61	0.92	0.92
14.52	211.37	223.90	1.00	223.90	1.62	0.93	0.93
14.57	212.26	224.61	1.00	224.61	1.63	0.93	0.93
14.64	211.82	224.01	1.00	224.01	1.65	0.93	0.93
14.71	209.94	221.70	1.00	221.70	1.67	0.92	0.92
14.78	205.82	217.01	1.00	217.01	1.69	0.92	0.92
14.83	201.62	212.33	1.00	212.33	1.70	0.91	0.91
14.93	193.22	202.98	1.02	207.26	1.72	0.91	0.91
14.97	189.64	198.99	1.04	206.92	1.73	0.90	0.90
15.03	184.99	193.81	1.06	205.77	1.74	0.90	0.90
15.10	178.11	186.28	1.09	203.55	1.76	0.89	0.89
15.16	174.98	182.57	1.10	200.76	1.76	0.88	0.88
15.24	170.33	177.33	1.12	198.72	1.77	0.88	0.88
15.32	170.51	177.05	1.14	201.00	1.79	0.88	0.88
15.36	172.56	178.96	1.14	203.44	1.79	0.88	0.88
15.46	177.21	183.24	1.16	212.67	1.81	0.89	0.89
15.50	176.94	182.83	1.18	214.97	1.82	0.89	0.89
15.57	176.77	182.39	1.20	218.39	1.85	0.89	0.89
15.62	176.86	182.24	1.21	220.02	1.86	0.89	0.89
15.69	181.77	186.74	1.21	225.29	1.86	0.89	0.89
15.76	189.19	193.43	1.17	226.90	1.82	0.90	0.90

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
15.82	197.23	200.44	1.08	216.25	1.75	0.90	0.90
15.91	206.35	208.77	1.05	219.26	1.73	0.91	0.91
15.96	208.94	211.05	1.05	220.74	1.73	0.92	0.92
16.02	214.67	216.20	1.02	220.67	1.72	0.92	0.92
16.09	214.13	215.07	1.02	218.82	1.71	0.92	0.92
16.16	209.40	209.83	1.04	218.04	1.72	0.91	0.91
16.21	211.01	211.02	1.03	216.94	1.72	0.92	0.92
16.30	208.69	208.09	1.06	221.58	1.74	0.91	0.91
16.35	204.93	204.15	1.10	225.23	1.76	0.91	0.91
16.44	198.67	197.48	1.15	227.08	1.80	0.90	0.90
16.49	193.13	191.66	1.17	224.49	1.82	0.90	0.90
16.55	185.80	184.05	1.19	219.77	1.84	0.89	0.89
16.60	180.79	178.80	1.21	215.82	1.86	0.89	0.89
16.67	173.46	171.16	1.22	209.58	1.88	0.88	0.88
16.74	165.41	162.84	1.24	202.46	1.91	0.87	0.87
16.80	163.09	160.19	1.25	199.89	1.92	0.87	0.87
16.88	161.92	158.51	1.25	198.20	1.92	0.86	0.86
16.93	160.31	156.61	1.25	196.52	1.93	0.86	0.86
17.00	155.93	151.89	1.26	191.68	1.94	0.86	0.86
17.08	151.46	147.10	1.27	186.89	1.95	0.85	0.85
17.13	149.50	144.91	1.27	184.73	1.96	0.85	0.85
17.20	146.46	141.55	1.28	181.40	1.97	0.85	0.85
17.28	145.74	140.35	1.28	179.16	1.96	0.84	0.84
17.33	146.55	140.83	1.27	178.93	1.95	0.84	0.84
17.39	146.81	140.73	1.27	178.75	1.95	0.84	0.84
17.48	145.64	139.12	1.27	177.27	1.96	0.84	0.84
17.52	146.27	139.47	1.27	177.51	1.95	0.84	0.84
17.59	151.81	144.38	1.26	181.45	1.93	0.85	0.85
17.67	168.89	160.13	1.20	191.67	1.85	0.86	0.86
17.72	173.00	163.72	1.17	192.21	1.82	0.87	0.87
17.79	171.75	162.15	1.18	191.43	1.83	0.87	0.87
17.87	172.20	162.09	1.19	192.58	1.84	0.87	0.87
17.93	172.20	161.69	1.19	192.68	1.84	0.87	0.87
17.98	172.65	161.84	1.19	192.96	1.84	0.87	0.87
18.07	186.33	174.21	1.15	200.60	1.80	0.88	0.88
18.12	187.85	175.27	1.15	202.21	1.80	0.88	0.88
18.18	184.54	171.77	1.18	202.52	1.83	0.88	0.88
18.25	193.04	179.31	1.18	211.35	1.82	0.89	0.89
18.32	211.90	196.48	1.15	225.09	1.79	0.91	0.91
18.40	221.92	205.24	1.13	231.73	1.78	0.92	0.92
18.45	227.19	209.86	1.10	231.11	1.76	0.92	0.92
18.52	238.55	219.90	1.04	229.29	1.73	0.93	0.93
18.57	246.69	227.09	1.04	236.27	1.73	0.94	0.94
18.64	258.58	237.57	1.02	241.88	1.71	0.95	0.95
18.72	268.50	246.11	1.00	246.11	1.71	0.96	0.96
18.77	267.52	244.70	1.03	251.82	1.72	0.96	0.96
18.86	266.53	243.02	1.05	256.21	1.73	0.95	0.95
18.91	273.51	249.08	1.03	255.75	1.72	0.96	0.96

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
18.96	278.16	252.89	1.00	254.08	1.71	0.96	0.96
19.06	282.18	255.83	1.00	255.83	1.70	0.97	0.97
19.11	285.31	258.26	1.00	258.26	1.70	0.97	0.97
19.18	287.19	259.38	1.00	259.38	1.70	0.97	0.97
19.24	288.89	260.40	1.00	260.40	1.70	0.97	0.97
19.30	290.85	261.68	1.00	261.68	1.69	0.97	0.97
19.36	293.00	263.20	1.00	263.20	1.69	0.97	0.97
19.45	293.81	263.22	1.00	263.22	1.68	0.97	0.97
19.50	293.18	262.27	1.00	262.27	1.68	0.97	0.97
19.58	291.12	259.82	1.00	259.82	1.67	0.97	0.97
19.64	289.96	258.30	1.00	258.30	1.66	0.97	0.97
19.69	289.07	257.17	1.00	257.17	1.66	0.97	0.97
19.76	288.44	257.22	1.00	257.22	1.55	0.96	0.96
19.84	287.01	256.78	1.00	256.78	1.42	0.95	0.95
19.89	286.29	255.63	1.00	255.63	1.44	0.95	0.95
19.95	284.33	253.17	1.00	253.17	1.47	0.95	0.95
20.02	280.84	249.26	1.00	249.26	1.50	0.95	0.95
20.08	267.61	236.56	1.00	236.56	1.54	0.94	0.94
20.14	262.06	231.00	1.00	231.00	1.57	0.94	0.94
20.21	263.85	232.06	1.00	232.06	1.57	0.94	0.94
20.28	265.01	232.50	1.00	232.50	1.59	0.94	0.94
20.37	265.45	232.01	1.00	232.01	1.61	0.94	0.94
20.43	264.92	230.77	1.00	230.77	1.64	0.94	0.94
20.49	263.13	229.16	1.00	229.16	1.61	0.94	0.94
20.55	259.55	225.87	1.00	225.87	1.60	0.93	0.93
20.61	253.02	219.58	1.00	219.58	1.61	0.93	0.93
20.68	248.82	215.37	1.00	215.37	1.62	0.92	0.92
20.74	236.75	204.19	1.00	204.19	1.65	0.91	0.91
20.80	202.06	172.73	1.08	186.04	1.75	0.88	0.88
20.87	205.10	175.18	1.05	183.50	1.73	0.88	0.88
20.94	197.50	168.22	1.06	178.07	1.74	0.87	0.87
21.01	185.34	157.16	1.11	174.37	1.77	0.86	0.86
21.06	172.64	145.61	1.17	169.97	1.81	0.85	0.85
21.15	150.92	126.03	1.24	156.23	1.90	0.83	0.83
21.21	135.36	112.11	1.29	144.68	1.98	0.81	0.81
21.27	121.86	100.09	1.35	135.55	2.05	0.79	0.79
21.34	115.87	94.68	1.39	131.63	2.08	0.78	0.78
21.41	110.23	89.62	1.43	128.40	2.11	0.78	0.78
21.46	102.46	82.75	1.52	125.95	2.16	0.77	0.77
21.53	89.67	71.64	1.73	124.08	2.24	0.75	0.75
21.60	83.68	66.34	1.91	126.61	2.30	0.75	0.75
21.68	73.58	57.63	2.28	131.13	2.38	0.74	0.74
21.74	66.60	51.69	2.61	135.00	2.44	0.73	0.73
21.79	61.33	47.21	2.94	138.59	2.49	0.72	0.72
21.86	57.30	43.78	3.22	140.91	2.53	0.72	0.72
21.93	54.89	41.68	3.39	141.25	2.56	0.72	0.72
21.98	52.83	39.92	3.53	140.77	2.57	0.71	0.71
22.08	50.51	37.90	3.69	139.94	2.59	0.64	0.71

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
22.14	49.61	37.12	3.66	135.92	2.59	0.53	0.70
22.20	48.81	36.44	3.60	131.07	2.58	0.42	0.70
22.26	49.35	36.83	3.40	125.31	2.56	0.35	0.69
22.34	52.20	39.06	3.05	118.99	2.51	0.33	0.69
22.38	53.45	40.02	2.93	117.43	2.49	0.33	0.69
22.44	55.24	41.34	2.83	116.87	2.48	0.36	0.69
22.53	56.58	42.29	2.73	115.40	2.46	0.37	0.69
22.58	57.03	42.55	2.70	114.86	2.46	0.37	0.69
22.64	57.39	42.74	2.67	114.28	2.45	0.37	0.69
22.72	57.21	42.46	2.69	114.14	2.46	0.36	0.69
22.77	51.31	37.65	3.14	118.10	2.52	0.29	0.69
22.85	76.79	58.19	1.78	103.53	2.26	0.71	0.71
22.91	101.74	78.70	1.39	109.18	2.08	0.75	0.75
22.99	136.25	107.42	1.24	132.70	1.90	0.79	0.79
23.05	145.19	114.70	1.21	139.21	1.87	0.80	0.80
23.10	147.61	116.38	1.22	141.71	1.87	0.81	0.81
23.18	146.27	114.63	1.24	142.37	1.91	0.81	0.81
23.24	139.92	108.84	1.27	138.59	1.95	0.80	0.80
23.31	131.25	101.08	1.33	134.16	2.02	0.80	0.80
23.38	121.50	92.60	1.40	129.84	2.09	0.79	0.79
23.44	121.37	92.30	1.40	129.48	2.09	0.79	0.79
23.51	121.23	92.04	1.40	128.49	2.08	0.78	0.78
23.57	127.04	96.72	1.35	130.54	2.05	0.79	0.79
23.63	134.64	102.88	1.31	134.66	2.00	0.80	0.80
23.69	151.01	116.35	1.25	145.69	1.92	0.81	0.81
23.77	157.53	121.74	1.22	149.00	1.88	0.82	0.82
23.84	157.98	122.65	1.18	144.26	1.82	0.82	0.82
23.89	153.15	119.11	1.15	136.44	1.79	0.81	0.81
23.98	141.44	109.59	1.15	126.21	1.80	0.79	0.79
24.03	131.07	100.87	1.19	119.93	1.84	0.77	0.77
24.11	115.24	87.58	1.24	109.00	1.91	0.75	0.75
24.17	104.06	78.04	1.30	101.68	1.99	0.74	0.74
24.24	89.58	65.85	1.45	95.61	2.12	0.72	0.72
24.31	77.24	55.59	1.75	97.52	2.25	0.57	0.71
24.36	71.79	51.11	1.97	100.69	2.31	0.47	0.70
24.43	62.58	43.75	2.44	106.79	2.41	0.34	0.69
24.48	58.20	40.21	2.82	113.21	2.48	0.33	0.69
24.56	51.94	35.21	3.56	125.34	2.58	0.36	0.69
24.62	54.35	37.14	3.03	112.69	2.51	0.26	0.68
24.68	71.16	50.38	1.80	90.89	2.27	0.31	0.69
24.77	86.45	62.17	1.51	93.97	2.15	0.71	0.71
24.82	95.21	68.99	1.41	97.49	2.10	0.73	0.73
24.88	105.67	77.26	1.33	102.93	2.03	0.74	0.74
24.94	109.70	80.44	1.31	104.99	2.00	0.75	0.75
25.02	107.82	78.92	1.30	102.59	1.99	0.74	0.74
25.07	107.10	78.33	1.30	101.46	1.99	0.74	0.74
25.14	100.40	72.81	1.33	96.78	2.02	0.73	0.73
25.20	94.41	67.87	1.38	93.49	2.07	0.72	0.72

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
25.27	88.15	62.71	1.45	90.93	2.12	0.67	0.71
25.33	81.80	57.60	1.55	89.14	2.17	0.47	0.70
25.42	74.38	51.66	1.71	88.24	2.23	0.32	0.69
25.47	71.25	49.15	1.80	88.23	2.26	0.27	0.68
25.53	67.41	46.11	1.93	88.92	2.30	0.22	0.68
25.61	63.20	42.71	2.15	91.85	2.35	0.19	0.67
25.66	59.81	40.01	2.39	95.53	2.40	0.18	0.67
25.72	56.14	37.10	2.72	100.81	2.46	0.18	0.67
25.80	51.76	33.67	3.20	107.88	2.53	0.17	0.67
25.86	49.61	31.96	3.53	112.96	2.57	0.19	0.67
25.93	45.68	28.94	4.21	121.91	2.65	0.91	2.01
26.00	42.28	26.37	4.87	128.48	2.72	0.95	1.85
26.06	40.66	25.14	5.24	131.73	2.75	0.96	1.78
26.12	39.14	23.98	5.61	134.50	2.78	0.98	1.70
26.21	37.26	22.58	6.02	135.97	2.81	0.97	1.61
26.26	37.26	22.55	6.00	135.36	2.81	0.96	1.61
26.31	37.71	22.82	5.84	133.29	2.80	0.94	1.62
26.41	39.95	24.34	5.23	127.35	2.75	0.90	1.72
26.46	42.09	25.81	4.77	123.17	2.71	0.87	1.81
26.51	43.70	26.92	4.44	119.53	2.67	0.85	1.88
26.61	46.47	28.82	3.95	113.89	2.62	0.81	2.00
26.65	50.31	31.53	3.45	108.90	2.56	0.16	0.67
26.72	53.89	34.02	3.10	105.37	2.52	0.17	0.67
26.79	57.10	36.24	2.85	103.12	2.48	0.19	0.67
26.86	60.68	38.70	2.63	101.67	2.45	0.22	0.68
26.90	62.29	39.75	2.58	102.37	2.44	0.25	0.68
26.99	68.65	44.15	2.29	101.28	2.38	0.34	0.69
27.04	74.01	47.96	2.08	99.77	2.34	0.43	0.70
27.10	78.48	51.16	1.92	98.41	2.30	0.53	0.70
27.20	86.89	57.24	1.70	97.21	2.23	0.71	0.71
27.24	91.27	60.86	1.52	92.44	2.16	0.71	0.71
27.31	95.38	64.87	1.34	86.74	2.03	0.58	0.71
27.39	98.24	66.92	1.32	88.29	2.01	0.67	0.71
27.43	100.03	68.20	1.31	89.36	2.00	0.71	0.71
27.50	101.82	69.42	1.30	90.44	1.99	0.72	0.72
27.56	100.30	68.07	1.32	89.57	2.01	0.71	0.71
27.64	97.17	65.40	1.35	88.07	2.04	0.67	0.71
27.70	100.57	67.76	1.34	90.48	2.03	0.72	0.72
27.76	100.49	67.42	1.35	90.97	2.04	0.72	0.72
27.84	98.97	65.90	1.38	91.11	2.07	0.72	0.72
27.89	97.27	64.39	1.41	91.00	2.10	0.72	0.72
27.96	94.41	62.06	1.45	90.25	2.12	0.71	0.71
28.03	89.40	58.18	1.53	88.75	2.16	0.56	0.71
28.08	84.66	54.59	1.61	87.89	2.20	0.44	0.70
28.16	79.48	50.64	1.74	88.08	2.25	0.35	0.69
28.23	72.23	45.20	2.00	90.52	2.32	0.26	0.68
28.30	66.07	40.58	2.36	95.63	2.40	0.22	0.68
28.35	59.00	35.47	2.89	102.53	2.49	0.19	0.67

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
28.45	45.95	26.39	4.40	116.16	2.67	0.80	1.84
28.49	39.87	22.32	5.48	122.21	2.77	0.80	1.58
28.55	34.95	19.27	6.50	125.33	2.85	0.78	1.38
28.62	29.76	16.22	7.85	127.30	2.94	0.75	1.16
28.70	26.55	14.32	8.88	127.14	3.01	0.71	1.02
28.74	25.65	13.78	9.14	125.99	3.02	0.69	0.98
28.84	24.22	12.91	9.37	120.99	3.03	0.63	0.92
28.89	24.27	12.91	9.21	118.90	3.02	0.61	0.92
28.95	24.27	12.89	9.04	116.56	3.02	0.58	0.92
29.01	24.31	12.88	8.78	113.07	3.00	0.55	0.92
29.09	24.13	12.74	7.84	99.89	2.94	0.43	0.91
29.14	24.22	12.77	6.27	80.10	2.83	0.28	0.91
29.23	27.80	14.79	5.69	84.22	2.79	0.33	1.05
29.28	30.66	16.51	5.25	86.66	2.75	0.37	1.17
29.34	39.87	22.35	3.80	84.96	2.61	0.42	1.54
29.42	40.95	22.78	4.08	92.88	2.64	0.50	1.58
29.47	46.23	26.11	3.56	92.84	2.58	0.06	0.63
29.55	50.25	28.49	3.42	97.32	2.56	0.09	0.65
29.61	49.09	27.56	3.70	102.09	2.59	0.10	0.65
29.66	46.40	25.68	4.18	107.45	2.65	0.69	1.78
29.76	36.93	19.79	5.14	101.69	2.74	0.55	1.40
29.82	31.38	16.44	6.18	101.69	2.83	0.50	1.17
29.87	27.00	13.98	7.51	104.98	2.92	0.49	1.00
29.92	23.60	12.07	8.70	105.06	3.00	0.47	0.86
30.01	20.30	10.21	9.86	100.74	3.06	0.41	0.73
30.06	18.06	8.96	10.92	97.84	3.12	0.37	0.64
30.13	18.06	8.94	10.55	94.35	3.10	0.34	0.64
30.20	18.87	9.36	9.99	93.50	3.07	0.34	0.67
30.27	20.74	10.36	9.34	96.77	3.03	0.38	0.74
30.33	23.87	12.05	8.30	100.02	2.97	0.42	0.86
30.41	30.49	15.63	6.34	99.16	2.84	0.47	1.12
30.45	34.42	17.84	5.43	96.90	2.77	0.48	1.27
30.52	42.11	22.59	4.11	92.81	2.64	0.50	1.56
30.59	48.10	26.31	3.46	90.97	2.56	0.06	0.63
30.65	52.48	29.06	3.06	89.03	2.51	0.07	0.64
30.73	57.85	32.49	2.64	85.89	2.45	0.09	0.65
30.79	60.08	33.93	2.49	84.35	2.42	0.09	0.65
30.87	61.43	34.77	2.39	82.99	2.40	0.09	0.65
30.92	60.53	34.10	2.45	83.53	2.41	0.09	0.65
30.98	59.37	33.24	2.55	84.77	2.43	0.09	0.65
31.04	57.58	31.91	2.75	87.74	2.47	0.09	0.65
31.12	53.20	28.87	3.26	94.07	2.54	0.09	0.65
31.19	48.91	25.83	4.10	105.95	2.64	0.68	1.79
31.24	45.60	23.66	4.67	110.55	2.70	0.70	1.66
31.32	39.16	19.74	5.85	115.45	2.80	0.69	1.41
31.37	35.23	17.63	6.73	118.69	2.87	0.68	1.26
31.45	38.80	19.47	5.89	114.58	2.80	0.68	1.39
31.50	32.64	16.19	7.44	120.42	2.92	0.68	1.16

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
31.57	38.45	19.20	6.11	117.23	2.82	0.70	1.37
31.64	45.78	23.33	4.90	114.33	2.72	0.73	1.64
31.69	46.49	23.61	5.02	118.40	2.73	0.78	1.67
31.77	36.57	18.09	7.11	128.69	2.89	0.80	1.29
31.83	32.19	15.77	8.32	131.27	2.97	0.78	1.13
31.91	26.02	12.52	10.52	131.81	3.10	0.73	0.89
31.99	23.52	11.19	11.86	132.81	3.16	0.73	0.80
32.04	23.34	11.08	12.06	133.63	3.17	0.73	0.79
32.09	27.18	13.05	10.02	130.79	3.07	0.73	0.93
32.17	52.04	26.70	4.06	108.34	2.63	0.72	1.85
32.24	67.51	36.27	2.73	99.12	2.46	0.21	0.68
32.30	75.64	41.24	2.41	99.41	2.41	0.34	0.69
32.38	82.62	45.53	2.17	99.00	2.36	0.48	0.70
32.42	84.32	46.64	2.09	97.58	2.34	0.50	0.70
32.48	85.48	47.61	1.94	92.54	2.31	0.44	0.70
32.55	84.40	47.15	1.86	87.75	2.28	0.34	0.69
32.62	84.49	47.25	1.82	85.92	2.27	0.32	0.69
32.68	84.14	46.91	1.84	86.19	2.28	0.31	0.69
32.77	111.50	65.17	1.41	91.71	2.09	0.73	0.73
32.81	117.75	69.44	1.36	94.34	2.05	0.73	0.73
32.88	120.44	71.30	1.34	95.23	2.03	0.74	0.74
32.94	119.54	70.72	1.33	94.19	2.03	0.73	0.73
33.01	117.22	69.09	1.34	92.48	2.03	0.73	0.73
33.12	110.69	64.48	1.38	88.75	2.07	0.72	0.72
33.14	107.92	62.51	1.40	87.59	2.09	0.72	0.72
33.22	101.48	57.97	1.47	85.19	2.13	0.60	0.71
33.27	95.94	54.29	1.52	82.72	2.16	0.43	0.70
33.35	89.14	49.70	1.63	80.97	2.21	0.30	0.69
33.41	83.42	45.17	1.97	88.97	2.31	0.32	0.69
33.48	69.29	35.76	2.82	100.97	2.48	0.23	0.68
33.55	59.73	29.63	3.83	113.50	2.61	0.82	2.04
33.61	54.36	26.23	4.70	123.35	2.70	0.88	1.84
33.70	52.22	24.75	5.29	130.80	2.75	0.95	1.76
33.73	51.41	24.27	5.40	130.96	2.76	0.95	1.73
33.81	50.96	23.98	5.41	129.77	2.76	0.93	1.71
33.86	54.99	26.30	4.74	124.71	2.70	0.90	1.85
33.95	67.51	33.69	3.35	112.81	2.55	0.32	0.69
34.01	77.79	39.99	2.61	104.40	2.44	0.41	0.70
34.06	84.76	44.45	2.21	98.44	2.37	0.48	0.70
34.16	91.38	48.81	1.90	92.55	2.29	0.54	0.70
34.20	93.79	50.44	1.79	90.46	2.26	0.55	0.71
34.26	94.69	51.38	1.67	85.93	2.22	0.47	0.70
34.34	94.95	51.63	1.63	84.14	2.21	0.43	0.70
34.40	95.13	51.56	1.65	85.00	2.21	0.45	0.70
34.46	93.97	50.48	1.72	87.05	2.24	0.47	0.70
34.55	90.39	47.48	1.98	94.03	2.31	0.53	0.70
34.60	83.96	43.04	2.36	101.37	2.40	0.50	0.70
34.66	75.28	37.37	2.98	111.51	2.50	0.44	0.70

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
34.72	67.86	32.82	3.60	118.26	2.58	0.38	0.69
34.78	60.89	28.72	4.27	122.75	2.66	0.92	2.00
34.86	52.57	23.96	5.37	128.61	2.76	0.91	1.71
34.94	52.40	23.82	5.36	127.72	2.76	0.90	1.70
35.00	52.40	24.22	4.56	110.39	2.69	0.70	1.70
35.04	52.22	24.59	3.84	94.36	2.61	0.54	1.69
35.11	64.73	31.87	2.74	87.31	2.46	0.10	0.65
35.18	71.53	35.93	2.34	84.17	2.39	0.13	0.66
35.28	79.22	40.57	2.01	81.63	2.32	0.18	0.67
35.32	78.24	39.92	2.05	81.89	2.33	0.17	0.67
35.39	82.62	42.58	1.90	80.80	2.29	0.20	0.68
35.44	87.71	45.76	1.75	79.89	2.25	0.24	0.68
35.50	88.70	46.32	1.72	79.74	2.24	0.25	0.68
35.59	86.46	44.68	1.81	80.80	2.27	0.24	0.68
35.65	82.79	42.19	1.96	82.69	2.31	0.22	0.68
35.72	76.89	38.17	2.33	88.89	2.39	0.20	0.68
35.77	71.35	34.59	2.73	94.60	2.46	0.18	0.67
35.85	56.69	25.85	4.21	108.91	2.65	0.71	1.80
35.90	48.73	21.46	5.49	117.78	2.77	0.75	1.53
35.99	38.45	16.67	7.67	127.97	2.93	0.76	1.19
36.04	31.56	13.49	9.76	131.60	3.06	0.75	0.96
36.09	28.25	11.95	10.94	130.72	3.12	0.71	0.85
36.16	26.11	10.94	11.88	130.03	3.16	0.69	0.78
36.24	24.05	9.98	12.95	129.22	3.21	0.67	0.71
36.29	22.71	9.35	13.72	128.35	3.24	0.66	0.67
36.37	22.00	9.01	14.19	127.77	3.26	0.65	0.64
36.43	24.86	10.29	12.14	124.88	3.17	0.63	0.73
36.50	31.47	13.27	8.83	117.15	3.00	0.60	0.95
36.57	41.58	17.81	6.11	108.76	2.82	0.59	1.27
36.63	50.52	22.11	4.67	103.33	2.70	0.60	1.56
36.68	64.20	29.62	3.24	95.91	2.54	0.13	0.66
36.77	78.68	37.93	2.36	89.39	2.40	0.21	0.68
36.82	91.11	45.33	1.91	86.39	2.29	0.36	0.69
36.88	100.59	51.11	1.68	85.65	2.22	0.53	0.70
36.95	106.40	54.81	1.55	85.01	2.17	0.65	0.71
37.01	109.98	57.02	1.50	85.51	2.15	0.71	0.71
37.08	111.41	57.83	1.48	85.77	2.14	0.72	0.72
37.14	110.07	56.83	1.51	85.63	2.15	0.71	0.71
37.22	104.34	52.97	1.61	85.53	2.20	0.61	0.71
37.30	93.88	46.11	1.92	88.47	2.30	0.44	0.70
37.35	86.55	41.58	2.20	91.36	2.36	0.34	0.69
37.41	74.03	34.11	2.88	98.28	2.49	0.22	0.68
37.47	59.28	25.80	4.21	108.65	2.65	0.71	1.80
37.56	42.56	17.74	6.82	120.95	2.87	0.71	1.27
37.61	34.42	14.13	8.92	126.01	3.01	0.70	1.01
37.67	28.61	11.56	11.08	127.99	3.12	0.68	0.83
37.76	25.84	10.32	12.12	125.05	3.17	0.63	0.74
37.81	25.30	10.06	12.00	120.81	3.17	0.59	0.72

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
37.87	23.96	9.46	11.59	109.64	3.15	0.47	0.68
37.95	22.35	8.74	11.14	97.39	3.13	0.36	0.62
38.00	20.21	7.79	12.30	95.88	3.18	0.34	0.56
38.06	18.78	7.16	13.08	93.69	3.22	0.32	0.51
38.13	17.97	6.79	13.47	91.51	3.23	0.30	0.49
38.20	18.55	7.03	13.00	91.43	3.21	0.30	0.50
38.26	18.33	6.92	13.37	92.61	3.23	0.31	0.49
38.35	19.13	7.25	13.58	98.44	3.24	0.36	0.52
38.40	20.56	7.86	12.96	101.85	3.21	0.39	0.56
38.47	22.62	8.73	12.32	107.57	3.18	0.45	0.62
38.53	23.96	9.29	12.00	111.50	3.17	0.49	0.66
38.61	23.43	9.04	12.72	115.05	3.20	0.52	0.65
38.65	23.25	8.95	12.98	116.23	3.21	0.53	0.64
38.74	22.62	8.66	13.92	120.55	3.25	0.57	0.62
38.80	22.80	8.72	14.19	123.81	3.26	0.60	0.62
38.85	22.62	8.63	14.50	125.23	3.27	0.62	0.62
38.92	22.89	8.73	14.45	126.13	3.27	0.63	0.62
38.99	23.78	9.09	13.89	126.27	3.25	0.63	0.65
39.05	24.50	9.38	13.44	126.10	3.23	0.63	0.67
39.12	25.12	9.63	13.04	125.49	3.21	0.63	0.69
39.18	25.57	9.80	11.85	116.15	3.16	0.54	0.70
39.24	25.75	9.86	8.10	79.84	2.96	0.25	0.70
39.33	25.75	9.83	9.54	93.87	3.04	0.35	0.70
39.38	25.48	9.71	9.97	96.76	3.07	0.37	0.69
39.44	24.68	9.36	10.52	98.45	3.10	0.38	0.67
39.52	19.31	7.09	13.75	97.46	3.24	0.35	0.51
39.58	20.12	7.41	12.93	95.88	3.21	0.34	0.53
39.65	19.31	7.06	13.77	97.24	3.24	0.35	0.50
39.71	17.53	6.31	15.31	96.59	3.30	0.34	0.45
39.80	19.27	7.02	11.80	82.76	3.16	0.24	0.50
39.83	17.26	6.18	12.97	80.08	3.21	0.22	0.44
39.91	19.22	6.98	12.68	88.45	3.20	0.28	0.50
39.97	18.69	6.75	13.79	93.01	3.24	0.31	0.48
40.04	20.30	7.40	13.05	96.57	3.21	0.34	0.53
40.10	20.43	7.44	13.40	99.68	3.23	0.37	0.53
40.18	20.92	7.63	13.70	104.51	3.24	0.41	0.54
40.23	20.56	7.47	14.45	107.86	3.27	0.44	0.53
40.30	20.74	7.53	14.87	111.95	3.29	0.48	0.54
40.38	21.91	7.99	14.27	114.01	3.26	0.50	0.57
40.43	22.71	8.31	13.78	114.45	3.24	0.51	0.59
40.50	23.87	8.77	13.32	116.80	3.23	0.54	0.63
40.59	25.21	9.29	12.79	118.80	3.20	0.56	0.66
40.64	25.75	9.50	12.68	120.41	3.20	0.58	0.68
40.69	26.29	9.71	12.66	122.85	3.20	0.61	0.69
40.78	27.63	10.23	12.65	129.37	3.20	0.68	0.73
40.83	29.06	10.79	12.02	129.74	3.17	0.70	0.77
40.89	32.28	12.08	10.49	126.70	3.09	0.68	0.86
40.97	40.06	15.20	7.83	118.94	2.94	0.65	1.09

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
41.02	49.27	18.90	5.86	110.83	2.80	0.64	1.35
41.08	60.62	23.78	4.36	103.80	2.67	0.64	1.67
41.16	79.93	34.30	2.46	84.26	2.42	0.15	0.67
41.22	88.87	40.07	1.81	72.69	2.27	0.14	0.66
41.28	93.97	42.31	1.83	77.42	2.27	0.22	0.68
41.38	97.91	43.87	1.87	81.96	2.28	0.33	0.69
41.43	98.53	43.88	1.92	84.43	2.30	0.38	0.70
41.48	98.58	43.61	1.99	86.83	2.32	0.42	0.70
41.54	100.23	44.09	2.05	90.23	2.33	0.53	0.70
41.64	98.62	42.74	2.21	94.52	2.37	0.58	0.71
41.69	100.19	43.35	2.22	96.38	2.37	0.67	0.71
41.73	97.99	41.95	2.36	98.82	2.40	0.66	0.71
41.82	100.14	42.70	2.39	102.20	2.40	0.72	0.72
41.88	101.48	43.11	2.44	105.02	2.41	0.72	0.72
41.93	101.66	42.81	2.56	109.58	2.43	0.73	0.73
42.02	100.23	41.51	2.80	116.45	2.47	0.73	0.73
42.07	97.73	40.02	2.99	119.85	2.50	0.73	0.73
42.13	90.93	36.41	3.41	124.14	2.56	0.72	0.72
42.22	84.94	33.24	3.88	128.83	2.61	1.11	2.31
42.26	83.96	32.67	3.99	130.51	2.63	1.12	2.28
42.33	85.75	33.31	4.00	133.43	2.63	1.17	2.32
42.39	93.43	36.91	3.58	132.27	2.58	0.73	0.73
42.46	101.21	40.66	3.20	129.98	2.53	0.74	0.74
42.52	108.46	44.43	2.80	124.20	2.47	0.75	0.75
42.61	117.84	49.44	2.39	118.14	2.40	0.75	0.75
42.65	126.87	54.35	2.10	114.15	2.34	0.76	0.76
42.72	138.23	60.73	1.82	110.24	2.27	0.77	0.77
42.81	161.66	74.20	1.49	110.53	2.14	0.79	0.79
42.87	166.75	77.37	1.43	110.75	2.11	0.79	0.79
42.92	167.47	78.19	1.40	109.45	2.09	0.79	0.79
43.00	168.63	79.50	1.36	108.02	2.05	0.78	0.78
43.07	167.47	78.93	1.35	106.93	2.05	0.78	0.78
43.12	165.95	77.96	1.36	106.12	2.06	0.78	0.78
43.21	163.44	76.32	1.37	104.90	2.07	0.78	0.78
43.26	161.57	75.14	1.38	104.02	2.07	0.78	0.78
43.31	158.97	73.53	1.40	102.88	2.09	0.77	0.77
43.40	157.18	72.28	1.41	102.25	2.10	0.77	0.77
43.44	156.20	71.60	1.42	101.97	2.10	0.77	0.77
43.51	155.84	71.21	1.43	101.93	2.11	0.77	0.77
43.58	154.86	70.48	1.44	101.58	2.11	0.77	0.77
43.66	153.88	69.78	1.45	101.16	2.12	0.77	0.77
43.70	153.26	69.39	1.45	100.73	2.12	0.77	0.77
43.80	152.46	69.24	1.43	98.85	2.11	0.76	0.76
43.85	152.46	69.06	1.43	99.05	2.11	0.76	0.76
43.90	153.07	69.21	1.44	99.54	2.11	0.76	0.76
43.99	154.51	69.58	1.45	100.74	2.12	0.77	0.77
44.05	156.02	70.16	1.45	101.70	2.12	0.77	0.77
44.10	151.65	67.42	1.50	101.03	2.15	0.77	0.77

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
44.16	158.89	71.12	1.46	103.89	2.13	0.78	0.78
44.23	162.47	72.73	1.46	105.84	2.12	0.78	0.78
44.30	164.88	73.68	1.46	107.43	2.12	0.78	0.78
44.38	167.75	74.67	1.47	109.71	2.13	0.79	0.79
44.45	170.34	75.66	1.47	111.48	2.13	0.79	0.79
44.49	171.86	76.32	1.47	112.22	2.13	0.79	0.79
44.57	175.17	77.88	1.46	113.56	2.12	0.80	0.80
44.64	177.22	78.78	1.45	114.38	2.12	0.80	0.80
44.69	178.30	79.26	1.45	114.75	2.12	0.80	0.80
44.75	182.23	81.34	1.42	115.90	2.10	0.80	0.80
44.82	186.52	83.68	1.40	117.12	2.09	0.81	0.81
44.88	190.90	86.13	1.38	118.51	2.07	0.81	0.81
44.95	198.15	90.26	1.34	121.25	2.04	0.82	0.82
45.03	205.12	94.10	1.32	124.29	2.02	0.82	0.82
45.09	208.70	95.85	1.32	126.13	2.01	0.82	0.82
45.15	210.31	96.51	1.32	126.92	2.01	0.83	0.83
45.23	209.77	96.30	1.31	126.17	2.00	0.82	0.82
45.30	205.30	93.73	1.32	123.63	2.01	0.82	0.82
45.38	201.81	91.81	1.32	121.47	2.02	0.82	0.82
45.41	198.41	89.90	1.33	119.67	2.03	0.81	0.81
45.48	189.65	85.09	1.35	115.09	2.05	0.80	0.80
45.56	191.17	86.41	1.33	114.71	2.02	0.80	0.80
45.63	190.46	86.35	1.32	113.69	2.01	0.80	0.80
45.67	190.19	86.20	1.32	113.35	2.01	0.80	0.80
45.78	191.71	86.88	1.31	113.86	2.00	0.80	0.80
45.80	191.98	86.99	1.31	113.93	2.00	0.80	0.80
45.88	191.26	86.35	1.31	113.51	2.01	0.80	0.80
45.95	179.37	79.29	1.36	108.20	2.06	0.79	0.79
46.01	180.98	80.08	1.36	108.81	2.05	0.79	0.79
46.09	174.45	76.14	1.40	106.33	2.08	0.79	0.79
46.15	164.08	70.09	1.48	103.58	2.14	0.78	0.78
46.21	149.95	62.00	1.66	102.66	2.22	0.77	0.77
46.28	134.57	53.45	1.98	105.64	2.31	0.76	0.76
46.35	113.56	42.58	2.66	113.22	2.45	0.74	0.74
46.40	108.20	39.77	2.97	118.06	2.50	0.74	0.74
46.48	87.45	29.94	4.52	135.45	2.68	1.21	2.14
46.53	82.36	28.11	5.04	141.64	2.73	1.25	2.01
46.60	73.51	24.94	5.74	143.06	2.79	1.20	1.78
46.68	67.78	22.87	6.07	138.81	2.82	1.09	1.63
46.74	63.76	21.42	6.42	137.49	2.84	1.04	1.53
46.79	63.63	21.35	6.40	136.64	2.84	1.03	1.53
46.90	63.49	21.25	6.29	133.61	2.83	0.99	1.52
46.93	73.95	24.90	5.08	126.52	2.73	0.98	1.78
46.99	123.76	46.93	2.31	108.54	2.39	0.75	0.75
47.08	175.79	72.97	1.53	111.45	2.16	0.80	0.80
47.13	210.22	91.39	1.35	123.27	2.04	0.82	0.82
47.18	237.67	106.53	1.28	136.42	1.97	0.85	0.85
47.27	256.62	116.64	1.25	146.28	1.93	0.86	0.86

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
47.33	261.36	119.08	1.25	148.66	1.92	0.86	0.86
47.38	263.95	120.06	1.25	150.03	1.92	0.87	0.87
47.47	263.33	118.68	1.26	149.84	1.94	0.87	0.87
47.53	261.98	117.32	1.27	149.16	1.95	0.87	0.87
47.58	260.82	116.36	1.28	148.53	1.96	0.87	0.87
47.64	256.80	113.79	1.29	146.39	1.97	0.87	0.87
47.71	255.01	112.44	1.29	145.38	1.98	0.86	0.86
47.77	256.80	113.18	1.29	146.17	1.98	0.87	0.87
47.86	254.74	111.61	1.30	145.07	1.99	0.86	0.86
47.90	256.80	112.56	1.30	146.02	1.99	0.87	0.87
47.99	258.32	113.08	1.30	146.60	1.99	0.87	0.87
48.06	258.23	112.82	1.30	146.37	1.99	0.87	0.87
48.11	257.25	112.11	1.30	145.77	1.99	0.87	0.87
48.18	254.92	110.53	1.31	144.56	2.00	0.87	0.87
48.23	253.67	109.54	1.31	143.96	2.01	0.86	0.86
48.32	251.79	108.10	1.32	143.03	2.02	0.86	0.86
48.38	250.72	107.35	1.33	142.40	2.02	0.86	0.86
48.45	249.74	106.55	1.33	141.88	2.03	0.86	0.86
48.51	249.02	105.99	1.33	141.42	2.03	0.86	0.86
48.57	247.14	104.87	1.34	140.39	2.03	0.86	0.86
48.65	241.33	101.98	1.34	137.10	2.04	0.86	0.86
48.71	235.97	99.34	1.35	134.13	2.05	0.85	0.85
48.76	200.48	80.64	1.51	121.72	2.15	0.82	0.82
48.83	221.76	92.31	1.37	126.77	2.07	0.84	0.84
48.93	219.17	91.45	1.36	124.31	2.05	0.83	0.83
48.98	218.00	90.87	1.36	123.52	2.05	0.83	0.83
49.02	217.29	90.48	1.36	123.01	2.05	0.83	0.83
49.12	217.96	90.72	1.36	122.94	2.05	0.83	0.83
49.16	216.84	90.06	1.36	122.37	2.05	0.83	0.83
49.22	217.92	90.51	1.36	122.67	2.05	0.83	0.83
49.30	217.65	90.13	1.36	122.50	2.05	0.83	0.83
49.36	216.93	89.55	1.36	122.17	2.06	0.83	0.83
49.41	215.50	88.76	1.37	121.37	2.06	0.83	0.83
49.48	213.09	87.42	1.37	120.17	2.07	0.82	0.82
49.54	211.30	86.43	1.38	119.22	2.07	0.82	0.82
49.62	209.06	85.29	1.38	117.91	2.07	0.82	0.82
49.71	205.49	83.15	1.40	116.56	2.09	0.82	0.82
49.75	204.32	82.92	1.39	115.17	2.08	0.81	0.81
49.80	201.11	83.30	1.33	110.69	2.02	0.80	0.80
49.89	194.94	79.67	1.36	108.15	2.05	0.80	0.80
49.95	191.54	77.68	1.38	106.83	2.07	0.80	0.80
50.01	187.69	75.54	1.39	105.35	2.08	0.79	0.79
50.09	177.77	70.30	1.45	101.91	2.12	0.78	0.78
50.15	174.08	68.20	1.48	101.13	2.14	0.78	0.78
50.22	178.82	70.15	1.47	103.38	2.13	0.79	0.79
50.26	182.94	71.72	1.47	105.68	2.13	0.79	0.79
50.35	196.79	77.54	1.45	112.41	2.12	0.81	0.81
50.41	207.79	81.99	1.44	118.29	2.12	0.82	0.82

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
50.46	221.92	88.51	1.40	124.17	2.09	0.84	0.84
50.53	237.12	96.35	1.35	129.73	2.04	0.85	0.85
50.60	258.49	107.92	1.29	138.96	1.97	0.86	0.86
50.67	272.79	115.15	1.27	145.94	1.95	0.87	0.87
50.73	282.09	120.09	1.25	150.41	1.92	0.88	0.88
50.79	272.84	115.05	1.27	145.56	1.94	0.87	0.87
50.88	273.96	116.26	1.25	145.60	1.92	0.87	0.87
50.93	272.88	116.01	1.25	144.75	1.92	0.86	0.86
51.00	265.91	112.48	1.25	140.97	1.92	0.86	0.86
51.06	255.81	107.23	1.27	135.66	1.94	0.85	0.85
51.12	247.22	102.57	1.28	131.24	1.96	0.84	0.84
51.19	231.31	93.76	1.32	123.75	2.01	0.83	0.83
51.25	211.90	83.57	1.38	115.70	2.07	0.82	0.82
51.33	191.52	72.51	1.54	111.35	2.17	0.81	0.81
51.39	168.63	60.73	1.84	111.98	2.28	0.79	0.79
51.47	143.59	48.45	2.48	120.10	2.42	0.77	0.77
51.53	125.80	40.51	3.14	127.05	2.52	0.76	0.76
51.58	107.38	32.95	4.09	134.90	2.64	1.33	2.35
51.64	86.19	26.22	5.53	144.86	2.77	1.31	1.87
51.72	75.91	22.93	6.48	148.58	2.85	1.28	1.64
51.78	72.87	21.94	6.83	149.87	2.87	1.27	1.57
51.84	70.45	21.16	7.17	151.73	2.90	1.28	1.51
51.93	68.39	20.47	7.55	154.63	2.92	1.31	1.46
51.98	68.39	20.45	7.39	151.10	2.91	1.26	1.46
52.06	68.39	20.41	6.87	140.25	2.88	1.11	1.46
52.11	68.39	20.39	6.67	135.98	2.86	1.05	1.46
52.17	69.82	20.81	6.51	135.58	2.85	1.06	1.49
52.24	71.88	21.43	6.27	134.24	2.83	1.05	1.53
52.31	73.40	21.87	6.21	135.85	2.83	1.09	1.56
52.38	76.88	22.92	6.24	142.95	2.83	1.21	1.64
52.45	83.95	25.08	5.94	149.08	2.81	1.35	1.79
52.52	80.37	23.93	6.42	153.75	2.84	1.39	1.71
52.58	73.49	21.77	7.16	155.95	2.90	1.37	1.55
52.65	62.04	18.20	8.15	148.35	2.96	1.17	1.30
52.72	53.01	15.38	9.08	139.70	3.02	0.99	1.10
52.76	48.18	13.87	9.88	137.11	3.06	0.93	0.99
52.82	46.22	13.25	9.92	131.51	3.06	0.85	0.95
52.91	46.57	13.34	9.44	125.91	3.04	0.78	0.95
52.97	46.93	13.43	9.48	127.26	3.04	0.80	0.96
53.02	50.78	14.60	8.73	127.37	3.00	0.82	1.04
53.09	60.16	17.46	7.04	122.88	2.89	0.83	1.25
53.17	76.88	22.55	5.10	115.02	2.74	0.84	1.61
53.22	95.84	28.42	3.79	107.65	2.60	0.87	2.02
53.29	106.75	32.61	3.26	106.32	2.54	0.72	0.72
53.37	117.03	36.63	2.87	105.13	2.48	0.73	0.73
53.42	122.57	38.99	2.63	102.63	2.45	0.73	0.73
53.50	125.97	40.56	2.46	99.63	2.42	0.73	0.73
53.55	129.64	42.31	2.30	97.41	2.39	0.74	0.74

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
53.62	132.59	43.78	2.16	94.58	2.36	0.74	0.74
53.70	133.30	44.11	2.12	93.64	2.35	0.74	0.74
53.74	131.60	43.33	2.16	93.68	2.36	0.73	0.73
53.81	128.56	41.79	2.28	95.31	2.38	0.73	0.73
53.91	123.20	39.05	2.53	98.94	2.43	0.73	0.73
53.94	117.66	36.59	2.78	101.56	2.47	0.73	0.73
54.01	109.88	33.04	3.26	107.86	2.54	0.72	0.72
54.09	91.28	26.46	4.71	124.55	2.70	1.06	1.89
54.16	80.64	23.23	5.67	131.66	2.79	1.08	1.66
54.21	72.68	20.81	6.56	136.58	2.85	1.09	1.49
54.29	67.76	19.30	7.21	139.24	2.90	1.09	1.38
54.34	68.75	19.58	7.04	137.91	2.89	1.08	1.40
54.45	77.42	22.13	5.83	128.97	2.80	1.02	1.58
54.50	93.07	26.78	4.35	116.60	2.67	0.96	1.91
54.56	109.34	32.32	3.34	107.97	2.55	0.72	0.72
54.59	117.48	35.63	2.94	104.58	2.49	0.73	0.73
54.69	137.68	44.05	2.26	99.68	2.38	0.75	0.75
54.73	141.53	46.02	2.09	96.24	2.34	0.75	0.75
54.79	143.50	47.94	1.84	88.35	2.28	0.74	0.74
54.86	143.94	48.08	1.83	88.14	2.27	0.74	0.74
54.94	145.28	48.52	1.82	88.52	2.27	0.74	0.74
55.01	145.73	48.30	1.87	90.52	2.29	0.74	0.74
55.07	146.27	48.03	1.94	93.31	2.30	0.75	0.75
55.13	147.25	47.92	2.01	96.43	2.32	0.75	0.75
55.18	155.74	51.20	1.92	98.45	2.30	0.76	0.76
55.26	168.26	56.19	1.80	101.07	2.26	0.78	0.78
55.33	187.13	64.46	1.60	103.41	2.20	0.79	0.79
55.40	205.99	72.86	1.48	107.83	2.14	0.81	0.81
55.46	219.32	78.81	1.42	111.93	2.10	0.82	0.82
55.52	232.64	84.91	1.37	116.59	2.07	0.83	0.83
55.60	249.72	93.16	1.32	123.01	2.02	0.84	0.84
55.66	254.99	95.73	1.31	125.08	2.00	0.85	0.85
55.73	262.23	99.33	1.29	128.06	1.98	0.85	0.85
55.81	265.45	100.86	1.28	129.30	1.97	0.85	0.85
55.86	268.13	102.06	1.28	130.44	1.96	0.85	0.85
55.91	268.94	102.27	1.28	130.71	1.96	0.85	0.85
56.02	269.74	102.52	1.28	130.80	1.96	0.85	0.85
56.07	269.74	102.49	1.27	130.66	1.96	0.85	0.85
56.12	268.76	101.99	1.28	130.07	1.96	0.85	0.85
56.17	265.27	100.37	1.28	128.28	1.96	0.85	0.85
56.26	259.73	98.13	1.28	125.34	1.96	0.84	0.84
56.30	254.90	95.96	1.28	122.95	1.97	0.84	0.84
56.37	250.61	93.94	1.29	120.79	1.97	0.83	0.83
56.45	250.88	94.23	1.28	120.63	1.96	0.83	0.83
56.51	253.11	95.49	1.27	121.46	1.95	0.83	0.83
56.58	255.89	96.92	1.26	122.55	1.94	0.84	0.84
56.66	255.97	96.78	1.26	122.42	1.94	0.84	0.84
56.71	254.81	96.02	1.27	121.79	1.95	0.83	0.83

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
56.78	252.67	94.42	1.28	120.75	1.96	0.83	0.83
56.84	250.61	93.15	1.29	119.75	1.97	0.83	0.83
56.91	248.02	91.55	1.29	118.52	1.98	0.83	0.83
57.00	250.61	92.52	1.29	119.52	1.98	0.83	0.83
57.05	248.64	91.41	1.30	118.56	1.99	0.83	0.83
57.11	250.61	92.25	1.29	119.30	1.98	0.83	0.83
57.19	250.97	92.06	1.30	119.36	1.99	0.83	0.83
57.23	251.50	92.06	1.30	119.59	1.99	0.84	0.84
57.30	255.71	93.45	1.30	121.48	1.99	0.84	0.84
57.40	265.54	97.72	1.29	125.70	1.97	0.85	0.85
57.43	269.83	99.65	1.28	127.56	1.96	0.85	0.85
57.50	282.71	105.74	1.26	133.28	1.94	0.86	0.86
57.58	293.71	110.95	1.24	138.10	1.91	0.87	0.87
57.63	300.59	114.29	1.23	141.10	1.90	0.87	0.87
57.69	308.37	117.70	1.23	144.50	1.89	0.88	0.88
57.77	312.30	118.74	1.23	146.22	1.89	0.88	0.88
57.83	315.25	119.64	1.23	147.50	1.89	0.88	0.88
57.89	315.79	119.42	1.24	147.67	1.90	0.88	0.88
57.95	313.20	117.65	1.24	146.40	1.91	0.88	0.88
58.01	316.19	118.78	1.24	147.63	1.91	0.88	0.88
58.08	316.61	118.64	1.24	147.67	1.91	0.89	0.89
58.17	322.51	121.07	1.24	150.12	1.90	0.89	0.89
58.21	326.35	122.78	1.24	151.77	1.90	0.89	0.89
58.27	331.54	125.29	1.23	153.90	1.89	0.89	0.89
58.35	334.67	126.93	1.22	154.96	1.88	0.90	0.90
58.41	332.25	125.62	1.22	153.72	1.88	0.89	0.89
58.47	332.52	125.77	1.22	153.64	1.88	0.89	0.89
58.56	330.02	124.75	1.22	152.19	1.88	0.89	0.89
58.60	326.89	123.27	1.22	150.69	1.88	0.89	0.89
58.67	318.93	119.34	1.23	146.99	1.89	0.88	0.88
58.73	308.29	114.46	1.24	141.99	1.91	0.88	0.88
58.80	301.05	111.16	1.25	138.53	1.91	0.87	0.87
58.87	293.27	107.70	1.25	134.81	1.92	0.86	0.86
58.94	279.41	101.03	1.27	128.39	1.95	0.85	0.85
59.01	268.86	95.91	1.29	123.58	1.98	0.85	0.85
59.06	261.35	92.20	1.30	120.30	2.00	0.84	0.84
59.16	256.34	89.19	1.33	118.33	2.02	0.84	0.84
59.21	255.90	88.57	1.34	118.28	2.03	0.84	0.84
59.26	257.95	89.16	1.34	119.16	2.03	0.84	0.84
59.34	253.84	86.14	1.38	118.45	2.07	0.84	0.84
59.40	247.13	82.66	1.41	116.67	2.09	0.84	0.84
59.46	238.81	78.67	1.46	114.56	2.12	0.84	0.84
59.55	223.25	71.71	1.55	110.93	2.17	0.82	0.82
59.60	216.90	68.98	1.59	109.45	2.19	0.82	0.82
59.67	197.05	60.45	1.78	107.52	2.26	0.80	0.80
59.72	179.80	53.27	2.03	107.88	2.33	0.79	0.79
59.79	160.48	42.39	1.00	42.39	-1.00	0.84	0.84
59.85	180.51	47.77	1.00	47.77	-1.00	0.87	0.87

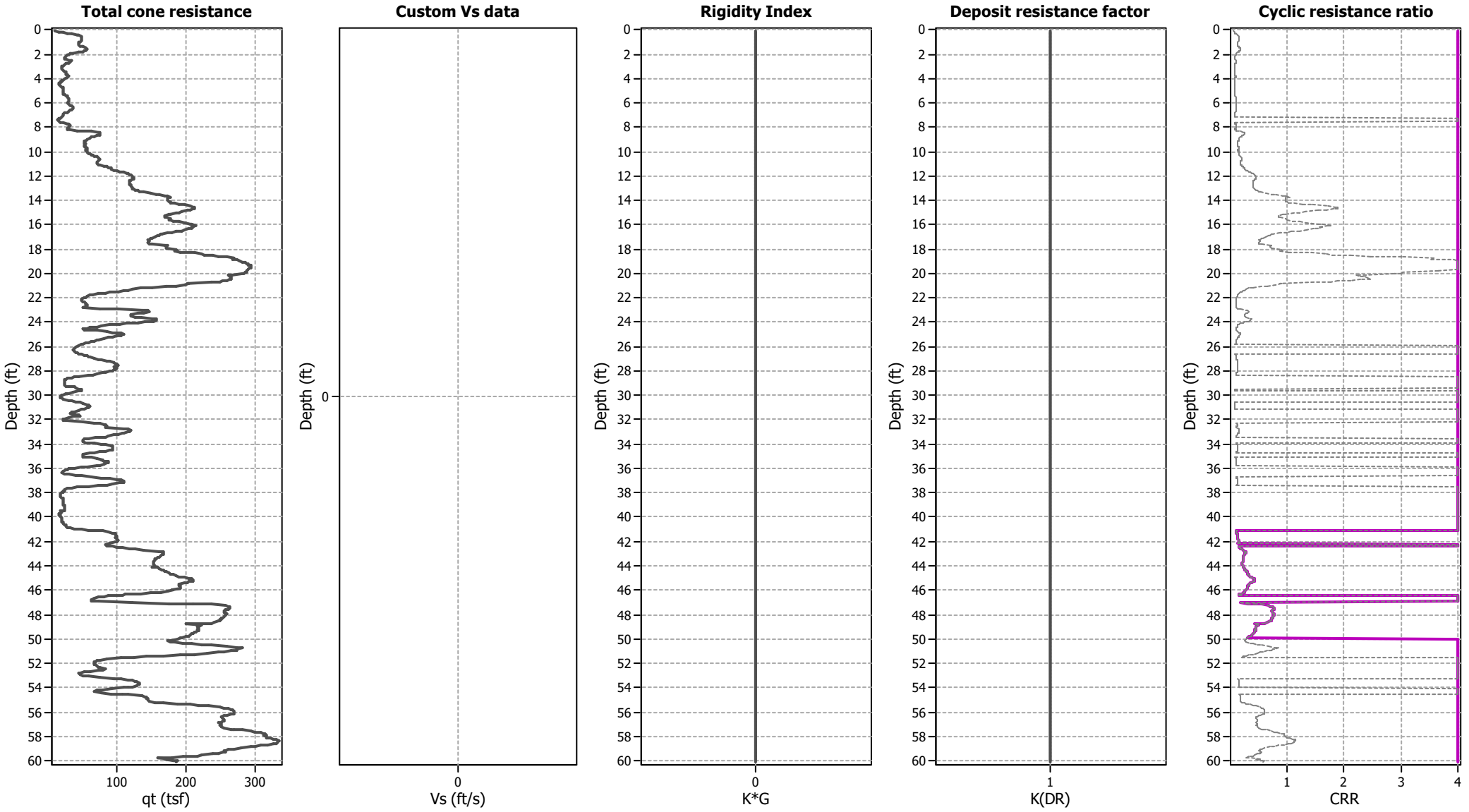
:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
59.91	170.23	44.96	1.00	44.96	-1.00	0.85	0.85
60.00	181.23	47.88	1.00	47.88	-1.00	0.87	0.87
60.04	187.93	49.66	1.00	49.66	-1.00	0.87	0.87
60.11	185.61	49.00	1.00	49.00	-1.00	0.87	0.87

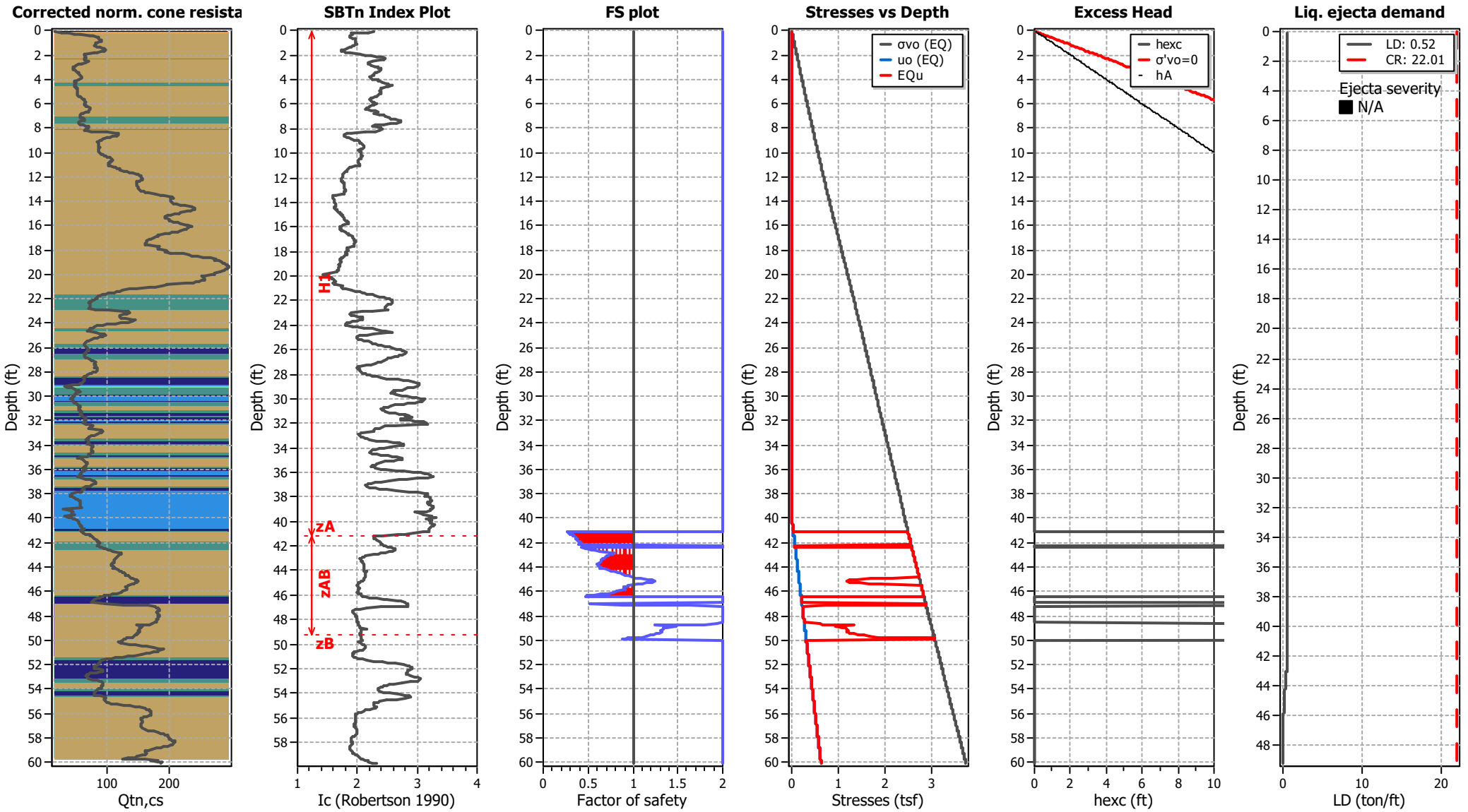
Abbreviations

q_t: Total cone resistance
K_c: Cone resistance correction factor due to fines
$Q_{tn,cs}$: Adjusted and corrected cone resistance due to fines
I_c: Soil behavior type index
$S_{u(liq)}/\sigma'_v$: Calculated liquefied undrained strength ratio
$S_{u(peak)}/\sigma'_v$: Calculated peak undrained strength ratio

Aging Calculation Estimation



Ejecta Severity Estimation



Kehoe Testing and Engineering
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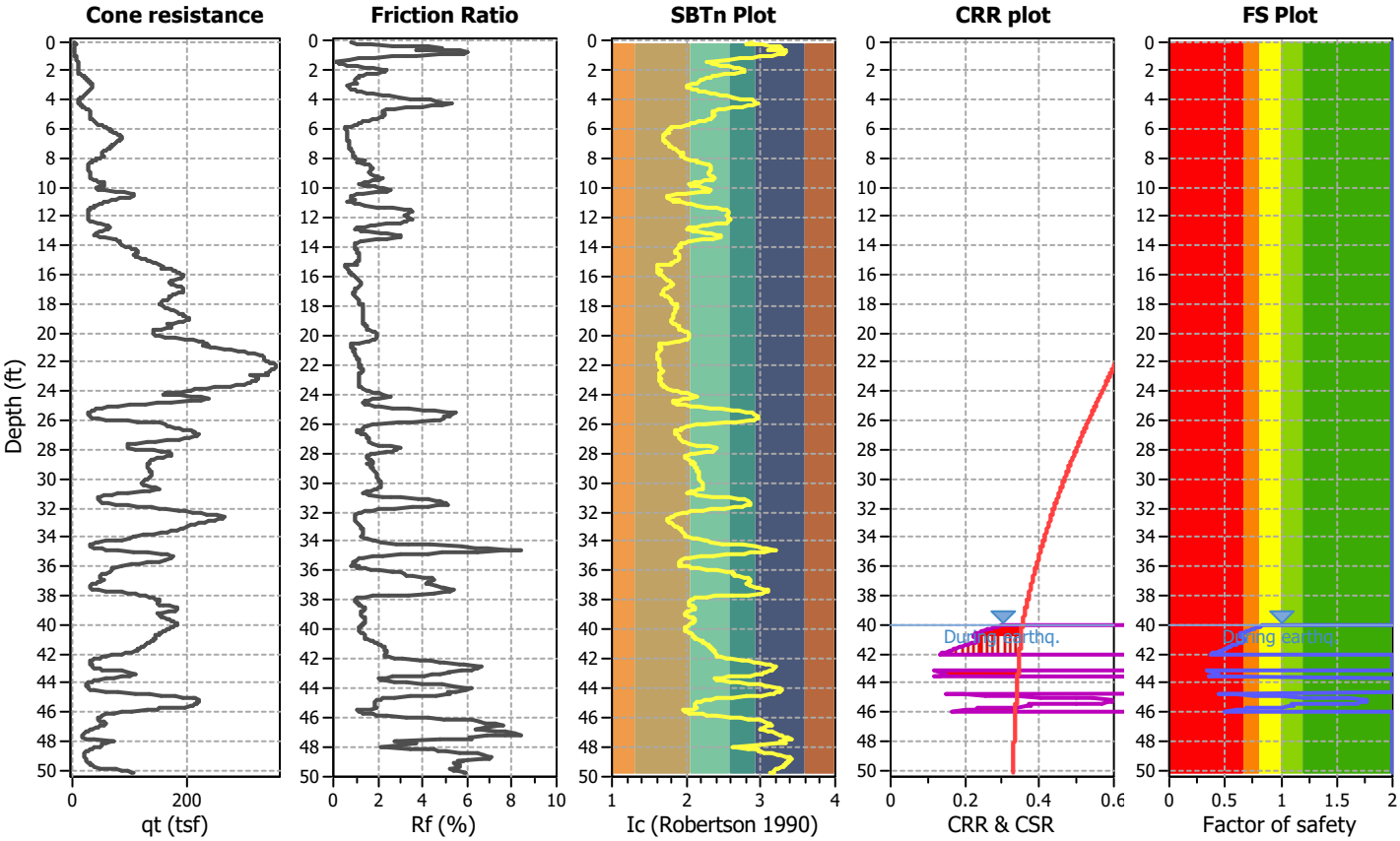
LIQUEFACTION ANALYSIS REPORT

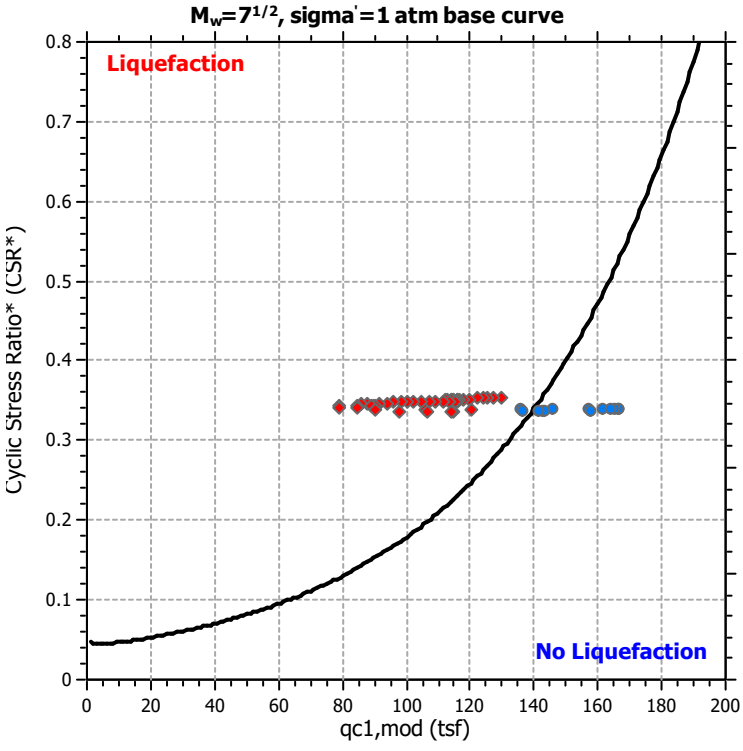
Project title : GeoSoils / Bradley Gardens **Location : 980 W. 7th St, San Jacinto, CA**

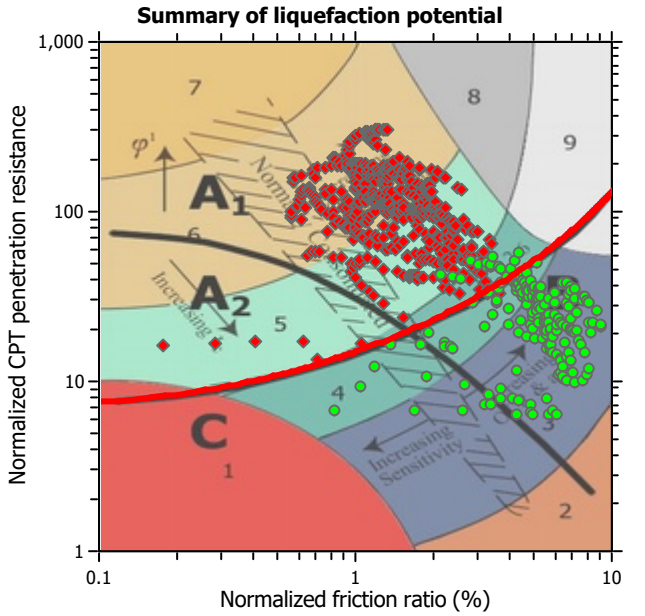
CPT file : CPT-4

Input parameters and analysis data

Analysis method:	Moss et al. (2006)	G.W.T. (in-situ):	100.00 ft	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	Moss et al. (2006)	G.W.T. (earthq.):	40.00 ft	Fill height:	N/A	Limit depth applied:	Yes
Points to test:	Based on Ic value	Average results interval:	1	Fill weight:	N/A	Limit depth:	50.00 ft
Earthquake magnitude M_w:	8.10	Ic cut-off value:	2.60	Trans. detect. applied:	No	MSF method:	Method based
Peak ground acceleration:	1.07	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		

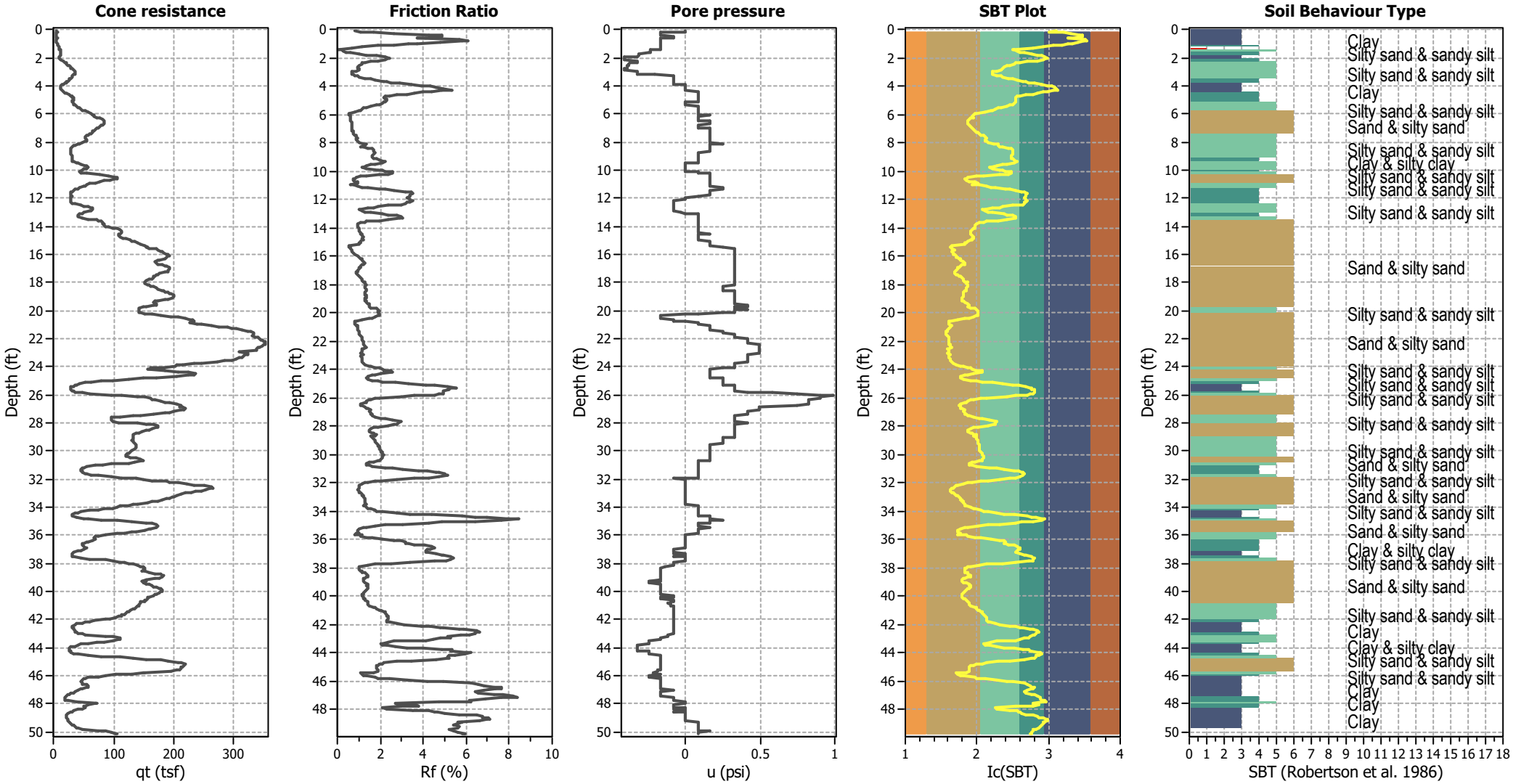






Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

CPT basic interpretation plots



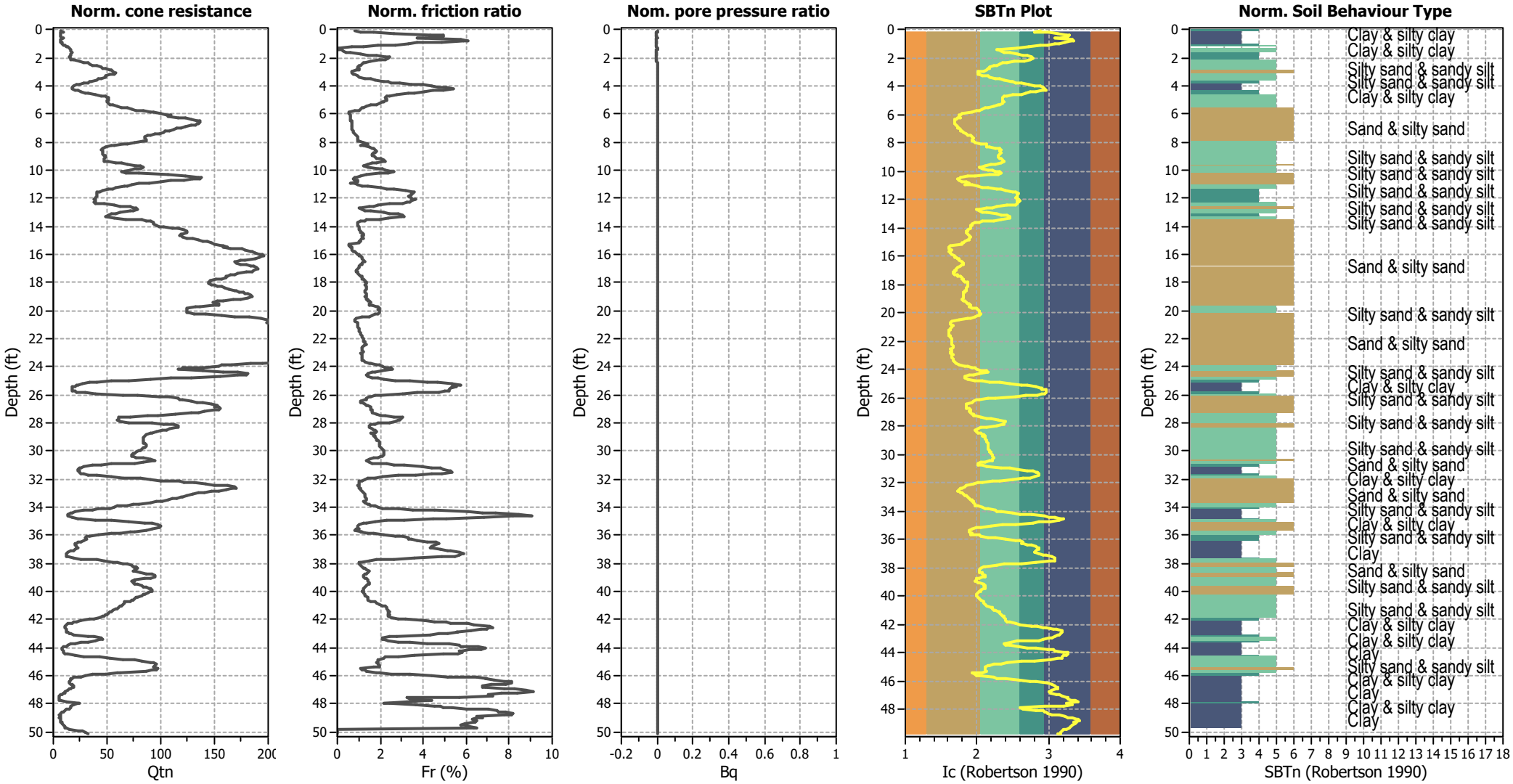
Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CPT basic interpretation plots (normalized)



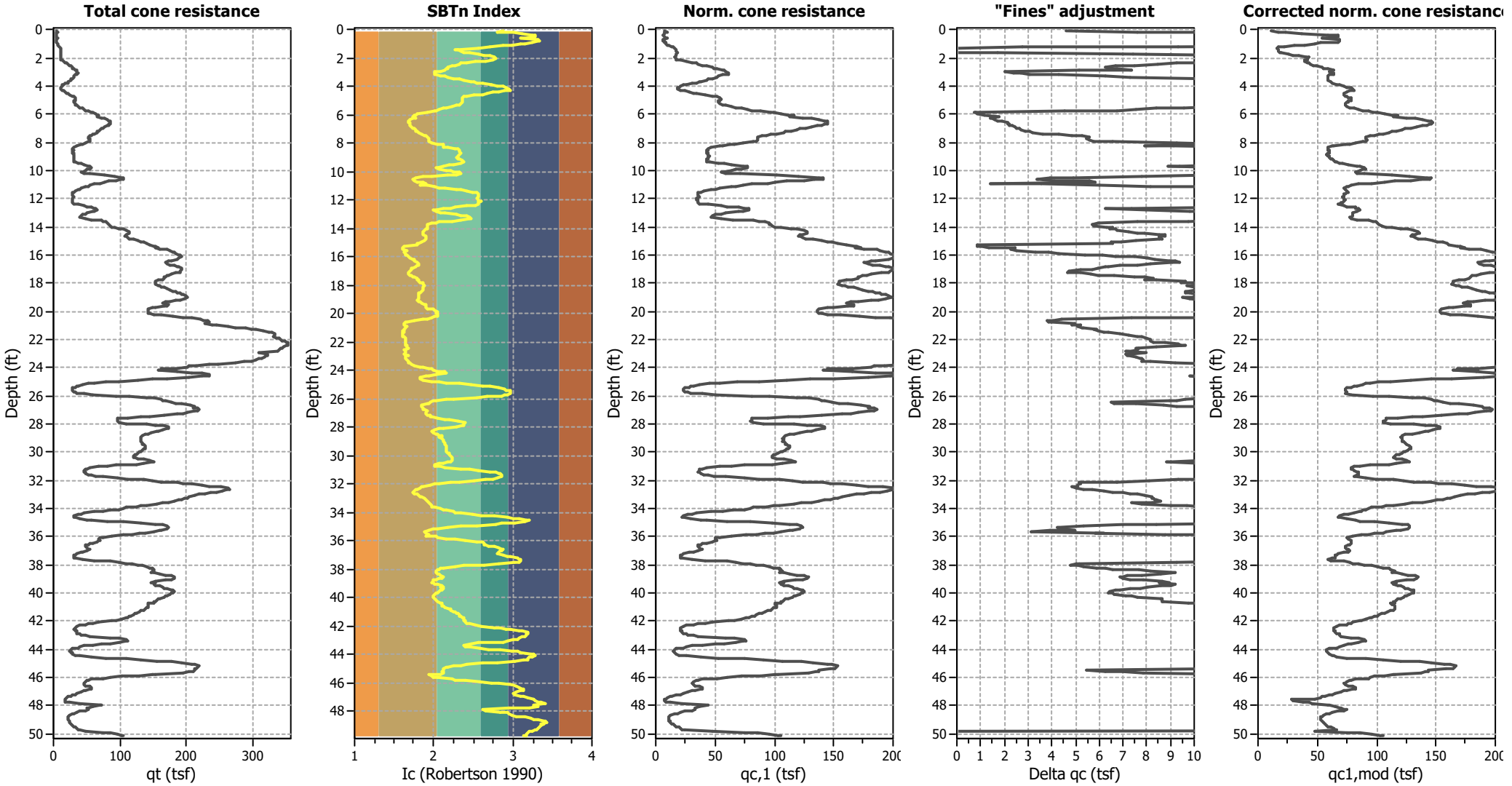
Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

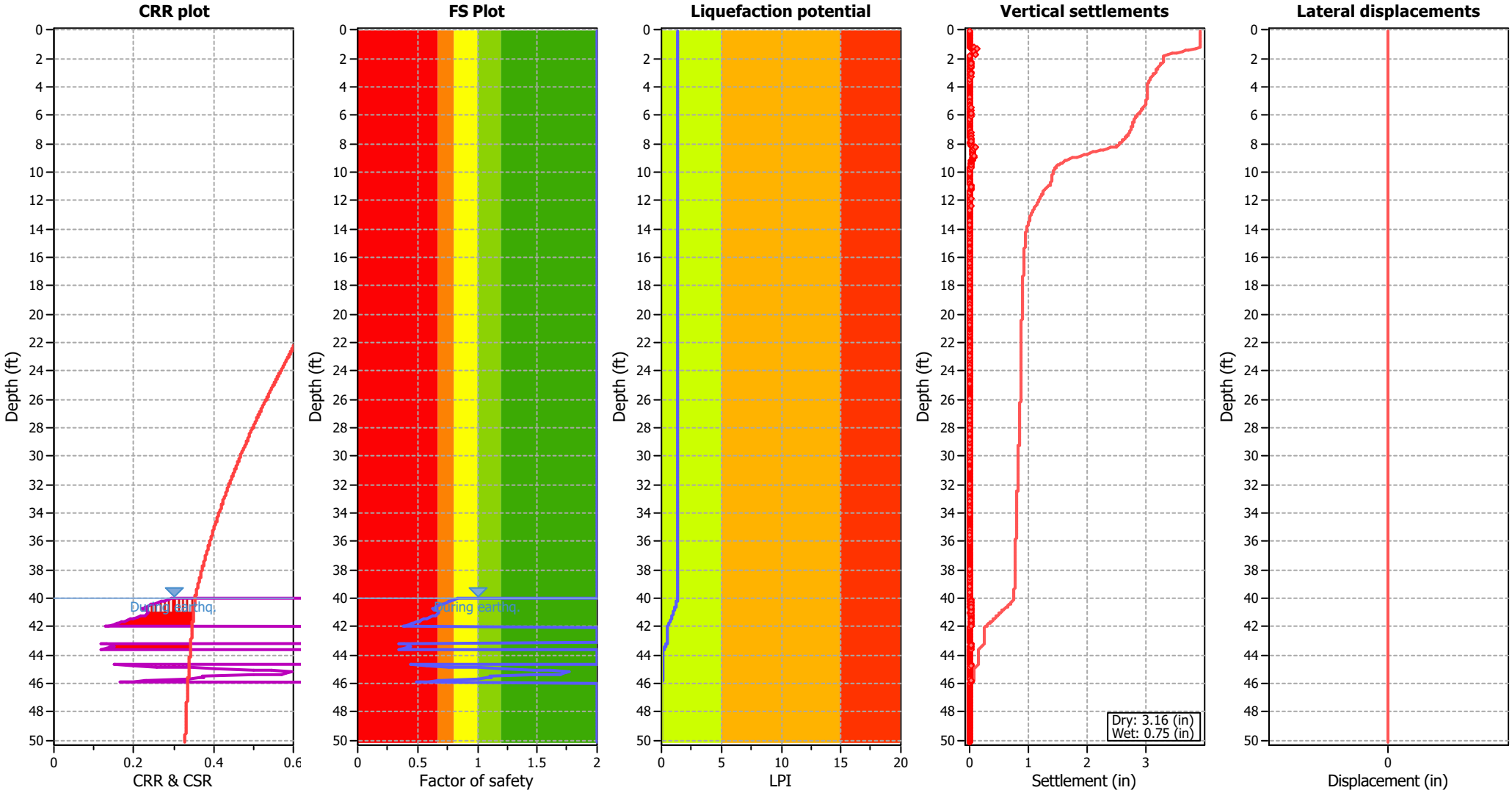
Liquefaction analysis overall plots (intermediate results)



Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

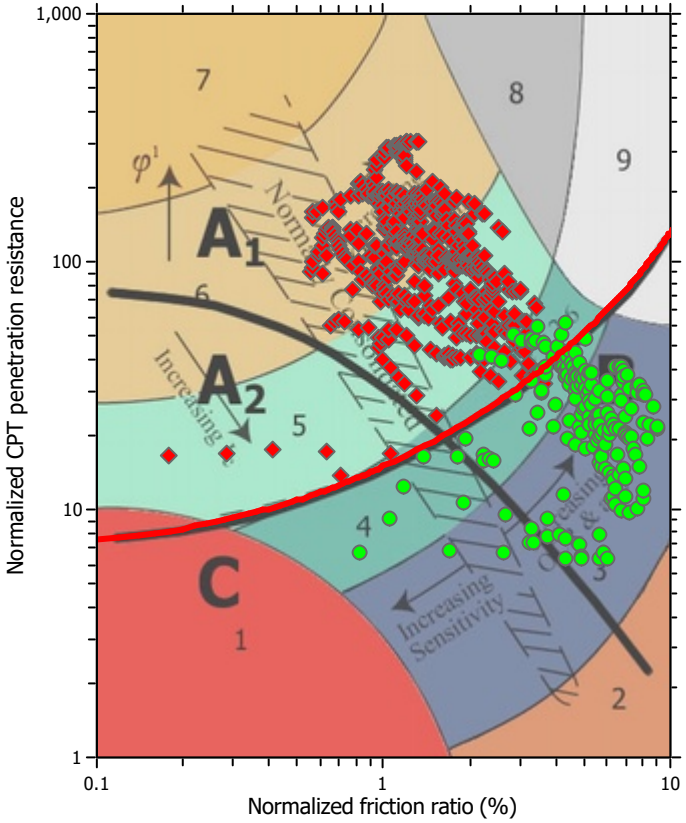
F.S. color scheme

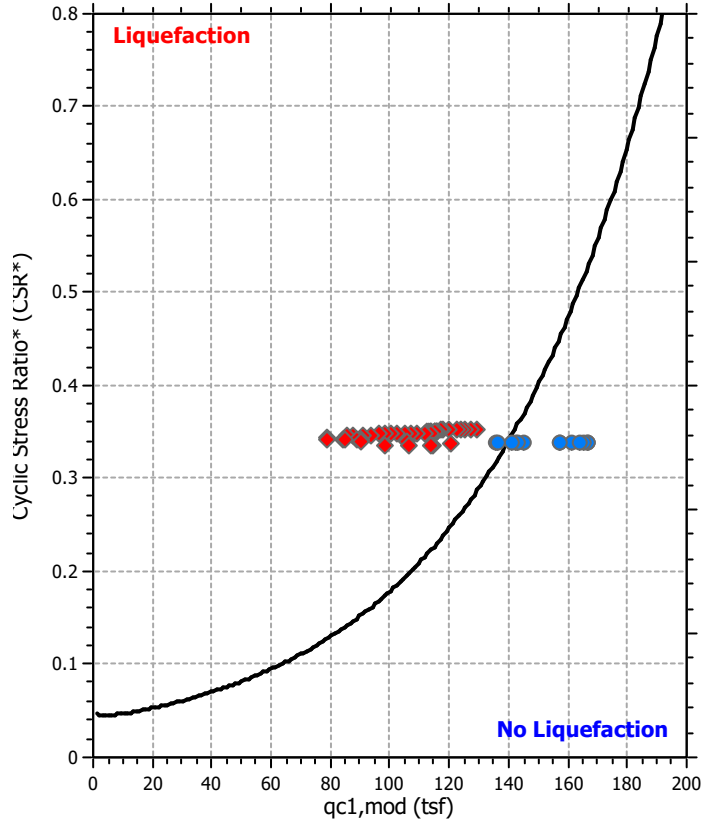
- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

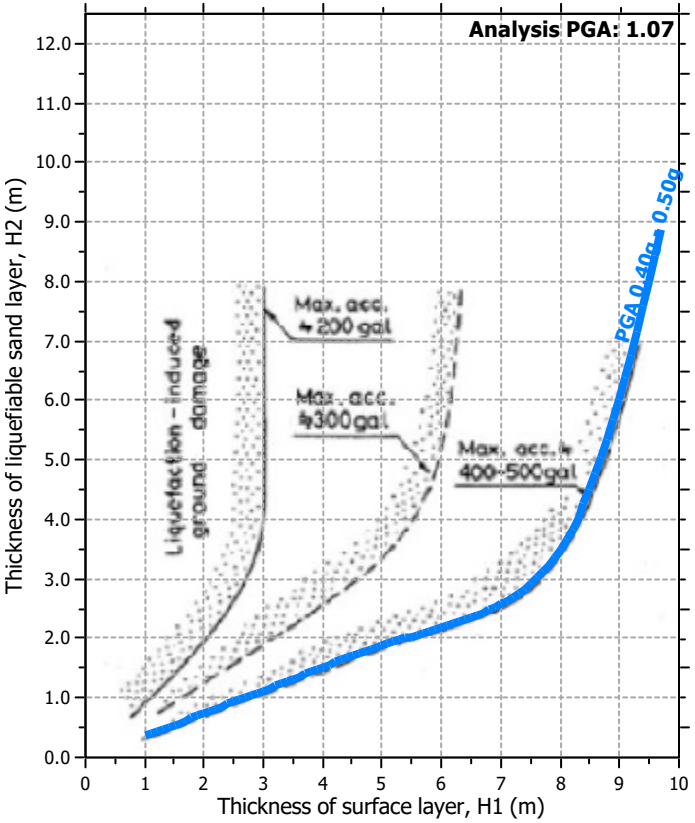
LPI color scheme

- Very high risk
- High risk
- Low risk

Liquefaction analysis summary plots



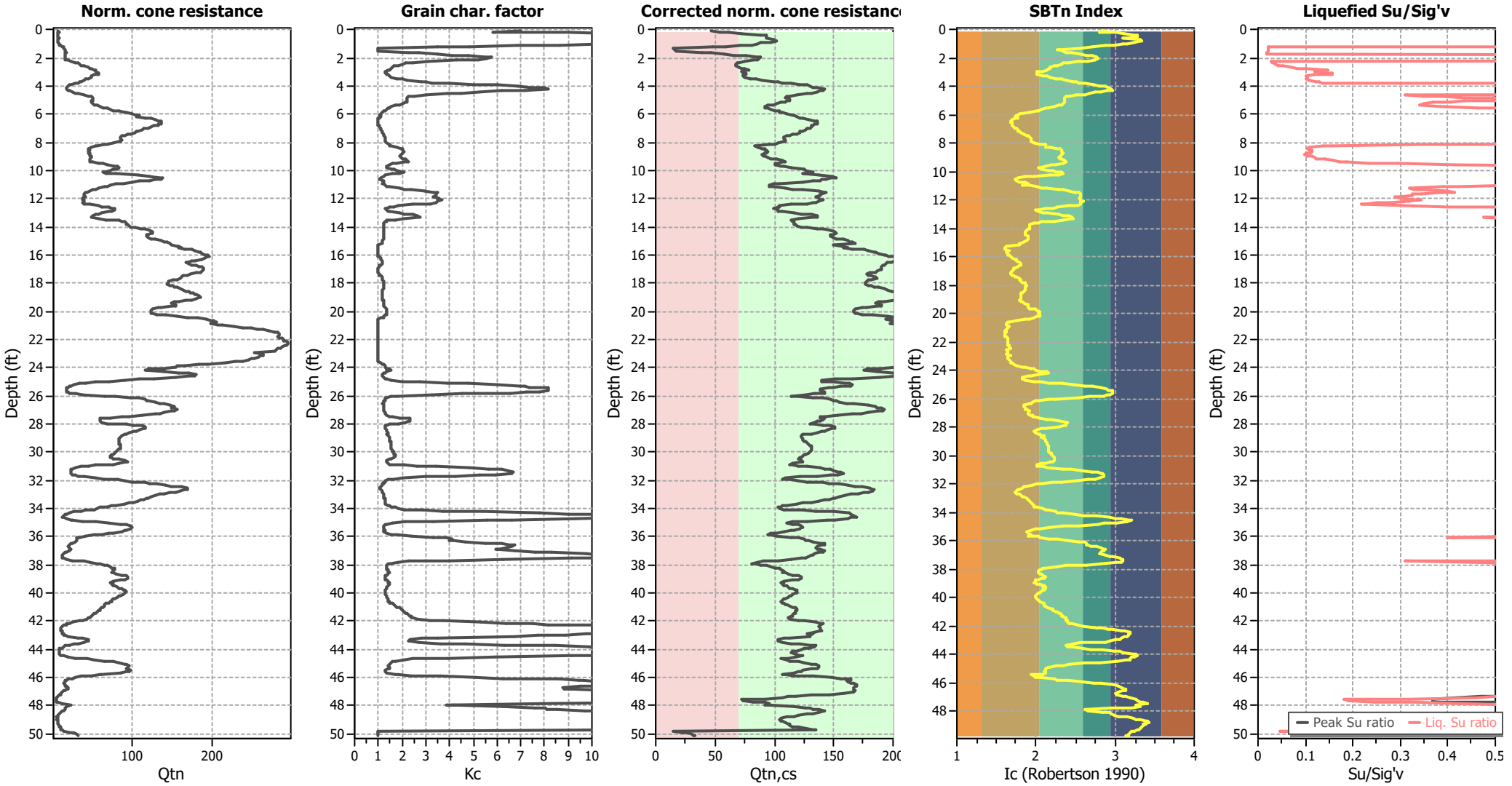




Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

Check for strength loss plots (Robertson (2010))



Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

:: Field input data ::

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
1	0.07	4.11	0.03	0.00	51.10	89.02
2	0.16	5.72	0.06	0.00	45.90	93.96
3	0.21	4.20	0.07	-0.17	59.51	94.48
4	0.27	4.11	0.11	-0.17	66.91	97.47
5	0.33	3.93	0.17	-0.17	77.13	100.58
6	0.41	3.93	0.19	-0.17	79.87	101.54
7	0.46	4.02	0.20	-0.08	79.16	101.74
8	0.54	4.92	0.20	-0.08	70.08	102.45
9	0.60	5.63	0.21	-0.17	64.72	103.05
10	0.66	3.93	0.22	-0.17	83.24	102.63
11	0.75	3.93	0.24	-0.17	84.70	103.10
12	0.81	4.11	0.24	-0.17	82.58	103.27
13	0.86	4.47	0.21	-0.17	76.06	102.68
14	0.95	4.83	0.18	-0.17	68.85	101.52
15	0.99	5.18	0.17	-0.17	64.89	101.35
16	1.05	5.90	0.16	-0.17	57.97	101.04
17	1.12	6.52	0.12	-0.17	50.47	99.50
18	1.19	7.60	0.09	-0.17	41.28	97.57
19	1.25	8.49	0.06	-0.17	33.95	94.83
20	1.35	9.47	0.00	-0.17	5.00	87.36
21	1.39	9.92	0.01	-0.17	5.00	87.36
22	1.44	10.19	0.02	-0.23	5.00	87.36
23	1.51	10.41	0.03	-0.23	5.00	90.10
24	1.58	10.81	0.04	-0.23	25.71	93.17
25	1.65	10.64	0.07	-0.25	28.99	96.20
26	1.73	10.46	0.11	-0.31	33.84	99.79
27	1.78	10.10	0.14	-0.31	37.50	101.50
28	1.84	10.01	0.18	-0.31	40.83	103.33
29	1.92	9.74	0.22	-0.33	44.23	104.63
30	1.98	9.65	0.23	-0.41	45.53	105.11
31	2.05	9.83	0.23	-0.41	44.79	105.09
32	2.12	10.37	0.23	-0.41	42.95	105.21
33	2.17	11.98	0.23	-0.41	38.29	105.58
34	2.24	14.92	0.23	-0.33	31.70	106.03
35	2.32	18.05	0.23	-0.33	26.91	106.65
36	2.37	20.02	0.24	-0.37	24.51	106.99
37	2.44	21.27	0.24	-0.38	23.23	107.24
38	2.51	23.06	0.24	-0.38	21.53	107.51
39	2.57	25.20	0.25	-0.39	19.91	107.97
40	2.66	27.97	0.27	-0.39	18.38	108.76
41	2.71	29.04	0.28	-0.39	18.05	109.24
42	2.76	30.56	0.30	-0.41	17.63	109.89
43	2.85	32.89	0.34	-0.41	17.14	110.93
44	2.90	33.78	0.30	-0.41	15.56	109.95
45	2.96	34.50	0.22	-0.33	13.31	107.93

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
46	3.06	35.75	0.24	-0.33	13.22	108.60
47	3.11	36.02	0.25	-0.33	13.34	108.91
48	3.16	35.84	0.26	-0.33	13.64	109.14
49	3.22	33.16	0.27	-0.21	15.24	109.23
50	3.30	30.83	0.30	-0.08	17.25	109.70
51	3.36	30.39	0.31	-0.08	18.03	110.13
52	3.44	28.33	0.36	-0.08	20.72	111.02
53	3.50	26.27	0.40	-0.08	23.32	111.53
54	3.55	25.11	0.44	-0.08	25.27	112.04
55	3.65	22.43	0.49	-0.08	29.45	112.60
56	3.70	21.63	0.50	-0.08	30.80	112.73
57	3.74	20.55	0.51	-0.08	32.56	112.79
58	3.81	18.05	0.52	-0.08	36.57	112.55
59	3.88	15.28	0.52	-0.08	42.05	112.19
60	3.94	13.41	0.52	0.00	46.65	111.89
61	4.01	11.98	0.52	0.00	50.65	111.52
62	4.09	11.35	0.52	0.00	52.97	111.48
63	4.15	10.90	0.54	0.00	55.15	111.60
64	4.23	11.08	0.59	0.00	56.04	112.25
65	4.29	12.51	0.61	0.00	51.86	112.80
66	4.34	14.21	0.63	0.00	47.53	113.32
67	4.42	16.35	0.65	0.08	43.14	113.92
68	4.47	18.59	0.66	0.08	39.15	114.37
69	4.54	20.55	0.67	0.08	36.26	114.75
70	4.60	24.75	0.68	0.08	30.92	115.26
71	4.68	28.24	0.68	0.08	27.43	115.60
72	4.73	30.21	0.68	0.08	25.73	115.77
73	4.80	31.55	0.69	0.08	24.84	115.98
74	4.87	32.08	0.72	0.08	24.88	116.31
75	4.92	32.17	0.73	0.08	25.01	116.44
76	4.99	31.99	0.72	0.08	25.06	116.37
77	5.08	31.19	0.70	0.08	25.24	116.02
78	5.13	31.19	0.68	0.08	24.92	115.82
79	5.18	31.19	0.65	0.00	24.45	115.51
80	5.25	32.08	0.62	0.00	23.24	115.21
81	5.32	32.89	0.59	0.00	22.24	114.97
82	5.39	34.76	0.55	0.00	20.22	114.51
83	5.48	37.62	0.50	0.08	17.70	113.99
84	5.53	39.77	0.48	0.08	16.37	113.90
85	5.59	42.81	0.48	0.08	15.01	114.08
86	5.67	45.31	0.48	0.08	14.01	114.22
87	5.72	47.99	0.48	0.08	13.03	114.36
88	5.78	52.28	0.44	0.08	11.02	113.87
89	5.87	56.93	0.32	0.08	8.00	111.72
90	5.91	58.54	0.33	0.08	7.83	112.05

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
91	5.98	62.29	0.35	0.08	7.38	112.69
92	6.07	65.69	0.39	0.08	7.19	113.51
93	6.12	68.28	0.40	0.17	6.93	113.90
94	6.17	66.40	0.42	0.08	7.51	114.18
95	6.23	72.66	0.44	0.08	6.63	114.73
96	6.32	77.21	0.47	0.08	6.24	115.34
97	6.37	80.52	0.50	0.08	6.04	115.87
98	6.44	83.56	0.52	0.08	5.88	116.35
99	6.51	84.99	0.55	0.17	5.88	116.68
100	6.56	85.17	0.56	0.17	5.99	116.89
101	6.65	84.81	0.56	0.17	6.03	116.86
102	6.71	83.56	0.55	0.17	6.15	116.75
103	6.76	82.58	0.55	0.08	6.23	116.64
104	6.84	79.89	0.54	0.08	6.52	116.41
105	6.91	77.04	0.53	0.08	6.84	116.17
106	6.96	74.62	0.51	0.08	7.10	115.92
107	7.03	71.67	0.50	0.17	7.46	115.62
108	7.10	70.06	0.49	0.17	7.67	115.46
109	7.17	67.56	0.48	0.17	8.03	115.23
110	7.25	65.51	0.48	0.17	8.38	115.08
111	7.29	64.70	0.48	0.17	8.52	115.02
112	7.36	61.93	0.48	0.17	9.15	114.95
113	7.45	59.52	0.49	0.17	9.84	115.00
114	7.50	57.11	0.49	0.17	10.49	114.96
115	7.55	55.14	0.49	0.17	11.02	114.88
116	7.63	53.35	0.49	0.17	11.49	114.75
117	7.69	53.26	0.49	0.17	11.45	114.68
118	7.75	53.62	0.49	0.17	11.37	114.72
119	7.85	54.25	0.50	0.17	11.34	114.91
120	7.88	53.98	0.50	0.17	11.50	114.99
121	7.94	52.46	0.52	0.17	12.18	115.16
122	8.04	47.63	0.57	0.17	14.50	115.59
123	8.09	43.34	0.60	0.25	16.62	115.69
124	8.14	41.20	0.54	0.17	16.70	114.81
125	8.23	35.75	0.39	0.17	16.79	112.13
126	8.27	34.23	0.41	0.17	17.98	112.32
127	8.34	30.47	0.44	0.17	21.12	112.60
128	8.41	28.96	0.47	0.17	22.83	112.89
129	8.47	28.78	0.48	0.17	23.33	113.13
130	8.53	28.60	0.49	0.17	23.64	113.23
131	8.60	29.31	0.50	0.17	23.25	113.42
132	8.68	28.87	0.51	0.17	23.87	113.56
133	8.74	29.31	0.50	0.08	23.32	113.46
134	8.80	28.78	0.48	0.08	23.35	113.13
135	8.88	29.31	0.47	0.08	22.67	113.00

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
136	8.95	29.85	0.48	0.08	22.55	113.25
137	9.01	30.65	0.51	0.08	22.39	113.64
138	9.07	30.56	0.52	0.08	22.82	113.89
139	9.14	30.21	0.55	0.08	23.58	114.21
140	9.20	30.16	0.60	0.08	24.53	114.82
141	9.26	30.16	0.64	0.08	25.32	115.34
142	9.34	30.12	0.67	0.08	25.82	115.63
143	9.39	32.35	0.67	0.08	24.12	115.84
144	9.48	37.27	0.66	0.08	20.82	116.05
145	9.52	41.11	0.65	0.00	18.80	116.17
146	9.58	46.02	0.63	0.00	16.55	116.25
147	9.67	52.91	0.64	0.00	14.38	116.72
148	9.71	55.59	0.65	0.00	13.74	116.96
149	9.78	56.93	0.79	0.00	14.76	118.37
150	9.88	54.69	1.04	0.00	17.84	120.30
151	9.93	50.76	1.05	0.00	19.45	120.24
152	9.98	47.90	1.06	0.00	20.71	120.14
153	10.07	42.54	1.09	0.00	23.56	120.03
154	10.11	41.82	1.08	0.08	23.95	119.97
155	10.18	45.31	1.07	0.08	22.14	120.08
156	10.24	54.34	1.05	0.17	18.38	120.41
157	10.32	77.48	1.02	0.17	12.17	121.06
158	10.37	90.89	1.00	0.17	9.73	121.24
159	10.47	103.49	0.90	0.17	7.56	120.84
160	10.52	105.99	0.85	0.17	6.96	120.43
161	10.57	105.45	0.80	0.17	6.73	120.00
162	10.66	100.18	0.76	0.17	7.10	119.52
163	10.72	94.02	0.77	0.17	7.90	119.41
164	10.77	83.74	0.78	0.17	9.45	119.21
165	10.83	76.23	0.72	0.17	10.31	118.46
166	10.90	68.90	0.42	0.17	8.66	114.22
167	10.97	60.59	0.47	0.17	10.99	114.73
168	11.04	55.14	0.53	0.17	13.21	115.42
169	11.10	51.83	0.58	0.17	14.91	115.96
170	11.17	48.97	0.69	0.17	17.30	117.08
171	11.25	42.09	0.83	0.25	22.04	118.06
172	11.30	39.77	0.90	0.25	24.10	118.47
173	11.36	36.73	0.96	0.25	26.75	118.76
174	11.46	32.89	1.03	0.17	30.54	119.04
175	11.51	30.47	1.04	0.17	32.73	118.91
176	11.55	28.78	1.01	0.17	33.98	118.55
177	11.62	28.78	0.98	0.17	33.65	118.33
178	11.69	28.78	0.97	0.17	33.57	118.24
179	11.75	28.78	0.97	0.17	33.67	118.25
180	11.85	29.58	0.95	0.08	32.77	118.19

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
181	11.88	29.40	0.95	0.08	32.88	118.12
182	11.95	28.33	0.95	0.00	34.08	118.07
183	12.04	29.22	0.98	0.00	33.73	118.38
184	12.07	28.06	0.99	0.00	35.03	118.34
185	12.14	29.04	0.98	-0.08	33.96	118.33
186	12.23	29.04	0.95	-0.08	33.63	118.10
187	12.28	28.78	0.92	-0.08	33.51	117.84
188	12.34	29.94	0.89	-0.08	32.11	117.73
189	12.42	36.10	0.86	-0.08	26.86	117.90
190	12.48	45.13	0.84	-0.08	21.58	118.29
191	12.54	49.69	0.84	-0.08	19.60	118.51
192	12.62	57.82	0.84	-0.08	16.72	118.87
193	12.69	61.22	0.66	-0.08	13.86	117.22
194	12.73	64.34	0.63	-0.08	12.83	117.09
195	12.81	64.52	0.72	-0.08	13.77	118.07
196	12.89	61.22	0.77	-0.08	15.19	118.42
197	12.93	58.98	0.90	-0.08	17.15	119.46
198	13.01	50.31	1.07	-0.03	22.04	120.32
199	13.06	47.54	1.14	0.00	23.98	120.62
200	13.13	43.34	1.21	0.08	26.96	120.86
201	13.19	41.20	1.23	0.08	28.49	120.85
202	13.26	39.86	1.21	0.08	29.18	120.64
203	13.32	40.04	1.17	0.08	28.75	120.44
204	13.41	47.37	1.12	0.08	24.14	120.49
205	13.47	56.21	1.08	0.08	20.11	120.68
206	13.56	71.14	0.97	0.08	14.75	120.48
207	13.59	74.98	0.95	0.08	13.65	120.40
208	13.66	79.36	0.87	0.08	12.16	119.93
209	13.75	81.68	0.79	0.08	11.09	119.27
210	13.81	82.13	0.78	0.08	10.96	119.20
211	13.86	83.11	0.79	0.08	10.89	119.32
212	13.91	84.90	0.81	0.08	10.76	119.56
213	13.99	87.76	0.88	0.08	10.82	120.22
214	14.04	92.23	0.94	0.08	10.56	120.84
215	14.12	99.65	1.00	0.08	9.92	121.52
216	14.19	105.10	1.08	0.08	9.68	122.19
217	14.25	110.19	1.14	0.08	9.38	122.68
218	14.34	113.41	1.21	0.08	9.42	123.22
219	14.40	113.85	1.25	0.08	9.59	123.45
220	14.45	113.59	1.27	0.08	9.77	123.59
221	14.54	110.46	1.30	0.17	10.32	123.65
222	14.60	108.85	1.30	0.08	10.54	123.61
223	14.65	108.40	1.29	0.08	10.59	123.57
224	14.71	109.57	1.28	0.08	10.43	123.56
225	14.77	111.62	1.31	0.08	10.30	123.74

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
226	14.83	114.75	1.36	0.08	10.19	124.08
227	14.90	120.56	1.42	0.08	9.79	124.50
228	14.98	126.99	1.39	0.08	8.99	124.51
229	15.04	131.46	1.38	0.17	8.48	124.52
230	15.10	135.57	1.38	0.17	8.09	124.58
231	15.17	139.68	1.43	0.17	7.94	124.91
232	15.24	144.15	0.82	0.17	4.71	120.91
233	15.34	151.30	0.86	0.17	4.45	121.38
234	15.37	152.91	0.89	0.17	4.53	121.70
235	15.44	157.47	0.96	0.25	4.56	122.30
236	15.53	153.53	1.07	0.25	5.36	123.05
237	15.56	160.42	1.10	0.33	5.02	123.35
238	15.63	170.78	1.16	0.33	4.66	123.92
239	15.69	174.62	1.22	0.33	4.68	124.34
240	15.77	179.54	1.37	0.33	4.97	125.25
241	15.83	181.86	1.47	0.33	5.19	125.78
242	15.88	184.54	1.55	0.33	5.33	126.22
243	15.97	188.66	1.76	0.33	5.78	127.19
244	16.03	191.07	1.90	0.33	6.07	127.77
245	16.08	193.03	2.00	0.33	6.27	128.17
246	16.15	192.14	2.11	0.33	6.66	128.56
247	16.23	189.46	2.16	0.33	7.01	128.71
248	16.28	186.06	2.18	0.33	7.27	128.71
249	16.38	176.86	2.16	0.33	7.88	128.52
250	16.42	173.11	2.15	0.33	8.13	128.43
251	16.47	169.44	2.12	0.33	8.35	128.30
252	16.54	168.01	2.07	0.33	8.30	128.08
253	16.62	171.05	1.98	0.33	7.80	127.81
254	16.68	175.16	1.94	0.33	7.40	127.73
255	16.75	181.51	1.91	0.33	6.87	127.69
256	16.82	186.42	1.89	0.33	6.51	127.69
257	16.87	189.28	1.90	0.33	6.37	127.76
258	16.97	193.21	1.89	0.33	6.12	127.77
259	17.01	193.66	1.86	0.33	6.00	127.64
260	17.07	193.30	1.78	0.33	5.81	127.34
261	17.15	191.43	1.69	0.33	5.63	126.92
262	17.19	190.00	1.67	0.33	5.65	126.80
263	17.26	185.17	1.70	0.33	6.08	126.91
264	17.34	177.57	1.70	0.33	6.57	126.78
265	17.40	174.18	1.71	0.33	6.84	126.78
266	17.46	170.42	1.77	0.33	7.32	126.96
267	17.54	168.10	1.86	0.33	7.85	127.32
268	17.60	167.74	1.92	0.33	8.08	127.52
269	17.65	167.48	1.96	0.33	8.27	127.69
270	17.75	163.99	1.88	0.33	8.28	127.32

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
271	17.81	158.45	1.88	0.33	8.75	127.23
272	17.85	153.53	1.97	0.33	9.55	127.52
273	17.92	153.18	1.94	0.33	9.49	127.40
274	18.00	153.18	2.02	0.33	9.79	127.69
275	18.05	152.82	2.03	0.33	9.88	127.72
276	18.15	156.93	2.05	0.33	9.58	127.84
277	18.18	159.79	2.06	0.33	9.38	127.93
278	18.25	162.20	2.13	0.25	9.43	128.22
279	18.31	166.58	2.22	0.25	9.37	128.59
280	18.39	171.05	2.30	0.25	9.26	128.91
281	18.45	175.25	2.32	0.25	9.01	129.03
282	18.54	180.97	2.34	0.25	8.65	129.17
283	18.58	183.74	2.37	0.33	8.52	129.29
284	18.64	187.31	2.42	0.33	8.43	129.49
285	18.74	191.52	2.50	0.33	8.39	129.80
286	18.79	193.21	2.57	0.33	8.47	130.01
287	18.84	196.16	2.64	0.33	8.46	130.24
288	18.91	199.65	2.67	0.33	8.33	130.37
289	18.97	201.70	2.65	0.33	8.17	130.36
290	19.04	201.97	2.59	0.33	8.00	130.19
291	19.12	198.31	2.60	0.33	8.28	130.16
292	19.18	191.96	2.61	0.33	8.75	130.10
293	19.24	185.26	2.55	0.33	9.11	129.86
294	19.33	174.89	2.52	0.33	9.87	129.64
295	19.36	169.08	2.51	0.33	10.34	129.52
296	19.43	165.69	2.50	0.33	10.64	129.45
297	19.53	172.39	2.55	0.33	10.22	129.69
298	19.57	172.21	2.58	0.41	10.33	129.76
299	19.63	166.49	2.64	0.41	11.03	129.84
300	19.72	154.07	2.76	0.33	12.69	129.99
301	19.76	149.60	2.78	0.41	13.26	129.97
302	19.83	141.83	2.76	0.33	14.13	129.77
303	19.92	141.87	2.71	0.41	14.00	129.65
304	19.97	141.87	2.71	0.33	14.03	129.66
305	20.02	141.92	2.73	0.33	14.09	129.70
306	20.09	142.63	2.80	0.33	14.28	129.91
307	20.17	145.22	2.84	0.25	14.10	130.04
308	20.22	151.21	2.85	0.08	13.46	130.18
309	20.28	163.45	2.85	0.00	12.16	130.37
310	20.37	179.90	2.86	-0.17	10.68	130.62
311	20.42	194.73	2.87	-0.17	9.54	130.84
312	20.49	208.50	2.33	-0.17	7.18	129.48
313	20.56	220.83	1.91	-0.17	5.34	128.19
314	20.61	226.91	1.90	-0.08	5.01	128.20
315	20.67	232.09	1.90	-0.08	4.77	128.24

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
316	20.75	234.05	1.92	-0.08	4.77	128.37
317	20.80	235.84	1.97	0.00	4.81	128.54
318	20.88	228.42	2.10	0.08	5.53	128.94
319	20.95	238.97	2.17	0.08	5.22	129.30
320	21.00	246.66	2.31	0.08	5.24	129.84
321	21.09	264.17	2.45	0.17	4.82	130.42
322	21.16	275.70	2.61	0.17	4.72	130.98
323	21.21	290.09	2.75	0.17	4.49	131.50
324	21.31	299.11	2.98	0.17	4.64	132.18
325	21.33	306.44	3.02	0.17	4.45	132.31
326	21.40	315.47	3.15	0.17	4.40	132.71
327	21.48	325.75	3.34	0.25	4.40	133.20
328	21.54	330.12	3.43	0.25	4.43	133.45
329	21.61	333.79	3.61	0.25	4.61	133.84
330	21.66	333.79	3.70	0.33	4.76	134.02
331	21.75	332.81	3.80	0.33	4.96	134.20
332	21.80	332.98	3.85	0.33	5.05	134.31
333	21.89	336.74	3.95	0.33	5.09	134.52
334	21.94	341.56	4.01	0.33	5.03	134.66
335	22.00	343.35	4.09	0.41	5.09	134.81
336	22.05	345.41	4.13	0.41	5.10	134.90
337	22.13	349.79	4.17	0.41	5.04	135.01
338	22.20	352.56	4.25	0.41	5.08	135.17
339	22.25	353.09	4.40	0.41	5.28	135.42
340	22.34	353.90	4.57	0.41	5.51	135.71
341	22.39	353.81	4.63	0.49	5.59	135.79
342	22.45	351.75	4.66	0.49	5.71	135.82
343	22.53	348.18	4.23	0.49	5.23	135.10
344	22.59	344.69	3.94	0.49	4.91	134.56
345	22.64	342.19	3.95	0.49	5.01	134.55
346	22.72	339.96	3.92	0.49	5.04	134.48
347	22.78	338.44	3.83	0.49	4.97	134.30
348	22.84	338.53	3.76	0.49	4.86	134.17
349	22.92	310.64	3.67	0.49	5.69	133.79
350	22.98	322.08	3.62	0.49	5.20	133.77
351	23.03	323.96	3.60	0.49	5.10	133.73
352	23.11	323.69	3.61	0.41	5.15	133.77
353	23.17	320.83	3.60	0.41	5.24	133.72
354	23.23	318.24	3.65	0.41	5.42	133.80
355	23.31	313.95	3.66	0.41	5.60	133.79
356	23.38	310.29	3.64	0.41	5.71	133.72
357	23.43	304.66	3.58	0.41	5.83	133.56
358	23.51	297.95	3.50	0.41	5.95	133.33
359	23.56	286.96	3.46	0.41	6.33	133.15
360	23.63	273.91	3.55	0.41	7.09	133.23

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
361	23.73	247.91	3.64	0.33	8.62	133.17
362	23.76	234.77	3.70	0.33	9.53	133.15
363	23.83	214.66	3.82	0.33	11.19	133.17
364	23.91	205.28	4.05	0.33	12.44	133.48
365	23.96	202.33	4.18	0.33	13.00	133.69
366	24.04	184.10	4.09	0.33	14.51	133.30
367	24.12	161.40	4.04	0.25	16.91	132.88
368	24.17	184.95	4.04	0.17	14.33	133.22
369	24.22	157.02	4.01	0.17	17.43	132.76
370	24.29	185.80	3.80	0.17	13.70	132.79
371	24.35	207.87	3.66	0.17	11.46	132.79
372	24.41	224.31	3.65	0.17	10.24	132.94
373	24.49	236.11	3.29	0.17	8.70	132.32
374	24.55	234.05	3.29	0.17	8.83	132.28
375	24.61	225.12	3.05	0.17	8.84	131.65
376	24.69	205.19	2.86	0.17	9.72	130.94
377	24.76	172.03	2.81	0.17	12.42	130.39
378	24.80	148.80	2.77	0.25	14.91	129.93
379	24.90	126.28	2.68	0.25	17.88	129.29
380	24.95	99.56	2.66	0.25	23.21	128.66
381	25.01	78.73	2.63	0.25	29.26	127.99
382	25.07	61.22	2.51	0.25	36.29	127.05
383	25.14	51.92	2.37	0.25	40.94	126.21
384	25.20	42.90	2.21	0.25	46.83	125.23
385	25.27	37.00	2.04	0.25	51.19	124.29
386	25.34	34.50	1.83	0.33	52.01	123.31
387	25.40	32.71	1.67	0.33	52.56	122.53
388	25.46	28.87	1.51	0.33	55.94	121.49
389	25.54	27.70	1.37	0.33	55.96	120.69
390	25.60	27.79	1.37	0.33	55.89	120.70
391	25.68	29.67	1.47	0.33	54.49	121.37
392	25.73	31.99	1.52	0.33	52.08	121.80
393	25.79	35.21	1.59	0.41	49.11	122.35
394	25.87	46.65	1.67	0.58	39.49	123.39
395	25.94	59.52	1.76	0.74	32.39	124.38
396	25.99	95.09	1.87	0.91	20.67	125.97
397	26.05	113.05	1.98	0.99	17.47	126.80
398	26.13	139.77	2.13	0.91	14.03	127.86
399	26.18	152.10	2.21	0.91	12.85	128.34
400	26.28	161.85	2.20	0.91	11.76	128.45
401	26.32	164.97	2.19	0.82	11.42	128.46
402	26.38	168.73	2.19	0.82	11.05	128.51
403	26.48	178.38	1.93	0.82	9.28	127.73
404	26.53	185.35	2.02	0.82	9.05	128.16
405	26.59	193.12	2.26	0.82	9.26	129.09

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
406	26.68	205.64	2.64	0.82	9.47	130.35
407	26.73	213.05	2.83	0.74	9.48	130.95
408	26.77	211.89	2.98	0.74	9.98	131.32
409	26.85	210.73	3.21	0.49	10.66	131.85
410	26.91	216.54	3.29	0.49	10.45	132.09
411	26.97	219.93	3.34	0.49	10.34	132.24
412	27.04	217.52	3.39	0.49	10.65	132.32
413	27.11	212.70	3.37	0.49	11.00	132.24
414	27.20	201.79	3.26	0.41	11.58	131.86
415	27.25	194.38	3.14	0.41	11.89	131.49
416	27.31	185.89	3.04	0.41	12.40	131.15
417	27.36	166.49	2.98	0.41	14.19	130.73
418	27.46	144.51	2.94	0.33	16.86	130.29
419	27.51	132.26	2.92	0.33	18.69	130.03
420	27.56	111.62	2.90	0.33	22.52	129.55
421	27.63	95.98	2.85	0.33	26.21	129.06
422	27.71	95.67	2.82	0.33	26.20	128.99
423	27.76	95.67	2.74	0.33	25.84	128.77
424	27.84	95.36	2.66	0.33	25.57	128.54
425	27.90	98.13	2.61	0.33	24.61	128.48
426	27.95	109.21	2.60	0.41	21.92	128.71
427	28.05	139.68	2.64	0.41	16.63	129.41
428	28.09	154.34	2.65	0.33	14.73	129.70
429	28.15	167.30	2.62	0.33	13.16	129.82
430	28.25	172.84	2.57	0.33	12.42	129.74
431	28.30	173.55	2.56	0.33	12.33	129.73
432	28.35	171.23	2.56	0.33	12.58	129.70
433	28.45	163.63	2.61	0.33	13.59	129.73
434	28.50	159.08	2.65	0.33	14.27	129.77
435	28.55	154.70	2.67	0.33	14.89	129.76
436	28.61	147.81	2.68	0.33	15.81	129.66
437	28.69	141.74	2.49	0.33	15.98	129.04
438	28.74	138.34	2.12	0.33	14.91	127.78
439	28.84	133.87	2.20	0.33	15.96	127.99
440	28.89	132.62	2.23	0.33	16.30	128.07
441	28.94	132.18	2.26	0.33	16.51	128.15
442	29.03	132.18	2.31	0.33	16.75	128.31
443	29.08	131.82	2.33	0.25	16.90	128.36
444	29.14	132.22	2.35	0.25	16.95	128.44
445	29.21	131.46	2.40	0.25	17.31	128.58
446	29.27	132.26	2.48	0.25	17.53	128.83
447	29.37	133.78	2.56	0.25	17.66	129.10
448	29.41	134.14	2.58	0.25	17.70	129.16
449	29.47	135.12	2.63	0.25	17.73	129.30
450	29.56	137.27	2.67	0.17	17.58	129.45

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
451	29.59	137.98	2.68	0.17	17.55	129.51
452	29.67	138.16	2.71	0.17	17.65	129.59
453	29.77	137.89	2.76	0.17	17.90	129.70
454	29.81	136.46	2.77	0.17	18.18	129.71
455	29.87	134.23	2.78	0.17	18.61	129.70
456	29.97	131.46	2.77	0.17	19.07	129.63
457	29.99	129.94	2.76	0.17	19.31	129.58
458	30.07	127.71	2.72	0.17	19.57	129.43
459	30.13	124.85	2.65	0.17	19.82	129.19
460	30.21	122.52	2.60	0.17	20.04	128.99
461	30.27	121.36	2.56	0.17	20.13	128.86
462	30.34	121.63	2.50	0.17	19.83	128.69
463	30.40	122.97	2.43	0.17	19.29	128.51
464	30.46	127.35	2.37	0.17	18.27	128.42
465	30.53	136.55	2.28	0.17	16.40	128.29
466	30.59	145.13	2.14	0.17	14.60	127.97
467	30.66	150.58	2.03	0.17	13.45	127.67
468	30.71	148.53	1.98	0.08	13.49	127.45
469	30.79	135.66	1.97	0.08	15.25	127.23
470	30.85	125.47	2.03	0.08	17.12	127.24
471	30.94	95.27	2.14	0.08	24.21	126.94
472	30.99	80.97	2.10	0.08	28.49	126.42
473	31.05	68.46	2.09	0.08	33.51	125.96
474	31.11	55.32	2.11	0.08	41.07	125.53
475	31.19	49.60	2.09	0.08	45.09	125.19
476	31.25	47.01	2.16	0.08	47.68	125.31
477	31.30	46.38	2.21	0.08	48.59	125.43
478	31.38	46.02	2.30	0.08	49.66	125.71
479	31.45	47.37	2.39	0.08	49.31	126.07
480	31.50	47.81	2.45	0.08	49.41	126.27
481	31.58	51.74	2.43	0.08	46.33	126.40
482	31.64	55.68	2.37	0.08	43.15	126.38
483	31.70	62.65	2.22	0.08	37.86	126.21
484	31.77	75.34	2.09	0.08	30.92	126.20
485	31.85	96.61	1.98	0.08	23.29	126.41
486	31.89	112.60	1.95	0.08	19.42	126.67
487	31.98	136.73	1.90	-0.08	15.07	126.96
488	32.03	150.23	1.91	0.00	13.31	127.22
489	32.09	163.36	1.87	0.00	11.67	127.28
490	32.18	187.49	1.86	0.00	9.39	127.56
491	32.23	194.64	1.94	0.00	9.14	127.98
492	32.29	208.14	2.07	0.00	8.59	128.60
493	32.35	222.97	2.21	0.00	8.06	129.25
494	32.42	235.48	2.33	0.00	7.66	129.77
495	32.49	252.46	2.44	0.00	7.02	130.28

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
496	32.58	264.71	2.61	0.00	6.84	130.88
497	32.63	266.05	2.69	0.00	6.99	131.12
498	32.69	262.21	2.75	0.00	7.33	131.24
499	32.75	254.61	2.78	0.00	7.84	131.27
500	32.83	246.74	2.80	0.00	8.33	131.23
501	32.88	237.45	2.78	0.00	8.87	131.09
502	32.94	228.87	2.75	0.00	9.35	130.93
503	33.01	220.65	2.72	0.00	9.85	130.76
504	33.08	213.32	2.70	0.00	10.33	130.61
505	33.17	205.19	2.65	0.00	10.84	130.38
506	33.23	201.08	2.60	0.00	11.06	130.21
507	33.28	198.04	2.57	0.00	11.22	130.09
508	33.34	193.03	2.52	0.00	11.51	129.88
509	33.41	187.85	2.46	0.00	11.79	129.63
510	33.48	181.77	2.42	0.00	12.23	129.42
511	33.54	173.64	2.25	0.00	12.44	128.77
512	33.62	163.54	1.98	0.00	12.48	127.71
513	33.66	156.13	1.96	0.00	13.25	127.52
514	33.76	139.86	1.92	0.00	15.22	127.10
515	33.81	132.26	1.91	0.00	16.31	126.91
516	33.87	125.38	1.91	0.08	17.46	126.78
517	33.93	109.65	1.92	0.08	20.60	126.50
518	33.99	105.54	1.94	0.08	21.68	126.49
519	34.07	99.65	2.07	0.08	23.94	126.83
520	34.15	84.99	2.37	0.08	30.23	127.42
521	34.20	74.35	2.52	0.08	35.45	127.54
522	34.26	60.23	2.63	0.08	43.78	127.33
523	34.34	45.94	2.66	0.08	54.47	126.77
524	34.41	40.48	2.59	0.08	59.40	126.27
525	34.46	36.02	2.50	0.08	63.95	125.71
526	34.55	31.28	2.47	0.08	70.64	125.29
527	34.58	30.03	2.53	0.08	73.26	125.36
528	34.66	31.82	2.43	0.17	69.45	125.20
529	34.72	38.96	2.51	0.17	60.68	125.94
530	34.80	50.67	2.46	0.17	49.40	126.43
531	34.85	57.46	2.45	0.17	44.68	126.71
532	34.94	80.07	2.41	0.25	32.73	127.40
533	34.98	105.99	2.38	0.17	24.37	128.00
534	35.05	131.46	2.27	0.17	18.54	128.17
535	35.15	153.44	2.04	0.17	14.28	127.76
536	35.19	163.63	1.95	0.08	12.68	127.58
537	35.25	170.51	1.75	0.08	11.13	126.91
538	35.35	173.91	1.60	0.08	10.16	126.31
539	35.38	173.46	1.60	0.08	10.18	126.27
540	35.44	171.50	1.60	0.17	10.40	126.27

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
541	35.54	162.56	1.62	0.08	11.40	126.20
542	35.57	160.33	1.43	0.08	10.72	125.27
543	35.64	151.93	1.23	0.08	10.56	124.04
544	35.72	138.79	1.55	0.08	13.99	125.51
545	35.77	130.48	1.41	0.08	14.40	124.67
546	35.84	117.79	1.62	0.08	17.81	125.42
547	35.90	104.92	1.72	0.08	21.19	125.61
548	35.97	87.04	1.81	0.00	26.72	125.49
549	36.06	73.55	1.95	0.00	32.94	125.65
550	36.11	68.90	2.05	0.00	35.88	125.84
551	36.17	67.47	2.15	0.00	37.38	126.14
552	36.25	69.89	2.23	0.00	36.79	126.50
553	36.30	68.55	2.27	0.00	37.78	126.58
554	36.37	64.88	2.32	0.00	40.19	126.62
555	36.45	58.54	2.37	0.00	44.36	126.52
556	36.51	53.89	2.38	0.00	47.47	126.33
557	36.56	51.30	2.32	0.00	49.00	126.05
558	36.61	48.71	2.20	0.00	50.08	125.51
559	36.70	48.71	2.12	0.00	49.47	125.23
560	36.75	50.22	2.12	0.00	48.33	125.31
561	36.85	52.55	2.18	0.00	47.14	125.62
562	36.90	54.34	2.24	0.00	46.39	125.91
563	36.95	54.51	2.29	0.00	46.71	126.10
564	37.01	49.78	2.28	-0.08	50.12	125.84
565	37.09	44.59	2.17	-0.08	53.71	125.21
566	37.16	40.30	2.00	-0.08	56.43	124.34
567	37.25	33.69	1.78	-0.08	62.24	123.07
568	37.30	31.55	1.71	0.00	64.58	122.63
569	37.35	30.74	1.66	-0.08	65.24	122.34
570	37.43	30.56	1.60	0.00	64.86	122.06
571	37.48	30.83	1.57	-0.08	64.02	121.91
572	37.55	33.25	1.51	0.00	59.83	121.81
573	37.63	44.59	1.50	0.00	47.73	122.52
574	37.68	60.06	1.50	0.00	36.83	123.25
575	37.74	85.70	1.51	0.00	25.71	124.16
576	37.80	97.77	1.41	0.00	21.44	123.96
577	37.88	110.46	1.13	-0.08	16.52	122.66
578	37.93	117.61	1.19	-0.08	15.63	123.17
579	38.00	126.28	1.25	-0.08	14.60	123.69
580	38.08	133.78	1.36	-0.08	14.19	124.46
581	38.13	139.86	1.46	-0.08	13.91	125.07
582	38.20	144.60	1.59	-0.14	14.02	125.79
583	38.27	150.14	1.71	-0.14	13.94	126.43
584	38.33	151.66	1.78	-0.17	14.07	126.72
585	38.40	149.07	1.91	-0.17	15.08	127.22

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
586	38.46	151.70	2.03	-0.17	15.28	127.68
587	38.53	147.01	2.11	-0.17	16.36	127.92
588	38.60	151.75	2.19	-0.17	16.03	128.24
589	38.67	159.25	2.19	-0.17	15.07	128.38
590	38.72	168.46	2.19	-0.17	13.96	128.51
591	38.80	178.11	2.20	-0.17	12.97	128.69
592	38.85	181.51	2.21	-0.17	12.65	128.75
593	38.91	183.03	2.20	-0.17	12.49	128.76
594	38.98	181.69	2.21	-0.17	12.68	128.77
595	39.05	177.48	2.22	-0.17	13.15	128.73
596	39.11	168.01	2.19	-0.17	14.11	128.51
597	39.20	153.44	2.14	-0.17	15.74	128.11
598	39.25	148.08	2.11	-0.25	16.37	127.91
599	39.31	153.85	2.12	-0.17	15.62	128.04
600	39.39	150.32	2.17	-0.25	16.39	128.18
601	39.44	154.25	2.21	-0.17	16.01	128.36
602	39.51	159.34	2.21	-0.17	15.36	128.45
603	39.60	164.71	2.19	-0.17	14.60	128.44
604	39.65	167.74	2.17	-0.17	14.20	128.45
605	39.70	171.94	2.16	-0.17	13.67	128.46
606	39.79	177.04	2.14	-0.17	13.07	128.48
607	39.84	179.72	2.14	-0.17	12.77	128.49
608	39.90	181.42	2.12	-0.17	12.54	128.45
609	39.99	180.97	2.11	-0.17	12.55	128.40
610	40.03	178.83	2.11	-0.17	12.78	128.37
611	40.10	175.79	2.09	-0.17	13.06	128.28
612	40.20	171.32	2.12	-0.17	13.70	128.32
613	40.24	169.08	2.13	-0.17	14.02	128.33
614	40.30	166.40	2.15	-0.08	14.41	128.34
615	40.39	160.50	2.24	-0.17	15.56	128.56
616	40.44	158.18	2.20	-0.08	15.72	128.40
617	40.50	156.48	2.19	-0.17	15.88	128.32
618	40.59	153.89	2.15	-0.08	16.11	128.17
619	40.63	152.37	2.14	-0.08	16.29	128.11
620	40.69	151.30	2.29	-0.08	17.11	128.57
621	40.76	143.70	2.45	-0.10	19.00	128.93
622	40.83	143.70	2.53	-0.10	19.40	129.19
623	40.88	143.70	2.61	-0.12	19.74	129.41
624	40.97	143.61	2.79	-0.10	20.53	129.89
625	41.02	142.36	2.88	-0.10	21.15	130.11
626	41.08	139.86	3.02	-0.08	22.17	130.40
627	41.16	137.54	3.09	-0.08	22.93	130.54
628	41.23	135.39	3.06	-0.08	23.23	130.42
629	41.28	132.53	3.01	-0.08	23.60	130.24
630	41.35	128.87	2.96	-0.08	24.20	130.07

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
631	41.42	125.74	2.92	-0.08	24.69	129.90
632	41.47	122.43	2.88	-0.08	25.28	129.74
633	41.57	119.57	2.81	-0.08	25.64	129.49
634	41.62	117.25	2.75	-0.08	25.96	129.30
635	41.68	114.39	2.68	-0.08	26.34	129.05
636	41.75	112.25	2.58	-0.08	26.41	128.73
637	41.81	109.30	2.53	-0.08	26.94	128.52
638	41.87	103.85	2.53	-0.08	28.49	128.39
639	41.94	93.84	2.61	-0.08	32.12	128.36
640	42.01	86.69	2.67	-0.08	35.15	128.33
641	42.11	68.01	2.65	-0.08	43.70	127.68
642	42.16	59.43	2.58	-0.08	48.26	127.16
643	42.21	51.57	2.47	-0.08	53.18	126.52
644	42.26	47.01	2.33	-0.08	55.93	125.84
645	42.33	38.52	2.18	-0.08	63.60	124.89
646	42.39	35.30	2.07	-0.08	66.74	124.29
647	42.48	31.82	2.07	-0.08	71.98	124.04
648	42.55	31.37	2.07	-0.08	72.77	124.00
649	42.60	32.26	2.08	-0.08	71.46	124.10
650	42.66	32.89	2.11	-0.08	70.81	124.25
651	42.74	34.14	2.11	-0.08	68.97	124.34
652	42.78	34.59	1.98	-0.08	67.06	123.92
653	42.85	35.84	1.84	-0.08	63.88	123.45
654	42.94	38.61	2.02	-0.08	62.37	124.34
655	42.98	41.47	1.99	-0.08	58.85	124.39
656	43.05	47.19	2.09	-0.08	54.26	125.07
657	43.12	53.62	2.20	-0.12	50.05	125.76
658	43.18	85.44	2.27	-0.12	33.74	127.12
659	43.25	97.68	2.30	-0.12	29.64	127.55
660	43.33	110.37	2.28	-0.17	25.85	127.77
661	43.38	111.62	2.27	-0.17	25.48	127.75
662	43.45	108.58	2.27	-0.17	26.31	127.69
663	43.51	99.65	2.28	-0.25	28.96	127.51
664	43.58	84.99	2.32	-0.25	34.43	127.26
665	43.64	73.10	2.38	-0.25	40.24	127.07
666	43.71	58.54	2.34	-0.25	48.00	126.43
667	43.77	45.76	2.24	-0.25	57.24	125.50
668	43.84	39.32	2.09	-0.33	62.72	124.62
669	43.90	36.10	1.91	-0.33	64.97	123.74
670	43.99	28.60	1.70	-0.33	74.41	122.34
671	44.03	25.92	1.60	-0.33	78.47	121.66
672	44.10	24.84	1.48	-0.33	79.15	120.98
673	44.18	25.47	1.40	-0.33	76.58	120.63
674	44.24	26.81	1.39	-0.33	73.71	120.71
675	44.29	27.61	1.41	-0.25	72.49	120.89

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
676	44.38	28.78	1.50	-0.25	71.72	121.46
677	44.44	32.26	1.66	-0.25	67.96	122.45
678	44.49	39.95	1.83	-0.25	59.85	123.70
679	44.57	57.82	1.98	-0.17	46.14	125.17
680	44.64	79.63	2.20	-0.17	36.39	126.71
681	44.69	110.28	2.41	-0.17	27.10	128.17
682	44.78	132.62	2.79	-0.17	23.82	129.70
683	44.83	155.68	3.00	-0.17	20.54	130.63
684	44.91	178.47	3.35	-0.17	18.52	131.76
685	44.95	192.23	3.54	-0.17	17.43	132.34
686	45.03	208.23	3.80	-0.17	16.45	133.06
687	45.08	213.86	3.95	-0.17	16.31	133.41
688	45.18	219.93	4.13	-0.17	16.21	133.81
689	45.22	220.02	4.14	-0.17	16.23	133.82
690	45.28	217.61	4.14	-0.17	16.47	133.79
691	45.35	215.56	4.14	-0.17	16.72	133.78
692	45.41	214.04	3.56	-0.17	15.28	132.65
693	45.48	212.52	2.29	-0.17	11.44	129.42
694	45.55	210.19	2.44	-0.17	12.16	129.83
695	45.61	205.01	2.54	-0.19	13.00	130.08
696	45.67	195.45	2.60	-0.19	14.15	130.12
697	45.74	152.91	2.72	-0.22	20.12	129.86
698	45.80	148.62	2.85	-0.22	21.42	130.14
699	45.87	129.23	3.12	-0.22	26.40	130.46
700	45.94	103.76	3.38	-0.17	34.59	130.51
701	46.01	85.61	3.61	-0.25	42.37	130.52
702	46.06	74.18	3.64	-0.17	47.73	130.24
703	46.16	57.37	3.55	-0.25	57.66	129.42
704	46.21	52.37	3.44	-0.17	61.09	128.98
705	46.26	50.67	3.30	-0.17	61.76	128.59
706	46.34	47.63	3.27	-0.17	64.41	128.35
707	46.41	46.11	3.36	-0.17	66.59	128.48
708	46.46	45.04	3.43	-0.17	68.22	128.58
709	46.55	46.65	3.56	-0.17	67.37	128.93
710	46.59	48.80	3.61	-0.17	65.53	129.14
711	46.66	53.80	3.65	-0.17	61.33	129.47
712	46.74	57.73	3.69	-0.17	58.47	129.72
713	46.80	57.46	3.69	-0.17	58.70	129.71
714	46.85	55.50	3.64	-0.17	59.98	129.52
715	46.93	48.53	3.54	-0.17	65.59	128.99
716	46.98	45.40	3.50	-0.17	68.55	128.73
717	47.05	41.47	3.39	-0.08	72.46	128.29
718	47.13	35.57	2.97	-0.17	77.55	126.96
719	47.20	32.80	2.51	-0.17	78.04	125.52
720	47.25	29.13	2.00	-0.17	79.43	123.58

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)
721	47.33	25.02	1.55	-0.17	82.37	121.35
722	47.39	22.16	1.36	-0.17	86.52	120.05
723	47.44	20.02	1.24	-0.17	90.83	119.15
724	47.53	18.14	0.86	-0.08	88.81	116.25
725	47.57	18.14	0.49	-0.08	77.39	112.17
726	47.64	18.14	0.51	-0.08	78.16	112.45
727	47.72	18.14	0.66	-0.08	83.34	114.34
728	47.79	23.86	0.89	-0.08	73.63	117.19
729	47.84	38.79	1.16	0.00	54.98	120.26
730	47.94	72.30	1.51	0.00	35.89	123.75
731	47.98	70.51	1.63	0.00	37.93	124.23
732	48.07	58.45	2.04	-0.08	47.86	125.40
733	48.13	52.28	2.22	-0.08	53.76	125.75
734	48.18	51.12	2.31	-0.08	55.46	126.00
735	48.24	51.83	2.42	-0.08	55.76	126.37
736	48.31	51.39	2.58	0.00	57.36	126.82
737	48.36	46.92	2.65	0.00	61.96	126.80
738	48.43	39.23	2.55	-0.08	69.75	126.07
739	48.51	33.96	2.29	0.00	74.95	124.95
740	48.58	31.01	2.09	-0.08	77.83	124.05
741	48.63	27.26	1.91	0.00	83.05	123.06
742	48.72	23.15	1.64	0.00	89.39	121.56
743	48.76	21.98	1.53	0.00	91.04	120.94
744	48.82	20.82	1.38	0.00	91.96	120.02
745	48.92	21.85	1.22	0.00	86.19	119.27
746	48.97	21.00	1.22	0.00	88.61	119.14
747	49.03	21.72	1.21	0.00	86.46	119.20
748	49.12	22.70	1.23	0.00	84.19	119.42
749	49.15	22.97	1.27	0.00	84.14	119.65
750	49.23	24.31	1.37	0.00	82.63	120.37
751	49.30	25.56	1.44	0.08	80.79	120.84
752	49.35	26.10	1.47	0.08	80.11	121.05
753	49.41	28.15	1.49	0.08	76.24	121.34
754	49.48	30.74	1.60	0.08	72.98	122.05
755	49.54	32.98	1.78	0.08	71.64	123.02
756	49.61	35.48	1.99	0.08	70.25	124.01
757	49.69	37.00	2.21	0.08	70.35	124.87
758	49.74	39.86	2.32	0.08	67.76	125.43
759	49.81	47.63	0.00	0.08	N/A	87.36
760	49.90	74.98	0.00	0.08	N/A	87.36
761	49.95	86.24	0.00	0.17	N/A	87.36
762	50.01	95.98	0.00	0.08	N/A	87.36
763	50.09	102.68	0.00	0.08	N/A	87.36
764	50.14	105.36	0.00	0.08	N/A	87.36

:: Field input data :: (continued)

Point ID	Depth (ft)	q_c (tsf)	f_s (tsf)	u (tsf)	Fines content (%)	Unit weight (pcf)

Abbreviations

Depth:	Depth from free surface, at which CPT was performed (ft)
q_c:	Measured cone resistance (tsf)
f_s:	Sleeve friction resistance (tsf)
u:	Pore pressure (tsf)
Fines content:	Percentage of fines in soil (%)
Unit weight:	Bulk soil unit weight (pcf)

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data ::

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
1	0.07	0.00	0.00	0.00	1.00	0.695	0.90	0.776	1.00	1.30	2.000	No
2	0.16	0.01	0.00	0.01	1.00	0.694	0.90	0.775	1.00	1.30	2.000	No
3	0.21	0.01	0.00	0.01	1.00	0.694	0.90	0.774	1.00	1.30	2.000	No
4	0.27	0.01	0.00	0.01	1.00	0.693	0.90	0.774	1.00	1.30	2.000	No
5	0.33	0.02	0.00	0.02	1.00	0.693	0.90	0.773	1.00	1.30	2.000	No
6	0.41	0.02	0.00	0.02	0.99	0.692	0.90	0.772	1.00	1.30	2.000	No
7	0.46	0.02	0.00	0.02	0.99	0.691	0.90	0.772	1.00	1.30	2.000	No
8	0.54	0.03	0.00	0.03	0.99	0.691	0.90	0.771	1.00	1.30	2.000	No
9	0.60	0.03	0.00	0.03	0.99	0.690	0.90	0.770	1.00	1.30	2.000	No
10	0.66	0.03	0.00	0.03	0.99	0.690	0.90	0.770	1.00	1.30	2.000	No
11	0.75	0.04	0.00	0.04	0.99	0.689	0.90	0.769	1.00	1.30	2.000	No
12	0.81	0.04	0.00	0.04	0.99	0.688	0.90	0.768	1.00	1.30	2.000	No
13	0.86	0.04	0.00	0.04	0.99	0.688	0.90	0.768	1.00	1.30	2.000	No
14	0.95	0.05	0.00	0.05	0.99	0.687	0.90	0.767	1.00	1.30	2.000	No
15	0.99	0.05	0.00	0.05	0.99	0.687	0.90	0.766	1.00	1.30	2.000	No
16	1.05	0.05	0.00	0.05	0.99	0.686	0.90	0.766	1.00	1.30	2.000	No
17	1.12	0.06	0.00	0.06	0.99	0.685	0.90	0.765	1.00	1.30	2.000	No
18	1.19	0.06	0.00	0.06	0.98	0.685	0.90	0.764	1.00	1.30	2.000	No
19	1.25	0.06	0.00	0.06	0.98	0.684	0.90	0.764	1.00	1.30	2.000	No
20	1.35	0.07	0.00	0.07	0.98	0.683	0.90	0.763	1.00	1.30	2.000	No
21	1.39	0.07	0.00	0.07	0.98	0.683	0.90	0.762	1.00	1.30	2.000	No
22	1.44	0.07	0.00	0.07	0.98	0.683	0.90	0.762	1.00	1.30	2.000	No
23	1.51	0.07	0.00	0.07	0.98	0.682	0.90	0.761	1.00	1.30	2.000	No
24	1.58	0.08	0.00	0.08	0.98	0.681	0.90	0.760	1.00	1.30	2.000	No
25	1.65	0.08	0.00	0.08	0.98	0.681	0.90	0.760	1.00	1.30	2.000	No
26	1.73	0.08	0.00	0.08	0.98	0.680	0.90	0.759	1.00	1.30	2.000	No
27	1.78	0.09	0.00	0.09	0.98	0.679	0.90	0.758	1.00	1.30	2.000	No
28	1.84	0.09	0.00	0.09	0.98	0.679	0.90	0.758	1.00	1.30	2.000	No
29	1.92	0.09	0.00	0.09	0.97	0.678	0.90	0.757	1.00	1.30	2.000	No
30	1.98	0.10	0.00	0.10	0.97	0.677	0.90	0.756	1.00	1.30	2.000	No
31	2.05	0.10	0.00	0.10	0.97	0.677	0.90	0.755	1.00	1.30	2.000	No
32	2.12	0.10	0.00	0.10	0.97	0.676	0.90	0.755	1.00	1.30	2.000	No
33	2.17	0.11	0.00	0.11	0.97	0.676	0.90	0.754	1.00	1.30	2.000	No
34	2.24	0.11	0.00	0.11	0.97	0.675	0.90	0.753	1.00	1.30	2.000	No
35	2.32	0.12	0.00	0.12	0.97	0.674	0.90	0.752	1.00	1.30	2.000	No
36	2.37	0.12	0.00	0.12	0.97	0.674	0.90	0.752	1.00	1.30	2.000	No
37	2.44	0.12	0.00	0.12	0.97	0.673	0.90	0.751	1.00	1.30	2.000	No
38	2.51	0.13	0.00	0.13	0.97	0.672	0.90	0.750	1.00	1.30	2.000	No
39	2.57	0.13	0.00	0.13	0.97	0.672	0.90	0.750	1.00	1.30	2.000	No
40	2.66	0.13	0.00	0.13	0.96	0.671	0.90	0.749	1.00	1.30	2.000	No
41	2.71	0.14	0.00	0.14	0.96	0.670	0.90	0.748	1.00	1.30	2.000	No
42	2.76	0.14	0.00	0.14	0.96	0.670	0.90	0.748	1.00	1.30	2.000	No
43	2.85	0.14	0.00	0.14	0.96	0.669	0.90	0.747	1.00	1.30	2.000	No
44	2.90	0.15	0.00	0.15	0.96	0.668	0.90	0.746	1.00	1.30	2.000	No
45	2.96	0.15	0.00	0.15	0.96	0.668	0.90	0.745	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
46	3.06	0.16	0.00	0.16	0.96	0.667	0.90	0.744	1.00	1.30	2.000	No
47	3.11	0.16	0.00	0.16	0.96	0.666	0.90	0.744	1.00	1.30	2.000	No
48	3.16	0.16	0.00	0.16	0.96	0.666	0.90	0.743	1.00	1.30	2.000	No
49	3.22	0.16	0.00	0.16	0.96	0.665	0.90	0.742	1.00	1.30	2.000	No
50	3.30	0.17	0.00	0.17	0.96	0.664	0.90	0.742	1.00	1.30	2.000	No
51	3.36	0.17	0.00	0.17	0.95	0.664	0.90	0.741	1.00	1.30	2.000	No
52	3.44	0.18	0.00	0.18	0.95	0.663	0.90	0.740	1.00	1.30	2.000	No
53	3.50	0.18	0.00	0.18	0.95	0.662	0.90	0.739	1.00	1.30	2.000	No
54	3.55	0.18	0.00	0.18	0.95	0.662	0.90	0.739	1.00	1.30	2.000	No
55	3.65	0.19	0.00	0.19	0.95	0.661	0.90	0.737	1.00	1.30	2.000	No
56	3.70	0.19	0.00	0.19	0.95	0.660	0.90	0.737	1.00	1.30	2.000	No
57	3.74	0.19	0.00	0.19	0.95	0.660	0.90	0.736	1.00	1.30	2.000	No
58	3.81	0.20	0.00	0.20	0.95	0.659	0.90	0.736	1.00	1.30	2.000	No
59	3.88	0.20	0.00	0.20	0.95	0.658	0.90	0.735	1.00	1.30	2.000	No
60	3.94	0.20	0.00	0.20	0.95	0.658	0.90	0.734	1.00	1.30	2.000	No
61	4.01	0.21	0.00	0.21	0.94	0.657	0.90	0.733	1.00	1.30	2.000	No
62	4.09	0.21	0.00	0.21	0.94	0.656	0.90	0.732	1.00	1.30	2.000	No
63	4.15	0.22	0.00	0.22	0.94	0.655	0.90	0.732	1.00	1.30	2.000	No
64	4.23	0.22	0.00	0.22	0.94	0.655	0.90	0.731	1.00	1.30	2.000	No
65	4.29	0.22	0.00	0.22	0.94	0.654	0.90	0.730	1.00	1.30	2.000	No
66	4.34	0.23	0.00	0.23	0.94	0.653	0.90	0.729	1.00	1.30	2.000	No
67	4.42	0.23	0.00	0.23	0.94	0.653	0.90	0.728	1.00	1.30	2.000	No
68	4.47	0.23	0.00	0.23	0.94	0.652	0.90	0.728	1.00	1.30	2.000	No
69	4.54	0.24	0.00	0.24	0.94	0.651	0.90	0.727	1.00	1.30	2.000	No
70	4.60	0.24	0.00	0.24	0.94	0.651	0.90	0.726	1.00	1.30	2.000	No
71	4.68	0.25	0.00	0.25	0.93	0.650	0.90	0.725	1.00	1.30	2.000	No
72	4.73	0.25	0.00	0.25	0.93	0.649	0.90	0.725	1.00	1.30	2.000	No
73	4.80	0.25	0.00	0.25	0.93	0.648	0.90	0.724	1.00	1.30	2.000	No
74	4.87	0.26	0.00	0.26	0.93	0.648	0.90	0.723	1.00	1.30	2.000	No
75	4.92	0.26	0.00	0.26	0.93	0.647	0.90	0.722	1.00	1.30	2.000	No
76	4.99	0.26	0.00	0.26	0.93	0.646	0.90	0.721	1.00	1.30	2.000	No
77	5.08	0.27	0.00	0.27	0.93	0.645	0.90	0.720	1.00	1.30	2.000	No
78	5.13	0.27	0.00	0.27	0.93	0.645	0.90	0.720	1.00	1.30	2.000	No
79	5.18	0.28	0.00	0.28	0.93	0.644	0.90	0.719	1.00	1.30	2.000	No
80	5.25	0.28	0.00	0.28	0.93	0.643	0.90	0.718	1.00	1.30	2.000	No
81	5.32	0.28	0.00	0.28	0.92	0.643	0.90	0.717	1.00	1.30	2.000	No
82	5.39	0.29	0.00	0.29	0.92	0.642	0.90	0.716	1.00	1.30	2.000	No
83	5.48	0.29	0.00	0.29	0.92	0.641	0.90	0.715	1.00	1.30	2.000	No
84	5.53	0.30	0.00	0.30	0.92	0.640	0.90	0.715	1.00	1.30	2.000	No
85	5.59	0.30	0.00	0.30	0.92	0.640	0.90	0.714	1.00	1.30	2.000	No
86	5.67	0.30	0.00	0.30	0.92	0.639	0.90	0.713	1.00	1.30	2.000	No
87	5.72	0.31	0.00	0.31	0.92	0.638	0.90	0.712	1.00	1.30	2.000	No
88	5.78	0.31	0.00	0.31	0.92	0.637	0.90	0.711	1.00	1.30	2.000	No
89	5.87	0.31	0.00	0.31	0.91	0.636	0.90	0.710	1.00	1.30	2.000	No
90	5.91	0.32	0.00	0.32	0.91	0.636	0.90	0.710	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
91	5.98	0.32	0.00	0.32	0.91	0.635	0.90	0.709	1.00	1.30	2.000	No
92	6.07	0.33	0.00	0.33	0.91	0.634	0.90	0.708	1.00	1.30	2.000	No
93	6.12	0.33	0.00	0.33	0.91	0.634	0.90	0.707	1.00	1.30	2.000	No
94	6.17	0.33	0.00	0.33	0.91	0.633	0.90	0.706	1.00	1.30	2.000	No
95	6.23	0.34	0.00	0.34	0.91	0.632	0.90	0.706	1.00	1.30	2.000	No
96	6.32	0.34	0.00	0.34	0.91	0.631	0.90	0.705	1.00	1.30	2.000	No
97	6.37	0.34	0.00	0.34	0.91	0.631	0.90	0.704	1.00	1.30	2.000	No
98	6.44	0.35	0.00	0.35	0.91	0.630	0.90	0.703	1.00	1.30	2.000	No
99	6.51	0.35	0.00	0.35	0.90	0.629	0.90	0.702	1.00	1.30	2.000	No
100	6.56	0.35	0.00	0.35	0.90	0.628	0.90	0.701	1.00	1.30	2.000	No
101	6.65	0.36	0.00	0.36	0.90	0.627	0.90	0.700	1.00	1.30	2.000	No
102	6.71	0.36	0.00	0.36	0.90	0.627	0.90	0.699	1.00	1.30	2.000	No
103	6.76	0.37	0.00	0.37	0.90	0.626	0.90	0.699	1.00	1.30	2.000	No
104	6.84	0.37	0.00	0.37	0.90	0.625	0.90	0.698	1.00	1.30	2.000	No
105	6.91	0.37	0.00	0.37	0.90	0.624	0.90	0.697	1.00	1.30	2.000	No
106	6.96	0.38	0.00	0.38	0.90	0.624	0.90	0.696	1.00	1.30	2.000	No
107	7.03	0.38	0.00	0.38	0.90	0.623	0.90	0.695	1.00	1.30	2.000	No
108	7.10	0.39	0.00	0.39	0.89	0.622	0.90	0.694	1.00	1.30	2.000	No
109	7.17	0.39	0.00	0.39	0.89	0.621	0.90	0.693	1.00	1.30	2.000	No
110	7.25	0.39	0.00	0.39	0.89	0.620	0.90	0.692	1.00	1.30	2.000	No
111	7.29	0.40	0.00	0.40	0.89	0.620	0.90	0.692	1.00	1.30	2.000	No
112	7.36	0.40	0.00	0.40	0.89	0.619	0.90	0.691	1.00	1.30	2.000	No
113	7.45	0.41	0.00	0.41	0.89	0.618	0.90	0.689	1.00	1.30	2.000	No
114	7.50	0.41	0.00	0.41	0.89	0.617	0.90	0.689	1.00	1.30	2.000	No
115	7.55	0.41	0.00	0.41	0.89	0.616	0.90	0.688	1.00	1.30	2.000	No
116	7.63	0.42	0.00	0.42	0.89	0.616	0.90	0.687	1.00	1.30	2.000	No
117	7.69	0.42	0.00	0.42	0.88	0.615	0.90	0.686	1.00	1.30	2.000	No
118	7.75	0.42	0.00	0.42	0.88	0.614	0.90	0.685	1.00	1.30	2.000	No
119	7.85	0.43	0.00	0.43	0.88	0.613	0.90	0.684	1.00	1.30	2.000	No
120	7.88	0.43	0.00	0.43	0.88	0.612	0.90	0.684	1.00	1.30	2.000	No
121	7.94	0.43	0.00	0.43	0.88	0.612	0.90	0.683	1.00	1.30	2.000	No
122	8.04	0.44	0.00	0.44	0.88	0.610	0.90	0.681	1.00	1.30	2.000	No
123	8.09	0.44	0.00	0.44	0.88	0.610	0.90	0.681	1.00	1.30	2.000	No
124	8.14	0.45	0.00	0.45	0.88	0.609	0.90	0.680	1.00	1.30	2.000	No
125	8.23	0.45	0.00	0.45	0.87	0.608	0.90	0.679	1.00	1.30	2.000	No
126	8.27	0.45	0.00	0.45	0.87	0.608	0.90	0.678	1.00	1.30	2.000	No
127	8.34	0.46	0.00	0.46	0.87	0.607	0.90	0.677	1.00	1.30	2.000	No
128	8.41	0.46	0.00	0.46	0.87	0.606	0.90	0.676	1.00	1.30	2.000	No
129	8.47	0.46	0.00	0.46	0.87	0.605	0.90	0.675	1.00	1.30	2.000	No
130	8.53	0.47	0.00	0.47	0.87	0.604	0.90	0.675	1.00	1.30	2.000	No
131	8.60	0.47	0.00	0.47	0.87	0.603	0.90	0.674	1.00	1.30	2.000	No
132	8.68	0.48	0.00	0.48	0.87	0.602	0.90	0.673	1.00	1.30	2.000	No
133	8.74	0.48	0.00	0.48	0.87	0.602	0.90	0.672	1.00	1.30	2.000	No
134	8.80	0.48	0.00	0.48	0.86	0.601	0.90	0.671	1.00	1.30	2.000	No
135	8.88	0.49	0.00	0.49	0.86	0.600	0.90	0.670	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
136	8.95	0.49	0.00	0.49	0.86	0.599	0.90	0.669	1.00	1.30	2.000	No
137	9.01	0.49	0.00	0.49	0.86	0.598	0.90	0.668	1.00	1.30	2.000	No
138	9.07	0.50	0.00	0.50	0.86	0.597	0.90	0.667	1.00	1.30	2.000	No
139	9.14	0.50	0.00	0.50	0.86	0.597	0.90	0.666	1.00	1.30	2.000	No
140	9.20	0.51	0.00	0.51	0.86	0.596	0.90	0.665	1.00	1.30	2.000	No
141	9.26	0.51	0.00	0.51	0.86	0.595	0.90	0.664	1.00	1.30	2.000	No
142	9.34	0.51	0.00	0.51	0.85	0.594	0.90	0.663	1.00	1.30	2.000	No
143	9.39	0.52	0.00	0.52	0.85	0.593	0.90	0.662	1.00	1.30	2.000	No
144	9.48	0.52	0.00	0.52	0.85	0.592	0.90	0.661	1.00	1.30	2.000	No
145	9.52	0.52	0.00	0.52	0.85	0.592	0.90	0.660	1.00	1.30	2.000	No
146	9.58	0.53	0.00	0.53	0.85	0.591	0.90	0.660	1.00	1.30	2.000	No
147	9.67	0.53	0.00	0.53	0.85	0.590	0.90	0.658	1.00	1.30	2.000	No
148	9.71	0.54	0.00	0.54	0.85	0.589	0.90	0.658	1.00	1.30	2.000	No
149	9.78	0.54	0.00	0.54	0.85	0.588	0.90	0.657	1.00	1.30	2.000	No
150	9.88	0.54	0.00	0.54	0.84	0.587	0.90	0.655	1.00	1.30	2.000	No
151	9.93	0.55	0.00	0.55	0.84	0.586	0.90	0.654	1.00	1.30	2.000	No
152	9.98	0.55	0.00	0.55	0.84	0.586	0.90	0.654	1.00	1.30	2.000	No
153	10.07	0.56	0.00	0.56	0.84	0.584	0.90	0.652	1.00	1.30	2.000	No
154	10.11	0.56	0.00	0.56	0.84	0.584	0.90	0.652	1.00	1.30	2.000	No
155	10.18	0.56	0.00	0.56	0.84	0.583	0.90	0.651	1.00	1.30	2.000	No
156	10.24	0.57	0.00	0.57	0.84	0.582	0.90	0.650	1.00	1.30	2.000	No
157	10.32	0.57	0.00	0.57	0.84	0.581	0.90	0.649	1.00	1.30	2.000	No
158	10.37	0.57	0.00	0.57	0.83	0.580	0.90	0.648	1.00	1.30	2.000	No
159	10.47	0.58	0.00	0.58	0.83	0.579	0.90	0.647	1.00	1.30	2.000	No
160	10.52	0.58	0.00	0.58	0.83	0.579	0.90	0.646	1.00	1.30	2.000	No
161	10.57	0.59	0.00	0.59	0.83	0.578	0.90	0.645	1.00	1.30	2.000	No
162	10.66	0.59	0.00	0.59	0.83	0.577	0.90	0.644	1.00	1.30	2.000	No
163	10.72	0.60	0.00	0.60	0.83	0.576	0.90	0.643	1.00	1.30	2.000	No
164	10.77	0.60	0.00	0.60	0.83	0.575	0.90	0.642	1.00	1.30	2.000	No
165	10.83	0.60	0.00	0.60	0.83	0.574	0.90	0.641	1.00	1.30	2.000	No
166	10.90	0.61	0.00	0.61	0.82	0.573	0.90	0.640	1.00	1.30	2.000	No
167	10.97	0.61	0.00	0.61	0.82	0.573	0.90	0.639	1.00	1.30	2.000	No
168	11.04	0.61	0.00	0.61	0.82	0.572	0.90	0.638	1.00	1.30	2.000	No
169	11.10	0.62	0.00	0.62	0.82	0.571	0.90	0.637	1.00	1.30	2.000	No
170	11.17	0.62	0.00	0.62	0.82	0.570	0.90	0.636	1.00	1.30	2.000	No
171	11.25	0.63	0.00	0.63	0.82	0.569	0.90	0.635	1.00	1.30	2.000	No
172	11.30	0.63	0.00	0.63	0.82	0.568	0.90	0.634	1.00	1.30	2.000	No
173	11.36	0.63	0.00	0.63	0.82	0.567	0.90	0.633	1.00	1.30	2.000	No
174	11.46	0.64	0.00	0.64	0.81	0.566	0.90	0.632	1.00	1.30	2.000	No
175	11.51	0.64	0.00	0.64	0.81	0.565	0.90	0.631	1.00	1.30	2.000	No
176	11.55	0.64	0.00	0.64	0.81	0.565	0.90	0.630	1.00	1.30	2.000	No
177	11.62	0.65	0.00	0.65	0.81	0.564	0.90	0.629	1.00	1.30	2.000	No
178	11.69	0.65	0.00	0.65	0.81	0.563	0.90	0.628	1.00	1.30	2.000	No
179	11.75	0.66	0.00	0.66	0.81	0.562	0.90	0.627	1.00	1.30	2.000	No
180	11.85	0.66	0.00	0.66	0.81	0.561	0.90	0.626	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
181	11.88	0.66	0.00	0.66	0.81	0.560	0.90	0.625	1.00	1.30	2.000	No
182	11.95	0.67	0.00	0.67	0.80	0.559	0.90	0.624	1.00	1.30	2.000	No
183	12.04	0.67	0.00	0.67	0.80	0.558	0.90	0.623	1.00	1.30	2.000	No
184	12.07	0.68	0.00	0.68	0.80	0.558	0.90	0.622	1.00	1.30	2.000	No
185	12.14	0.68	0.00	0.68	0.80	0.557	0.90	0.621	1.00	1.30	2.000	No
186	12.23	0.68	0.00	0.68	0.80	0.555	0.90	0.620	1.00	1.30	2.000	No
187	12.28	0.69	0.00	0.69	0.80	0.555	0.90	0.619	1.00	1.30	2.000	No
188	12.34	0.69	0.00	0.69	0.80	0.554	0.90	0.618	1.00	1.30	2.000	No
189	12.42	0.70	0.00	0.70	0.79	0.553	0.90	0.617	1.00	1.30	2.000	No
190	12.48	0.70	0.00	0.70	0.79	0.552	0.90	0.616	1.00	1.30	2.000	No
191	12.54	0.70	0.00	0.70	0.79	0.551	0.90	0.615	1.00	1.30	2.000	No
192	12.62	0.71	0.00	0.71	0.79	0.550	0.90	0.614	1.00	1.30	2.000	No
193	12.69	0.71	0.00	0.71	0.79	0.549	0.90	0.613	1.00	1.30	2.000	No
194	12.73	0.71	0.00	0.71	0.79	0.548	0.90	0.612	1.00	1.30	2.000	No
195	12.81	0.72	0.00	0.72	0.79	0.547	0.90	0.611	1.00	1.30	2.000	No
196	12.89	0.72	0.00	0.72	0.79	0.546	0.90	0.610	1.00	1.30	2.000	No
197	12.93	0.73	0.00	0.73	0.78	0.546	0.90	0.609	1.00	1.30	2.000	No
198	13.01	0.73	0.00	0.73	0.78	0.545	0.90	0.608	1.00	1.30	2.000	No
199	13.06	0.73	0.00	0.73	0.78	0.544	0.90	0.607	1.00	1.30	2.000	No
200	13.13	0.74	0.00	0.74	0.78	0.543	0.90	0.606	1.00	1.30	2.000	No
201	13.19	0.74	0.00	0.74	0.78	0.542	0.90	0.605	1.00	1.30	2.000	No
202	13.26	0.75	0.00	0.75	0.78	0.541	0.90	0.604	1.00	1.30	2.000	No
203	13.32	0.75	0.00	0.75	0.78	0.540	0.90	0.603	1.00	1.30	2.000	No
204	13.41	0.75	0.00	0.75	0.77	0.539	0.90	0.602	1.00	1.30	2.000	No
205	13.47	0.76	0.00	0.76	0.77	0.538	0.90	0.601	1.00	1.30	2.000	No
206	13.56	0.76	0.00	0.76	0.77	0.537	0.90	0.599	1.00	1.30	2.000	No
207	13.59	0.77	0.00	0.77	0.77	0.536	0.90	0.599	1.00	1.30	2.000	No
208	13.66	0.77	0.00	0.77	0.77	0.535	0.90	0.598	1.00	1.30	2.000	No
209	13.75	0.78	0.00	0.78	0.77	0.534	0.90	0.596	1.00	1.30	2.000	No
210	13.81	0.78	0.00	0.78	0.77	0.533	0.90	0.595	1.00	1.30	2.000	No
211	13.86	0.78	0.00	0.78	0.77	0.533	0.90	0.595	1.00	1.30	2.000	No
212	13.91	0.78	0.00	0.78	0.76	0.532	0.90	0.594	1.00	1.30	2.000	No
213	13.99	0.79	0.00	0.79	0.76	0.531	0.90	0.593	1.00	1.30	2.000	No
214	14.04	0.79	0.00	0.79	0.76	0.530	0.90	0.592	1.00	1.30	2.000	No
215	14.12	0.80	0.00	0.80	0.76	0.529	0.90	0.591	1.00	1.30	2.000	No
216	14.19	0.80	0.00	0.80	0.76	0.528	0.90	0.589	1.00	1.30	2.000	No
217	14.25	0.81	0.00	0.81	0.76	0.527	0.90	0.588	1.00	1.30	2.000	No
218	14.34	0.81	0.00	0.81	0.76	0.526	0.90	0.587	1.00	1.30	2.000	No
219	14.40	0.81	0.00	0.81	0.75	0.525	0.90	0.586	1.00	1.30	2.000	No
220	14.45	0.82	0.00	0.82	0.75	0.524	0.90	0.585	1.00	1.30	2.000	No
221	14.54	0.82	0.00	0.82	0.75	0.523	0.90	0.584	1.00	1.30	2.000	No
222	14.60	0.83	0.00	0.83	0.75	0.522	0.90	0.583	1.00	1.30	2.000	No
223	14.65	0.83	0.00	0.83	0.75	0.522	0.90	0.582	1.00	1.30	2.000	No
224	14.71	0.83	0.00	0.83	0.75	0.521	0.90	0.581	1.00	1.30	2.000	No
225	14.77	0.84	0.00	0.84	0.75	0.520	0.90	0.580	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
226	14.83	0.84	0.00	0.84	0.75	0.519	0.90	0.579	1.00	1.30	2.000	No
227	14.90	0.85	0.00	0.85	0.74	0.518	0.90	0.578	1.00	1.30	2.000	No
228	14.98	0.85	0.00	0.85	0.74	0.517	0.90	0.577	1.00	1.30	2.000	No
229	15.04	0.85	0.00	0.85	0.74	0.516	0.90	0.576	1.00	1.30	2.000	No
230	15.10	0.86	0.00	0.86	0.74	0.515	0.90	0.575	1.00	1.30	2.000	No
231	15.17	0.86	0.00	0.86	0.74	0.514	0.90	0.574	1.00	1.30	2.000	No
232	15.24	0.87	0.00	0.87	0.74	0.513	0.90	0.573	1.00	1.30	2.000	No
233	15.34	0.87	0.00	0.87	0.74	0.512	0.90	0.571	1.00	1.30	2.000	No
234	15.37	0.87	0.00	0.87	0.74	0.511	0.90	0.571	1.00	1.30	2.000	No
235	15.44	0.88	0.00	0.88	0.73	0.510	0.90	0.570	1.00	1.30	2.000	No
236	15.53	0.88	0.00	0.88	0.73	0.509	0.90	0.568	1.00	1.30	2.000	No
237	15.56	0.89	0.00	0.89	0.73	0.509	0.90	0.568	1.00	1.30	2.000	No
238	15.63	0.89	0.00	0.89	0.73	0.508	0.90	0.567	1.00	1.30	2.000	No
239	15.69	0.89	0.00	0.89	0.73	0.507	0.90	0.566	1.00	1.30	2.000	No
240	15.77	0.90	0.00	0.90	0.73	0.506	0.90	0.564	1.00	1.30	2.000	No
241	15.83	0.90	0.00	0.90	0.73	0.505	0.90	0.563	1.00	1.30	2.000	No
242	15.88	0.91	0.00	0.91	0.72	0.504	0.90	0.563	1.00	1.30	2.000	No
243	15.97	0.91	0.00	0.91	0.72	0.503	0.90	0.561	1.00	1.30	2.000	No
244	16.03	0.92	0.00	0.92	0.72	0.502	0.90	0.560	1.00	1.30	2.000	No
245	16.08	0.92	0.00	0.92	0.72	0.501	0.90	0.559	1.00	1.30	2.000	No
246	16.15	0.92	0.00	0.92	0.72	0.500	0.90	0.558	1.00	1.30	2.000	No
247	16.23	0.93	0.00	0.93	0.72	0.499	0.90	0.557	1.00	1.30	2.000	No
248	16.28	0.93	0.00	0.93	0.72	0.498	0.90	0.556	1.00	1.30	2.000	No
249	16.38	0.94	0.00	0.94	0.71	0.497	0.90	0.555	1.00	1.30	2.000	No
250	16.42	0.94	0.00	0.94	0.71	0.496	0.90	0.554	1.00	1.30	2.000	No
251	16.47	0.94	0.00	0.94	0.71	0.496	0.90	0.553	1.00	1.30	2.000	No
252	16.54	0.95	0.00	0.95	0.71	0.495	0.90	0.552	1.00	1.30	2.000	No
253	16.62	0.95	0.00	0.95	0.71	0.493	0.90	0.551	1.00	1.30	2.000	No
254	16.68	0.96	0.00	0.96	0.71	0.493	0.90	0.550	1.00	1.30	2.000	No
255	16.75	0.96	0.00	0.96	0.71	0.492	0.90	0.549	1.00	1.30	2.000	No
256	16.82	0.97	0.00	0.97	0.71	0.491	0.90	0.548	1.00	1.30	2.000	No
257	16.87	0.97	0.00	0.97	0.70	0.490	0.90	0.547	1.00	1.30	2.000	No
258	16.97	0.98	0.00	0.98	0.70	0.488	0.90	0.545	1.00	1.30	2.000	No
259	17.01	0.98	0.00	0.98	0.70	0.488	0.90	0.545	1.00	1.30	2.000	No
260	17.07	0.98	0.00	0.98	0.70	0.487	0.90	0.544	1.00	1.30	2.000	No
261	17.15	0.99	0.00	0.99	0.70	0.486	0.90	0.542	1.00	1.30	2.000	No
262	17.19	0.99	0.00	0.99	0.70	0.485	0.90	0.542	1.00	1.30	2.000	No
263	17.26	0.99	0.00	0.99	0.70	0.484	0.90	0.540	1.00	1.30	2.000	No
264	17.34	1.00	0.00	1.00	0.69	0.483	0.90	0.539	1.00	1.30	2.000	No
265	17.40	1.00	0.00	1.00	0.69	0.482	0.90	0.538	1.00	1.30	2.000	No
266	17.46	1.01	0.00	1.01	0.69	0.481	0.90	0.537	1.00	1.30	2.000	No
267	17.54	1.01	0.00	1.01	0.69	0.480	0.90	0.536	1.00	1.30	2.000	No
268	17.60	1.02	0.00	1.02	0.69	0.479	0.90	0.535	1.00	1.30	2.000	No
269	17.65	1.02	0.00	1.02	0.69	0.479	0.90	0.534	1.00	1.30	2.000	No
270	17.75	1.03	0.00	1.03	0.69	0.477	0.90	0.533	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
271	17.81	1.03	0.00	1.03	0.69	0.476	0.90	0.532	1.00	1.30	2.000	No
272	17.85	1.03	0.00	1.03	0.68	0.476	0.90	0.531	1.00	1.30	2.000	No
273	17.92	1.04	0.00	1.04	0.68	0.475	0.90	0.530	1.00	1.30	2.000	No
274	18.00	1.04	0.00	1.04	0.68	0.474	0.90	0.529	1.00	1.30	2.000	No
275	18.05	1.04	0.00	1.04	0.68	0.473	0.90	0.528	1.00	1.30	2.000	No
276	18.15	1.05	0.00	1.05	0.68	0.472	0.90	0.526	1.00	1.30	2.000	No
277	18.18	1.05	0.00	1.05	0.68	0.471	0.90	0.526	1.00	1.30	2.000	No
278	18.25	1.06	0.00	1.06	0.68	0.470	0.90	0.525	1.00	1.30	2.000	No
279	18.31	1.06	0.00	1.06	0.67	0.469	0.90	0.524	1.00	1.30	2.000	No
280	18.39	1.07	0.00	1.07	0.67	0.468	0.90	0.523	1.00	1.30	2.000	No
281	18.45	1.07	0.00	1.07	0.67	0.467	0.90	0.522	1.00	1.30	2.000	No
282	18.54	1.08	0.00	1.08	0.67	0.466	0.90	0.520	1.00	1.30	2.000	No
283	18.58	1.08	0.00	1.08	0.67	0.465	0.90	0.520	1.00	1.30	2.000	No
284	18.64	1.08	0.00	1.08	0.67	0.465	0.90	0.519	1.00	1.30	2.000	No
285	18.74	1.09	0.00	1.09	0.67	0.463	0.90	0.517	1.00	1.30	2.000	No
286	18.79	1.09	0.00	1.09	0.66	0.462	0.90	0.516	1.00	1.30	2.000	No
287	18.84	1.10	0.00	1.10	0.66	0.462	0.90	0.515	1.00	1.30	2.000	No
288	18.91	1.10	0.00	1.10	0.66	0.461	0.90	0.514	1.00	1.30	2.000	No
289	18.97	1.10	0.00	1.10	0.66	0.460	0.90	0.513	1.00	1.30	2.000	No
290	19.04	1.11	0.00	1.11	0.66	0.459	0.90	0.512	1.00	1.30	2.000	No
291	19.12	1.11	0.00	1.11	0.66	0.458	0.90	0.511	1.00	1.30	2.000	No
292	19.18	1.12	0.00	1.12	0.66	0.457	0.90	0.510	1.00	1.30	2.000	No
293	19.24	1.12	0.00	1.12	0.66	0.456	0.90	0.509	1.00	1.30	2.000	No
294	19.33	1.13	0.00	1.13	0.65	0.455	0.90	0.508	1.00	1.30	2.000	No
295	19.36	1.13	0.00	1.13	0.65	0.454	0.90	0.507	1.00	1.30	2.000	No
296	19.43	1.13	0.00	1.13	0.65	0.454	0.90	0.506	1.00	1.30	2.000	No
297	19.53	1.14	0.00	1.14	0.65	0.452	0.90	0.505	1.00	1.30	2.000	No
298	19.57	1.14	0.00	1.14	0.65	0.451	0.90	0.504	1.00	1.30	2.000	No
299	19.63	1.15	0.00	1.15	0.65	0.451	0.90	0.503	1.00	1.30	2.000	No
300	19.72	1.15	0.00	1.15	0.65	0.449	0.90	0.502	1.00	1.30	2.000	No
301	19.76	1.16	0.00	1.16	0.65	0.449	0.90	0.501	1.00	1.30	2.000	No
302	19.83	1.16	0.00	1.16	0.64	0.448	0.90	0.500	1.00	1.30	2.000	No
303	19.92	1.17	0.00	1.17	0.64	0.447	0.90	0.499	1.00	1.30	2.000	No
304	19.97	1.17	0.00	1.17	0.64	0.446	0.90	0.498	1.00	1.30	2.000	No
305	20.02	1.17	0.00	1.17	0.64	0.445	0.90	0.497	1.00	1.30	2.000	No
306	20.09	1.18	0.00	1.18	0.64	0.444	0.90	0.496	1.00	1.30	2.000	No
307	20.17	1.18	0.00	1.18	0.64	0.443	0.90	0.495	1.00	1.30	2.000	No
308	20.22	1.19	0.00	1.19	0.64	0.442	0.90	0.494	1.00	1.30	2.000	No
309	20.28	1.19	0.00	1.19	0.63	0.442	0.90	0.493	1.00	1.30	2.000	No
310	20.37	1.20	0.00	1.20	0.63	0.440	0.90	0.492	1.00	1.30	2.000	No
311	20.42	1.20	0.00	1.20	0.63	0.440	0.90	0.491	1.00	1.30	2.000	No
312	20.49	1.20	0.00	1.20	0.63	0.439	0.90	0.490	1.00	1.30	2.000	No
313	20.56	1.21	0.00	1.21	0.63	0.438	0.90	0.489	1.00	1.30	2.000	No
314	20.61	1.21	0.00	1.21	0.63	0.437	0.90	0.488	1.00	1.30	2.000	No
315	20.67	1.21	0.00	1.21	0.63	0.436	0.90	0.487	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
316	20.75	1.22	0.00	1.22	0.63	0.435	0.90	0.486	1.00	1.30	2.000	No
317	20.80	1.22	0.00	1.22	0.62	0.434	0.90	0.485	1.00	1.30	2.000	No
318	20.88	1.23	0.00	1.23	0.62	0.433	0.90	0.484	1.00	1.30	2.000	No
319	20.95	1.23	0.00	1.23	0.62	0.432	0.90	0.483	1.00	1.30	2.000	No
320	21.00	1.24	0.00	1.24	0.62	0.432	0.90	0.482	1.00	1.30	2.000	No
321	21.09	1.24	0.00	1.24	0.62	0.430	0.90	0.480	1.00	1.30	2.000	No
322	21.16	1.25	0.00	1.25	0.62	0.429	0.90	0.479	1.00	1.30	2.000	No
323	21.21	1.25	0.00	1.25	0.62	0.429	0.90	0.478	1.00	1.30	2.000	No
324	21.31	1.26	0.00	1.26	0.61	0.427	0.90	0.477	1.00	1.30	2.000	No
325	21.33	1.26	0.00	1.26	0.61	0.427	0.90	0.477	1.00	1.30	2.000	No
326	21.40	1.26	0.00	1.26	0.61	0.426	0.90	0.476	1.00	1.30	2.000	No
327	21.48	1.27	0.00	1.27	0.61	0.425	0.90	0.474	1.00	1.30	2.000	No
328	21.54	1.27	0.00	1.27	0.61	0.424	0.90	0.474	1.00	1.30	2.000	No
329	21.61	1.28	0.00	1.28	0.61	0.423	0.90	0.473	1.00	1.30	2.000	No
330	21.66	1.28	0.00	1.28	0.61	0.423	0.90	0.472	1.00	1.30	2.000	No
331	21.75	1.29	0.00	1.29	0.61	0.421	0.90	0.470	1.00	1.30	2.000	No
332	21.80	1.29	0.00	1.29	0.60	0.421	0.90	0.470	1.00	1.30	2.000	No
333	21.89	1.30	0.00	1.30	0.60	0.419	0.90	0.468	1.00	1.30	2.000	No
334	21.94	1.30	0.00	1.30	0.60	0.419	0.90	0.468	1.00	1.30	2.000	No
335	22.00	1.30	0.00	1.30	0.60	0.418	0.90	0.467	1.00	1.30	2.000	No
336	22.05	1.31	0.00	1.31	0.60	0.417	0.90	0.466	1.00	1.30	2.000	No
337	22.13	1.31	0.00	1.31	0.60	0.416	0.90	0.465	1.00	1.30	2.000	No
338	22.20	1.32	0.00	1.32	0.60	0.415	0.90	0.464	1.00	1.30	2.000	No
339	22.25	1.32	0.00	1.32	0.60	0.415	0.90	0.463	1.00	1.30	2.000	No
340	22.34	1.33	0.00	1.33	0.59	0.413	0.90	0.462	1.00	1.30	2.000	No
341	22.39	1.33	0.00	1.33	0.59	0.413	0.90	0.461	1.00	1.30	2.000	No
342	22.45	1.33	0.00	1.33	0.59	0.412	0.90	0.460	1.00	1.30	2.000	No
343	22.53	1.34	0.00	1.34	0.59	0.411	0.90	0.459	1.00	1.30	2.000	No
344	22.59	1.34	0.00	1.34	0.59	0.410	0.90	0.458	1.00	1.30	2.000	No
345	22.64	1.35	0.00	1.35	0.59	0.409	0.90	0.457	1.00	1.30	2.000	No
346	22.72	1.35	0.00	1.35	0.59	0.408	0.90	0.456	1.00	1.30	2.000	No
347	22.78	1.36	0.00	1.36	0.59	0.408	0.90	0.455	1.00	1.30	2.000	No
348	22.84	1.36	0.00	1.36	0.58	0.407	0.90	0.454	1.00	1.30	2.000	No
349	22.92	1.36	0.00	1.36	0.58	0.406	0.90	0.453	1.00	1.30	2.000	No
350	22.98	1.37	0.00	1.37	0.58	0.405	0.90	0.452	1.00	1.30	2.000	No
351	23.03	1.37	0.00	1.37	0.58	0.404	0.90	0.451	1.00	1.30	2.000	No
352	23.11	1.38	0.00	1.38	0.58	0.403	0.90	0.450	1.00	1.30	2.000	No
353	23.17	1.38	0.00	1.38	0.58	0.402	0.90	0.449	1.00	1.30	2.000	No
354	23.23	1.39	0.00	1.39	0.58	0.402	0.90	0.448	1.00	1.30	2.000	No
355	23.31	1.39	0.00	1.39	0.58	0.401	0.90	0.447	1.00	1.30	2.000	No
356	23.38	1.40	0.00	1.40	0.57	0.400	0.90	0.446	1.00	1.30	2.000	No
357	23.43	1.40	0.00	1.40	0.57	0.399	0.90	0.445	1.00	1.30	2.000	No
358	23.51	1.40	0.00	1.40	0.57	0.398	0.90	0.444	1.00	1.30	2.000	No
359	23.56	1.41	0.00	1.41	0.57	0.397	0.90	0.443	1.00	1.30	2.000	No
360	23.63	1.41	0.00	1.41	0.57	0.396	0.90	0.443	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
361	23.73	1.42	0.00	1.42	0.57	0.395	0.90	0.441	1.00	1.30	2.000	No
362	23.76	1.42	0.00	1.42	0.57	0.395	0.90	0.441	1.00	1.30	2.000	No
363	23.83	1.43	0.00	1.43	0.57	0.394	0.90	0.440	1.00	1.30	2.000	No
364	23.91	1.43	0.00	1.43	0.56	0.393	0.90	0.438	1.00	1.30	2.000	No
365	23.96	1.43	0.00	1.43	0.56	0.392	0.90	0.438	1.00	1.30	2.000	No
366	24.04	1.44	0.00	1.44	0.56	0.391	0.90	0.437	1.00	1.30	2.000	No
367	24.12	1.44	0.00	1.44	0.56	0.390	0.90	0.435	1.00	1.30	2.000	No
368	24.17	1.45	0.00	1.45	0.56	0.389	0.90	0.435	1.00	1.30	2.000	No
369	24.22	1.45	0.00	1.45	0.56	0.389	0.90	0.434	1.00	1.30	2.000	No
370	24.29	1.46	0.00	1.46	0.56	0.388	0.90	0.433	1.00	1.30	2.000	No
371	24.35	1.46	0.00	1.46	0.56	0.387	0.90	0.432	1.00	1.30	2.000	No
372	24.41	1.46	0.00	1.46	0.56	0.386	0.90	0.431	1.00	1.30	2.000	No
373	24.49	1.47	0.00	1.47	0.55	0.385	0.90	0.430	1.00	1.30	2.000	No
374	24.55	1.47	0.00	1.47	0.55	0.385	0.90	0.429	1.00	1.30	2.000	No
375	24.61	1.48	0.00	1.48	0.55	0.384	0.90	0.428	1.00	1.30	2.000	No
376	24.69	1.48	0.00	1.48	0.55	0.383	0.90	0.427	1.00	1.30	2.000	No
377	24.76	1.49	0.00	1.49	0.55	0.382	0.90	0.426	1.00	1.30	2.000	No
378	24.80	1.49	0.00	1.49	0.55	0.381	0.90	0.426	1.00	1.30	2.000	No
379	24.90	1.50	0.00	1.50	0.55	0.380	0.90	0.424	1.00	1.30	2.000	No
380	24.95	1.50	0.00	1.50	0.55	0.380	0.90	0.424	1.00	1.30	2.000	No
381	25.01	1.50	0.00	1.50	0.54	0.379	0.90	0.423	1.00	1.30	2.000	No
382	25.07	1.51	0.00	1.51	0.54	0.378	0.90	0.422	1.00	1.30	2.000	No
383	25.14	1.51	0.00	1.51	0.54	0.377	0.90	0.421	1.00	1.30	2.000	No
384	25.20	1.51	0.00	1.51	0.54	0.376	0.90	0.420	1.00	1.30	2.000	No
385	25.27	1.52	0.00	1.52	0.54	0.376	0.90	0.419	1.00	1.30	2.000	No
386	25.34	1.52	0.00	1.52	0.54	0.375	0.90	0.418	1.00	1.30	2.000	No
387	25.40	1.53	0.00	1.53	0.54	0.374	0.90	0.417	1.00	1.30	2.000	No
388	25.46	1.53	0.00	1.53	0.54	0.373	0.90	0.417	1.00	1.30	2.000	No
389	25.54	1.54	0.00	1.54	0.54	0.372	0.90	0.416	1.00	1.30	2.000	No
390	25.60	1.54	0.00	1.54	0.53	0.372	0.90	0.415	1.00	1.30	2.000	No
391	25.68	1.54	0.00	1.54	0.53	0.371	0.90	0.414	1.00	1.30	2.000	No
392	25.73	1.55	0.00	1.55	0.53	0.370	0.90	0.413	1.00	1.30	2.000	No
393	25.79	1.55	0.00	1.55	0.53	0.369	0.90	0.412	1.00	1.30	2.000	No
394	25.87	1.56	0.00	1.56	0.53	0.368	0.90	0.411	1.00	1.30	2.000	No
395	25.94	1.56	0.00	1.56	0.53	0.367	0.90	0.410	1.00	1.30	2.000	No
396	25.99	1.56	0.00	1.56	0.53	0.367	0.90	0.409	1.00	1.30	2.000	No
397	26.05	1.57	0.00	1.57	0.53	0.366	0.90	0.409	1.00	1.30	2.000	No
398	26.13	1.57	0.00	1.57	0.53	0.365	0.90	0.408	1.00	1.30	2.000	No
399	26.18	1.58	0.00	1.58	0.52	0.365	0.90	0.407	1.00	1.30	2.000	No
400	26.28	1.58	0.00	1.58	0.52	0.363	0.90	0.406	1.00	1.30	2.000	No
401	26.32	1.58	0.00	1.58	0.52	0.363	0.90	0.405	1.00	1.30	2.000	No
402	26.38	1.59	0.00	1.59	0.52	0.362	0.90	0.404	1.00	1.30	2.000	No
403	26.48	1.59	0.00	1.59	0.52	0.361	0.90	0.403	1.00	1.30	2.000	No
404	26.53	1.60	0.00	1.60	0.52	0.360	0.90	0.402	1.00	1.30	2.000	No
405	26.59	1.60	0.00	1.60	0.52	0.360	0.90	0.401	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
406	26.68	1.61	0.00	1.61	0.52	0.359	0.90	0.400	1.00	1.30	2.000	No
407	26.73	1.61	0.00	1.61	0.51	0.358	0.90	0.400	1.00	1.30	2.000	No
408	26.77	1.61	0.00	1.61	0.51	0.358	0.90	0.399	1.00	1.30	2.000	No
409	26.85	1.62	0.00	1.62	0.51	0.357	0.90	0.398	1.00	1.30	2.000	No
410	26.91	1.62	0.00	1.62	0.51	0.356	0.90	0.397	1.00	1.30	2.000	No
411	26.97	1.63	0.00	1.63	0.51	0.355	0.90	0.396	1.00	1.30	2.000	No
412	27.04	1.63	0.00	1.63	0.51	0.354	0.90	0.396	1.00	1.30	2.000	No
413	27.11	1.64	0.00	1.64	0.51	0.354	0.90	0.395	1.00	1.30	2.000	No
414	27.20	1.64	0.00	1.64	0.51	0.353	0.90	0.394	1.00	1.30	2.000	No
415	27.25	1.65	0.00	1.65	0.51	0.352	0.90	0.393	1.00	1.30	2.000	No
416	27.31	1.65	0.00	1.65	0.51	0.351	0.90	0.392	1.00	1.30	2.000	No
417	27.36	1.65	0.00	1.65	0.50	0.351	0.90	0.391	1.00	1.30	2.000	No
418	27.46	1.66	0.00	1.66	0.50	0.350	0.90	0.390	1.00	1.30	2.000	No
419	27.51	1.66	0.00	1.66	0.50	0.349	0.90	0.390	1.00	1.30	2.000	No
420	27.56	1.67	0.00	1.67	0.50	0.348	0.90	0.389	1.00	1.30	2.000	No
421	27.63	1.67	0.00	1.67	0.50	0.348	0.90	0.388	1.00	1.30	2.000	No
422	27.71	1.68	0.00	1.68	0.50	0.347	0.90	0.387	1.00	1.30	2.000	No
423	27.76	1.68	0.00	1.68	0.50	0.346	0.90	0.386	1.00	1.30	2.000	No
424	27.84	1.68	0.00	1.68	0.50	0.345	0.90	0.385	1.00	1.30	2.000	No
425	27.90	1.69	0.00	1.69	0.50	0.345	0.90	0.385	1.00	1.30	2.000	No
426	27.95	1.69	0.00	1.69	0.49	0.344	0.90	0.384	1.00	1.30	2.000	No
427	28.05	1.70	0.00	1.70	0.49	0.343	0.90	0.383	1.00	1.30	2.000	No
428	28.09	1.70	0.00	1.70	0.49	0.343	0.90	0.382	1.00	1.30	2.000	No
429	28.15	1.70	0.00	1.70	0.49	0.342	0.90	0.381	1.00	1.30	2.000	No
430	28.25	1.71	0.00	1.71	0.49	0.341	0.90	0.380	1.00	1.30	2.000	No
431	28.30	1.71	0.00	1.71	0.49	0.340	0.90	0.380	1.00	1.30	2.000	No
432	28.35	1.72	0.00	1.72	0.49	0.340	0.90	0.379	1.00	1.30	2.000	No
433	28.45	1.72	0.00	1.72	0.49	0.339	0.90	0.378	1.00	1.30	2.000	No
434	28.50	1.73	0.00	1.73	0.49	0.338	0.90	0.377	1.00	1.30	2.000	No
435	28.55	1.73	0.00	1.73	0.49	0.337	0.90	0.377	1.00	1.30	2.000	No
436	28.61	1.73	0.00	1.73	0.48	0.337	0.90	0.376	1.00	1.30	2.000	No
437	28.69	1.74	0.00	1.74	0.48	0.336	0.90	0.375	1.00	1.30	2.000	No
438	28.74	1.74	0.00	1.74	0.48	0.335	0.90	0.374	1.00	1.30	2.000	No
439	28.84	1.75	0.00	1.75	0.48	0.334	0.90	0.373	1.00	1.30	2.000	No
440	28.89	1.75	0.00	1.75	0.48	0.334	0.90	0.372	1.00	1.30	2.000	No
441	28.94	1.75	0.00	1.75	0.48	0.333	0.90	0.372	1.00	1.30	2.000	No
442	29.03	1.76	0.00	1.76	0.48	0.332	0.90	0.371	1.00	1.30	2.000	No
443	29.08	1.76	0.00	1.76	0.48	0.332	0.90	0.370	1.00	1.30	2.000	No
444	29.14	1.77	0.00	1.77	0.48	0.331	0.90	0.370	1.00	1.30	2.000	No
445	29.21	1.77	0.00	1.77	0.47	0.330	0.90	0.369	1.00	1.30	2.000	No
446	29.27	1.78	0.00	1.78	0.47	0.330	0.90	0.368	1.00	1.30	2.000	No
447	29.37	1.78	0.00	1.78	0.47	0.329	0.90	0.367	1.00	1.30	2.000	No
448	29.41	1.78	0.00	1.78	0.47	0.328	0.90	0.366	1.00	1.30	2.000	No
449	29.47	1.79	0.00	1.79	0.47	0.328	0.90	0.366	1.00	1.30	2.000	No
450	29.56	1.79	0.00	1.79	0.47	0.327	0.90	0.365	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
451	29.59	1.80	0.00	1.80	0.47	0.326	0.90	0.364	1.00	1.30	2.000	No
452	29.67	1.80	0.00	1.80	0.47	0.326	0.90	0.363	1.00	1.30	2.000	No
453	29.77	1.81	0.00	1.81	0.47	0.324	0.90	0.362	1.00	1.30	2.000	No
454	29.81	1.81	0.00	1.81	0.47	0.324	0.90	0.362	1.00	1.30	2.000	No
455	29.87	1.81	0.00	1.81	0.47	0.323	0.90	0.361	1.00	1.30	2.000	No
456	29.97	1.82	0.00	1.82	0.46	0.322	0.90	0.360	1.00	1.30	2.000	No
457	29.99	1.82	0.00	1.82	0.46	0.322	0.90	0.360	1.00	1.30	2.000	No
458	30.07	1.83	0.00	1.83	0.46	0.321	0.90	0.359	1.00	1.30	2.000	No
459	30.13	1.83	0.00	1.83	0.46	0.321	0.90	0.358	1.00	1.30	2.000	No
460	30.21	1.84	0.00	1.84	0.46	0.320	0.90	0.357	1.00	1.30	2.000	No
461	30.27	1.84	0.00	1.84	0.46	0.319	0.90	0.356	1.00	1.30	2.000	No
462	30.34	1.85	0.00	1.85	0.46	0.319	0.90	0.356	1.00	1.30	2.000	No
463	30.40	1.85	0.00	1.85	0.46	0.318	0.90	0.355	1.00	1.30	2.000	No
464	30.46	1.85	0.00	1.85	0.46	0.317	0.90	0.354	1.00	1.30	2.000	No
465	30.53	1.86	0.00	1.86	0.46	0.317	0.90	0.354	1.00	1.30	2.000	No
466	30.59	1.86	0.00	1.86	0.45	0.316	0.90	0.353	1.00	1.30	2.000	No
467	30.66	1.87	0.00	1.87	0.45	0.315	0.90	0.352	1.00	1.30	2.000	No
468	30.71	1.87	0.00	1.87	0.45	0.315	0.90	0.352	1.00	1.30	2.000	No
469	30.79	1.87	0.00	1.87	0.45	0.314	0.90	0.351	1.00	1.30	2.000	No
470	30.85	1.88	0.00	1.88	0.45	0.314	0.90	0.350	1.00	1.30	2.000	No
471	30.94	1.88	0.00	1.88	0.45	0.313	0.90	0.349	1.00	1.30	2.000	No
472	30.99	1.89	0.00	1.89	0.45	0.312	0.90	0.348	1.00	1.30	2.000	No
473	31.05	1.89	0.00	1.89	0.45	0.312	0.90	0.348	1.00	1.30	2.000	No
474	31.11	1.89	0.00	1.89	0.45	0.311	0.90	0.347	1.00	1.30	2.000	No
475	31.19	1.90	0.00	1.90	0.45	0.310	0.90	0.346	1.00	1.30	2.000	No
476	31.25	1.90	0.00	1.90	0.45	0.310	0.90	0.346	1.00	1.30	2.000	No
477	31.30	1.91	0.00	1.91	0.44	0.309	0.90	0.345	1.00	1.30	2.000	No
478	31.38	1.91	0.00	1.91	0.44	0.308	0.90	0.344	1.00	1.30	2.000	No
479	31.45	1.92	0.00	1.92	0.44	0.308	0.90	0.344	1.00	1.30	2.000	No
480	31.50	1.92	0.00	1.92	0.44	0.307	0.90	0.343	1.00	1.30	2.000	No
481	31.58	1.92	0.00	1.92	0.44	0.307	0.90	0.342	1.00	1.30	2.000	No
482	31.64	1.93	0.00	1.93	0.44	0.306	0.90	0.342	1.00	1.30	2.000	No
483	31.70	1.93	0.00	1.93	0.44	0.305	0.90	0.341	1.00	1.30	2.000	No
484	31.77	1.94	0.00	1.94	0.44	0.305	0.90	0.340	1.00	1.30	2.000	No
485	31.85	1.94	0.00	1.94	0.44	0.304	0.90	0.339	1.00	1.30	2.000	No
486	31.89	1.94	0.00	1.94	0.44	0.304	0.90	0.339	1.00	1.30	2.000	No
487	31.98	1.95	0.00	1.95	0.44	0.303	0.90	0.338	1.00	1.30	2.000	No
488	32.03	1.95	0.00	1.95	0.43	0.302	0.90	0.337	1.00	1.30	2.000	No
489	32.09	1.96	0.00	1.96	0.43	0.302	0.90	0.337	1.00	1.30	2.000	No
490	32.18	1.96	0.00	1.96	0.43	0.301	0.90	0.336	1.00	1.30	2.000	No
491	32.23	1.97	0.00	1.97	0.43	0.300	0.90	0.335	1.00	1.30	2.000	No
492	32.29	1.97	0.00	1.97	0.43	0.300	0.90	0.335	1.00	1.30	2.000	No
493	32.35	1.97	0.00	1.97	0.43	0.299	0.90	0.334	1.00	1.30	2.000	No
494	32.42	1.98	0.00	1.98	0.43	0.299	0.90	0.334	1.00	1.30	2.000	No
495	32.49	1.98	0.00	1.98	0.43	0.298	0.90	0.333	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
496	32.58	1.99	0.00	1.99	0.43	0.297	0.90	0.332	1.00	1.30	2.000	No
497	32.63	1.99	0.00	1.99	0.43	0.297	0.90	0.331	1.00	1.30	2.000	No
498	32.69	1.99	0.00	1.99	0.43	0.296	0.90	0.331	1.00	1.30	2.000	No
499	32.75	2.00	0.00	2.00	0.43	0.296	0.90	0.330	1.00	1.30	2.000	No
500	32.83	2.00	0.00	2.00	0.42	0.295	0.90	0.329	1.00	1.30	2.000	No
501	32.88	2.01	0.00	2.01	0.42	0.295	0.90	0.329	1.00	1.30	2.000	No
502	32.94	2.01	0.00	2.01	0.42	0.294	0.90	0.328	1.00	1.30	2.000	No
503	33.01	2.02	0.00	2.02	0.42	0.294	0.90	0.328	1.00	1.30	2.000	No
504	33.08	2.02	0.00	2.02	0.42	0.293	0.90	0.327	1.00	1.30	2.000	No
505	33.17	2.03	0.00	2.03	0.42	0.292	0.90	0.326	1.00	1.30	2.000	No
506	33.23	2.03	0.00	2.03	0.42	0.292	0.90	0.326	1.00	1.30	2.000	No
507	33.28	2.03	0.00	2.03	0.42	0.291	0.90	0.325	1.00	1.30	2.000	No
508	33.34	2.04	0.00	2.04	0.42	0.291	0.90	0.324	1.00	1.30	2.000	No
509	33.41	2.04	0.00	2.04	0.42	0.290	0.90	0.324	1.00	1.30	2.000	No
510	33.48	2.05	0.00	2.05	0.42	0.290	0.90	0.323	1.00	1.30	2.000	No
511	33.54	2.05	0.00	2.05	0.42	0.289	0.90	0.323	1.00	1.30	2.000	No
512	33.62	2.06	0.00	2.06	0.41	0.288	0.90	0.322	1.00	1.30	2.000	No
513	33.66	2.06	0.00	2.06	0.41	0.288	0.90	0.321	1.00	1.30	2.000	No
514	33.76	2.06	0.00	2.06	0.41	0.287	0.90	0.320	1.00	1.30	2.000	No
515	33.81	2.07	0.00	2.07	0.41	0.287	0.90	0.320	1.00	1.30	2.000	No
516	33.87	2.07	0.00	2.07	0.41	0.286	0.90	0.320	1.00	1.30	2.000	No
517	33.93	2.07	0.00	2.07	0.41	0.286	0.90	0.319	1.00	1.30	2.000	No
518	33.99	2.08	0.00	2.08	0.41	0.285	0.90	0.318	1.00	1.30	2.000	No
519	34.07	2.08	0.00	2.08	0.41	0.285	0.90	0.318	1.00	1.30	2.000	No
520	34.15	2.09	0.00	2.09	0.41	0.284	0.90	0.317	1.00	1.30	2.000	No
521	34.20	2.09	0.00	2.09	0.41	0.283	0.90	0.316	1.00	1.30	2.000	No
522	34.26	2.10	0.00	2.10	0.41	0.283	0.90	0.316	1.00	1.30	2.000	No
523	34.34	2.10	0.00	2.10	0.41	0.282	0.90	0.315	1.00	1.30	2.000	No
524	34.41	2.11	0.00	2.11	0.41	0.282	0.90	0.315	1.00	1.30	2.000	No
525	34.46	2.11	0.00	2.11	0.40	0.281	0.90	0.314	1.00	1.30	2.000	No
526	34.55	2.11	0.00	2.11	0.40	0.281	0.90	0.313	1.00	1.30	2.000	No
527	34.58	2.12	0.00	2.12	0.40	0.280	0.90	0.313	1.00	1.30	2.000	No
528	34.66	2.12	0.00	2.12	0.40	0.280	0.90	0.312	1.00	1.30	2.000	No
529	34.72	2.12	0.00	2.12	0.40	0.279	0.90	0.312	1.00	1.30	2.000	No
530	34.80	2.13	0.00	2.13	0.40	0.279	0.90	0.311	1.00	1.30	2.000	No
531	34.85	2.13	0.00	2.13	0.40	0.278	0.90	0.311	1.00	1.30	2.000	No
532	34.94	2.14	0.00	2.14	0.40	0.278	0.90	0.310	1.00	1.30	2.000	No
533	34.98	2.14	0.00	2.14	0.40	0.277	0.90	0.309	1.00	1.30	2.000	No
534	35.05	2.15	0.00	2.15	0.40	0.277	0.90	0.309	1.00	1.30	2.000	No
535	35.15	2.15	0.00	2.15	0.40	0.276	0.90	0.308	1.00	1.30	2.000	No
536	35.19	2.15	0.00	2.15	0.40	0.276	0.90	0.308	1.00	1.30	2.000	No
537	35.25	2.16	0.00	2.16	0.40	0.275	0.90	0.307	1.00	1.30	2.000	No
538	35.35	2.16	0.00	2.16	0.39	0.274	0.90	0.306	1.00	1.30	2.000	No
539	35.38	2.17	0.00	2.17	0.39	0.274	0.90	0.306	1.00	1.30	2.000	No
540	35.44	2.17	0.00	2.17	0.39	0.274	0.90	0.306	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
541	35.54	2.18	0.00	2.18	0.39	0.273	0.90	0.305	1.00	1.30	2.000	No
542	35.57	2.18	0.00	2.18	0.39	0.273	0.90	0.304	1.00	1.30	2.000	No
543	35.64	2.18	0.00	2.18	0.39	0.272	0.90	0.304	1.00	1.30	2.000	No
544	35.72	2.19	0.00	2.19	0.39	0.272	0.90	0.303	1.00	1.30	2.000	No
545	35.77	2.19	0.00	2.19	0.39	0.271	0.90	0.303	1.00	1.30	2.000	No
546	35.84	2.20	0.00	2.20	0.39	0.271	0.90	0.302	1.00	1.30	2.000	No
547	35.90	2.20	0.00	2.20	0.39	0.270	0.90	0.302	1.00	1.30	2.000	No
548	35.97	2.20	0.00	2.20	0.39	0.270	0.90	0.301	1.00	1.30	2.000	No
549	36.06	2.21	0.00	2.21	0.39	0.269	0.90	0.300	1.00	1.30	2.000	No
550	36.11	2.21	0.00	2.21	0.39	0.269	0.90	0.300	1.00	1.30	2.000	No
551	36.17	2.22	0.00	2.22	0.39	0.268	0.90	0.299	1.00	1.30	2.000	No
552	36.25	2.22	0.00	2.22	0.38	0.268	0.90	0.299	1.00	1.30	2.000	No
553	36.30	2.22	0.00	2.22	0.38	0.267	0.90	0.298	1.00	1.30	2.000	No
554	36.37	2.23	0.00	2.23	0.38	0.267	0.90	0.298	1.00	1.30	2.000	No
555	36.45	2.23	0.00	2.23	0.38	0.266	0.90	0.297	1.00	1.30	2.000	No
556	36.51	2.24	0.00	2.24	0.38	0.266	0.90	0.297	1.00	1.30	2.000	No
557	36.56	2.24	0.00	2.24	0.38	0.266	0.90	0.296	1.00	1.30	2.000	No
558	36.61	2.24	0.00	2.24	0.38	0.265	0.90	0.296	1.00	1.30	2.000	No
559	36.70	2.25	0.00	2.25	0.38	0.265	0.90	0.295	1.00	1.30	2.000	No
560	36.75	2.25	0.00	2.25	0.38	0.264	0.90	0.295	1.00	1.30	2.000	No
561	36.85	2.26	0.00	2.26	0.38	0.263	0.90	0.294	1.00	1.30	2.000	No
562	36.90	2.26	0.00	2.26	0.38	0.263	0.90	0.294	1.00	1.30	2.000	No
563	36.95	2.27	0.00	2.27	0.38	0.263	0.90	0.293	1.00	1.30	2.000	No
564	37.01	2.27	0.00	2.27	0.38	0.262	0.90	0.293	1.00	1.30	2.000	No
565	37.09	2.27	0.00	2.27	0.38	0.262	0.90	0.292	1.00	1.30	2.000	No
566	37.16	2.28	0.00	2.28	0.38	0.261	0.90	0.292	1.00	1.30	2.000	No
567	37.25	2.28	0.00	2.28	0.37	0.261	0.90	0.291	1.00	1.30	2.000	No
568	37.30	2.29	0.00	2.29	0.37	0.260	0.90	0.291	1.00	1.30	2.000	No
569	37.35	2.29	0.00	2.29	0.37	0.260	0.90	0.290	1.00	1.30	2.000	No
570	37.43	2.30	0.00	2.30	0.37	0.259	0.90	0.290	1.00	1.30	2.000	No
571	37.48	2.30	0.00	2.30	0.37	0.259	0.90	0.289	1.00	1.30	2.000	No
572	37.55	2.30	0.00	2.30	0.37	0.259	0.90	0.289	1.00	1.30	2.000	No
573	37.63	2.31	0.00	2.31	0.37	0.258	0.90	0.288	1.00	1.30	2.000	No
574	37.68	2.31	0.00	2.31	0.37	0.258	0.90	0.288	1.00	1.30	2.000	No
575	37.74	2.31	0.00	2.31	0.37	0.257	0.90	0.287	1.00	1.30	2.000	No
576	37.80	2.32	0.00	2.32	0.37	0.257	0.90	0.287	1.00	1.30	2.000	No
577	37.88	2.32	0.00	2.32	0.37	0.256	0.90	0.286	1.00	1.30	2.000	No
578	37.93	2.33	0.00	2.33	0.37	0.256	0.90	0.286	1.00	1.30	2.000	No
579	38.00	2.33	0.00	2.33	0.37	0.256	0.90	0.285	1.00	1.30	2.000	No
580	38.08	2.34	0.00	2.34	0.37	0.255	0.90	0.285	1.00	1.30	2.000	No
581	38.13	2.34	0.00	2.34	0.37	0.255	0.90	0.285	1.00	1.30	2.000	No
582	38.20	2.34	0.00	2.34	0.37	0.254	0.90	0.284	1.00	1.30	2.000	No
583	38.27	2.35	0.00	2.35	0.37	0.254	0.90	0.284	1.00	1.30	2.000	No
584	38.33	2.35	0.00	2.35	0.36	0.254	0.90	0.283	1.00	1.30	2.000	No
585	38.40	2.36	0.00	2.36	0.36	0.253	0.90	0.283	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
586	38.46	2.36	0.00	2.36	0.36	0.253	0.90	0.282	1.00	1.30	2.000	No
587	38.53	2.36	0.00	2.36	0.36	0.252	0.90	0.282	1.00	1.30	2.000	No
588	38.60	2.37	0.00	2.37	0.36	0.252	0.90	0.281	1.00	1.30	2.000	No
589	38.67	2.37	0.00	2.37	0.36	0.252	0.90	0.281	1.00	1.30	2.000	No
590	38.72	2.38	0.00	2.38	0.36	0.251	0.90	0.280	1.00	1.30	2.000	No
591	38.80	2.38	0.00	2.38	0.36	0.251	0.90	0.280	1.00	1.30	2.000	No
592	38.85	2.38	0.00	2.38	0.36	0.250	0.90	0.280	1.00	1.30	2.000	No
593	38.91	2.39	0.00	2.39	0.36	0.250	0.90	0.279	1.00	1.30	2.000	No
594	38.98	2.39	0.00	2.39	0.36	0.250	0.90	0.279	1.00	1.30	2.000	No
595	39.05	2.40	0.00	2.40	0.36	0.249	0.90	0.278	1.00	1.30	2.000	No
596	39.11	2.40	0.00	2.40	0.36	0.249	0.90	0.278	1.00	1.30	2.000	No
597	39.20	2.41	0.00	2.41	0.36	0.248	0.90	0.277	1.00	1.30	2.000	No
598	39.25	2.41	0.00	2.41	0.36	0.248	0.90	0.277	1.00	1.30	2.000	No
599	39.31	2.41	0.00	2.41	0.36	0.248	0.90	0.276	1.00	1.30	2.000	No
600	39.39	2.42	0.00	2.42	0.36	0.247	0.90	0.276	1.00	1.30	2.000	No
601	39.44	2.42	0.00	2.42	0.36	0.247	0.90	0.276	1.00	1.30	2.000	No
602	39.51	2.43	0.00	2.43	0.35	0.247	0.90	0.275	1.00	1.30	2.000	No
603	39.60	2.43	0.00	2.43	0.35	0.246	0.90	0.275	1.00	1.30	2.000	No
604	39.65	2.44	0.00	2.44	0.35	0.246	0.90	0.274	1.00	1.30	2.000	No
605	39.70	2.44	0.00	2.44	0.35	0.245	0.90	0.274	1.00	1.30	2.000	No
606	39.79	2.44	0.00	2.44	0.35	0.245	0.90	0.273	1.00	1.30	2.000	No
607	39.84	2.45	0.00	2.45	0.35	0.245	0.90	0.273	1.00	1.30	2.000	No
608	39.90	2.45	0.00	2.45	0.35	0.244	0.90	0.273	1.00	1.30	2.000	No
609	39.99	2.46	0.00	2.46	0.35	0.244	0.90	0.272	1.00	1.30	2.000	No
610	40.03	2.46	0.00	2.46	0.35	0.244	0.90	0.272	1.00	1.30	0.353	No
611	40.10	2.46	0.00	2.46	0.35	0.243	0.90	0.272	1.00	1.30	0.353	No
612	40.20	2.47	0.01	2.46	0.35	0.243	0.90	0.271	1.00	1.30	0.353	No
613	40.24	2.47	0.01	2.47	0.35	0.243	0.90	0.271	1.00	1.30	0.353	No
614	40.30	2.48	0.01	2.47	0.35	0.243	0.90	0.271	1.00	1.30	0.352	No
615	40.39	2.48	0.01	2.47	0.35	0.243	0.90	0.271	1.00	1.30	0.352	No
616	40.44	2.49	0.01	2.47	0.35	0.243	0.90	0.271	1.00	1.30	0.352	No
617	40.50	2.49	0.02	2.47	0.35	0.242	0.90	0.271	1.00	1.30	0.352	No
618	40.59	2.50	0.02	2.48	0.35	0.242	0.90	0.270	1.00	1.30	0.351	No
619	40.63	2.50	0.02	2.48	0.35	0.242	0.90	0.270	1.00	1.30	0.351	No
620	40.69	2.50	0.02	2.48	0.34	0.242	0.90	0.270	1.00	1.30	0.351	No
621	40.76	2.51	0.02	2.48	0.34	0.242	0.90	0.270	1.00	1.30	0.351	No
622	40.83	2.51	0.03	2.49	0.34	0.242	0.90	0.270	1.00	1.30	0.351	No
623	40.88	2.51	0.03	2.49	0.34	0.242	0.90	0.270	1.00	1.30	0.350	No
624	40.97	2.52	0.03	2.49	0.34	0.241	0.90	0.269	1.00	1.30	0.350	No
625	41.02	2.52	0.03	2.49	0.34	0.241	0.90	0.269	1.00	1.30	0.350	No
626	41.08	2.53	0.03	2.49	0.34	0.241	0.90	0.269	1.00	1.30	0.350	No
627	41.16	2.53	0.04	2.50	0.34	0.241	0.90	0.269	1.00	1.30	0.349	No
628	41.23	2.54	0.04	2.50	0.34	0.241	0.90	0.269	1.00	1.30	0.349	No
629	41.28	2.54	0.04	2.50	0.34	0.241	0.90	0.269	1.00	1.30	0.349	No
630	41.35	2.55	0.04	2.50	0.34	0.240	0.90	0.268	1.00	1.30	0.349	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
631	41.42	2.55	0.04	2.51	0.34	0.240	0.90	0.268	1.00	1.30	0.349	No
632	41.47	2.55	0.05	2.51	0.34	0.240	0.90	0.268	1.00	1.30	0.348	No
633	41.57	2.56	0.05	2.51	0.34	0.240	0.90	0.268	1.00	1.30	0.348	No
634	41.62	2.56	0.05	2.51	0.34	0.240	0.90	0.268	1.00	1.30	0.348	No
635	41.68	2.57	0.05	2.51	0.34	0.240	0.90	0.267	1.00	1.30	0.348	No
636	41.75	2.57	0.05	2.52	0.34	0.239	0.90	0.267	1.00	1.30	0.347	No
637	41.81	2.58	0.06	2.52	0.34	0.239	0.90	0.267	1.00	1.30	0.347	No
638	41.87	2.58	0.06	2.52	0.34	0.239	0.90	0.267	1.00	1.30	0.347	No
639	41.94	2.58	0.06	2.52	0.34	0.239	0.90	0.267	1.00	1.30	0.347	No
640	42.01	2.59	0.06	2.53	0.34	0.239	0.90	0.267	1.00	1.30	0.347	No
641	42.11	2.59	0.07	2.53	0.33	0.239	0.90	0.266	1.00	1.30	0.346	No
642	42.16	2.60	0.07	2.53	0.33	0.239	0.90	0.266	1.00	1.30	0.346	No
643	42.21	2.60	0.07	2.53	0.33	0.238	0.90	0.266	1.00	1.30	0.346	No
644	42.26	2.60	0.07	2.53	0.33	0.238	0.90	0.266	1.00	1.30	0.346	No
645	42.33	2.61	0.07	2.54	0.33	0.238	0.90	0.266	1.00	1.30	0.346	No
646	42.39	2.61	0.07	2.54	0.33	0.238	0.90	0.266	1.00	1.30	0.345	No
647	42.48	2.62	0.08	2.54	0.33	0.238	0.90	0.266	1.00	1.30	0.345	No
648	42.55	2.62	0.08	2.54	0.33	0.238	0.90	0.265	1.00	1.30	0.345	No
649	42.60	2.63	0.08	2.54	0.33	0.238	0.90	0.265	1.00	1.30	0.345	No
650	42.66	2.63	0.08	2.55	0.33	0.238	0.90	0.265	1.00	1.30	0.345	No
651	42.74	2.63	0.09	2.55	0.33	0.237	0.90	0.265	1.00	1.30	0.344	No
652	42.78	2.64	0.09	2.55	0.33	0.237	0.90	0.265	1.00	1.30	0.344	No
653	42.85	2.64	0.09	2.55	0.33	0.237	0.90	0.265	1.00	1.30	0.344	No
654	42.94	2.65	0.09	2.55	0.33	0.237	0.90	0.264	1.00	1.30	0.344	No
655	42.98	2.65	0.09	2.56	0.33	0.237	0.90	0.264	1.00	1.30	0.344	No
656	43.05	2.65	0.10	2.56	0.33	0.237	0.90	0.264	1.00	1.30	0.343	No
657	43.12	2.66	0.10	2.56	0.33	0.237	0.90	0.264	1.00	1.30	0.343	No
658	43.18	2.66	0.10	2.56	0.33	0.236	0.90	0.264	1.00	1.30	0.343	No
659	43.25	2.67	0.10	2.56	0.33	0.236	0.90	0.264	1.00	1.30	0.343	No
660	43.33	2.67	0.10	2.57	0.33	0.236	0.90	0.264	1.00	1.30	0.343	No
661	43.38	2.67	0.11	2.57	0.33	0.236	0.90	0.263	1.00	1.30	0.343	No
662	43.45	2.68	0.11	2.57	0.33	0.236	0.90	0.263	1.00	1.30	0.342	No
663	43.51	2.68	0.11	2.57	0.33	0.236	0.90	0.263	1.00	1.30	0.342	No
664	43.58	2.69	0.11	2.57	0.32	0.236	0.90	0.263	1.00	1.30	0.342	No
665	43.64	2.69	0.11	2.58	0.32	0.236	0.90	0.263	1.00	1.30	0.342	No
666	43.71	2.69	0.12	2.58	0.32	0.235	0.90	0.263	1.00	1.30	0.342	No
667	43.77	2.70	0.12	2.58	0.32	0.235	0.90	0.263	1.00	1.30	0.341	No
668	43.84	2.70	0.12	2.58	0.32	0.235	0.90	0.262	1.00	1.30	0.341	No
669	43.90	2.71	0.12	2.58	0.32	0.235	0.90	0.262	1.00	1.30	0.341	No
670	43.99	2.71	0.12	2.59	0.32	0.235	0.90	0.262	1.00	1.30	0.341	No
671	44.03	2.71	0.13	2.59	0.32	0.235	0.90	0.262	1.00	1.30	0.341	No
672	44.10	2.72	0.13	2.59	0.32	0.235	0.90	0.262	1.00	1.30	0.341	No
673	44.18	2.72	0.13	2.59	0.32	0.235	0.90	0.262	1.00	1.30	0.340	No
674	44.24	2.73	0.13	2.59	0.32	0.234	0.90	0.262	1.00	1.30	0.340	No
675	44.29	2.73	0.13	2.60	0.32	0.234	0.90	0.262	1.00	1.30	0.340	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
676	44.38	2.74	0.14	2.60	0.32	0.234	0.90	0.261	1.00	1.30	0.340	No
677	44.44	2.74	0.14	2.60	0.32	0.234	0.90	0.261	1.00	1.30	0.340	No
678	44.49	2.74	0.14	2.60	0.32	0.234	0.90	0.261	1.00	1.30	0.340	No
679	44.57	2.75	0.14	2.60	0.32	0.234	0.90	0.261	1.00	1.30	0.339	No
680	44.64	2.75	0.14	2.61	0.32	0.234	0.90	0.261	1.00	1.30	0.339	No
681	44.69	2.76	0.15	2.61	0.32	0.234	0.90	0.261	1.00	1.30	0.339	No
682	44.78	2.76	0.15	2.61	0.32	0.233	0.90	0.261	1.00	1.30	0.339	No
683	44.83	2.76	0.15	2.61	0.32	0.233	0.90	0.261	1.00	1.30	0.339	No
684	44.91	2.77	0.15	2.62	0.32	0.233	0.90	0.260	1.00	1.30	0.338	No
685	44.95	2.77	0.15	2.62	0.32	0.233	0.90	0.260	1.00	1.30	0.338	No
686	45.03	2.78	0.16	2.62	0.32	0.233	0.90	0.260	1.00	1.30	0.338	No
687	45.08	2.78	0.16	2.62	0.32	0.233	0.90	0.260	1.00	1.30	0.338	No
688	45.18	2.79	0.16	2.63	0.32	0.233	0.90	0.260	1.00	1.30	0.338	No
689	45.22	2.79	0.16	2.63	0.32	0.233	0.90	0.260	1.00	1.30	0.338	No
690	45.28	2.79	0.16	2.63	0.31	0.233	0.90	0.260	1.00	1.30	0.338	No
691	45.35	2.80	0.17	2.63	0.31	0.232	0.90	0.260	1.00	1.30	0.337	No
692	45.41	2.80	0.17	2.63	0.31	0.232	0.90	0.259	1.00	1.30	0.337	No
693	45.48	2.81	0.17	2.64	0.31	0.232	0.90	0.259	1.00	1.30	0.337	No
694	45.55	2.81	0.17	2.64	0.31	0.232	0.90	0.259	1.00	1.30	0.337	No
695	45.61	2.82	0.18	2.64	0.31	0.232	0.90	0.259	1.00	1.30	0.337	No
696	45.67	2.82	0.18	2.64	0.31	0.232	0.90	0.259	1.00	1.30	0.337	No
697	45.74	2.82	0.18	2.65	0.31	0.232	0.90	0.259	1.00	1.30	0.336	No
698	45.80	2.83	0.18	2.65	0.31	0.232	0.90	0.259	1.00	1.30	0.336	No
699	45.87	2.83	0.18	2.65	0.31	0.232	0.90	0.259	1.00	1.30	0.336	No
700	45.94	2.84	0.19	2.65	0.31	0.232	0.90	0.258	1.00	1.30	0.336	No
701	46.01	2.84	0.19	2.65	0.31	0.231	0.90	0.258	1.00	1.30	0.336	No
702	46.06	2.85	0.19	2.66	0.31	0.231	0.90	0.258	1.00	1.30	0.336	No
703	46.16	2.85	0.19	2.66	0.31	0.231	0.90	0.258	1.00	1.30	0.336	No
704	46.21	2.85	0.19	2.66	0.31	0.231	0.90	0.258	1.00	1.30	0.335	No
705	46.26	2.86	0.20	2.66	0.31	0.231	0.90	0.258	1.00	1.30	0.335	No
706	46.34	2.86	0.20	2.67	0.31	0.231	0.90	0.258	1.00	1.30	0.335	No
707	46.41	2.87	0.20	2.67	0.31	0.231	0.90	0.258	1.00	1.30	0.335	No
708	46.46	2.87	0.20	2.67	0.31	0.231	0.90	0.258	1.00	1.30	0.335	No
709	46.55	2.88	0.20	2.67	0.31	0.231	0.90	0.257	1.00	1.30	0.335	No
710	46.59	2.88	0.21	2.67	0.31	0.231	0.90	0.257	1.00	1.30	0.335	No
711	46.66	2.88	0.21	2.68	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
712	46.74	2.89	0.21	2.68	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
713	46.80	2.89	0.21	2.68	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
714	46.85	2.90	0.21	2.68	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
715	46.93	2.90	0.22	2.68	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
716	46.98	2.90	0.22	2.69	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
717	47.05	2.91	0.22	2.69	0.31	0.230	0.90	0.257	1.00	1.30	0.334	No
718	47.13	2.91	0.22	2.69	0.31	0.230	0.90	0.257	1.00	1.30	0.333	No
719	47.20	2.92	0.22	2.69	0.30	0.230	0.90	0.256	1.00	1.30	0.333	No
720	47.25	2.92	0.23	2.70	0.30	0.230	0.90	0.256	1.00	1.30	0.333	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition
721	47.33	2.93	0.23	2.70	0.30	0.230	0.90	0.256	1.00	1.30	0.333	No
722	47.39	2.93	0.23	2.70	0.30	0.229	0.90	0.256	1.00	1.30	0.333	No
723	47.44	2.93	0.23	2.70	0.30	0.229	0.90	0.256	1.00	1.30	0.333	No
724	47.53	2.94	0.23	2.70	0.30	0.229	0.90	0.256	1.00	1.30	0.333	No
725	47.57	2.94	0.24	2.70	0.30	0.229	0.90	0.256	1.00	1.30	0.333	No
726	47.64	2.94	0.24	2.71	0.30	0.229	0.90	0.256	1.00	1.30	0.333	No
727	47.72	2.95	0.24	2.71	0.30	0.229	0.90	0.256	1.00	1.30	0.332	No
728	47.79	2.95	0.24	2.71	0.30	0.229	0.90	0.256	1.00	1.30	0.332	No
729	47.84	2.96	0.24	2.71	0.30	0.229	0.90	0.256	1.00	1.30	0.332	No
730	47.94	2.96	0.25	2.71	0.30	0.229	0.90	0.255	1.00	1.30	0.332	No
731	47.98	2.96	0.25	2.72	0.30	0.229	0.90	0.255	1.00	1.30	0.332	No
732	48.07	2.97	0.25	2.72	0.30	0.229	0.90	0.255	1.00	1.30	0.332	No
733	48.13	2.97	0.25	2.72	0.30	0.229	0.90	0.255	1.00	1.30	0.332	No
734	48.18	2.98	0.26	2.72	0.30	0.229	0.90	0.255	1.00	1.30	0.332	No
735	48.24	2.98	0.26	2.72	0.30	0.228	0.90	0.255	1.00	1.30	0.332	No
736	48.31	2.99	0.26	2.73	0.30	0.228	0.90	0.255	1.00	1.30	0.331	No
737	48.36	2.99	0.26	2.73	0.30	0.228	0.90	0.255	1.00	1.30	0.331	No
738	48.43	2.99	0.26	2.73	0.30	0.228	0.90	0.255	1.00	1.30	0.331	No
739	48.51	3.00	0.27	2.73	0.30	0.228	0.90	0.255	1.00	1.30	0.331	No
740	48.58	3.00	0.27	2.73	0.30	0.228	0.90	0.255	1.00	1.30	0.331	No
741	48.63	3.01	0.27	2.74	0.30	0.228	0.90	0.255	1.00	1.30	0.331	No
742	48.72	3.01	0.27	2.74	0.30	0.228	0.90	0.254	1.00	1.30	0.331	No
743	48.76	3.01	0.27	2.74	0.30	0.228	0.90	0.254	1.00	1.30	0.331	No
744	48.82	3.02	0.28	2.74	0.30	0.228	0.90	0.254	1.00	1.30	0.331	No
745	48.92	3.02	0.28	2.74	0.30	0.228	0.90	0.254	1.00	1.30	0.330	No
746	48.97	3.03	0.28	2.75	0.30	0.228	0.90	0.254	1.00	1.30	0.330	No
747	49.03	3.03	0.28	2.75	0.30	0.228	0.90	0.254	1.00	1.30	0.330	No
748	49.12	3.03	0.28	2.75	0.30	0.227	0.90	0.254	1.00	1.30	0.330	No
749	49.15	3.04	0.29	2.75	0.30	0.227	0.90	0.254	1.00	1.30	0.330	No
750	49.23	3.04	0.29	2.75	0.30	0.227	0.90	0.254	1.00	1.30	0.330	No
751	49.30	3.05	0.29	2.76	0.30	0.227	0.90	0.254	1.00	1.30	0.330	No
752	49.35	3.05	0.29	2.76	0.30	0.227	0.90	0.254	1.00	1.30	0.330	No
753	49.41	3.05	0.29	2.76	0.30	0.227	0.90	0.254	1.00	1.30	0.330	No
754	49.48	3.06	0.30	2.76	0.29	0.227	0.90	0.254	1.00	1.30	0.330	No
755	49.54	3.06	0.30	2.76	0.29	0.227	0.90	0.253	1.00	1.30	0.329	No
756	49.61	3.06	0.30	2.76	0.29	0.227	0.90	0.253	1.00	1.30	0.329	No
757	49.69	3.07	0.30	2.77	0.29	0.227	0.90	0.253	1.00	1.30	0.329	No
758	49.74	3.07	0.30	2.77	0.29	0.227	0.90	0.253	1.00	1.30	0.329	No
759	49.81	3.08	0.31	2.77	0.29	0.227	0.90	0.253	1.00	1.30	2.000	No
760	49.90	3.08	0.31	2.77	0.29	0.227	0.90	0.253	1.00	1.30	2.000	No
761	49.95	3.08	0.31	2.77	0.29	0.227	0.90	0.253	1.00	1.30	2.000	No
762	50.01	3.08	0.31	2.77	0.29	0.227	0.90	0.253	1.00	1.30	2.000	No
763	50.09	3.09	0.31	2.77	0.29	0.227	0.90	0.253	1.00	1.30	2.000	No
764	50.14	3.09	0.32	2.77	0.29	0.227	0.90	0.253	1.00	1.30	2.000	No

:: Cyclic Stress Ratio fully adjusted (CSR*) calculation data :: (continued)

Point ID	Depth (ft)	σ_v (tsf)	u_0 (tsf)	σ_v' (tsf)	r_d	CSR	MSF	CSR_{eq}	K_σ	User FS	CSR^*	Belongs to transition

Abbreviations

Depth: Depth from free surface, at which CPT was performed (ft)
σ_v: Total overburden pressure at test point (tsf)
u_0: Water pressure at test point (tsf)
σ_v': Effective overburden pressure based on GWT during earthquake (tsf)
r_d: Nonlinear shear mass factor
CSR: Cyclic Stress Ratio
MSF: Magnitude Scaling Factor
CSR_{eq}: CSR adjusted for M=7.5
K_σ: Effective overburden stress factor
CSR^*: CSR fully adjusted

:: Cyclic Resistance Ratio (CRR) calculation data ::

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
1	0.07	4.11	0.00	1.00	1.70	6.99	4.58	11.57	4.000	No	Yes	2.00
2	0.16	5.72	0.01	0.88	1.70	9.72	7.62	17.35	4.000	No	Yes	2.00
3	0.21	4.20	0.01	0.92	1.70	7.14	16.63	23.77	4.000	No	Yes	2.00
4	0.27	4.11	0.01	0.88	1.70	6.99	29.53	36.52	4.000	No	Yes	2.00
5	0.33	3.93	0.02	0.85	1.70	6.68	52.26	58.94	4.000	No	Yes	2.00
6	0.41	3.93	0.02	0.84	1.70	6.68	60.56	67.25	4.000	No	Yes	2.00
7	0.46	4.02	0.02	0.83	1.70	6.83	60.33	67.16	4.000	No	Yes	2.00
8	0.54	4.92	0.03	0.77	1.70	8.36	49.69	58.06	4.000	No	Yes	2.00
9	0.60	5.63	0.03	0.74	1.70	9.57	44.37	53.94	4.000	No	Yes	2.00
10	0.66	3.93	0.03	0.83	1.70	6.68	61.97	68.66	4.000	No	Yes	2.00
11	0.75	3.93	0.04	0.82	1.70	6.68	61.95	68.63	4.000	No	Yes	2.00
12	0.81	4.11	0.04	0.81	1.70	6.99	61.94	68.93	4.000	No	Yes	2.00
13	0.86	4.47	0.04	0.79	1.70	7.60	59.35	66.94	4.000	No	Yes	2.00
14	0.95	4.83	0.05	0.79	1.70	8.21	44.10	52.31	4.000	No	Yes	2.00
15	0.99	5.18	0.05	0.78	1.70	8.81	38.50	47.30	4.000	No	Yes	2.00
16	1.05	5.90	0.05	0.76	1.70	10.03	29.69	39.72	4.000	No	Yes	2.00
17	1.12	6.52	0.06	0.77	1.70	11.08	19.03	30.11	4.000	No	Yes	2.00
18	1.19	7.60	0.06	0.79	1.70	12.92	9.34	22.26	4.000	No	Yes	2.00
19	1.25	8.49	0.06	0.83	1.70	14.43	2.75	17.18	4.000	No	No	2.00
20	1.35	9.47	0.07	1.39	1.70	16.10	0.00	16.10	4.000	No	No	2.00
21	1.39	9.92	0.07	1.19	1.70	16.86	0.00	16.86	4.000	No	No	2.00
22	1.44	10.19	0.07	1.03	1.70	17.32	0.00	17.32	4.000	No	No	2.00
23	1.51	10.41	0.07	0.94	1.70	17.70	0.00	17.70	4.000	No	No	2.00
24	1.58	10.81	0.08	0.87	1.70	18.38	0.00	18.38	4.000	No	No	2.00
25	1.65	10.64	0.08	0.80	1.70	18.09	1.72	19.81	4.000	No	No	2.00
26	1.73	10.46	0.08	0.73	1.70	17.78	7.45	25.24	4.000	No	No	2.00
27	1.78	10.10	0.09	0.70	1.70	17.17	12.09	29.26	4.000	No	Yes	2.00
28	1.84	10.01	0.09	0.67	1.70	17.02	17.78	34.80	4.000	No	Yes	2.00
29	1.92	9.74	0.09	0.65	1.70	16.56	23.64	40.20	4.000	No	Yes	2.00
30	1.98	9.64	0.10	0.64	1.70	16.41	26.09	42.50	4.000	No	Yes	2.00
31	2.05	9.82	0.10	0.64	1.70	16.71	25.23	41.94	4.000	No	Yes	2.00
32	2.12	10.36	0.10	0.63	1.70	17.63	23.52	41.14	4.000	No	Yes	2.00
33	2.17	11.97	0.11	0.62	1.70	20.37	19.46	39.83	4.000	No	Yes	2.00
34	2.24	14.92	0.11	0.60	1.70	25.36	14.04	39.41	4.000	No	No	2.00
35	2.32	18.05	0.12	0.59	1.70	30.68	10.78	41.46	4.000	No	No	2.00
36	2.37	20.01	0.12	0.59	1.70	34.03	9.24	43.28	4.000	No	No	2.00
37	2.44	21.26	0.12	0.59	1.70	36.16	8.49	44.65	4.000	No	No	2.00
38	2.51	23.05	0.13	0.58	1.70	39.20	7.46	46.66	4.000	No	No	2.00
39	2.57	25.19	0.13	0.58	1.70	42.84	6.67	49.51	4.000	No	No	2.00
40	2.66	27.96	0.13	0.57	1.70	47.55	6.26	53.81	4.000	No	No	2.00
41	2.71	29.03	0.14	0.56	1.70	49.37	6.46	55.82	4.000	No	No	2.00
42	2.76	30.55	0.14	0.55	1.70	51.95	6.75	58.70	4.000	No	No	2.00
43	2.85	32.88	0.14	0.54	1.70	55.91	7.36	63.27	4.000	No	No	2.00
44	2.90	33.77	0.15	0.56	1.70	57.43	5.14	62.56	4.000	No	No	2.00
45	2.96	34.50	0.15	0.60	1.70	58.65	2.00	60.65	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
46	3.06	35.75	0.16	0.59	1.70	60.77	2.40	63.17	4.000	No	No	2.00
47	3.11	36.02	0.16	0.59	1.70	61.23	2.70	63.93	4.000	No	No	2.00
48	3.16	35.84	0.16	0.58	1.70	60.93	3.07	63.99	4.000	No	No	2.00
49	3.22	33.16	0.16	0.57	1.70	56.37	4.28	60.65	4.000	No	No	2.00
50	3.30	30.83	0.17	0.56	1.70	52.41	6.23	58.64	4.000	No	No	2.00
51	3.36	30.39	0.17	0.55	1.70	51.66	7.28	58.94	4.000	No	No	2.00
52	3.44	28.33	0.18	0.53	1.70	48.16	10.65	58.81	4.000	No	No	2.00
53	3.50	26.27	0.18	0.51	1.70	44.66	13.91	58.57	4.000	No	No	2.00
54	3.55	25.11	0.18	0.50	1.70	42.69	16.78	59.46	4.000	No	No	2.00
55	3.65	22.43	0.19	0.49	1.70	38.13	22.77	60.90	4.000	No	No	2.00
56	3.70	21.63	0.19	0.49	1.70	36.77	24.77	61.54	4.000	No	No	2.00
57	3.74	20.55	0.19	0.49	1.70	34.94	27.26	62.20	4.000	No	No	2.00
58	3.81	18.05	0.20	0.49	1.70	30.68	32.41	63.09	4.000	No	Yes	2.00
59	3.88	15.28	0.20	0.50	1.70	25.98	39.80	65.77	4.000	No	Yes	2.00
60	3.94	13.41	0.20	0.51	1.70	22.80	46.37	69.16	4.000	No	Yes	2.00
61	4.01	11.98	0.21	0.52	1.70	20.37	51.97	72.34	4.000	No	Yes	2.00
62	4.09	11.35	0.21	0.53	1.70	19.30	55.96	75.26	4.000	No	Yes	2.00
63	4.15	10.90	0.22	0.53	1.70	18.53	60.54	79.07	4.000	No	Yes	2.00
64	4.23	11.08	0.22	0.52	1.70	18.84	61.04	79.88	4.000	No	Yes	2.00
65	4.29	12.51	0.22	0.50	1.70	21.27	59.23	80.50	4.000	No	Yes	2.00
66	4.34	14.21	0.23	0.49	1.70	24.16	52.96	77.11	4.000	No	Yes	2.00
67	4.42	16.35	0.23	0.48	1.70	27.80	46.99	74.78	4.000	No	Yes	2.00
68	4.47	18.59	0.23	0.47	1.70	31.60	41.40	73.00	4.000	No	Yes	2.00
69	4.54	20.55	0.24	0.46	1.70	34.94	37.60	72.54	4.000	No	Yes	2.00
70	4.60	24.75	0.24	0.45	1.70	42.08	30.33	72.40	4.000	No	No	2.00
71	4.68	28.24	0.25	0.45	1.70	48.01	25.84	73.84	4.000	No	No	2.00
72	4.73	30.21	0.25	0.45	1.70	51.36	23.70	75.06	4.000	No	No	2.00
73	4.80	31.55	0.25	0.45	1.70	53.63	22.86	76.49	4.000	No	No	2.00
74	4.87	32.08	0.26	0.44	1.70	54.54	23.52	78.06	4.000	No	No	2.00
75	4.92	32.17	0.26	0.44	1.70	54.69	23.94	78.63	4.000	No	No	2.00
76	4.99	31.99	0.26	0.44	1.70	54.38	23.87	78.25	4.000	No	No	2.00
77	5.08	31.19	0.27	0.45	1.70	53.02	23.44	76.46	4.000	No	No	2.00
78	5.13	31.19	0.27	0.45	1.70	53.02	22.59	75.62	4.000	No	No	2.00
79	5.18	31.19	0.28	0.45	1.70	53.02	21.38	74.40	4.000	No	No	2.00
80	5.25	32.08	0.28	0.46	1.70	54.54	19.26	73.79	4.000	No	No	2.00
81	5.32	32.89	0.28	0.46	1.70	55.91	17.58	73.49	4.000	No	No	2.00
82	5.39	34.76	0.29	0.47	1.70	59.09	14.48	73.57	4.000	No	No	2.00
83	5.48	37.62	0.29	0.49	1.70	63.95	11.03	74.98	4.000	No	No	2.00
84	5.53	39.77	0.30	0.49	1.70	67.61	9.57	77.18	4.000	No	No	2.00
85	5.59	42.81	0.30	0.50	1.70	72.78	8.41	81.19	4.000	No	No	2.00
86	5.67	45.31	0.30	0.50	1.70	77.03	7.57	84.60	4.000	No	No	2.00
87	5.72	47.99	0.31	0.50	1.70	81.58	6.77	88.35	4.000	No	No	2.00
88	5.78	52.28	0.31	0.52	1.70	88.88	4.53	93.41	4.000	No	No	2.00
89	5.87	56.93	0.31	0.57	1.70	96.78	0.76	97.54	4.000	No	No	2.00
90	5.91	58.54	0.32	0.57	1.70	99.52	0.82	100.34	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
91	5.98	62.29	0.32	0.56	1.70	105.89	0.85	106.75	4.000	No	No	2.00
92	6.07	65.69	0.33	0.55	1.70	111.67	1.18	112.85	4.000	No	No	2.00
93	6.12	68.28	0.33	0.55	1.70	116.08	1.19	117.27	4.000	No	No	2.00
94	6.17	66.40	0.33	0.54	1.70	112.88	1.81	114.69	4.000	No	No	2.00
95	6.23	72.66	0.34	0.54	1.70	123.52	1.43	124.95	4.000	No	No	2.00
96	6.32	77.21	0.34	0.53	1.70	131.26	1.46	132.71	4.000	No	No	2.00
97	6.37	80.52	0.34	0.53	1.70	136.88	1.58	138.47	4.000	No	No	2.00
98	6.44	83.56	0.35	0.52	1.70	142.05	1.72	143.77	4.000	No	No	2.00
99	6.51	84.99	0.35	0.52	1.70	144.48	1.91	146.39	4.000	No	No	2.00
100	6.56	85.17	0.35	0.51	1.70	144.79	2.13	146.92	4.000	No	No	2.00
101	6.65	84.81	0.36	0.51	1.70	144.18	2.15	146.33	4.000	No	No	2.00
102	6.71	83.56	0.36	0.52	1.70	142.05	2.19	144.24	4.000	No	No	2.00
103	6.76	82.58	0.37	0.52	1.70	140.39	2.20	142.58	4.000	No	No	2.00
104	6.84	79.89	0.37	0.52	1.70	135.81	2.31	138.13	4.000	No	No	2.00
105	6.91	77.04	0.37	0.52	1.70	130.97	2.44	133.41	4.000	No	No	2.00
106	6.96	74.62	0.38	0.52	1.70	126.85	2.52	129.38	4.000	No	No	2.00
107	7.03	71.67	0.38	0.52	1.70	121.65	2.64	124.29	4.000	No	No	2.00
108	7.10	70.06	0.39	0.52	1.69	118.41	2.72	121.13	4.000	No	No	2.00
109	7.17	67.56	0.39	0.52	1.68	113.68	2.88	116.56	4.000	No	No	2.00
110	7.25	65.51	0.39	0.52	1.67	109.52	3.08	112.60	4.000	No	No	2.00
111	7.29	64.70	0.40	0.52	1.67	107.81	3.16	110.97	4.000	No	No	2.00
112	7.36	61.93	0.40	0.52	1.65	102.38	3.65	106.03	4.000	No	No	2.00
113	7.45	59.52	0.41	0.51	1.63	97.31	4.29	101.60	4.000	No	No	2.00
114	7.50	57.11	0.41	0.51	1.63	92.81	4.84	97.65	4.000	No	No	2.00
115	7.55	55.14	0.41	0.51	1.62	89.16	5.25	94.41	4.000	No	No	2.00
116	7.63	53.35	0.42	0.51	1.61	85.76	5.57	91.33	4.000	No	No	2.00
117	7.69	53.26	0.42	0.51	1.60	85.40	5.47	90.87	4.000	No	No	2.00
118	7.75	53.62	0.42	0.51	1.60	85.64	5.44	91.09	4.000	No	No	2.00
119	7.85	54.25	0.43	0.51	1.58	85.90	5.56	91.47	4.000	No	No	2.00
120	7.88	53.98	0.43	0.51	1.58	85.14	5.77	90.91	4.000	No	No	2.00
121	7.94	52.46	0.43	0.50	1.56	82.04	6.55	88.60	4.000	No	No	2.00
122	8.04	47.63	0.44	0.49	1.53	73.08	9.28	82.35	4.000	No	No	2.00
123	8.09	43.34	0.44	0.48	1.52	65.83	11.66	77.48	4.000	No	No	2.00
124	8.14	41.20	0.45	0.49	1.53	63.04	10.71	73.75	4.000	No	No	2.00
125	8.23	35.75	0.45	0.53	1.57	56.17	7.89	64.06	4.000	No	No	2.00
126	8.27	34.23	0.45	0.52	1.56	53.40	9.16	62.56	4.000	No	No	2.00
127	8.34	30.47	0.46	0.51	1.54	46.93	12.54	59.47	4.000	No	No	2.00
128	8.41	28.96	0.46	0.51	1.53	44.21	14.70	58.91	4.000	No	No	2.00
129	8.47	28.78	0.46	0.51	1.52	43.63	15.59	59.23	4.000	No	No	2.00
130	8.53	28.60	0.47	0.50	1.51	43.17	16.07	59.23	4.000	No	No	2.00
131	8.60	29.31	0.47	0.50	1.50	43.99	15.90	59.89	4.000	No	No	2.00
132	8.68	28.87	0.48	0.50	1.49	43.06	16.81	59.88	4.000	No	No	2.00
133	8.74	29.31	0.48	0.50	1.49	43.63	16.03	59.66	4.000	No	No	2.00
134	8.80	28.78	0.48	0.51	1.49	42.86	15.56	58.42	4.000	No	No	2.00
135	8.88	29.31	0.49	0.51	1.49	43.56	14.62	58.18	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
136	8.95	29.85	0.49	0.51	1.48	44.08	14.84	58.92	4.000	No	No	2.00
137	9.01	30.65	0.49	0.50	1.47	44.93	15.21	60.14	4.000	No	No	2.00
138	9.07	30.56	0.50	0.50	1.46	44.51	16.07	60.58	4.000	No	No	2.00
139	9.14	30.21	0.50	0.49	1.45	43.69	17.43	61.11	4.000	No	No	2.00
140	9.20	30.16	0.51	0.49	1.43	43.19	19.56	62.75	4.000	No	No	2.00
141	9.26	30.16	0.51	0.48	1.42	42.80	21.47	64.27	4.000	No	No	2.00
142	9.34	30.12	0.51	0.47	1.41	42.46	22.66	65.12	4.000	No	No	2.00
143	9.39	32.35	0.52	0.47	1.40	45.43	20.77	66.19	4.000	No	No	2.00
144	9.48	37.27	0.52	0.48	1.40	52.18	16.71	68.88	4.000	No	No	2.00
145	9.52	41.11	0.52	0.48	1.40	57.51	14.20	71.71	4.000	No	No	2.00
146	9.58	46.02	0.53	0.48	1.40	64.39	11.49	75.89	4.000	No	No	2.00
147	9.67	52.91	0.53	0.48	1.39	73.78	9.40	83.18	4.000	No	No	2.00
148	9.71	55.59	0.54	0.48	1.39	77.32	8.89	86.20	4.000	No	No	2.00
149	9.78	56.93	0.54	0.46	1.37	77.74	11.57	89.32	4.000	No	No	2.00
150	9.88	54.69	0.54	0.43	1.33	72.73	18.34	91.07	4.000	No	No	2.00
151	9.93	50.76	0.55	0.43	1.32	67.22	20.70	87.92	4.000	No	No	2.00
152	9.98	47.90	0.55	0.43	1.32	63.25	22.49	85.74	4.000	No	No	2.00
153	10.07	42.54	0.56	0.42	1.31	55.85	26.95	82.80	4.000	No	No	2.00
154	10.11	41.82	0.56	0.42	1.31	54.82	27.45	82.27	4.000	No	No	2.00
155	10.18	45.31	0.56	0.43	1.31	59.27	24.47	83.74	4.000	No	No	2.00
156	10.24	54.34	0.57	0.43	1.31	71.04	18.88	89.91	4.000	No	No	2.00
157	10.32	77.48	0.57	0.44	1.31	101.77	10.76	112.53	4.000	No	No	2.00
158	10.37	90.89	0.57	0.45	1.32	119.93	7.79	127.72	4.000	No	No	2.00
159	10.47	103.49	0.58	0.48	1.33	137.69	4.88	142.57	4.000	No	No	2.00
160	10.52	105.99	0.58	0.49	1.34	141.57	3.92	145.48	4.000	No	No	2.00
161	10.57	105.45	0.59	0.50	1.34	141.17	3.37	144.55	4.000	No	No	2.00
162	10.66	100.18	0.59	0.50	1.34	133.76	3.41	137.16	4.000	No	No	2.00
163	10.72	94.02	0.60	0.49	1.33	124.83	4.12	128.96	4.000	No	No	2.00
164	10.77	83.74	0.60	0.48	1.32	110.37	5.56	115.93	4.000	No	No	2.00
165	10.83	76.23	0.60	0.49	1.32	100.45	5.83	106.28	4.000	No	No	2.00
166	10.90	68.90	0.61	0.56	1.37	94.26	1.40	95.66	4.000	No	No	2.00
167	10.97	60.59	0.61	0.54	1.35	81.52	3.55	85.07	4.000	No	No	2.00
168	11.04	55.14	0.61	0.52	1.32	73.05	6.03	79.09	4.000	No	No	2.00
169	11.10	51.83	0.62	0.50	1.31	67.95	8.15	76.10	4.000	No	No	2.00
170	11.17	48.97	0.62	0.48	1.29	63.23	11.92	75.16	4.000	No	No	2.00
171	11.25	42.09	0.63	0.46	1.27	53.51	19.25	72.76	4.000	No	No	2.00
172	11.30	39.77	0.63	0.45	1.26	50.26	22.86	73.12	4.000	No	No	2.00
173	11.36	36.73	0.63	0.44	1.26	46.16	27.48	73.64	4.000	No	No	2.00
174	11.46	32.89	0.64	0.44	1.25	41.06	34.36	75.42	4.000	No	No	2.00
175	11.51	30.47	0.64	0.44	1.25	38.00	37.91	75.91	4.000	No	No	2.00
176	11.55	28.78	0.64	0.45	1.25	35.92	39.13	75.05	4.000	No	No	2.00
177	11.62	28.78	0.65	0.45	1.25	35.88	37.73	73.61	4.000	No	No	2.00
178	11.69	28.78	0.65	0.45	1.24	35.80	37.17	72.97	4.000	No	No	2.00
179	11.75	28.78	0.66	0.45	1.24	35.72	37.25	72.97	4.000	No	No	2.00
180	11.85	29.58	0.66	0.45	1.24	36.59	35.29	71.88	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
181	11.88	29.40	0.66	0.45	1.24	36.34	35.22	71.56	4.000	No	No	2.00
182	11.95	28.33	0.67	0.46	1.23	34.94	37.02	71.96	4.000	No	No	2.00
183	12.04	29.22	0.67	0.45	1.23	35.84	37.06	72.91	4.000	No	No	2.00
184	12.07	28.06	0.68	0.45	1.23	34.39	39.20	73.59	4.000	No	No	2.00
185	12.14	29.04	0.68	0.45	1.22	35.49	37.09	72.59	4.000	No	No	2.00
186	12.23	29.04	0.68	0.46	1.22	35.44	35.73	71.16	4.000	No	No	2.00
187	12.28	28.78	0.69	0.46	1.22	35.11	34.71	69.82	4.000	No	No	2.00
188	12.34	29.94	0.69	0.46	1.22	36.47	32.03	68.49	4.000	No	No	2.00
189	12.42	36.10	0.70	0.46	1.21	43.83	24.21	68.04	4.000	No	No	2.00
190	12.48	45.13	0.70	0.46	1.21	54.66	17.55	72.21	4.000	No	No	2.00
191	12.54	49.69	0.70	0.46	1.21	60.08	15.31	75.39	4.000	No	No	2.00
192	12.62	57.82	0.71	0.47	1.21	69.76	12.22	81.98	4.000	No	No	2.00
193	12.69	61.22	0.71	0.50	1.22	74.66	7.35	82.01	4.000	No	No	2.00
194	12.73	64.34	0.71	0.51	1.22	78.52	6.23	84.75	4.000	No	No	2.00
195	12.81	64.52	0.72	0.49	1.21	77.94	8.00	85.94	4.000	No	No	2.00
196	12.89	61.22	0.72	0.48	1.20	73.46	9.80	83.26	4.000	No	No	2.00
197	12.93	58.98	0.73	0.46	1.19	70.12	13.21	83.33	4.000	No	No	2.00
198	13.01	50.31	0.73	0.44	1.18	59.16	20.86	80.02	4.000	No	No	2.00
199	13.06	47.54	0.73	0.43	1.17	55.67	24.23	79.91	4.000	No	No	2.00
200	13.13	43.34	0.74	0.43	1.17	50.53	29.38	79.91	4.000	No	No	2.00
201	13.19	41.20	0.74	0.43	1.16	47.91	31.85	79.76	4.000	No	No	2.00
202	13.26	39.86	0.75	0.43	1.16	46.29	32.39	78.68	4.000	No	No	2.00
203	13.32	40.04	0.75	0.43	1.16	46.46	31.11	77.57	4.000	No	No	2.00
204	13.41	47.37	0.75	0.44	1.16	54.86	23.77	78.63	4.000	No	No	2.00
205	13.47	56.21	0.76	0.44	1.16	65.06	18.25	83.30	4.000	No	No	2.00
206	13.56	71.14	0.76	0.46	1.16	82.56	11.10	93.66	4.000	No	No	2.00
207	13.59	74.98	0.77	0.46	1.16	87.07	9.74	96.81	4.000	No	No	2.00
208	13.66	79.36	0.77	0.48	1.16	92.32	7.63	99.95	4.000	No	No	2.00
209	13.75	81.68	0.78	0.49	1.17	95.17	5.93	101.11	4.000	No	No	2.00
210	13.81	82.13	0.78	0.49	1.16	95.54	5.73	101.27	4.000	No	No	2.00
211	13.86	83.11	0.78	0.49	1.16	96.45	5.73	102.19	4.000	No	No	2.00
212	13.91	84.90	0.78	0.49	1.16	98.28	5.77	104.06	4.000	No	No	2.00
213	13.99	87.76	0.79	0.48	1.15	101.03	6.34	107.37	4.000	No	No	2.00
214	14.04	92.23	0.79	0.47	1.15	105.77	6.58	112.35	4.000	No	No	2.00
215	14.12	99.65	0.80	0.47	1.14	113.82	6.44	120.26	4.000	No	No	2.00
216	14.19	105.10	0.80	0.46	1.14	119.52	6.71	126.23	4.000	No	No	2.00
217	14.25	110.19	0.81	0.46	1.13	124.90	6.75	131.65	4.000	No	No	2.00
218	14.34	113.41	0.81	0.45	1.13	127.92	7.22	135.14	4.000	No	No	2.00
219	14.40	113.85	0.81	0.45	1.12	128.03	7.58	135.61	4.000	No	No	2.00
220	14.45	113.59	0.82	0.45	1.12	127.43	7.89	135.33	4.000	No	No	2.00
221	14.54	110.46	0.82	0.44	1.12	123.42	8.54	131.97	4.000	No	No	2.00
222	14.60	108.85	0.83	0.44	1.12	121.39	8.74	130.13	4.000	No	No	2.00
223	14.65	108.40	0.83	0.44	1.11	120.70	8.75	129.45	4.000	No	No	2.00
224	14.71	109.57	0.83	0.44	1.11	121.81	8.51	130.32	4.000	No	No	2.00
225	14.77	111.62	0.84	0.44	1.11	123.79	8.50	132.29	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
226	14.83	114.75	0.84	0.44	1.11	126.90	8.64	135.54	4.000	No	No	2.00
227	14.90	120.56	0.85	0.44	1.10	132.98	8.52	141.50	4.000	No	No	2.00
228	14.98	126.99	0.85	0.44	1.10	139.87	7.53	147.40	4.000	No	No	2.00
229	15.04	131.46	0.85	0.45	1.10	144.61	6.92	151.52	4.000	No	No	2.00
230	15.10	135.57	0.86	0.45	1.10	148.94	6.50	155.44	4.000	No	No	2.00
231	15.17	139.68	0.86	0.45	1.10	153.01	6.56	159.57	4.000	No	No	2.00
232	15.24	144.15	0.87	0.53	1.11	160.29	0.83	161.12	4.000	No	No	2.00
233	15.34	151.30	0.87	0.53	1.11	167.53	0.84	168.37	4.000	No	No	2.00
234	15.37	152.91	0.87	0.52	1.10	168.91	1.05	169.96	4.000	No	No	2.00
235	15.44	157.47	0.88	0.52	1.10	173.25	1.36	174.61	4.000	No	No	2.00
236	15.53	153.53	0.88	0.50	1.09	167.76	2.48	170.24	4.000	No	No	2.00
237	15.56	160.42	0.89	0.50	1.09	175.12	2.33	177.45	4.000	No	No	2.00
238	15.63	170.78	0.89	0.49	1.09	185.93	2.28	188.21	4.000	No	No	2.00
239	15.69	174.62	0.89	0.49	1.09	189.53	2.52	192.05	4.000	No	No	2.00
240	15.77	179.54	0.90	0.47	1.08	193.87	3.32	197.19	4.000	No	No	2.00
241	15.83	181.86	0.90	0.46	1.08	195.72	3.86	199.58	4.000	No	No	2.00
242	15.88	184.54	0.91	0.46	1.07	198.05	4.28	202.33	4.000	No	No	2.00
243	15.97	188.66	0.91	0.44	1.07	201.41	5.42	206.83	4.000	No	No	2.00
244	16.03	191.07	0.92	0.43	1.06	203.37	6.17	209.54	4.000	No	No	2.00
245	16.08	193.03	0.92	0.43	1.06	204.95	6.69	211.64	4.000	No	No	2.00
246	16.15	192.14	0.92	0.42	1.06	203.38	7.47	210.85	4.000	No	No	2.00
247	16.23	189.46	0.93	0.41	1.06	199.96	8.02	207.99	4.000	No	No	2.00
248	16.28	186.06	0.93	0.41	1.05	196.06	8.36	204.42	4.000	No	No	2.00
249	16.38	176.86	0.94	0.41	1.05	185.80	8.98	194.78	4.000	No	No	2.00
250	16.42	173.11	0.94	0.41	1.05	181.63	9.22	190.85	4.000	No	No	2.00
251	16.47	169.44	0.94	0.41	1.05	177.51	9.38	186.89	4.000	No	No	2.00
252	16.54	168.01	0.95	0.41	1.05	175.75	9.09	184.83	4.000	No	No	2.00
253	16.62	171.05	0.95	0.42	1.04	178.65	8.18	186.83	4.000	No	No	2.00
254	16.68	175.16	0.96	0.42	1.04	182.72	7.58	190.30	4.000	No	No	2.00
255	16.75	181.51	0.96	0.43	1.04	189.06	6.86	195.92	4.000	No	No	2.00
256	16.82	186.42	0.97	0.43	1.04	193.85	6.39	200.24	4.000	No	No	2.00
257	16.87	189.28	0.97	0.43	1.04	196.56	6.26	202.83	4.000	No	No	2.00
258	16.97	193.21	0.98	0.44	1.04	200.11	5.93	206.04	4.000	No	No	2.00
259	17.01	193.66	0.98	0.44	1.03	200.37	5.69	206.06	4.000	No	No	2.00
260	17.07	193.30	0.98	0.44	1.03	199.77	5.24	205.01	4.000	No	No	2.00
261	17.15	191.43	0.99	0.45	1.03	197.49	4.73	202.21	4.000	No	No	2.00
262	17.19	190.00	0.99	0.45	1.03	195.77	4.66	200.43	4.000	No	No	2.00
263	17.26	185.17	0.99	0.45	1.03	190.33	5.20	195.53	4.000	No	No	2.00
264	17.34	177.57	1.00	0.44	1.03	182.07	5.65	187.72	4.000	No	No	2.00
265	17.40	174.18	1.00	0.44	1.02	178.29	5.94	184.23	4.000	No	No	2.00
266	17.46	170.42	1.01	0.44	1.02	174.10	6.62	180.72	4.000	No	No	2.00
267	17.54	168.10	1.01	0.43	1.02	171.31	7.49	178.80	4.000	No	No	2.00
268	17.60	167.74	1.02	0.42	1.02	170.64	7.92	178.56	4.000	No	No	2.00
269	17.65	167.48	1.02	0.42	1.02	170.10	8.27	178.37	4.000	No	No	2.00
270	17.75	163.99	1.03	0.43	1.01	166.15	7.94	174.09	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
271	17.81	158.45	1.03	0.42	1.01	160.30	8.42	168.72	4.000	No	No	2.00
272	17.85	153.53	1.03	0.41	1.01	155.11	9.65	164.76	4.000	No	No	2.00
273	17.92	153.18	1.04	0.42	1.01	154.51	9.43	163.94	4.000	No	No	2.00
274	18.00	153.18	1.04	0.41	1.01	154.15	10.05	164.20	4.000	No	No	2.00
275	18.05	152.82	1.04	0.41	1.01	153.61	10.16	163.77	4.000	No	No	2.00
276	18.15	156.93	1.05	0.41	1.00	157.36	9.86	167.22	4.000	No	No	2.00
277	18.18	159.79	1.05	0.41	1.00	160.07	9.66	169.74	4.000	No	No	2.00
278	18.25	162.20	1.06	0.41	1.00	162.24	9.97	172.21	4.000	No	No	2.00
279	18.31	166.58	1.06	0.41	1.00	166.35	10.22	176.57	4.000	No	No	2.00
280	18.39	171.05	1.07	0.40	1.00	170.50	10.34	180.84	4.000	No	No	2.00
281	18.45	175.25	1.07	0.40	1.00	174.43	10.08	184.52	4.000	No	No	2.00
282	18.54	180.97	1.08	0.40	0.99	179.70	9.69	189.39	4.000	No	No	2.00
283	18.58	183.74	1.08	0.40	0.99	182.28	9.62	191.90	4.000	No	No	2.00
284	18.64	187.31	1.08	0.40	0.99	185.55	9.65	195.20	4.000	No	No	2.00
285	18.74	191.52	1.09	0.40	0.99	189.30	9.84	199.14	4.000	No	No	2.00
286	18.79	193.21	1.09	0.40	0.99	190.75	10.11	200.86	4.000	No	No	2.00
287	18.84	196.16	1.10	0.40	0.99	193.46	10.29	203.74	4.000	No	No	2.00
288	18.91	199.65	1.10	0.40	0.98	196.58	10.19	206.77	4.000	No	No	2.00
289	18.97	201.70	1.10	0.40	0.98	198.31	9.93	208.24	4.000	No	No	2.00
290	19.04	201.97	1.11	0.40	0.98	198.23	9.53	207.76	4.000	No	No	2.00
291	19.12	198.31	1.11	0.40	0.98	194.26	9.84	204.10	4.000	No	No	2.00
292	19.18	191.96	1.12	0.40	0.98	187.82	10.41	198.22	4.000	No	No	2.00
293	19.24	185.26	1.12	0.40	0.98	181.01	10.65	191.65	4.000	No	No	2.00
294	19.33	174.89	1.13	0.39	0.98	170.56	11.42	181.98	4.000	No	No	2.00
295	19.36	169.08	1.13	0.39	0.97	164.78	11.93	176.71	4.000	No	No	2.00
296	19.43	165.69	1.13	0.39	0.97	161.24	12.25	173.49	4.000	No	No	2.00
297	19.53	172.39	1.14	0.39	0.97	167.39	11.86	179.25	4.000	No	No	2.00
298	19.57	172.22	1.14	0.39	0.97	167.06	12.07	179.13	4.000	No	No	2.00
299	19.63	166.50	1.15	0.39	0.97	161.38	13.09	174.47	4.000	No	No	2.00
300	19.72	154.07	1.15	0.38	0.97	149.16	15.60	164.76	4.000	No	No	2.00
301	19.76	149.61	1.16	0.37	0.97	144.72	16.39	161.11	4.000	No	No	2.00
302	19.83	141.83	1.16	0.37	0.97	137.04	17.40	154.44	4.000	No	No	2.00
303	19.92	141.88	1.17	0.38	0.96	136.80	16.98	153.77	4.000	No	No	2.00
304	19.97	141.87	1.17	0.38	0.96	136.65	16.99	153.64	4.000	No	No	2.00
305	20.02	141.92	1.17	0.37	0.96	136.55	17.12	153.67	4.000	No	No	2.00
306	20.09	142.63	1.18	0.37	0.96	137.08	17.62	154.70	4.000	No	No	2.00
307	20.17	145.22	1.18	0.37	0.96	139.35	17.47	156.82	4.000	No	No	2.00
308	20.22	151.21	1.19	0.37	0.96	144.94	16.66	161.60	4.000	No	No	2.00
309	20.28	163.45	1.19	0.38	0.96	156.40	14.95	171.35	4.000	No	No	2.00
310	20.37	179.90	1.20	0.38	0.95	171.71	13.06	184.77	4.000	No	No	2.00
311	20.42	194.73	1.20	0.39	0.95	185.57	11.65	197.22	4.000	No	No	2.00
312	20.49	208.50	1.20	0.42	0.95	197.58	7.39	204.97	4.000	No	No	2.00
313	20.56	220.83	1.21	0.45	0.94	208.06	4.39	212.45	4.000	No	No	2.00
314	20.61	226.91	1.21	0.45	0.94	213.45	4.03	217.49	4.000	No	No	2.00
315	20.67	232.09	1.21	0.46	0.94	217.92	3.79	221.71	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
316	20.75	234.05	1.22	0.45	0.94	219.37	3.85	223.22	4.000	No	No	2.00
317	20.80	235.84	1.22	0.45	0.94	220.86	3.98	224.84	4.000	No	No	2.00
318	20.88	228.42	1.23	0.44	0.94	213.91	4.99	218.91	4.000	No	No	2.00
319	20.95	238.97	1.23	0.44	0.94	223.47	4.86	228.33	4.000	No	No	2.00
320	21.00	246.66	1.24	0.43	0.93	230.59	5.21	235.80	4.000	No	No	2.00
321	21.09	264.17	1.24	0.43	0.93	246.57	5.07	251.64	4.000	No	No	2.00
322	21.16	275.70	1.25	0.43	0.93	257.13	5.29	262.43	4.000	No	No	2.00
323	21.21	290.09	1.25	0.42	0.93	270.34	5.32	275.66	4.000	No	No	2.00
324	21.31	299.11	1.26	0.41	0.93	278.57	5.91	284.48	4.000	No	No	2.00
325	21.33	306.44	1.26	0.42	0.93	285.25	5.75	291.00	4.000	No	No	2.00
326	21.40	315.47	1.26	0.41	0.93	293.36	5.92	299.28	4.000	No	No	2.00
327	21.48	325.75	1.27	0.41	0.93	302.64	6.22	308.86	4.000	No	No	2.00
328	21.54	330.12	1.27	0.40	0.93	306.53	6.40	312.93	4.000	No	No	2.00
329	21.61	333.79	1.28	0.40	0.93	309.80	6.89	316.68	4.000	No	No	2.00
330	21.66	333.79	1.28	0.39	0.93	309.66	7.21	316.87	4.000	No	No	2.00
331	21.75	332.81	1.29	0.39	0.93	308.40	7.58	315.98	4.000	No	No	2.00
332	21.80	332.98	1.29	0.39	0.93	308.33	7.77	316.10	4.000	No	No	2.00
333	21.89	336.74	1.30	0.39	0.92	311.36	7.95	319.31	4.000	No	No	2.00
334	21.94	341.56	1.30	0.39	0.92	315.58	7.95	323.53	4.000	No	No	2.00
335	22.00	343.36	1.30	0.38	0.92	316.96	8.13	325.09	4.000	No	No	2.00
336	22.05	345.42	1.31	0.38	0.92	318.58	8.18	326.76	4.000	No	No	2.00
337	22.13	349.80	1.31	0.38	0.92	322.15	8.16	330.31	4.000	No	No	2.00
338	22.20	352.57	1.32	0.38	0.92	324.41	8.31	332.72	4.000	No	No	2.00
339	22.25	353.10	1.32	0.38	0.92	324.85	8.77	333.62	4.000	No	No	2.00
340	22.34	353.91	1.33	0.37	0.92	325.40	9.31	334.70	4.000	No	No	2.00
341	22.39	353.82	1.33	0.37	0.92	325.08	9.48	334.56	4.000	No	No	2.00
342	22.45	351.76	1.33	0.37	0.92	322.94	9.66	332.59	4.000	No	No	2.00
343	22.53	348.19	1.34	0.38	0.91	318.28	8.38	326.66	4.000	No	No	2.00
344	22.59	344.70	1.34	0.39	0.91	314.12	7.53	321.65	4.000	No	No	2.00
345	22.64	342.20	1.35	0.39	0.91	311.59	7.65	319.24	4.000	No	No	2.00
346	22.72	339.97	1.35	0.39	0.91	309.04	7.62	316.66	4.000	No	No	2.00
347	22.78	338.45	1.36	0.39	0.91	307.08	7.38	314.46	4.000	No	No	2.00
348	22.84	338.54	1.36	0.40	0.91	306.63	7.13	313.77	4.000	No	No	2.00
349	22.92	310.65	1.36	0.39	0.91	281.21	7.97	289.17	4.000	No	No	2.00
350	22.98	322.09	1.37	0.40	0.90	290.83	7.27	298.11	4.000	No	No	2.00
351	23.03	323.97	1.37	0.40	0.90	292.14	7.11	299.25	4.000	No	No	2.00
352	23.11	323.70	1.38	0.40	0.90	291.50	7.18	298.68	4.000	No	No	2.00
353	23.17	320.84	1.38	0.40	0.90	288.60	7.24	295.84	4.000	No	No	2.00
354	23.23	318.25	1.39	0.39	0.90	286.14	7.53	293.67	4.000	No	No	2.00
355	23.31	313.96	1.39	0.39	0.90	281.98	7.73	289.71	4.000	No	No	2.00
356	23.38	310.30	1.40	0.39	0.90	278.32	7.81	286.14	4.000	No	No	2.00
357	23.43	304.67	1.40	0.39	0.90	272.95	7.84	280.79	4.000	No	No	2.00
358	23.51	297.96	1.40	0.40	0.89	266.45	7.81	274.26	4.000	No	No	2.00
359	23.56	286.97	1.41	0.39	0.89	256.47	8.16	264.63	4.000	No	No	2.00
360	23.63	273.92	1.41	0.39	0.89	245.00	9.21	254.21	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
361	23.73	247.91	1.42	0.38	0.90	221.99	11.20	233.19	4.000	No	No	2.00
362	23.76	234.77	1.42	0.37	0.90	210.45	12.42	222.88	4.000	No	No	2.00
363	23.83	214.66	1.43	0.36	0.90	192.70	14.78	207.48	4.000	No	No	2.00
364	23.91	205.28	1.43	0.35	0.90	184.56	16.97	201.52	4.000	No	No	2.00
365	23.96	202.33	1.43	0.35	0.90	181.97	18.05	200.03	4.000	No	No	2.00
366	24.04	184.10	1.44	0.35	0.90	165.50	19.86	185.36	4.000	No	No	2.00
367	24.12	161.40	1.44	0.34	0.90	145.09	23.03	168.13	4.000	No	No	2.00
368	24.17	184.95	1.45	0.35	0.90	165.83	19.39	185.21	4.000	No	No	2.00
369	24.22	157.02	1.45	0.34	0.90	140.95	23.61	164.56	4.000	No	No	2.00
370	24.29	185.80	1.46	0.36	0.89	165.89	17.78	183.67	4.000	No	No	2.00
371	24.35	207.87	1.46	0.37	0.89	184.79	14.50	199.28	4.000	No	No	2.00
372	24.41	224.31	1.46	0.37	0.89	198.87	12.91	211.78	4.000	No	No	2.00
373	24.49	236.11	1.47	0.39	0.88	207.96	10.25	218.21	4.000	No	No	2.00
374	24.55	234.05	1.47	0.39	0.88	205.95	10.35	216.30	4.000	No	No	2.00
375	24.61	225.12	1.48	0.39	0.88	197.45	9.79	207.24	4.000	No	No	2.00
376	24.69	205.19	1.48	0.40	0.88	179.59	10.22	189.81	4.000	No	No	2.00
377	24.76	172.03	1.49	0.39	0.88	150.80	12.95	163.75	4.000	No	No	2.00
378	24.80	148.80	1.49	0.38	0.88	130.58	15.56	146.14	4.000	No	No	2.00
379	24.90	126.28	1.50	0.38	0.88	110.74	18.53	129.28	4.000	No	No	2.00
380	24.95	99.56	1.50	0.37	0.88	87.41	24.79	112.20	4.000	No	No	2.00
381	25.01	78.73	1.50	0.37	0.88	69.09	32.34	101.42	4.000	No	No	2.00
382	25.07	61.22	1.51	0.38	0.87	53.54	41.04	94.58	4.000	No	Yes	2.00
383	25.14	51.92	1.51	0.39	0.87	45.20	46.16	91.36	4.000	No	Yes	2.00
384	25.20	42.90	1.51	0.40	0.87	37.12	51.16	88.28	4.000	No	Yes	2.00
385	25.27	37.00	1.52	0.42	0.86	31.79	51.13	82.92	4.000	No	Yes	2.00
386	25.34	34.50	1.52	0.44	0.85	29.43	51.08	80.51	4.000	No	Yes	2.00
387	25.40	32.71	1.53	0.45	0.85	27.74	51.05	78.78	4.000	No	Yes	2.00
388	25.46	28.87	1.53	0.47	0.84	24.26	51.01	75.27	4.000	No	Yes	2.00
389	25.54	27.70	1.54	0.49	0.83	23.12	50.45	73.57	4.000	No	Yes	2.00
390	25.60	27.79	1.54	0.48	0.83	23.17	50.26	73.43	4.000	No	Yes	2.00
391	25.68	29.67	1.54	0.47	0.84	24.82	50.42	75.25	4.000	No	Yes	2.00
392	25.73	31.99	1.55	0.46	0.84	26.84	48.14	74.98	4.000	No	Yes	2.00
393	25.79	35.22	1.55	0.45	0.84	29.63	45.32	74.95	4.000	No	Yes	2.00
394	25.87	46.66	1.56	0.43	0.85	39.50	34.71	74.21	4.000	No	Yes	2.00
395	25.94	59.53	1.56	0.42	0.85	50.57	27.72	78.30	4.000	No	No	2.00
396	25.99	95.10	1.56	0.41	0.85	80.87	16.55	97.42	4.000	No	No	2.00
397	26.05	113.06	1.57	0.41	0.85	96.12	14.09	110.21	4.000	No	No	2.00
398	26.13	139.78	1.57	0.41	0.85	118.70	11.54	130.24	4.000	No	No	2.00
399	26.18	152.11	1.58	0.41	0.85	129.08	10.73	139.81	4.000	No	No	2.00
400	26.28	161.86	1.58	0.42	0.85	136.89	9.65	146.54	4.000	No	No	2.00
401	26.32	164.98	1.58	0.42	0.84	139.33	9.29	148.62	4.000	No	No	2.00
402	26.38	168.74	1.59	0.42	0.84	142.28	8.93	151.21	4.000	No	No	2.00
403	26.48	178.39	1.59	0.44	0.83	148.89	6.53	155.42	4.000	No	No	2.00
404	26.53	185.36	1.60	0.44	0.84	154.81	6.61	161.42	4.000	No	No	2.00
405	26.59	193.13	1.60	0.42	0.84	161.96	7.52	169.48	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
406	26.68	205.65	1.61	0.41	0.84	173.37	8.74	182.11	4.000	No	No	2.00
407	26.73	213.06	1.61	0.40	0.84	179.98	9.24	189.22	4.000	No	No	2.00
408	26.77	211.90	1.61	0.39	0.85	179.40	10.12	189.51	4.000	No	No	2.00
409	26.85	210.74	1.62	0.38	0.85	178.92	11.39	190.31	4.000	No	No	2.00
410	26.91	216.55	1.62	0.38	0.85	183.78	11.34	195.13	4.000	No	No	2.00
411	26.97	219.94	1.63	0.38	0.85	186.54	11.32	197.87	4.000	No	No	2.00
412	27.04	217.53	1.63	0.38	0.85	184.49	11.76	196.24	4.000	No	No	2.00
413	27.11	212.71	1.64	0.38	0.85	180.27	12.08	192.35	4.000	No	No	2.00
414	27.20	201.80	1.64	0.38	0.85	170.71	12.39	183.10	4.000	No	No	2.00
415	27.25	194.39	1.65	0.38	0.84	164.12	12.36	176.48	4.000	No	No	2.00
416	27.31	185.90	1.65	0.38	0.84	156.73	12.60	169.33	4.000	No	No	2.00
417	27.36	166.50	1.65	0.38	0.84	140.45	14.29	154.74	4.000	No	No	2.00
418	27.46	144.51	1.66	0.38	0.84	121.99	16.99	138.98	4.000	No	No	2.00
419	27.51	132.26	1.66	0.37	0.84	111.70	18.92	130.61	4.000	No	No	2.00
420	27.56	111.62	1.67	0.37	0.85	94.36	23.16	117.53	4.000	No	No	2.00
421	27.63	95.98	1.67	0.37	0.84	81.09	27.28	108.37	4.000	No	No	2.00
422	27.71	95.67	1.68	0.37	0.84	80.70	27.05	107.75	4.000	No	No	2.00
423	27.76	95.67	1.68	0.37	0.84	80.52	26.09	106.61	4.000	No	No	2.00
424	27.84	95.36	1.68	0.38	0.84	80.04	25.21	105.25	4.000	No	No	2.00
425	27.90	98.13	1.69	0.38	0.84	82.19	23.80	105.99	4.000	No	No	2.00
426	27.95	109.22	1.69	0.38	0.84	91.30	20.72	112.02	4.000	No	No	2.00
427	28.05	139.69	1.70	0.39	0.83	116.24	15.26	131.50	4.000	No	No	2.00
428	28.09	154.34	1.70	0.39	0.83	128.15	13.40	141.55	4.000	No	No	2.00
429	28.15	167.30	1.70	0.40	0.83	138.41	11.74	150.15	4.000	No	No	2.00
430	28.25	172.84	1.71	0.40	0.82	142.48	10.82	153.29	4.000	No	No	2.00
431	28.30	173.55	1.71	0.40	0.82	142.90	10.70	153.60	4.000	No	No	2.00
432	28.35	171.23	1.72	0.40	0.82	140.94	10.91	151.85	4.000	No	No	2.00
433	28.45	163.63	1.72	0.40	0.82	134.80	12.00	146.80	4.000	No	No	2.00
434	28.50	159.08	1.73	0.39	0.82	131.16	12.78	143.94	4.000	No	No	2.00
435	28.55	154.70	1.73	0.39	0.82	127.60	13.43	141.03	4.000	No	No	2.00
436	28.61	147.81	1.73	0.39	0.82	121.92	14.32	136.24	4.000	No	No	2.00
437	28.69	141.74	1.74	0.40	0.82	116.38	13.76	130.14	4.000	No	No	2.00
438	28.74	138.34	1.74	0.42	0.81	112.40	11.23	123.64	4.000	No	No	2.00
439	28.84	133.87	1.75	0.41	0.81	108.95	12.47	121.42	4.000	No	No	2.00
440	28.89	132.62	1.75	0.41	0.81	107.97	12.89	120.86	4.000	No	No	2.00
441	28.94	132.18	1.75	0.41	0.81	107.63	13.18	120.80	4.000	No	No	2.00
442	29.03	132.18	1.76	0.40	0.81	107.62	13.57	121.19	4.000	No	No	2.00
443	29.08	131.82	1.76	0.40	0.81	107.30	13.75	121.05	4.000	No	No	2.00
444	29.14	132.22	1.77	0.40	0.81	107.59	13.88	121.47	4.000	No	No	2.00
445	29.21	131.46	1.77	0.40	0.81	107.01	14.40	121.41	4.000	No	No	2.00
446	29.27	132.26	1.78	0.40	0.81	107.77	14.91	122.68	4.000	No	No	2.00
447	29.37	133.78	1.78	0.39	0.82	109.04	15.33	124.37	4.000	No	No	2.00
448	29.41	134.14	1.78	0.39	0.81	109.32	15.43	124.76	4.000	No	No	2.00
449	29.47	135.12	1.79	0.39	0.81	110.12	15.61	125.72	4.000	No	No	2.00
450	29.56	137.27	1.79	0.39	0.81	111.80	15.58	127.38	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
451	29.59	137.98	1.80	0.39	0.81	112.36	15.61	127.96	4.000	No	No	2.00
452	29.67	138.16	1.80	0.39	0.81	112.46	15.78	128.24	4.000	No	No	2.00
453	29.77	137.89	1.81	0.38	0.81	112.19	16.15	128.34	4.000	No	No	2.00
454	29.81	136.46	1.81	0.38	0.81	111.01	16.45	127.46	4.000	No	No	2.00
455	29.87	134.23	1.81	0.38	0.81	109.18	16.91	126.09	4.000	No	No	2.00
456	29.97	131.46	1.82	0.38	0.81	106.79	17.29	124.08	4.000	No	No	2.00
457	29.99	129.94	1.82	0.38	0.81	105.53	17.49	123.01	4.000	No	No	2.00
458	30.07	127.71	1.83	0.38	0.81	103.55	17.55	121.09	4.000	No	No	2.00
459	30.13	124.85	1.83	0.39	0.81	101.01	17.46	118.47	4.000	No	No	2.00
460	30.21	122.52	1.84	0.39	0.81	98.91	17.38	116.29	4.000	No	No	2.00
461	30.27	121.36	1.84	0.39	0.81	97.82	17.28	115.10	4.000	No	No	2.00
462	30.34	121.63	1.85	0.39	0.80	97.76	16.66	114.43	4.000	No	No	2.00
463	30.40	122.97	1.85	0.40	0.80	98.55	15.81	114.36	4.000	No	No	2.00
464	30.46	127.35	1.85	0.40	0.80	101.74	14.58	116.31	4.000	No	No	2.00
465	30.53	136.55	1.86	0.41	0.79	108.50	12.48	120.99	4.000	No	No	2.00
466	30.59	145.13	1.86	0.42	0.79	114.50	10.38	124.88	4.000	No	No	2.00
467	30.66	150.58	1.87	0.43	0.78	118.09	9.03	127.12	4.000	No	No	2.00
468	30.71	148.53	1.87	0.43	0.78	116.21	8.85	125.06	4.000	No	No	2.00
469	30.79	135.66	1.87	0.43	0.78	106.28	10.18	116.46	4.000	No	No	2.00
470	30.85	125.47	1.88	0.42	0.79	98.59	11.90	110.49	4.000	No	No	2.00
471	30.94	95.27	1.88	0.41	0.79	75.37	18.53	93.90	4.000	No	No	2.00
472	30.99	80.97	1.89	0.41	0.79	63.99	22.27	86.27	4.000	No	No	2.00
473	31.05	68.46	1.89	0.41	0.79	54.02	27.03	81.05	4.000	No	No	2.00
474	31.11	55.32	1.89	0.41	0.79	43.53	35.20	78.73	4.000	No	Yes	2.00
475	31.19	49.60	1.90	0.42	0.78	38.87	39.40	78.27	4.000	No	Yes	2.00
476	31.25	47.01	1.90	0.42	0.78	36.84	43.45	80.28	4.000	No	Yes	2.00
477	31.30	46.38	1.91	0.41	0.78	36.36	45.13	81.48	4.000	No	Yes	2.00
478	31.38	46.02	1.91	0.41	0.78	36.11	47.59	83.70	4.000	No	Yes	2.00
479	31.45	47.37	1.92	0.40	0.79	37.26	47.57	84.83	4.000	No	Yes	2.00
480	31.50	47.81	1.92	0.40	0.79	37.65	47.54	85.19	4.000	No	Yes	2.00
481	31.58	51.74	1.92	0.40	0.79	40.75	44.33	85.09	4.000	No	Yes	2.00
482	31.64	55.68	1.93	0.40	0.79	43.81	39.55	83.37	4.000	No	Yes	2.00
483	31.70	62.65	1.93	0.40	0.78	49.14	32.15	81.30	4.000	No	Yes	2.00
484	31.77	75.34	1.94	0.41	0.78	58.85	23.92	82.77	4.000	No	No	2.00
485	31.85	96.61	1.94	0.42	0.78	75.00	16.28	91.29	4.000	No	No	2.00
486	31.89	112.60	1.94	0.42	0.77	87.05	12.92	99.97	4.000	No	No	2.00
487	31.98	136.73	1.95	0.43	0.77	104.88	9.34	114.23	4.000	No	No	2.00
488	32.03	150.23	1.95	0.44	0.76	114.85	8.07	122.93	4.000	No	No	2.00
489	32.09	163.36	1.96	0.45	0.76	124.22	6.77	130.98	4.000	No	No	2.00
490	32.18	187.49	1.96	0.46	0.75	141.48	5.13	146.61	4.000	No	No	2.00
491	32.23	194.64	1.97	0.45	0.76	147.09	5.20	152.30	4.000	No	No	2.00
492	32.29	208.14	1.97	0.45	0.76	157.56	5.15	162.71	4.000	No	No	2.00
493	32.35	222.97	1.97	0.44	0.76	169.08	5.12	174.20	4.000	No	No	2.00
494	32.42	235.48	1.98	0.44	0.76	178.78	5.10	183.87	4.000	No	No	2.00
495	32.49	252.46	1.98	0.44	0.76	191.59	4.86	196.44	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
496	32.58	264.71	1.99	0.43	0.76	201.35	5.05	206.41	4.000	No	No	2.00
497	32.63	266.05	1.99	0.43	0.76	202.72	5.32	208.03	4.000	No	No	2.00
498	32.69	262.21	1.99	0.43	0.76	200.16	5.70	205.86	4.000	No	No	2.00
499	32.75	254.61	2.00	0.42	0.76	194.68	6.17	200.85	4.000	No	No	2.00
500	32.83	246.74	2.00	0.42	0.77	188.82	6.59	195.40	4.000	No	No	2.00
501	32.88	237.45	2.01	0.42	0.77	181.83	6.98	188.80	4.000	No	No	2.00
502	32.94	228.87	2.01	0.42	0.77	175.24	7.29	182.54	4.000	No	No	2.00
503	33.01	220.65	2.02	0.41	0.77	168.89	7.61	176.51	4.000	No	No	2.00
504	33.08	213.32	2.02	0.41	0.77	163.24	7.93	171.16	4.000	No	No	2.00
505	33.17	205.19	2.03	0.41	0.76	156.85	8.19	165.04	4.000	No	No	2.00
506	33.23	201.08	2.03	0.41	0.76	153.48	8.24	161.72	4.000	No	No	2.00
507	33.28	198.04	2.03	0.42	0.76	150.99	8.28	159.27	4.000	No	No	2.00
508	33.34	193.03	2.04	0.42	0.76	146.94	8.34	155.28	4.000	No	No	2.00
509	33.41	187.85	2.04	0.42	0.76	142.71	8.38	151.09	4.000	No	No	2.00
510	33.48	181.77	2.05	0.42	0.76	137.93	8.57	146.50	4.000	No	No	2.00
511	33.54	173.64	2.05	0.43	0.75	131.02	8.19	139.21	4.000	No	No	2.00
512	33.62	163.54	2.06	0.44	0.75	122.14	7.34	129.49	4.000	No	No	2.00
513	33.66	156.13	2.06	0.44	0.75	116.62	7.79	124.41	4.000	No	No	2.00
514	33.76	139.86	2.06	0.44	0.75	104.53	9.00	113.53	4.000	No	No	2.00
515	33.81	132.26	2.07	0.43	0.75	98.88	9.70	108.58	4.000	No	No	2.00
516	33.87	125.38	2.07	0.43	0.75	93.80	10.51	104.31	4.000	No	No	2.00
517	33.93	109.65	2.07	0.43	0.75	82.25	12.85	95.10	4.000	No	No	2.00
518	33.99	105.54	2.08	0.42	0.75	79.23	13.75	92.98	4.000	No	No	2.00
519	34.07	99.65	2.08	0.42	0.75	75.21	16.21	91.41	4.000	No	No	2.00
520	34.15	84.99	2.09	0.40	0.76	64.85	23.46	88.31	4.000	No	No	2.00
521	34.20	74.35	2.09	0.39	0.77	56.95	29.59	86.53	4.000	No	Yes	2.00
522	34.26	60.23	2.10	0.39	0.77	46.12	39.50	85.62	4.000	No	Yes	2.00
523	34.34	45.94	2.10	0.40	0.76	34.91	46.03	80.93	4.000	No	Yes	2.00
524	34.41	40.48	2.11	0.41	0.75	30.50	45.99	76.49	4.000	No	Yes	2.00
525	34.46	36.02	2.11	0.42	0.75	26.88	45.96	72.84	4.000	No	Yes	2.00
526	34.55	31.28	2.11	0.44	0.74	23.07	45.92	68.99	4.000	No	Yes	2.00
527	34.58	30.03	2.12	0.44	0.74	22.10	45.90	68.00	4.000	No	Yes	2.00
528	34.66	31.82	2.12	0.44	0.74	23.42	45.86	69.29	4.000	No	Yes	2.00
529	34.72	38.96	2.12	0.42	0.75	29.10	45.83	74.93	4.000	No	Yes	2.00
530	34.80	50.67	2.13	0.40	0.75	38.17	44.31	82.49	4.000	No	Yes	2.00
531	34.85	57.46	2.13	0.40	0.76	43.39	38.31	81.71	4.000	No	Yes	2.00
532	34.94	80.07	2.14	0.40	0.76	60.57	25.52	86.09	4.000	No	No	2.00
533	34.98	105.99	2.14	0.40	0.75	79.91	17.75	97.66	4.000	No	No	2.00
534	35.05	131.46	2.15	0.41	0.75	98.18	12.44	110.62	4.000	No	No	2.00
535	35.15	153.44	2.15	0.43	0.73	112.76	8.40	121.15	4.000	No	No	2.00
536	35.19	163.63	2.15	0.44	0.73	119.34	6.98	126.32	4.000	No	No	2.00
537	35.25	170.51	2.16	0.46	0.72	122.71	5.35	128.06	4.000	No	No	2.00
538	35.35	173.91	2.16	0.48	0.71	123.68	4.27	127.95	4.000	No	No	2.00
539	35.38	173.46	2.17	0.48	0.71	123.25	4.25	127.49	4.000	No	No	2.00
540	35.44	171.50	2.17	0.48	0.71	121.88	4.38	126.26	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
541	35.54	162.56	2.18	0.47	0.71	115.76	4.99	120.75	4.000	No	No	2.00
542	35.57	160.33	2.18	0.49	0.70	112.67	3.95	116.62	4.000	No	No	2.00
543	35.64	151.93	2.18	0.51	0.69	105.14	3.12	108.26	4.000	No	No	2.00
544	35.72	138.79	2.19	0.47	0.71	98.80	6.22	105.02	4.000	No	No	2.00
545	35.77	130.48	2.19	0.48	0.71	92.09	5.84	97.94	4.000	No	No	2.00
546	35.84	117.79	2.20	0.45	0.72	84.52	8.79	93.31	4.000	No	No	2.00
547	35.90	104.92	2.20	0.44	0.72	75.90	11.50	87.40	4.000	No	No	2.00
548	35.97	87.04	2.20	0.43	0.73	63.34	15.83	79.17	4.000	No	No	2.00
549	36.06	73.55	2.21	0.42	0.73	53.84	21.61	75.45	4.000	No	No	2.00
550	36.11	68.90	2.21	0.42	0.73	50.59	24.82	75.41	4.000	No	Yes	2.00
551	36.17	67.47	2.22	0.41	0.74	49.70	26.91	76.61	4.000	No	Yes	2.00
552	36.25	69.89	2.22	0.41	0.74	51.62	26.98	78.60	4.000	No	Yes	2.00
553	36.30	68.55	2.22	0.41	0.74	50.65	28.15	78.80	4.000	No	Yes	2.00
554	36.37	64.88	2.23	0.41	0.74	47.96	30.83	78.79	4.000	No	Yes	2.00
555	36.45	58.54	2.23	0.41	0.74	43.22	35.49	78.71	4.000	No	Yes	2.00
556	36.51	53.89	2.24	0.41	0.74	39.67	39.04	78.71	4.000	No	Yes	2.00
557	36.56	51.30	2.24	0.41	0.73	37.61	40.24	77.85	4.000	No	Yes	2.00
558	36.61	48.71	2.24	0.42	0.73	35.45	40.05	75.50	4.000	No	Yes	2.00
559	36.70	48.71	2.25	0.43	0.72	35.30	38.33	73.63	4.000	No	Yes	2.00
560	36.75	50.22	2.25	0.43	0.72	36.40	37.01	73.41	4.000	No	Yes	2.00
561	36.85	52.55	2.26	0.42	0.73	38.19	36.24	74.43	4.000	No	Yes	2.00
562	36.90	54.34	2.26	0.42	0.73	39.61	36.02	75.63	4.000	No	Yes	2.00
563	36.95	54.51	2.27	0.41	0.73	39.80	36.88	76.68	4.000	No	Yes	2.00
564	37.01	49.78	2.27	0.42	0.73	36.18	40.58	76.77	4.000	No	Yes	2.00
565	37.09	44.59	2.27	0.43	0.72	32.09	43.40	75.49	4.000	No	Yes	2.00
566	37.16	40.30	2.28	0.45	0.71	28.60	44.18	72.78	4.000	No	Yes	2.00
567	37.25	33.69	2.28	0.48	0.69	23.34	44.60	67.95	4.000	No	Yes	2.00
568	37.30	31.55	2.29	0.49	0.69	21.65	44.58	66.23	4.000	No	Yes	2.00
569	37.35	30.74	2.29	0.50	0.68	20.97	44.56	65.53	4.000	No	Yes	2.00
570	37.43	30.56	2.30	0.50	0.68	20.74	44.52	65.26	4.000	No	Yes	2.00
571	37.48	30.83	2.30	0.50	0.68	20.88	44.50	65.38	4.000	No	Yes	2.00
572	37.55	33.25	2.30	0.50	0.68	22.56	39.79	62.35	4.000	No	Yes	2.00
573	37.63	44.59	2.31	0.48	0.69	30.78	28.38	59.16	4.000	No	Yes	2.00
574	37.68	60.06	2.31	0.46	0.70	41.86	19.78	61.64	4.000	No	Yes	2.00
575	37.74	85.70	2.31	0.46	0.70	59.84	12.49	72.33	4.000	No	No	2.00
576	37.80	97.77	2.32	0.47	0.69	67.59	9.29	76.88	4.000	No	No	2.00
577	37.88	110.46	2.32	0.51	0.67	74.14	5.18	79.32	4.000	No	No	2.00
578	37.93	117.61	2.33	0.50	0.67	79.19	5.04	84.23	4.000	No	No	2.00
579	38.00	126.28	2.33	0.50	0.67	85.20	4.79	89.99	4.000	No	No	2.00
580	38.08	133.78	2.34	0.49	0.68	90.88	5.07	95.96	4.000	No	No	2.00
581	38.13	139.86	2.34	0.48	0.68	95.55	5.32	100.86	4.000	No	No	2.00
582	38.20	144.60	2.34	0.47	0.69	99.58	5.88	105.46	4.000	No	No	2.00
583	38.27	150.14	2.35	0.46	0.69	104.02	6.28	110.30	4.000	No	No	2.00
584	38.33	151.66	2.35	0.46	0.69	105.40	6.58	111.98	4.000	No	No	2.00
585	38.40	149.07	2.36	0.44	0.70	104.44	7.66	112.10	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
586	38.46	151.70	2.36	0.44	0.70	106.80	8.18	114.98	4.000	No	No	2.00
587	38.53	147.01	2.36	0.43	0.71	104.03	9.18	113.21	4.000	No	No	2.00
588	38.60	151.75	2.37	0.43	0.71	107.53	9.19	116.72	4.000	No	No	2.00
589	38.67	159.25	2.37	0.43	0.71	112.58	8.56	121.14	4.000	No	No	2.00
590	38.72	168.46	2.38	0.43	0.70	118.72	7.82	126.54	4.000	No	No	2.00
591	38.80	178.11	2.38	0.43	0.70	125.16	7.20	132.36	4.000	No	No	2.00
592	38.85	181.51	2.38	0.44	0.70	127.38	6.99	134.36	4.000	No	No	2.00
593	38.91	183.03	2.39	0.44	0.70	128.26	6.86	135.11	4.000	No	No	2.00
594	38.98	181.69	2.39	0.44	0.70	127.33	6.99	134.32	4.000	No	No	2.00
595	39.05	177.48	2.40	0.43	0.70	124.44	7.30	131.74	4.000	No	No	2.00
596	39.11	168.01	2.40	0.43	0.70	117.84	7.82	125.67	4.000	No	No	2.00
597	39.20	153.44	2.41	0.43	0.70	107.62	8.68	116.30	4.000	No	No	2.00
598	39.25	148.08	2.41	0.43	0.70	103.78	8.97	112.75	4.000	No	No	2.00
599	39.31	153.85	2.41	0.43	0.70	107.63	8.50	116.14	4.000	No	No	2.00
600	39.39	150.32	2.42	0.43	0.70	105.47	9.18	114.65	4.000	No	No	2.00
601	39.44	154.25	2.42	0.43	0.70	108.25	9.03	117.28	4.000	No	No	2.00
602	39.51	159.34	2.43	0.43	0.70	111.60	8.61	120.21	4.000	No	No	2.00
603	39.60	164.71	2.43	0.43	0.70	114.91	8.01	122.92	4.000	No	No	2.00
604	39.65	167.74	2.44	0.43	0.70	116.78	7.70	124.49	4.000	No	No	2.00
605	39.70	171.94	2.44	0.44	0.69	119.40	7.31	126.70	4.000	No	No	2.00
606	39.79	177.04	2.44	0.44	0.69	122.53	6.87	129.40	4.000	No	No	2.00
607	39.84	179.72	2.45	0.44	0.69	124.17	6.66	130.83	4.000	No	No	2.00
608	39.90	181.42	2.45	0.44	0.69	125.07	6.45	131.52	4.000	No	No	2.00
609	39.99	180.97	2.46	0.44	0.69	124.54	6.40	130.94	4.000	No	No	2.00
610	40.03	178.83	2.46	0.44	0.69	123.09	6.54	129.62	0.296	No	No	0.84
611	40.10	175.79	2.46	0.44	0.69	120.90	6.65	127.55	0.285	No	No	0.81
612	40.20	171.32	2.47	0.44	0.69	118.03	7.12	125.15	0.274	No	No	0.78
613	40.24	169.08	2.47	0.44	0.69	116.57	7.34	123.91	0.269	No	No	0.76
614	40.30	166.40	2.48	0.44	0.69	114.82	7.62	122.44	0.262	No	No	0.74
615	40.39	160.50	2.48	0.43	0.69	111.36	8.63	119.99	0.252	No	No	0.72
616	40.44	158.18	2.49	0.43	0.69	109.54	8.60	118.14	0.244	No	No	0.69
617	40.50	156.48	2.49	0.43	0.69	108.23	8.63	116.86	0.239	No	No	0.68
618	40.59	153.89	2.50	0.43	0.69	106.21	8.65	114.87	0.231	No	No	0.66
619	40.63	152.37	2.50	0.43	0.69	105.10	8.72	113.83	0.227	No	No	0.64
620	40.69	151.30	2.50	0.42	0.69	105.12	9.74	114.86	0.231	No	No	0.66
621	40.76	143.70	2.51	0.41	0.70	100.69	11.56	112.25	0.221	No	No	0.63
622	40.83	143.70	2.51	0.41	0.70	101.01	12.14	113.15	0.224	No	No	0.64
623	40.88	143.70	2.51	0.40	0.70	101.28	12.65	113.92	0.228	No	No	0.65
624	40.97	143.61	2.52	0.40	0.71	101.85	13.84	115.68	0.235	No	No	0.67
625	41.02	142.36	2.52	0.39	0.71	101.30	14.65	115.95	0.236	No	No	0.67
626	41.08	139.86	2.53	0.39	0.71	99.98	15.91	115.89	0.236	No	No	0.67
627	41.16	137.54	2.53	0.38	0.72	98.55	16.78	115.33	0.233	No	No	0.67
628	41.23	135.39	2.54	0.38	0.72	96.86	16.87	113.74	0.227	No	No	0.65
629	41.28	132.53	2.54	0.38	0.71	94.64	16.96	111.60	0.218	No	No	0.62
630	41.35	128.87	2.55	0.39	0.71	91.89	17.27	109.16	0.208	No	No	0.60

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
631	41.42	125.74	2.55	0.39	0.71	89.49	17.46	106.95	0.200	No	No	0.57
632	41.47	122.43	2.55	0.39	0.71	87.01	17.75	104.76	0.192	No	No	0.55
633	41.57	119.57	2.56	0.39	0.71	84.70	17.70	102.40	0.184	No	No	0.53
634	41.62	117.25	2.56	0.39	0.71	82.87	17.70	100.58	0.178	No	No	0.51
635	41.68	114.39	2.57	0.39	0.70	80.61	17.66	98.27	0.171	No	No	0.49
636	41.75	112.25	2.57	0.40	0.70	78.74	17.24	95.98	0.164	No	No	0.47
637	41.81	109.30	2.58	0.40	0.70	76.49	17.38	93.87	0.158	No	No	0.45
638	41.87	103.85	2.58	0.40	0.70	72.68	18.54	91.22	0.150	No	No	0.43
639	41.94	93.84	2.58	0.40	0.70	65.88	21.80	87.68	0.138	No	No	0.40
640	42.01	86.69	2.59	0.39	0.70	60.97	24.63	85.60	0.131	No	No	0.38
641	42.11	68.01	2.59	0.40	0.70	47.60	32.42	80.02	4.000	No	Yes	2.00
642	42.16	59.43	2.60	0.41	0.70	41.31	36.67	77.98	4.000	No	Yes	2.00
643	42.21	51.57	2.60	0.42	0.69	35.45	41.09	76.54	4.000	No	Yes	2.00
644	42.26	47.01	2.60	0.43	0.68	31.93	42.54	74.47	4.000	No	Yes	2.00
645	42.33	38.52	2.61	0.45	0.66	25.60	42.99	68.59	4.000	No	Yes	2.00
646	42.39	35.30	2.61	0.47	0.66	23.13	42.98	66.11	4.000	No	Yes	2.00
647	42.48	31.82	2.62	0.48	0.65	20.60	42.97	63.57	4.000	No	Yes	2.00
648	42.55	31.37	2.62	0.48	0.65	20.25	42.95	63.20	4.000	No	Yes	2.00
649	42.60	32.26	2.63	0.48	0.65	20.89	42.95	63.83	4.000	No	Yes	2.00
650	42.66	32.89	2.63	0.47	0.65	21.36	42.94	64.30	4.000	No	Yes	2.00
651	42.74	34.14	2.63	0.47	0.65	22.23	42.93	65.16	4.000	No	Yes	2.00
652	42.78	34.59	2.64	0.48	0.65	22.39	42.92	65.31	4.000	No	Yes	2.00
653	42.85	35.84	2.64	0.48	0.64	23.07	42.91	65.98	4.000	No	Yes	2.00
654	42.94	38.61	2.65	0.46	0.65	25.26	42.89	68.15	4.000	No	Yes	2.00
655	42.98	41.47	2.65	0.46	0.66	27.22	40.98	68.20	4.000	No	Yes	2.00
656	43.05	47.19	2.65	0.44	0.67	31.40	37.47	68.87	4.000	No	Yes	2.00
657	43.12	53.62	2.66	0.43	0.67	36.09	34.37	70.46	4.000	No	Yes	2.00
658	43.18	85.44	2.66	0.41	0.68	58.32	20.55	78.87	0.118	No	No	0.35
659	43.25	97.68	2.67	0.41	0.68	66.70	17.70	84.40	0.133	No	No	0.39
660	43.33	110.37	2.67	0.42	0.68	75.07	14.88	89.95	0.148	No	No	0.43
661	43.38	111.62	2.67	0.42	0.68	75.82	14.56	90.38	0.150	No	No	0.44
662	43.45	108.58	2.68	0.42	0.68	73.74	15.11	88.85	0.145	No	No	0.42
663	43.51	99.65	2.68	0.41	0.68	67.74	16.97	84.71	0.134	No	No	0.39
664	43.58	84.99	2.69	0.41	0.68	57.89	21.20	79.09	0.118	No	No	0.35
665	43.64	73.10	2.69	0.41	0.68	49.82	26.16	75.98	4.000	No	Yes	2.00
666	43.71	58.54	2.69	0.42	0.68	39.55	33.30	72.84	4.000	No	Yes	2.00
667	43.77	45.76	2.70	0.44	0.66	30.35	41.78	72.13	4.000	No	Yes	2.00
668	43.84	39.32	2.70	0.46	0.65	25.56	42.76	68.32	4.000	No	Yes	2.00
669	43.90	36.10	2.71	0.48	0.64	23.02	42.75	65.77	4.000	No	Yes	2.00
670	43.99	28.60	2.71	0.52	0.61	17.47	42.74	60.21	4.000	No	Yes	2.00
671	44.03	25.92	2.71	0.55	0.60	15.46	42.73	58.19	4.000	No	Yes	2.00
672	44.10	24.84	2.72	0.57	0.59	14.55	42.72	57.27	4.000	No	Yes	2.00
673	44.18	25.47	2.72	0.57	0.58	14.86	42.71	57.57	4.000	No	Yes	2.00
674	44.24	26.81	2.73	0.56	0.59	15.75	42.70	58.46	4.000	No	Yes	2.00
675	44.29	27.61	2.73	0.55	0.59	16.31	42.70	59.01	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
676	44.38	28.78	2.74	0.54	0.60	17.23	42.69	59.91	4.000	No	Yes	2.00
677	44.44	32.26	2.74	0.51	0.61	19.83	42.68	62.51	4.000	No	Yes	2.00
678	44.49	39.95	2.74	0.48	0.64	25.40	38.75	64.15	4.000	No	Yes	2.00
679	44.57	57.82	2.75	0.44	0.66	37.93	27.74	65.67	4.000	No	Yes	2.00
680	44.64	79.63	2.75	0.42	0.67	53.28	21.41	74.70	4.000	No	Yes	2.00
681	44.69	110.28	2.76	0.41	0.68	74.45	15.94	90.39	0.149	No	No	0.44
682	44.78	132.62	2.76	0.40	0.68	90.67	15.20	105.88	0.197	No	No	0.58
683	44.83	155.68	2.76	0.39	0.69	106.76	13.53	120.29	0.256	No	No	0.76
684	44.91	178.47	2.77	0.38	0.69	123.22	13.03	136.25	0.342	No	No	1.01
685	44.95	192.23	2.77	0.38	0.69	133.09	12.68	145.77	0.405	No	No	1.20
686	45.03	208.23	2.78	0.38	0.70	144.73	12.53	157.26	0.499	No	No	1.48
687	45.08	213.86	2.78	0.37	0.70	149.08	12.76	161.84	0.543	No	No	1.61
688	45.18	219.93	2.79	0.37	0.70	153.76	13.05	166.82	0.597	No	No	1.77
689	45.22	220.02	2.79	0.37	0.70	153.79	13.08	166.87	0.597	No	No	1.77
690	45.28	217.61	2.79	0.37	0.70	152.08	13.25	165.34	0.582	No	No	1.72
691	45.35	215.56	2.80	0.37	0.70	150.66	13.45	164.11	0.569	No	No	1.69
692	45.41	214.04	2.80	0.39	0.69	146.84	10.99	157.83	0.499	No	No	1.48
693	45.48	212.52	2.81	0.45	0.65	137.51	5.48	142.98	0.371	No	No	1.10
694	45.55	210.19	2.81	0.44	0.65	137.16	6.23	143.39	0.375	No	No	1.11
695	45.61	205.01	2.82	0.43	0.66	134.67	6.99	141.65	0.366	No	No	1.09
696	45.67	195.45	2.82	0.42	0.66	129.05	7.83	136.88	0.338	No	No	1.00
697	45.74	152.91	2.82	0.41	0.67	102.69	12.07	114.76	0.232	No	No	0.69
698	45.80	148.62	2.83	0.40	0.68	100.48	13.42	113.90	0.228	No	No	0.68
699	45.87	129.23	2.83	0.38	0.69	88.62	18.09	106.72	0.200	No	No	0.59
700	45.94	103.76	2.84	0.37	0.69	72.00	26.07	98.08	0.165	No	No	0.49
701	46.01	85.61	2.84	0.36	0.70	59.77	35.12	94.88	4.000	No	Yes	2.00
702	46.06	74.18	2.85	0.37	0.70	51.70	41.65	93.35	4.000	No	Yes	2.00
703	46.16	57.37	2.85	0.38	0.69	39.46	42.46	81.92	4.000	No	Yes	2.00
704	46.21	52.37	2.85	0.39	0.68	35.72	42.45	78.17	4.000	No	Yes	2.00
705	46.26	50.67	2.86	0.39	0.68	34.32	42.45	76.77	4.000	No	Yes	2.00
706	46.34	47.63	2.86	0.40	0.67	32.06	42.44	74.50	4.000	No	Yes	2.00
707	46.41	46.11	2.87	0.40	0.67	31.04	42.43	73.47	4.000	No	Yes	2.00
708	46.46	45.04	2.87	0.40	0.67	30.32	42.42	72.74	4.000	No	Yes	2.00
709	46.55	46.65	2.88	0.39	0.68	31.58	42.41	73.99	4.000	No	Yes	2.00
710	46.59	48.80	2.88	0.39	0.68	33.17	42.41	75.58	4.000	No	Yes	2.00
711	46.66	53.80	2.88	0.38	0.68	36.82	42.40	79.22	4.000	No	Yes	2.00
712	46.74	57.73	2.89	0.37	0.69	39.66	42.39	82.05	4.000	No	Yes	2.00
713	46.80	57.46	2.89	0.37	0.69	39.44	42.39	81.83	4.000	No	Yes	2.00
714	46.85	55.50	2.90	0.38	0.68	37.96	42.38	80.34	4.000	No	Yes	2.00
715	46.93	48.53	2.90	0.39	0.68	32.80	42.37	75.17	4.000	No	Yes	2.00
716	46.98	45.40	2.90	0.39	0.67	30.47	42.37	72.84	4.000	No	Yes	2.00
717	47.05	41.47	2.91	0.41	0.66	27.51	42.36	69.87	4.000	No	Yes	2.00
718	47.13	35.57	2.91	0.44	0.64	22.87	42.35	65.22	4.000	No	Yes	2.00
719	47.20	32.80	2.92	0.47	0.62	20.44	42.34	62.79	4.000	No	Yes	2.00
720	47.25	29.13	2.92	0.51	0.59	17.33	42.34	59.67	4.000	No	Yes	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS
721	47.33	25.02	2.93	0.57	0.56	13.95	42.33	56.28	4.000	No	Yes	2.00
722	47.39	22.16	2.93	0.62	0.53	11.76	42.32	54.08	4.000	No	Yes	2.00
723	47.44	20.02	2.93	0.66	0.51	10.17	42.32	52.49	4.000	No	Yes	2.00
724	47.53	18.14	2.94	0.76	0.46	8.39	39.99	48.37	4.000	No	Yes	2.00
725	47.57	18.14	2.94	0.84	0.42	7.66	20.87	28.53	4.000	No	Yes	2.00
726	47.64	18.14	2.94	0.84	0.42	7.69	21.87	29.57	4.000	No	Yes	2.00
727	47.72	18.14	2.95	0.80	0.44	8.01	29.71	37.72	4.000	No	Yes	2.00
728	47.79	23.86	2.95	0.67	0.50	12.04	30.54	42.59	4.000	No	Yes	2.00
729	47.84	38.79	2.96	0.55	0.57	22.08	23.32	45.40	4.000	No	Yes	2.00
730	47.94	72.30	2.96	0.48	0.61	44.31	14.99	59.29	4.000	No	Yes	2.00
731	47.98	70.51	2.96	0.47	0.62	43.62	17.03	60.65	4.000	No	Yes	2.00
732	48.07	58.45	2.97	0.44	0.63	36.98	28.04	65.02	4.000	No	Yes	2.00
733	48.13	52.28	2.97	0.44	0.64	33.21	35.14	68.36	4.000	No	Yes	2.00
734	48.18	51.12	2.98	0.44	0.64	32.58	37.76	70.34	4.000	No	Yes	2.00
735	48.24	51.83	2.98	0.43	0.64	33.23	39.16	72.39	4.000	No	Yes	2.00
736	48.31	51.39	2.99	0.42	0.65	33.17	42.24	75.41	4.000	No	Yes	2.00
737	48.36	46.92	2.99	0.43	0.64	30.17	42.23	72.40	4.000	No	Yes	2.00
738	48.43	39.23	2.99	0.45	0.63	24.68	42.23	66.90	4.000	No	Yes	2.00
739	48.51	33.96	3.00	0.48	0.61	20.70	42.22	62.92	4.000	No	Yes	2.00
740	48.58	31.01	3.00	0.50	0.59	18.41	42.21	60.63	4.000	No	Yes	2.00
741	48.63	27.26	3.01	0.53	0.57	15.60	42.21	57.81	4.000	No	Yes	2.00
742	48.72	23.15	3.01	0.59	0.54	12.48	42.20	54.68	4.000	No	Yes	2.00
743	48.76	21.98	3.01	0.61	0.53	11.56	42.20	53.76	4.000	No	Yes	2.00
744	48.82	20.82	3.02	0.65	0.51	10.59	42.19	52.78	4.000	No	Yes	2.00
745	48.92	21.85	3.02	0.65	0.51	11.06	42.18	53.24	4.000	No	Yes	2.00
746	48.97	21.00	3.03	0.66	0.50	10.48	42.18	52.66	4.000	No	Yes	2.00
747	49.03	21.72	3.03	0.65	0.50	10.93	42.18	53.11	4.000	No	Yes	2.00
748	49.12	22.70	3.03	0.64	0.51	11.59	42.17	53.75	4.000	No	Yes	2.00
749	49.15	22.97	3.04	0.63	0.51	11.81	42.17	53.97	4.000	No	Yes	2.00
750	49.23	24.31	3.04	0.61	0.53	12.82	42.16	54.98	4.000	No	Yes	2.00
751	49.30	25.56	3.05	0.59	0.54	13.72	42.15	55.87	4.000	No	Yes	2.00
752	49.35	26.10	3.05	0.58	0.54	14.11	42.15	56.26	4.000	No	Yes	2.00
753	49.41	28.15	3.05	0.56	0.55	15.48	42.15	57.63	4.000	No	Yes	2.00
754	49.48	30.74	3.06	0.54	0.56	17.35	42.14	59.49	4.000	No	Yes	2.00
755	49.54	32.98	3.06	0.51	0.58	19.11	42.14	61.24	4.000	No	Yes	2.00
756	49.61	35.48	3.06	0.49	0.59	21.07	42.13	63.20	4.000	No	Yes	2.00
757	49.69	37.00	3.07	0.47	0.60	22.37	42.12	64.50	4.000	No	Yes	2.00
758	49.74	39.86	3.07	0.46	0.61	24.46	42.12	66.58	4.000	No	Yes	2.00
759	49.81	47.63	3.08	0.00	1.00	47.63	0.00	47.63	4.000	No	No	2.00
760	49.90	74.98	3.08	0.00	1.00	74.98	0.00	74.98	4.000	No	No	2.00
761	49.95	86.24	3.08	0.00	1.00	86.24	0.00	86.24	4.000	No	No	2.00
762	50.01	95.98	3.08	0.00	1.00	95.98	0.00	95.98	4.000	No	No	2.00
763	50.09	102.68	3.09	0.00	1.00	102.68	0.00	102.68	4.000	No	No	2.00
764	50.14	105.36	3.09	0.00	1.00	105.36	0.00	105.36	4.000	No	No	2.00

:: Cyclic Resistance Ratio (CRR) calculation data :: (continued)

Point ID	Depth (ft)	q_t (tsf)	σ_v' (tsf)	c	C_q	$q_{c,1}$ (tsf)	Δq_c	$q_{c,1,mod}$ (tsf)	$CRR_{7.5}$	Belongs to trans. layer	Clay-like behaviour	FS

Abbreviations

Depth: Depth from free surface, at which CPT was performed (ft)
q_t: Total cone resistance
I_c: Soil behavior type index
Fr: Normalized friction ratio (%)
n: Stress exponent
Q_{tn}: Normalized cone resistance
K_c: Cone resistance correction factor due to fines
$Q_{tn,cs}$: Normalized and adjusted cone resistance
$CRR_{7.5}$: Cyclic resistance ratio for M_w=7.5
FS: Factor of safety against soil liquefaction

:: Liquefaction Potential Index calculation data ::

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
0.07	2.00	0.00	0.00	0.09	0.00	0.16	2.00	0.00	0.00	0.09	0.00
0.21	2.00	0.00	0.00	0.05	0.00	0.27	2.00	0.00	0.00	0.06	0.00
0.33	2.00	0.00	0.00	0.06	0.00	0.41	2.00	0.00	0.00	0.08	0.00
0.46	2.00	0.00	0.00	0.06	0.00	0.54	2.00	0.00	0.00	0.08	0.00
0.60	2.00	0.00	0.00	0.06	0.00	0.66	2.00	0.00	0.00	0.06	0.00
0.75	2.00	0.00	0.00	0.09	0.00	0.81	2.00	0.00	0.00	0.06	0.00
0.86	2.00	0.00	0.00	0.06	0.00	0.95	2.00	0.00	0.00	0.08	0.00
0.99	2.00	0.00	0.00	0.05	0.00	1.05	2.00	0.00	0.00	0.06	0.00
1.12	2.00	0.00	0.00	0.07	0.00	1.19	2.00	0.00	0.00	0.07	0.00
1.25	2.00	0.00	0.00	0.06	0.00	1.35	2.00	0.00	0.00	0.10	0.00
1.39	2.00	0.00	0.00	0.04	0.00	1.44	2.00	0.00	0.00	0.05	0.00
1.51	2.00	0.00	0.00	0.07	0.00	1.58	2.00	0.00	0.00	0.07	0.00
1.65	2.00	0.00	0.00	0.07	0.00	1.73	2.00	0.00	0.00	0.08	0.00
1.78	2.00	0.00	0.00	0.05	0.00	1.84	2.00	0.00	0.00	0.06	0.00
1.92	2.00	0.00	0.00	0.08	0.00	1.98	2.00	0.00	0.00	0.06	0.00
2.05	2.00	0.00	0.00	0.07	0.00	2.12	2.00	0.00	0.00	0.07	0.00
2.17	2.00	0.00	0.00	0.06	0.00	2.24	2.00	0.00	0.00	0.06	0.00
2.32	2.00	0.00	0.00	0.08	0.00	2.37	2.00	0.00	0.00	0.05	0.00
2.44	2.00	0.00	0.00	0.06	0.00	2.51	2.00	0.00	0.00	0.07	0.00
2.57	2.00	0.00	0.00	0.06	0.00	2.66	2.00	0.00	0.00	0.09	0.00
2.71	2.00	0.00	0.00	0.05	0.00	2.76	2.00	0.00	0.00	0.04	0.00
2.85	2.00	0.00	0.00	0.09	0.00	2.90	2.00	0.00	0.00	0.04	0.00
2.96	2.00	0.00	0.00	0.06	0.00	3.06	2.00	0.00	0.00	0.10	0.00
3.11	2.00	0.00	0.00	0.05	0.00	3.16	2.00	0.00	0.00	0.05	0.00
3.22	2.00	0.00	0.00	0.05	0.00	3.30	2.00	0.00	0.00	0.08	0.00
3.36	2.00	0.00	0.00	0.06	0.00	3.44	2.00	0.00	0.00	0.08	0.00
3.50	2.00	0.00	0.00	0.05	0.00	3.55	2.00	0.00	0.00	0.06	0.00
3.65	2.00	0.00	0.00	0.10	0.00	3.70	2.00	0.00	0.00	0.04	0.00
3.74	2.00	0.00	0.00	0.04	0.00	3.81	2.00	0.00	0.00	0.07	0.00
3.88	2.00	0.00	0.00	0.07	0.00	3.94	2.00	0.00	0.00	0.06	0.00
4.01	2.00	0.00	0.00	0.06	0.00	4.09	2.00	0.00	0.00	0.08	0.00
4.15	2.00	0.00	0.00	0.06	0.00	4.23	2.00	0.00	0.00	0.08	0.00
4.29	2.00	0.00	0.00	0.06	0.00	4.34	2.00	0.00	0.00	0.05	0.00
4.42	2.00	0.00	0.00	0.08	0.00	4.47	2.00	0.00	0.00	0.05	0.00
4.54	2.00	0.00	0.00	0.06	0.00	4.60	2.00	0.00	0.00	0.06	0.00
4.68	2.00	0.00	0.00	0.09	0.00	4.73	2.00	0.00	0.00	0.05	0.00
4.80	2.00	0.00	0.00	0.07	0.00	4.87	2.00	0.00	0.00	0.06	0.00
4.92	2.00	0.00	0.00	0.06	0.00	4.99	2.00	0.00	0.00	0.07	0.00
5.08	2.00	0.00	0.00	0.09	0.00	5.13	2.00	0.00	0.00	0.05	0.00
5.18	2.00	0.00	0.00	0.05	0.00	5.25	2.00	0.00	0.00	0.07	0.00
5.32	2.00	0.00	0.00	0.07	0.00	5.39	2.00	0.00	0.00	0.07	0.00
5.48	2.00	0.00	0.00	0.09	0.00	5.53	2.00	0.00	0.00	0.05	0.00
5.59	2.00	0.00	0.00	0.07	0.00	5.67	2.00	0.00	0.00	0.08	0.00
5.72	2.00	0.00	0.00	0.06	0.00	5.78	2.00	0.00	0.00	0.05	0.00
5.87	2.00	0.00	0.00	0.10	0.00	5.91	2.00	0.00	0.00	0.04	0.00
5.98	2.00	0.00	0.00	0.07	0.00	6.07	2.00	0.00	0.00	0.09	0.00
6.12	2.00	0.00	0.00	0.05	0.00	6.17	2.00	0.00	0.00	0.06	0.00
6.23	2.00	0.00	0.00	0.06	0.00	6.32	2.00	0.00	0.00	0.08	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
6.37	2.00	0.00	0.00	0.06	0.00	6.44	2.00	0.00	0.00	0.07	0.00
6.51	2.00	0.00	0.00	0.07	0.00	6.56	2.00	0.00	0.00	0.05	0.00
6.65	2.00	0.00	0.00	0.09	0.00	6.71	2.00	0.00	0.00	0.05	0.00
6.76	2.00	0.00	0.00	0.06	0.00	6.84	2.00	0.00	0.00	0.08	0.00
6.91	2.00	0.00	0.00	0.07	0.00	6.96	2.00	0.00	0.00	0.05	0.00
7.03	2.00	0.00	0.00	0.08	0.00	7.10	2.00	0.00	0.00	0.06	0.00
7.17	2.00	0.00	0.00	0.07	0.00	7.25	2.00	0.00	0.00	0.08	0.00
7.29	2.00	0.00	0.00	0.04	0.00	7.36	2.00	0.00	0.00	0.07	0.00
7.45	2.00	0.00	0.00	0.09	0.00	7.50	2.00	0.00	0.00	0.04	0.00
7.55	2.00	0.00	0.00	0.05	0.00	7.63	2.00	0.00	0.00	0.07	0.00
7.69	2.00	0.00	0.00	0.06	0.00	7.75	2.00	0.00	0.00	0.06	0.00
7.85	2.00	0.00	0.00	0.10	0.00	7.88	2.00	0.00	0.00	0.04	0.00
7.94	2.00	0.00	0.00	0.06	0.00	8.04	2.00	0.00	0.00	0.10	0.00
8.09	2.00	0.00	0.00	0.05	0.00	8.14	2.00	0.00	0.00	0.04	0.00
8.23	2.00	0.00	0.00	0.09	0.00	8.27	2.00	0.00	0.00	0.04	0.00
8.34	2.00	0.00	0.00	0.08	0.00	8.41	2.00	0.00	0.00	0.06	0.00
8.47	2.00	0.00	0.00	0.07	0.00	8.53	2.00	0.00	0.00	0.06	0.00
8.60	2.00	0.00	0.00	0.07	0.00	8.68	2.00	0.00	0.00	0.07	0.00
8.74	2.00	0.00	0.00	0.07	0.00	8.80	2.00	0.00	0.00	0.06	0.00
8.88	2.00	0.00	0.00	0.07	0.00	8.95	2.00	0.00	0.00	0.07	0.00
9.01	2.00	0.00	0.00	0.07	0.00	9.07	2.00	0.00	0.00	0.06	0.00
9.14	2.00	0.00	0.00	0.06	0.00	9.20	2.00	0.00	0.00	0.06	0.00
9.26	2.00	0.00	0.00	0.07	0.00	9.34	2.00	0.00	0.00	0.07	0.00
9.39	2.00	0.00	0.00	0.06	0.00	9.48	2.00	0.00	0.00	0.09	0.00
9.52	2.00	0.00	0.00	0.04	0.00	9.58	2.00	0.00	0.00	0.06	0.00
9.67	2.00	0.00	0.00	0.09	0.00	9.71	2.00	0.00	0.00	0.04	0.00
9.78	2.00	0.00	0.00	0.07	0.00	9.88	2.00	0.00	0.00	0.10	0.00
9.93	2.00	0.00	0.00	0.05	0.00	9.98	2.00	0.00	0.00	0.05	0.00
10.07	2.00	0.00	0.00	0.09	0.00	10.11	2.00	0.00	0.00	0.04	0.00
10.18	2.00	0.00	0.00	0.07	0.00	10.24	2.00	0.00	0.00	0.06	0.00
10.32	2.00	0.00	0.00	0.08	0.00	10.37	2.00	0.00	0.00	0.05	0.00
10.47	2.00	0.00	0.00	0.10	0.00	10.52	2.00	0.00	0.00	0.05	0.00
10.57	2.00	0.00	0.00	0.05	0.00	10.66	2.00	0.00	0.00	0.09	0.00
10.72	2.00	0.00	0.00	0.05	0.00	10.77	2.00	0.00	0.00	0.05	0.00
10.83	2.00	0.00	0.00	0.06	0.00	10.90	2.00	0.00	0.00	0.07	0.00
10.97	2.00	0.00	0.00	0.07	0.00	11.04	2.00	0.00	0.00	0.08	0.00
11.10	2.00	0.00	0.00	0.06	0.00	11.17	2.00	0.00	0.00	0.07	0.00
11.25	2.00	0.00	0.00	0.08	0.00	11.30	2.00	0.00	0.00	0.05	0.00
11.36	2.00	0.00	0.00	0.06	0.00	11.46	2.00	0.00	0.00	0.10	0.00
11.51	2.00	0.00	0.00	0.05	0.00	11.55	2.00	0.00	0.00	0.05	0.00
11.62	2.00	0.00	0.00	0.07	0.00	11.69	2.00	0.00	0.00	0.07	0.00
11.75	2.00	0.00	0.00	0.06	0.00	11.85	2.00	0.00	0.00	0.10	0.00
11.88	2.00	0.00	0.00	0.03	0.00	11.95	2.00	0.00	0.00	0.07	0.00
12.04	2.00	0.00	0.00	0.09	0.00	12.07	2.00	0.00	0.00	0.04	0.00
12.14	2.00	0.00	0.00	0.07	0.00	12.23	2.00	0.00	0.00	0.08	0.00
12.28	2.00	0.00	0.00	0.05	0.00	12.34	2.00	0.00	0.00	0.06	0.00
12.42	2.00	0.00	0.00	0.08	0.00	12.48	2.00	0.00	0.00	0.07	0.00
12.54	2.00	0.00	0.00	0.05	0.00	12.62	2.00	0.00	0.00	0.08	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
12.69	2.00	0.00	0.00	0.06	0.00	12.73	2.00	0.00	0.00	0.05	0.00
12.81	2.00	0.00	0.00	0.08	0.00	12.89	2.00	0.00	0.00	0.07	0.00
12.93	2.00	0.00	0.00	0.05	0.00	13.01	2.00	0.00	0.00	0.08	0.00
13.06	2.00	0.00	0.00	0.05	0.00	13.13	2.00	0.00	0.00	0.07	0.00
13.19	2.00	0.00	0.00	0.06	0.00	13.26	2.00	0.00	0.00	0.07	0.00
13.32	2.00	0.00	0.00	0.06	0.00	13.41	2.00	0.00	0.00	0.09	0.00
13.47	2.00	0.00	0.00	0.06	0.00	13.56	2.00	0.00	0.00	0.09	0.00
13.59	2.00	0.00	0.00	0.03	0.00	13.66	2.00	0.00	0.00	0.07	0.00
13.75	2.00	0.00	0.00	0.08	0.00	13.81	2.00	0.00	0.00	0.06	0.00
13.86	2.00	0.00	0.00	0.05	0.00	13.91	2.00	0.00	0.00	0.05	0.00
13.99	2.00	0.00	0.00	0.08	0.00	14.04	2.00	0.00	0.00	0.05	0.00
14.12	2.00	0.00	0.00	0.08	0.00	14.19	2.00	0.00	0.00	0.07	0.00
14.25	2.00	0.00	0.00	0.06	0.00	14.34	2.00	0.00	0.00	0.09	0.00
14.40	2.00	0.00	0.00	0.06	0.00	14.45	2.00	0.00	0.00	0.05	0.00
14.54	2.00	0.00	0.00	0.09	0.00	14.60	2.00	0.00	0.00	0.05	0.00
14.65	2.00	0.00	0.00	0.05	0.00	14.71	2.00	0.00	0.00	0.06	0.00
14.77	2.00	0.00	0.00	0.06	0.00	14.83	2.00	0.00	0.00	0.06	0.00
14.90	2.00	0.00	0.00	0.06	0.00	14.98	2.00	0.00	0.00	0.08	0.00
15.04	2.00	0.00	0.00	0.06	0.00	15.10	2.00	0.00	0.00	0.05	0.00
15.17	2.00	0.00	0.00	0.07	0.00	15.24	2.00	0.00	0.00	0.07	0.00
15.34	2.00	0.00	0.00	0.10	0.00	15.37	2.00	0.00	0.00	0.04	0.00
15.44	2.00	0.00	0.00	0.07	0.00	15.53	2.00	0.00	0.00	0.09	0.00
15.56	2.00	0.00	0.00	0.03	0.00	15.63	2.00	0.00	0.00	0.06	0.00
15.69	2.00	0.00	0.00	0.06	0.00	15.77	2.00	0.00	0.00	0.08	0.00
15.83	2.00	0.00	0.00	0.06	0.00	15.88	2.00	0.00	0.00	0.05	0.00
15.97	2.00	0.00	0.00	0.09	0.00	16.03	2.00	0.00	0.00	0.05	0.00
16.08	2.00	0.00	0.00	0.05	0.00	16.15	2.00	0.00	0.00	0.07	0.00
16.23	2.00	0.00	0.00	0.08	0.00	16.28	2.00	0.00	0.00	0.05	0.00
16.38	2.00	0.00	0.00	0.10	0.00	16.42	2.00	0.00	0.00	0.04	0.00
16.47	2.00	0.00	0.00	0.05	0.00	16.54	2.00	0.00	0.00	0.07	0.00
16.62	2.00	0.00	0.00	0.08	0.00	16.68	2.00	0.00	0.00	0.06	0.00
16.75	2.00	0.00	0.00	0.07	0.00	16.82	2.00	0.00	0.00	0.07	0.00
16.87	2.00	0.00	0.00	0.05	0.00	16.97	2.00	0.00	0.00	0.10	0.00
17.01	2.00	0.00	0.00	0.04	0.00	17.07	2.00	0.00	0.00	0.05	0.00
17.15	2.00	0.00	0.00	0.08	0.00	17.19	2.00	0.00	0.00	0.05	0.00
17.26	2.00	0.00	0.00	0.07	0.00	17.34	2.00	0.00	0.00	0.08	0.00
17.40	2.00	0.00	0.00	0.06	0.00	17.46	2.00	0.00	0.00	0.06	0.00
17.54	2.00	0.00	0.00	0.08	0.00	17.60	2.00	0.00	0.00	0.06	0.00
17.65	2.00	0.00	0.00	0.06	0.00	17.75	2.00	0.00	0.00	0.10	0.00
17.81	2.00	0.00	0.00	0.05	0.00	17.85	2.00	0.00	0.00	0.04	0.00
17.92	2.00	0.00	0.00	0.06	0.00	18.00	2.00	0.00	0.00	0.09	0.00
18.05	2.00	0.00	0.00	0.04	0.00	18.15	2.00	0.00	0.00	0.10	0.00
18.18	2.00	0.00	0.00	0.04	0.00	18.25	2.00	0.00	0.00	0.06	0.00
18.31	2.00	0.00	0.00	0.06	0.00	18.39	2.00	0.00	0.00	0.08	0.00
18.45	2.00	0.00	0.00	0.06	0.00	18.54	2.00	0.00	0.00	0.10	0.00
18.58	2.00	0.00	0.00	0.04	0.00	18.64	2.00	0.00	0.00	0.06	0.00
18.74	2.00	0.00	0.00	0.10	0.00	18.79	2.00	0.00	0.00	0.05	0.00
18.84	2.00	0.00	0.00	0.05	0.00	18.91	2.00	0.00	0.00	0.07	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
18.97	2.00	0.00	0.00	0.06	0.00	19.04	2.00	0.00	0.00	0.07	0.00
19.12	2.00	0.00	0.00	0.09	0.00	19.18	2.00	0.00	0.00	0.06	0.00
19.24	2.00	0.00	0.00	0.06	0.00	19.33	2.00	0.00	0.00	0.09	0.00
19.36	2.00	0.00	0.00	0.03	0.00	19.43	2.00	0.00	0.00	0.07	0.00
19.53	2.00	0.00	0.00	0.10	0.00	19.57	2.00	0.00	0.00	0.05	0.00
19.63	2.00	0.00	0.00	0.05	0.00	19.72	2.00	0.00	0.00	0.09	0.00
19.76	2.00	0.00	0.00	0.05	0.00	19.83	2.00	0.00	0.00	0.06	0.00
19.92	2.00	0.00	0.00	0.09	0.00	19.97	2.00	0.00	0.00	0.05	0.00
20.02	2.00	0.00	0.00	0.05	0.00	20.09	2.00	0.00	0.00	0.07	0.00
20.17	2.00	0.00	0.00	0.08	0.00	20.22	2.00	0.00	0.00	0.05	0.00
20.28	2.00	0.00	0.00	0.06	0.00	20.37	2.00	0.00	0.00	0.09	0.00
20.42	2.00	0.00	0.00	0.05	0.00	20.49	2.00	0.00	0.00	0.07	0.00
20.56	2.00	0.00	0.00	0.07	0.00	20.61	2.00	0.00	0.00	0.05	0.00
20.67	2.00	0.00	0.00	0.06	0.00	20.75	2.00	0.00	0.00	0.08	0.00
20.80	2.00	0.00	0.00	0.05	0.00	20.88	2.00	0.00	0.00	0.07	0.00
20.95	2.00	0.00	0.00	0.07	0.00	21.00	2.00	0.00	0.00	0.05	0.00
21.09	2.00	0.00	0.00	0.08	0.00	21.16	2.00	0.00	0.00	0.07	0.00
21.21	2.00	0.00	0.00	0.06	0.00	21.31	2.00	0.00	0.00	0.09	0.00
21.33	2.00	0.00	0.00	0.02	0.00	21.40	2.00	0.00	0.00	0.07	0.00
21.48	2.00	0.00	0.00	0.08	0.00	21.54	2.00	0.00	0.00	0.05	0.00
21.61	2.00	0.00	0.00	0.07	0.00	21.66	2.00	0.00	0.00	0.05	0.00
21.75	2.00	0.00	0.00	0.09	0.00	21.80	2.00	0.00	0.00	0.05	0.00
21.89	2.00	0.00	0.00	0.09	0.00	21.94	2.00	0.00	0.00	0.04	0.00
22.00	2.00	0.00	0.00	0.06	0.00	22.05	2.00	0.00	0.00	0.05	0.00
22.13	2.00	0.00	0.00	0.08	0.00	22.20	2.00	0.00	0.00	0.07	0.00
22.25	2.00	0.00	0.00	0.05	0.00	22.34	2.00	0.00	0.00	0.09	0.00
22.39	2.00	0.00	0.00	0.05	0.00	22.45	2.00	0.00	0.00	0.06	0.00
22.53	2.00	0.00	0.00	0.09	0.00	22.59	2.00	0.00	0.00	0.05	0.00
22.64	2.00	0.00	0.00	0.05	0.00	22.72	2.00	0.00	0.00	0.08	0.00
22.78	2.00	0.00	0.00	0.07	0.00	22.84	2.00	0.00	0.00	0.06	0.00
22.92	2.00	0.00	0.00	0.08	0.00	22.98	2.00	0.00	0.00	0.06	0.00
23.03	2.00	0.00	0.00	0.05	0.00	23.11	2.00	0.00	0.00	0.08	0.00
23.17	2.00	0.00	0.00	0.06	0.00	23.23	2.00	0.00	0.00	0.06	0.00
23.31	2.00	0.00	0.00	0.07	0.00	23.38	2.00	0.00	0.00	0.07	0.00
23.43	2.00	0.00	0.00	0.05	0.00	23.51	2.00	0.00	0.00	0.08	0.00
23.56	2.00	0.00	0.00	0.05	0.00	23.63	2.00	0.00	0.00	0.07	0.00
23.73	2.00	0.00	0.00	0.10	0.00	23.76	2.00	0.00	0.00	0.03	0.00
23.83	2.00	0.00	0.00	0.08	0.00	23.91	2.00	0.00	0.00	0.07	0.00
23.96	2.00	0.00	0.00	0.06	0.00	24.04	2.00	0.00	0.00	0.07	0.00
24.12	2.00	0.00	0.00	0.08	0.00	24.17	2.00	0.00	0.00	0.05	0.00
24.22	2.00	0.00	0.00	0.05	0.00	24.29	2.00	0.00	0.00	0.07	0.00
24.35	2.00	0.00	0.00	0.06	0.00	24.41	2.00	0.00	0.00	0.06	0.00
24.49	2.00	0.00	0.00	0.08	0.00	24.55	2.00	0.00	0.00	0.06	0.00
24.61	2.00	0.00	0.00	0.06	0.00	24.69	2.00	0.00	0.00	0.08	0.00
24.76	2.00	0.00	0.00	0.07	0.00	24.80	2.00	0.00	0.00	0.05	0.00
24.90	2.00	0.00	0.00	0.10	0.00	24.95	2.00	0.00	0.00	0.05	0.00
25.01	2.00	0.00	0.00	0.06	0.00	25.07	2.00	0.00	0.00	0.07	0.00
25.14	2.00	0.00	0.00	0.06	0.00	25.20	2.00	0.00	0.00	0.06	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
25.27	2.00	0.00	0.00	0.07	0.00	25.34	2.00	0.00	0.00	0.08	0.00
25.40	2.00	0.00	0.00	0.06	0.00	25.46	2.00	0.00	0.00	0.06	0.00
25.54	2.00	0.00	0.00	0.08	0.00	25.60	2.00	0.00	0.00	0.06	0.00
25.68	2.00	0.00	0.00	0.08	0.00	25.73	2.00	0.00	0.00	0.05	0.00
25.79	2.00	0.00	0.00	0.06	0.00	25.87	2.00	0.00	0.00	0.07	0.00
25.94	2.00	0.00	0.00	0.07	0.00	25.99	2.00	0.00	0.00	0.06	0.00
26.05	2.00	0.00	0.00	0.06	0.00	26.13	2.00	0.00	0.00	0.08	0.00
26.18	2.00	0.00	0.00	0.05	0.00	26.28	2.00	0.00	0.00	0.10	0.00
26.32	2.00	0.00	0.00	0.04	0.00	26.38	2.00	0.00	0.00	0.06	0.00
26.48	2.00	0.00	0.00	0.10	0.00	26.53	2.00	0.00	0.00	0.05	0.00
26.59	2.00	0.00	0.00	0.06	0.00	26.68	2.00	0.00	0.00	0.08	0.00
26.73	2.00	0.00	0.00	0.05	0.00	26.77	2.00	0.00	0.00	0.04	0.00
26.85	2.00	0.00	0.00	0.07	0.00	26.91	2.00	0.00	0.00	0.06	0.00
26.97	2.00	0.00	0.00	0.06	0.00	27.04	2.00	0.00	0.00	0.07	0.00
27.11	2.00	0.00	0.00	0.07	0.00	27.20	2.00	0.00	0.00	0.09	0.00
27.25	2.00	0.00	0.00	0.05	0.00	27.31	2.00	0.00	0.00	0.05	0.00
27.36	2.00	0.00	0.00	0.05	0.00	27.46	2.00	0.00	0.00	0.10	0.00
27.51	2.00	0.00	0.00	0.05	0.00	27.56	2.00	0.00	0.00	0.05	0.00
27.63	2.00	0.00	0.00	0.07	0.00	27.71	2.00	0.00	0.00	0.08	0.00
27.76	2.00	0.00	0.00	0.05	0.00	27.84	2.00	0.00	0.00	0.08	0.00
27.90	2.00	0.00	0.00	0.06	0.00	27.95	2.00	0.00	0.00	0.05	0.00
28.05	2.00	0.00	0.00	0.10	0.00	28.09	2.00	0.00	0.00	0.04	0.00
28.15	2.00	0.00	0.00	0.07	0.00	28.25	2.00	0.00	0.00	0.09	0.00
28.30	2.00	0.00	0.00	0.05	0.00	28.35	2.00	0.00	0.00	0.05	0.00
28.45	2.00	0.00	0.00	0.10	0.00	28.50	2.00	0.00	0.00	0.05	0.00
28.55	2.00	0.00	0.00	0.05	0.00	28.61	2.00	0.00	0.00	0.06	0.00
28.69	2.00	0.00	0.00	0.08	0.00	28.74	2.00	0.00	0.00	0.05	0.00
28.84	2.00	0.00	0.00	0.10	0.00	28.89	2.00	0.00	0.00	0.05	0.00
28.94	2.00	0.00	0.00	0.05	0.00	29.03	2.00	0.00	0.00	0.09	0.00
29.08	2.00	0.00	0.00	0.05	0.00	29.14	2.00	0.00	0.00	0.05	0.00
29.21	2.00	0.00	0.00	0.07	0.00	29.27	2.00	0.00	0.00	0.06	0.00
29.37	2.00	0.00	0.00	0.10	0.00	29.41	2.00	0.00	0.00	0.04	0.00
29.47	2.00	0.00	0.00	0.06	0.00	29.56	2.00	0.00	0.00	0.08	0.00
29.59	2.00	0.00	0.00	0.04	0.00	29.67	2.00	0.00	0.00	0.07	0.00
29.77	2.00	0.00	0.00	0.11	0.00	29.81	2.00	0.00	0.00	0.04	0.00
29.87	2.00	0.00	0.00	0.06	0.00	29.97	2.00	0.00	0.00	0.10	0.00
29.99	2.00	0.00	0.00	0.02	0.00	30.07	2.00	0.00	0.00	0.07	0.00
30.13	2.00	0.00	0.00	0.06	0.00	30.21	2.00	0.00	0.00	0.08	0.00
30.27	2.00	0.00	0.00	0.06	0.00	30.34	2.00	0.00	0.00	0.08	0.00
30.40	2.00	0.00	0.00	0.06	0.00	30.46	2.00	0.00	0.00	0.06	0.00
30.53	2.00	0.00	0.00	0.07	0.00	30.59	2.00	0.00	0.00	0.07	0.00
30.66	2.00	0.00	0.00	0.07	0.00	30.71	2.00	0.00	0.00	0.05	0.00
30.79	2.00	0.00	0.00	0.08	0.00	30.85	2.00	0.00	0.00	0.06	0.00
30.94	2.00	0.00	0.00	0.09	0.00	30.99	2.00	0.00	0.00	0.05	0.00
31.05	2.00	0.00	0.00	0.06	0.00	31.11	2.00	0.00	0.00	0.06	0.00
31.19	2.00	0.00	0.00	0.08	0.00	31.25	2.00	0.00	0.00	0.06	0.00
31.30	2.00	0.00	0.00	0.05	0.00	31.38	2.00	0.00	0.00	0.08	0.00
31.45	2.00	0.00	0.00	0.07	0.00	31.50	2.00	0.00	0.00	0.05	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
31.58	2.00	0.00	0.00	0.08	0.00	31.64	2.00	0.00	0.00	0.06	0.00
31.70	2.00	0.00	0.00	0.06	0.00	31.77	2.00	0.00	0.00	0.07	0.00
31.85	2.00	0.00	0.00	0.08	0.00	31.89	2.00	0.00	0.00	0.05	0.00
31.98	2.00	0.00	0.00	0.09	0.00	32.03	2.00	0.00	0.00	0.05	0.00
32.09	2.00	0.00	0.00	0.06	0.00	32.18	2.00	0.00	0.00	0.09	0.00
32.23	2.00	0.00	0.00	0.05	0.00	32.29	2.00	0.00	0.00	0.06	0.00
32.35	2.00	0.00	0.00	0.06	0.00	32.42	2.00	0.00	0.00	0.06	0.00
32.49	2.00	0.00	0.00	0.07	0.00	32.58	2.00	0.00	0.00	0.09	0.00
32.63	2.00	0.00	0.00	0.06	0.00	32.69	2.00	0.00	0.00	0.06	0.00
32.75	2.00	0.00	0.00	0.06	0.00	32.83	2.00	0.00	0.00	0.08	0.00
32.88	2.00	0.00	0.00	0.05	0.00	32.94	2.00	0.00	0.00	0.06	0.00
33.01	2.00	0.00	0.00	0.07	0.00	33.08	2.00	0.00	0.00	0.07	0.00
33.17	2.00	0.00	0.00	0.08	0.00	33.23	2.00	0.00	0.00	0.06	0.00
33.28	2.00	0.00	0.00	0.05	0.00	33.34	2.00	0.00	0.00	0.06	0.00
33.41	2.00	0.00	0.00	0.07	0.00	33.48	2.00	0.00	0.00	0.06	0.00
33.54	2.00	0.00	0.00	0.06	0.00	33.62	2.00	0.00	0.00	0.08	0.00
33.66	2.00	0.00	0.00	0.04	0.00	33.76	2.00	0.00	0.00	0.10	0.00
33.81	2.00	0.00	0.00	0.05	0.00	33.87	2.00	0.00	0.00	0.05	0.00
33.93	2.00	0.00	0.00	0.06	0.00	33.99	2.00	0.00	0.00	0.06	0.00
34.07	2.00	0.00	0.00	0.08	0.00	34.15	2.00	0.00	0.00	0.08	0.00
34.20	2.00	0.00	0.00	0.05	0.00	34.26	2.00	0.00	0.00	0.05	0.00
34.34	2.00	0.00	0.00	0.08	0.00	34.41	2.00	0.00	0.00	0.08	0.00
34.46	2.00	0.00	0.00	0.05	0.00	34.55	2.00	0.00	0.00	0.09	0.00
34.58	2.00	0.00	0.00	0.03	0.00	34.66	2.00	0.00	0.00	0.07	0.00
34.72	2.00	0.00	0.00	0.07	0.00	34.80	2.00	0.00	0.00	0.08	0.00
34.85	2.00	0.00	0.00	0.05	0.00	34.94	2.00	0.00	0.00	0.09	0.00
34.98	2.00	0.00	0.00	0.05	0.00	35.05	2.00	0.00	0.00	0.07	0.00
35.15	2.00	0.00	0.00	0.10	0.00	35.19	2.00	0.00	0.00	0.04	0.00
35.25	2.00	0.00	0.00	0.06	0.00	35.35	2.00	0.00	0.00	0.10	0.00
35.38	2.00	0.00	0.00	0.04	0.00	35.44	2.00	0.00	0.00	0.05	0.00
35.54	2.00	0.00	0.00	0.11	0.00	35.57	2.00	0.00	0.00	0.03	0.00
35.64	2.00	0.00	0.00	0.06	0.00	35.72	2.00	0.00	0.00	0.08	0.00
35.77	2.00	0.00	0.00	0.05	0.00	35.84	2.00	0.00	0.00	0.08	0.00
35.90	2.00	0.00	0.00	0.06	0.00	35.97	2.00	0.00	0.00	0.07	0.00
36.06	2.00	0.00	0.00	0.10	0.00	36.11	2.00	0.00	0.00	0.05	0.00
36.17	2.00	0.00	0.00	0.05	0.00	36.25	2.00	0.00	0.00	0.08	0.00
36.30	2.00	0.00	0.00	0.05	0.00	36.37	2.00	0.00	0.00	0.07	0.00
36.45	2.00	0.00	0.00	0.08	0.00	36.51	2.00	0.00	0.00	0.06	0.00
36.56	2.00	0.00	0.00	0.05	0.00	36.61	2.00	0.00	0.00	0.06	0.00
36.70	2.00	0.00	0.00	0.08	0.00	36.75	2.00	0.00	0.00	0.06	0.00
36.85	2.00	0.00	0.00	0.10	0.00	36.90	2.00	0.00	0.00	0.05	0.00
36.95	2.00	0.00	0.00	0.04	0.00	37.01	2.00	0.00	0.00	0.07	0.00
37.09	2.00	0.00	0.00	0.08	0.00	37.16	2.00	0.00	0.00	0.06	0.00
37.25	2.00	0.00	0.00	0.09	0.00	37.30	2.00	0.00	0.00	0.05	0.00
37.35	2.00	0.00	0.00	0.05	0.00	37.43	2.00	0.00	0.00	0.09	0.00
37.48	2.00	0.00	0.00	0.04	0.00	37.55	2.00	0.00	0.00	0.07	0.00
37.63	2.00	0.00	0.00	0.08	0.00	37.68	2.00	0.00	0.00	0.05	0.00
37.74	2.00	0.00	0.00	0.06	0.00	37.80	2.00	0.00	0.00	0.06	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
37.88	2.00	0.00	0.00	0.09	0.00	37.93	2.00	0.00	0.00	0.05	0.00
38.00	2.00	0.00	0.00	0.07	0.00	38.08	2.00	0.00	0.00	0.08	0.00
38.13	2.00	0.00	0.00	0.05	0.00	38.20	2.00	0.00	0.00	0.07	0.00
38.27	2.00	0.00	0.00	0.07	0.00	38.33	2.00	0.00	0.00	0.05	0.00
38.40	2.00	0.00	0.00	0.07	0.00	38.46	2.00	0.00	0.00	0.07	0.00
38.53	2.00	0.00	0.00	0.07	0.00	38.60	2.00	0.00	0.00	0.08	0.00
38.67	2.00	0.00	0.00	0.06	0.00	38.72	2.00	0.00	0.00	0.05	0.00
38.80	2.00	0.00	0.00	0.08	0.00	38.85	2.00	0.00	0.00	0.05	0.00
38.91	2.00	0.00	0.00	0.06	0.00	38.98	2.00	0.00	0.00	0.06	0.00
39.05	2.00	0.00	0.00	0.08	0.00	39.11	2.00	0.00	0.00	0.06	0.00
39.20	2.00	0.00	0.00	0.09	0.00	39.25	2.00	0.00	0.00	0.05	0.00
39.31	2.00	0.00	0.00	0.06	0.00	39.39	2.00	0.00	0.00	0.08	0.00
39.44	2.00	0.00	0.00	0.05	0.00	39.51	2.00	0.00	0.00	0.07	0.00
39.60	2.00	0.00	0.00	0.10	0.00	39.65	2.00	0.00	0.00	0.05	0.00
39.70	2.00	0.00	0.00	0.05	0.00	39.79	2.00	0.00	0.00	0.09	0.00
39.84	2.00	0.00	0.00	0.05	0.00	39.90	2.00	0.00	0.00	0.06	0.00
39.99	2.00	0.00	0.00	0.09	0.00	40.03	0.84	0.00	0.00	0.04	0.01
40.10	0.81	0.00	0.00	0.07	0.01	40.20	0.78	0.00	0.00	0.10	0.03
40.24	0.76	0.00	0.00	0.05	0.01	40.30	0.74	0.00	0.00	0.05	0.02
40.39	0.72	0.00	0.00	0.09	0.03	40.44	0.69	0.00	0.00	0.05	0.02
40.50	0.68	0.00	0.00	0.06	0.02	40.59	0.66	0.00	0.00	0.09	0.04
40.63	0.64	0.00	0.00	0.04	0.02	40.69	0.66	0.00	0.00	0.06	0.02
40.76	0.63	0.00	0.00	0.07	0.03	40.83	0.64	0.00	0.00	0.07	0.03
40.88	0.65	0.00	0.00	0.05	0.02	40.97	0.67	0.00	0.00	0.09	0.03
41.02	0.67	0.00	0.00	0.05	0.02	41.08	0.67	0.00	0.00	0.06	0.02
41.16	0.67	0.00	0.00	0.08	0.03	41.23	0.65	0.00	0.00	0.07	0.03
41.28	0.62	0.00	0.00	0.06	0.02	41.35	0.60	0.00	0.00	0.07	0.03
41.42	0.57	0.00	0.00	0.07	0.03	41.47	0.55	0.00	0.00	0.05	0.03
41.57	0.53	0.00	0.00	0.09	0.05	41.62	0.51	0.00	0.00	0.05	0.03
41.68	0.49	0.00	0.00	0.06	0.03	41.75	0.47	0.00	0.00	0.07	0.04
41.81	0.45	0.00	0.00	0.06	0.04	41.87	0.43	0.00	0.00	0.05	0.03
41.94	0.40	0.00	0.00	0.08	0.05	42.01	0.38	0.00	0.00	0.06	0.04
42.11	2.00	0.00	0.00	0.10	0.00	42.16	2.00	0.00	0.00	0.05	0.00
42.21	2.00	0.00	0.00	0.05	0.00	42.26	2.00	0.00	0.00	0.05	0.00
42.33	2.00	0.00	0.00	0.07	0.00	42.39	2.00	0.00	0.00	0.06	0.00
42.48	2.00	0.00	0.00	0.08	0.00	42.55	2.00	0.00	0.00	0.08	0.00
42.60	2.00	0.00	0.00	0.05	0.00	42.66	2.00	0.00	0.00	0.05	0.00
42.74	2.00	0.00	0.00	0.09	0.00	42.78	2.00	0.00	0.00	0.04	0.00
42.85	2.00	0.00	0.00	0.07	0.00	42.94	2.00	0.00	0.00	0.09	0.00
42.98	2.00	0.00	0.00	0.04	0.00	43.05	2.00	0.00	0.00	0.07	0.00
43.12	2.00	0.00	0.00	0.07	0.00	43.18	0.35	0.00	0.00	0.05	0.04
43.25	0.39	0.00	0.00	0.07	0.05	43.33	0.43	0.00	0.00	0.09	0.05
43.38	0.44	0.00	0.00	0.04	0.02	43.45	0.42	0.00	0.00	0.07	0.04
43.51	0.39	0.00	0.00	0.06	0.04	43.58	0.35	0.00	0.00	0.07	0.05
43.64	2.00	0.00	0.00	0.07	0.00	43.71	2.00	0.00	0.00	0.06	0.00
43.77	2.00	0.00	0.00	0.06	0.00	43.84	2.00	0.00	0.00	0.07	0.00
43.90	2.00	0.00	0.00	0.06	0.00	43.99	2.00	0.00	0.00	0.09	0.00
44.03	2.00	0.00	0.00	0.05	0.00	44.10	2.00	0.00	0.00	0.07	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI
44.18	2.00	0.00	0.00	0.08	0.00	44.24	2.00	0.00	0.00	0.06	0.00
44.29	2.00	0.00	0.00	0.05	0.00	44.38	2.00	0.00	0.00	0.09	0.00
44.44	2.00	0.00	0.00	0.06	0.00	44.49	2.00	0.00	0.00	0.05	0.00
44.57	2.00	0.00	0.00	0.08	0.00	44.64	2.00	0.00	0.00	0.06	0.00
44.69	0.44	0.00	0.00	0.05	0.03	44.78	0.58	0.00	0.00	0.09	0.04
44.83	0.76	0.00	0.00	0.05	0.01	44.91	1.01	0.00	0.00	0.08	0.00
44.95	1.20	0.00	0.00	0.04	0.00	45.03	1.48	0.00	0.00	0.08	0.00
45.08	1.61	0.00	0.00	0.05	0.00	45.18	1.77	0.00	0.00	0.10	0.00
45.22	1.77	0.00	0.00	0.05	0.00	45.28	1.72	0.00	0.00	0.06	0.00
45.35	1.69	0.00	0.00	0.07	0.00	45.41	1.48	0.00	0.00	0.06	0.00
45.48	1.10	0.00	0.00	0.07	0.00	45.55	1.11	0.00	0.00	0.07	0.00
45.61	1.09	0.00	0.00	0.06	0.00	45.67	1.00	0.00	0.00	0.06	0.00
45.74	0.69	0.00	0.00	0.07	0.02	45.80	0.68	0.00	0.00	0.06	0.02
45.87	0.59	0.00	0.00	0.07	0.02	45.94	0.49	0.00	0.00	0.07	0.03
46.01	2.00	0.00	0.00	0.08	0.00	46.06	2.00	0.00	0.00	0.05	0.00
46.16	2.00	0.00	0.00	0.09	0.00	46.21	2.00	0.00	0.00	0.05	0.00
46.26	2.00	0.00	0.00	0.05	0.00	46.34	2.00	0.00	0.00	0.08	0.00
46.41	2.00	0.00	0.00	0.07	0.00	46.46	2.00	0.00	0.00	0.05	0.00
46.55	2.00	0.00	0.00	0.09	0.00	46.59	2.00	0.00	0.00	0.04	0.00
46.66	2.00	0.00	0.00	0.07	0.00	46.74	2.00	0.00	0.00	0.09	0.00
46.80	2.00	0.00	0.00	0.06	0.00	46.85	2.00	0.00	0.00	0.05	0.00
46.93	2.00	0.00	0.00	0.08	0.00	46.98	2.00	0.00	0.00	0.05	0.00
47.05	2.00	0.00	0.00	0.07	0.00	47.13	2.00	0.00	0.00	0.08	0.00
47.20	2.00	0.00	0.00	0.06	0.00	47.25	2.00	0.00	0.00	0.06	0.00
47.33	2.00	0.00	0.00	0.08	0.00	47.39	2.00	0.00	0.00	0.06	0.00
47.44	2.00	0.00	0.00	0.05	0.00	47.53	2.00	0.00	0.00	0.08	0.00
47.57	2.00	0.00	0.00	0.05	0.00	47.64	2.00	0.00	0.00	0.07	0.00
47.72	2.00	0.00	0.00	0.07	0.00	47.79	2.00	0.00	0.00	0.07	0.00
47.84	2.00	0.00	0.00	0.05	0.00	47.94	2.00	0.00	0.00	0.10	0.00
47.98	2.00	0.00	0.00	0.04	0.00	48.07	2.00	0.00	0.00	0.09	0.00
48.13	2.00	0.00	0.00	0.06	0.00	48.18	2.00	0.00	0.00	0.04	0.00
48.24	2.00	0.00	0.00	0.06	0.00	48.31	2.00	0.00	0.00	0.07	0.00
48.36	2.00	0.00	0.00	0.05	0.00	48.43	2.00	0.00	0.00	0.06	0.00
48.51	2.00	0.00	0.00	0.08	0.00	48.58	2.00	0.00	0.00	0.06	0.00
48.63	2.00	0.00	0.00	0.05	0.00	48.72	2.00	0.00	0.00	0.09	0.00
48.76	2.00	0.00	0.00	0.04	0.00	48.82	2.00	0.00	0.00	0.07	0.00
48.92	2.00	0.00	0.00	0.09	0.00	48.97	2.00	0.00	0.00	0.05	0.00
49.03	2.00	0.00	0.00	0.06	0.00	49.12	2.00	0.00	0.00	0.09	0.00
49.15	2.00	0.00	0.00	0.03	0.00	49.23	2.00	0.00	0.00	0.09	0.00
49.30	2.00	0.00	0.00	0.07	0.00	49.35	2.00	0.00	0.00	0.05	0.00
49.41	2.00	0.00	0.00	0.06	0.00	49.48	2.00	0.00	0.00	0.07	0.00
49.54	2.00	0.00	0.00	0.06	0.00	49.61	2.00	0.00	0.00	0.07	0.00
49.69	2.00	0.00	0.00	0.08	0.00	49.74	2.00	0.00	0.00	0.05	0.00
49.81	2.00	0.00	0.00	0.07	0.00	49.90	2.00	0.00	0.00	0.10	0.00
49.95	2.00	0.00	0.00	0.04	0.00	50.01	2.00	0.00	0.00	0.06	0.00
50.09	2.00	0.00	0.00	0.09	0.00	50.14	2.00	0.00	0.00	0.05	0.00

:: Liquefaction Potential Index calculation data :: (continued)

Depth (ft)	FS	F_L	w_z	d_z	LPI	Depth (ft)	FS	F_L	w_z	d_z	LPI

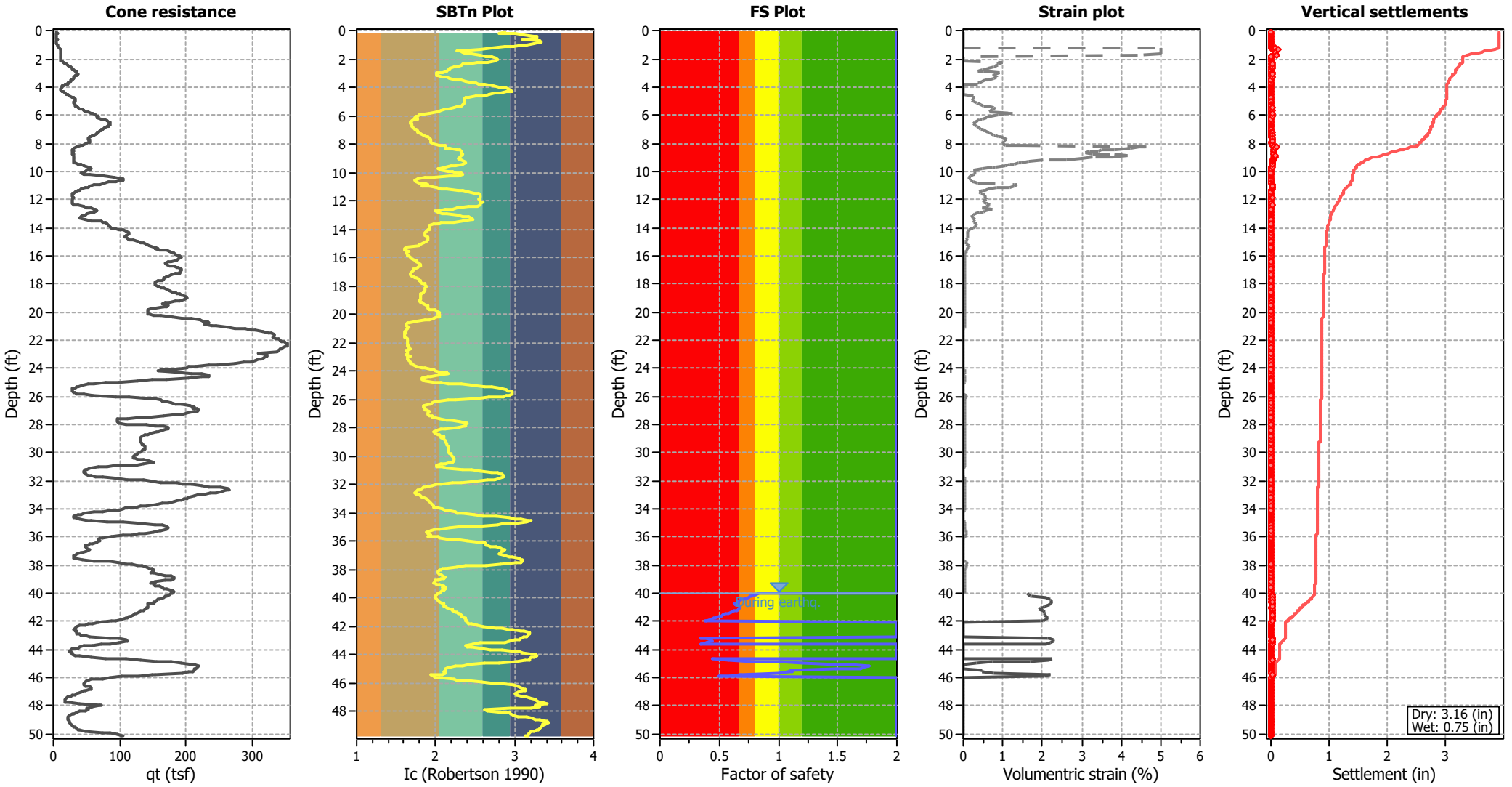
Overall liquefaction potential: 1.33

LPI = 0.00 - Liquefaction risk very low
LPI between 0.00 and 5.00 - Liquefaction risk low
LPI between 5.00 and 15.00 - Liquefaction risk high
LPI > 15.00 - Liquefaction risk very high

Abbreviations

FS: Calculated factor of safety for test point
F_L: 1 - FS
w_z: Function value of the extend of soil liquefaction according to depth
d_z: Layer thickness (ft)

Estimation of post-earthquake settlements



Abbreviations

q_t:	Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c:	Soil Behaviour Type Index
FS:	Calculated Factor of Safety against liquefaction
Volumentric strain:	Post-liquefaction volumentric strain

:: Post-earthquake settlement of dry sands ::

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
0.07	2.89	6.60	46.16	0	0.0	0	1.01	0.000	0.00	0.00	0.00	0.000
0.16	2.80	9.18	53.53	0	0.0	0	1.01	0.000	0.00	0.00	0.00	0.000
0.21	3.02	6.73	60.86	0	0.0	0	1.01	0.000	0.00	0.00	0.00	0.000
0.27	3.12	6.58	72.41	0	0.0	0	1.01	0.000	0.00	0.00	0.00	0.000
0.33	3.25	6.29	87.77	0	0.0	0	1.01	0.000	0.00	0.00	0.00	0.000
0.41	3.29	6.28	92.98	0	0.0	0	1.00	0.000	0.00	0.00	0.00	0.000
0.46	3.28	6.42	93.67	0	0.0	0	1.00	0.000	0.00	0.00	0.00	0.000
0.54	3.16	7.86	93.48	0	0.0	0	1.00	0.000	0.00	0.00	0.00	0.000
0.60	3.09	8.99	93.62	0	0.0	0	1.00	0.000	0.00	0.00	0.00	0.000
0.66	3.33	6.26	99.38	0	0.0	0	1.00	0.000	0.00	0.00	0.00	0.000
0.75	3.34	6.25	102.22	0	0.0	0	1.00	0.000	0.00	0.00	0.00	0.000
0.81	3.32	6.54	102.38	0	0.0	0	1.00	0.000	0.00	0.00	0.00	0.000
0.86	3.24	7.11	96.98	0	0.0	0	1.00	0.000	0.00	0.00	0.00	0.000
0.95	3.15	7.68	88.67	0	0.0	0	1.00	0.000	0.00	0.00	0.00	0.000
0.99	3.09	8.24	86.15	0	0.0	0	1.00	0.000	0.00	0.00	0.00	0.000
1.05	2.99	9.39	81.28	0	0.0	0	1.00	0.000	0.00	0.00	0.00	0.000
1.12	2.88	10.38	71.13	0	0.0	0	0.99	0.000	0.00	0.00	0.00	0.000
1.19	2.72	12.11	59.00	0	0.0	0	0.99	0.000	0.00	0.00	0.00	0.000
1.25	2.57	13.54	47.50	13	0.0	197	0.99	4.767	8.24	21.37	5.00	0.068
1.35	2.30	15.10	15.10	4	0.0	156	0.99	61.871	492.07	21.37	5.00	0.125
1.39	2.28	15.82	15.82	4	0.0	158	0.99	57.786	439.89	21.37	5.00	0.046
1.44	2.31	16.25	16.25	4	0.0	169	0.99	33.776	245.02	21.37	5.00	0.065
1.51	2.35	16.60	16.60	4	0.0	182	0.99	19.899	137.76	21.37	5.00	0.085
1.58	2.38	17.24	39.39	10	0.0	197	0.99	10.805	26.02	21.37	5.00	0.078
1.65	2.46	16.96	46.24	12	0.0	215	0.99	6.036	11.48	21.37	5.00	0.079
1.73	2.57	16.66	58.15	15	0.0	241	0.99	2.764	3.76	21.37	4.40	0.089
1.78	2.64	16.08	66.57	0	0.0	0	0.99	0.000	0.00	0.00	0.00	0.000
1.84	2.71	15.93	76.18	0	0.0	0	0.98	0.000	0.00	0.00	0.00	0.000
1.92	2.77	15.49	84.84	0	0.0	0	0.98	0.000	0.00	0.00	0.00	0.000
1.98	2.79	15.34	88.25	0	0.0	0	0.98	0.000	0.00	0.00	0.00	0.000
2.05	2.78	15.62	87.40	0	0.0	0	0.98	0.000	0.00	0.00	0.00	0.000
2.12	2.75	16.48	85.89	0	0.0	0	0.98	0.000	0.00	0.00	0.00	0.000
2.17	2.66	19.07	81.76	0	0.0	0	0.98	0.000	0.00	0.00	0.00	0.000
2.24	2.52	23.79	74.61	19	0.0	325	0.98	0.806	0.83	21.37	0.98	0.015
2.32	2.41	28.81	70.24	17	0.0	342	0.98	0.647	0.77	21.37	0.90	0.017
2.37	2.35	31.97	68.46	16	0.0	352	0.98	0.582	0.73	21.37	0.86	0.011
2.44	2.32	33.97	67.89	16	0.0	359	0.98	0.563	0.73	21.37	0.86	0.013
2.51	2.27	36.84	67.31	16	0.0	367	0.98	0.537	0.72	21.37	0.84	0.015
2.57	2.23	40.27	67.86	15	0.0	378	0.97	0.480	0.65	21.37	0.77	0.011
2.66	2.18	44.71	70.21	16	0.0	397	0.97	0.405	0.54	21.37	0.63	0.014
2.71	2.17	46.43	71.87	16	0.0	407	0.97	0.370	0.48	21.37	0.57	0.007
2.76	2.16	48.87	74.30	16	0.0	421	0.97	0.321	0.40	21.37	0.47	0.005
2.85	2.14	52.60	78.41	17	0.0	445	0.97	0.264	0.31	21.37	0.37	0.008
2.90	2.09	54.03	76.00	16	0.0	428	0.97	0.339	0.43	21.37	0.50	0.005
2.96	2.01	55.18	72.75	15	0.0	396	0.97	0.565	0.78	21.37	0.92	0.014
3.06	2.01	57.18	75.22	16	0.0	408	0.97	0.516	0.69	21.37	0.81	0.019
3.11	2.01	57.61	76.02	16	0.0	414	0.97	0.502	0.66	21.37	0.77	0.010
3.16	2.03	57.32	76.20	16	0.0	417	0.97	0.502	0.66	21.37	0.77	0.010

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
3.22	2.08	53.01	73.80	16	0.0	414	0.97	0.551	0.73	21.37	0.85	0.011
3.30	2.15	49.26	73.75	16	0.0	418	0.96	0.560	0.72	21.37	0.84	0.017
3.36	2.17	48.55	75.08	17	0.0	425	0.96	0.537	0.67	21.37	0.78	0.012
3.44	2.25	45.23	79.33	18	0.0	438	0.96	0.485	0.54	21.37	0.63	0.012
3.50	2.32	41.92	84.18	20	0.0	444	0.96	0.468	0.47	21.37	0.55	0.007
3.55	2.37	40.05	89.35	22	0.0	452	0.96	0.443	0.40	21.37	0.47	0.007
3.65	2.47	35.73	99.81	25	0.0	458	0.96	0.445	0.33	21.37	0.39	0.009
3.70	2.50	34.44	103.21	27	0.0	459	0.96	0.455	0.32	21.37	0.38	0.004
3.74	2.54	32.70	107.14	28	0.0	458	0.96	0.479	0.32	21.37	0.37	0.004
3.81	2.62	28.68	113.86	0	0.0	0	0.96	0.000	0.00	0.00	0.00	0.000
3.88	2.73	24.22	121.75	0	0.0	0	0.96	0.000	0.00	0.00	0.00	0.000
3.94	2.81	21.22	127.19	0	0.0	0	0.95	0.000	0.00	0.00	0.00	0.000
4.01	2.88	18.91	130.35	0	0.0	0	0.95	0.000	0.00	0.00	0.00	0.000
4.09	2.92	17.89	133.04	0	0.0	0	0.95	0.000	0.00	0.00	0.00	0.000
4.15	2.95	17.17	136.59	0	0.0	0	0.95	0.000	0.00	0.00	0.00	0.000
4.23	2.96	17.45	142.65	0	0.0	0	0.95	0.000	0.00	0.00	0.00	0.000
4.29	2.90	19.74	141.59	0	0.0	0	0.95	0.000	0.00	0.00	0.00	0.000
4.34	2.83	22.47	139.05	0	0.0	0	0.95	0.000	0.00	0.00	0.00	0.000
4.42	2.75	25.90	135.93	0	0.0	0	0.95	0.000	0.00	0.00	0.00	0.000
4.47	2.68	29.49	131.32	0	0.0	0	0.95	0.000	0.00	0.00	0.00	0.000
4.54	2.62	32.64	127.75	0	0.0	0	0.94	0.000	0.00	0.00	0.00	0.000
4.60	2.51	39.38	118.75	31	0.0	527	0.94	0.386	0.23	21.37	0.27	0.004
4.68	2.42	44.98	112.83	28	0.0	543	0.94	0.345	0.23	21.37	0.27	0.006
4.73	2.38	48.14	110.12	27	0.0	551	0.94	0.328	0.23	21.37	0.27	0.003
4.80	2.36	50.28	109.63	26	0.0	560	0.94	0.314	0.22	21.37	0.26	0.004
4.87	2.36	51.13	111.72	27	0.0	570	0.94	0.297	0.21	21.37	0.24	0.004
4.92	2.37	51.27	112.79	27	0.0	574	0.94	0.296	0.20	21.37	0.24	0.003
4.99	2.37	50.97	112.46	27	0.0	572	0.94	0.312	0.22	21.37	0.25	0.004
5.08	2.37	49.68	110.65	27	0.0	560	0.94	0.362	0.25	21.37	0.30	0.007
5.13	2.36	49.68	108.76	26	0.0	555	0.94	0.392	0.28	21.37	0.33	0.004
5.18	2.35	49.67	106.02	26	0.0	546	0.93	0.436	0.33	21.37	0.38	0.005
5.25	2.32	51.09	102.18	24	0.0	540	0.93	0.480	0.38	21.37	0.45	0.007
5.32	2.29	52.39	99.32	23	0.0	535	0.93	0.522	0.43	21.37	0.51	0.008
5.39	2.24	55.39	94.74	22	0.0	526	0.93	0.589	0.53	21.37	0.63	0.010
5.48	2.16	59.97	91.44	20	0.0	518	0.93	0.674	0.66	21.37	0.78	0.017
5.53	2.12	63.42	91.79	20	0.0	519	0.93	0.679	0.68	21.37	0.80	0.009
5.59	2.07	68.30	94.40	20	0.0	528	0.93	0.636	0.63	21.37	0.74	0.012
5.67	2.04	72.31	97.08	21	0.0	535	0.93	0.612	0.59	21.37	0.70	0.013
5.72	2.00	76.61	100.35	21	0.0	542	0.93	0.582	0.55	21.37	0.65	0.009
5.78	1.93	83.50	104.70	21	0.0	536	0.92	0.637	0.59	21.37	0.70	0.009
5.87	1.79	90.96	104.30	20	0.0	494	0.92	1.072	1.06	21.37	1.25	0.028
5.91	1.79	93.55	106.30	20	0.0	503	0.92	0.979	0.95	21.37	1.12	0.010
5.98	1.76	99.56	110.23	21	0.0	521	0.92	0.817	0.77	21.37	0.90	0.014
6.07	1.76	105.02	114.80	22	0.0	543	0.92	0.667	0.60	21.37	0.70	0.016
6.12	1.74	109.18	116.90	22	0.0	555	0.92	0.602	0.53	21.37	0.62	0.007
6.17	1.77	106.15	118.45	23	0.0	560	0.92	0.588	0.51	21.37	0.59	0.008
6.23	1.73	116.20	121.25	23	0.0	580	0.92	0.496	0.42	21.37	0.50	0.007
6.32	1.71	123.50	123.53	23	0.0	600	0.92	0.426	0.36	21.37	0.42	0.008

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
6.37	1.70	128.82	128.82	24	0.0	618	0.91	0.376	0.30	21.37	0.35	0.005
6.44	1.69	133.69	133.69	25	0.0	634	0.91	0.338	0.26	21.37	0.31	0.005
6.51	1.69	135.99	135.99	25	0.0	645	0.91	0.319	0.24	21.37	0.28	0.005
6.56	1.69	136.27	136.27	25	0.0	652	0.91	0.309	0.23	21.37	0.27	0.003
6.65	1.70	135.69	135.69	25	0.0	650	0.91	0.321	0.24	21.37	0.28	0.006
6.71	1.70	133.67	133.67	25	0.0	646	0.91	0.338	0.26	21.37	0.30	0.004
6.76	1.71	132.09	132.09	25	0.0	642	0.91	0.356	0.28	21.37	0.32	0.004
6.84	1.72	127.76	131.76	25	0.0	633	0.91	0.392	0.30	21.37	0.36	0.006
6.91	1.74	123.18	130.94	25	0.0	623	0.91	0.434	0.34	21.37	0.39	0.007
6.96	1.75	119.28	129.53	25	0.0	613	0.90	0.477	0.37	21.37	0.44	0.005
7.03	1.77	114.54	127.44	24	0.0	602	0.90	0.539	0.43	21.37	0.50	0.009
7.10	1.78	111.95	126.14	24	0.0	596	0.90	0.581	0.46	21.37	0.54	0.008
7.17	1.80	107.92	123.92	24	0.0	588	0.90	0.643	0.52	21.37	0.61	0.010
7.25	1.81	104.62	121.99	24	0.0	581	0.90	0.701	0.57	21.37	0.67	0.014
7.29	1.82	103.32	121.15	24	0.0	579	0.90	0.728	0.60	21.37	0.70	0.007
7.36	1.85	98.86	118.43	23	0.0	574	0.90	0.780	0.65	21.37	0.76	0.012
7.45	1.88	94.98	115.95	23	0.0	573	0.90	0.814	0.69	21.37	0.81	0.018
7.50	1.90	91.10	112.93	23	0.0	569	0.90	0.859	0.74	21.37	0.87	0.009
7.55	1.93	87.93	110.25	22	0.0	564	0.89	0.915	0.80	21.37	0.94	0.012
7.63	1.94	85.05	107.69	22	0.0	559	0.89	0.991	0.89	21.37	1.04	0.018
7.69	1.94	84.90	107.41	22	0.0	557	0.89	1.032	0.93	21.37	1.09	0.016
7.75	1.94	85.47	107.97	22	0.0	558	0.89	1.031	0.92	21.37	1.08	0.015
7.85	1.94	86.48	109.16	22	0.0	564	0.89	1.001	0.88	21.37	1.04	0.025
7.88	1.94	86.04	108.96	22	0.0	566	0.89	0.996	0.88	21.37	1.03	0.009
7.94	1.97	83.59	107.40	22	0.0	568	0.89	0.985	0.87	21.37	1.02	0.014
8.04	2.06	75.82	103.20	22	0.0	574	0.89	0.959	0.86	21.37	1.01	0.024
8.09	2.13	68.93	100.68	22	0.0	570	0.88	1.006	0.90	21.37	1.05	0.013
8.14	2.13	65.48	95.95	21	0.0	544	0.88	1.361	1.28	21.37	1.50	0.016
8.23	2.13	56.72	83.39	18	0.0	473	0.88	3.544	3.95	21.37	4.63	0.102
8.27	2.17	54.27	83.73	19	0.0	474	0.88	3.505	3.81	21.37	4.47	0.041
8.34	2.26	48.22	86.32	20	0.0	474	0.88	3.611	3.62	21.37	4.24	0.077
8.41	2.31	45.79	89.58	21	0.0	477	0.88	3.491	3.26	21.37	3.83	0.059
8.47	2.32	45.50	91.43	22	0.0	482	0.88	3.303	2.99	21.37	3.51	0.056
8.53	2.33	45.20	92.34	22	0.0	484	0.88	3.270	2.91	21.37	3.42	0.047
8.60	2.32	46.34	92.68	22	0.0	490	0.88	3.074	2.74	21.37	3.22	0.054
8.68	2.34	45.62	94.34	23	0.0	492	0.87	3.027	2.62	21.37	3.07	0.055
8.74	2.32	46.32	93.02	22	0.0	491	0.87	3.146	2.79	21.37	3.27	0.053
8.80	2.32	45.47	91.44	22	0.0	482	0.87	3.620	3.28	21.37	3.84	0.055
8.88	2.30	46.31	89.85	21	0.0	480	0.87	3.806	3.55	21.37	4.17	0.074
8.95	2.30	47.17	90.91	21	0.0	487	0.87	3.508	3.24	21.37	3.79	0.064
9.01	2.30	48.45	92.59	22	0.0	497	0.87	3.076	2.78	21.37	3.26	0.051
9.07	2.31	48.30	94.44	22	0.0	503	0.87	2.883	2.53	21.37	2.97	0.045
9.14	2.33	47.73	97.22	23	0.0	510	0.87	2.666	2.24	21.37	2.62	0.040
9.20	2.35	47.65	102.12	25	0.0	525	0.86	2.223	1.73	21.37	2.03	0.027
9.26	2.37	47.64	106.59	26	0.0	539	0.86	1.915	1.40	21.37	1.65	0.027
9.34	2.39	47.57	109.35	27	0.0	546	0.86	1.777	1.25	21.37	1.47	0.025
9.39	2.34	51.15	107.24	26	0.0	556	0.86	1.607	1.19	21.37	1.39	0.019
9.48	2.25	58.34	102.83	24	0.0	574	0.86	1.358	1.11	21.37	1.30	0.027

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
9.52	2.19	63.21	101.10	23	0.0	588	0.86	1.182	1.01	21.37	1.19	0.013
9.58	2.12	69.24	100.91	22	0.0	603	0.86	1.028	0.91	21.37	1.07	0.016
9.67	2.05	77.69	105.39	22	0.0	633	0.86	0.794	0.69	21.37	0.81	0.017
9.71	2.03	80.93	107.87	23	0.0	647	0.85	0.714	0.61	21.37	0.72	0.007
9.78	2.06	83.27	114.20	24	0.0	693	0.85	0.504	0.40	21.37	0.47	0.008
9.88	2.16	81.49	125.00	28	0.0	756	0.85	0.338	0.23	21.37	0.27	0.006
9.93	2.21	76.19	125.63	28	0.0	746	0.85	0.364	0.24	21.37	0.28	0.004
9.98	2.25	72.21	126.57	29	0.0	736	0.85	0.390	0.25	21.37	0.29	0.004
10.07	2.33	64.78	131.76	31	0.0	720	0.85	0.440	0.26	21.37	0.30	0.007
10.11	2.34	63.63	132.15	32	0.0	717	0.85	0.453	0.26	21.37	0.31	0.003
10.18	2.29	67.86	128.03	30	0.0	732	0.85	0.415	0.26	21.37	0.30	0.005
10.24	2.18	79.06	124.14	28	0.0	767	0.84	0.337	0.23	21.37	0.27	0.004
10.32	1.97	106.97	137.40	28	0.0	839	0.84	0.231	0.15	21.37	0.18	0.003
10.37	1.87	122.35	148.96	30	0.0	870	0.84	0.201	0.13	21.37	0.15	0.002
10.47	1.77	135.52	151.69	29	0.0	875	0.84	0.200	0.13	21.37	0.15	0.003
10.52	1.74	137.48	147.60	28	0.0	863	0.84	0.212	0.14	21.37	0.17	0.002
10.57	1.73	136.05	143.30	27	0.0	846	0.84	0.231	0.16	21.37	0.19	0.002
10.66	1.75	129.11	140.19	27	0.0	823	0.84	0.264	0.19	21.37	0.22	0.005
10.72	1.79	121.82	138.98	27	0.0	811	0.84	0.283	0.20	21.37	0.23	0.003
10.77	1.86	109.77	132.64	26	0.0	789	0.83	0.322	0.23	21.37	0.27	0.003
10.83	1.90	100.30	123.83	25	0.0	752	0.83	0.405	0.31	21.37	0.37	0.005
10.90	1.82	88.85	104.71	20	0.0	620	0.83	1.128	1.10	21.37	1.29	0.022
10.97	1.92	79.40	99.48	20	0.0	617	0.83	1.165	1.16	21.37	1.36	0.022
11.04	2.01	73.15	96.23	20	0.0	625	0.83	1.093	1.09	21.37	1.27	0.023
11.10	2.07	69.32	95.52	20	0.0	634	0.83	1.022	1.00	21.37	1.17	0.016
11.17	2.15	66.22	99.34	22	0.0	661	0.83	0.818	0.73	21.37	0.86	0.014
11.25	2.29	58.07	108.99	26	0.0	676	0.83	0.735	0.55	21.37	0.64	0.013
11.30	2.34	55.23	115.67	28	0.0	684	0.82	0.695	0.47	21.37	0.55	0.006
11.36	2.41	51.40	124.27	31	0.0	686	0.82	0.688	0.41	21.37	0.48	0.006
11.46	2.50	46.36	137.06	35	0.0	685	0.82	0.701	0.35	21.37	0.42	0.010
11.51	2.54	43.13	142.56	38	0.0	674	0.82	0.772	0.36	21.37	0.43	0.005
11.55	2.57	40.74	143.18	38	0.0	657	0.82	0.889	0.41	21.37	0.48	0.005
11.62	2.56	40.47	139.92	37	0.0	651	0.82	0.944	0.45	21.37	0.53	0.009
11.69	2.56	40.23	138.54	37	0.0	650	0.82	0.965	0.46	21.37	0.54	0.009
11.75	2.56	40.05	138.60	37	0.0	652	0.82	0.960	0.46	21.37	0.54	0.008
11.85	2.55	40.74	134.93	36	0.0	654	0.81	0.952	0.48	21.37	0.56	0.013
11.88	2.55	40.41	134.52	35	0.0	652	0.81	0.974	0.49	21.37	0.57	0.004
11.95	2.57	38.86	137.18	37	0.0	648	0.81	1.017	0.49	21.37	0.58	0.010
12.04	2.57	39.79	138.15	37	0.0	662	0.81	0.908	0.44	21.37	0.51	0.011
12.07	2.59	38.25	141.36	38	0.0	658	0.81	0.949	0.44	21.37	0.51	0.004
12.14	2.57	39.26	137.80	37	0.0	662	0.81	0.922	0.44	21.37	0.52	0.009
12.23	2.56	38.97	134.63	36	0.0	656	0.81	0.978	0.49	21.37	0.57	0.011
12.28	2.56	38.44	132.01	35	0.0	648	0.80	1.057	0.54	21.37	0.63	0.008
12.34	2.53	39.67	127.09	33	0.0	650	0.80	1.049	0.57	21.37	0.67	0.009
12.42	2.41	46.83	113.90	28	0.0	675	0.80	0.857	0.57	21.37	0.67	0.013
12.48	2.27	57.25	104.88	24	0.0	712	0.80	0.650	0.51	21.37	0.60	0.010
12.54	2.22	62.36	103.53	24	0.0	731	0.80	0.572	0.47	21.37	0.55	0.007
12.62	2.13	71.36	104.64	23	0.0	762	0.80	0.471	0.40	21.37	0.47	0.010

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
12.69	2.03	74.25	99.27	21	0.0	715	0.80	0.653	0.62	21.37	0.72	0.011
12.73	2.00	77.45	100.97	21	0.0	717	0.80	0.645	0.61	21.37	0.71	0.008
12.81	2.03	77.72	103.68	22	0.0	751	0.79	0.518	0.47	21.37	0.55	0.011
12.89	2.08	73.94	102.77	22	0.0	758	0.79	0.498	0.44	21.37	0.52	0.009
12.93	2.14	71.67	106.88	24	0.0	791	0.79	0.408	0.34	21.37	0.39	0.004
13.01	2.29	61.96	116.25	27	0.0	808	0.79	0.375	0.26	21.37	0.30	0.006
13.06	2.34	58.75	122.24	29	0.0	814	0.79	0.363	0.23	21.37	0.27	0.003
13.13	2.41	53.81	131.58	33	0.0	815	0.79	0.364	0.20	21.37	0.24	0.004
13.19	2.45	51.14	135.77	34	0.0	810	0.79	0.375	0.20	21.37	0.23	0.004
13.26	2.47	49.32	135.77	34	0.0	799	0.79	0.402	0.21	21.37	0.25	0.004
13.32	2.46	49.29	132.70	33	0.0	793	0.78	0.419	0.23	21.37	0.26	0.004
13.41	2.34	57.30	120.27	29	0.0	815	0.78	0.372	0.24	21.37	0.28	0.006
13.47	2.23	66.97	113.98	26	0.0	844	0.78	0.322	0.23	21.37	0.27	0.004
13.56	2.06	82.79	113.53	24	0.0	865	0.78	0.292	0.23	21.37	0.27	0.006
13.59	2.03	86.75	115.37	24	0.0	868	0.78	0.288	0.23	21.37	0.27	0.002
13.66	1.97	90.93	116.80	24	0.0	858	0.78	0.305	0.24	21.37	0.29	0.005
13.75	1.93	92.77	116.48	24	0.0	837	0.78	0.340	0.28	21.37	0.33	0.007
13.81	1.92	92.96	116.41	24	0.0	836	0.77	0.344	0.28	21.37	0.33	0.005
13.86	1.92	93.81	117.29	24	0.0	843	0.77	0.333	0.27	21.37	0.32	0.004
13.91	1.91	95.57	119.15	24	0.0	856	0.77	0.314	0.25	21.37	0.30	0.003
13.99	1.92	98.48	122.95	25	0.0	887	0.77	0.271	0.21	21.37	0.25	0.005
14.04	1.91	103.17	128.10	26	0.0	921	0.77	0.235	0.17	21.37	0.20	0.003
14.12	1.88	110.83	135.59	27	0.0	962	0.77	0.200	0.14	21.37	0.16	0.003
14.19	1.87	116.44	141.60	28	0.0	1002	0.77	0.174	0.12	21.37	0.14	0.002
14.25	1.86	121.60	146.65	29	0.0	1034	0.76	0.157	0.10	21.37	0.12	0.002
14.34	1.86	124.71	150.61	30	0.0	1067	0.76	0.142	0.09	21.37	0.10	0.002
14.40	1.87	124.95	151.58	30	0.0	1081	0.76	0.137	0.08	21.37	0.10	0.001
14.45	1.87	124.48	151.72	30	0.0	1089	0.76	0.134	0.08	21.37	0.10	0.001
14.54	1.90	120.78	149.15	30	0.0	1090	0.76	0.134	0.08	21.37	0.10	0.002
14.60	1.91	118.81	147.45	30	0.0	1087	0.76	0.136	0.08	21.37	0.10	0.001
14.65	1.91	118.07	146.70	29	0.0	1085	0.76	0.137	0.09	21.37	0.10	0.001
14.71	1.90	118.96	147.26	30	0.0	1087	0.76	0.137	0.09	21.37	0.10	0.001
14.77	1.90	120.80	149.13	30	0.0	1101	0.75	0.132	0.08	21.37	0.10	0.001
14.83	1.89	123.80	152.41	30	0.0	1125	0.75	0.124	0.07	21.37	0.09	0.001
14.90	1.87	129.56	157.98	31	0.0	1157	0.75	0.114	0.07	21.37	0.08	0.001
14.98	1.84	135.62	161.66	32	0.0	1166	0.75	0.112	0.06	21.37	0.08	0.002
15.04	1.82	139.78	163.62	32	0.0	1173	0.75	0.110	0.06	21.37	0.07	0.001
15.10	1.80	143.65	165.37	32	0.0	1182	0.75	0.108	0.06	21.37	0.07	0.001
15.17	1.79	147.50	168.60	32	0.0	1208	0.75	0.102	0.06	21.37	0.07	0.001
15.24	1.62	149.88	149.88	27	0.0	1004	0.74	0.184	0.13	21.37	0.15	0.002
15.34	1.61	156.64	156.64	28	0.0	1034	0.74	0.167	0.11	21.37	0.13	0.003
15.37	1.61	158.16	158.16	29	0.0	1051	0.74	0.159	0.10	21.37	0.12	0.001
15.44	1.61	162.54	162.54	29	0.0	1085	0.74	0.143	0.09	21.37	0.11	0.002
15.53	1.66	158.43	158.43	29	0.0	1122	0.74	0.130	0.08	21.37	0.10	0.002
15.56	1.64	165.21	165.21	30	0.0	1145	0.74	0.122	0.07	21.37	0.09	0.001
15.63	1.62	175.29	175.29	32	0.0	1186	0.74	0.110	0.06	21.37	0.07	0.001
15.69	1.62	178.88	178.88	32	0.0	1215	0.74	0.103	0.06	21.37	0.07	0.001
15.77	1.64	183.61	183.61	34	0.0	1277	0.73	0.090	0.05	21.37	0.06	0.001

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
15.83	1.65	185.75	185.75	34	0.0	1314	0.73	0.084	0.04	21.37	0.05	0.001
15.88	1.66	188.21	188.21	35	0.0	1347	0.73	0.079	0.04	21.37	0.05	0.001
15.97	1.68	192.06	192.06	36	0.0	1422	0.73	0.070	0.03	21.37	0.04	0.001
16.03	1.70	194.31	194.31	36	0.0	1469	0.73	0.065	0.03	21.37	0.04	0.000
16.08	1.71	196.03	196.72	37	0.0	1503	0.73	0.062	0.03	21.37	0.03	0.000
16.15	1.73	194.81	203.82	38	0.0	1536	0.73	0.059	0.03	21.37	0.03	0.001
16.23	1.75	191.66	206.57	39	0.0	1548	0.72	0.058	0.03	21.37	0.03	0.001
16.28	1.76	187.97	206.63	39	0.0	1546	0.72	0.059	0.03	21.37	0.03	0.000
16.38	1.79	178.20	203.05	39	0.0	1525	0.72	0.061	0.03	21.37	0.03	0.001
16.42	1.80	174.20	200.89	39	0.0	1515	0.72	0.062	0.03	21.37	0.03	0.000
16.47	1.81	170.19	198.20	38	0.0	1502	0.72	0.063	0.03	21.37	0.03	0.000
16.54	1.81	168.29	195.52	38	0.0	1484	0.72	0.065	0.03	21.37	0.04	0.001
16.62	1.78	170.65	193.69	37	0.0	1468	0.72	0.067	0.03	21.37	0.04	0.001
16.68	1.77	174.25	193.13	37	0.0	1466	0.71	0.067	0.03	21.37	0.04	0.001
16.75	1.74	179.95	191.81	36	0.0	1470	0.71	0.067	0.03	21.37	0.04	0.001
16.82	1.72	184.24	189.88	36	0.0	1475	0.71	0.067	0.03	21.37	0.04	0.001
16.87	1.71	186.71	189.59	36	0.0	1484	0.71	0.066	0.03	21.37	0.04	0.000
16.97	1.70	189.84	189.84	35	0.0	1489	0.71	0.065	0.03	21.37	0.04	0.001
17.01	1.69	189.96	189.96	35	0.0	1481	0.71	0.066	0.03	21.37	0.04	0.000
17.07	1.68	189.18	189.18	35	0.0	1459	0.71	0.069	0.04	21.37	0.04	0.001
17.15	1.67	186.77	186.77	35	0.0	1426	0.71	0.073	0.04	21.37	0.04	0.001
17.19	1.67	185.08	185.08	34	0.0	1418	0.70	0.074	0.04	21.37	0.05	0.001
17.26	1.70	180.00	180.00	34	0.0	1423	0.70	0.074	0.04	21.37	0.05	0.001
17.34	1.72	172.18	178.48	34	0.0	1409	0.70	0.075	0.04	21.37	0.05	0.001
17.40	1.74	168.59	179.29	34	0.0	1407	0.70	0.076	0.04	21.37	0.05	0.001
17.46	1.76	164.66	181.59	35	0.0	1419	0.70	0.075	0.04	21.37	0.05	0.001
17.54	1.79	162.01	184.32	35	0.0	1446	0.70	0.072	0.04	21.37	0.04	0.001
17.60	1.80	161.34	185.63	36	0.0	1462	0.70	0.070	0.03	21.37	0.04	0.001
17.65	1.81	160.78	186.56	36	0.0	1476	0.69	0.068	0.03	21.37	0.04	0.001
17.75	1.81	156.84	182.11	35	0.0	1447	0.69	0.072	0.04	21.37	0.04	0.001
17.81	1.83	151.23	178.85	35	0.0	1436	0.69	0.073	0.04	21.37	0.04	0.001
17.85	1.86	146.32	177.31	35	0.0	1455	0.69	0.071	0.04	21.37	0.04	0.000
17.92	1.86	145.62	176.17	35	0.0	1446	0.69	0.072	0.04	21.37	0.04	0.001
18.00	1.87	145.15	177.02	35	0.0	1471	0.69	0.070	0.04	21.37	0.04	0.001
18.05	1.88	144.56	176.66	35	0.0	1474	0.69	0.070	0.04	21.37	0.04	0.000
18.15	1.87	147.93	179.41	36	0.0	1490	0.68	0.068	0.03	21.37	0.04	0.001
18.18	1.86	150.42	181.42	36	0.0	1500	0.68	0.067	0.03	21.37	0.04	0.000
18.25	1.86	152.36	184.02	36	0.0	1527	0.68	0.065	0.03	21.37	0.04	0.001
18.31	1.86	156.13	188.26	37	0.0	1564	0.68	0.062	0.03	21.37	0.03	0.001
18.39	1.85	159.89	192.21	38	0.0	1596	0.68	0.059	0.03	21.37	0.03	0.001
18.45	1.84	163.49	194.98	38	0.0	1612	0.68	0.058	0.03	21.37	0.03	0.000
18.54	1.82	168.27	198.23	39	0.0	1631	0.68	0.057	0.03	21.37	0.03	0.001
18.58	1.82	170.64	200.09	39	0.0	1645	0.68	0.056	0.03	21.37	0.03	0.000
18.64	1.81	173.59	202.81	39	0.0	1668	0.67	0.054	0.02	21.37	0.03	0.000
18.74	1.81	176.91	206.39	40	0.0	1702	0.67	0.052	0.02	21.37	0.03	0.001
18.79	1.82	178.14	208.47	41	0.0	1725	0.67	0.051	0.02	21.37	0.03	0.000
18.84	1.82	180.57	211.24	41	0.0	1750	0.67	0.050	0.02	21.37	0.02	0.000
18.91	1.81	183.36	213.32	41	0.0	1767	0.67	0.049	0.02	21.37	0.02	0.000

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
18.97	1.80	184.89	213.59	41	0.0	1769	0.67	0.049	0.02	21.37	0.02	0.000
19.04	1.79	184.71	211.77	41	0.0	1754	0.67	0.050	0.02	21.37	0.02	0.000
19.12	1.81	180.76	209.85	41	0.0	1750	0.66	0.050	0.02	21.37	0.03	0.001
19.18	1.83	174.52	206.35	40	0.0	1741	0.66	0.051	0.02	21.37	0.03	0.000
19.24	1.84	167.97	200.97	39	0.0	1714	0.66	0.052	0.02	21.37	0.03	0.000
19.33	1.88	157.90	192.91	38	0.0	1686	0.66	0.054	0.02	21.37	0.03	0.001
19.36	1.90	152.36	188.22	38	0.0	1671	0.66	0.055	0.03	21.37	0.03	0.000
19.43	1.91	148.87	185.16	37	0.0	1664	0.66	0.056	0.03	21.37	0.03	0.000
19.53	1.89	154.45	190.28	38	0.0	1694	0.66	0.054	0.02	21.37	0.03	0.001
19.57	1.90	154.01	190.23	38	0.0	1702	0.66	0.054	0.02	21.37	0.03	0.000
19.63	1.93	148.44	186.16	38	0.0	1706	0.65	0.053	0.02	21.37	0.03	0.000
19.72	1.99	136.54	177.43	37	0.0	1711	0.65	0.053	0.03	21.37	0.03	0.001
19.76	2.01	132.22	174.15	36	0.0	1707	0.65	0.054	0.03	21.37	0.03	0.000
19.83	2.04	124.86	168.21	36	0.0	1682	0.65	0.055	0.03	21.37	0.03	0.000
19.92	2.04	124.49	167.08	35	0.0	1673	0.65	0.056	0.03	21.37	0.03	0.001
19.97	2.04	124.23	166.86	35	0.0	1675	0.65	0.056	0.03	21.37	0.03	0.000
20.02	2.04	124.01	166.87	35	0.0	1680	0.65	0.055	0.03	21.37	0.03	0.000
20.09	2.05	124.27	168.07	36	0.0	1702	0.64	0.054	0.03	21.37	0.03	0.001
20.17	2.04	126.19	169.82	36	0.0	1720	0.64	0.053	0.03	21.37	0.03	0.001
20.22	2.02	131.33	173.79	36	0.0	1740	0.64	0.052	0.03	21.37	0.03	0.000
20.28	1.97	142.02	182.40	38	0.0	1771	0.64	0.050	0.02	21.37	0.03	0.000
20.37	1.91	156.32	194.59	39	0.0	1811	0.64	0.048	0.02	21.37	0.03	0.001
20.42	1.86	169.37	205.21	41	0.0	1845	0.64	0.047	0.02	21.37	0.02	0.000
20.49	1.75	181.93	198.68	38	0.0	1721	0.64	0.053	0.02	21.37	0.03	0.001
20.56	1.66	193.28	193.28	36	0.0	1613	0.64	0.061	0.03	21.37	0.04	0.001
20.61	1.64	198.56	198.56	36	0.0	1618	0.63	0.061	0.03	21.37	0.03	0.000
20.67	1.62	202.89	202.89	37	0.0	1626	0.63	0.060	0.03	21.37	0.03	0.001
20.75	1.62	204.15	204.15	37	0.0	1639	0.63	0.059	0.03	21.37	0.03	0.001
20.80	1.63	205.39	205.39	37	0.0	1657	0.63	0.058	0.03	21.37	0.03	0.000
20.88	1.67	198.01	198.01	37	0.0	1690	0.63	0.056	0.03	21.37	0.03	0.001
20.95	1.65	206.99	206.99	38	0.0	1730	0.63	0.053	0.02	21.37	0.03	0.000
21.00	1.65	213.34	213.34	39	0.0	1789	0.63	0.050	0.02	21.37	0.03	0.000
21.09	1.63	228.35	228.35	42	0.0	1858	0.62	0.047	0.02	21.37	0.02	0.000
21.16	1.62	237.97	237.97	43	0.0	1925	0.62	0.044	0.02	21.37	0.02	0.000
21.21	1.61	250.25	250.25	45	0.0	1991	0.62	0.042	0.02	21.37	0.02	0.000
21.31	1.62	257.23	257.23	47	0.0	2076	0.62	0.039	0.01	21.37	0.02	0.000
21.33	1.61	263.63	263.63	48	0.0	2097	0.62	0.038	0.01	21.37	0.02	0.000
21.40	1.60	270.90	270.90	49	0.0	2151	0.62	0.037	0.01	21.37	0.01	0.000
21.48	1.60	279.11	279.11	50	0.0	2222	0.62	0.035	0.01	21.37	0.01	0.000
21.54	1.60	282.44	282.44	51	0.0	2257	0.62	0.034	0.01	21.37	0.01	0.000
21.61	1.61	284.80	284.80	52	0.0	2313	0.61	0.033	0.01	21.37	0.01	0.000
21.66	1.62	284.20	284.20	52	0.0	2340	0.61	0.032	0.01	21.37	0.01	0.000
21.75	1.64	282.41	282.41	52	0.0	2367	0.61	0.032	0.01	21.37	0.01	0.000
21.80	1.64	282.01	282.01	52	0.0	2384	0.61	0.032	0.01	21.37	0.01	0.000
21.89	1.64	284.38	284.38	52	0.0	2418	0.61	0.031	0.01	21.37	0.01	0.000
21.94	1.64	288.17	288.17	53	0.0	2442	0.61	0.031	0.01	21.37	0.01	0.000
22.00	1.64	289.08	289.08	53	0.0	2467	0.61	0.030	0.01	21.37	0.01	0.000
22.05	1.64	290.39	290.39	53	0.0	2482	0.61	0.030	0.01	21.37	0.01	0.000

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
22.13	1.64	293.52	293.52	54	0.0	2503	0.60	0.030	0.01	21.37	0.01	0.000
22.20	1.64	295.26	295.26	54	0.0	2530	0.60	0.029	0.01	21.37	0.01	0.000
22.25	1.65	294.97	294.97	54	0.0	2571	0.60	0.028	0.01	21.37	0.01	0.000
22.34	1.67	294.58	294.58	54	0.0	2620	0.60	0.028	0.01	21.37	0.01	0.000
22.39	1.67	293.93	293.93	54	0.0	2634	0.60	0.028	0.01	21.37	0.01	0.000
22.45	1.68	291.58	291.58	54	0.0	2640	0.60	0.028	0.01	21.37	0.01	0.000
22.53	1.65	288.56	288.56	53	0.0	2526	0.60	0.029	0.01	21.37	0.01	0.000
22.59	1.63	285.68	285.68	52	0.0	2444	0.60	0.031	0.01	21.37	0.01	0.000
22.64	1.64	283.05	283.05	52	0.0	2443	0.59	0.031	0.01	21.37	0.01	0.000
22.72	1.64	280.55	280.55	51	0.0	2433	0.59	0.031	0.01	21.37	0.01	0.000
22.78	1.64	278.90	278.90	51	0.0	2408	0.59	0.032	0.01	21.37	0.01	0.000
22.84	1.63	278.70	278.70	51	0.0	2390	0.59	0.032	0.01	21.37	0.01	0.000
22.92	1.68	253.93	253.93	47	0.0	2327	0.59	0.033	0.01	21.37	0.01	0.000
22.98	1.65	263.56	263.56	48	0.0	2330	0.59	0.033	0.01	21.37	0.01	0.000
23.03	1.64	264.89	264.89	48	0.0	2327	0.59	0.033	0.01	21.37	0.01	0.000
23.11	1.65	264.02	264.02	48	0.0	2334	0.59	0.033	0.01	21.37	0.01	0.000
23.17	1.65	261.11	261.11	48	0.0	2327	0.58	0.033	0.01	21.37	0.01	0.000
23.23	1.66	258.31	258.31	48	0.0	2339	0.58	0.033	0.01	21.37	0.01	0.000
23.31	1.67	254.02	254.02	47	0.0	2336	0.58	0.033	0.01	21.37	0.01	0.000
23.38	1.68	250.38	250.38	46	0.0	2327	0.58	0.033	0.01	21.37	0.01	0.000
23.43	1.68	245.28	245.28	46	0.0	2304	0.58	0.034	0.01	21.37	0.01	0.000
23.51	1.69	239.19	239.19	44	0.0	2271	0.58	0.035	0.01	21.37	0.02	0.000
23.56	1.71	229.49	231.90	43	0.0	2244	0.58	0.035	0.01	21.37	0.02	0.000
23.63	1.75	217.66	236.18	45	0.0	2250	0.58	0.035	0.01	21.37	0.02	0.000
23.73	1.82	194.73	229.22	45	0.0	2232	0.57	0.036	0.01	21.37	0.02	0.000
23.76	1.86	183.36	222.07	44	0.0	2223	0.57	0.036	0.01	21.37	0.02	0.000
23.83	1.93	165.87	208.69	42	0.0	2217	0.57	0.036	0.01	21.37	0.02	0.000
23.91	1.98	157.32	203.28	42	0.0	2254	0.57	0.035	0.01	21.37	0.02	0.000
23.96	2.00	154.37	202.05	42	0.0	2282	0.57	0.035	0.01	21.37	0.02	0.000
24.04	2.06	139.14	189.41	40	0.0	2221	0.57	0.036	0.02	21.37	0.02	0.000
24.12	2.14	120.36	177.81	39	0.0	2152	0.57	0.038	0.02	21.37	0.02	0.000
24.17	2.05	139.27	188.65	40	0.0	2214	0.57	0.036	0.02	21.37	0.02	0.000
24.22	2.15	116.44	175.58	39	0.0	2137	0.56	0.039	0.02	21.37	0.02	0.000
24.29	2.03	139.74	186.07	39	0.0	2162	0.56	0.038	0.02	21.37	0.02	0.000
24.35	1.94	157.76	199.66	41	0.0	2176	0.56	0.037	0.02	21.37	0.02	0.000
24.41	1.89	171.07	210.86	42	0.0	2206	0.56	0.037	0.02	21.37	0.02	0.000
24.49	1.83	181.20	213.91	42	0.0	2135	0.56	0.039	0.02	21.37	0.02	0.000
24.55	1.83	179.16	212.40	42	0.0	2131	0.56	0.039	0.02	21.37	0.02	0.000
24.61	1.83	171.98	204.00	40	0.0	2051	0.56	0.041	0.02	21.37	0.02	0.000
24.69	1.87	155.54	189.33	38	0.0	1961	0.56	0.044	0.02	21.37	0.02	0.000
24.76	1.98	128.13	165.48	34	0.0	1884	0.55	0.048	0.03	21.37	0.03	0.001
24.80	2.07	109.24	150.50	32	0.0	1822	0.55	0.050	0.03	21.37	0.03	0.000
24.90	2.17	91.07	139.92	31	0.0	1745	0.55	0.055	0.03	21.37	0.04	0.001
24.95	2.32	70.02	139.76	33	0.0	1662	0.55	0.060	0.03	21.37	0.04	0.000
25.01	2.47	53.95	149.20	38	0.0	1582	0.55	0.066	0.03	21.37	0.04	0.000
25.07	2.62	40.77	159.77	0	0.0	0	0.55	0.000	0.00	0.00	0.00	0.000
25.14	2.71	33.92	162.94	0	0.0	0	0.55	0.000	0.00	0.00	0.00	0.000
25.20	2.81	27.38	165.23	0	0.0	0	0.55	0.000	0.00	0.00	0.00	0.000

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
25.27	2.89	23.36	163.93	0	0.0	0	0.55	0.000	0.00	0.00	0.00	0.000
25.34	2.90	21.64	156.01	0	0.0	0	0.54	0.000	0.00	0.00	0.00	0.000
25.40	2.91	20.42	149.82	0	0.0	0	0.54	0.000	0.00	0.00	0.00	0.000
25.46	2.96	17.86	145.56	0	0.0	0	0.54	0.000	0.00	0.00	0.00	0.000
25.54	2.96	17.04	138.99	0	0.0	0	0.54	0.000	0.00	0.00	0.00	0.000
25.60	2.96	17.06	138.82	0	0.0	0	0.54	0.000	0.00	0.00	0.00	0.000
25.68	2.94	18.22	142.09	0	0.0	0	0.54	0.000	0.00	0.00	0.00	0.000
25.73	2.90	19.68	142.20	0	0.0	0	0.54	0.000	0.00	0.00	0.00	0.000
25.79	2.85	21.70	141.97	0	0.0	0	0.54	0.000	0.00	0.00	0.00	0.000
25.87	2.68	29.61	133.78	0	0.0	0	0.53	0.000	0.00	0.00	0.00	0.000
25.94	2.54	38.77	125.96	33	0.0	1297	0.53	0.101	0.06	21.37	0.06	0.001
25.99	2.25	65.16	114.01	26	0.0	1452	0.53	0.078	0.06	21.37	0.07	0.001
26.05	2.15	78.65	118.83	26	0.0	1534	0.53	0.070	0.05	21.37	0.06	0.001
26.13	2.04	98.95	132.93	28	0.0	1645	0.53	0.061	0.04	21.37	0.05	0.001
26.18	2.00	108.31	141.24	29	0.0	1697	0.53	0.057	0.04	21.37	0.04	0.001
26.28	1.95	115.71	147.35	30	0.0	1715	0.53	0.056	0.03	21.37	0.04	0.001
26.32	1.94	118.07	149.26	30	0.0	1719	0.53	0.056	0.03	21.37	0.04	0.000
26.38	1.93	120.86	151.64	31	0.0	1726	0.53	0.056	0.03	21.37	0.04	0.001
26.48	1.85	128.96	155.10	31	0.0	1662	0.52	0.060	0.04	21.37	0.04	0.001
26.53	1.84	134.09	160.13	31	0.0	1705	0.52	0.057	0.03	21.37	0.04	0.000
26.59	1.85	139.31	167.46	33	0.0	1798	0.52	0.052	0.03	21.37	0.03	0.001
26.68	1.86	147.87	178.79	35	0.0	1938	0.52	0.045	0.02	21.37	0.03	0.001
26.73	1.86	153.01	185.07	37	0.0	2009	0.52	0.043	0.02	21.37	0.02	0.000
26.77	1.88	151.46	185.55	37	0.0	2053	0.52	0.041	0.02	21.37	0.02	0.000
26.85	1.91	149.61	186.17	37	0.0	2117	0.52	0.039	0.02	21.37	0.02	0.000
26.91	1.90	153.74	190.40	38	0.0	2151	0.52	0.038	0.02	21.37	0.02	0.000
26.97	1.90	155.99	192.73	39	0.0	2173	0.52	0.038	0.02	21.37	0.02	0.000
27.04	1.91	153.64	191.12	38	0.0	2184	0.51	0.038	0.02	21.37	0.02	0.000
27.11	1.92	149.56	187.43	38	0.0	2173	0.51	0.038	0.02	21.37	0.02	0.000
27.20	1.95	140.94	178.80	36	0.0	2123	0.51	0.039	0.02	21.37	0.02	0.000
27.25	1.96	135.24	172.68	35	0.0	2075	0.51	0.041	0.02	21.37	0.02	0.000
27.31	1.98	128.65	166.08	34	0.0	2033	0.51	0.042	0.02	21.37	0.03	0.000
27.36	2.04	113.65	153.36	32	0.0	1977	0.51	0.044	0.02	21.37	0.03	0.000
27.46	2.13	96.72	142.61	31	0.0	1918	0.51	0.046	0.03	21.37	0.03	0.001
27.51	2.19	87.43	139.17	31	0.0	1884	0.51	0.048	0.03	21.37	0.03	0.000
27.56	2.30	72.11	138.77	33	0.0	1821	0.51	0.050	0.03	21.37	0.03	0.000
27.63	2.39	60.70	142.48	35	0.0	1762	0.50	0.053	0.03	21.37	0.03	0.001
27.71	2.39	60.34	141.60	35	0.0	1756	0.50	0.054	0.03	21.37	0.03	0.001
27.76	2.39	60.33	138.83	34	0.0	1736	0.50	0.055	0.03	21.37	0.03	0.000
27.84	2.38	60.03	136.11	33	0.0	1715	0.50	0.056	0.03	21.37	0.04	0.001
27.90	2.36	61.94	133.38	32	0.0	1713	0.50	0.056	0.03	21.37	0.04	0.001
27.95	2.28	69.84	130.26	30	0.0	1745	0.50	0.054	0.03	21.37	0.04	0.000
28.05	2.13	91.92	134.33	29	0.0	1835	0.50	0.050	0.03	21.37	0.04	0.001
28.09	2.06	102.73	140.79	30	0.0	1874	0.50	0.048	0.03	21.37	0.03	0.000
28.15	2.01	112.37	147.63	31	0.0	1894	0.50	0.047	0.03	21.37	0.03	0.001
28.25	1.98	116.42	150.34	31	0.0	1890	0.49	0.047	0.03	21.37	0.03	0.001
28.30	1.98	116.79	150.56	31	0.0	1891	0.49	0.047	0.03	21.37	0.03	0.000
28.35	1.99	114.86	148.88	31	0.0	1887	0.49	0.047	0.03	21.37	0.03	0.000

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
28.45	2.02	108.66	144.29	30	0.0	1889	0.49	0.047	0.03	21.37	0.03	0.001
28.50	2.05	104.98	141.97	30	0.0	1893	0.49	0.047	0.03	21.37	0.03	0.000
28.55	2.07	101.50	139.77	30	0.0	1891	0.49	0.047	0.03	21.37	0.03	0.000
28.61	2.10	96.19	136.47	30	0.0	1878	0.49	0.048	0.03	21.37	0.04	0.001
28.69	2.11	91.87	131.13	28	0.0	1813	0.49	0.051	0.03	21.37	0.04	0.001
28.74	2.07	90.13	124.19	27	0.0	1690	0.49	0.057	0.04	21.37	0.05	0.001
28.84	2.10	86.35	123.14	27	0.0	1709	0.48	0.056	0.04	21.37	0.05	0.001
28.89	2.12	85.23	123.04	27	0.0	1717	0.48	0.056	0.04	21.37	0.05	0.001
28.94	2.12	84.71	123.24	27	0.0	1726	0.48	0.055	0.04	21.37	0.05	0.001
29.03	2.13	84.35	123.85	27	0.0	1744	0.48	0.054	0.04	21.37	0.04	0.001
29.08	2.14	83.92	123.90	27	0.0	1749	0.48	0.054	0.04	21.37	0.04	0.001
29.14	2.14	84.02	124.30	27	0.0	1758	0.48	0.053	0.04	21.37	0.04	0.001
29.21	2.15	83.16	124.80	28	0.0	1773	0.48	0.053	0.04	21.37	0.04	0.001
29.27	2.16	83.41	126.30	28	0.0	1800	0.48	0.051	0.03	21.37	0.04	0.001
29.37	2.16	84.06	127.96	28	0.0	1830	0.48	0.050	0.03	21.37	0.04	0.001
29.41	2.16	84.17	128.34	28	0.0	1837	0.48	0.049	0.03	21.37	0.04	0.000
29.47	2.16	84.63	129.20	29	0.0	1853	0.48	0.049	0.03	21.37	0.04	0.001
29.56	2.16	85.86	130.26	29	0.0	1872	0.47	0.048	0.03	21.37	0.04	0.001
29.59	2.16	86.23	130.68	29	0.0	1880	0.47	0.047	0.03	21.37	0.04	0.000
29.67	2.16	86.11	131.05	29	0.0	1890	0.47	0.047	0.03	21.37	0.04	0.001
29.77	2.17	85.54	131.53	29	0.0	1904	0.47	0.046	0.03	21.37	0.03	0.001
29.81	2.18	84.40	131.34	29	0.0	1905	0.47	0.046	0.03	21.37	0.03	0.000
29.87	2.19	82.64	131.07	29	0.0	1904	0.47	0.046	0.03	21.37	0.03	0.000
29.97	2.20	80.44	130.27	29	0.0	1897	0.47	0.047	0.03	21.37	0.03	0.001
29.99	2.21	79.32	129.90	29	0.0	1892	0.47	0.047	0.03	21.37	0.03	0.000
30.07	2.22	77.65	128.73	29	0.0	1877	0.47	0.048	0.03	21.37	0.04	0.001
30.13	2.22	75.63	126.88	29	0.0	1851	0.47	0.049	0.03	21.37	0.04	0.001
30.21	2.23	73.92	125.35	29	0.0	1831	0.46	0.049	0.03	21.37	0.04	0.001
30.27	2.23	73.04	124.41	28	0.0	1819	0.46	0.050	0.03	21.37	0.04	0.001
30.34	2.22	73.17	122.83	28	0.0	1803	0.46	0.051	0.03	21.37	0.04	0.001
30.40	2.21	74.11	121.28	27	0.0	1788	0.46	0.051	0.04	21.37	0.04	0.001
30.46	2.18	77.16	120.57	27	0.0	1782	0.46	0.052	0.04	21.37	0.04	0.001
30.53	2.12	83.71	121.27	26	0.0	1775	0.46	0.052	0.04	21.37	0.04	0.001
30.59	2.06	90.04	122.90	26	0.0	1749	0.46	0.053	0.04	21.37	0.05	0.001
30.66	2.02	94.12	124.54	26	0.0	1724	0.46	0.055	0.04	21.37	0.05	0.001
30.71	2.02	92.67	122.75	26	0.0	1704	0.46	0.056	0.04	21.37	0.05	0.001
30.79	2.08	83.24	115.91	25	0.0	1680	0.46	0.057	0.04	21.37	0.05	0.001
30.85	2.14	75.75	112.84	25	0.0	1677	0.45	0.057	0.04	21.37	0.05	0.001
30.94	2.34	54.62	115.05	28	0.0	1637	0.45	0.060	0.04	21.37	0.05	0.001
30.99	2.45	45.11	119.74	30	0.0	1583	0.45	0.064	0.04	21.37	0.05	0.001
31.05	2.56	36.99	127.02	34	0.0	1536	0.45	0.067	0.04	21.37	0.04	0.001
31.11	2.71	28.66	138.36	0	0.0	0	0.45	0.000	0.00	0.00	0.00	0.000
31.19	2.78	25.12	142.11	0	0.0	0	0.45	0.000	0.00	0.00	0.00	0.000
31.25	2.83	23.70	147.48	0	0.0	0	0.45	0.000	0.00	0.00	0.00	0.000
31.30	2.84	23.34	149.90	0	0.0	0	0.45	0.000	0.00	0.00	0.00	0.000
31.38	2.86	23.08	153.87	0	0.0	0	0.45	0.000	0.00	0.00	0.00	0.000
31.45	2.86	23.73	156.29	0	0.0	0	0.45	0.000	0.00	0.00	0.00	0.000
31.50	2.86	23.92	158.12	0	0.0	0	0.45	0.000	0.00	0.00	0.00	0.000

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
31.58	2.81	25.90	153.47	0	0.0	0	0.44	0.000	0.00	0.00	0.00	0.000
31.64	2.75	28.08	147.42	0	0.0	0	0.44	0.000	0.00	0.00	0.00	0.000
31.70	2.65	32.38	136.22	0	0.0	0	0.44	0.000	0.00	0.00	0.00	0.000
31.77	2.51	40.37	121.72	31	0.0	1577	0.44	0.064	0.04	21.37	0.04	0.001
31.85	2.32	54.22	108.70	26	0.0	1609	0.44	0.061	0.05	21.37	0.05	0.001
31.89	2.21	64.90	106.82	24	0.0	1641	0.44	0.059	0.05	21.37	0.06	0.001
31.98	2.08	81.41	112.72	24	0.0	1679	0.44	0.057	0.05	21.37	0.05	0.001
32.03	2.01	90.75	119.66	25	0.0	1708	0.44	0.055	0.04	21.37	0.05	0.001
32.09	1.95	100.08	127.21	26	0.0	1720	0.44	0.054	0.04	21.37	0.05	0.001
32.18	1.86	117.35	141.59	28	0.0	1755	0.44	0.053	0.04	21.37	0.04	0.001
32.23	1.85	122.03	146.18	29	0.0	1797	0.44	0.050	0.03	21.37	0.04	0.000
32.29	1.82	131.18	154.21	30	0.0	1863	0.44	0.048	0.03	21.37	0.03	0.000
32.35	1.80	141.25	162.35	31	0.0	1936	0.43	0.045	0.03	21.37	0.03	0.000
32.42	1.78	149.70	168.53	32	0.0	1997	0.43	0.043	0.02	21.37	0.03	0.000
32.49	1.75	161.52	174.30	33	0.0	2059	0.43	0.041	0.02	21.37	0.03	0.000
32.58	1.74	169.47	180.18	34	0.0	2135	0.43	0.038	0.02	21.37	0.02	0.000
32.63	1.74	169.82	182.72	35	0.0	2165	0.43	0.038	0.02	21.37	0.02	0.000
32.69	1.76	166.45	183.68	35	0.0	2181	0.43	0.037	0.02	21.37	0.02	0.000
32.75	1.79	160.40	182.36	35	0.0	2184	0.43	0.037	0.02	21.37	0.02	0.000
32.83	1.81	154.23	179.49	35	0.0	2179	0.43	0.037	0.02	21.37	0.02	0.000
32.88	1.83	147.35	174.92	34	0.0	2162	0.43	0.038	0.02	21.37	0.02	0.000
32.94	1.86	141.03	169.98	34	0.0	2141	0.43	0.038	0.02	21.37	0.02	0.000
33.01	1.88	134.97	164.85	33	0.0	2120	0.43	0.039	0.02	21.37	0.03	0.000
33.08	1.90	129.59	160.08	32	0.0	2102	0.43	0.039	0.02	21.37	0.03	0.000
33.17	1.92	123.71	154.53	31	0.0	2076	0.42	0.040	0.02	21.37	0.03	0.001
33.23	1.93	120.76	151.53	31	0.0	2056	0.42	0.041	0.02	21.37	0.03	0.000
33.28	1.93	118.59	149.32	30	0.0	2042	0.42	0.041	0.02	21.37	0.03	0.000
33.34	1.95	115.05	145.73	30	0.0	2018	0.42	0.042	0.03	21.37	0.03	0.000
33.41	1.96	111.43	141.99	29	0.0	1991	0.42	0.043	0.03	21.37	0.03	0.001
33.48	1.97	107.16	137.84	28	0.0	1968	0.42	0.043	0.03	21.37	0.03	0.001
33.54	1.98	101.96	131.74	27	0.0	1897	0.42	0.046	0.03	21.37	0.04	0.001
33.62	1.98	95.72	123.80	26	0.0	1789	0.42	0.050	0.04	21.37	0.04	0.001
33.66	2.01	90.58	119.25	25	0.0	1770	0.42	0.051	0.04	21.37	0.05	0.000
33.76	2.08	79.41	110.48	24	0.0	1728	0.42	0.053	0.04	21.37	0.05	0.001
33.81	2.12	74.25	107.22	23	0.0	1709	0.42	0.054	0.05	21.37	0.05	0.001
33.87	2.15	69.57	105.05	23	0.0	1696	0.42	0.055	0.05	21.37	0.05	0.001
33.93	2.25	59.15	103.15	24	0.0	1666	0.41	0.057	0.05	21.37	0.05	0.001
33.99	2.28	56.36	103.80	24	0.0	1665	0.41	0.057	0.05	21.37	0.05	0.001
34.07	2.34	52.22	108.39	26	0.0	1695	0.41	0.055	0.04	21.37	0.05	0.001
34.15	2.49	42.54	123.79	32	0.0	1747	0.41	0.052	0.03	21.37	0.04	0.001
34.20	2.60	35.97	135.54	0	0.0	0	0.41	0.000	0.00	0.00	0.00	0.000
34.26	2.76	27.74	149.28	0	0.0	0	0.41	0.000	0.00	0.00	0.00	0.000
34.34	2.94	20.87	162.62	0	0.0	0	0.41	0.000	0.00	0.00	0.00	0.000
34.41	3.01	18.23	164.35	0	0.0	0	0.41	0.000	0.00	0.00	0.00	0.000
34.46	3.08	16.08	164.12	0	0.0	0	0.41	0.000	0.00	0.00	0.00	0.000
34.55	3.17	13.80	166.27	0	0.0	0	0.41	0.000	0.00	0.00	0.00	0.000
34.58	3.20	13.19	168.96	0	0.0	0	0.41	0.000	0.00	0.00	0.00	0.000
34.66	3.15	14.00	164.06	0	0.0	0	0.41	0.000	0.00	0.00	0.00	0.000

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
34.72	3.03	17.34	161.99	0	0.0	0	0.41	0.000	0.00	0.00	0.00	0.000
34.80	2.86	22.79	150.58	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
34.85	2.78	25.94	144.49	0	0.0	0	0.40	0.000	0.00	0.00	0.00	0.000
34.94	2.54	38.52	127.29	34	0.0	1760	0.40	0.051	0.03	21.37	0.03	0.001
34.98	2.35	54.05	114.83	28	0.0	1829	0.40	0.048	0.03	21.37	0.04	0.000
35.05	2.19	70.18	110.98	25	0.0	1855	0.40	0.047	0.04	21.37	0.04	0.001
35.15	2.05	85.02	115.01	24	0.0	1821	0.40	0.049	0.04	21.37	0.04	0.001
35.19	1.99	92.10	119.65	25	0.0	1806	0.40	0.049	0.04	21.37	0.04	0.000
35.25	1.93	97.46	122.48	25	0.0	1746	0.40	0.052	0.04	21.37	0.05	0.001
35.35	1.89	100.28	123.39	25	0.0	1693	0.40	0.055	0.04	21.37	0.05	0.001
35.38	1.89	99.92	122.99	25	0.0	1690	0.40	0.055	0.04	21.37	0.05	0.000
35.44	1.90	98.41	121.75	24	0.0	1691	0.40	0.055	0.04	21.37	0.05	0.001
35.54	1.94	91.97	116.23	24	0.0	1685	0.40	0.055	0.05	21.37	0.05	0.001
35.57	1.91	91.31	113.76	23	0.0	1606	0.40	0.060	0.05	21.37	0.06	0.000
35.64	1.91	86.49	107.39	22	0.0	1508	0.40	0.067	0.06	21.37	0.07	0.001
35.72	2.04	75.96	101.93	22	0.0	1623	0.39	0.059	0.05	21.37	0.06	0.001
35.77	2.05	70.98	96.33	20	0.0	1552	0.39	0.063	0.06	21.37	0.07	0.001
35.84	2.16	61.89	94.81	21	0.0	1612	0.39	0.059	0.06	21.37	0.07	0.001
35.90	2.26	53.42	95.96	22	0.0	1625	0.39	0.059	0.05	21.37	0.06	0.001
35.97	2.41	42.30	102.10	25	0.0	1610	0.39	0.059	0.05	21.37	0.05	0.001
36.06	2.55	34.09	113.82	30	0.0	1621	0.39	0.059	0.04	21.37	0.04	0.001
36.11	2.61	31.28	120.27	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.17	2.64	30.30	124.78	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.25	2.63	31.45	126.14	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.30	2.65	30.61	128.32	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.37	2.70	28.48	132.59	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.45	2.77	25.21	138.75	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.51	2.83	23.08	142.56	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.56	2.85	21.89	142.67	0	0.0	0	0.39	0.000	0.00	0.00	0.00	0.000
36.61	2.87	20.70	139.99	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
36.70	2.86	20.65	136.77	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
36.75	2.84	21.29	135.51	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
36.85	2.82	22.26	135.82	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
36.90	2.81	23.02	136.71	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
36.95	2.81	23.06	138.56	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
37.01	2.87	20.93	141.76	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
37.09	2.93	18.60	141.59	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
37.16	2.97	16.69	138.04	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
37.25	3.05	13.75	134.08	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
37.30	3.09	12.79	132.71	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
37.35	3.10	12.42	131.05	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
37.43	3.09	12.31	128.65	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
37.48	3.08	12.42	126.91	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
37.55	3.02	13.44	122.67	0	0.0	0	0.38	0.000	0.00	0.00	0.00	0.000
37.63	2.83	18.33	114.25	0	0.0	0	0.37	0.000	0.00	0.00	0.00	0.000
37.68	2.63	25.76	103.47	0	0.0	0	0.37	0.000	0.00	0.00	0.00	0.000
37.74	2.38	39.97	91.36	22	0.0	1534	0.37	0.064	0.06	21.37	0.07	0.001
37.80	2.27	47.25	85.96	20	0.0	1523	0.37	0.065	0.06	21.37	0.08	0.001

:: Post-earthquake settlement of dry sands :: (continued)

Depth (ft)	Ic	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	$N_{1,60}$ (blows)	Vs (ft/s)	G_{max} (tsf)	CSR	Shear, γ (%)	$S_{vol,15}$ (%)	N_c	e_v (%)	Settle. (in)
37.88	2.12	55.82	81.23	18	0.0	1432	0.37	0.072	0.08	21.37	0.10	0.002
37.93	2.09	59.97	84.57	18	0.0	1471	0.37	0.069	0.08	21.37	0.09	0.001
38.00	2.06	65.07	88.82	19	0.0	1513	0.37	0.065	0.07	21.37	0.08	0.001
38.08	2.04	69.17	93.33	20	0.0	1576	0.37	0.061	0.06	21.37	0.07	0.001
38.13	2.03	72.50	97.07	20	0.0	1628	0.37	0.057	0.06	21.37	0.07	0.001
38.20	2.04	74.80	100.44	21	0.0	1692	0.37	0.054	0.05	21.37	0.06	0.001
38.27	2.04	77.65	104.05	22	0.0	1752	0.37	0.051	0.05	21.37	0.05	0.001
38.33	2.04	78.24	105.22	22	0.0	1781	0.37	0.050	0.04	21.37	0.05	0.001
38.40	2.08	75.95	105.21	23	0.0	1829	0.37	0.048	0.04	21.37	0.05	0.001
38.46	2.08	77.04	107.38	23	0.0	1877	0.37	0.046	0.04	21.37	0.05	0.001
38.53	2.12	73.69	106.62	23	0.0	1903	0.37	0.045	0.04	21.37	0.04	0.001
38.60	2.11	76.22	108.97	24	0.0	1938	0.37	0.044	0.04	21.37	0.04	0.001
38.67	2.08	80.71	111.78	24	0.0	1955	0.36	0.043	0.03	21.37	0.04	0.001
38.72	2.04	86.37	115.81	24	0.0	1971	0.36	0.042	0.03	21.37	0.04	0.000
38.80	2.00	92.23	120.64	25	0.0	1993	0.36	0.042	0.03	21.37	0.04	0.001
38.85	1.99	94.27	122.37	25	0.0	2000	0.36	0.041	0.03	21.37	0.04	0.000
38.91	1.98	95.10	123.02	25	0.0	2002	0.36	0.041	0.03	21.37	0.04	0.001
38.98	1.99	94.06	122.19	25	0.0	2005	0.36	0.041	0.03	21.37	0.04	0.001
39.05	2.01	91.19	119.79	25	0.0	2002	0.36	0.041	0.03	21.37	0.04	0.001
39.11	2.04	85.23	114.74	24	0.0	1979	0.36	0.042	0.03	21.37	0.04	0.001
39.20	2.10	76.24	107.91	23	0.0	1936	0.36	0.044	0.04	21.37	0.04	0.001
39.25	2.12	72.97	105.61	23	0.0	1917	0.36	0.044	0.04	21.37	0.04	0.001
39.31	2.09	76.34	107.62	23	0.0	1932	0.36	0.044	0.04	21.37	0.04	0.001
39.39	2.12	73.83	106.93	23	0.0	1948	0.36	0.043	0.04	21.37	0.04	0.001
39.44	2.11	76.01	108.58	24	0.0	1968	0.36	0.042	0.03	21.37	0.04	0.000
39.51	2.09	78.97	110.38	24	0.0	1980	0.36	0.042	0.03	21.37	0.04	0.001
39.60	2.06	82.16	112.17	24	0.0	1981	0.36	0.042	0.03	21.37	0.04	0.001
39.65	2.05	83.97	113.33	24	0.0	1983	0.36	0.042	0.03	21.37	0.04	0.000
39.70	2.03	86.52	115.12	24	0.0	1985	0.36	0.042	0.03	21.37	0.04	0.000
39.79	2.00	89.57	117.42	24	0.0	1989	0.36	0.042	0.03	21.37	0.04	0.001
39.84	1.99	91.16	118.68	25	0.0	1992	0.35	0.042	0.03	21.37	0.04	0.000
39.90	1.98	92.18	119.37	25	0.0	1988	0.35	0.042	0.03	21.37	0.04	0.001
39.99	1.99	91.75	118.84	25	0.0	1985	0.35	0.042	0.03	21.37	0.04	0.001

Total estimated settlement: 3.16

:: Post-earthquake settlement due to soil liquefaction ::

Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)
40.03	129.62	122.50	0.84	1.60	1.00	0.01	40.10	127.55	120.55	0.81	1.64	1.00	0.01
40.20	125.15	118.28	0.78	1.69	1.00	0.02	40.24	123.91	117.11	0.76	1.71	1.00	0.01
40.30	122.44	115.72	0.74	2.12	1.00	0.01	40.39	119.99	113.40	0.72	2.17	1.00	0.02
40.44	118.14	111.65	0.69	2.19	1.00	0.01	40.50	116.86	110.44	0.68	2.21	1.00	0.02
40.59	114.87	108.56	0.66	2.23	1.00	0.02	40.63	113.83	107.57	0.64	2.24	1.00	0.01
40.69	114.86	108.55	0.66	2.22	1.00	0.02	40.76	112.25	106.09	0.63	2.20	1.00	0.02
40.83	113.15	106.94	0.64	2.18	1.00	0.02	40.88	113.92	107.67	0.65	2.16	1.00	0.01
40.97	115.68	109.33	0.67	2.06	1.00	0.02	41.02	115.95	109.58	0.67	2.02	1.00	0.01
41.08	115.89	109.53	0.67	1.95	1.00	0.02	41.16	115.33	109.00	0.67	1.91	1.00	0.02

:: Post-earthquake settlement due to soil liquefaction :: (continued)

Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)
41.23	113.74	107.49	0.65	2.03	1.00	0.02	41.28	111.60	105.47	0.62	2.04	1.00	0.01
41.35	109.16	103.16	0.60	2.04	1.00	0.02	41.42	106.95	101.07	0.57	2.05	1.00	0.02
41.47	104.76	99.01	0.55	2.05	1.00	0.01	41.57	102.40	96.77	0.53	2.07	1.00	0.02
41.62	100.58	95.05	0.51	2.08	1.00	0.01	41.68	98.27	92.88	0.49	2.10	1.00	0.02
41.75	95.98	90.71	0.47	2.13	1.00	0.02	41.81	93.87	88.72	0.45	2.14	1.00	0.02
41.87	91.22	86.21	0.43	2.11	1.00	0.01	41.94	87.68	82.87	0.40	2.02	1.00	0.02
42.01	85.60	80.89	0.38	1.95	1.00	0.02	42.11	80.02	75.63	2.00	0.00	1.00	0.00
42.16	77.98	73.69	2.00	0.00	1.00	0.00	42.21	76.54	72.33	2.00	0.00	1.00	0.00
42.26	74.47	70.38	2.00	0.00	1.00	0.00	42.33	68.59	64.83	2.00	0.00	1.00	0.00
42.39	66.11	62.48	2.00	0.00	1.00	0.00	42.48	63.57	60.07	2.00	0.00	1.00	0.00
42.55	63.20	59.73	2.00	0.00	1.00	0.00	42.60	63.83	60.33	2.00	0.00	1.00	0.00
42.66	64.30	60.77	2.00	0.00	1.00	0.00	42.74	65.16	61.58	2.00	0.00	1.00	0.00
42.78	65.31	61.72	2.00	0.00	1.00	0.00	42.85	65.98	62.35	2.00	0.00	1.00	0.00
42.94	68.15	64.41	2.00	0.00	1.00	0.00	42.98	68.20	64.46	2.00	0.00	1.00	0.00
43.05	68.87	65.08	2.00	0.00	1.00	0.00	43.12	70.46	66.59	2.00	0.00	1.00	0.00
43.18	78.87	74.54	0.35	2.12	1.00	0.01	43.25	84.40	79.77	0.39	2.19	1.00	0.02
43.33	89.95	85.01	0.43	2.28	1.00	0.02	43.38	90.38	85.42	0.44	2.29	1.00	0.01
43.45	88.85	83.97	0.42	2.27	1.00	0.02	43.51	84.71	80.06	0.39	2.22	1.00	0.02
43.58	79.09	74.74	0.35	2.10	1.00	0.02	43.64	75.98	71.81	2.00	0.00	1.00	0.00
43.71	72.84	68.84	2.00	0.00	1.00	0.00	43.77	72.13	68.16	2.00	0.00	1.00	0.00
43.84	68.32	64.57	2.00	0.00	1.00	0.00	43.90	65.77	62.16	2.00	0.00	1.00	0.00
43.99	60.21	56.90	2.00	0.00	1.00	0.00	44.03	58.19	55.00	2.00	0.00	1.00	0.00
44.10	57.27	54.13	2.00	0.00	1.00	0.00	44.18	57.57	54.41	2.00	0.00	1.00	0.00
44.24	58.46	55.25	2.00	0.00	1.00	0.00	44.29	59.01	55.77	2.00	0.00	1.00	0.00
44.38	59.91	56.62	2.00	0.00	1.00	0.00	44.44	62.51	59.08	2.00	0.00	1.00	0.00
44.49	64.15	60.62	2.00	0.00	1.00	0.00	44.57	65.67	62.06	2.00	0.00	1.00	0.00
44.64	74.70	70.59	2.00	0.00	1.00	0.00	44.69	90.39	85.42	0.44	2.23	1.00	0.01
44.78	105.88	100.06	0.58	2.16	1.00	0.02	44.83	120.29	113.68	0.76	1.71	1.00	0.01
44.91	136.25	128.77	1.01	0.75	1.00	0.01	44.95	145.77	137.77	1.20	0.35	1.00	0.00
45.03	157.26	148.62	1.48	0.00	1.00	0.00	45.08	161.84	152.95	1.61	0.00	1.00	0.00
45.18	166.82	157.66	1.77	0.00	1.00	0.00	45.22	166.87	157.71	1.77	0.00	1.00	0.00
45.28	165.34	156.26	1.72	0.00	1.00	0.00	45.35	164.11	155.10	1.69	0.00	1.00	0.00
45.41	157.83	149.16	1.48	0.00	1.00	0.00	45.48	142.98	135.13	1.10	0.48	1.00	0.00
45.55	143.39	135.52	1.11	0.48	1.00	0.00	45.61	141.65	133.87	1.09	0.49	1.00	0.00
45.67	136.88	129.36	1.00	0.77	1.00	0.01	45.74	114.76	108.46	0.69	2.22	1.00	0.02
45.80	113.90	107.64	0.68	2.18	1.00	0.01	45.87	106.72	100.86	0.59	2.05	1.00	0.02
45.94	98.08	92.69	0.49	1.85	1.00	0.02	46.01	94.88	89.67	2.00	0.00	1.00	0.00
46.06	93.35	88.22	2.00	0.00	1.00	0.00	46.16	81.92	77.43	2.00	0.00	1.00	0.00
46.21	78.17	73.88	2.00	0.00	1.00	0.00	46.26	76.77	72.55	2.00	0.00	1.00	0.00
46.34	74.50	70.41	2.00	0.00	1.00	0.00	46.41	73.47	69.43	2.00	0.00	1.00	0.00
46.46	72.74	68.75	2.00	0.00	1.00	0.00	46.55	73.99	69.93	2.00	0.00	1.00	0.00
46.59	75.58	71.43	2.00	0.00	1.00	0.00	46.66	79.22	74.87	2.00	0.00	1.00	0.00
46.74	82.05	77.55	2.00	0.00	1.00	0.00	46.80	81.83	77.34	2.00	0.00	1.00	0.00
46.85	80.34	75.93	2.00	0.00	1.00	0.00	46.93	75.17	71.04	2.00	0.00	1.00	0.00
46.98	72.84	68.84	2.00	0.00	1.00	0.00	47.05	69.87	66.04	2.00	0.00	1.00	0.00
47.13	65.22	61.63	2.00	0.00	1.00	0.00	47.20	62.79	59.34	2.00	0.00	1.00	0.00
47.25	59.67	56.39	2.00	0.00	1.00	0.00	47.33	56.28	53.19	2.00	0.00	1.00	0.00
47.39	54.08	51.11	2.00	0.00	1.00	0.00	47.44	52.49	49.60	2.00	0.00	1.00	0.00

:: Post-earthquake settlement due to soil liquefaction :: (continued)

Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)	Depth (ft)	$q_{c,1,mod}$ (tsf)	$q_{c,1N,mod}$	FS	e_v (%)	DF	Settlement (in)
47.53	48.37	45.72	2.00	0.00	1.00	0.00	47.57	28.53	26.96	2.00	0.00	1.00	0.00
47.64	29.57	27.94	2.00	0.00	1.00	0.00	47.72	37.72	35.65	2.00	0.00	1.00	0.00
47.79	42.59	40.25	2.00	0.00	1.00	0.00	47.84	45.40	42.91	2.00	0.00	1.00	0.00
47.94	59.29	56.04	2.00	0.00	1.00	0.00	47.98	60.65	57.32	2.00	0.00	1.00	0.00
48.07	65.02	61.45	2.00	0.00	1.00	0.00	48.13	68.36	64.60	2.00	0.00	1.00	0.00
48.18	70.34	66.48	2.00	0.00	1.00	0.00	48.24	72.39	68.41	2.00	0.00	1.00	0.00
48.31	75.41	71.27	2.00	0.00	1.00	0.00	48.36	72.40	68.43	2.00	0.00	1.00	0.00
48.43	66.90	63.23	2.00	0.00	1.00	0.00	48.51	62.92	59.46	2.00	0.00	1.00	0.00
48.58	60.63	57.30	2.00	0.00	1.00	0.00	48.63	57.81	54.64	2.00	0.00	1.00	0.00
48.72	54.68	51.68	2.00	0.00	1.00	0.00	48.76	53.76	50.80	2.00	0.00	1.00	0.00
48.82	52.78	49.88	2.00	0.00	1.00	0.00	48.92	53.24	50.32	2.00	0.00	1.00	0.00
48.97	52.66	49.77	2.00	0.00	1.00	0.00	49.03	53.11	50.19	2.00	0.00	1.00	0.00
49.12	53.75	50.80	2.00	0.00	1.00	0.00	49.15	53.97	51.01	2.00	0.00	1.00	0.00
49.23	54.98	51.96	2.00	0.00	1.00	0.00	49.30	55.87	52.81	2.00	0.00	1.00	0.00
49.35	56.26	53.17	2.00	0.00	1.00	0.00	49.41	57.63	54.46	2.00	0.00	1.00	0.00
49.48	59.49	56.23	2.00	0.00	1.00	0.00	49.54	61.24	57.88	2.00	0.00	1.00	0.00
49.61	63.20	59.73	2.00	0.00	1.00	0.00	49.69	64.50	60.95	2.00	0.00	1.00	0.00
49.74	66.58	62.93	2.00	0.00	1.00	0.00	49.81	47.63	45.01	2.00	0.00	1.00	0.00
49.90	74.98	70.86	2.00	0.00	1.00	0.00	49.95	86.24	81.50	2.00	0.00	1.00	0.00
50.01	95.98	90.71	2.00	0.00	1.00	0.00	50.09	102.68	97.04	2.00	0.00	1.00	0.00
50.14	105.36	99.57	2.00	0.00	1.00	0.00							

Total estimated settlement: 0.75

Abbreviations

$q_{c,1,mod}$: Equivalent clean sand cone resistance
$q_{c,1N,mod}$: Equivalent clean sand normalized cone resistance
FS: Factor of safety against liquefaction
e_v (%): Post-liquefaction volumentric strain
DF: e_v depth weighting factor
Settlement: Calculated settlement

:: Strength loss calculation (Robertson (2009) ::

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
0.07	4.11	6.60	7.00	46.16	2.89	11.47	98.37
0.16	5.72	9.18	5.83	53.53	2.80	8.40	56.96
0.21	4.20	6.73	9.05	60.86	3.02	7.44	31.10
0.27	4.11	6.58	11.01	72.41	3.12	8.52	22.96
0.33	3.93	6.29	13.96	87.77	3.25	10.73	17.79
0.41	3.93	6.28	14.81	92.98	3.29	9.77	14.19
0.46	4.02	6.42	14.59	93.67	3.28	8.73	12.71
0.54	4.92	7.86	11.89	93.48	3.16	7.65	13.23
0.60	5.63	8.99	10.41	93.62	3.09	7.07	13.51
0.66	3.93	6.26	15.88	99.38	3.33	6.85	8.54
0.75	3.93	6.25	16.35	102.22	3.34	6.39	7.47
0.81	4.11	6.54	15.67	102.38	3.32	5.98	7.25
0.86	4.47	7.11	13.64	96.98	3.24	5.00	7.34
0.95	4.83	7.68	11.54	88.67	3.15	3.79	7.23
0.99	5.18	8.24	10.46	86.15	3.09	3.44	7.38
1.05	5.90	9.39	8.65	81.28	2.99	2.98	7.94
1.12	6.52	10.38	6.85	71.13	2.88	2.19	8.24
1.19	7.60	12.11	4.87	59.00	2.72	1.51	9.06
1.25	8.49	13.54	3.51	47.50	2.57	0.02	0.62
1.35	9.47	15.10	1.00	15.10	2.30	0.02	0.62
1.39	9.92	15.82	1.00	15.82	2.28	0.02	0.62
1.44	10.19	16.25	1.00	16.25	2.31	0.02	0.62
1.51	10.41	16.60	1.00	16.60	2.35	0.02	0.62
1.58	10.81	17.24	2.29	39.39	2.38	0.02	0.62
1.65	10.64	16.96	2.73	46.24	2.46	0.02	0.62
1.73	10.46	16.66	3.49	58.15	2.57	0.02	0.62
1.78	10.10	16.08	4.14	66.57	2.64	1.61	8.24
1.84	10.01	15.93	4.78	76.18	2.71	2.00	7.88
1.92	9.74	15.49	5.48	84.84	2.77	2.31	7.33
1.98	9.64	15.34	5.75	88.25	2.79	2.38	7.01
2.05	9.82	15.62	5.59	87.40	2.78	2.28	6.88
2.12	10.36	16.48	5.21	85.89	2.75	2.20	7.02
2.17	11.97	19.07	4.29	81.76	2.66	2.14	7.89
2.24	14.92	23.79	3.14	74.61	2.52	0.03	0.62
2.32	18.05	28.81	2.44	70.24	2.41	0.03	0.62
2.37	20.01	31.97	2.14	68.46	2.35	0.03	0.62
2.44	21.26	33.97	2.00	67.89	2.32	0.04	0.62
2.51	23.05	36.84	1.83	67.31	2.27	0.04	0.62
2.57	25.19	40.27	1.69	67.86	2.23	0.05	0.62
2.66	27.96	44.71	1.57	70.21	2.18	0.07	0.64
2.71	29.03	46.43	1.55	71.87	2.17	0.08	0.64
2.76	30.55	48.87	1.52	74.30	2.16	0.10	0.65
2.85	32.88	52.60	1.49	78.41	2.14	0.15	0.67
2.90	33.77	54.03	1.41	76.00	2.09	0.14	0.66
2.96	34.50	55.18	1.32	72.75	2.01	0.12	0.66
3.06	35.75	57.18	1.32	75.22	2.01	0.15	0.67
3.11	36.02	57.61	1.32	76.02	2.01	0.16	0.67
3.16	35.84	57.32	1.33	76.20	2.03	0.16	0.67

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
3.22	33.16	53.01	1.39	73.80	2.08	0.12	0.66
3.30	30.83	49.26	1.50	73.75	2.15	0.10	0.65
3.36	30.39	48.55	1.55	75.08	2.17	0.10	0.65
3.44	28.33	45.23	1.75	79.33	2.25	0.10	0.65
3.50	26.27	41.92	2.01	84.18	2.32	0.10	0.65
3.55	25.11	40.05	2.23	89.35	2.37	0.11	0.65
3.65	22.43	35.73	2.79	99.81	2.47	0.12	0.66
3.70	21.63	34.44	3.00	103.21	2.50	0.13	0.66
3.74	20.55	32.70	3.28	107.14	2.54	0.13	0.66
3.81	18.05	28.68	3.97	113.86	2.62	2.64	6.47
3.88	15.28	24.22	5.03	121.75	2.73	2.60	5.35
3.94	13.41	21.22	6.00	127.19	2.81	2.57	4.61
4.01	11.98	18.91	6.89	130.35	2.88	2.49	4.04
4.09	11.35	17.89	7.44	133.04	2.92	2.47	3.74
4.15	10.90	17.17	7.96	136.59	2.95	2.50	3.53
4.23	11.08	17.45	8.18	142.65	2.96	2.66	3.51
4.29	12.51	19.74	7.17	141.59	2.90	2.72	3.92
4.34	14.21	22.47	6.19	139.05	2.83	2.76	4.40
4.42	16.35	25.90	5.25	135.93	2.75	2.80	4.98
4.47	18.59	29.49	4.45	131.32	2.68	2.82	5.59
4.54	20.55	32.64	3.91	127.75	2.62	2.83	6.10
4.60	24.75	39.38	3.02	118.75	2.51	0.31	0.69
4.68	28.24	44.98	2.51	112.83	2.42	0.35	0.69
4.73	30.21	48.14	2.29	110.12	2.38	0.39	0.70
4.80	31.55	50.28	2.18	109.63	2.36	0.44	0.70
4.87	32.08	51.13	2.18	111.72	2.36	0.50	0.70
4.92	32.17	51.27	2.20	112.79	2.37	0.52	0.70
4.99	31.99	50.97	2.21	112.46	2.37	0.50	0.70
5.08	31.19	49.68	2.23	110.65	2.37	0.43	0.70
5.13	31.19	49.68	2.19	108.76	2.36	0.41	0.70
5.18	31.19	49.67	2.13	106.02	2.35	0.37	0.69
5.25	32.08	51.09	2.00	102.18	2.32	0.35	0.69
5.32	32.89	52.39	1.90	99.32	2.29	0.34	0.69
5.39	34.76	55.39	1.71	94.74	2.24	0.34	0.69
5.48	37.62	59.97	1.52	91.44	2.16	0.38	0.70
5.53	39.77	63.42	1.45	91.79	2.12	0.46	0.70
5.59	42.81	68.30	1.38	94.40	2.07	0.64	0.71
5.67	45.31	72.31	1.34	97.08	2.04	0.72	0.72
5.72	47.99	76.61	1.31	100.35	2.00	0.73	0.73
5.78	52.28	83.50	1.25	104.70	1.93	0.74	0.74
5.87	56.93	90.96	1.15	104.30	1.79	0.74	0.74
5.91	58.54	93.55	1.14	106.30	1.79	0.75	0.75
5.98	62.29	99.56	1.11	110.23	1.76	0.76	0.76
6.07	65.69	105.02	1.09	114.80	1.76	0.77	0.77
6.12	68.28	109.18	1.07	116.90	1.74	0.78	0.78
6.17	66.40	106.15	1.12	118.45	1.77	0.77	0.77
6.23	72.66	116.20	1.04	121.25	1.73	0.79	0.79
6.32	77.21	123.50	1.00	123.53	1.71	0.80	0.80

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
6.37	80.52	128.82	1.00	128.82	1.70	0.81	0.81
6.44	83.56	133.69	1.00	133.69	1.69	0.82	0.82
6.51	84.99	135.99	1.00	135.99	1.69	0.82	0.82
6.56	85.17	136.27	1.00	136.27	1.69	0.82	0.82
6.65	84.81	135.69	1.00	135.69	1.70	0.82	0.82
6.71	83.56	133.67	1.00	133.67	1.70	0.82	0.82
6.76	82.58	132.09	1.00	132.09	1.71	0.82	0.82
6.84	79.89	127.76	1.03	131.76	1.72	0.81	0.81
6.91	77.04	123.18	1.06	130.94	1.74	0.80	0.80
6.96	74.62	119.28	1.09	129.53	1.75	0.80	0.80
7.03	71.67	114.54	1.11	127.44	1.77	0.79	0.79
7.10	70.06	111.95	1.13	126.14	1.78	0.78	0.78
7.17	67.56	107.92	1.15	123.92	1.80	0.78	0.78
7.25	65.51	104.62	1.17	121.99	1.81	0.77	0.77
7.29	64.70	103.32	1.17	121.15	1.82	0.77	0.77
7.36	61.93	98.86	1.20	118.43	1.85	0.76	0.76
7.45	59.52	94.98	1.22	115.95	1.88	0.75	0.75
7.50	57.11	91.10	1.24	112.93	1.90	0.74	0.74
7.55	55.14	87.93	1.25	110.25	1.93	0.74	0.74
7.63	53.35	85.05	1.27	107.69	1.94	0.73	0.73
7.69	53.26	84.90	1.27	107.41	1.94	0.73	0.73
7.75	53.62	85.47	1.26	107.97	1.94	0.73	0.73
7.85	54.25	86.48	1.26	109.16	1.94	0.73	0.73
7.88	53.98	86.04	1.27	108.96	1.94	0.73	0.73
7.94	52.46	83.59	1.28	107.40	1.97	0.73	0.73
8.04	47.63	75.82	1.36	103.20	2.06	0.71	0.71
8.09	43.34	68.93	1.46	100.68	2.13	0.47	0.70
8.14	41.20	65.48	1.47	95.95	2.13	0.35	0.69
8.23	35.75	56.72	1.47	83.39	2.13	0.16	0.67
8.27	34.23	54.27	1.54	83.73	2.17	0.14	0.66
8.34	30.47	48.22	1.79	86.32	2.26	0.11	0.65
8.41	28.96	45.79	1.96	89.58	2.31	0.10	0.65
8.47	28.78	45.50	2.01	91.43	2.32	0.11	0.65
8.53	28.60	45.20	2.04	92.34	2.33	0.11	0.65
8.60	29.31	46.34	2.00	92.68	2.32	0.11	0.66
8.68	28.87	45.62	2.07	94.34	2.34	0.11	0.66
8.74	29.31	46.32	2.01	93.02	2.32	0.11	0.66
8.80	28.78	45.47	2.01	91.44	2.32	0.10	0.65
8.88	29.31	46.31	1.94	89.85	2.30	0.10	0.65
8.95	29.85	47.17	1.93	90.91	2.30	0.10	0.65
9.01	30.65	48.45	1.91	92.59	2.30	0.11	0.66
9.07	30.56	48.30	1.96	94.44	2.31	0.12	0.66
9.14	30.21	47.73	2.04	97.22	2.33	0.12	0.66
9.20	30.16	47.65	2.14	102.12	2.35	0.14	0.66
9.26	30.16	47.64	2.24	106.59	2.37	0.16	0.67
9.34	30.12	47.57	2.30	109.35	2.39	0.17	0.67
9.39	32.35	51.15	2.10	107.24	2.34	0.19	0.67
9.48	37.27	58.34	1.76	102.83	2.25	0.23	0.68

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
9.52	41.11	63.21	1.60	101.10	2.19	0.29	0.69
9.58	46.02	69.24	1.46	100.91	2.12	0.41	0.70
9.67	52.91	77.69	1.36	105.39	2.05	0.71	0.71
9.71	55.59	80.93	1.33	107.87	2.03	0.72	0.72
9.78	56.93	83.27	1.37	114.20	2.06	0.73	0.73
9.88	54.69	81.49	1.53	125.00	2.16	0.73	0.73
9.93	50.76	76.19	1.65	125.63	2.21	0.72	0.72
9.98	47.90	72.21	1.75	126.57	2.25	0.72	0.72
10.07	42.54	64.78	2.03	131.76	2.33	0.71	0.71
10.11	41.82	63.63	2.08	132.15	2.34	0.71	0.71
10.18	45.31	67.86	1.89	128.03	2.29	0.72	0.72
10.24	54.34	79.06	1.57	124.14	2.18	0.73	0.73
10.32	77.48	106.97	1.28	137.40	1.97	0.77	0.77
10.37	90.89	122.35	1.22	148.96	1.87	0.79	0.79
10.47	103.49	135.52	1.12	151.69	1.77	0.82	0.82
10.52	105.99	137.48	1.07	147.60	1.74	0.82	0.82
10.57	105.45	136.05	1.05	143.30	1.73	0.82	0.82
10.66	100.18	129.11	1.09	140.19	1.75	0.81	0.81
10.72	94.02	121.82	1.14	138.98	1.79	0.80	0.80
10.77	83.74	109.77	1.21	132.64	1.86	0.78	0.78
10.83	76.23	100.30	1.23	123.83	1.90	0.76	0.76
10.90	68.90	88.85	1.18	104.71	1.82	0.74	0.74
10.97	60.59	79.40	1.25	99.48	1.92	0.72	0.72
11.04	55.14	73.15	1.32	96.23	2.01	0.54	0.71
11.10	51.83	69.32	1.38	95.52	2.07	0.42	0.70
11.17	48.97	66.22	1.50	99.34	2.15	0.39	0.70
11.25	42.09	58.07	1.88	108.99	2.29	0.32	0.69
11.30	39.77	55.23	2.09	115.67	2.34	0.33	0.69
11.36	36.73	51.40	2.42	124.27	2.41	0.34	0.69
11.46	32.89	46.36	2.96	137.06	2.50	0.40	0.70
11.51	30.47	43.13	3.31	142.56	2.54	0.42	0.70
11.55	28.78	40.74	3.51	143.18	2.57	0.39	0.70
11.62	28.78	40.47	3.46	139.92	2.56	0.34	0.69
11.69	28.78	40.23	3.44	138.54	2.56	0.33	0.69
11.75	28.78	40.05	3.46	138.60	2.56	0.33	0.69
11.85	29.58	40.74	3.31	134.93	2.55	0.30	0.69
11.88	29.40	40.41	3.33	134.52	2.55	0.29	0.69
11.95	28.33	38.86	3.53	137.18	2.57	0.30	0.69
12.04	29.22	39.79	3.47	138.15	2.57	0.32	0.69
12.07	28.06	38.25	3.70	141.36	2.59	0.34	0.69
12.14	29.04	39.26	3.51	137.80	2.57	0.32	0.69
12.23	29.04	38.97	3.45	134.63	2.56	0.28	0.69
12.28	28.78	38.44	3.43	132.01	2.56	0.25	0.68
12.34	29.94	39.67	3.20	127.09	2.53	0.23	0.68
12.42	36.10	46.83	2.43	113.90	2.41	0.22	0.68
12.48	45.13	57.25	1.83	104.88	2.27	0.31	0.69
12.54	49.69	62.36	1.66	103.53	2.22	0.40	0.70
12.62	57.82	71.36	1.47	104.64	2.13	0.69	0.71

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
12.69	61.22	74.25	1.34	99.27	2.03	0.69	0.71
12.73	64.34	77.45	1.30	100.97	2.00	0.72	0.72
12.81	64.52	77.72	1.33	103.68	2.03	0.72	0.72
12.89	61.22	73.94	1.39	102.77	2.08	0.71	0.71
12.93	58.98	71.67	1.49	106.88	2.14	0.71	0.71
13.01	50.31	61.96	1.88	116.25	2.29	0.58	0.71
13.06	47.54	58.75	2.08	122.24	2.34	0.58	0.71
13.13	43.34	53.81	2.45	131.58	2.41	0.58	0.71
13.19	41.20	51.14	2.65	135.77	2.45	0.57	0.71
13.26	39.86	49.32	2.75	135.77	2.47	0.52	0.70
13.32	40.04	49.29	2.69	132.70	2.46	0.48	0.70
13.41	47.37	57.30	2.10	120.27	2.34	0.52	0.70
13.47	56.21	66.97	1.70	113.98	2.23	0.71	0.71
13.56	71.14	82.79	1.37	113.53	2.06	0.74	0.74
13.59	74.98	86.75	1.33	115.37	2.03	0.74	0.74
13.66	79.36	90.93	1.28	116.80	1.97	0.75	0.75
13.75	81.68	92.77	1.26	116.48	1.93	0.75	0.75
13.81	82.13	92.96	1.25	116.41	1.92	0.75	0.75
13.86	83.11	93.81	1.25	117.29	1.92	0.75	0.75
13.91	84.90	95.57	1.25	119.15	1.91	0.76	0.76
13.99	87.76	98.48	1.25	122.95	1.92	0.76	0.76
14.04	92.23	103.17	1.24	128.10	1.91	0.77	0.77
14.12	99.65	110.83	1.22	135.59	1.88	0.78	0.78
14.19	105.10	116.44	1.22	141.60	1.87	0.79	0.79
14.25	110.19	121.60	1.21	146.65	1.86	0.80	0.80
14.34	113.41	124.71	1.21	150.61	1.86	0.81	0.81
14.40	113.85	124.95	1.21	151.58	1.87	0.81	0.81
14.45	113.59	124.48	1.22	151.72	1.87	0.81	0.81
14.54	110.46	120.78	1.23	149.15	1.90	0.80	0.80
14.60	108.85	118.81	1.24	147.45	1.91	0.80	0.80
14.65	108.40	118.07	1.24	146.70	1.91	0.80	0.80
14.71	109.57	118.96	1.24	147.26	1.90	0.80	0.80
14.77	111.62	120.80	1.23	149.13	1.90	0.80	0.80
14.83	114.75	123.80	1.23	152.41	1.89	0.81	0.81
14.90	120.56	129.56	1.22	157.98	1.87	0.82	0.82
14.98	126.99	135.62	1.19	161.66	1.84	0.82	0.82
15.04	131.46	139.78	1.17	163.62	1.82	0.83	0.83
15.10	135.57	143.65	1.15	165.37	1.80	0.83	0.83
15.17	139.68	147.50	1.14	168.60	1.79	0.84	0.84
15.24	144.15	149.88	1.00	149.88	1.62	0.84	0.84
15.34	151.30	156.64	1.00	156.64	1.61	0.85	0.85
15.37	152.91	158.16	1.00	158.16	1.61	0.85	0.85
15.44	157.47	162.54	1.00	162.54	1.61	0.86	0.86
15.53	153.53	158.43	1.00	158.43	1.66	0.85	0.85
15.56	160.42	165.21	1.00	165.21	1.64	0.86	0.86
15.63	170.78	175.29	1.00	175.29	1.62	0.87	0.87
15.69	174.62	178.88	1.00	178.88	1.62	0.88	0.88
15.77	179.54	183.61	1.00	183.61	1.64	0.88	0.88

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
15.83	181.86	185.75	1.00	185.75	1.65	0.89	0.89
15.88	184.54	188.21	1.00	188.21	1.66	0.89	0.89
15.97	188.66	192.06	1.00	192.06	1.68	0.89	0.89
16.03	191.07	194.31	1.00	194.31	1.70	0.90	0.90
16.08	193.03	196.03	1.00	196.72	1.71	0.90	0.90
16.15	192.14	194.81	1.05	203.82	1.73	0.90	0.90
16.23	189.46	191.66	1.08	206.57	1.75	0.90	0.90
16.28	186.06	187.97	1.10	206.63	1.76	0.89	0.89
16.38	176.86	178.20	1.14	203.05	1.79	0.88	0.88
16.42	173.11	174.20	1.15	200.89	1.80	0.88	0.88
16.47	169.44	170.19	1.16	198.20	1.81	0.87	0.87
16.54	168.01	168.29	1.16	195.52	1.81	0.87	0.87
16.62	171.05	170.65	1.14	193.69	1.78	0.87	0.87
16.68	175.16	174.25	1.11	193.13	1.77	0.88	0.88
16.75	181.51	179.95	1.07	191.81	1.74	0.88	0.88
16.82	186.42	184.24	1.03	189.88	1.72	0.89	0.89
16.87	189.28	186.71	1.02	189.59	1.71	0.89	0.89
16.97	193.21	189.84	1.00	189.84	1.70	0.89	0.89
17.01	193.66	189.96	1.00	189.96	1.69	0.89	0.89
17.07	193.30	189.18	1.00	189.18	1.68	0.89	0.89
17.15	191.43	186.77	1.00	186.77	1.67	0.89	0.89
17.19	190.00	185.08	1.00	185.08	1.67	0.89	0.89
17.26	185.17	180.00	1.00	180.00	1.70	0.88	0.88
17.34	177.57	172.18	1.04	178.48	1.72	0.87	0.87
17.40	174.18	168.59	1.06	179.29	1.74	0.87	0.87
17.46	170.42	164.66	1.10	181.59	1.76	0.87	0.87
17.54	168.10	162.01	1.14	184.32	1.79	0.86	0.86
17.60	167.74	161.34	1.15	185.63	1.80	0.86	0.86
17.65	167.48	160.78	1.16	186.56	1.81	0.86	0.86
17.75	163.99	156.84	1.16	182.11	1.81	0.86	0.86
17.81	158.45	151.23	1.18	178.85	1.83	0.85	0.85
17.85	153.53	146.32	1.21	177.31	1.86	0.85	0.85
17.92	153.18	145.62	1.21	176.17	1.86	0.85	0.85
18.00	153.18	145.15	1.22	177.02	1.87	0.85	0.85
18.05	152.82	144.56	1.22	176.66	1.88	0.84	0.84
18.15	156.93	147.93	1.21	179.41	1.87	0.85	0.85
18.18	159.79	150.42	1.21	181.42	1.86	0.85	0.85
18.25	162.20	152.36	1.21	184.02	1.86	0.86	0.86
18.31	166.58	156.13	1.21	188.26	1.86	0.86	0.86
18.39	171.05	159.89	1.20	192.21	1.85	0.87	0.87
18.45	175.25	163.49	1.19	194.98	1.84	0.87	0.87
18.54	180.97	168.27	1.18	198.23	1.82	0.88	0.88
18.58	183.74	170.64	1.17	200.09	1.82	0.88	0.88
18.64	187.31	173.59	1.17	202.81	1.81	0.88	0.88
18.74	191.52	176.91	1.17	206.39	1.81	0.89	0.89
18.79	193.21	178.14	1.17	208.47	1.82	0.89	0.89
18.84	196.16	180.57	1.17	211.24	1.82	0.89	0.89
18.91	199.65	183.36	1.16	213.32	1.81	0.89	0.89

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
18.97	201.70	184.89	1.16	213.59	1.80	0.90	0.90
19.04	201.97	184.71	1.15	211.77	1.79	0.90	0.90
19.12	198.31	180.76	1.16	209.85	1.81	0.89	0.89
19.18	191.96	174.52	1.18	206.35	1.83	0.88	0.88
19.24	185.26	167.97	1.20	200.97	1.84	0.88	0.88
19.33	174.89	157.90	1.22	192.91	1.88	0.87	0.87
19.36	169.08	152.36	1.24	188.22	1.90	0.86	0.86
19.43	165.69	148.87	1.24	185.16	1.91	0.86	0.86
19.53	172.39	154.45	1.23	190.28	1.89	0.86	0.86
19.57	172.22	154.01	1.24	190.23	1.90	0.86	0.86
19.63	166.50	148.44	1.25	186.16	1.93	0.86	0.86
19.72	154.07	136.54	1.30	177.43	1.99	0.85	0.85
19.76	149.61	132.22	1.32	174.15	2.01	0.84	0.84
19.83	141.83	124.86	1.35	168.21	2.04	0.83	0.83
19.92	141.88	124.49	1.34	167.08	2.04	0.83	0.83
19.97	141.87	124.23	1.34	166.86	2.04	0.83	0.83
20.02	141.92	124.01	1.35	166.87	2.04	0.83	0.83
20.09	142.63	124.27	1.35	168.07	2.05	0.83	0.83
20.17	145.22	126.19	1.35	169.82	2.04	0.84	0.84
20.22	151.21	131.33	1.32	173.79	2.02	0.84	0.84
20.28	163.45	142.02	1.28	182.40	1.97	0.85	0.85
20.37	179.90	156.32	1.24	194.59	1.91	0.87	0.87
20.42	194.73	169.37	1.21	205.21	1.86	0.88	0.88
20.49	208.50	181.93	1.09	198.68	1.75	0.89	0.89
20.56	220.83	193.28	1.00	193.28	1.66	0.90	0.90
20.61	226.91	198.56	1.00	198.56	1.64	0.90	0.90
20.67	232.09	202.89	1.00	202.89	1.62	0.91	0.91
20.75	234.05	204.15	1.00	204.15	1.62	0.91	0.91
20.80	235.84	205.39	1.00	205.39	1.63	0.91	0.91
20.88	228.42	198.01	1.00	198.01	1.67	0.91	0.91
20.95	238.97	206.99	1.00	206.99	1.65	0.92	0.92
21.00	246.66	213.34	1.00	213.34	1.65	0.92	0.92
21.09	264.17	228.35	1.00	228.35	1.63	0.94	0.94
21.16	275.70	237.97	1.00	237.97	1.62	0.95	0.95
21.21	290.09	250.25	1.00	250.25	1.61	0.96	0.96
21.31	299.11	257.23	1.00	257.23	1.62	0.97	0.97
21.33	306.44	263.63	1.00	263.63	1.61	0.97	0.97
21.40	315.47	270.90	1.00	270.90	1.60	0.98	0.98
21.48	325.75	279.11	1.00	279.11	1.60	0.98	0.98
21.54	330.12	282.44	1.00	282.44	1.60	0.99	0.99
21.61	333.79	284.80	1.00	284.80	1.61	0.99	0.99
21.66	333.79	284.20	1.00	284.20	1.62	0.99	0.99
21.75	332.81	282.41	1.00	282.41	1.64	0.99	0.99
21.80	332.98	282.01	1.00	282.01	1.64	0.99	0.99
21.89	336.74	284.38	1.00	284.38	1.64	0.99	0.99
21.94	341.56	288.17	1.00	288.17	1.64	1.00	1.00
22.00	343.36	289.08	1.00	289.08	1.64	1.00	1.00
22.05	345.42	290.39	1.00	290.39	1.64	1.00	1.00

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
22.13	349.80	293.52	1.00	293.52	1.64	1.00	1.00
22.20	352.57	295.26	1.00	295.26	1.64	1.00	1.00
22.25	353.10	294.97	1.00	294.97	1.65	1.00	1.00
22.34	353.91	294.58	1.00	294.58	1.67	1.00	1.00
22.39	353.82	293.93	1.00	293.93	1.67	1.00	1.00
22.45	351.76	291.58	1.00	291.58	1.68	1.00	1.00
22.53	348.19	288.56	1.00	288.56	1.65	1.00	1.00
22.59	344.70	285.68	1.00	285.68	1.63	0.99	0.99
22.64	342.20	283.05	1.00	283.05	1.64	0.99	0.99
22.72	339.97	280.55	1.00	280.55	1.64	0.99	0.99
22.78	338.45	278.90	1.00	278.90	1.64	0.99	0.99
22.84	338.54	278.70	1.00	278.70	1.63	0.99	0.99
22.92	310.65	253.93	1.00	253.93	1.68	0.97	0.97
22.98	322.09	263.56	1.00	263.56	1.65	0.98	0.98
23.03	323.97	264.89	1.00	264.89	1.64	0.98	0.98
23.11	323.70	264.02	1.00	264.02	1.65	0.98	0.98
23.17	320.84	261.11	1.00	261.11	1.65	0.97	0.97
23.23	318.25	258.31	1.00	258.31	1.66	0.97	0.97
23.31	313.96	254.02	1.00	254.02	1.67	0.97	0.97
23.38	310.30	250.38	1.00	250.38	1.68	0.97	0.97
23.43	304.67	245.28	1.00	245.28	1.68	0.96	0.96
23.51	297.96	239.19	1.00	239.19	1.69	0.96	0.96
23.56	286.97	229.49	1.01	231.90	1.71	0.95	0.95
23.63	273.92	217.66	1.09	236.18	1.75	0.94	0.94
23.73	247.91	194.73	1.18	229.22	1.82	0.92	0.92
23.76	234.77	183.36	1.21	222.07	1.86	0.91	0.91
23.83	214.66	165.87	1.26	208.69	1.93	0.89	0.89
23.91	205.28	157.32	1.29	203.28	1.98	0.89	0.89
23.96	202.33	154.37	1.31	202.05	2.00	0.89	0.89
24.04	184.10	139.14	1.36	189.41	2.06	0.87	0.87
24.12	161.40	120.36	1.48	177.81	2.14	0.85	0.85
24.17	184.95	139.27	1.35	188.65	2.05	0.87	0.87
24.22	157.02	116.44	1.51	175.58	2.15	0.85	0.85
24.29	185.80	139.74	1.33	186.07	2.03	0.87	0.87
24.35	207.87	157.76	1.27	199.66	1.94	0.89	0.89
24.41	224.31	171.07	1.23	210.86	1.89	0.90	0.90
24.49	236.11	181.20	1.18	213.91	1.83	0.91	0.91
24.55	234.05	179.16	1.19	212.40	1.83	0.90	0.90
24.61	225.12	171.98	1.19	204.00	1.83	0.89	0.89
24.69	205.19	155.54	1.22	189.33	1.87	0.88	0.88
24.76	172.03	128.13	1.29	165.48	1.98	0.84	0.84
24.80	148.80	109.24	1.38	150.50	2.07	0.82	0.82
24.90	126.28	91.07	1.54	139.92	2.17	0.80	0.80
24.95	99.56	70.02	2.00	139.76	2.32	0.77	0.77
25.01	78.73	53.95	2.77	149.20	2.47	0.75	0.75
25.07	61.22	40.77	3.92	159.77	2.62	1.67	2.83
25.14	51.92	33.92	4.80	162.94	2.71	1.57	2.38
25.20	42.90	27.38	6.04	165.23	2.81	1.46	1.95

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
25.27	37.00	23.36	7.02	163.93	2.89	1.34	1.67
25.34	34.50	21.64	7.21	156.01	2.90	1.20	1.55
25.40	32.71	20.42	7.34	149.82	2.91	1.09	1.46
25.46	28.87	17.86	8.15	145.56	2.96	0.99	1.28
25.54	27.70	17.04	8.16	138.99	2.96	0.89	1.22
25.60	27.79	17.06	8.14	138.82	2.96	0.89	1.22
25.68	29.67	18.22	7.80	142.09	2.94	0.95	1.30
25.73	31.99	19.68	7.23	142.20	2.90	0.98	1.41
25.79	35.22	21.70	6.54	141.97	2.85	1.02	1.55
25.87	46.66	29.61	4.52	133.78	2.68	1.07	2.07
25.94	59.53	38.77	3.25	125.96	2.54	0.51	0.70
25.99	95.10	65.16	1.75	114.01	2.25	0.74	0.74
26.05	113.06	78.65	1.51	118.83	2.15	0.77	0.77
26.13	139.78	98.95	1.34	132.93	2.04	0.80	0.80
26.18	152.11	108.31	1.30	141.24	2.00	0.81	0.81
26.28	161.86	115.71	1.27	147.35	1.95	0.82	0.82
26.32	164.98	118.07	1.26	149.26	1.94	0.83	0.83
26.38	168.74	120.86	1.25	151.64	1.93	0.83	0.83
26.48	178.39	128.96	1.20	155.10	1.85	0.83	0.83
26.53	185.36	134.09	1.19	160.13	1.84	0.84	0.84
26.59	193.13	139.31	1.20	167.46	1.85	0.85	0.85
26.68	205.65	147.87	1.21	178.79	1.86	0.87	0.87
26.73	213.06	153.01	1.21	185.07	1.86	0.88	0.88
26.77	211.90	151.46	1.23	185.55	1.88	0.88	0.88
26.85	210.74	149.61	1.24	186.17	1.91	0.88	0.88
26.91	216.55	153.74	1.24	190.40	1.90	0.88	0.88
26.97	219.94	155.99	1.24	192.73	1.90	0.88	0.88
27.04	217.53	153.64	1.24	191.12	1.91	0.88	0.88
27.11	212.71	149.56	1.25	187.43	1.92	0.88	0.88
27.20	201.80	140.94	1.27	178.80	1.95	0.87	0.87
27.25	194.39	135.24	1.28	172.68	1.96	0.86	0.86
27.31	185.90	128.65	1.29	166.08	1.98	0.85	0.85
27.36	166.50	113.65	1.35	153.36	2.04	0.83	0.83
27.46	144.51	96.72	1.47	142.61	2.13	0.81	0.81
27.51	132.26	87.43	1.59	139.17	2.19	0.80	0.80
27.56	111.62	72.11	1.92	138.77	2.30	0.78	0.78
27.63	95.98	60.70	2.35	142.48	2.39	0.76	0.76
27.71	95.67	60.34	2.35	141.60	2.39	0.76	0.76
27.76	95.67	60.33	2.30	138.83	2.39	0.76	0.76
27.84	95.36	60.03	2.27	136.11	2.38	0.76	0.76
27.90	98.13	61.94	2.15	133.38	2.36	0.76	0.76
27.95	109.22	69.84	1.87	130.26	2.28	0.77	0.77
28.05	139.69	91.92	1.46	134.33	2.13	0.80	0.80
28.09	154.34	102.73	1.37	140.79	2.06	0.82	0.82
28.15	167.30	112.37	1.31	147.63	2.01	0.83	0.83
28.25	172.84	116.42	1.29	150.34	1.98	0.83	0.83
28.30	173.55	116.79	1.29	150.56	1.98	0.83	0.83
28.35	171.23	114.86	1.30	148.88	1.99	0.83	0.83

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
28.45	163.63	108.66	1.33	144.29	2.02	0.82	0.82
28.50	159.08	104.98	1.35	141.97	2.05	0.82	0.82
28.55	154.70	101.50	1.38	139.77	2.07	0.81	0.81
28.61	147.81	96.19	1.42	136.47	2.10	0.81	0.81
28.69	141.74	91.87	1.43	131.13	2.11	0.80	0.80
28.74	138.34	90.13	1.38	124.19	2.07	0.79	0.79
28.84	133.87	86.35	1.43	123.14	2.10	0.79	0.79
28.89	132.62	85.23	1.44	123.04	2.12	0.78	0.78
28.94	132.18	84.71	1.45	123.24	2.12	0.78	0.78
29.03	132.18	84.35	1.47	123.85	2.13	0.78	0.78
29.08	131.82	83.92	1.48	123.90	2.14	0.78	0.78
29.14	132.22	84.02	1.48	124.30	2.14	0.79	0.79
29.21	131.46	83.16	1.50	124.80	2.15	0.79	0.79
29.27	132.26	83.41	1.51	126.30	2.16	0.79	0.79
29.37	133.78	84.06	1.52	127.96	2.16	0.79	0.79
29.41	134.14	84.17	1.52	128.34	2.16	0.79	0.79
29.47	135.12	84.63	1.53	129.20	2.16	0.79	0.79
29.56	137.27	85.86	1.52	130.26	2.16	0.79	0.79
29.59	137.98	86.23	1.52	130.68	2.16	0.80	0.80
29.67	138.16	86.11	1.52	131.05	2.16	0.80	0.80
29.77	137.89	85.54	1.54	131.53	2.17	0.80	0.80
29.81	136.46	84.40	1.56	131.34	2.18	0.79	0.79
29.87	134.23	82.64	1.59	131.07	2.19	0.79	0.79
29.97	131.46	80.44	1.62	130.27	2.20	0.79	0.79
29.99	129.94	79.32	1.64	129.90	2.21	0.79	0.79
30.07	127.71	77.65	1.66	128.73	2.22	0.78	0.78
30.13	124.85	75.63	1.68	126.88	2.22	0.78	0.78
30.21	122.52	73.92	1.70	125.35	2.23	0.78	0.78
30.27	121.36	73.04	1.70	124.41	2.23	0.77	0.77
30.34	121.63	73.17	1.68	122.83	2.22	0.77	0.77
30.40	122.97	74.11	1.64	121.28	2.21	0.77	0.77
30.46	127.35	77.16	1.56	120.57	2.18	0.78	0.78
30.53	136.55	83.71	1.45	121.27	2.12	0.78	0.78
30.59	145.13	90.04	1.36	122.90	2.06	0.79	0.79
30.66	150.58	94.12	1.32	124.54	2.02	0.79	0.79
30.71	148.53	92.67	1.32	122.75	2.02	0.79	0.79
30.79	135.66	83.24	1.39	115.91	2.08	0.78	0.78
30.85	125.47	75.75	1.49	112.84	2.14	0.77	0.77
30.94	95.27	54.62	2.11	115.05	2.34	0.74	0.74
30.99	80.97	45.11	2.65	119.74	2.45	0.72	0.72
31.05	68.46	36.99	3.43	127.02	2.56	0.64	0.71
31.11	55.32	28.66	4.83	138.36	2.71	1.11	2.01
31.19	49.60	25.12	5.66	142.11	2.78	1.10	1.79
31.25	47.01	23.70	6.22	147.48	2.83	1.14	1.69
31.30	46.38	23.34	6.42	149.90	2.84	1.16	1.67
31.38	46.02	23.08	6.67	153.87	2.86	1.20	1.65
31.45	47.37	23.73	6.59	156.29	2.86	1.25	1.70
31.50	47.81	23.92	6.61	158.12	2.86	1.28	1.71

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
31.58	51.74	25.90	5.93	153.47	2.81	1.26	1.85
31.64	55.68	28.08	5.25	147.42	2.75	1.23	1.99
31.70	62.65	32.38	4.21	136.22	2.65	1.15	2.25
31.77	75.34	40.37	3.02	121.72	2.51	0.71	0.71
31.85	96.61	54.22	2.00	108.70	2.32	0.73	0.73
31.89	112.60	64.90	1.65	106.82	2.21	0.75	0.75
31.98	136.73	81.41	1.38	112.72	2.08	0.77	0.77
32.03	150.23	90.75	1.32	119.66	2.01	0.79	0.79
32.09	163.36	100.08	1.27	127.21	1.95	0.80	0.80
32.18	187.49	117.35	1.21	141.59	1.86	0.82	0.82
32.23	194.64	122.03	1.20	146.18	1.85	0.83	0.83
32.29	208.14	131.18	1.18	154.21	1.82	0.84	0.84
32.35	222.97	141.25	1.15	162.35	1.80	0.86	0.86
32.42	235.48	149.70	1.13	168.53	1.78	0.87	0.87
32.49	252.46	161.52	1.08	174.30	1.75	0.88	0.88
32.58	264.71	169.47	1.06	180.18	1.74	0.89	0.89
32.63	266.05	169.82	1.08	182.72	1.74	0.90	0.90
32.69	262.21	166.45	1.10	183.68	1.76	0.89	0.89
32.75	254.61	160.40	1.14	182.36	1.79	0.89	0.89
32.83	246.74	154.23	1.16	179.49	1.81	0.88	0.88
32.88	237.45	147.35	1.19	174.92	1.83	0.87	0.87
32.94	228.87	141.03	1.21	169.98	1.86	0.87	0.87
33.01	220.65	134.97	1.22	164.85	1.88	0.86	0.86
33.08	213.32	129.59	1.24	160.08	1.90	0.85	0.85
33.17	205.19	123.71	1.25	154.53	1.92	0.85	0.85
33.23	201.08	120.76	1.25	151.53	1.93	0.84	0.84
33.28	198.04	118.59	1.26	149.32	1.93	0.84	0.84
33.34	193.03	115.05	1.27	145.73	1.95	0.83	0.83
33.41	187.85	111.43	1.27	141.99	1.96	0.83	0.83
33.48	181.77	107.16	1.29	137.84	1.97	0.82	0.82
33.54	173.64	101.96	1.29	131.74	1.98	0.81	0.81
33.62	163.54	95.72	1.29	123.80	1.98	0.80	0.80
33.66	156.13	90.58	1.32	119.25	2.01	0.79	0.79
33.76	139.86	79.41	1.39	110.48	2.08	0.77	0.77
33.81	132.26	74.25	1.44	107.22	2.12	0.76	0.76
33.87	125.38	69.57	1.51	105.05	2.15	0.76	0.76
33.93	109.65	59.15	1.74	103.15	2.25	0.74	0.74
33.99	105.54	56.36	1.84	103.80	2.28	0.73	0.73
34.07	99.65	52.22	2.08	108.39	2.34	0.73	0.73
34.15	84.99	42.54	2.91	123.79	2.49	0.73	0.73
34.20	74.35	35.97	3.77	135.54	2.60	1.20	2.47
34.26	60.23	27.74	5.38	149.28	2.76	1.25	1.98
34.34	45.94	20.87	7.79	162.62	2.94	1.27	1.49
34.41	40.48	18.23	9.02	164.35	3.01	1.23	1.30
34.46	36.02	16.08	10.20	164.12	3.08	1.18	1.15
34.55	31.28	13.80	12.05	166.27	3.17	1.17	0.99
34.58	30.03	13.19	12.81	168.96	3.20	1.20	0.94
34.66	31.82	14.00	11.71	164.06	3.15	1.14	1.00

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
34.72	38.96	17.34	9.34	161.99	3.03	1.18	1.24
34.80	50.67	22.79	6.61	150.58	2.86	1.16	1.63
34.85	57.46	25.94	5.57	144.49	2.78	1.15	1.85
34.94	80.07	38.52	3.30	127.29	2.54	0.72	0.72
34.98	105.99	54.05	2.12	114.83	2.35	0.74	0.74
35.05	131.46	70.18	1.58	110.98	2.19	0.77	0.77
35.15	153.44	85.02	1.35	115.01	2.05	0.78	0.78
35.19	163.63	92.10	1.30	119.65	1.99	0.79	0.79
35.25	170.51	97.46	1.26	122.48	1.93	0.80	0.80
35.35	173.91	100.28	1.23	123.39	1.89	0.80	0.80
35.38	173.46	99.92	1.23	122.99	1.89	0.79	0.79
35.44	171.50	98.41	1.24	121.75	1.90	0.79	0.79
35.54	162.56	91.97	1.26	116.23	1.94	0.78	0.78
35.57	160.33	91.31	1.25	113.76	1.91	0.78	0.78
35.64	151.93	86.49	1.24	107.39	1.91	0.76	0.76
35.72	138.79	75.96	1.34	101.93	2.04	0.76	0.76
35.77	130.48	70.98	1.36	96.33	2.05	0.74	0.74
35.84	117.79	61.89	1.53	94.81	2.16	0.74	0.74
35.90	104.92	53.42	1.80	95.96	2.26	0.72	0.72
35.97	87.04	42.30	2.41	102.10	2.41	0.54	0.71
36.06	73.55	34.09	3.34	113.82	2.55	0.40	0.70
36.11	68.90	31.28	3.85	120.27	2.61	0.93	2.15
36.17	67.47	30.30	4.12	124.78	2.64	0.97	2.10
36.25	69.89	31.45	4.01	126.14	2.63	1.00	2.18
36.30	68.55	30.61	4.19	128.32	2.65	1.02	2.13
36.37	64.88	28.48	4.66	132.59	2.70	1.04	2.01
36.45	58.54	25.21	5.50	138.75	2.77	1.06	1.80
36.51	53.89	23.08	6.18	142.56	2.83	1.06	1.65
36.56	51.30	21.89	6.52	142.67	2.85	1.04	1.56
36.61	48.71	20.70	6.76	139.99	2.87	0.98	1.48
36.70	48.71	20.65	6.62	136.77	2.86	0.94	1.48
36.75	50.22	21.29	6.37	135.51	2.84	0.94	1.52
36.85	52.55	22.26	6.10	135.82	2.82	0.96	1.59
36.90	54.34	23.02	5.94	136.71	2.81	0.99	1.64
36.95	54.51	23.06	6.01	138.56	2.81	1.01	1.65
37.01	49.78	20.93	6.77	141.76	2.87	1.01	1.50
37.09	44.59	18.60	7.61	141.59	2.93	0.96	1.33
37.16	40.30	16.69	8.27	138.04	2.97	0.88	1.19
37.25	33.69	13.75	9.75	134.08	3.05	0.78	0.98
37.30	31.55	12.79	10.37	132.71	3.09	0.75	0.91
37.35	30.74	12.42	10.55	131.05	3.10	0.73	0.89
37.43	30.56	12.31	10.45	128.65	3.09	0.70	0.88
37.48	30.83	12.42	10.22	126.91	3.08	0.68	0.89
37.55	33.25	13.44	9.13	122.67	3.02	0.65	0.96
37.63	44.59	18.33	6.23	114.25	2.83	0.65	1.31
37.68	60.06	25.76	4.02	103.47	2.63	0.65	1.79
37.74	85.70	39.97	2.29	91.36	2.38	0.31	0.69
37.80	97.77	47.25	1.82	85.96	2.27	0.45	0.70

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
37.88	110.46	55.82	1.46	81.23	2.12	0.55	0.71
37.93	117.61	59.97	1.41	84.57	2.09	0.72	0.72
38.00	126.28	65.07	1.36	88.82	2.06	0.73	0.73
38.08	133.78	69.17	1.35	93.33	2.04	0.74	0.74
38.13	139.86	72.50	1.34	97.07	2.03	0.75	0.75
38.20	144.60	74.80	1.34	100.44	2.04	0.76	0.76
38.27	150.14	77.65	1.34	104.05	2.04	0.77	0.77
38.33	151.66	78.24	1.34	105.22	2.04	0.77	0.77
38.40	149.07	75.95	1.39	105.21	2.08	0.77	0.77
38.46	151.70	77.04	1.39	107.38	2.08	0.77	0.77
38.53	147.01	73.69	1.45	106.62	2.12	0.77	0.77
38.60	151.75	76.22	1.43	108.97	2.11	0.78	0.78
38.67	159.25	80.71	1.38	111.78	2.08	0.78	0.78
38.72	168.46	86.37	1.34	115.81	2.04	0.79	0.79
38.80	178.11	92.23	1.31	120.64	2.00	0.80	0.80
38.85	181.51	94.27	1.30	122.37	1.99	0.80	0.80
38.91	183.03	95.10	1.29	123.02	1.98	0.81	0.81
38.98	181.69	94.06	1.30	122.19	1.99	0.80	0.80
39.05	177.48	91.19	1.31	119.79	2.01	0.80	0.80
39.11	168.01	85.23	1.35	114.74	2.04	0.79	0.79
39.20	153.44	76.24	1.42	107.91	2.10	0.78	0.78
39.25	148.08	72.97	1.45	105.61	2.12	0.77	0.77
39.31	153.85	76.34	1.41	107.62	2.09	0.78	0.78
39.39	150.32	73.83	1.45	106.93	2.12	0.77	0.77
39.44	154.25	76.01	1.43	108.58	2.11	0.78	0.78
39.51	159.34	78.97	1.40	110.38	2.09	0.78	0.78
39.60	164.71	82.16	1.37	112.17	2.06	0.79	0.79
39.65	167.74	83.97	1.35	113.33	2.05	0.79	0.79
39.70	171.94	86.52	1.33	115.12	2.03	0.79	0.79
39.79	177.04	89.57	1.31	117.42	2.00	0.80	0.80
39.84	179.72	91.16	1.30	118.68	1.99	0.80	0.80
39.90	181.42	92.18	1.29	119.37	1.98	0.80	0.80
39.99	180.97	91.75	1.30	118.84	1.99	0.80	0.80
40.03	178.83	90.32	1.30	117.61	1.99	0.80	0.80
40.10	175.79	88.34	1.31	115.79	2.00	0.79	0.79
40.20	171.32	85.24	1.33	113.50	2.03	0.79	0.79
40.24	169.08	83.71	1.34	112.41	2.04	0.79	0.79
40.30	166.40	81.90	1.36	111.18	2.05	0.79	0.79
40.39	160.50	77.79	1.41	109.45	2.09	0.78	0.78
40.44	158.18	76.44	1.41	108.10	2.10	0.78	0.78
40.50	156.48	75.37	1.42	107.19	2.10	0.78	0.78
40.59	153.89	73.76	1.43	105.77	2.11	0.77	0.77
40.63	152.37	72.82	1.44	105.09	2.12	0.77	0.77
40.69	151.30	71.58	1.49	106.56	2.14	0.77	0.77
40.76	143.70	66.53	1.61	107.39	2.20	0.77	0.77
40.83	143.70	66.16	1.64	108.82	2.21	0.77	0.77
40.88	143.70	65.86	1.67	110.10	2.22	0.77	0.77
40.97	143.61	65.19	1.74	113.25	2.24	0.78	0.78

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
41.02	142.36	64.16	1.79	115.02	2.26	0.78	0.78
41.08	139.86	62.33	1.89	117.74	2.29	0.78	0.78
41.16	137.54	60.75	1.97	119.47	2.31	0.78	0.78
41.23	135.39	59.52	2.00	118.93	2.32	0.77	0.77
41.28	132.53	57.97	2.04	118.15	2.33	0.77	0.77
41.35	128.87	55.95	2.11	117.78	2.34	0.76	0.76
41.42	125.74	54.23	2.16	117.27	2.36	0.76	0.76
41.47	122.43	52.44	2.23	117.05	2.37	0.76	0.76
41.57	119.57	50.91	2.28	115.88	2.38	0.75	0.75
41.62	117.25	49.70	2.32	115.12	2.39	0.75	0.75
41.68	114.39	48.24	2.36	114.05	2.40	0.74	0.74
41.75	112.25	47.20	2.37	112.02	2.40	0.74	0.74
41.81	109.30	45.66	2.44	111.53	2.41	0.74	0.74
41.87	103.85	42.69	2.65	113.34	2.45	0.73	0.73
41.94	93.84	37.35	3.21	119.74	2.53	0.72	0.72
42.01	86.69	33.63	3.72	124.98	2.60	0.72	0.72
42.11	68.01	25.22	5.37	135.31	2.76	1.05	1.80
42.16	59.43	21.88	6.35	138.94	2.84	1.02	1.56
42.21	51.57	18.83	7.48	140.91	2.92	0.98	1.34
42.26	47.01	17.05	8.15	138.97	2.96	0.92	1.22
42.33	38.52	13.77	10.11	139.21	3.07	0.86	0.98
42.39	35.30	12.51	10.96	137.14	3.12	0.82	0.89
42.48	31.82	11.16	12.44	138.77	3.19	0.82	0.80
42.55	31.37	10.96	12.66	138.85	3.20	0.81	0.78
42.60	32.26	11.29	12.29	138.70	3.18	0.82	0.81
42.66	32.89	11.51	12.10	139.31	3.17	0.83	0.82
42.74	34.14	11.96	11.58	138.53	3.15	0.83	0.85
42.78	34.59	12.12	11.05	133.91	3.12	0.78	0.87
42.85	35.84	12.57	10.19	128.06	3.08	0.72	0.90
42.94	38.61	13.59	9.78	132.98	3.06	0.79	0.97
42.98	41.47	14.66	8.88	130.11	3.01	0.78	1.05
43.05	47.19	16.79	7.74	129.99	2.94	0.82	1.20
43.12	53.62	19.18	6.75	129.52	2.87	0.86	1.37
43.18	85.44	32.46	3.47	112.72	2.57	0.53	0.70
43.25	97.68	38.37	2.82	108.23	2.48	0.72	0.72
43.33	110.37	44.83	2.30	103.25	2.39	0.73	0.73
43.38	111.62	45.46	2.26	102.59	2.38	0.73	0.73
43.45	108.58	43.79	2.36	103.37	2.40	0.73	0.73
43.51	99.65	39.12	2.72	106.45	2.46	0.72	0.72
43.58	84.99	31.78	3.59	114.12	2.58	0.54	0.71
43.64	73.10	26.17	4.66	122.05	2.70	0.92	1.87
43.71	58.54	20.72	6.29	130.42	2.83	0.91	1.48
43.77	45.76	15.96	8.47	135.17	2.98	0.87	1.14
43.84	39.32	13.55	9.88	133.81	3.06	0.81	0.97
43.90	36.10	12.34	10.48	129.24	3.09	0.74	0.88
43.99	28.60	9.54	13.15	125.49	3.22	0.66	0.68
44.03	25.92	8.55	14.38	122.86	3.27	0.62	0.61
44.10	24.84	8.13	14.58	118.64	3.28	0.57	0.58

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
44.18	25.47	8.35	13.80	115.19	3.25	0.54	0.60
44.24	26.81	8.83	12.94	114.26	3.21	0.54	0.63
44.29	27.61	9.11	12.59	114.67	3.19	0.54	0.65
44.38	28.78	9.52	12.36	117.68	3.18	0.58	0.68
44.44	32.26	10.78	11.30	121.73	3.13	0.64	0.77
44.49	39.95	13.57	9.13	123.87	3.02	0.70	0.97
44.57	57.82	20.04	5.88	117.94	2.80	0.76	1.43
44.64	79.63	28.51	3.94	112.25	2.62	0.84	2.00
44.69	110.28	42.90	2.46	105.71	2.42	0.73	0.73
44.78	132.62	53.27	2.06	109.88	2.33	0.76	0.76
44.83	155.68	64.74	1.74	112.54	2.25	0.78	0.78
44.91	178.47	75.88	1.58	119.88	2.19	0.81	0.81
44.95	192.23	82.75	1.51	124.81	2.15	0.82	0.82
45.03	208.23	90.61	1.45	131.56	2.12	0.84	0.84
45.08	213.86	93.15	1.44	134.55	2.12	0.84	0.84
45.18	219.93	95.74	1.44	137.77	2.11	0.85	0.85
45.22	220.02	95.66	1.44	137.77	2.11	0.85	0.85
45.28	217.61	94.20	1.45	136.86	2.12	0.85	0.85
45.35	215.56	92.89	1.47	136.19	2.13	0.85	0.85
45.41	214.04	93.73	1.39	130.67	2.08	0.84	0.84
45.48	212.52	97.86	1.26	123.80	1.94	0.82	0.82
45.55	210.19	95.64	1.28	122.84	1.97	0.82	0.82
45.61	205.01	92.05	1.31	120.48	2.00	0.82	0.82
45.67	195.45	86.25	1.35	116.25	2.04	0.81	0.81
45.74	152.91	62.51	1.70	106.44	2.23	0.77	0.77
45.80	148.62	59.81	1.82	108.71	2.27	0.77	0.77
45.87	129.23	49.32	2.37	117.00	2.40	0.76	0.76
45.94	103.76	36.68	3.62	132.71	2.58	0.74	0.74
46.01	85.61	29.12	5.09	148.23	2.74	1.36	2.08
46.06	74.18	25.07	6.23	156.23	2.83	1.37	1.79
46.16	57.37	19.12	8.58	163.96	2.99	1.34	1.37
46.21	52.37	17.34	9.45	163.91	3.04	1.29	1.24
46.26	50.67	16.73	9.63	161.01	3.05	1.24	1.19
46.34	47.63	15.64	10.33	161.47	3.09	1.23	1.12
46.41	46.11	15.08	10.92	164.61	3.12	1.26	1.08
46.46	45.04	14.69	11.37	166.99	3.14	1.29	1.05
46.55	46.65	15.22	11.13	169.37	3.13	1.33	1.09
46.59	48.80	15.95	10.63	169.50	3.10	1.35	1.14
46.66	53.80	17.66	9.51	167.98	3.04	1.37	1.26
46.74	57.73	18.98	8.78	166.66	3.00	1.38	1.36
46.80	57.46	18.86	8.84	166.70	3.00	1.38	1.35
46.85	55.50	18.16	9.16	166.44	3.02	1.36	1.30
46.93	48.53	15.73	10.65	167.42	3.10	1.32	1.12
46.98	45.40	14.63	11.46	167.69	3.14	1.30	1.04
47.05	41.47	13.26	12.58	166.69	3.19	1.26	0.95
47.13	35.57	11.20	14.09	157.90	3.26	1.11	0.80
47.20	32.80	10.24	14.24	145.84	3.26	0.93	0.73
47.25	29.13	8.97	14.67	131.61	3.28	0.74	0.64

:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$
47.33	25.02	7.55	15.60	117.77	3.32	0.58	0.54
47.39	22.16	6.56	16.95	111.26	3.36	0.50	0.47
47.44	20.02	5.82	18.42	107.30	3.41	0.46	0.42
47.53	18.14	5.17	17.73	91.72	3.39	0.32	0.37
47.57	18.14	5.17	14.04	72.58	3.26	0.18	0.37
47.64	18.14	5.16	14.28	73.70	3.26	0.19	0.37
47.72	18.14	5.15	15.91	81.97	3.33	0.25	0.37
47.79	23.86	7.08	12.92	91.46	3.21	0.33	0.51
47.84	38.79	12.12	7.92	95.96	2.95	0.43	0.87
47.94	72.30	23.78	3.85	91.45	2.61	0.56	1.67
47.98	70.51	22.78	4.22	96.19	2.65	0.60	1.63
48.07	58.45	18.68	6.26	116.96	2.83	0.75	1.33
48.13	52.28	16.58	7.62	126.38	2.93	0.82	1.18
48.18	51.12	16.17	8.03	129.92	2.95	0.85	1.16
48.24	51.83	16.39	8.11	132.84	2.96	0.89	1.17
48.31	51.39	16.21	8.50	137.84	2.98	0.95	1.16
48.36	46.92	14.70	9.68	142.25	3.05	0.97	1.05
48.43	39.23	12.11	11.80	142.85	3.16	0.93	0.86
48.51	33.96	10.33	13.31	137.43	3.22	0.84	0.74
48.58	31.01	9.33	14.18	132.27	3.26	0.76	0.67
48.63	27.26	8.07	15.82	127.67	3.32	0.70	0.58
48.72	23.15	6.69	17.93	119.91	3.40	0.60	0.48
48.76	21.98	6.29	18.50	116.43	3.41	0.56	0.45
48.82	20.82	5.90	18.82	111.04	3.43	0.50	0.42
48.92	21.85	6.23	16.85	104.92	3.36	0.45	0.44
48.97	21.00	5.94	17.66	104.91	3.39	0.44	0.42
49.03	21.72	6.17	16.94	104.50	3.36	0.44	0.44
49.12	22.70	6.48	16.19	104.91	3.34	0.45	0.46
49.15	22.97	6.56	16.17	106.16	3.34	0.46	0.47
49.23	24.31	6.99	15.68	109.65	3.32	0.50	0.50
49.30	25.56	7.39	15.10	111.61	3.30	0.52	0.53
49.35	26.10	7.56	14.88	112.54	3.29	0.53	0.54
49.41	28.15	8.22	13.69	112.60	3.24	0.54	0.59
49.48	30.74	9.06	12.73	115.27	3.20	0.58	0.65
49.54	32.98	9.78	12.34	120.63	3.18	0.64	0.70
49.61	35.48	10.58	11.94	126.31	3.16	0.72	0.76
49.69	37.00	11.05	11.97	132.29	3.17	0.80	0.79
49.74	39.86	11.97	11.24	134.56	3.13	0.84	0.86
49.81	47.63	14.49	1.00	14.49	-1.00	0.04	0.62
49.90	74.98	23.34	1.00	23.34	-1.00	0.38	0.70
49.95	86.24	26.98	1.00	26.98	-1.00	0.72	0.72
50.01	95.98	30.12	1.00	30.12	-1.00	0.74	0.74
50.09	102.68	32.25	1.00	32.25	-1.00	0.75	0.75
50.14	105.36	33.09	1.00	33.09	-1.00	0.76	0.76

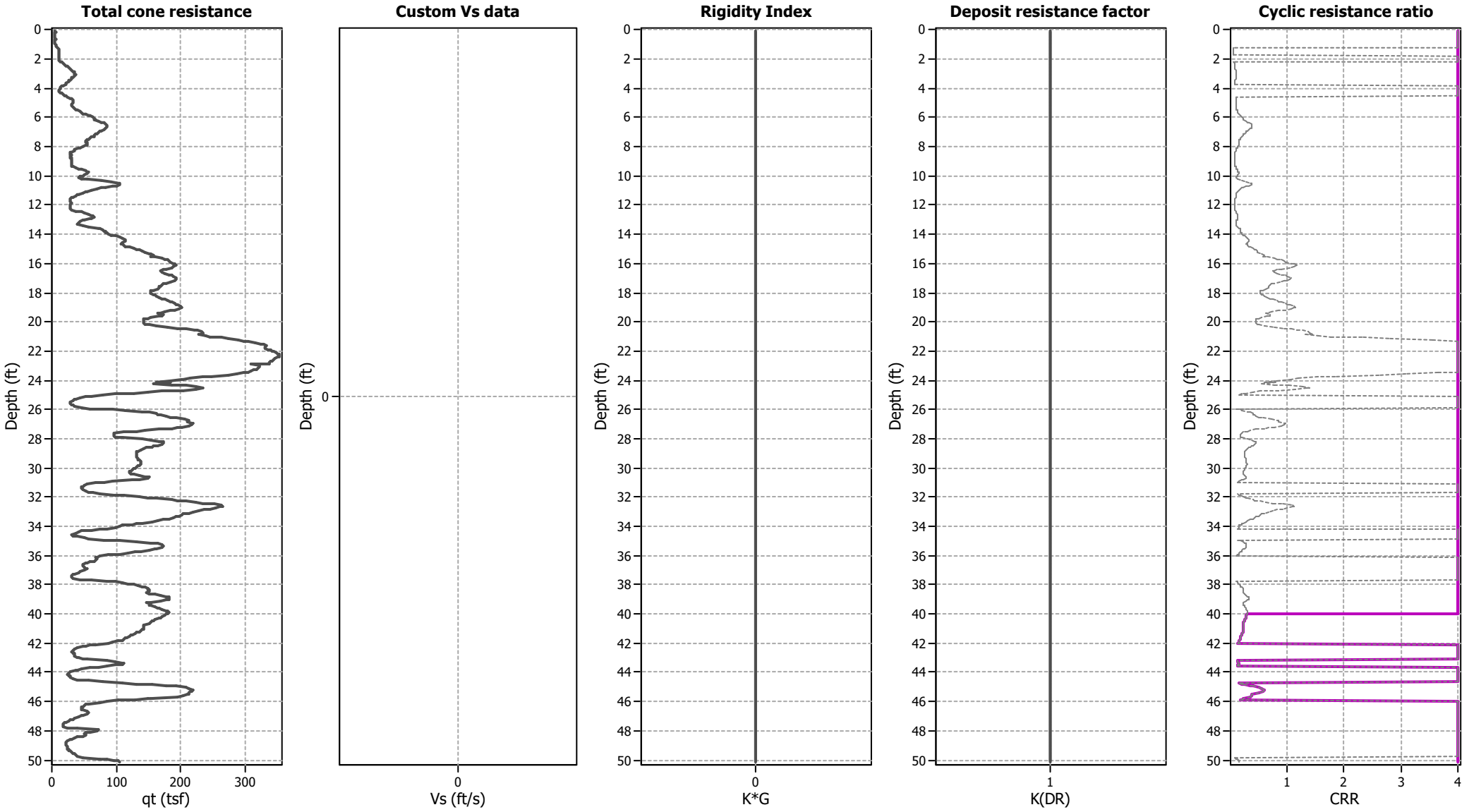
:: Strength loss calculation (Robertson (2009) :: (continued)

Depth (ft)	q_t (tsf)	Q_{tn}	K_c	$Q_{tn,cs}$	I_c	$S_{u(liq)}/\sigma'_v$	$S_{u(peak)}/\sigma'_v$

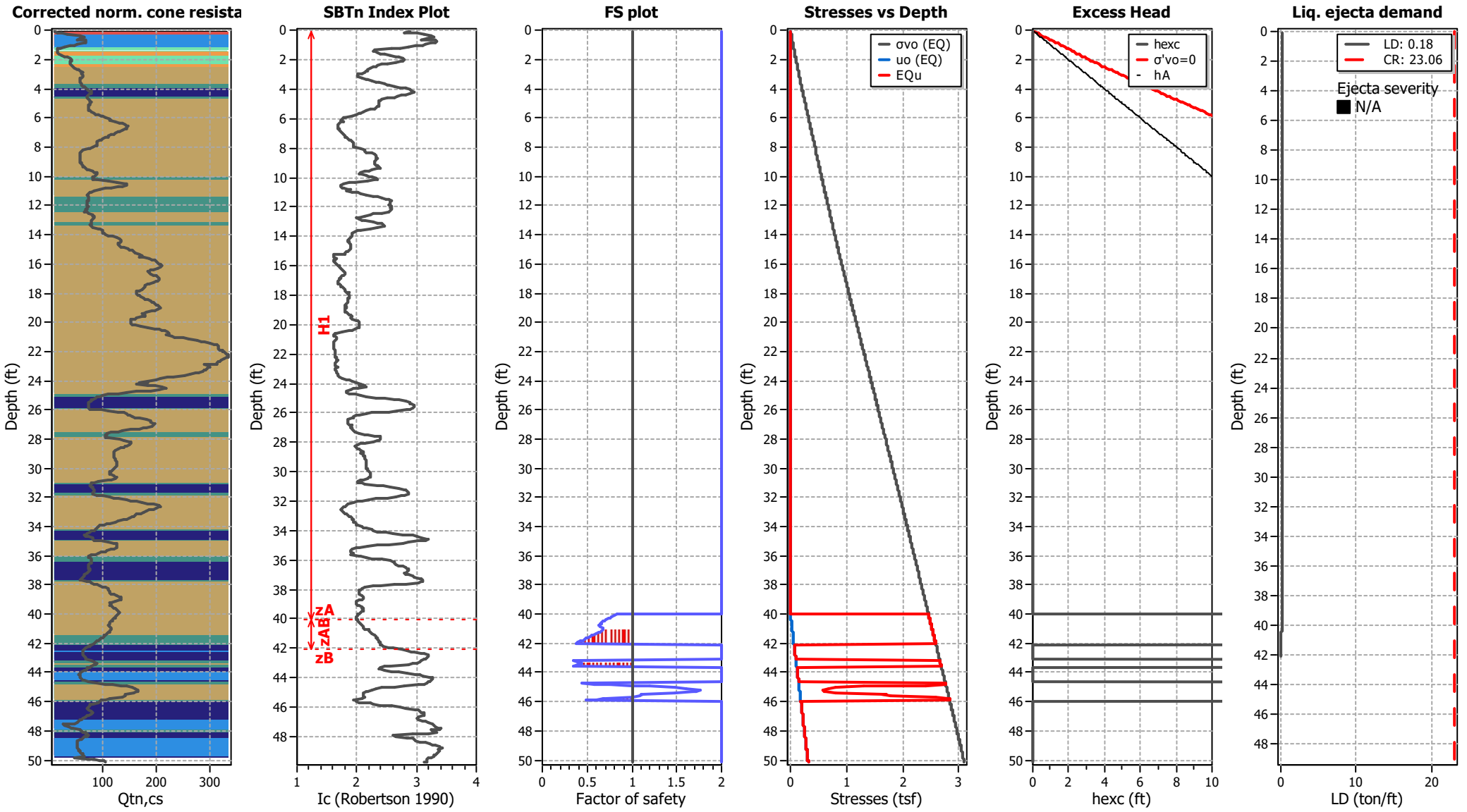
Abbreviations

q_t:	Total cone resistance
K_c:	Cone resistance correction factor due to fines
$Q_{tn,cs}$:	Adjusted and corrected cone resistance due to fines
I_c:	Soil behavior type index
$S_{u(liq)}/\sigma'_v$:	Calculated liquefied undrained strength ratio
$S_{u(peak)}/\sigma'_v$:	Calculated peak undrained strength ratio

Aging Calculation Estimation

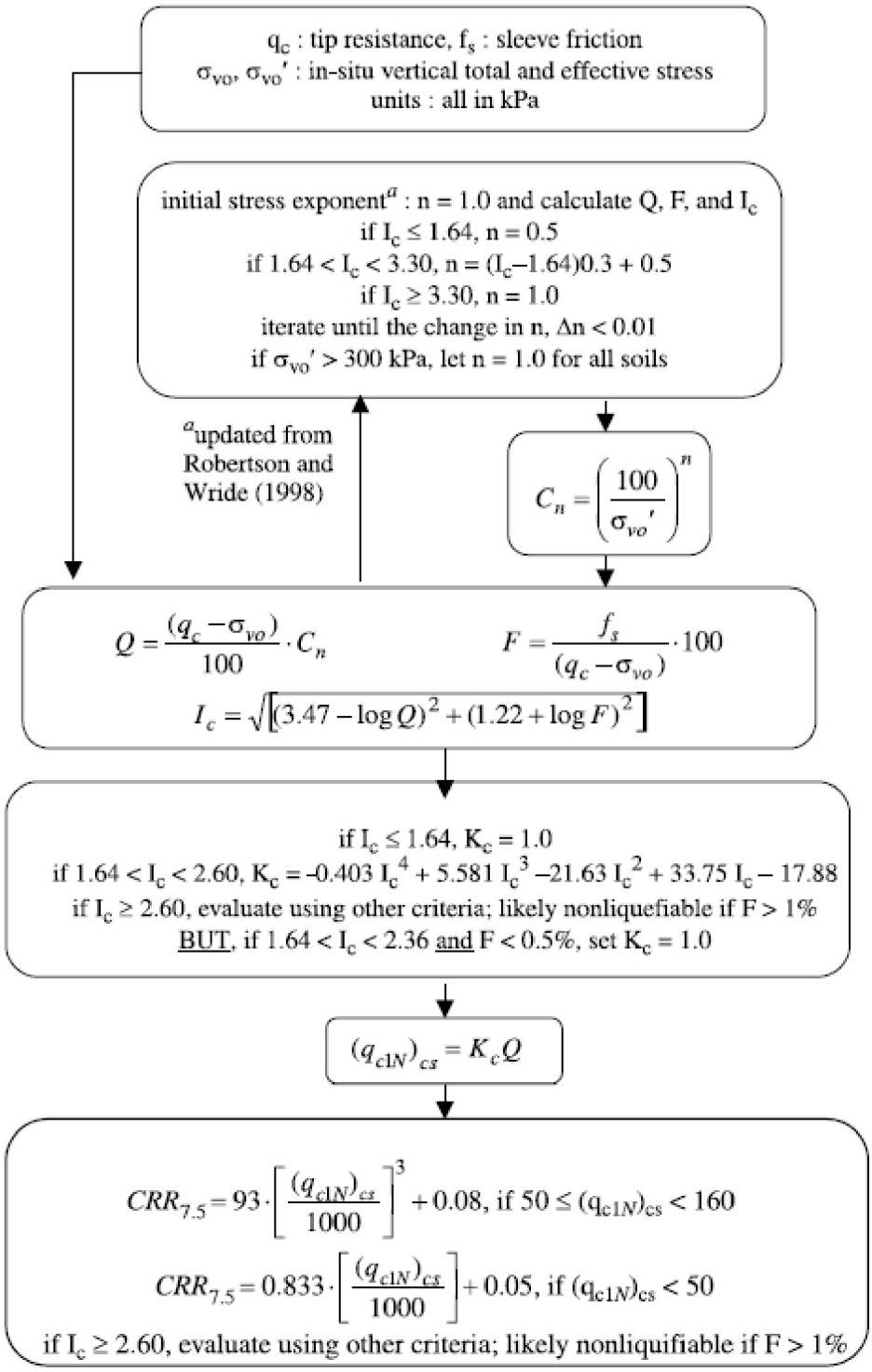


Ejecta Severity Estimation



Procedure for the evaluation of soil liquefaction resistance, NCEER (1998)

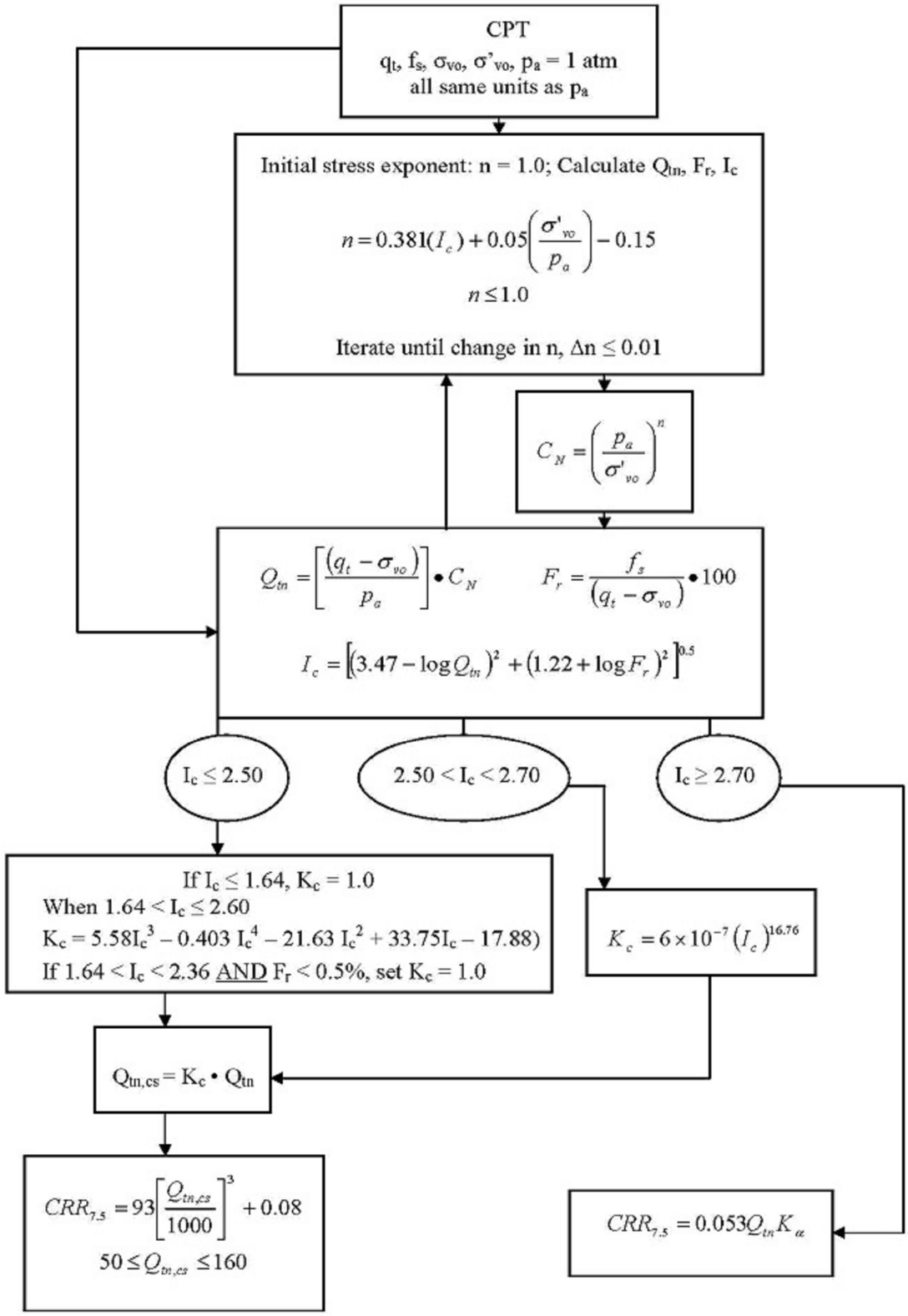
Calculation of soil resistance against liquefaction is performed according to the Robertson & Wride (1998) procedure. The procedure used in the software, slightly differs from the one originally published in NCEER-97-0022 (Proceedings of the NCEER Workshop on Evaluation of Liquefaction Resistance of Soils). The revised procedure is presented below in the form of a flowchart[1]:



[1] "Estimating liquefaction-induced ground settlements from CPT for level ground", G. Zhang, P.K. Robertson, and R.W.I. Brachman

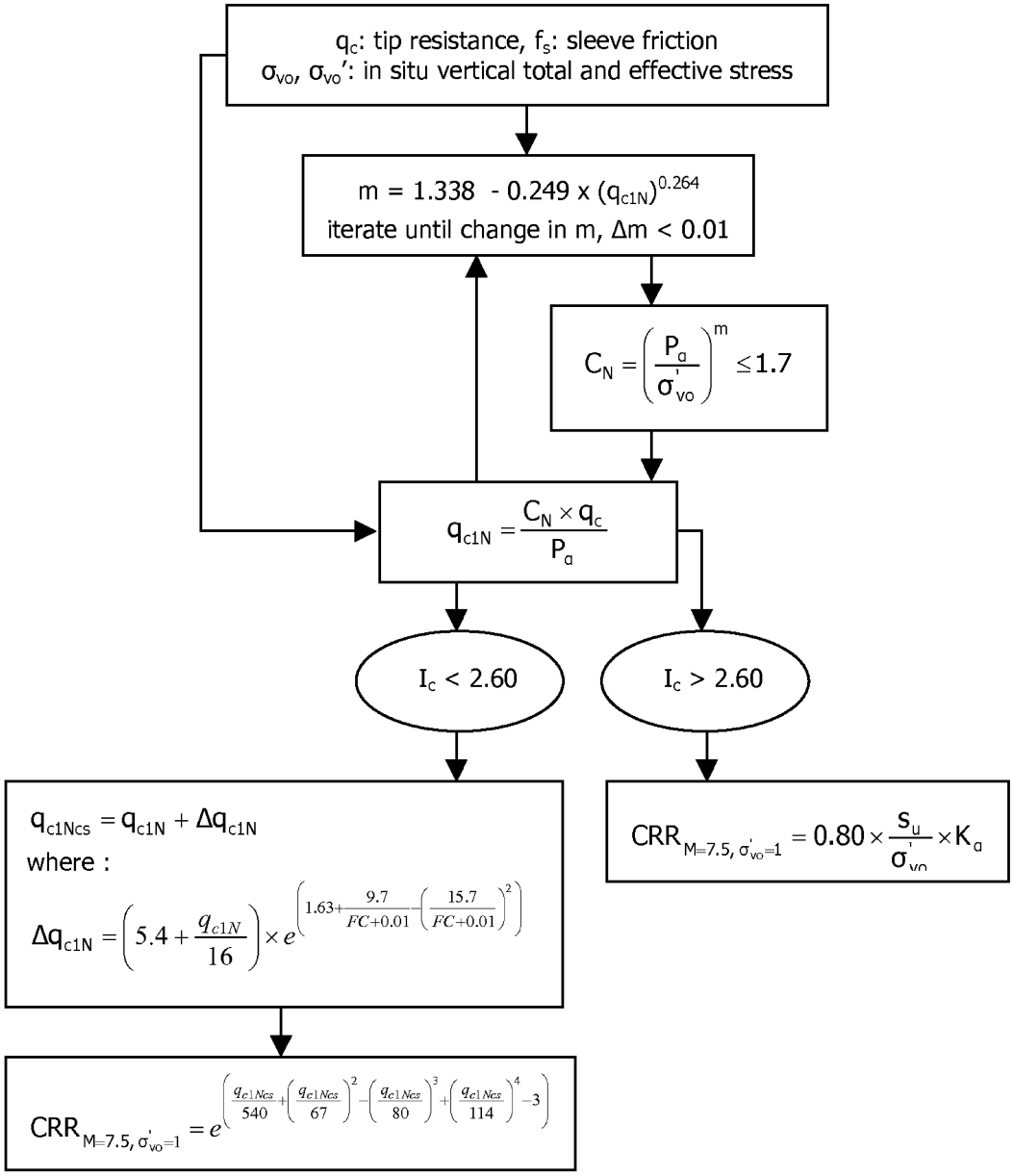
Procedure for the evaluation of soil liquefaction resistance (all soils), Robertson (2010)

Calculation of soil resistance against liquefaction is performed according to the Robertson & Wride (1998) procedure. This procedure used in the software, slightly differs from the one originally published in NCEER-97-0022 (Proceedings of the NCEER Workshop on Evaluation of Liquefaction Resistance of Soils). The revised procedure is presented below in the form of a flowchart[1]:

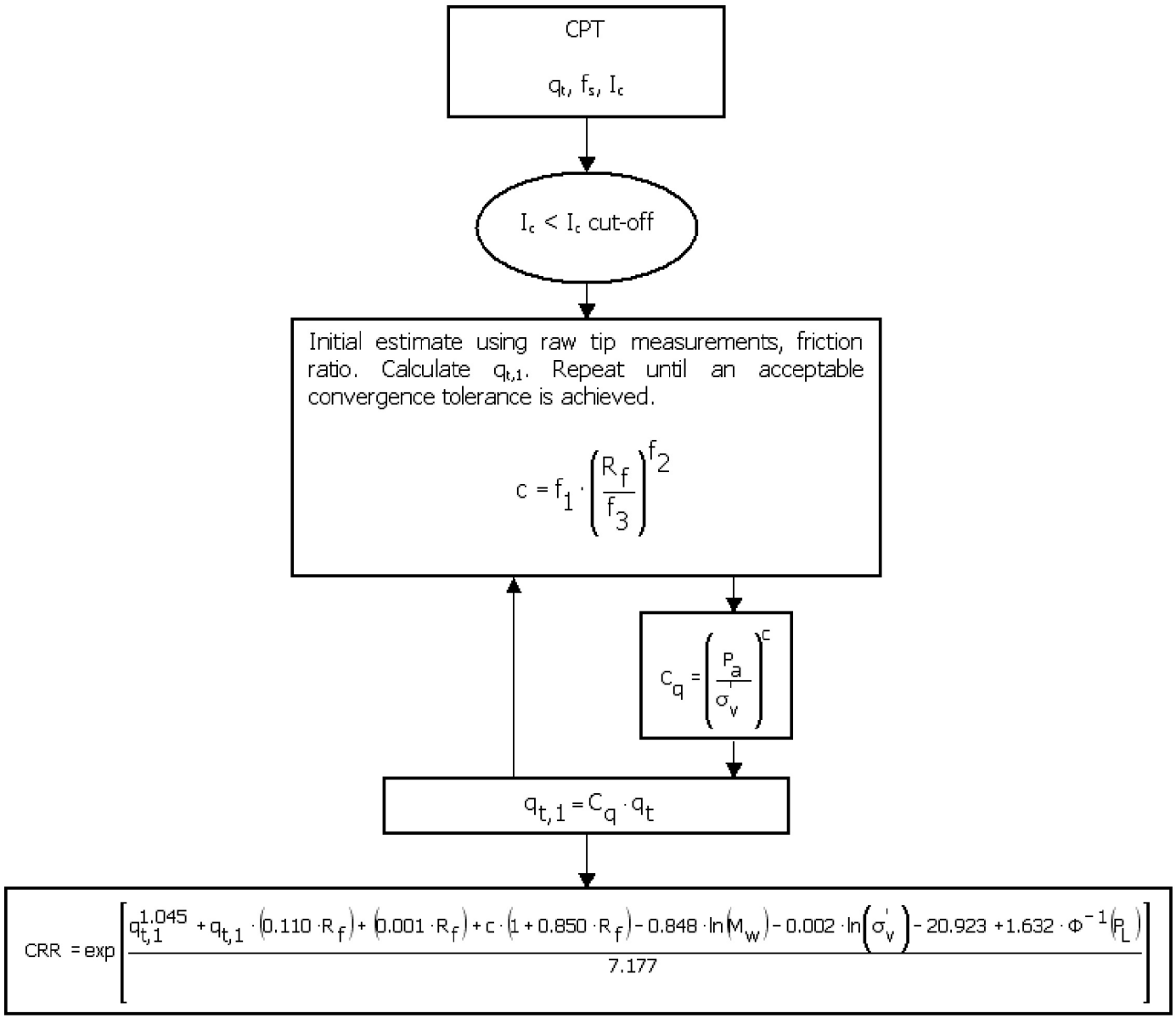


[1] P.K. Robertson, 2009. "Performance based earthquake design using the CPT", Keynote Lecture, International Conference on Performance-based Design in Earthquake Geotechnical Engineering – from case history to practice, IS-Tokyo, June 2009

Procedure for the evaluation of soil liquefaction resistance, Idriss & Boulanger (2008)



Procedure for the evaluation of soil liquefaction resistance (sandy soils), Moss et al. (2006)



Procedure for the evaluation of soil liquefaction resistance, Boulanger & Idriss(2014)

$$FS_{liq} = \frac{CRR_{M=7.5,\sigma'_v=1atm}}{CSR_{M=7.5,\sigma'_v=1atm}}$$

$$CSR_{M=7.5,\sigma'_v=1atm} = 0.65 \frac{\sigma_v}{\sigma'_v} \frac{a_{max}}{g} r_d \frac{1}{MSF} \frac{1}{K_\sigma}$$

$$r_d = \exp\left[\alpha(z) + \beta(z) \cdot M\right]$$

$$\alpha(z) = -1.012 - 1.126 \sin\left(\frac{z}{11.73} + 5.133\right)$$

$$\beta(z) = 0.106 + 0.118 \sin\left(\frac{z}{11.28} + 5.142\right)$$

$$K_\sigma = 1 - C_\sigma \ln\left(\frac{\sigma'_v}{P_a}\right) \leq 1.1$$

$$C_\sigma = \frac{1}{37.3 - 8.27\left(q_{c1Ncs}\right)^{0.264}} \leq 0.3$$

$$MSF = 1 + \left(MSF_{max} - 1\right)\left(8.64 \exp\left(\frac{-M}{4}\right) - 1.325\right)$$

$$MSF_{max} = 1.09 + \left(\frac{q_{c1Ncs}}{180}\right)^3 \leq 2.2$$

σ'_v *and* σ_v *at start of earthquake shaking*

$$CRR_{M=7.5,\sigma'_v=1atm} = \exp\left(\frac{q_{c1Ncs}}{113} + \left(\frac{q_{c1Ncs}}{1000}\right)^2 - \left(\frac{q_{c1Ncs}}{140}\right)^3 + \left(\frac{q_{c1Ncs}}{137}\right)^4 - 2.80\right)$$

$$q_{c1Ncs} = q_{c1N} + \Delta q_{c1N}$$

$$\Delta q_{c1N} = \left(11.9 + \frac{q_{c1N}}{14.6}\right) \exp\left(1.63 - \frac{9.7}{FC+2} - \left(\frac{15.7}{FC+2}\right)^2\right)$$

$$q_{c1N} = C_{Ne} \frac{q_c}{P_a}$$

$$C_{Ne} = \left(\frac{P_a}{\sigma'_v}\right)^m \leq 1.7$$

$$m = 1.338 - 0.249\left(q_{c1Ncs}\right)^{0.264} \quad with \quad 0.264 \leq m \leq 0.782$$

$$FC = 80\left(I_C + C_{FC}\right) - 137 \quad with \quad 0\% \leq FC \leq 100\%$$

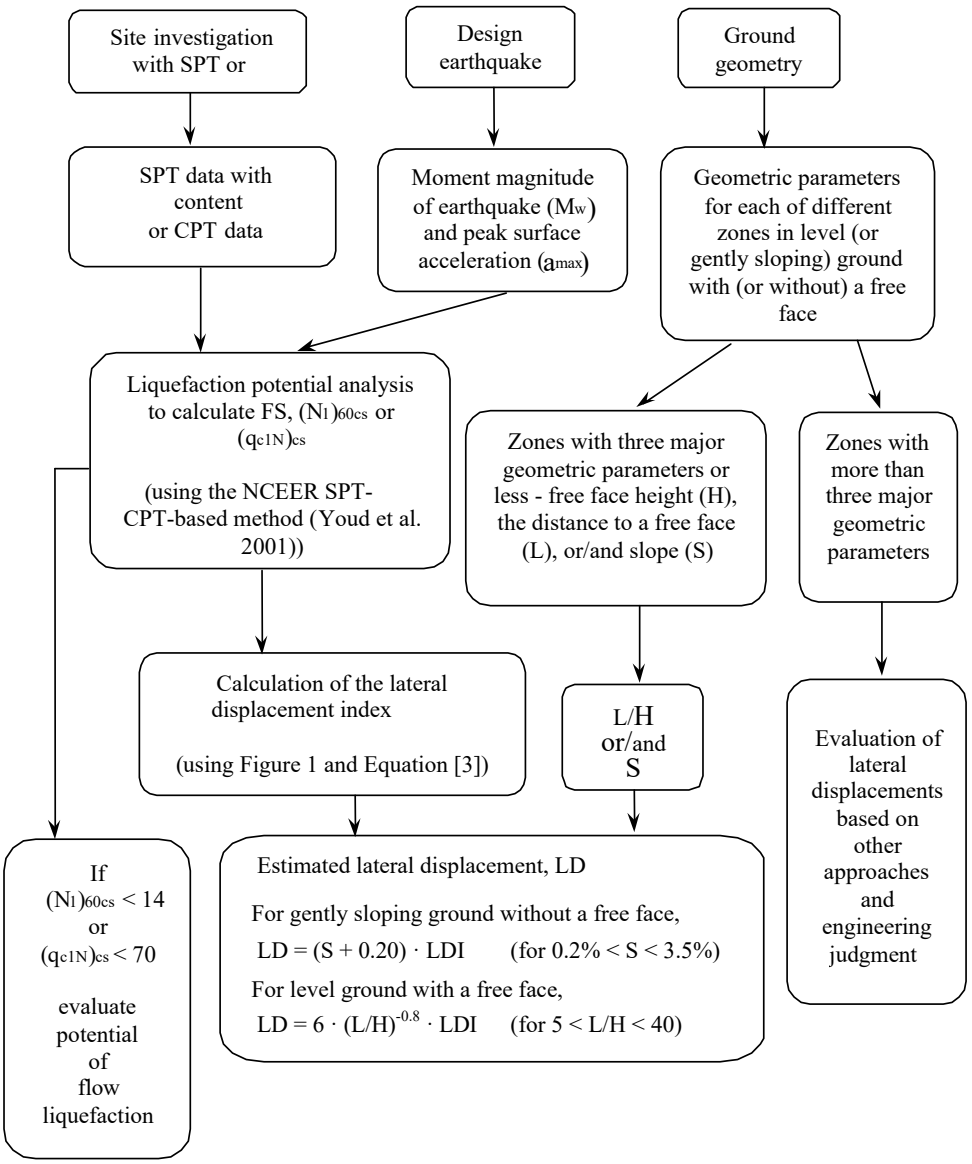
$$I_c = \left[\left(3.47 - \log\left(Q\right)\right)^2 + \left(1.22 + \log\left(F\right)\right)^2\right]^{0.5}$$

$$Q = \left(\frac{q_c - \sigma_{vc}}{P_a}\right)\left(\frac{P_a}{\sigma'_{vc}}\right)^n \; with \; 0.5 \leq n \leq 1.0 \; per \; Robertson \; \& \; Wride \; (1998)$$

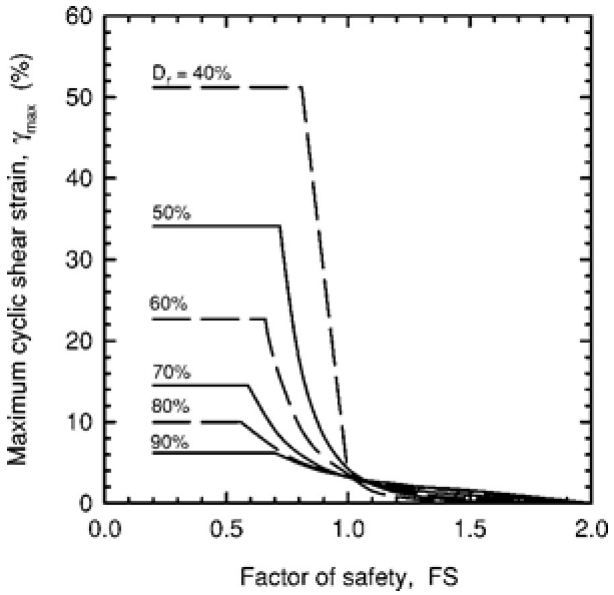
$$F = \left(\frac{f_s}{q_c - \sigma_{vc}}\right) \cdot 100\%$$

σ'_v *at time of CPT sounding*

Procedure for the evaluation of liquefaction-induced lateral spreading displacements



[1] Flow chart illustrating major steps in estimating liquefaction-induced lateral spreading displacements using the proposed approach



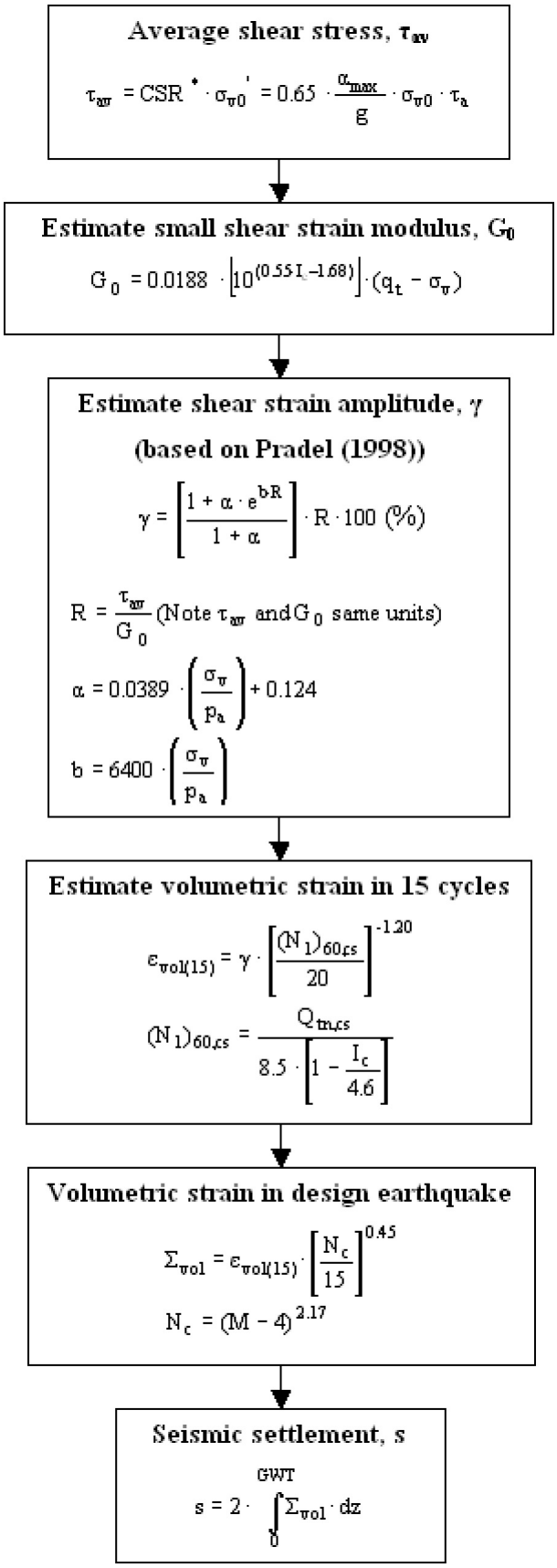
[1] **Figure 1**

$$LDI = \int_0^{z_{max}} \gamma_{max} dz$$

[1] **Equation [3]**

[1] "Estimating liquefaction-induced ground settlements from CPT for level ground", G. Zhang, P.K. Robertson, and R.W.I. Brachman

Procedure for the estimation of seismic induced settlements in dry sands



Robertson, P.K. and Lisheng, S., 2010, "Estimation of seismic compression in dry soils using the CPT" FIFTH INTERNATIONAL CONFERENCE ON RECENT ADVANCES IN GEOTECHNICAL EARTHQUAKE ENGINEERING AND SOIL DYNAMICS, Symposium in honor of professor I. M. Idriss, San Diego, CA

Liquefaction Potential Index (LPI) calculation procedure

Calculation of the Liquefaction Potential Index (LPI) is used to interpret the liquefaction assessment calculations in terms of severity over depth. The calculation procedure is based on the methology developed by Iwasaki (1982) and is adopted by AFPS.

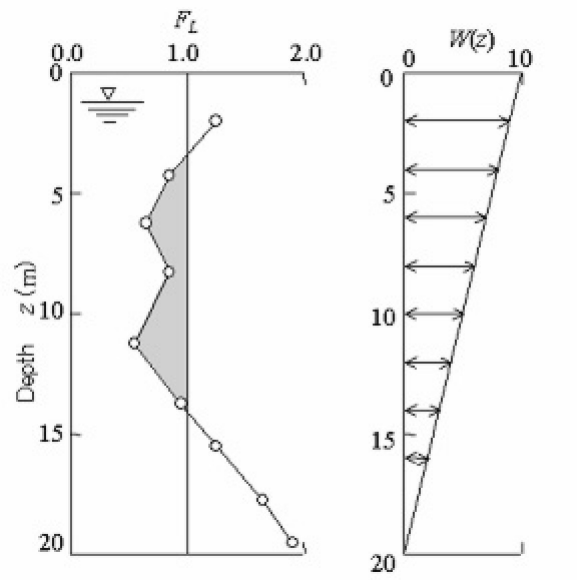
To estimate the severity of liquefaction extent at a given site, LPI is calculated based on the following equation:

$$\mathbf{LPI} = \int_0^{20} (10 - 0{,}5z) \times F_L \times dz$$

where:
F_L = 1 - F.S. when F.S. less than 1
F_L = 0 when F.S. greater than 1
z depth of measurment in meters

Values of LPI range between zero (0) when no test point is characterized as liquefiable and 100 when all points are characterized as susceptible to liquefaction. Iwasaki proposed four (4) discrete categories based on the numeric value of LPI:

- LPI = 0 : Liquefaction risk is very low
- 0 < LPI <= 5 : Liquefaction risk is low
- 5 < LPI <= 15 : Liquefaction risk is high
- LPI > 15 : Liquefaction risk is very high



Graphical presentation of the LPI calculation procedure

Shear-Induced Building Settlement (Ds) calculation procedure

The shear-induced building settlement (Ds) due to liquefaction below the building can be estimated using the relationship developed by Bray and Macedo (2017):

$$Ln(Ds) = c1 + c2 * LBS + 0.58 * Ln\left(Tanh\left(\frac{HL}{6}\right)\right) + 4.59 * Ln(Q) - 0.42 * Ln(Q)^2 - 0.02 * B + 0.84 * Ln(CAVdp) + 0.41 * Ln(Sa1) + \varepsilon$$

where Ds is in the units of mm, c1= -8.35 and c2= 0.072 for LBS ≤ 16, and c1= -7.48 and c2= 0.014 otherwise. Q is the building contact pressure in units of kPa, HL is the cumulative thickness of the liquefiable layers in the units of m, B is the building width in the units of m, CAVdp is a standardized version of the cumulative absolute velocity in the units of g-s, Sa1 is 5%-damped pseudo-acceleration response spectral value at a period of 1 s in the units of g, and ε is a normal random variable with zero mean and 0.50 standard deviation in Ln units. The liquefaction-induced building settlement index (LBS) is:

$$LBS = \sum W * \frac{\varepsilon_{shear}}{z} dz$$

where z (m) is the depth measured from the ground surface > 0, W is a foundation-weighting factor wherein W = 0.0 for z less than Df, which is the embedment depth of the foundation, and W = 1.0 otherwise. The shear strain parameter (ε_shear) is the liquefaction-induced free-field shear strain (in %) estimated using Zhang et al. (2004). It is calculated based on the estimated Dr of the liquefied soil layer and the calculated safety factor against liquefaction triggering (FSL).

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APPENDIX F

GENERAL EARTHWORK AND GRADING GUIDELINES AND PRELIMINARY CRITERIA

GENERAL EARTHWORK, GRADING GUIDELINES, AND PRELIMINARY CRITERIA

General

These guidelines present general procedures and requirements for earthwork and grading as shown on the approved grading plans, including preparation of areas to be filled, placement of fill, installation of subdrains, excavations, and appurtenant structures or flatwork. The recommendations contained in the geotechnical report are part of these earthwork and grading guidelines and would supersede the provisions contained hereafter in the case of conflict. Evaluations performed by the consultant during the course of grading may result in new or revised recommendations which could supersede these guidelines or the recommendations contained in the geotechnical report. Generalized details follow this text.

The contractor is responsible for the satisfactory completion of all earthwork in accordance with provisions of the project plans and specifications and latest adopted Code. In the case of conflict, the most onerous provisions shall prevail. The project geotechnical engineer and engineering geologist (geotechnical consultant), or their representatives, should provide observation and testing services, and geotechnical consultation during the duration of the project.

EARTHWORK OBSERVATIONS AND TESTING

Geotechnical Consultant

Prior to the commencement of grading, a qualified geotechnical consultant (soil engineer and engineering geologist) should be employed for the purpose of observing earthwork procedures and testing the fills for general conformance with the recommendations of the geotechnical report(s), the approved grading plans, and applicable grading codes and ordinances.

The geotechnical consultant should provide testing and observation so that an evaluation may be made that the work is being accomplished as specified. It is the responsibility of the contractor to assist the consultants and keep them apprised of anticipated work schedules and changes, so that they may schedule their personnel accordingly.

All remedial removals, clean-outs, prepared ground to receive fill, key excavations, and subdrain installation should be observed and documented by the geotechnical consultant prior to placing any fill. It is the contractor's responsibility to notify the geotechnical consultant when such areas are ready for observation.

Laboratory and Field Tests

Maximum dry density tests to determine the degree of compaction should be performed in accordance with American Standard Testing Materials test method ASTM designation D-1557. Random or representative field compaction tests should be performed in accordance with test methods ASTM designation D-1556, D-2937 or D-2922, and D-3017, at intervals of approximately ±2 feet of fill height or approximately every 1,000 cubic yards placed. These criteria would vary depending on the soil conditions and the size of the project. The location and frequency of testing would be at the discretion of the geotechnical consultant.

Contractor's Responsibility

All clearing, site preparation, and earthwork performed on the project should be conducted by the contractor, with observation by a geotechnical consultant, and staged approval by the governing agencies, as applicable. It is the contractor's responsibility to prepare the ground surface to receive the fill, to the satisfaction of the geotechnical consultant, and to place, spread, moisture condition, mix, and compact the fill in accordance with the recommendations of the geotechnical consultant. The contractor should also remove all non-earth material considered unsatisfactory by the geotechnical consultant.

Notwithstanding the services provided by the geotechnical consultant, it is the sole responsibility of the contractor to provide adequate equipment and methods to accomplish the earthwork in strict accordance with applicable grading guidelines, latest adopted Code or agency ordinances, geotechnical report(s), and approved grading plans. Sufficient watering apparatus and compaction equipment should be provided by the contractor with due consideration for the fill material, rate of placement, and climatic conditions. If, in the opinion of the geotechnical consultant, unsatisfactory conditions such as questionable weather, excessive oversized rock or deleterious material, insufficient support equipment, etc., are resulting in a quality of work that is not acceptable, the consultant will inform the contractor, and the contractor is expected to rectify the conditions, and if necessary, stop work until conditions are satisfactory.

During construction, the contractor shall properly grade all surfaces to maintain good drainage and prevent ponding of water. The contractor shall take remedial measures to control surface water and to prevent erosion of graded areas until such time as permanent drainage and erosion control measures have been installed.

SITE PREPARATION

All major vegetation, including brush, trees, thick grasses, organic debris, and other deleterious material, should be removed and disposed of off-site. These removals must be concluded prior to placing fill. In-place existing fill, soil, alluvium, colluvium, or rock materials, as evaluated by the geotechnical consultant as being unsuitable, should be removed prior to any fill placement. Depending upon the soil conditions, these materials may be reused as

compacted fills. Any materials incorporated as part of the compacted fills should be approved by the geotechnical consultant.

Any underground structures such as cesspools, cisterns, mining shafts, tunnels, septic tanks, wells, pipelines, or other structures not located prior to grading, are to be removed or treated in a manner recommended by the geotechnical consultant. Soft, dry, spongy, highly fractured, or otherwise unsuitable ground, extending to such a depth that surface processing cannot adequately improve the condition, should be overexcavated down to firm ground and approved by the geotechnical consultant before compaction and filling operations continue. Overexcavated and processed soils, which have been properly mixed and moisture conditioned, should be re-compacted to the minimum relative compaction as specified in these guidelines.

Existing ground, which is determined to be satisfactory for support of the fills, should be scarified (ripped) to a minimum depth of 6 to 8 inches, or as directed by the geotechnical consultant. After the scarified ground is brought to optimum moisture content, or greater and mixed, the materials should be compacted as specified herein. If the scarified zone is greater than 6 to 8 inches in depth, it may be necessary to remove the excess and place the material in lifts restricted to about 6 to 8 inches in compacted thickness.

Existing ground which is not satisfactory to support compacted fill should be overexcavated as required in the geotechnical report, or by the on-site geotechnical consultant. Scarification, disc harrowing, or other acceptable forms of mixing should continue until the soils are broken down and free of large lumps or clods, until the working surface is reasonably uniform and free from ruts, hollows, hummocks, mounds, or other uneven features, which would inhibit compaction as described previously.

Where fills are to be placed on ground with slopes steeper than 5:1 (horizontal to vertical [h:v]), the ground should be stepped or benched. The lowest bench, which will act as a key, should be a minimum of 15 feet wide and should be at least 2 feet deep into firm material, and approved by the geotechnical consultant. In fill-over-cut slope conditions, the recommended minimum width of the lowest bench or key is also 15 feet, with the key founded on firm material, as designated by the geotechnical consultant. As a general rule, unless specifically recommended otherwise by the geotechnical consultant, the minimum width of fill keys should be equal to ½ the height of the slope.

Standard benching is generally 4 feet (minimum) vertically, exposing firm, acceptable material. Benching may be used to remove unsuitable materials, although it is understood that the vertical height of the bench may exceed 4 feet. Pre-stripping may be considered for unsuitable materials in excess of 4 feet in thickness.

All areas to receive fill, including processed areas, removal areas, and the toes of fill benches, should be observed and approved by the geotechnical consultant prior to placement of fill. Fills may then be properly placed and compacted until design grades (elevations) are attained.

COMPACTED FILLS

Any earth materials imported or excavated on the property may be utilized in the fill provided that each material has been evaluated to be suitable by the geotechnical consultant. These materials should be free of roots, tree branches, other organic matter, or other deleterious materials. All unsuitable materials should be removed from the fill as directed by the geotechnical consultant. Soils of poor gradation, undesirable expansion potential, or substandard strength characteristics may be designated by the consultant as unsuitable and may require blending with other soils to serve as a satisfactory fill material.

Fill materials derived from benching operations should be dispersed throughout the fill area and blended with other approved material. Benching operations should not result in the benched material being placed only within a single equipment width away from the fill/bedrock contact.

Oversized materials defined as rock, or other irreducible materials, with a maximum dimension greater than 12 inches, should not be buried or placed in fills unless the location of materials and disposal methods are specifically approved by the geotechnical consultant. Oversized material should be taken offsite, or placed in accordance with recommendations of the geotechnical consultant in areas designated as suitable for rock disposal. GSI anticipates that soils to be utilized as fill material for the subject project may contain some rock. Appropriately, the need for rock disposal may be necessary during grading operations on the site. From a geotechnical standpoint, the depth of any rocks, rock fills, or rock blankets, should be a sufficient distance from finish grade. This depth is generally the same as any overexcavation due to cut-fill transitions in hard rock areas, and generally facilitates the excavation of structural footings and substructures. Should deeper excavations be proposed (i.e., deepened footings, utility trenching, swimming pools, spas, etc.), the developer may consider increasing the hold-down depth of any rocky fills to be placed, as appropriate. In addition, some agencies/jurisdictions mandate a specific hold-down depth for oversize materials placed in fills. The hold-down depth, and potential to encounter oversize rock, both within fills, and occurring in cut or natural areas, would need to be disclosed to all interested/affected parties. Once approved by the governing agency, the hold-down depth for oversized rock (i.e., greater than 12 inches) in fills on this project is provided as 10 feet, unless specified differently in the text of this report. The governing agency may require that these materials need to be deeper, crushed, or reduced to less than 12 inches in maximum dimension, at their discretion.

To facilitate future trenching, rock (or oversized material), should not be placed within the hold-down depth feet from finish grade, the range of foundation excavations, future utilities, or underground construction unless specifically approved by the governing agency, the geotechnical consultant, or the developer's representative.

If import material is required for grading, representative samples of the materials to be utilized as compacted fill should be analyzed in the laboratory by the geotechnical consultant to evaluate it's physical properties and suitability for use onsite. Such testing should be performed three (3) days prior to importation. If any material other than that previously tested is encountered during grading, an appropriate analysis of this material should be conducted by the geotechnical consultant as soon as possible.

Approved fill material should be placed in areas prepared to receive fill in near horizontal layers, that when compacted, should not exceed about 6 to 8 inches in thickness. The geotechnical consultant may approve thick lifts if testing indicates the grading procedures are such that adequate compaction is being achieved with lifts of greater thickness. Each layer should be spread evenly and blended to attain uniformity of material and moisture suitable for compaction.

Fill layers at a moisture content less than optimum should be watered and mixed, and wet fill layers should be aerated by scarification, or should be blended with drier material. Moisture conditioning, blending, and mixing of the fill layer should continue until the fill materials have a uniform moisture content at, or above, optimum moisture.

After each layer has been evenly spread, moisture conditioned, and mixed, it should be uniformly compacted to a minimum of 90 percent of the maximum density as evaluated by ASTM test designation D 1557, or as otherwise recommended by the geotechnical consultant. Compaction equipment should be adequately sized and should be specifically designed for soil compaction, or of proven reliability to efficiently achieve the specified degree of compaction.

Where tests indicate that the density of any layer of fill, or portion thereof, is below the required relative compaction, or improper moisture is in evidence, the particular layer or portion shall be re-worked until the required density and moisture content has been attained. No additional fill shall be placed in an area until the last placed lift of fill has been tested and found to meet the density and moisture requirements, and is approved by the geotechnical consultant.

In general, per the latest adopted Code, fill slopes should be designed and constructed at a gradient of 2:1 (h:v), or flatter. Compaction of slopes should be accomplished by over-building a minimum of 3 feet horizontally, and subsequently trimming back to the design slope configuration. Testing shall be performed as the fill is elevated to evaluate compaction as the fill core is being developed. Special efforts may be necessary to attain the specified compaction in the fill slope zone. Final slope shaping should be performed by trimming and removing loose materials with appropriate equipment. A final evaluation of fill slope compaction should be based on observation or testing of the finished slope face. Where compacted fill slopes are designed steeper than 2:1 (h:v), prior approval from the governing agency, specific material types, a higher minimum relative compaction, special reinforcement, and special grading procedures will be recommended.

If an alternative to over-building and cutting back the compacted fill slopes is selected, then special effort should be made to achieve the required compaction in the outer 10 feet of each lift of fill by undertaking the following:

1. An extra piece of equipment consisting of a heavy, short-shanked sheepsfoot should be used to roll (horizontal) parallel to the slopes continuously as fill is placed. The sheepsfoot roller should also be used to roll perpendicular to the slopes, and extend out over the slope to provide adequate compaction to the face of the slope.

2. Loose fill should not be spilled out over the face of the slope as each lift is compacted. Any loose fill spilled over a previously completed slope face should be trimmed off or be subject to re-rolling.

3. Field compaction tests will be made in the outer (horizontal) ±2 to ±8 feet of the slope at appropriate vertical intervals, subsequent to compaction operations.

4. After completion of the slope, the slope face should be shaped with a small tractor and then re-rolled with a sheepsfoot to achieve compaction to near the slope face. Subsequent to testing to evaluate compaction, the slopes should be grid-rolled to achieve compaction to the slope face. Final testing should be used to evaluate compaction after grid rolling.

5. Where testing indicates less than adequate compaction, the contractor will be responsible to rip, water, mix, and recompact the slope material as necessary to achieve compaction. Additional testing should be performed to evaluate compaction.

SUBDRAIN INSTALLATION

Subdrains should be installed in approved ground in accordance with the approximate alignment and details indicated by the geotechnical consultant. Subdrain locations or materials should not be changed or modified without approval of the geotechnical consultant. The geotechnical consultant may recommend and direct changes in subdrain line, grade, and drain material in the field, pending exposed conditions. The location of constructed subdrains, especially the outlets, should be recorded/surveyed by the project civil engineer. Drainage at the subdrain outlets should be provided by the project civil engineer.

EXCAVATIONS

Excavations and cut slopes should be examined during grading by the geotechnical consultant. If directed by the geotechnical consultant, further excavations or overexcavation and refilling of cut areas should be performed, or remedial grading of cut slopes should be performed. When fill-over-cut slopes are to be graded, unless otherwise approved, the cut portion of the slope should be observed by the geotechnical consultant prior to placement of materials for construction of the fill portion of the slope. The geotechnical consultant should observe all cut slopes, and should be notified by the contractor when excavation of cut slopes commences.

If, during the course of grading, unforeseen adverse or potentially adverse geologic conditions are encountered, the geotechnical consultant should investigate, evaluate, and make appropriate recommendations for mitigation of these conditions. The need for cut slope buttressing or stabilizing should be based on in-grading evaluation by the geotechnical consultant, whether anticipated or not.

Unless otherwise specified in geotechnical and geological report(s), no cut slopes should be excavated higher or steeper than that allowed by the ordinances of controlling governmental agencies. Additionally, short-term stability of temporary cut slopes is the contractor's responsibility.

Erosion control and drainage devices should be designed by the project civil engineer and should be constructed in compliance with the ordinances of the controlling governmental agencies, or in accordance with the recommendations of the geotechnical consultant.

COMPLETION

Observation, testing, and consultation by the geotechnical consultant should be conducted during the grading operations in order to state an opinion that all cut and fill areas are graded in accordance with the approved project specifications. After completion of grading, and after the geotechnical consultant has finished observations of the work, final reports should be submitted, and may be subject to review by the controlling governmental agencies. No further excavation or filling should be undertaken without prior notification of the geotechnical consultant or approved plans.

All finished cut and fill slopes should be protected from erosion and be planted in accordance with the project specifications or as recommended by a landscape architect. Such protection and planning should be undertaken as soon as practical after completion of grading.

JOB SAFETY

General

At GSI, getting the job done safely is of primary concern. The following is the company's safety considerations for use by all employees on multi-employer construction sites. On-ground personnel are at highest risk of injury, and possible fatality, on grading and construction projects. GSI recognizes that construction activities will vary on each site, and that site safety is the prime responsibility of the contractor; however, everyone must be safety conscious and responsible at all times. To achieve our goal of avoiding accidents, cooperation between the client, the contractor, and GSI personnel must be maintained.

In an effort to minimize risks associated with geotechnical testing and observation, the following precautions are to be implemented for the safety of field personnel on grading and construction projects:

Safety Meetings: GSI field personnel are directed to attend contractor's regularly scheduled and documented safety meetings.

Safety Vests: Safety vests are provided for, and are to be worn by GSI personnel, at all times, when they are working in the field.

Safety Flags: Two safety flags are provided to GSI field technicians; one is to be affixed to the vehicle when on site, the other is to be placed atop the spoil pile on all test pits.

Flashing Lights: All vehicles stationary in the grading area shall use rotating or flashing amber beacons, or strobe lights, on the vehicle during all field testing. While operating a vehicle in the grading area, the emergency flasher on the vehicle shall be activated.

If the contractor's representative observes any of our personnel who do not follow the above, we request that it be brought to the attention of our office.

Test Pits Location, Orientation, and Clearance

The technician is responsible for selecting test pit locations. A primary concern should be the technician's safety. Efforts will be made to coordinate locations with the grading contractor's authorized representative, and to select locations following or behind the established traffic pattern, preferably outside of current traffic. The contractor's authorized representative (supervisor, grade checker, dump man, operator, etc.) should direct excavation of the pit and safety during the test period. Of paramount concern should be the soil technician's safety, and obtaining enough tests to represent the fill.

Test pits should be excavated so that the spoil pile is placed away from oncoming traffic, whenever possible. The technician's vehicle is to be placed next to the test pit, opposite the spoil pile. This necessitates the fill be maintained in a drivable condition. Alternatively, the contractor may wish to park a piece of equipment in front of the test holes, particularly in small fill areas or those with limited access.

A zone of non-encroachment should be established for all test pits. No grading equipment should enter this zone during the testing procedure. The zone should extend approximately 50 feet outward from the center of the test pit. This zone is established for safety and to avoid excessive ground vibration, which typically decreases test results.

When taking slope tests, the technician should park the vehicle directly above or below the test location. If this is not possible, a prominent flag should be placed at the top of the slope. The contractor's representative should effectively keep all equipment at a safe operational distance (e.g., 50 feet) away from the slope during this testing.

The technician is directed to withdraw from the active portion of the fill as soon as possible following testing. The technician's vehicle should be parked at the perimeter of the fill in a highly visible location, well away from the equipment traffic pattern. The contractor should inform our personnel of all changes to haul roads, cut and fill areas or other factors that may affect site access and site safety.

If the technician's safety is jeopardized or compromised because of the contractor's failure to comply with any of the above, the technician is required, by company policy, to immediately withdraw and notify his/her supervisor. The grading contractor's representative will be

contacted to affect a solution. However, in the interim, no further testing will be performed until the situation is rectified. Any fill placed can be considered unacceptable and subject to reprocessing, recompaction, or removal.

If the soil technician does not comply with the above or other established safety guidelines, we request that the contractor bring this to the technician's attention and notify this office. Effective communication and coordination between the contractor's representative and the soil technician is strongly encouraged to implement the above safety plan.

Trench and Vertical Excavation

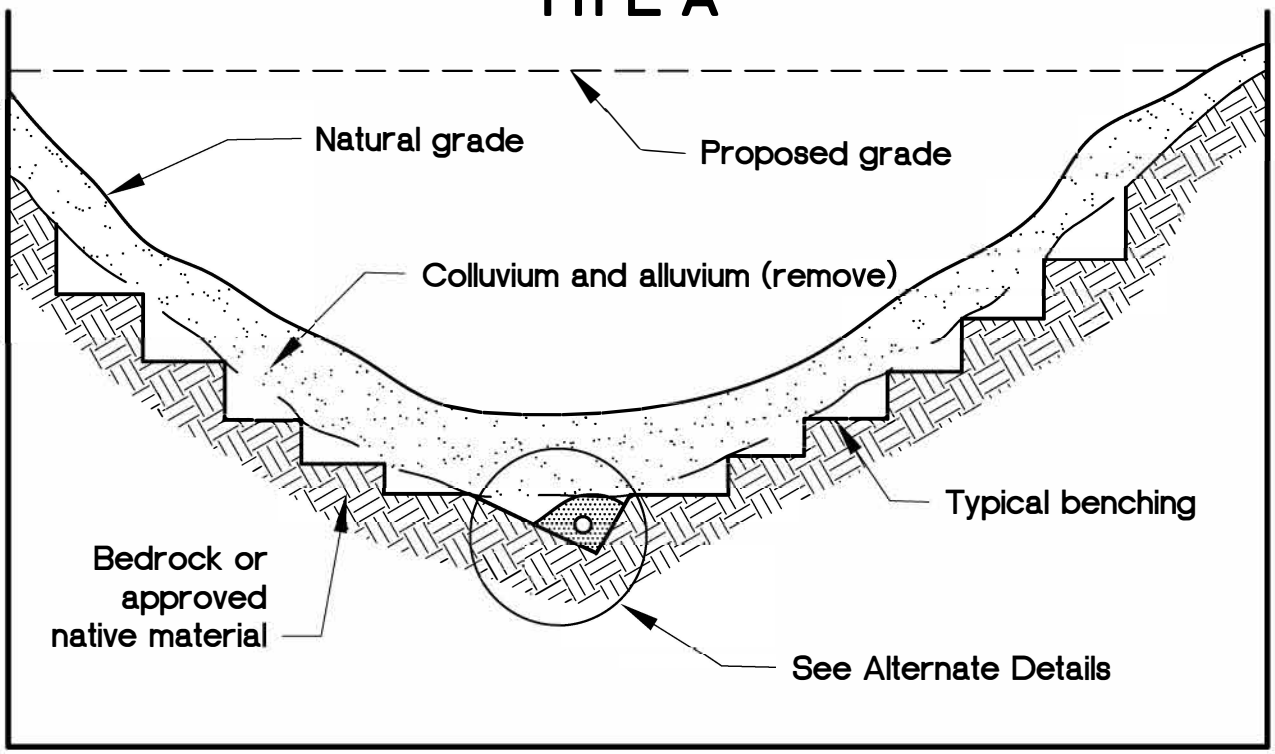
It is the contractor's responsibility to provide safe access into trenches where compaction testing is needed. Our personnel are directed not to enter any excavation or vertical cut which: 1) is 5 feet or deeper unless shored or laid back; 2) displays any evidence of instability, has any loose rock or other debris which could fall into the trench; or 3) displays any other evidence of any unsafe conditions regardless of depth.

All trench excavations or vertical cuts more than 5 feet deep, which any person enters, should be shored or laid back. Trench access should be provided in accordance with Cal/OSHA and/or state and local standards. Our personnel are directed not to enter any trench by being lowered or "riding down" on the equipment.

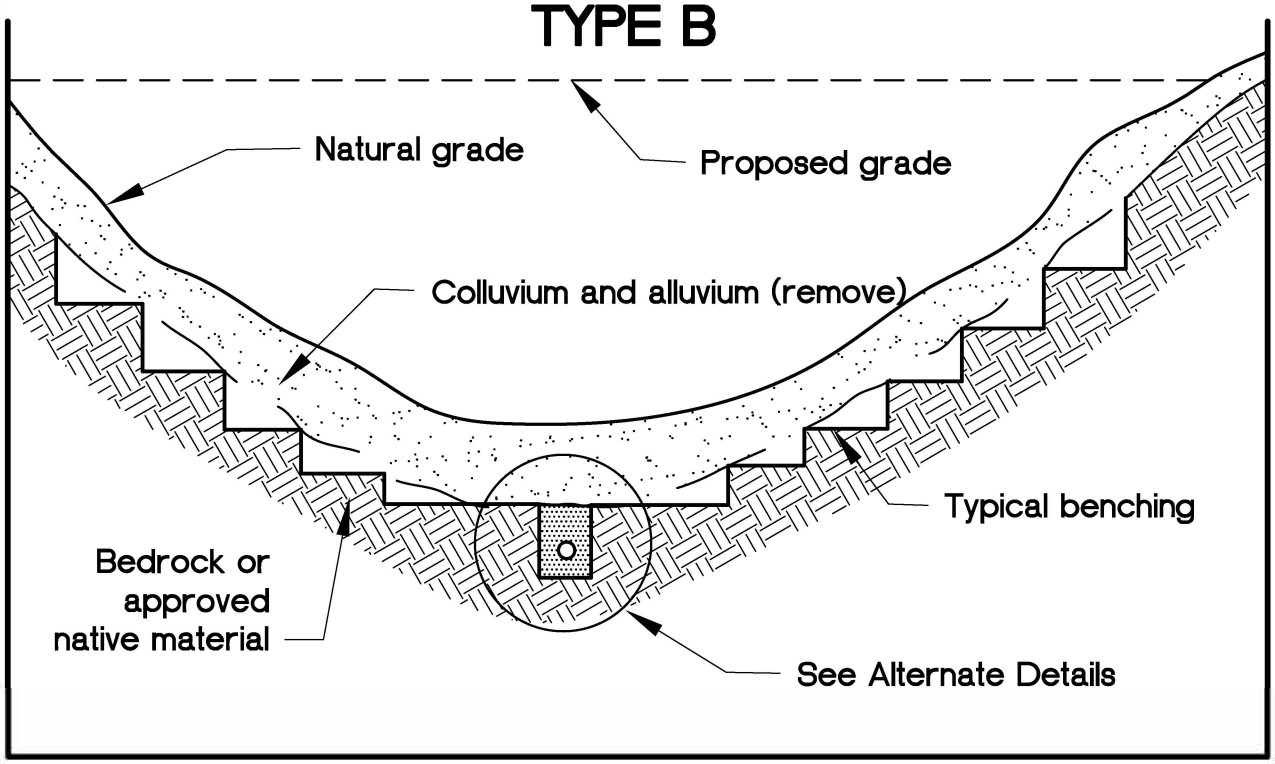
If the contractor fails to provide safe access to trenches for compaction testing, our company policy requires that the soil technician withdraw and notify his/her supervisor. The contractor's representative will be contacted to affect a solution. All backfill not tested due to safety concerns or other reasons could be subject to reprocessing and/or removal.

If GSI personnel become aware of anyone working beneath an unsafe trench wall or vertical excavation, we have a legal obligation to put the contractor and owner/developer on notice to immediately correct the situation. If corrective steps are not taken, GSI then has an obligation to notify Cal/OSHA and/or the proper controlling authorities.

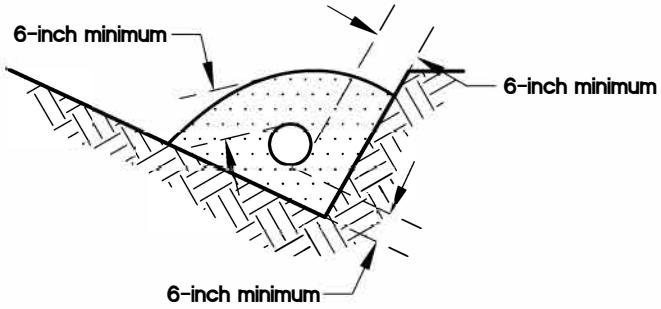
TYPE A



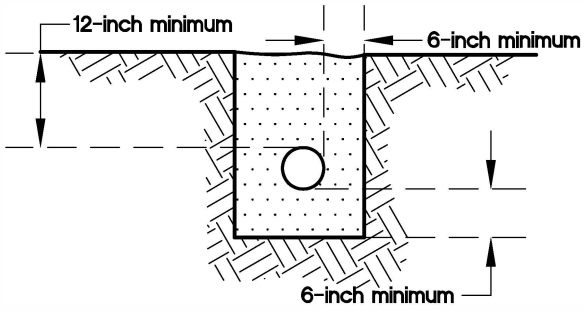
TYPE B



Selection of alternate subdrain details, location, and extent of subdrains should be evaluated by the geotechnical consultant during grading.



A-1



B-1

Filter material: Minimum volume of 9 cubic feet per lineal foot of pipe.

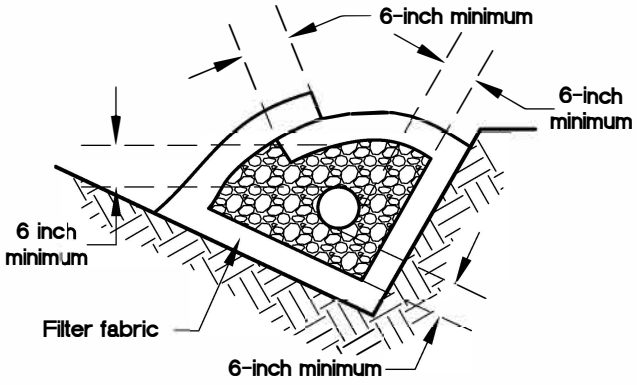
Perforated pipe: 6-inch-diameter ABS or PVC pipe or approved substitute with minimum 8 perforations (¼-inch diameter) per lineal foot in bottom half of pipe (ASTM D-2751, SDR-35, or ASTM D-1527, Schd. 40).

For continuous run in excess of 500 feet, use 8-inch-diameter pipe (ASTM D-3034, SDR-35, or ASTM D-1785, Schd. 40).

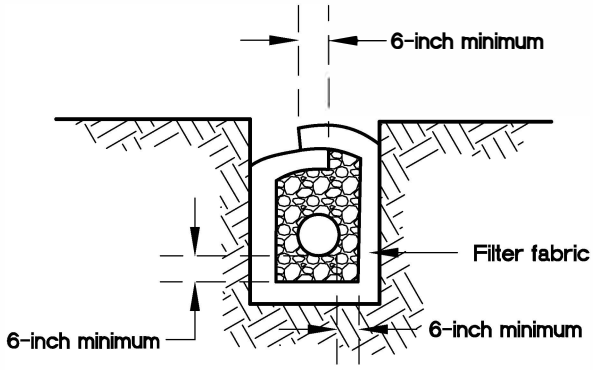
FILTER MATERIAL

Sieve Size	Percent Passing
1 inch	100
¾ inch	90-100
⅜ inch	40-100
No. 4	25-40
No. 8	18-33
No. 30	5-15
No. 50	0-7
No. 200	0-3

ALTERNATE 1: PERFORATED PIPE AND FILTER MATERIAL



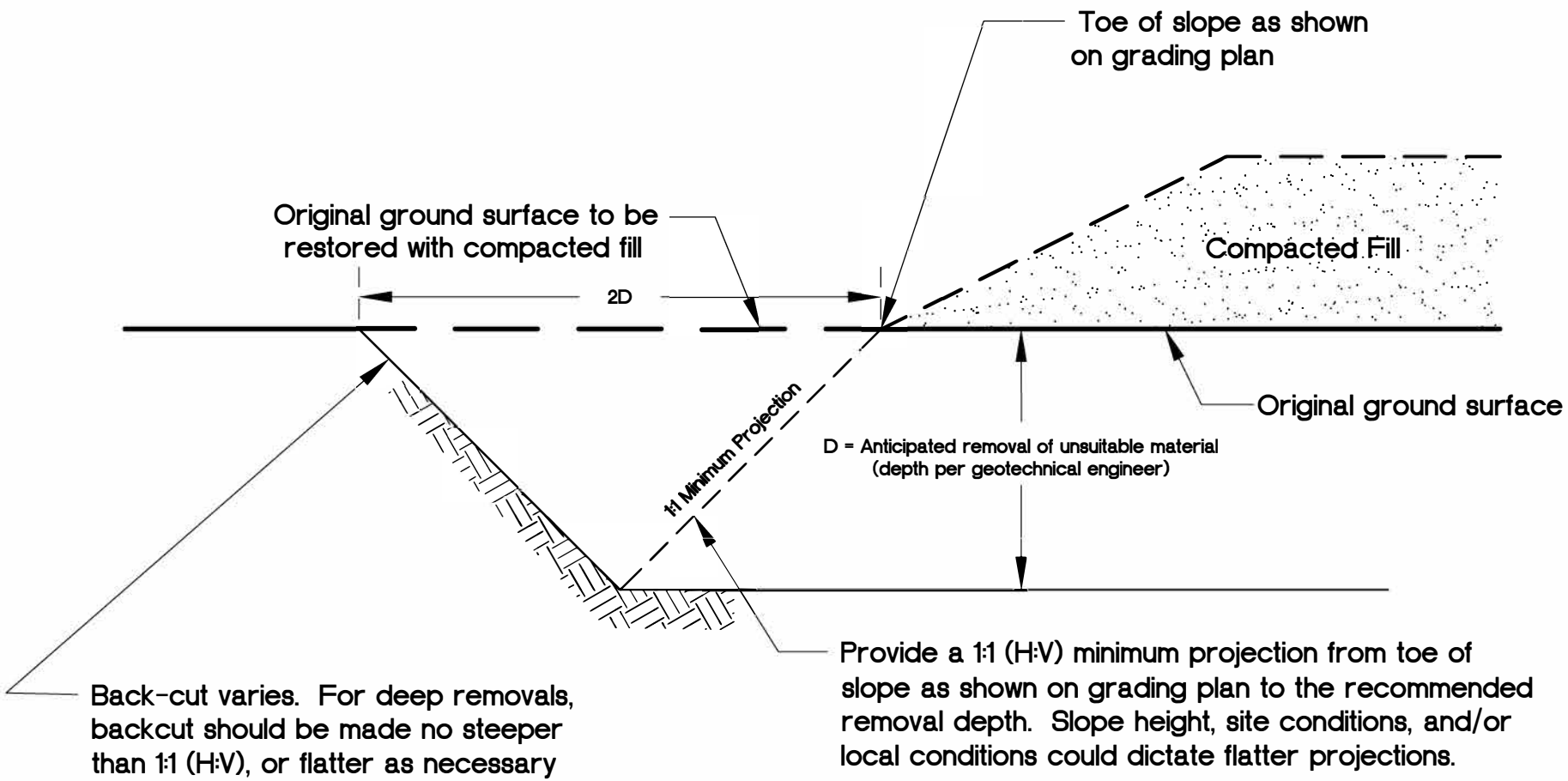
A-2



B-2

Gravel Material: 9 cubic feet per lineal foot.
Perforated Pipe: See Alternate 1
Gravel: Clean ¾-inch rock or approved substitute.
Filter Fabric: Mirafi 140 or approved substitute.

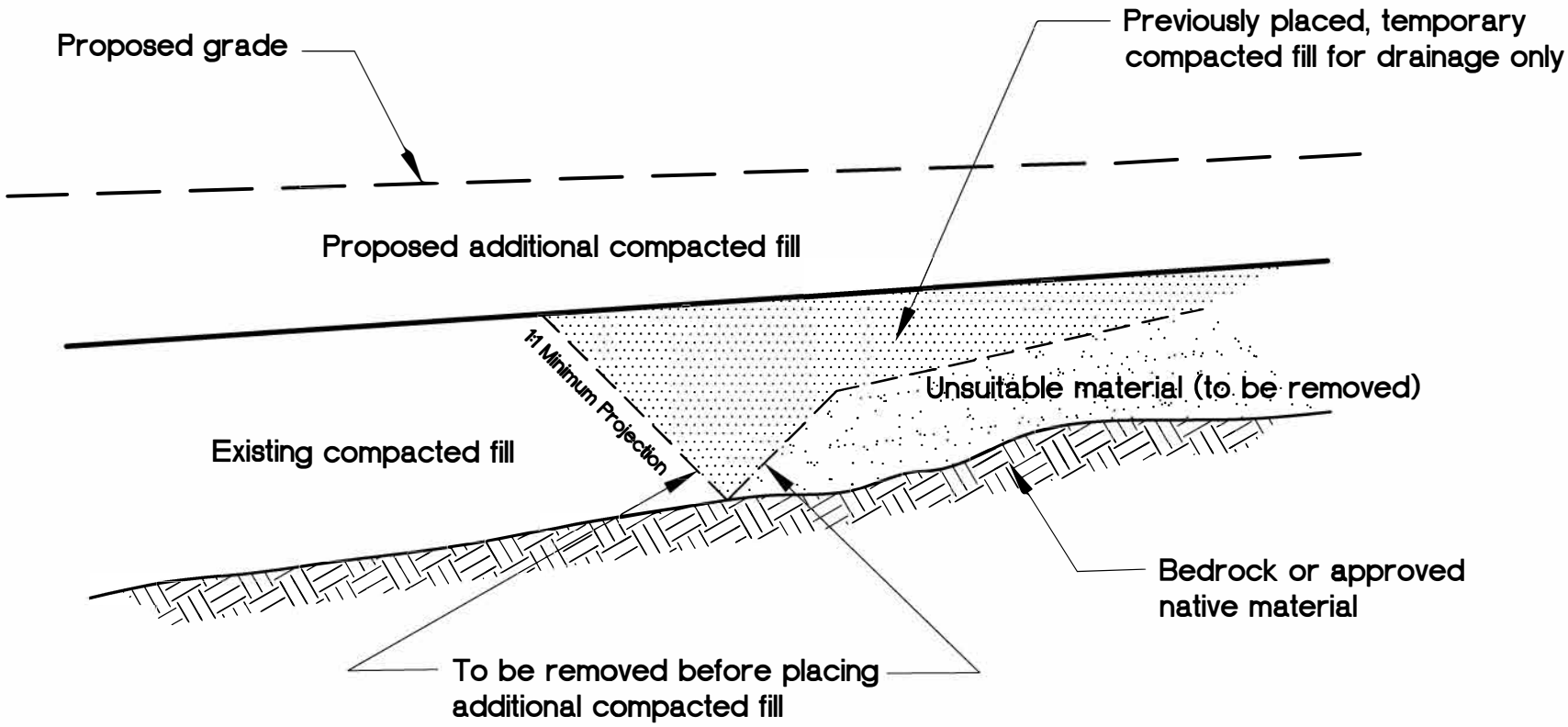
ALTERNATE 2: PERFORATED PIPE, GRAVEL, AND FILTER FABRIC



GSI GeoSoils, Inc.

FILL SLOPE TOEING OUT ON FLAT ALLUVIATED CANYON DETAIL

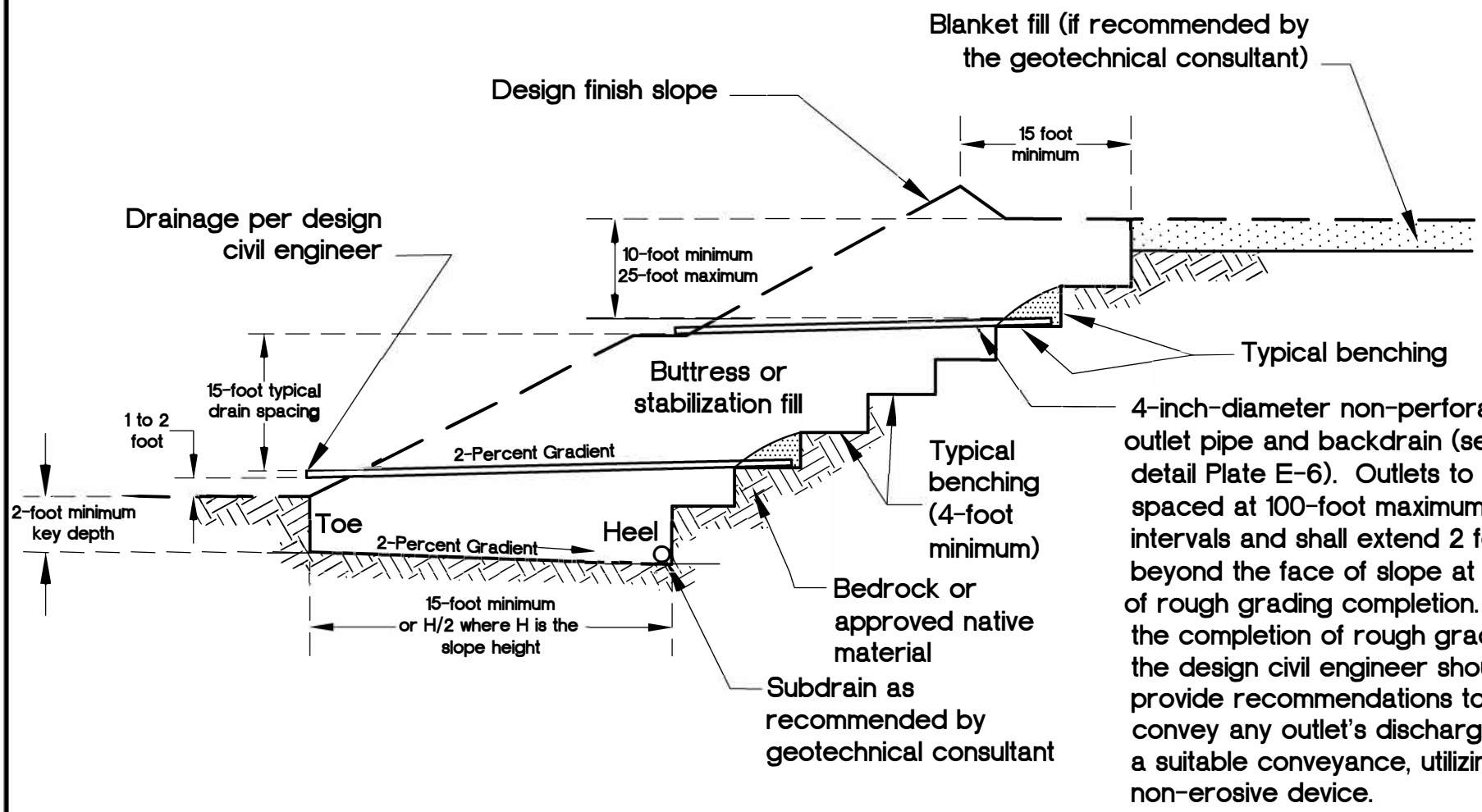
Plate F-3



GeoSoils, Inc.

REMOVAL ADJACENT TO EXISTING FILL ADJOINING CANYON FILL DETAIL

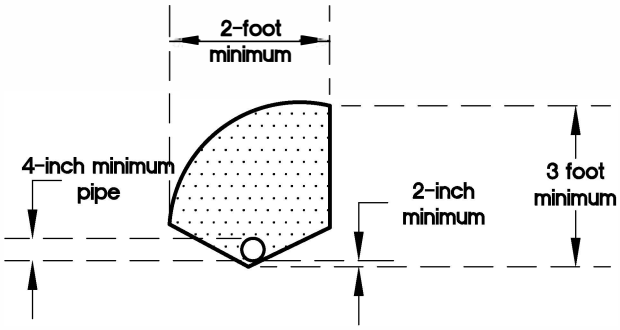
Plate F-4

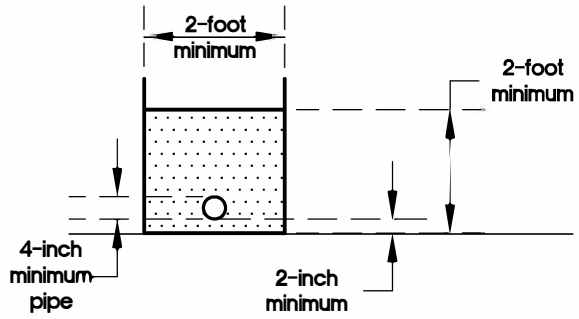


GeoSoils, Inc.

TYPICAL STABILIZATION / BUTTRESS FILL DETAIL

Plate F-5





Filter Material: Minimum of 5 cubic feet per lineal foot of pipe or 4 cubic feet per lineal feet of pipe when placed in square cut trench.

Alternative in Lieu of Filter Material: Gravel may be encased in approved filter fabric. Filter fabric shall be Mirafi 140 or equivalent. Filter fabric shall be lapped a minimum of 12 inches in all joints.

Minimum 4-Inch-Diameter Pipe: ABS-ASTM D-2751, SDR 35; or ASTM D-1527 Schedule 40, PVC-ASTM D-3034, SDR 35; or ASTM D-1785 Schedule 40 with a crushing strength of 1,000 pounds minimum, and a minimum of 8 uniformly-spaced perforations per foot of pipe. Must be installed with perforations down at bottom of pipe. Provide cap at upstream end of pipe. Slope at 2 percent to outlet pipe. Outlet pipe to be connected to subdrain pipe with tee or elbow.

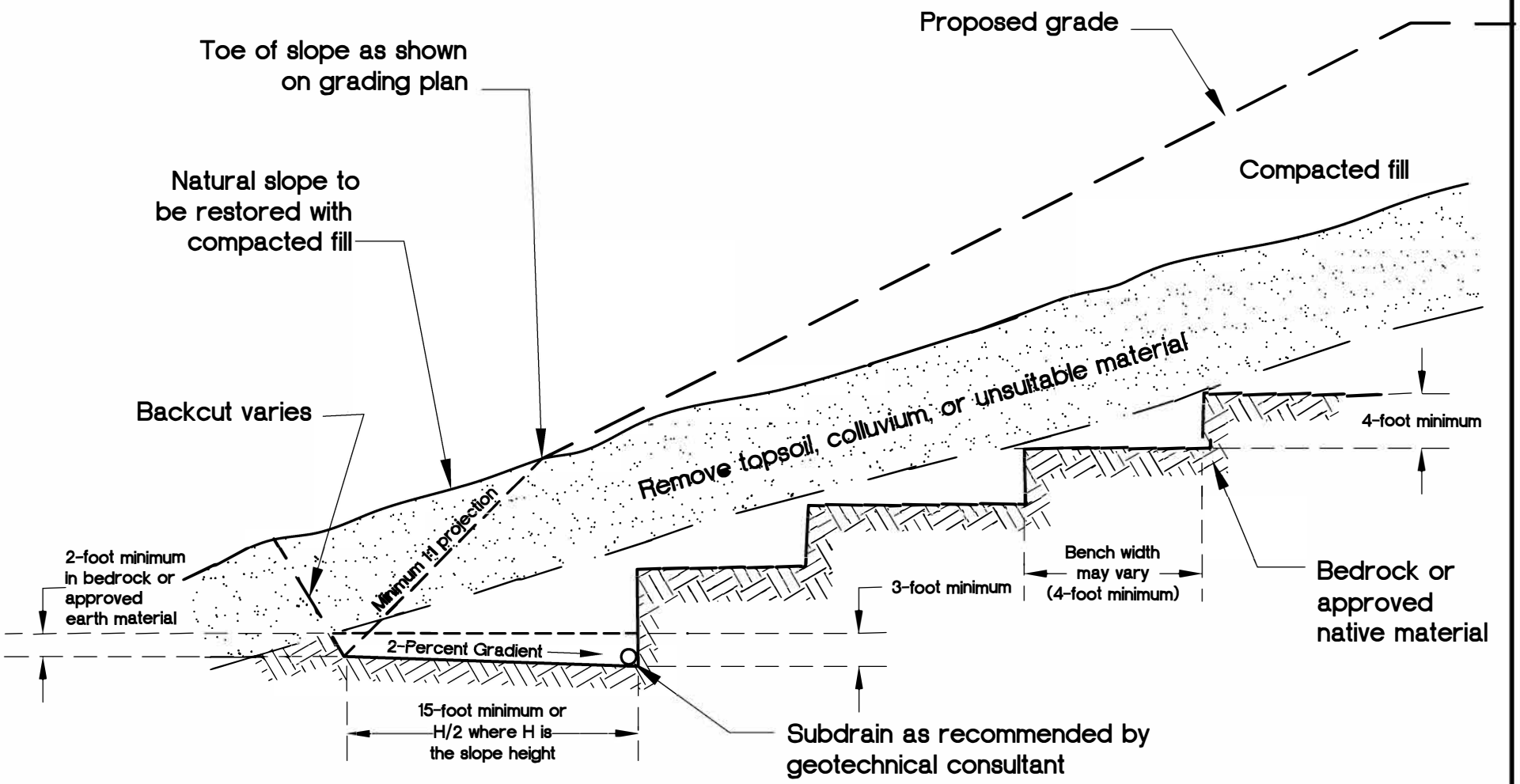
Notes:
1. Trench for outlet pipes to be backfilled and compacted with onsite soil.
2. Backdrains and lateral drains shall be located at elevation of every bench drain. First drain located at elevation just above lower lot grade. Additional drains may be required at the discretion of the geotechnical consultant.

Filter Material shall be of the following specification or an approved equivalent.

Sieve Size	Percent Passing
1 inch	100
¾ inch	90-100
⅜ inch	40-100
No. 4	25-40
No. 8	18-33
No. 30	5-15
No. 50	0-7
No. 200	0-3

Gravel shall be of the following specification or an approved equivalent.

Sieve Size	Percent Passing
1½ inch	100
No. 4	50
No. 200	8



NOTES:

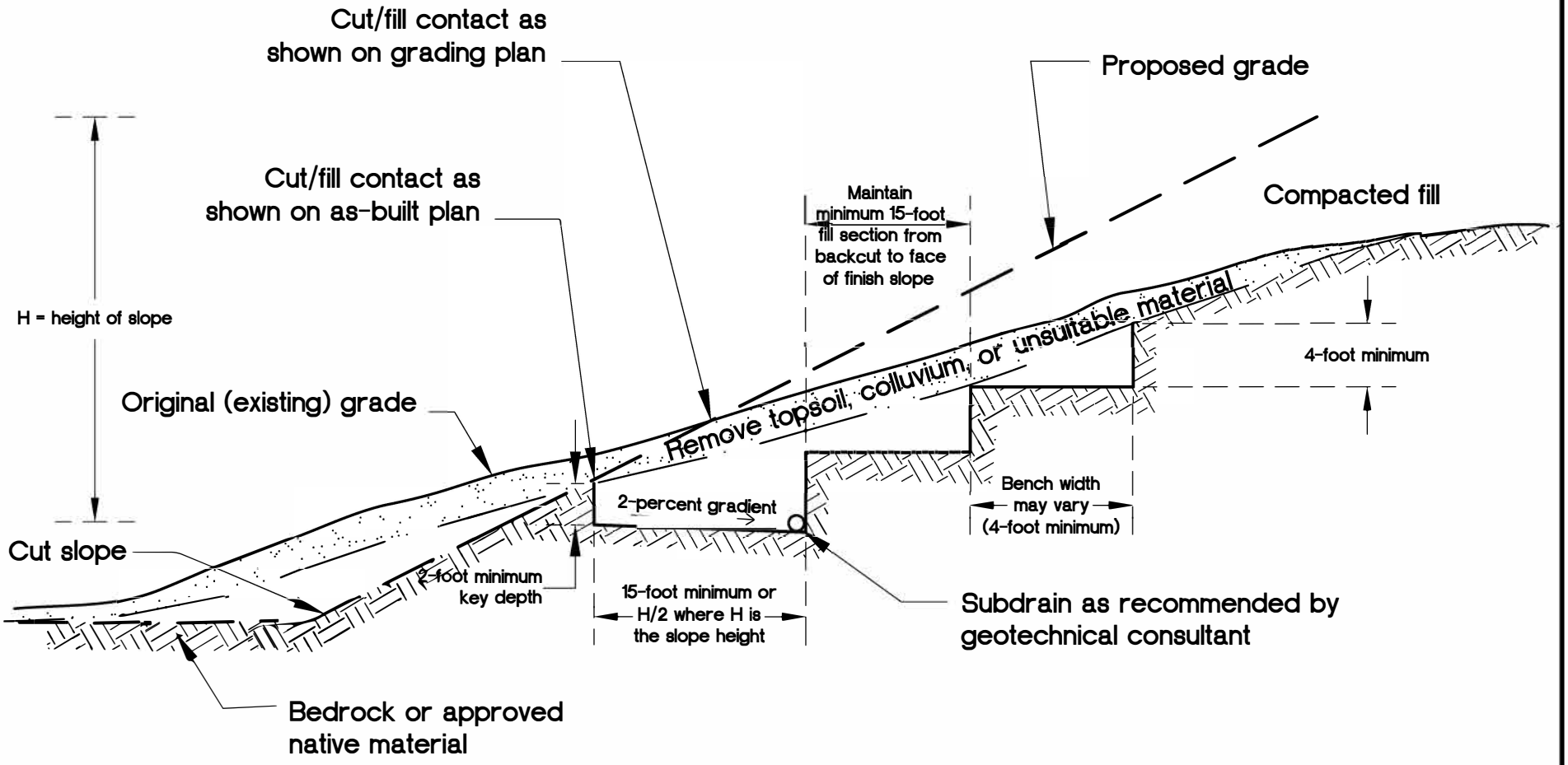
1. Where the natural slope approaches or exceeds the design slope ratio, special recommendations would be provided by the geotechnical consultant.

2. The need for and disposition of drains should be evaluated by the geotechnical consultant, based upon exposed conditions.

GeoSoils, Inc.

FILL OVER NATURAL (SIDEHILL FILL) DETAIL

Plate F-7

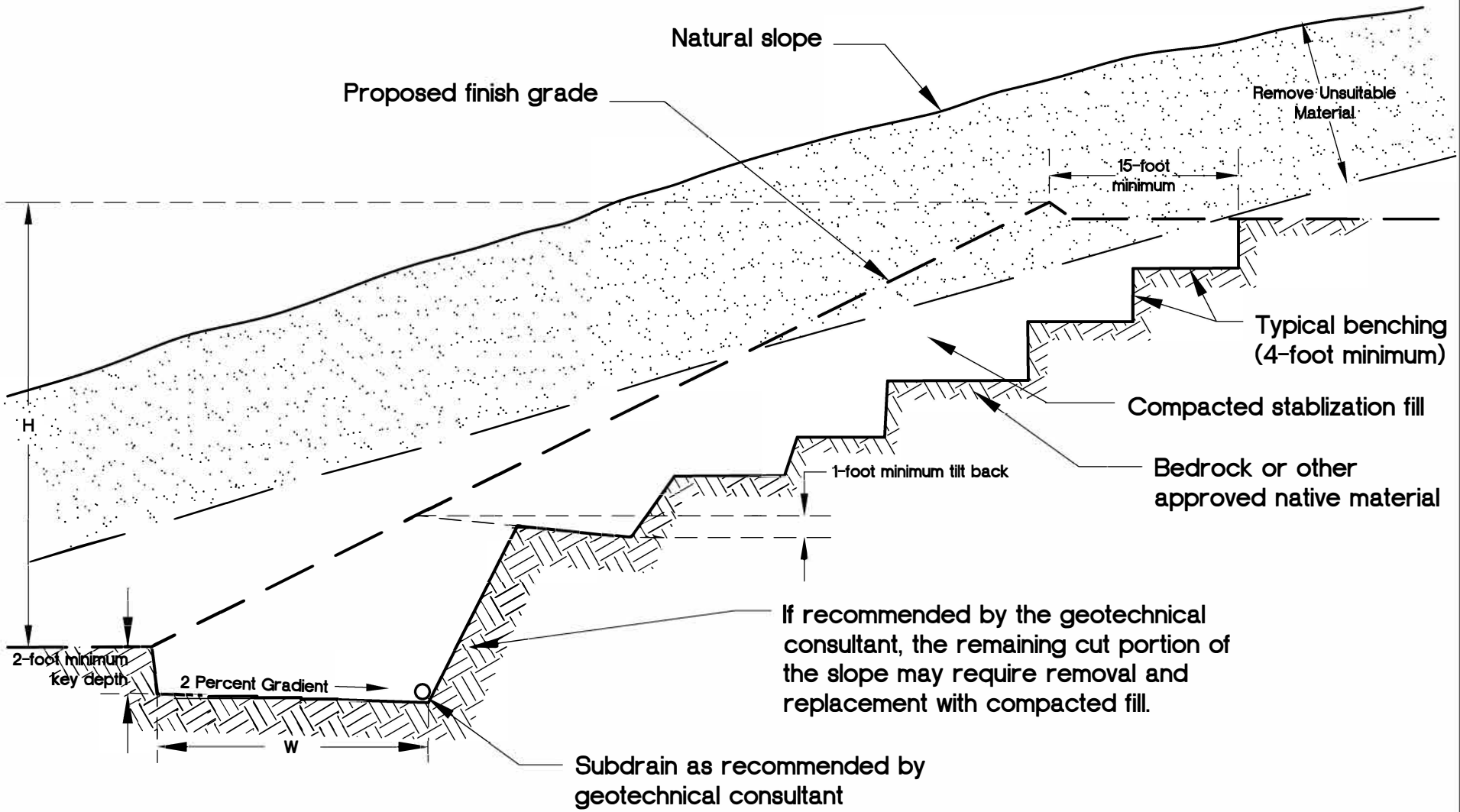


NOTE: The cut portion of the slope should be excavated and evaluated by the geotechnical consultant prior to construction of the fill portion.

GSI GeoSoils, Inc.

FILL OVER CUT DETAIL

Plate F-8

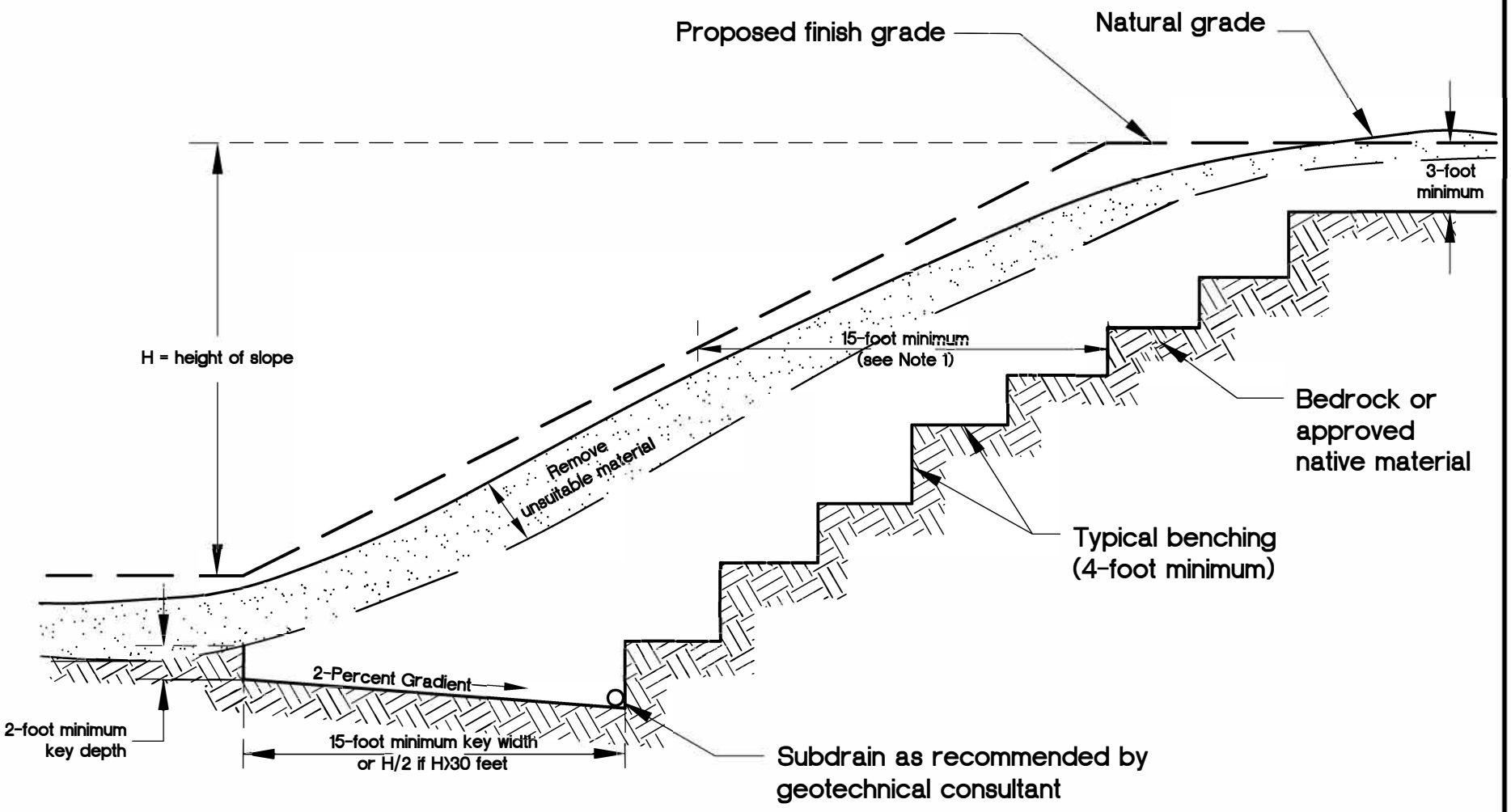


NOTES:

1. Subdrains may be required as specified by the geotechnical consultant.

2 W shall be equipment width (15 feet) for slope heights less than 25 feet. For slopes greater than 25 feet, W shall be evaluated by the geotechnical consultant. At no time, shall W be less than H/2, where H is the height of the slope.

GeoSoils, Inc.	STABLIZATION FILL FOR UNSTABLE MATERIAL EXPOSED IN CUT SLOPE DETAIL	Plate F-9



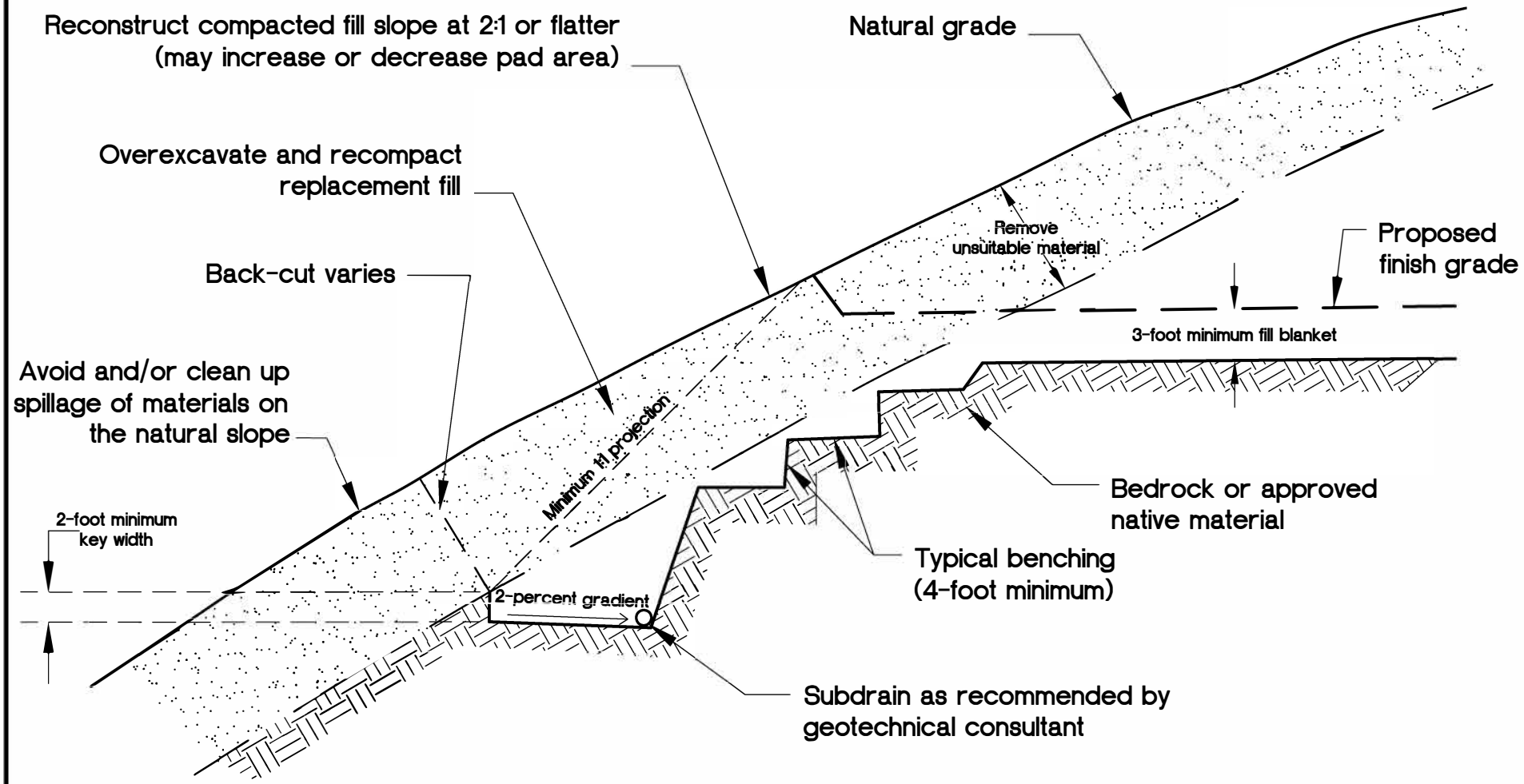
NOTES:

1. 15-foot minimum to be maintained from proposed finish slope face to backcut.
2. The need and disposition of drains will be evaluated by the geotechnical consultant based on field conditions.
3. Pad overexcavation and recompaction should be performed if evaluated to be necessary by the geotechnical consultant.

GSI GeoSoils, Inc.

SKIN FILL OF NATURAL GROUND DETAIL

Plate F-10



NOTES:

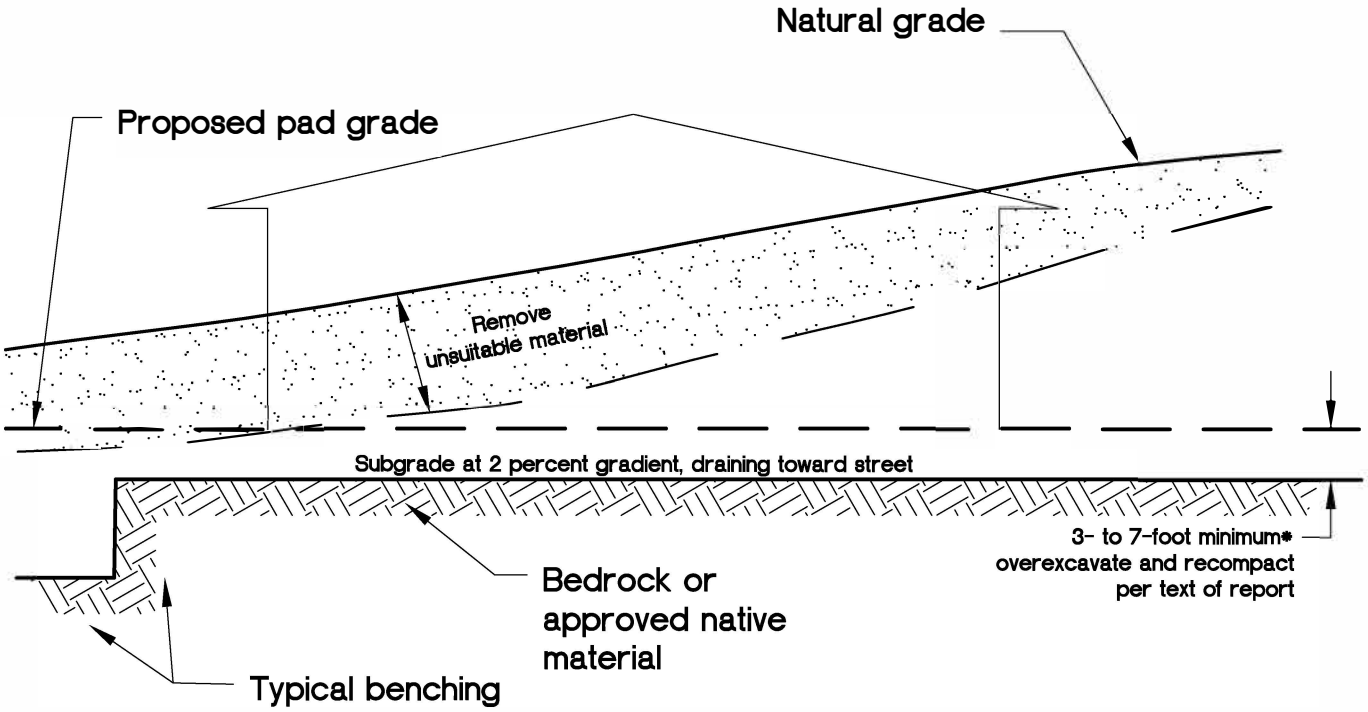
1. Subdrain and key width requirements will be evaluated based on exposed subsurface conditions and thickness of overburden.

2. Pad overexcavation and recompaction should be performed if evaluated necessary by the geotechnical consultant.

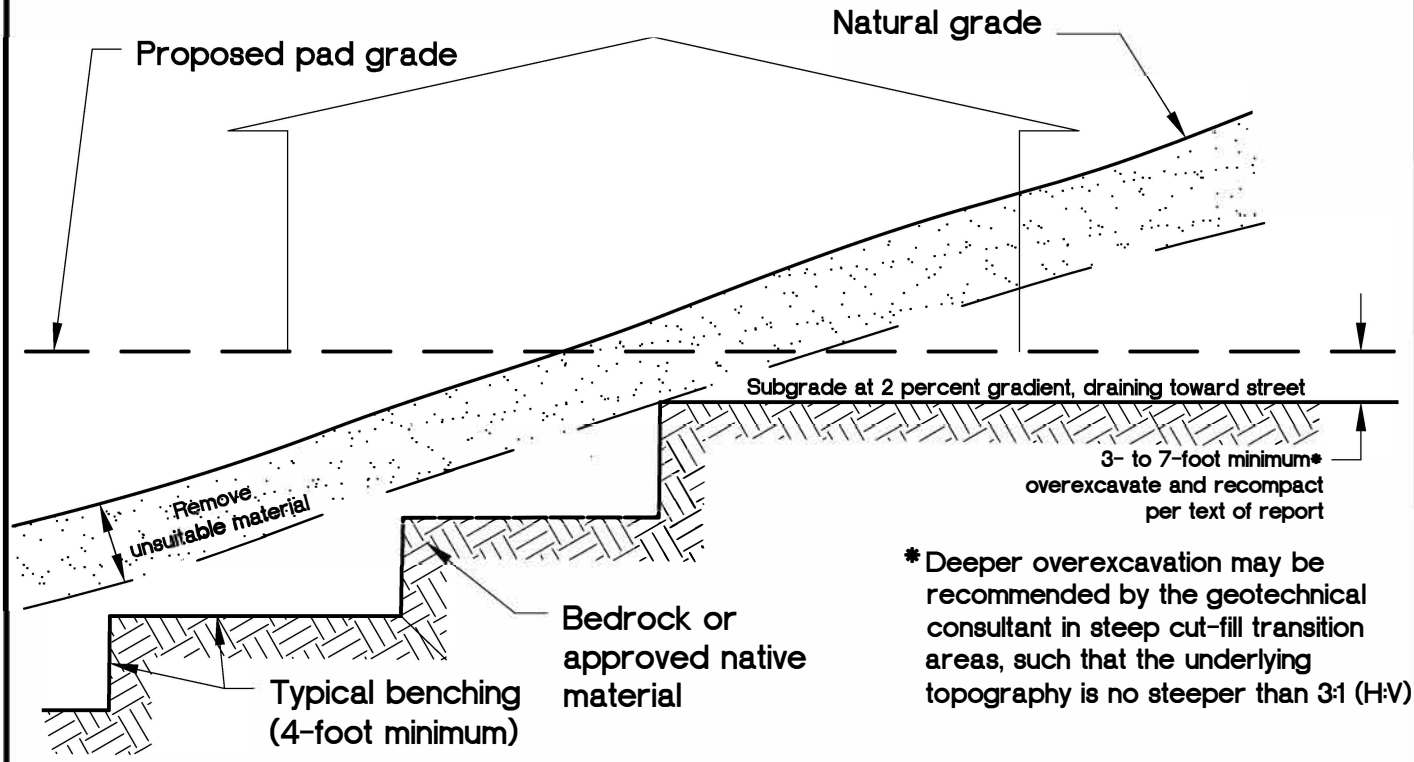
GSI GeoSoils, Inc.

DAYLIGHT CUT LOT DETAIL

Plate F-11



CUT LOT OR MATERIAL-TYPE TRANSITION

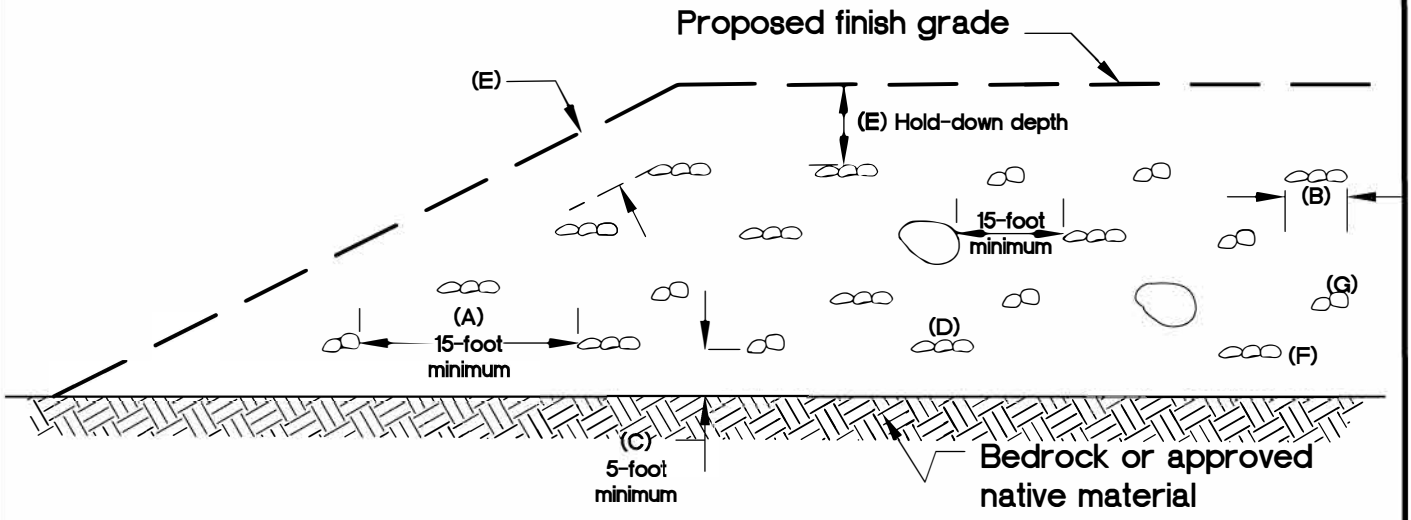


*Deeper overexcavation may be recommended by the geotechnical consultant in steep cut-fill transition areas, such that the underlying topography is no steeper than 3:1 (H:V)

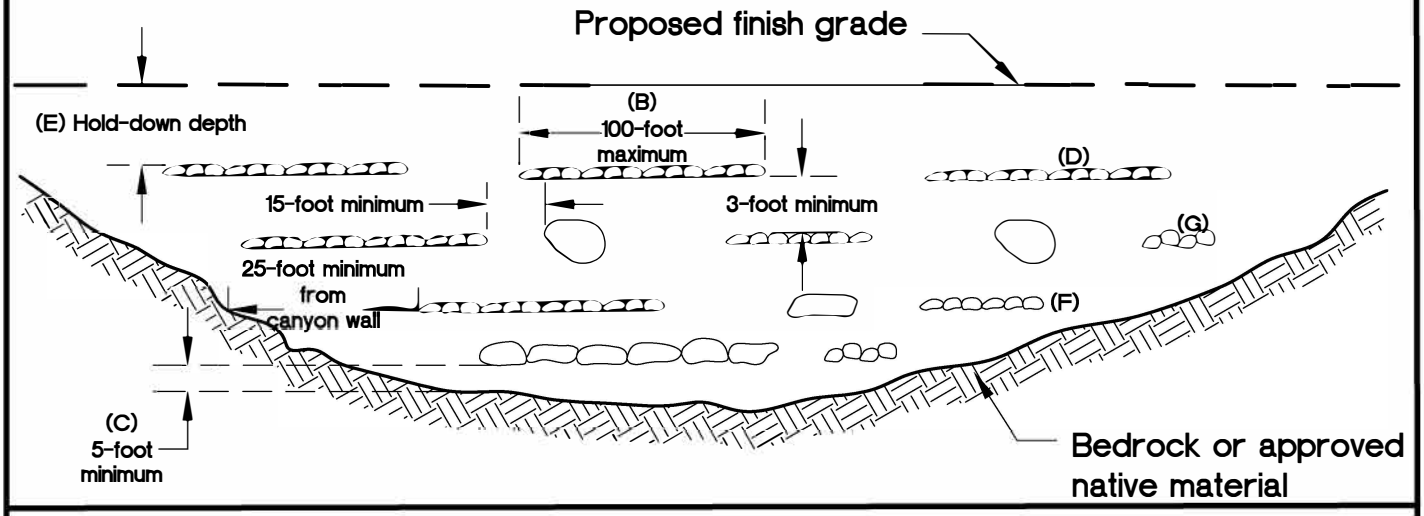
CUT-FILL LOT (DAYLIGHT TRANSITION)

GeoSoils, Inc.	TRANSITION LOT DETAILS	Plate F-12

VIEW NORMAL TO SLOPE FACE



VIEW PARALLEL TO SLOPE FACE



NOTES:

A. One equipment width or a minimum of 15 feet between rows (or windrows).
B. Height and width may vary depending on rock size and type of equipment. Length of windrow shall be no greater than 100 feet.
C. If approved by the geotechnical consultant, windrows may be placed direclty on competent material or bedrock, provided adequate space is available for compaction.
D. Orientation of windrows may vary but should be as recommended by the geotechnical engineer and/or engineering geologist. Staggering of windrows is not necessary unless recommended.
E. Clear area for utility trenches, foundations, and swimming pools; Hold-down depth as specified in text of report, subject to governing agency approval.
F. All fill over and around rock windrow shall be compacted to at least 90 percent relative compaction or as recommended.
G. After fill between windrows is placed and compacted, with the lift of fill covering windrow, windrow should be proof rolled with a D-9 dozer or equivalent.

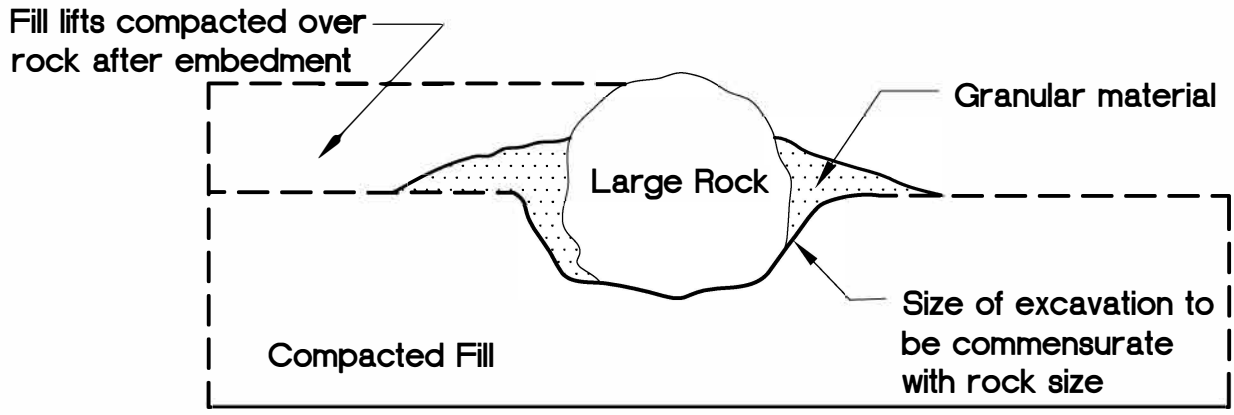
VIEWS ARE DIAGRAMMATIC ONLY AND MAY BE SUPERSEDED BY REPORT RECOMMENDATIONS OR CODE
ROCK SHOULD NOT TOUCH AND VOIDS SHOULD BE COMPLETELY FILLED

GeoSoils, Inc.

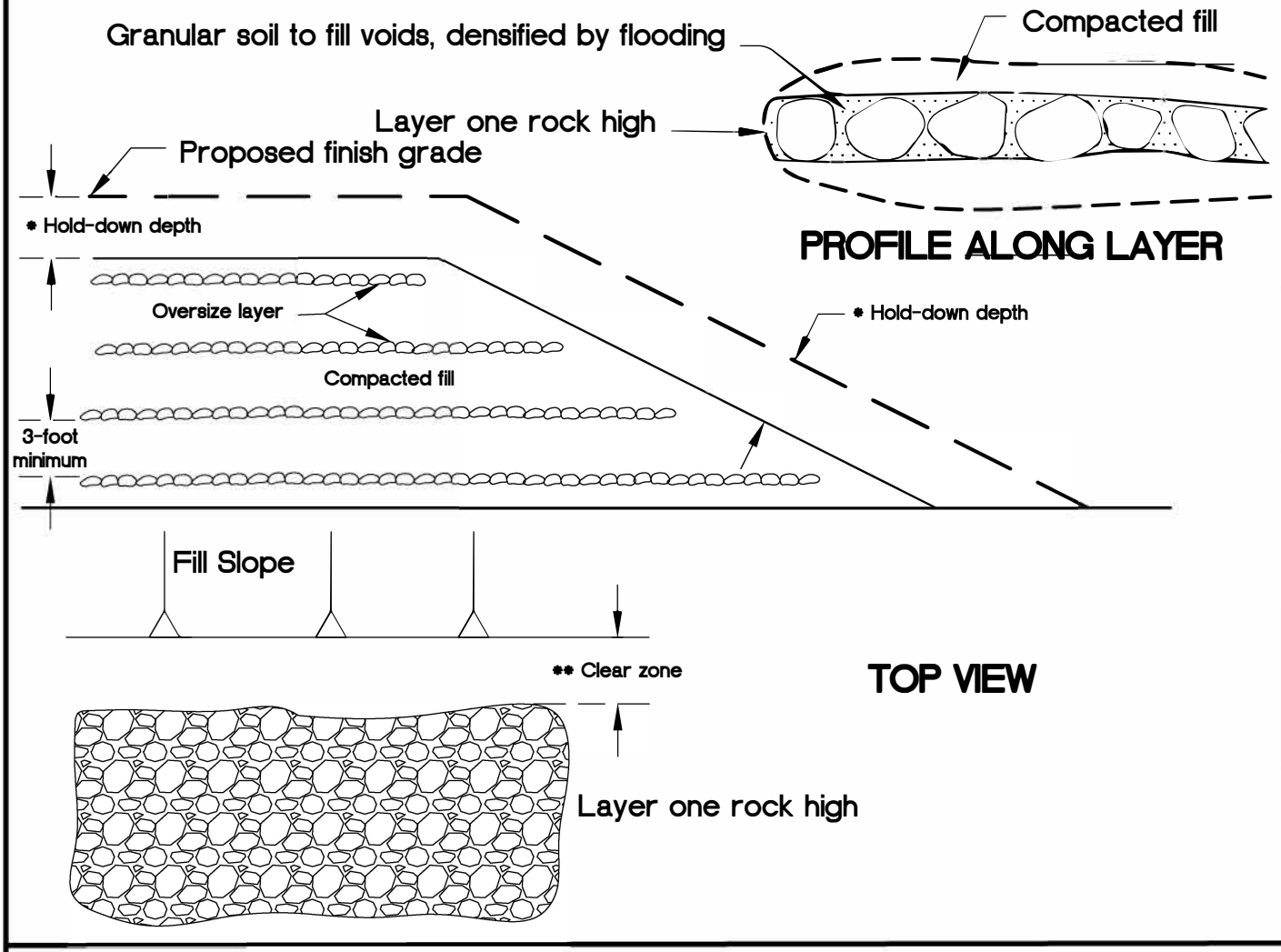
OVERSIZE ROCK DISPOSAL DETAIL

Plate F-13

ROCK DISPOSAL PITS



ROCK DISPOSAL LAYERS



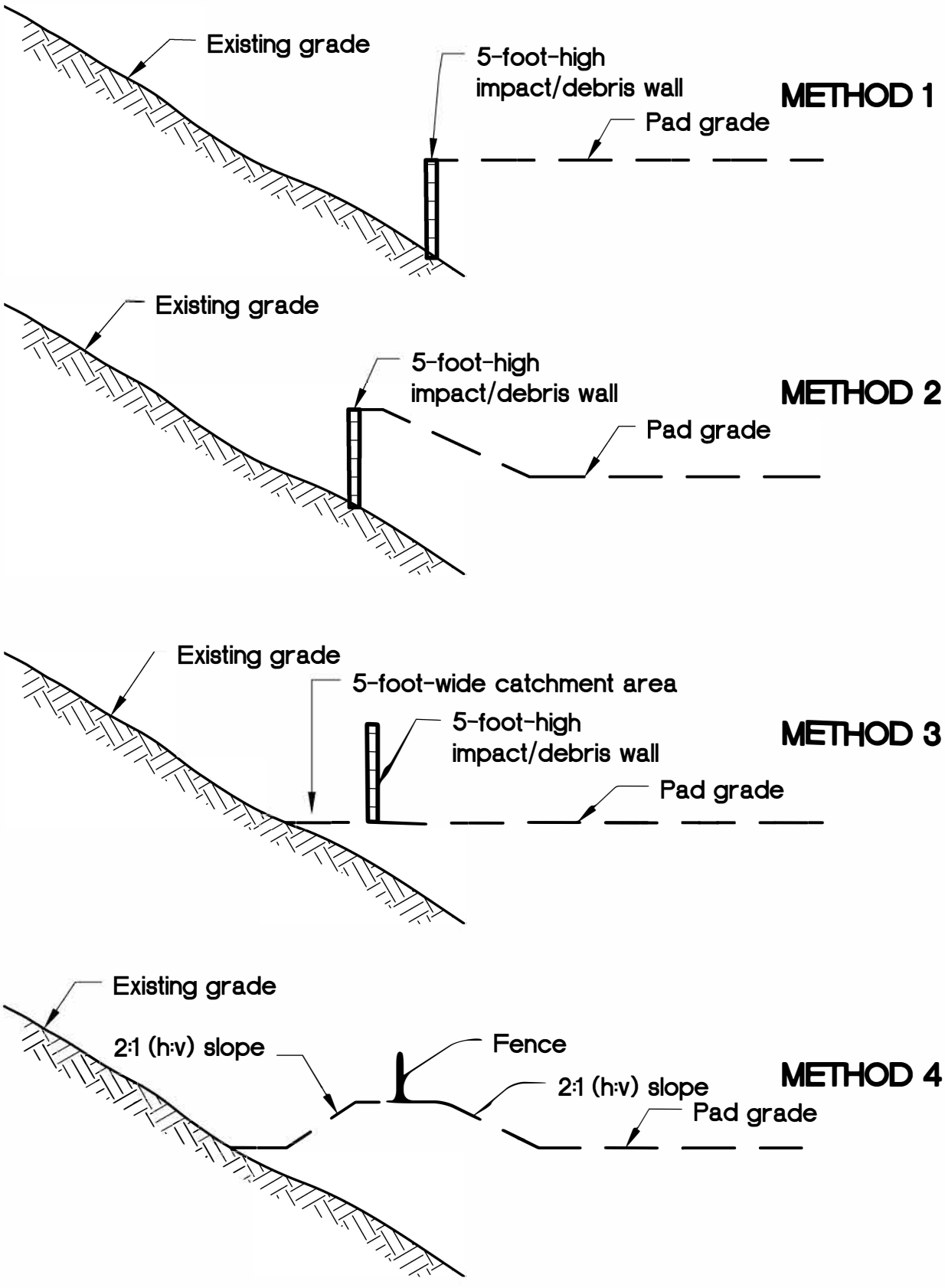
* Hold-down depth or below lowest utility as specified in text of report, subject to governing agency approval.

** Clear zone for utility trenches, foundations, and swimming pools, as specified in text of report.

VIEWS ARE DIAGRAMMATIC ONLY AND MAY BE SUPERSEDED BY REPORT RECOMMENDATIONS OR CODE

ROCK SHOULD NOT TOUCH AND VOIDS SHOULD BE COMPLETELY FILLED IN

GeoSoils,Inc.	ROCK DISPOSAL DETAIL	Plate F-14

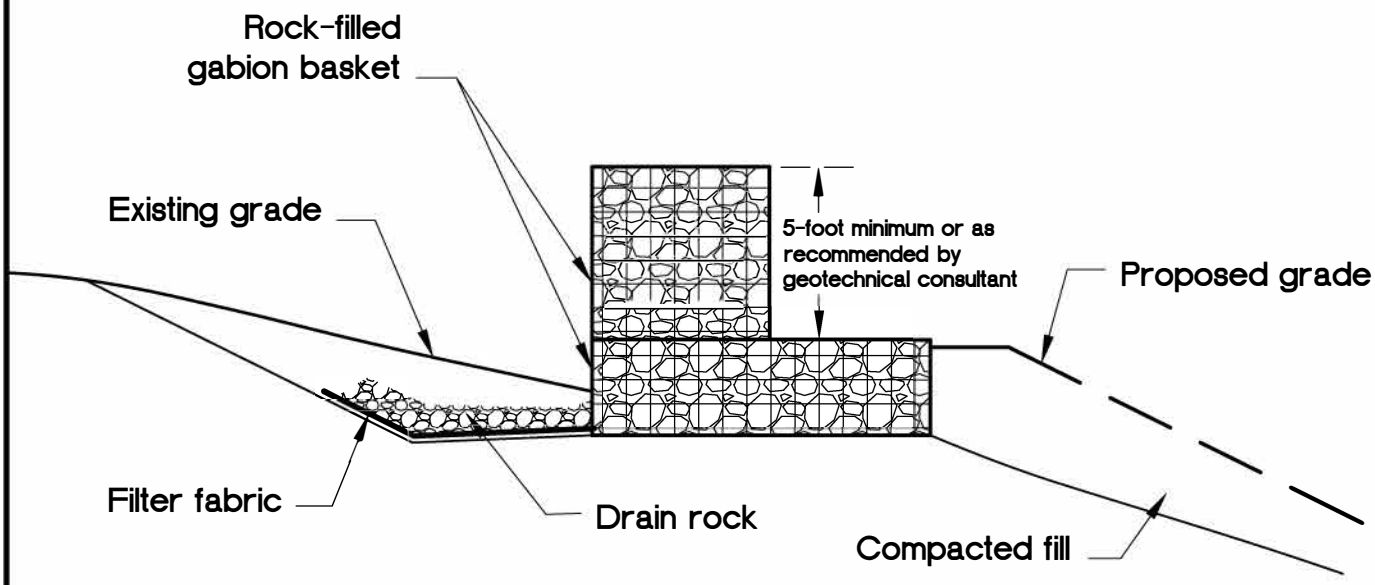


NOT TO SCALE

GSI GeoSoils,Inc.

DEBRIS DEVICE CONTROL METHODS DETAIL

Plate F-15



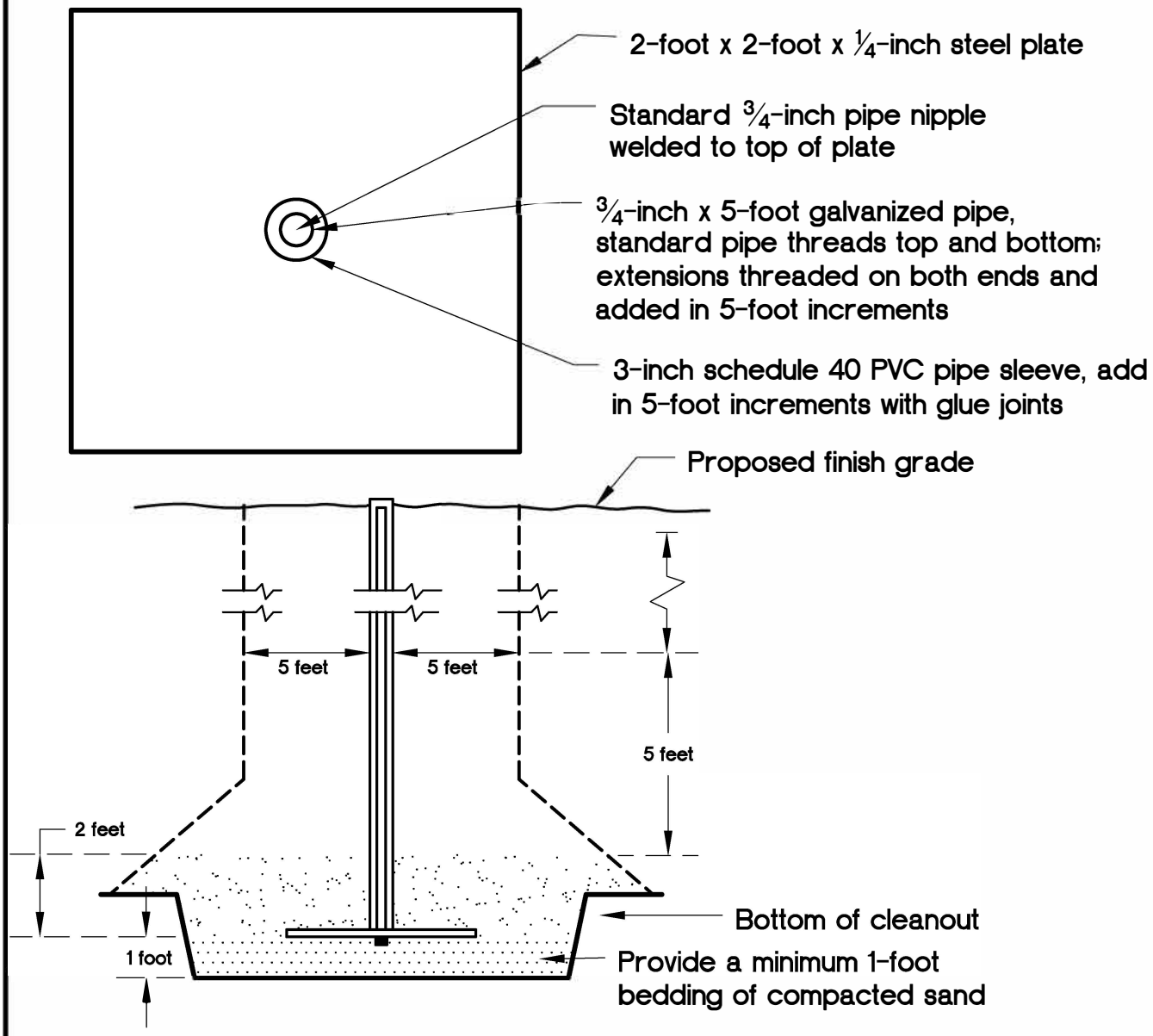
Gabion impact or diversion wall should be constructed at the base of the ascending slope subject to rock fall. Walls need to be constructed with high segments that sustain impact and mitigate potential for overtopping, and low segment that provides channelization of sediments and debris to desired depositional area for subsequent clean-out. Additional subdrain may be recommended by geotechnical consultant.

From GSA, 1987

GeoSoils,Inc.

ROCK FALL MITIGATION DETAIL

Plate F-16



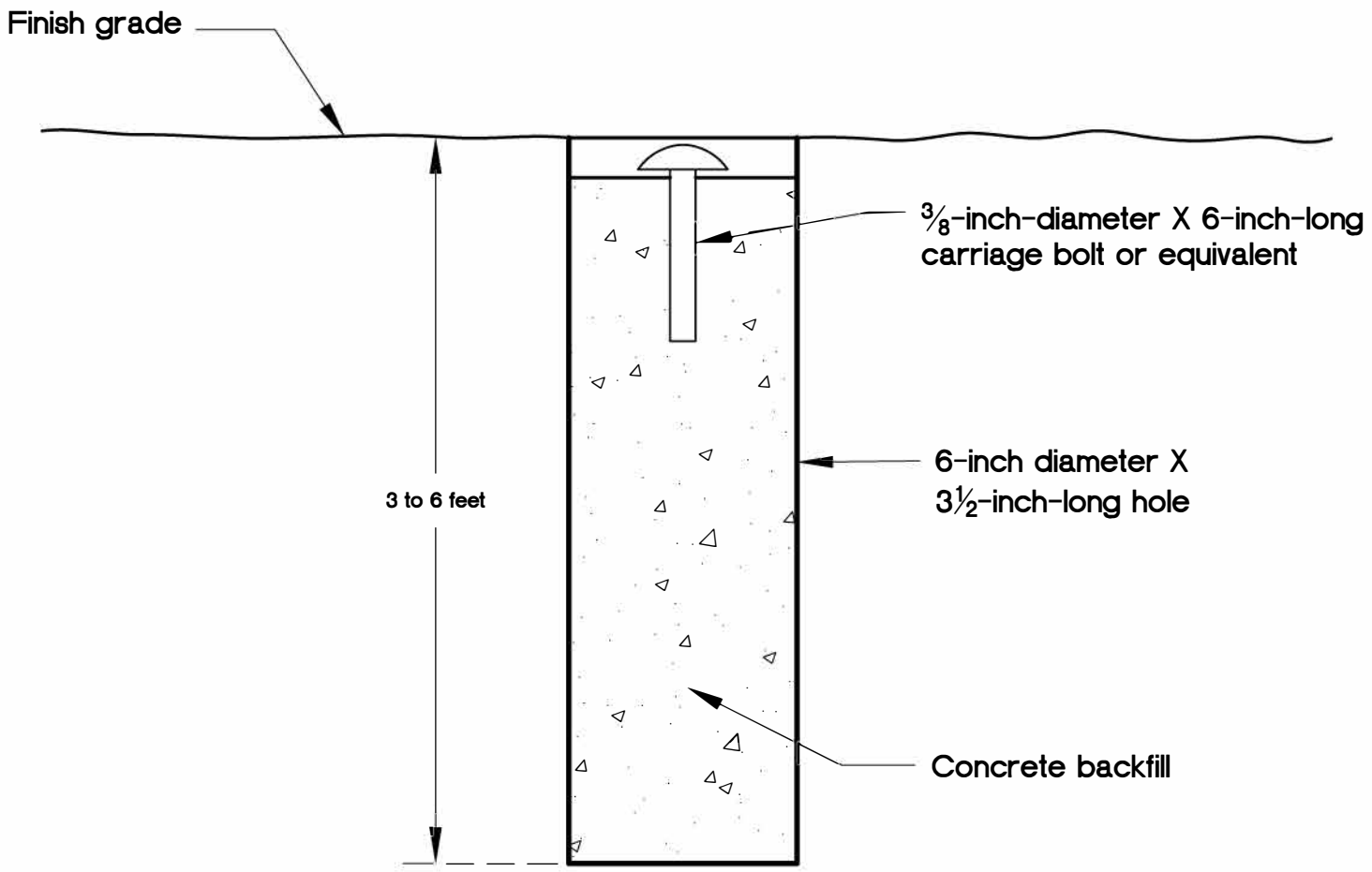
NOTES:

1. Locations of settlement plates should be clearly marked and readily visible (red flagged) to equipment operators.
2. Contractor should maintain clearance of a 5-foot radius of plate base and withiin 5 feet (vertical) for heavy equipment. Fill within clearance area should be hand compacted to project specifications or compacted by alternative approved method by the geotechnical consultant (in writing, prior to construction).
3. After 5 feet (vertical) of fill is in place, contractor should maintain a 5-foot radius equipment clearance from riser.
4. Place and mechanically hand compact initial 2 feet of fill prior to establishing the initial reading.
5. In the event of damage to the settlement plate or extension resulting from equipment operating within the specified clearance area, contractor should immediately notify the geotechnical consultant and should be responsible for restoring the settlement plates to working order.
6. An alternate design and method of installation may be provided at the discretion of the geotechnical consultant.

GeoSoils,Inc.

SETTLEMENT PLATE AND RISER DETAIL

Plate F-17



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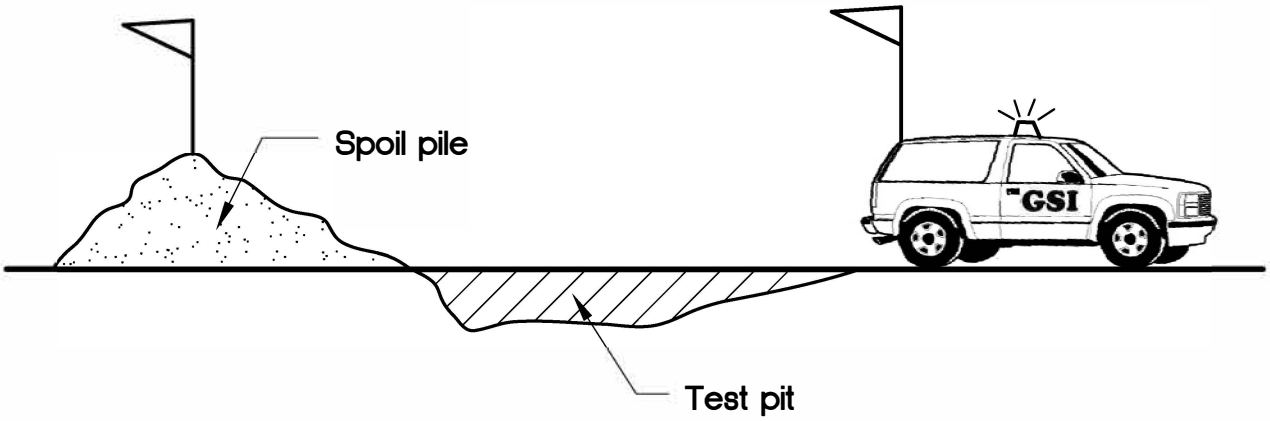
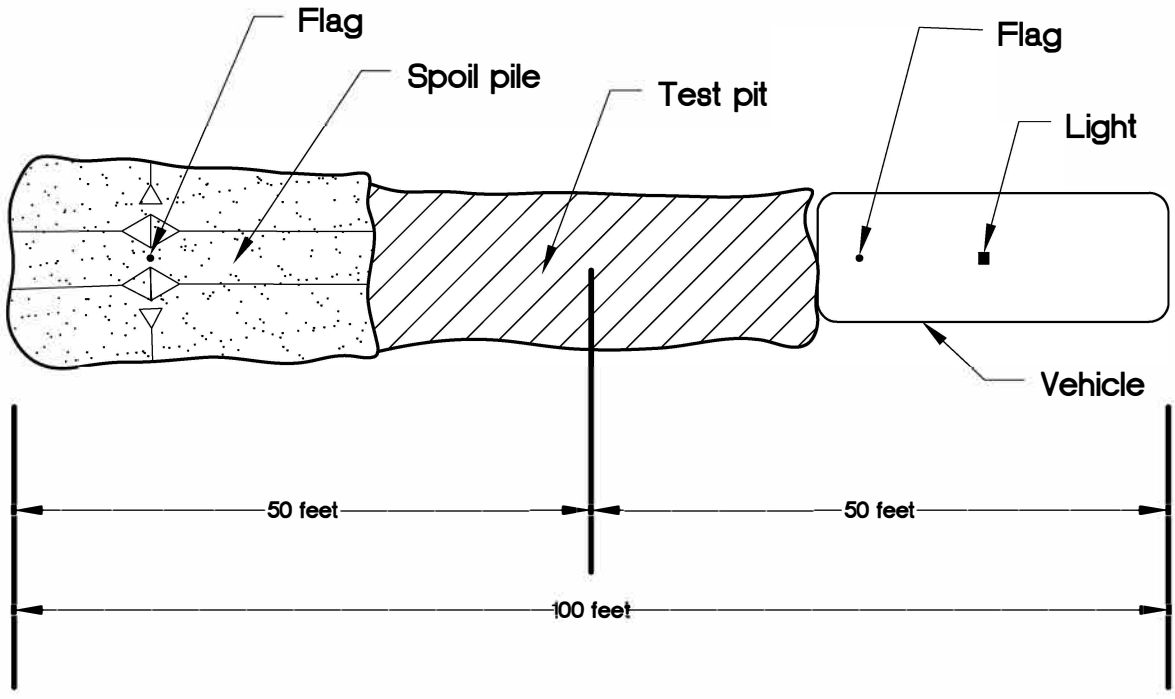
TYPICAL SURFACE SETTLEMENT MONUMENT

Plate F–18

SIDE VIEW



TOP VIEW



GeoSoils, Inc.

TEST PIT SAFETY DIAGRAM

Plate F-19

PALEONTOLOGICAL ASSESSMENT FOR THE BRADLEY GARDENS PROJECT

CITY OF SAN JACINTO, RIVERSIDE COUNTY, CALIFORNIA

APN 435-330-003

Prepared on Behalf of:

EPD Solutions
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Prepared for:

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Community Development – Planning Division
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Prepared by:

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Poway, California 92064

March 13, 2026

BFSA Environmental Services
A Perennial Company

Paleontological Database Information

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Consulting Firm:	BFSA Environmental Services, a Perennial Company 14010 Poway Road, Suite A Poway, California 92064 (858) 484-0915
Report Date:	March 13, 2026
Report Title:	Paleontological Assessment for the Bradley Gardens Project, City of San Jacinto, Riverside County, California, APN 435-330-003
Prepared on Behalf of:	EPD Solutions 3333 Michaelson Drive, Suite 500 Irvine, California 92612
Submitted to:	City of San Jacinto Community Development – Planning Division 595 South San Jacinto Avenue, Building A San Jacinto, California 92583
USGS Quadrangle:	Section 34, Township 4 South, Range 1 West, of the *San Jacinto, California* USGS quadrangle topographic map
Study Area:	2.98 acres
Assessor's Parcel Number:	435-330-003
Key Words:	Paleontological assessment; Pleistocene alluvial deposits; high paleontological sensitivity; monitoring recommended.

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1.0 INTRODUCTION AND LOCATION

This paleontological resource assessment has been completed for the Bradley Gardens Project, located at 980 West 7th Street in the southern portion of the city of San Jacinto, Riverside County, California (Figures 1 and 2). The 2.98-acre project consists of one parcel (Assessor's Parcel Number [APN] 435-330-003) and is situated within Section 34, Township 4 South, Range 1 West, in the United States Geological Survey (USGS) *Lakeview, California* topographic quadrangle map (see Figure 2). The applicant proposes removal and/or modifications to the existing buildings within the parcel and the construction of a new care building with associated hardscape, landscape, and infrastructure.

As the lead agency, the City of San Jacinto has required the preparation of a paleontological assessment to evaluate the project's potential to yield paleontological resources. The paleontological assessment of the project included a review of paleontological literature and fossil locality records in the area; a review of the underlying geology; and recommendations to mitigate impacts to potential paleontological resources, if necessary.

2.0 REGULATORY SETTING

State of California

The California Environmental Quality Act (CEQA), which is patterned after the National Environmental Policy Act, is the overriding environmental regulation that sets the requirement for protecting California's paleontological resources. CEQA mandates that governing permitting agencies (lead agencies) set their own guidelines for the protection of nonrenewable paleontological resources under their jurisdiction.

Under "Guidelines for Implementation of the California Environmental Quality Act," as amended in December 2018 (California Code of Regulations [CCR] Title 14, Division 6, Chapter 3, Sections 15000 et seq.), procedures define the types of activities, persons, and public agencies required to comply with CEQA. Section 15063 of the CCR provides a process by which a lead agency may review a project's potential impact to the environment, whether the impacts are significant, and provide recommendations, if necessary.



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Figure 1

General Location Map

The Bradley Gardens Project

Esri World Topographic Map

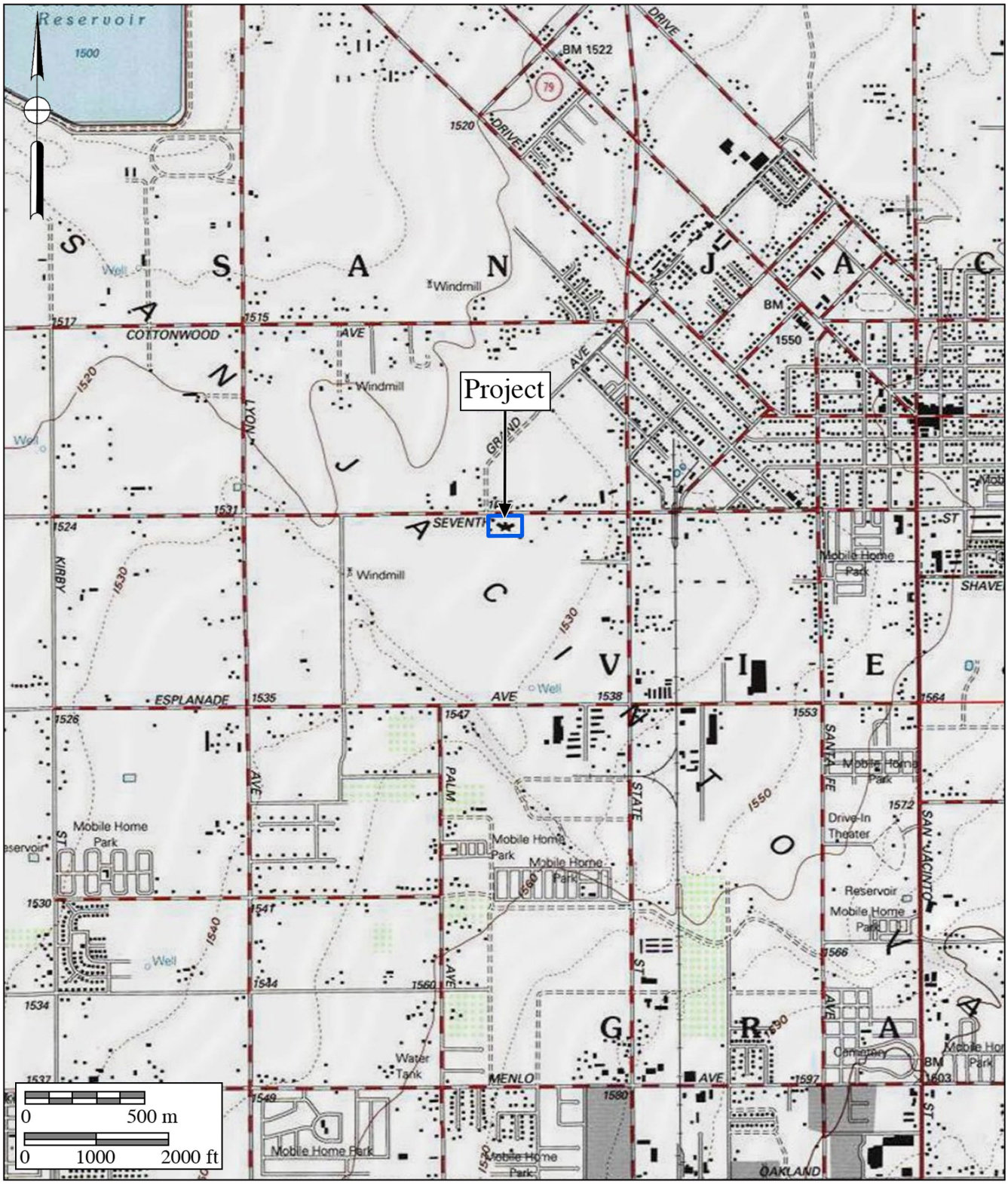

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Figure 2

Project Location Map

The Bradley Gardens Project

USGS *San Jacinto* and *Lakeview* Quadrangles (7.5-minute series)

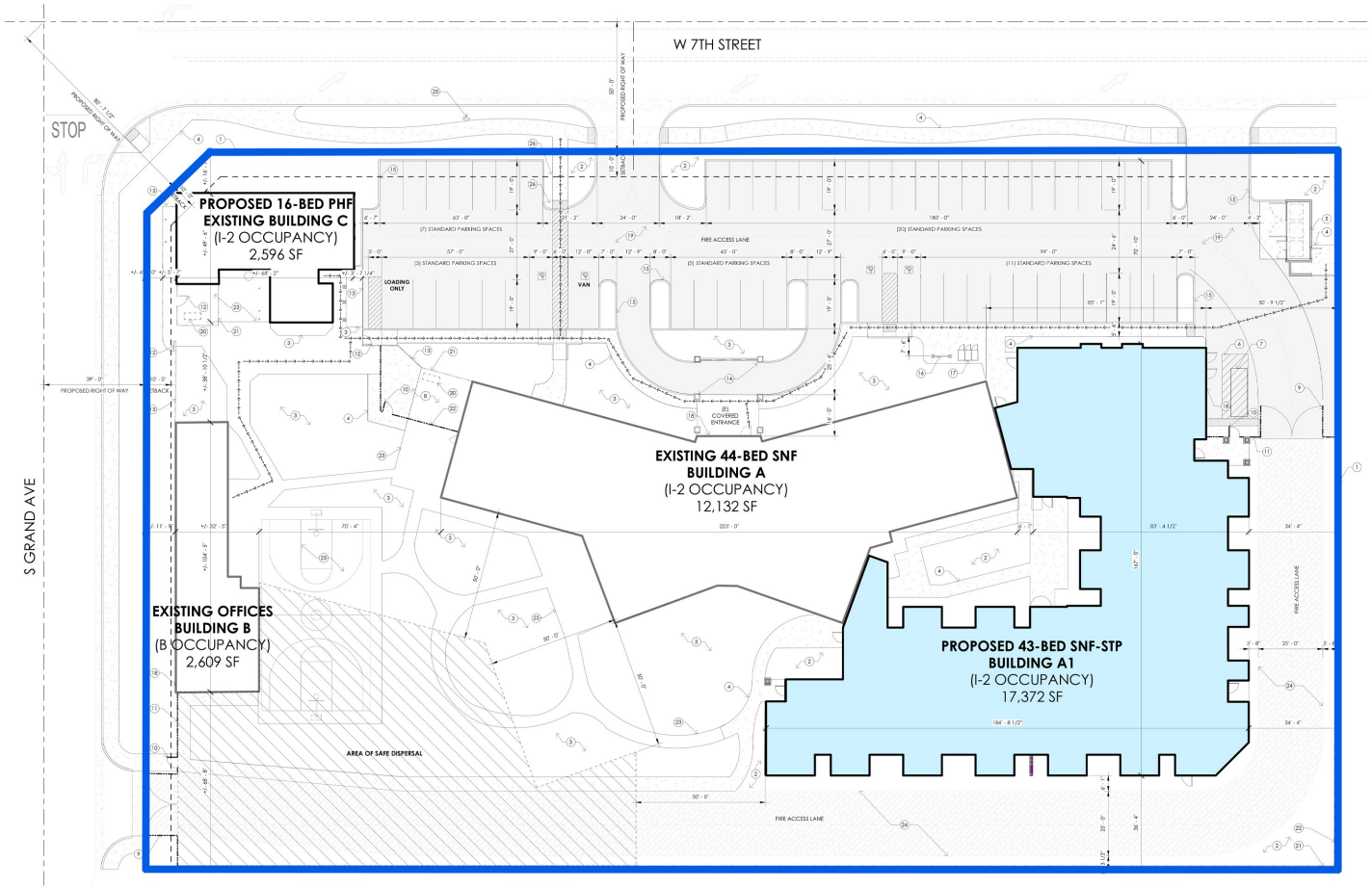

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Figure 3
Project Development Map
The Bradley Gardens Project

In CEQA's Environmental Checklist Form, a question to respond to is, "Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" (Appendix G, Section VII, Part f). This is to ensure compliance with California Public Resources Code Section 5097.5, the law that protects nonrenewable resources including fossils, which is paraphrased below:

a) A person shall not knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands.
b) As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.
c) A violation of this section is a misdemeanor.

City of San Jacinto

The 2022 Envision San Jacinto – General Plan 2040 addresses cultural resources in its Resource Management chapter. The City of San Jacinto's Final Environmental Impact Report (EIR) identifies an existing potential for earth disturbance activities to adversely impact significant paleontological resources (City of San Jacinto 2022). Policy Resource Management (RM) 3.1 Preservation serves to preserve paleontological resources, stating "Protect areas containing significant historic, archaeological, paleontological, and tribal cultural resources, as defined by the California Public Resources Code." In response, Action RM-3e, stated below and in the City's Draft EIR (De Novo Planning Group 2022), is provided to reduce adverse impacts to paleontological resources to a level below significant (City of San Jacinto 2022):

> The City shall require an assessment of the potential for development proposals to significantly impact paleontological resources pursuant to the California Environmental Quality Act Guidelines. If the project involves earthworks, the City may require a study conducted by a professional paleontologist to determine if paleontological assets are present, and if the project will significantly impact the resources. If significant impacts are identified, the City may require the project to be modified to avoid impacting the paleontological materials, require monitoring of rock units with high potential to contain significant nonrenewable paleontological resources, or require mitigation measures to mitigate the impacts, such as recovering the paleontological resources for preservation.

3.0 GEOLOGY

Regionally, the project lies within the San Jacinto Valley, east of the Lakeview Mountains. The surficial geology at the project is mapped as Holocene and late Pleistocene-aged young alluvial valley deposits (area colored pale olive-gray with dots labeled "Qya" on Figure 4, after Lancaster et al. 2012). These deposits are characterized as clay, silt, sand, and gravel along stream valleys and alluvial flats of larger rivers. Disturbed deposits likely overlie the undisturbed alluvial deposits.

4.0 PALEONTOLOGICAL RESOURCES

Definition

Paleontological resources are the remains of prehistoric life that have been preserved in geologic strata. These remains are called fossils and include bones, shells, teeth, and plant remains (including their impressions, casts, and molds) in the sedimentary matrix, as well as trace fossils such as footprints and burrows. Fossils are considered older than 5,000 years of age (Society of Vertebrate Paleontology 2025) but may include younger remains (subfossils) when viewed in the context of local extinction of the organism or habitat. Fossils are considered a nonrenewable resource under state and local guidelines (see Sections 2.0 and 5.0 of this report).

Paleontological Locality Records Search

A paleontological literature review and collections and locality records search was conducted for the project using records from prior Brian F. Smith and Associates, Inc., and BFSA Environmental Services, a Perennial Company (BFSA) projects, the Division of Geological Sciences at the San Bernardino County Museum (SBCM), the Los Angeles County Museum of Natural History, the San Diego Society of Natural History (SDSNH), and the Western Science Center (WSC), as well as data from published and unpublished paleontological literature (Jefferson 1991). The resulting locality records search did not identify any previously recorded fossil localities within the project boundaries.

The closest known fossil localities were recovered during mitigation monitoring for improvements at the Monte Vista Middle School, situated approximately one mile northeast of the project. The late Pleistocene fossils consisted of the shells of freshwater snails and the bones of frogs, snakes, lizards, and mammals, as well as the dental remains of rodents, including those of pocket gophers (*Thomomys* sp.) (SDSNH locality number 7971). This locality was recovered as a result of screenwashing about 400 pounds of fossiliferous sedimentary matrix consisting of pale olive siltstone, collected at approximately seven feet deep in an area mapped as young alluvial valley deposits. The deposits were interpreted as representing a fluvial overbank environment and are mapped within the same geologic unit by Lancaster et al. (2012) as the current project.

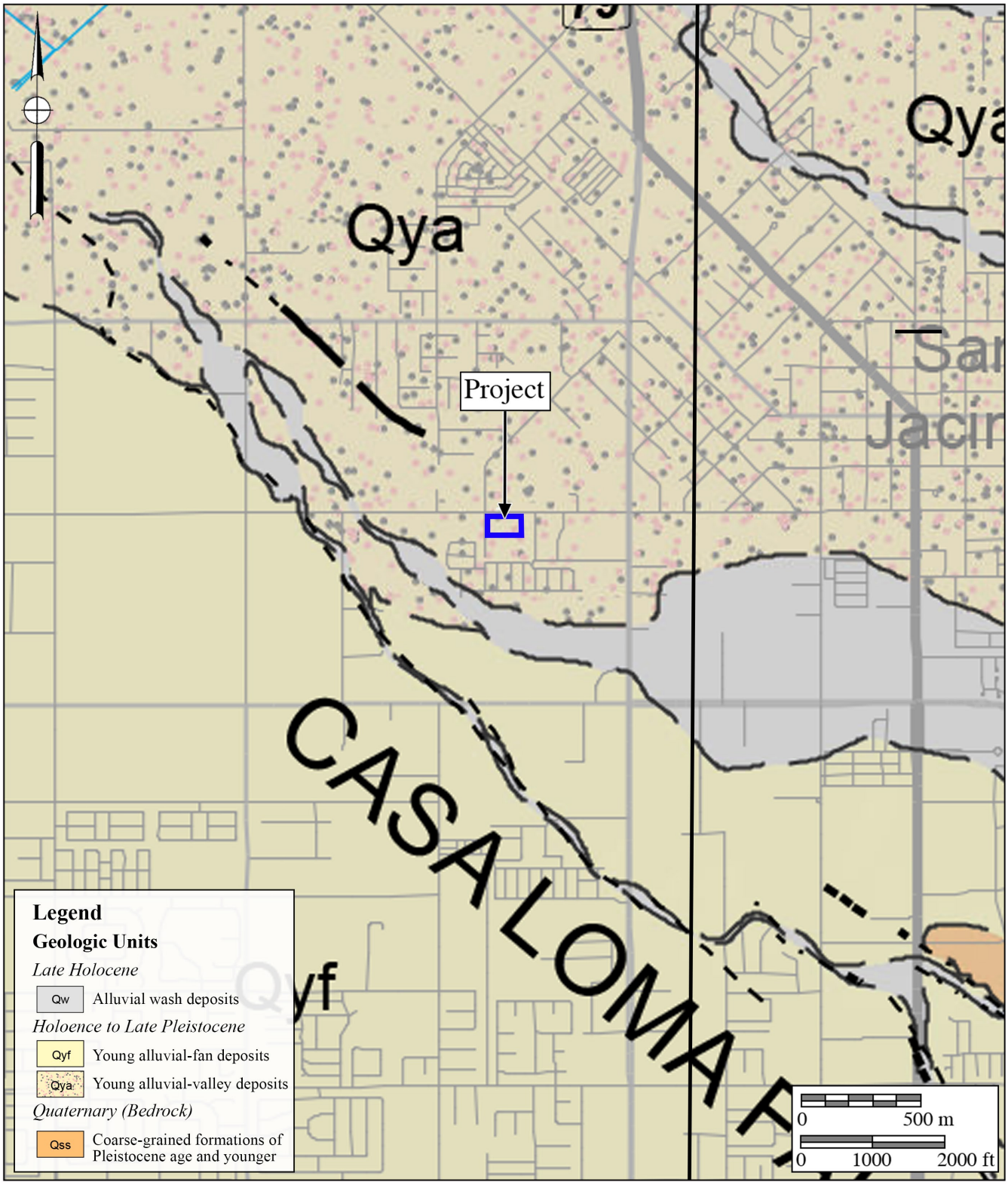

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Figure 4

Geologic Map

The Bradley Gardens Project

Geology after Lancaster et al. (2012)

Other fossil localities were discovered during mitigation monitoring for the construction of the Eastside Pipeline (De Novo Planning Group 2022), a little more than three miles west of the project. From WSC records, these Pleistocene vertebrate localities extend from Esplanade Avenue to as far south as Stetson Avenue and are situated within areas mapped as young alluvial valley deposits. Fossil specimens include rodents (*Thomomys* sp., *Dipodomys* sp.), camels (*Camelops* sp.), and more (Stoneburg 2024).

Approximately four miles south of the project, south of the Hemet-Ryan Airport off Warren Road, a locality consisting of the bones of an extinct horse and other unidentified large mammal remains were discovered during mitigation monitoring. Fossils were recovered from 10 places at the locality, at depths as little as a few feet below the surface, in an area mapped as young alluvial valley deposits (Kennedy 2006). These fossils are housed at the WSC. From similar deposits as the project, the closest SBCM localities are located at Lakeview Hot Springs near Lake Perris, and the nearest LACM locality is near the Lake Skinner reservoir.

Project Survey

BFSA staff, under the supervision of Principal Investigator Todd A. Wirths, M.S., P.G., conducted a project survey on February 6, 2026, employing a series of parallel survey transects spaced at approximately 15-meter intervals. The entire property was covered by the survey process. Approximately half of the area proposed for development had existing structures, with the remainder occurring as paved parking lots and graded dirt areas. The proposed development area was 100 percent disturbed. No paleontological resources, or evidence indicating the presence of paleontological resources, were identified as a result of the survey.

5.0 PALEONTOLOGICAL SENSITIVITY

Overview

The degree of paleontological sensitivity of any particular area is based upon a number of factors, including the documented presence of fossiliferous resources on a site or in nearby areas, the presence of documented fossils within a particular geologic formation or lithostratigraphic unit, and whether or not the original depositional environment of the sediments is one that might have been conducive to the accumulation of organic remains that may have become fossilized over time. Holocene alluvium is generally considered to be geologically too young to contain significant nonrenewable paleontological resources (*i.e.,* fossils) and is thus typically assigned a low paleontological sensitivity. Pleistocene (older than 11,700 years old) alluvial and alluvial fan deposits in the Inland Empire and western Riverside County, however, are known to yield important terrestrial vertebrate fossils, such as extinct mammoths, mastodons, giant ground sloths, extinct species of horse, bison, camel, saber-toothed cats, and others (Jefferson 1991). These Pleistocene sediments are accorded a high paleontological resource sensitivity.

Professional Standards

The Society of Vertebrate Paleontology (2025) has put forth the guideline criteria, a "Fossil Prediction Map System" (FPMS), which include six categories of paleontological sensitivity for geologic units (formations) that might be impacted by a proposed project, as listed below:

- *5 = Very High Potential:* Highly fossiliferous geologic units that consistently and predictably preserve scientifically significant fossils.
- *4 = High Potential:* Highly fossiliferous geologic units that preserve scientifically significant fossils, but their concentrations vary and are less predictable than 5.
- *3 = Moderate Potential:* Fossiliferous geologic units that are often marine in origin and in which fossils may be common, but scientifically significant fossils are isolated or sparse.
- *2 = Low Potential:* Geologic units that are not likely to preserve fossils, including sedimentary deposits that are generally younger than 11,700 years before present, older sedimentary units that only rarely preserve fossils, or units that exhibit physical and chemical alteration (diagenetic changes) that make fossil preservation unlikely.
- *1 = Very Low Potential:* Geologic units that are not likely to contain recognizable fossils including Precambrian units and units that are igneous or metamorphic, excluding air-fall and reworked volcanic ash.
- *U = Undetermined Potential:* Geologic units that cannot be assigned an informed FPMS designation. This includes units that have not been subject to prior field surveys but that contain lithologies or preserve depositional settings that are known to be conducive to fossil preservation, units that have not been published in the scientific literature, and units in which reports of fossils have not been verified.

Using these criteria, and based upon the distribution of nearby fossil localities, surficial fill and Holocene alluvial deposits at the project have a low potential to yield significant paleontological resources. The underlying Pleistocene young alluvial deposits may be considered to have a high potential to yield significant paleontological resources. The depth of age transition from Holocene to Pleistocene within the alluvial deposits at the project is unknown.

City of San Jacinto Sensitivity Assessment

The surficial alluvial deposits at the project are regarded by the City of San Jacinto as having a low potential to contain paleontological resources; however, the potential increases to high with (an unspecified) depth, in accordance with their increasing (verging into Pleistocene) age (De Novo Planning Group 2022:5.7–5.16).

6.0 CONCLUSION AND RECOMMENDATIONS

Research has confirmed the existence of potentially fossiliferous Pleistocene alluvial deposits that underlie Holocene deposits at the project. The occurrence of terrestrial vertebrate fossils from Pleistocene-aged alluvial deposits in western Riverside County and San Jacinto is well documented. The high paleontological sensitivity rating assigned to this formation for yielding paleontological resources supports the recommendation that paleontological monitoring be implemented during mass grading and excavation activities within these deposits to mitigate any adverse impacts (loss or destruction) to potential nonrenewable paleontological resources. Since the younger deposits are likely very thin at the surface, full-time monitoring at the project is warranted starting at three feet deep below the current surface. Monitoring disturbed soils or artificial fill deposits is not recommended.

A Paleontological Resource Impact Mitigation Program (PRIMP) with the recommended mitigation monitoring procedures at the project is outlined below. When implemented, this PRIMP would reduce potential impacts to paleontological resources to a level below significant.

Suggested PRIMP

1. All mitigation programs should be performed by a qualified professional (project) paleontologist, defined as an individual with a master's or doctorate in paleontology or geology, who has proven experience in paleontology and is knowledgeable in professional paleontological procedures and techniques. Fieldwork may be conducted by a qualified paleontological monitor, defined as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor shall always work under the direction of a qualified paleontologist.
2. Monitoring of mass grading and excavation activities shall be performed by a qualified paleontologist or paleontological monitor. Full-time monitoring for paleontological resources from three feet deep below the surface will be conducted in areas where grading, excavation, or drilling activities occur in undisturbed alluvium to mitigate any adverse impacts (loss or destruction) to potential nonrenewable paleontological resources. The duration and frequency of monitoring may be altered at the discretion of the project paleontologist based upon geologic conditions encountered. Monitoring is not warranted in disturbed soils, such as artificial fill, or in crystalline bedrock formations, should they become exposed.
3. Paleontological monitors will be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediment that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor must be empowered to temporarily halt or divert equipment to allow for the removal of abundant or large specimens in a timely manner. The monitor shall notify the project paleontologist, who will then notify the concerned parties of the discovery.

Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface or, if they are present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources.

4. In accordance with the "Microfossil Salvage" section of the Society of Vertebrate Paleontology guidelines (2025), bulk sampling and screening of fine-grained sedimentary deposits (including carbonate-rich paleosols) must be performed if the deposits are identified to possess indications of producing fossil "microvertebrates" to test the feasibility of the deposit to yield fossil bones and teeth. If indicators of potential microvertebrate fossils are found, screening of a test sample (approximately 600 pounds) is recommended, according to the Society of Vertebrate Paleontology guidelines. If feasible, wet screening shall be conducted on-site. If screening yields significant fossils, removing and processing a "standard sample" of 6,000 pounds shall be performed.
5. Preparation of recovered specimens to a point of identification and permanent preservation will be conducted, including screen washing sediments to recover small vertebrates and invertebrates if indicated by the results of test sampling.
6. All fossils must be deposited in an accredited institution (university or museum) that maintains collections of paleontological materials. The Western Science Center in Hemet, California, is the preferred institution for fossils recovered within the County of Riverside. All costs of the paleontological monitoring and mitigation program, including any one-time charges by the receiving institution, are the responsibility of the developer.
7. Preparation of a final monitoring and mitigation report of findings and significance will be completed, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location(s). A letter documenting receipt and acceptance of all fossil collections by the receiving institution must be included in the final report. The report, when submitted to and accepted by the appropriate lead agency (*e.g.,* the City of San Jacinto), will signify satisfactory completion of the project program to mitigate impacts to any nonrenewable paleontological resources.

7.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this paleontological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief and have been compiled in accordance with CEQA criteria.



March 13, 2026

Todd A. Wirths, M.S., P.G.
Principal Paleontologist
California Professional Geologist No. 7588

Date

8.0 REFERENCES

City of San Jacinto. 2022. Envision San Jacinto – General Plan 2040. https://static1.squarespace.com/static/5a999021cc8fedea12873268/t/639a30e962747e6d737cfb59/1671049471437/SanJacinto_AdoptedGPU.pdf.

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APPENDIX A

Qualifications of Key Personnel

Todd A. Wirths, MS, PG No. 7588

Principal Paleontologist

BFSA Environmental Services, a Perennial Company
14010 Poway Road • Suite A •
Phone: (858) 679-8218 • Fax: (858) 679-9896 • Email: twirths@bfsa.perennialenv.com

BFSA Environmental Services
A Perennial Company

Education

Master of Science, Geological Sciences, San Diego State University, California **1995**

Bachelor of Arts, Earth Sciences, University of California, Santa Cruz **1992**

Professional Certifications

California Professional Geologist #7588, 2003
Riverside County Approved Paleontologist
San Diego County Qualified Paleontologist
Orange County Certified Paleontologist
OSHA HAZWOPER 40-hour trained; current 8-hour annual refresher

Professional Memberships

Board Director, San Diego Geological Society
San Diego Association of Geologists; past President (2012) and Vice President (2011)
South Coast Geological Society
Southern California Paleontological Society

Experience

Mr. Wirths has more than a dozen years of professional experience as a senior-level paleontologist throughout southern California. He is also a certified California Professional Geologist. At BFSA, Mr. Wirths conducts on-site paleontological monitoring, trains and supervises junior staff, and performs all research and reporting duties for locations throughout Los Angeles, Ventura, San Bernardino, Riverside, Orange, San Diego, and Imperial Counties. Mr. Wirths was formerly a senior project manager conducting environmental investigations and remediation projects for petroleum hydrocarbon-impacted sites across southern California.

Selected Recent Reports

2025 *Paleontological Monitoring Report for the Ontario Ranch Business Park Project, City of Ontario, San Bernardino County, California*. Prepared for Real Estate Developmental Associates, LLC.

2025 *Paleontological Assessment for the Irwindale Aggregates Project, 13550 Live Oak Avenue, Irwindale, Los Angeles County, California*. Prepared for Lilburn Corporation, Inc.

2025 *Paleontological Resource Impact Mitigation Program for the Canterwood 53 Project (BGR2400072; TTM 38332), Riverside County, California*. Prepared for KB Home Inland Empire Division.

2025 *Paleontological Monitoring Report for the Alberhill Tract 28214-9 Project, city of Lake Elsinore, Riverside County, California*. Prepared for Pulte Group.

2025 *Paleontological Assessment for the Quail Valley Nature Park Project, City of Menifee, Riverside County, California*. Prepared for EPD Solutions, Inc.

2025 *Paleontological Assessment for the Hesperia Gateway Project, City of Hesperia, San Bernardino County, California.* Prepared for T&B Planning.

2024 *Paleontological Resource Impact Mitigation Program for the 450 The Promenade North Project, City of Long Beach, Los Angeles County, California.* Prepared for JPI-West Region.

2024 *Paleontological Assessment for the Noble Creek Vistas SPA Project, Beaumont, Riverside County, California*. Prepared for EPD Solutions, Inc.

2024 *Paleontological Assessment for the High Desert Gas Station Project, Yucca Grove, San Bernardino County, California*. Prepared for Lilburn Corporation, Inc.

2024 *Paleontological Resource Impact Mitigation Program for the 424 Berry Way Project, Brea, Orange County, California*. Prepared for EPD Solutions, Inc.

2024 *Paleontological Monitoring Report for the Manchester Pacific Gateway/IQHQ RaDD Project, San Diego, California*. Prepared for Manchester Financial Group LP.

2024 *Paleontological Resource Impact Mitigation Program for the Vernola Ranch Project, Jurupa Valley, Riverside County, California.* Prepared for Lennar Homes of California.

2023 *Paleontological Assessment for the Kramer Junction Solar Project, Kramer Junction, San Bernardino County, California*. Prepared for San Bernardino CSG 3 LLC.

2023 *Paleontological Monitoring and Mitigation Plan for the Moss Street Beach Access Improvements Project, Moss Street Beach, City of Laguna Beach, California*. Prepared for the City of Laguna Beach.

2023 *Paleontological Monitoring Report for the 11th and Broadway Residential Towers Project, San Diego, California*. Prepared for Pinnacle International Development.

2023 *Paleontological Assessment for the Willow Street and Orange Avenue Project, City of Signal Hill, Los Angeles County, California*. Prepared for CenterPoint Properties.

2023 *Paleontological Resource Assessment Update for the Summerwind Ranch Specific Plan Amendment, Phases 2-5, Calimesa*. Prepared for Jen So Cal 2, LLC.

2023 *Paleontological Resource Impact Mitigation Program for the Palisade Temescal Canyon Project, Riverside County, California, PPT220036, BGR2300031, BGR2300032*. Prepared for North Palisade Partners, LLC.

PARTNER
Engineering and Science, Inc.

More Than Just Assessments.
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PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

Bradley Gardens
980 W 7th St
San Jacinto, California 92582

Report Date
February 23, 2026

Site Inspection Date
February 6, 2026

Partner Project No.
25-560235.1

Prepared for:
EPD Solutions
3333 Michelson Drive | Suite 500
Irvine, California 92612

Building Science | Environmental Consulting | Construction & Development | Energy & Sustainability

PARTNER

February 23, 2026

Ms. Erin Gallagher
EPD Solutions
3333 Michelson Drive | Suite 500
Irvine, California 92612

Subject: **Phase I Environmental Site Assessment**
Bradley Gardens
980 W 7th St
San Jacinto, California 92582
Partner Project No. 25-560235.1

Dear Erin Gallagher,

Partner Engineering and Science, Inc. (Partner) is pleased to provide this Phase I Environmental Site Assessment (Phase I ESA) report of the abovementioned address (the "subject property"). This assessment was performed in conformance with the scope and limitations as detailed in the ASTM Practice E1527-21 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process and Client Agreement.

This assessment included a site reconnaissance as well as research and interviews with representatives of the public, property ownership, site manager, and regulatory agencies. An assessment was made, conclusions stated, and recommendations outlined.

We appreciate your trust in Partner and the opportunity to provide environmental services to you. If you have any questions concerning this report, or if we can assist you in any other matter, please contact me at (619) 925-9672 or at MLambson@partneresi.com.

Sincerely,



Mark Lambson
Principal

EXECUTIVE SUMMARY

Partner Engineering and Science, Inc. (Partner) has performed a Phase I Environmental Site Assessment (ESA) in accordance with the scope of work and limitations of ASTM Practice E1527-21, the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) and set forth by EPD Solutions for the property located at 980 W 7th St in San Jacinto, Riverside County, California (the "subject property"). The Phase I Environmental Site Assessment is designed to provide EPD Solutions with an assessment concerning environmental conditions (limited to those issues identified in the report) as they exist at the subject property.

Property Description

The subject property is located on the southeast corner of the intersection of West 7th Street and South Grand Avenue within a residential and light industrial area of Riverside County, California. Please refer to the table below for a further description of the subject property:

SUBJECT PROPERTY DATA

Address(es):	980 W 7th St, San Jacinto, California
Additional Current Address(es):	None Identified
Historical Address(es):	39241 West 7th Street
Property Use:	Inpatient Rehabilitation
Land Acreage (Ac):	2.98
Number of Buildings:	Four
Number of Floors:	Building A through D: One
Gross Building Area (SF):	18,411
Net Rentable Area (SF):	18,411
Date of Construction:	Buildings A, C, and D: 1964; Building B: 1971
Parcel Number:	435-330-003
Type of Construction:	Concrete slab-on-grade foundations with wood framed stucco finished walls and a pitched asphalt shingle roofs
Current Tenants:	The Bradley Gardens Rehabilitation Center
Site Assessment Performed By:	James Erwin of Partner
Site Assessment Conducted On:	February 6, 2026
Regulatory Radius Report Date:	February 2, 2026
Lien Search Date:	N/A
Report Date:	February 23, 2026
FOIAs Date:	February 2026
Groundwater Flow Direction (Inferred):	Northwest

Estimated Depth to Groundwater (Feet bgs):	Approximately 170 to 175

The subject property is currently occupied by Bradley Gardens Rehabilitation Center. Onsite operations consist of commercial inpatient rehabilitation and convalescent care, food preparation, administrative office operations, and routine property maintenance activities. In addition to the current structures, the subject property is also improved with asphalt-paved parking areas, associated landscaping, and perimeter fencing.

According to available historical sources, the subject property was formerly undeveloped as early as 1938; developed with three of the current commercial structures circa 1964; and developed with the remaining structure (Building B) by 1971. Tenants on the subject property have included Colonial Nursing Home (1964); Colonial Convalescent Hospital (1974-1996); and Bradley Gardens Convalescent Center (2001-Present).

The adjoining properties are tabulated below:

ADJOINING PROPERTIES

Direction	Land Use/Occupant
North:	West 7th Street beyond which is Talley Metal Fabrication (911-989 West 7th Street)
East:	Vacant land (APNs: 435-330-005, 435-330-006)
South:	Vacant land (APNs: 435-330-004)
Southwest:	South Grand Avenue beyond which is the Parkview Estates Mobile Home Park (913 South Grand Avenue)
West:	South Grand Avenue beyond which is vacant land (APN: 435-320-001)
Northwest:	South Grand Avenue beyond which is a single-family residential structure (1011 West 7th Street)

Findings and Opinions

Recognized Environmental Condition

A recognized environmental condition (REC) refers to the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment.

- Partner did not identify any RECs during the course of this assessment.

Controlled Recognized Environmental Condition

A controlled recognized environmental condition (CREC) refers to a REC affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, activity and use limitations or other property use limitations).

- Partner did not identify any CRECs during the course of this assessment.

Historical Recognized Environmental Condition

A historical recognized environmental condition (HREC) refers to a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls (for example, activity and use limitations or other property use limitations).

- Partner did not identify any HRECs during the course of this assessment.

Business Environmental Risk

A Business Environmental Risk (BER) is a risk which can have a material environmental or environmentally driven impact on the business associated with the current or planned use of commercial real estate, not necessarily related to those environmental issues required to be investigated in this practice. The following was identified during the course of this assessment:

- Due to the age of the subject property buildings, there is a potential that asbestos-containing material (ACM) and/or lead-based paint (LBP) are present. Should these materials be replaced, the identified suspect ACMs would need to be sampled to confirm the presence or absence of asbestos prior to any renovation or demolition activities to prevent potential exposure to workers and/or building occupants. Building D is slated for demolition and redevelopment, and as such should have ACM and LBP sampling and testing conducted prior to demolition activities.

Significant Data Gaps

No significant data gaps affecting the ability of the Environmental Professional to identify a REC were encountered during this assessment.

Conclusions and Recommendations

Partner has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-21 of 980 W 7th St in San Jacinto, Riverside County, California (the “subject property”). Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report.

This assessment has revealed no evidence of RECs, CRECs, or HRECs in connection with the subject property; however, a BER was identified. Based on the conclusions of this assessment, Partner recommends the following:

- An Operations and Maintenance (O&M) Program should be implemented in order to safely manage the suspect ACMs and LBP located at the subject property.

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ACRONYM LIST

Ac	Acre
AAI	All Appropriate Inquiries
AMSD	Approximate Minimum Search Distance
AOC	Area of Concern
ACM	Asbestos Containing Material
APN	Assessor Parcel Number
AST	Aboveground Storage Tank
AUL	Activity and Use Limitation
AIRS	Aerometric Information Retrieval System
AFS	Air Facility System
ALT FUELS	Alternate Fueling Stations
ASTM	American Society for Testing and Materials
BGS	Below Ground Surface
BER	Business Environmental Risk
BRS	EPA Biennial Reporting System
COC	Chemical of Concern
CREC	Controlled Recognized Environmental Condition
CDL	Clandestine Drug Lab
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESQG	Conditionally Exempt Small Quantity Generator
CORRACTS	RCRA Corrective Action Sites
ERIS	Environmental Risk Information Services
ERNS	Emergency Response Notification System
ECHO	Enforcement and Compliance History Online
FRP	Fiberglass Reinforced Plastic
FIM	Fire Insurance Map
FOIA	Freedom of Information Action
FINDS	Facility Index Database System
FRS	Facility Registry Service
FRP	Facility Response Plan
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FUDS	Formally Used Defense Site
FTTS	FIFRA/TSCA Tracking System
FTTS INSP	Inspection Case Listing
FUSRAP	Formerly Utilized Sites Remedial Action Program
FEMA	Federal Emergency Management Agency
HUD	U.S. Department of Housing and Urban Development
HSWA	Hazardous and Solid Waste Amendments
HVAC	Heating, Ventilation and Air Conditioning
HREC	Historical Recognized Environmental Condition
IODI	Open Dumps on Indian Lands
IHW	Industrial Hazardous Waste
IC/EC or INST/ENG	Institutional Control/Engineering Control
ICIS	Integrated Compliance Information System
LUCIS	Land Use Control Information System U.S. Department of the Navy
LQG	Large Quantity Generator
LPST	Leaking Petroleum Storage Tank
LST	Leaking Storage Tank
LUST	Leaking Underground Storage Tank

LBP	Lead-Based Paint
MSL	Mean Sea Level
MMMP	Mold, Moisture, and Mitigation Plan
MGP	Manufactured Gas Plant
MINES	Mines Master Index File
MLTS	Material Licensing Tracking System
HMIRS	Hazardous Materials Information Reporting System
MRDS	Mineral Resource Data System
NPL	National Priorities List
NCDL	National Clandestine Drug Labs
NPDES	National Pollutant Discharge Elimination System
NFRAP	No Further Remedial Action Planned
NonGen	Non Generator
NonGen/NLR	Non Generator/No Longer Regulated
ND	None Detected
NESHAP	National Emission Standards for Hazardous Air Pollutants
NWI	National Wetlands Inventory
NFA	No Further Action
N/A	Not Applicable
NOV	Notice of Violation
NTC	Notice To Comply
NRC	Nuclear Regulatory Commission
ODI	Inventory of Open Dumps
OWS	Oil-Water Separator
OSHA	Occupational Safety and Health Administration
O&M	Operations and Maintenance
PTO	Permit to Operate
Phase I ESA	Phase I Environmental Site Assessment
pCi/L	picoCuries per Liter
PHMSA	Pipeline and Hazardous Materials Safety Administration
PCB	Polychlorinated Biphenyl
PACM	Presumed Asbestos Containing Material
PFAS	Perfluoroalkyl and Polyfluoroalkyl Substances
PFOA	perfluorooctanoic acid
PFOS	Perfluorooctane sulfonic acid
REFN	Petroleum Refineries
PRP	Potentially Responsible Party
PST	Petroleum Storage Tank
ROD	Record of Decision
RGA	Recovered Government Archive
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation Recovery Information System
REC	Recognized Environmental Condition
SF	Square Foot/Feet
SSA	Superfund Alternative Agreement
SSTS	Section Seven Tracking System
SQG	Small Quantity Generator
SMCRA	Office of Surface Mining Reclamation and Enforcement
SWF/LF	Solid Waste Facility/Landfill
SWRCY	Solid Waste Recycling Facility
SCRD	State Coalition for the Remediation of Drycleaners
SHWS	State Hazardous Waste Sites

SEMS	Superfund Enterprise Management Site
TANKS	Aboveground and Unregulated Tanks
TRIS	Toxic Chemicals Release Inventory System
TSCA	Toxic Substances Control Act
TSDF	Transfer, Storage and Disposal Facility
USDOE	United States Department of Energy
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank
UIC	Underground Injection Control
VEC	Vapor Encroachment Condition
VSQG	Very Small Quantity Generator
VCP	Voluntary Cleanup Program

1.0 INTRODUCTION

Partner Engineering and Science, Inc. (Partner) has performed a Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM Practice E1527-21 and the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) for the property located at 980 W 7th St in San Jacinto, Riverside County, California (the "subject property"). Any exceptions to, or deletions from, this scope of work are described in the report.

1.1 Purpose

The purpose of this ESA is to identify existing or potential Recognized Environmental Conditions (as defined by ASTM Standard E1527-21) affecting the subject property that: 1) constitute or result in a material violation or a potential material violation of any applicable environmental law; 2) impose any material constraints on the operation of the subject property or require a material change in the use thereof; 3) require clean-up, remedial action or other response with respect to Hazardous Substances or Petroleum Products on or affecting the subject property under any applicable environmental law; 4) may affect the value of the subject property; and 5) may require specific actions to be performed with regard to such conditions and circumstances. The information contained in the ESA Report will be used by Client to: 1) evaluate its legal and financial liabilities for transactions related to foreclosure, purchase, sale, loan origination, loan workout or seller financing; 2) evaluate the subject property's overall development potential, the associated market value and the impact of applicable laws that restrict financial and other types of assistance for the future development of the subject property; and/or 3) determine whether specific actions are required to be performed prior to the foreclosure, purchase, sale, loan origination, loan workout or seller financing of the subject property.

This ESA was performed to permit the User to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. §9601) liability (hereinafter, the "landowner liability protections," or "LLPs"). ASTM Standard E1527-21 constitutes "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined at 42 U.S.C. §9601(35)(B).

1.2 Scope of Work

The scope of work for this ESA is in accordance with and to the extent necessary to achieve the goal of the requirements set forth in the ASTM Standard E1527-21. This assessment included: 1) a property and adjoining site reconnaissance; 2) interviews with key personnel; 3) a review of historical sources; 4) a review of regulatory agency records; and 5) a review of a regulatory database report provided by a third-party vendor. Partner contacted local agencies, such as environmental health departments, fire departments and building departments to obtain readily ascertainable information to determine any current and/or former hazardous substances usage, storage and/or releases of hazardous substances on the subject property. Additionally, Partner researched readily available information on the presence of activity and use limitations (AULs) at these agencies. As defined by ASTM E1527-21, AULs include both legal (that is, institutional) and physical (that is, engineering) controls that may include legal or physical restrictions or limitations on the use of, or access to, a site or facility: 1) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil, soil vapor, groundwater, or surface water on the subject property; or 2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment. These legal or physical restrictions, which may include institutional and/or engineering controls (IC/ECs), are intended to prevent adverse impacts to individuals or populations that may be exposed to hazardous substances and petroleum products in the soil, soil vapor, groundwater, and/or surface water on a property.

If requested by Client, this report may also include the identification, discussion of, and/or limited sampling of asbestos-containing materials (ACMs), lead-based paint (LBP), mold, and/or radon.

1.3 Limitations

Partner warrants that the findings and conclusions contained herein were accomplished in accordance with the methodologies set forth in the Scope of Work. These methodologies are described as representing good commercial and customary practice for conducting an ESA of a property for the purpose of identifying recognized environmental conditions. There is a possibility that even with the proper application of these methodologies there may exist on the subject property conditions that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. Partner believes that the information obtained from the record review and the interviews concerning the subject property is reliable. However, Partner cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete. The conclusions and findings set forth in this report are strictly limited in time and scope to the date of the evaluations. The conclusions presented in the report are based solely on the services described therein, and not on scientific tasks or procedures beyond the scope of agreed-upon services or the time and budgeting restraints imposed by the Client. No other warranties are implied or expressed.

Some of the information provided in this report is based upon personal interviews, and research of available documents, records, and maps held by the appropriate government and private agencies. This report is subject to the limitations of historical documentation, availability, and accuracy of pertinent records, and the personal recollections of those persons contacted.

This practice does not address requirements of any state or local laws or of any federal laws other than the all appropriate inquiry provisions of the LLPs. Further, this report does not intend to address all of the compliance and safety concerns, if any, associated with the subject property.

Environmental concerns, which are beyond the scope of a Phase I ESA as defined by ASTM include the following: ACMs, LBP, radon, and lead in drinking water. These issues may affect environmental risk at the subject property and may warrant discussion and/or assessment; however, are considered non-scope issues. If specifically requested by the Client, these non-scope issues are discussed in Section 6.3.

1.4 User Reliance

EPD Solutions (herein referred to as Client) engaged Partner to perform this assessment in accordance with an agreement governing the nature, scope and purpose of the work as well as other matters critical to the engagement. All reports, both verbal and written, are for the sole use and benefit of Client. Either verbally or in writing, third parties may come into possession of this report or all or part of the information generated as a result of this work. In the absence of a written agreement with Partner granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against Partner, its officers, employees, vendors, successors or assigns. Any such unauthorized user shall be responsible to protect, indemnify and hold Partner, Client and their respective officers, employees, vendors, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses (including reasonable attorneys' fees) and costs attributable to such Use. Unauthorized use of this report shall constitute acceptance of and commitment to these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted. Additional legal penalties may apply.

This report has been completed under specific Terms and Conditions relating to scope, relying parties, limitations of liability, indemnification, dispute resolution, and other factors relevant to any reliance on this report. Any parties relying on this report do so having accepted the Terms and Conditions for which this report was completed. A copy of Partner's standard Terms and Conditions can be found at http://www.partneresi.com/terms-and-conditions.php.

1.5 Limiting Conditions

The findings and conclusions contain all the limitations inherent in these methodologies that are referred to in ASTM Practice E1527-21.

Specific limitations and exceptions to this ESA are more specifically set forth below:

- Interviews with past or current owners, operators and occupants were not reasonably ascertainable and thus constitute a data gap. Based on information obtained from other historical sources, this data gap is not expected to alter the findings of this assessment.
- Partner requested information relative to deed restrictions and environmental liens, a title search, and completion of the AAI User Questionnaire from the Report User. This information was not provided at the time of the assessment. This data gap is not expected to alter the findings of this assessment.
- Partner was unable to determine the property use at 5-year intervals when the use of the subject property changed, which constitutes a data gap. Partner reviewed all standard historical sources and conducted appropriate interviews. This data gap is not expected to alter the findings of this assessment.
- Partner observed approximately 90% of all interior units and all common areas. Based on the size and nature of use of the unobserved patient rooms within Building A, this limited method of observation is not expected to alter the overall findings of this assessment.

2.0 SITE DESCRIPTION

2.1 Site Location and Legal Description

The subject property at 980 W 7th St in San Jacinto, California is located on the southeast corner of the intersection of West 7th Street and South Grand Avenue. According to the Riverside County Assessor (RCA), the subject property is legally described as 2.98 ACRES M/L IN POR LOT 13 AND LOT 14 MB 009/410 SD ESTUDILLO LAND & WATER CO ADD Lot 13 SubdivisionName ESTUDILLO LAND & WATER CO ADD Acres 002.98 M/L LotType Lot RecMapType Map Book RecordedCOCode SD MapPlatB 009 MapPlatP 410 PortionLot Portion Lot 14 LotType Lot. According to the RCA and Environmental Risk Information Services (ERIS), ownership is currently vested in Real San Jacinto Estate since 2024.

Please refer to Figure 1: Site Location Map, Figure 2: Site Plan, Figure 3: Topographic Map, and Appendix A: Site Photographs for the location and site characteristics of the subject property.

2.2 Current Property Use

The subject property is currently occupied by Bradley Gardens Rehabilitation Center. Onsite operations consist of commercial inpatient rehabilitation and convalescent care, food preparation, administrative office operations, and routine property maintenance activities. The subject property consists of a one-story impatient rehabilitation building (Building A), a one-story administrative office and storage building (Building B), a one-story maintenance and storage building (Building C), and a one-story vacant office building (Building D). . In addition to the current structures, the subject property is also improved with asphalt-paved parking areas, associated landscaping, and perimeter fencing.

The subject property is designated IL for Light Industrial development by the City of San Jacinto Planning Department

2.3 Current Use of Adjoining Properties

The subject property is located within a residential and light industrial area of Riverside County, California. During the vicinity reconnaissance, Partner observed the land uses on adjoining properties as defined in ASTM Practice E1527-21 as any real property or properties the border of which is contiguous or partially contiguous with that of the property, or that would be contiguous or partially contiguous with that of the property but for a street, road, or other public thoroughfare separating them. The adjoining properties are tabulated below:

ADJOINING PROPERTIES

Direction	Land Use/Occupant
North:	West 7th Street beyond which is Talley Metal Fabrication (911-989 West 7th Street)
East:	Vacant land (APNs: 435-330-005, 435-330-006)
South:	Vacant land (APNs: 435-330-004)
Southwest:	South Grand Avenue beyond which is the Parkview Estates Mobile Home Park (913 South Grand Avenue)
West:	South Grand Avenue beyond which is vacant land (APN: 435-320-001)
Northwest:	South Grand Avenue beyond which is a single-family residential structure (1011 West 7th Street)

2.4 Physical Setting Sources

2.4.1 Topography

TOPOGRAPHIC DATA SUMMARY

Quadrangle Year:	2021
Quadrangle Name:	San Jacinto, California
Source:	USGS 7.5 Minute Topographic Map
Elevation (Feet):	Approximately 1,528
Slope Direction:	.
Slope Degree:	Relatively flat

A copy of the most recent topographic map is included as Figure 3 of this report.

2.4.2 Hydrology

While under natural and undisturbed conditions shallow groundwater flow most frequently follows the topography of the land surface, natural or man-made features can affect flow direction, and the presumed flow may not match the actual flow directions at the subject property and vicinity.

HYDROLOGY DATA SUMMARY

Groundwater Flow Direction:	Northwest
Groundwater Flow Source:	Topographic map interpretation
Estimated Depth to Groundwater (Feet bgs):	Approximately 170 to 175
Estimated Depth Source:	A previous subsurface investigation conducted on a nearby property (GeoTracker Global ID T0606500201) and California Department of Water Resources (CDWR) Water Data Library (WDL) groundwater level data for well 10336 located 0.32 miles south of the subject property.
Closest Body of Surface Water Name:	San Jacinto Reservoir
Closest Body of Surface Water Distance (Miles):	Approximately 1.5
Closest Body of Surface Water Direction:	Northwest
Water System Operator:	Eastern Municipal Water District (EMWD)
Shallow Groundwater Use:	Used for domestic purposes

HYDROLOGY DATA SUMMARY

Source of Drinking Water:	Groundwater from the wells in the San Jacinto Upper Pressure Basin , which is balanced by recharge of surface water at percolation sites and water imported from the Colorado River via the State Water Project.

2.4.3 Geology/Soils

GEOLOGY AND SOIL DATA SUMMARY

Physiographic Province:	The subject property is located in the San Jacinto Valley, within the Perris Plain of the Peninsular Range Geomorphic Province of California. The San Jacinto Valley is fault-bound by sections of the San Jacinto Fault Zone including the Claremont Fault to the north, and the Casa Loma Fault to the South. The valley consists of a broad alluvial trough down-dropped by the Claremont and Casa Loma faults with approximately 1,000 feet of sedimentary fill derived from the San Jacinto River and it's tributaries.
Geologic Unit Description:	The uppermost geologic formation underlying the soils at the subject property is the Pleistocene to Holocene Age Quaternary alluvium and marine deposits formation. The primary rock in this formation is coarse-detrital and consists of both unconsolidated and semi-consolidated alluvium, lake, playa, and terrace deposits.
Geologic Data Source:	United States Department of Agriculture (USDA) Natural Resources Conservation Service Web Soil Survey
Soil Series Name:	Grangeville fine sandy loam, saline-alkali (GvB); Grangeville sandy loam, sandy substratum (GrB)
Soil Series Description:	Grangeville fine sandy loam, saline-alkali (GvB)is somewhat poorly drained, has slopes of 0 to 5 percent, with a parent material of alluvium derived from granite, and typically found on alluvial fans. Grangeville sandy loam, sandy substratum (GrB) is moderately well drained, with a parent material of alluvium derived from granite, and typically found on alluvial fans.

2.4.4 Flood Zone Information

FLOOD ZONE DATA SUMMARY

Source:	FEMA

FLOOD ZONE DATA SUMMARY

Community Panel No.	06035C1488H
FIRM Date:	April 19, 2017
Zone Designation:	Zone X (shaded); defined as moderate risk areas within the 0.2-percent-annual-chance floodplain, areas of 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1-percent-annual-chance flood by a levee.

A copy of the reviewed flood map is included in Appendix B of this report.

3.0 HISTORICAL INFORMATION

Partner obtained historical use information about the subject property from a variety of sources. A chronological listing of the historical data found is summarized in the table below:

HISTORICAL USE INFORMATION

Years	Resource	Description/Use
1938-1962	Aerial Photographs, Topographic Maps	Vacant and/or undeveloped
1964-Present	Aerial Photographs, Assessor Records, City Directories, Topographic Maps, Onsite Observations	Commercial; tenants include Colonial Nursing Home (1964), Colonial Convalescent Hospital (1974-1996), and Bradley Gardens Convalescent Center (2001-Present)

Tenants on the subject property have included Colonial Nursing Home (1964); Colonial Convalescent Hospital (1974-1996); and Bradley Gardens Convalescent Center (2001-Present).

No potential environmental concerns were identified in association with the current or former use of the subject property.

3.1 Aerial Photograph Review

Partner obtained available aerial photographs of the subject property and surrounding area from ERIS on February 3, 2026. The inferred uses of the subject property and adjoining properties as interpreted from the aerial photographs in Appendix B are tabulated below:

Date: **1938**		Scale: 1"=500'
Subject Property:	Appears to be unimproved grassland	
North:	Appears to be unimproved grassland beyond a roadway	
East:	Appears to be unimproved grassland	
South:	Appears to be unimproved grassland	
Southwest:	Appears to be unimproved grassland beyond an unimproved roadway	
West:	Appears to be unimproved grassland beyond an unimproved roadway	
Northwest:	Appears to be unimproved grassland beyond a roadway	

Date: **1949**		Scale: 1”=500’
Subject Property:	No significant changes visible	
North:	No significant changes visible	
East:	Appears to be agricultural land developed with a rural residential structure	
South:	Appears to be agricultural land	
Southwest:	Appears to be agricultural land	

West:	Appears to be agricultural land
Northwest:	Appears to be agricultural land developed with a rural residential structure

Date:	**1953, 1962**	Scale:	1”=500’
Subject Property:	No significant changes visible		
North:	Appears to be agricultural land developed with rural residential structures		
East:	No significant changes visible		
South:	No significant changes visible		
Southwest:	No significant changes visible		
West:	No significant changes visible		
Northwest:	No significant changes visible		

Date:	**1972, 1980**	Scale:	1”=500’
Subject Property:	Appears to be developed with the four existing commercial structures		
North:	Appears to be developed with several residential structures and a commercial structure		
East:	Appears to be developed with a residential structure		
South:	No significant changes visible		
Southwest:	No significant changes visible		
West:	No significant changes visible		
Northwest:	Appears to be developed with residential structures beyond a roadway		

Date:	**1988, 1996**	Scale:	1”=500’
Subject Property:	No significant changes visible		
North:	No significant changes visible		
East:	No significant changes visible		
South:	Appears to be vacant land		
Southwest:	Appears to be developed with the existing mobile home park beyond a roadway		
West:	No significant changes visible		
Northwest:	No significant changes visible		

Date:	**2002, 2006, 2009, 2010, 2012, 2014, 2016, 2018, 2020, 2022, 2024**	Scale:	1”=500’
Subject Property:	No significant changes visible		
North:	Appears to be developed with the existing light industrial and residential		

	structures
East:	Appears to be vacant land
South:	No significant changes visible
Southwest:	No significant changes visible
West:	No significant changes visible
Northwest:	No significant changes visible

Copies of reviewed aerial photographs are included in Appendix B of this report.

3.2 Fire Insurance Maps

Partner reviewed the collection of fire insurance maps (FIMs) from ERIS on January 31, 2026. FIM coverage was not available for the subject property.

A copy of the no coverage letter is included in Appendix B of this report.

3.3 City Directories

Partner reviewed historical city directories obtained from ERIS on February 3, 2026, for past names and businesses that were listed for the subject property and adjoining properties. The findings are tabulated below:

SUBJECT PROPERTY SUMMARY

City Directory Search for 980 W 7 Th St (Subject Property)	
Year(s)	**Occupant Listed**
1984	Colonial Cylsnt Hsp
1986	Colonial Cylsnt Hsp
1991	Langworthy Louise, Colonial Cvlsnt Hsp
1996	Fogel Miriam, Colonial Cvlsnt Hsp
2001	Bradley Gardens Convlsnt Ct
2003	Bradley Garden Convalescent
2008	Bradley Garden Convalescent
2012	Bradley Gardens Convalescent
2016	Bradley Gardens Convalescent
2020	Medhost, Bradley Gardens Convalescent
2024	Jerrold Gage, Bradley Gardens Convalescent

City Directory Search for 39241 W 7 Th St (Subject Property)	
Year(s)	**Occupant Listed**
1964 65	Yokes Irene, Colonial Nursing Home, Patterson H H

1974	Lawler Philip W Md, Colonial Cnvlst Hsp, San Jacnto Mdcl Ctr
1977	Williams G, Ellis Anna M, Colonial Cnvlst Hsp

Based on the city directory review, no environmentally sensitive listings were identified for the subject property addresses.

ADJOINING PROPERTY SUMMARY

City Directory Search for 913 S Grand Ave (Adjoining Property)

Year(s)	Occupant Listed
1986	Four Aces Mobile Hm
1991	M & M Flooring, Multi Tenant Residential, Four Aces Mobile Hm, Rons Mbl Car Clng
1996	Four Aces Mobile Hm, Multi Tenant Residential
2001	Four Aces Mobile Hm, Maple Ridge Mobile Homes Inc, Multi Tenant Residential
2003	Gil Bale, Maple Ridge Mobile Homes Inc, Robert & Mary C Aguirre, Frank & Brenda Aguirre, Robert & Judy Oleary, Parkview Estates, Nicolas Frodsham, Hector Gutierrez, Salvador M Pena, Rachel v Marino, Kimber Del Rico, William Willis, Tony Distefano, Mirabella Luna, Cleo a Elliott, Roslyn Reeder, R & B Delrico, Miriam Martin, William Goff, Roger Brewer, Craig Stolze, Ralph White, Dale Newton, V Equihua, Dan Nowak
2008	Clara Laws, Daves Landscape Services, Robert & Mary J Aguirre, Robert & Judy O'leary, Lloyd & Helen Bitters, Shirley R Causky, Robert L O'leary, Ricardo Gonzalez, Parkview Estates, Donald R Raymond, Tammie Walthers, Richard Blauser, Rachel v Marino, Fred Benjestorf, Carlos Martinez, Yuri Dominguez, Rogelio Lozano, Roslyn Reeder, R & B Delrico, Maria Puentes, Joann Sanchez, James O'leary, Four Aces Mhp, Tracy Oakley, Tay Woodring, Roger Brewer, Laura Carter, John Gibbons, Barbara Dion, Ron Garland, Naomi White, Mary Cloney, Dale Newton, P Robinson, Nora Spohn, Mary Enlow
2012	A Carey, Ninfa Samano Padilla, Maria Ortega Banda, Matthew Applegate, Daniel Guangorena, Apolinaria Acosta, Parkview Estates, Latricia Alvarez, Flor Livingston, Carlos Zambrano, Anthony Oglesby, Yuri Dominguez, Stanett Dibble, Robert O Leary, Gladys Cornejo, Ela Natolitano, Diana Gonzalez, Alfredo Landin, Yolanda Lopez, Victor Castro, Patricia Hair, Pamela Caloia, Nora Palomino, Marcos Tavera, Leticia Perez, Eduardo Duran, David Santoyo, Tracey Lopez, Maria Juarez, Judy O Leary, Sarah Smith, Sarah Roffe, Ralph Lopez, Maria Lopez, Maria Duran, Judy Oleary, James Carey, Guevara Jay, Gerri Lucas, Emma Suarez, David Lopez, Shawn Muth, S Atkinson, Kathy Webb, Jose Lopez, John Laine, Jesus Meza, Heidi Meza, Dona Carey, T Machado, M Quinlan, Jim Lucas, J Handley, K Morris, J Lozano, B Murphy, Vu Laws, R Ducas
2016	Mary Knox, Richard Pendergraft, Raymond Weinberger, Gabriel Villanueva, Stephanie Velgara, Salvador Figueroa, Patricia Arreguin, Linda Pendergraft, Ezequiel Cisneros, Alfredo Rodriguez, Rochelle Jimenez, Patricia Ramirez, Parkview Estates, Martin Grabowsky, Chelsey Walthers, Apolinara Acosta, Wanda Eastridge, Tami

	Weinberger, Soledad Berumen, Socorro Berumen, Sheila Cisneros, Rosanna Preston, Randall Higgins, Miguel Gonzalez, Lola Magallanes, Karen Velasquez, Jorge Rodriguez, Gloria Cisneros, Francisco Lopez, Faviola Ramirez, David Eastridge, Celeste Montoya, Brandon Hubbard, Belen Rodriguez, Amanda Knoefler, Alfonso Herrera, Thomas Willard, Tammy Coughlin, Stephan Hunter, Shelly Maynard, Robert Aguirre, Nikkola Sawyer, Nicole Morales, Monette Holmes, Matilde Medina, Maria Gonzalez, Lenycha Warren, Lacey Stephens, Jose Rodriguez, Irma Rodriguez, Herman Velgara, Guillermo Lugo, Frances Morris, Ela Napolitano, Eduardo Alcala, Dorothy Bigney, Donald Raymond, David Martinez, Carmen Herrera, Beverly Landry, Anthony Wright, Wendy Willard, Vicki Eckerle, Vannesa Beard, Terry Jimenez, Roslyn Reeder, Ronald Holmes, Reina Cornejo, Rebeca Gamino, Marvel Briggs, Maria Santoyo, Marco Morales, Lori Thrasher, Larry Sanders, Judith Willis, Jose Palomino, Jose Arreguin, Janett Briggs, James Maynard, David Zazueta, David Santoyo, Rhoda Kissel, Miguel Perez, Mickey Young, Mary Aguirre, Maria Avalos, Kenneth Holm, John Morales, Jesus Gamino, Iran Quijano, Debra Sawyer, Cindy Morris, Carmen Lopez, Barbara Dion, Tina Wright, Nora Copado, Maria Lopez, L Hernandez, Jose Gamino, Jack Martin, Ari Jimenez, Kathy Webb, Alan Smith
2020	Mary Knox, Apolinaria Villalpando, Richard Pendergraft, Raymond Weinberger, Gabriel Villanueva, Stephanie Velgara, Linda Pendergraft, Ezequiel Cisneros, Rochelle Jimenez, Parkview Estates, Martin Grabowsky, Gregory Thrasher, Ciscom Computers, Chelsey Walthers, Apolinara Acosta, Tammie Walthers, Rosanna Preston, Randall Higgins, Nicolas Berumen, Lola Magallanes, Karen Velasquez, Faviola Ramirez, David Eastridge, Celeste Montoya, Brandon Hubbard, Belen Rodriguez, Alfonso Herrera, Thomas Willard, Stephan Hunter, Shirley Causky, Robin Ippolito, Robert Casteel, Nikkola Sawyer, Monette Holmes, Mariela Mojica, Maria Gonzalez, Maria Figueroa, Lenycha Warren, Lacey Stephens, Jose Rodriguez, Jackson Morris, Herman Velgara, Guillermo Lugo, Frances Morris, Ela Napolitano, Eduardo Alcala, Dorothy Bigney, Donald Raymond, Claudia Liford, Beverly Landry, Anthony Wright, Alicia Ahumada, Alfredo Landin, Vicki Eckerle, Vannesa Beard, Roslyn Reeder, Ronald Holmes, Reina Cornejo, Nora Palomino, Larry Sanders, Julio Ordonez, Judith Willis, Jose Palomino, Jose Arreguin, Janett Briggs, James Sprague, James Maynard, David Zazueta, David Santoyo, Tracey Lopez, Susan Morgan, Rhoda Kissel, Miguel Perez, Mickey Young, Mary Aguirre, Maria Avalos, Kenneth Holm, John Morales, Jesus Gamino, Iran Quijano, Ina Martinez, Dora Pedraza, Barbara Dion, L Hernandez, Jack Martin, Amy Stevens, Keith Ruby, Kathy Webb, John Lopez, Alan Smith
2024	Lupe Foy, Apolinaria Villalpando, Richard Pendergraft, Enrique Lopez Reyes, Brantley Dillingham, Raymond Weinberger, Penny Vanrenselaar, Francisco Martinez, Stephanie Velgara, Linda Pendergraft, Ezequiel Cisneros, Emmanuel Crawford, Daisy Villalpando, Christine Iniguez, A 8 Transport Llc, Rochelle Jimenez, Patricia Iniguez, Parkview Estates, Martin Grabowsky, Gregory Thrasher, Eduardo Candelas, Crystal Mitchell, Charles Bidinger, Carol Otterstrom, Apolinara Acosta, Alexander Lozano, Tammie Walthers, Rosanna Preston, Robert Voorhees, Richard Blauser, Reinaldo Macias, Randall Higgins, Nicolas Berumen, Maria Gutierrez, Madeline Montez, Lola Magallanes, Karen Velasquez, Jorge Rodriguez, Jocelyn Sanchez,

Jameka Spalitta, Gonzalo Mendoza, Faviola Ramirez, David Eastridge, Celeste Montoya, Brandon Hubbard, Belen Rodriguez, Alfonso Herrera, Thomas Willard, Tammy Coughlin, Stephan Hunter, Shirley Causky, Ronald Worlitz, Robert Casteel, Patricia Dutro, Nikkola Sawyer, Monette Holmes, Mariela Mojica, Maria Gonzalez, Maria Figueroa, Lenycha Warren, Lacey Stephens, Jose Rodriguez, Jeffery Martin, Jackson Morris, Herman Velgara, Guillermo Lugo, Erika Crawford, Ela Napolitano, Eduardo Alcala, David Martinez, Daniel Iniguez, Claudia Liford, Alicia Ahumada, Alfredo Landin, Vicki Eckerle, Vannesa Beard, Terry Jimenez, Roslyn Reeder, Ronald Holmes, Rhonda Bigler, Reina Cornejo, Raven Jackson, Nora Palomino, Nicole Stuart, Larry Sanders, Judith Willis, James Sprague, Ginger Miller, Fremont Smith, Dianne Fierro, David Santoyo, Biatriz Lopez, Barbara Salas, Ariana Garcia, Annie Cordero, Travis Arias, Tracey Lopez, Susan Morgan, Robin Burney, Rhoda Kissel, Rafael Gomez, Ninfa Samano, Miguel Perez, Mickey Young, Maria Avalos, John Morales, Hugo Trevizo, Frank Magana, Dora Pedraza, Carol Howell, Steven Hill, Ruben Reyes, L Hernandez, Jack Martin, Carlos Diaz, Amy Stevens, Keith Ruby, Kathy Webb, John Lopez, Helen Osak, Heidi Meza, Alan Smith

City Directory Search for 911 W 7 Th St (Adjoining Property)

Year(s)	Occupant Listed
1984	Rodda Dennis
1986	Xxxx
1991	Luna Mauro Jr, Hoefs Kenneth A
2001	Luna Nancy
2012	Mauro Luna, Nancy Luna

City Directory Search for 929 W 7 Th St (Adjoining Property)

Year(s)	Occupant Listed
1986	Wigley Keith
1991	Wigley Kelth
1996	Wigley Keith
2003	Keith Wigley
2008	Keith Wigley
2012	Dovie Wigley
2016	Dovie Wigley, Keith Wigley
2020	Dovie Wigley
2024	Dovie Wigley

City Directory Search for 943 W 7 Th St (Adjoining Property)	
Year(s)	**Occupant Listed**
1986	Hulstrom Alice V
1991	Hulstrom Alice V
1996	Hulstrom Alice V
2001	Xxxx

City Directory Search for 965 W 7 Th St (Adjoining Property)	
Year(s)	**Occupant Listed**
1986	Clarke Nina K
1991	Clarke Nina K
1996	Clarke Nina K
2003	Nina K Clarke
2008	Nina K Clarke

City Directory Search for 989 W 7 Th St (Adjoining Property)	
Year(s)	**Occupant Listed**
1986	Chacon Chas M, Chacon Gloria A
1991	Rock Tech
1996	Xxxx
2001	Talley Joe, Talley&ochoa, Metal Fabrication
2003	Talley & Ochoa Metal Fab
2008	Talley Metal Fabrication
2016	Talley Metal Fabrication
2020	Talley Metal Fabrication
2024	Talley Metal Fabrication

City Directory Search for 1011 W 7 Th St (Adjoining Property)	
Year(s)	**Occupant Listed**
1991	Mora Adollo
1996	Xxxx
2001	Plueger Florence

*XXXX = A phone number is present but is not registered to a tenant or is disconnected.

Based on the city directory review, no environmentally sensitive listings were identified for the adjoining property addresses.

Copies of reviewed city directories are included in Appendix B of this report.

3.4 Historical Topographic Maps

Partner reviewed historical topographic maps obtained from ERIS on January 31, 2026. The following inferred uses of the subject property and adjoining properties interpreted from topographic maps in Appendix B and are tabulated below:

Date:	**1942, 1943**
Subject Property:	No structural development depicted
North:	Depicted with a residential or agricultural structure beyond a roadway
East:	No structural development depicted
South:	No structural development depicted
Southwest:	No structural development depicted
West:	No structural development depicted
Northwest:	Depicted with a residential structure beyond a roadway

Date:	**1953, 1956**
Subject Property:	No significant changes depicted
North:	Depicted with two residential structures beyond a roadway
East:	Depicted with a residential structure
South:	No significant changes depicted
Southwest:	No significant changes depicted
West:	No significant changes depicted
Northwest:	Depicted with two residential structures beyond a roadway

Date:	**1972, 1979, 1996**
Subject Property:	Depicted as developed with the four existing commercial nursing home structures
North:	Depicted with five residential or commercial structures beyond a roadway
East:	No significant changes depicted
South:	No significant changes depicted
Southwest:	No significant changes depicted
West:	No significant changes depicted
Northwest:	No significant changes depicted

Date:	**2012, 2015, 2018, 2021**
Subject Property:	No site-specific features are depicted
North:	Only roadways and/or water bodies are shown, and no site-specific features are depicted
East:	Only roadways and/or water bodies are shown, and no site-specific features are depicted
South:	Only roadways and/or water bodies are shown, and no site-specific features are depicted
Southwest:	Only roadways and/or water bodies are shown, and no site-specific features are depicted
West:	Only roadways and/or water bodies are shown, and no site-specific features are depicted
Northwest:	Only roadways and/or water bodies are shown, and no site-specific features are depicted

Copies of reviewed topographic maps are included in Appendix B of this report.

4.0 REGULATORY RECORDS REVIEW

4.1 Regulatory Agencies

State Department

REGULATORY AGENCY DATA

Name of Agency:	California Environmental Protection Agency (CalEPA)
Point of Contact:	CalEPA Regulated Sites Portal
Agency Address:	1001 I Street, Sacramento, CA 95814
Agency Phone Number:	(916) 323-2514
Date of Contact:	February 2, 2026
Method of Communication:	Online Research (https://siteportal.calepa.ca.gov/nsite/map/help)

Summary of Communication:

No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the CalEPA.

Health Department

REGULATORY AGENCY DATA

Name of Agency:	Riverside County Department of Environmental Health (RCDEH)
Point of Contact:	NextRequest Online Portal
Agency Address:	4065 County Circle Drive, Riverside, CA 92503
Agency Phone Number:	(951) 358-5055
Date of Contact:	February 2, 2026
Method of Communication:	Online Request Form (https://riversidecountyca.nextrequest.com/requests/new)

Summary of Communication:

No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the RCDEH.

Fire Department

REGULATORY AGENCY DATA

Name of Agency:	Riverside County Fire Department (RCFD)
Point of Contact:	NextRequest Online Portal
Agency Address:	210 West San Jacinto Avenue, Perris, CA 92570
Agency Phone Number:	(951) 940-6900

Date of Contact:	February 2, 0020
Method of Communication:	Online Request Form (https://riversidecountyca.nextrequest.com/requests/new)

Summary of Communication:

No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the RCFD.

Building Department

REGULATORY AGENCY DATA

Name of Agency:	City of San Jacinto Building & Safety Department
Point of Contact:	Email of Request Form
Agency Address:	595 South San Jacinto Avenue, San Jacinto, CA 92583
Agency Phone Number:	(951) 487-7330
Date of Contact:	February 6, 0020
Method of Communication:	Email

Summary of Communication:

Building records were on file for the subject property in relation to the reroof of the building and a certificate of occupancy for a CNA school formally located in one of the buildings. Historical building records dating back to the original construction of the buildings were not provided. No evidence of dry cleaning equipment installation, USTs, or other environmentally sensitive equipment were on file with the City of San Jacinto Building and Safety Department, nor were any permits related to reconstruction after a fire.

Planning Department

REGULATORY AGENCY DATA

Name of Agency:	City of San Jacinto Planning Department
Point of Contact:	Online GIS Zoning Map
Agency Address:	595 South San Jacinto Avenue, San Jacinto, CA 92583
Agency Phone Number:	(951) 487-7330
Date of Contact:	February 2, 2026
Method of Communication:	Online Research (https://sanjacintoca.maps.arcgis.com/apps/webappviewer/index.html?id=ed1ebde8df5542ca8bffe8af1578c764)

Summary of Communication:

According to reviewed online documents, the subject property is zoned "IL" for "Light industrial" development by the City of San Jacinto Planning Department.

Oil & Gas Exploration

REGULATORY AGENCY DATA

Name of Agency:	California Geologic Energy Management Division (CalGEM)
Point of Contact:	CalGEM Well Finder Mapping Application
Agency Address:	715 P Street, MS 1900, Sacramento, CA 95814
Agency Phone Number:	(916) 445-9686
Date of Contact:	February 2, 2026
Method of Communication:	Online Research CalGEM Well Finder Mapping Application

Summary of Communication:

According to CalGEM, no oil or gas wells are located on or adjoining to the subject property.

Assessor's Office

REGULATORY AGENCY DATA

Name of Agency:	Riverside County Assessor (RCA)
Point of Contact:	RivCoView Parcel Search Database
Agency Address:	4080 Lemon Street, Riverside, CA 92501
Agency Phone Number:	(951) 955-6200
Date of Contact:	February 2, 0020
Method of Communication:	Online Research https://ca-riverside-acr.publicaccessnow.com/

Summary of Communication:

According to records reviewed, the subject property is identified by Assessor Parcel Number (APN) 435-330-003. The original three commercial structures (Buildings A, C, D) were constructed in 1964, and the fourth commercial structure (Building B) was constructed in 1971. No records regarding property ownership are readily available through the RCA website.

Air Pollution Control Agency

REGULATORY AGENCY DATA

Name of Agency:	South Coast Air Quality Management District (SCAQMD)
Point of Contact:	FIND Online Database
Agency Address:	21865 Copley Drive, Diamond Bar, CA 91765
Agency Phone Number:	(909) 396-2000
Date of Contact:	February 2, 2026
Method of Communication:	Online Research (https://xappprod.aqmd.gov/find)

Summary of Communication:

No Permits to Operate (PTO), Notices of Violation (NOV), or Notices to Comply (NTC) or the presence of AULs, dry cleaning machines, or USTs were on file for the subject property with the

SCAQMD.

Regional Water Quality Agency

REGULATORY AGENCY DATA

Name of Agency:	State Water Resources Control Board (SWRCB)
Point of Contact:	GeoTracker Online Database
Agency Address:	1001 I Street, Sacramento, CA 95814
Agency Phone Number:	866-480-1028
Date of Contact:	February 2, 2026
Method of Communication:	Online Research (http://geotracker.waterboards.ca.gov/)

Summary of Communication:

No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the SWRCB.

Department of Toxic Substances Control

REGULATORY AGENCY DATA

Name of Agency:	Department of Toxic Substances Control (DTSC)
Point of Contact:	EnviroStor and Hazardous Waste Tracking System (HWTS) Data Management Systems
Agency Address:	1001 I Street, Sacramento, CA 95814
Agency Phone Number:	(916) 551-1313
Date of Contact:	February 2, 2026
Method of Communication:	Online Research (https://www.envirostor.dtsc.ca.gov/public/; https://hwts.dtsc.ca.gov/report_search.cfm?id=5)

Summary of Communication:

The EnviroStor database is the DTSC's data management system for tracking cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known contamination or sites where there may be reason to investigate further. No records were identified for the subject property address on the EnviroStor database.

The DTSC Hazardous Waste Tracking System (HWTS) was researched for hazardous waste manifest data submitted to the California DTSC. EPA ID Number CAL000485599 was issued to GHD of San Jacinto LLC DBA The Bradly Gardens 2024 which remains active. Manifest records obtained from the DTSC HWTS for the EPA IDs issued to subject property occupants are further discussed in Section 4.2.2.

Copies of pertinent documents are included in Appendix B of this report.

4.2 Mapped Database Records Search

The regulatory database report provided by ERIS documents the listing of sites identified on federal, state, county, city, and tribal (when applicable) standard source environmental databases within the

approximate minimum search distance (AMSD) specified by ASTM Practice E1527-21. The data from these sources are updated as these data are released and integrated into one database. The information contained in this report was compiled from publicly available sources.

The environmental database information is used to identify environmental concerns in connection with the subject property. The listings also serve to identify the known indications of the storage, use, generation, disposal, or release of hazardous substance at the subject property and the potential for contaminants to migrate onto the subject property from off-site sources in groundwater or soil in the form of liquids or vapor.

Using the ASTM definition of migration, Partner considers the migration of hazardous substances or petroleum products in any form onto the subject property during the evaluation of each site listed on the radius report, which includes solid, liquid, and vapor.

4.2.1 Regulatory Database Summary

The following table lists the sites as categorized by the regulatory database within the prescribed AMSD. The locations of the sites are plotted utilizing a geographic information system, which geocodes the site addresses. The accuracy of the geocoded locations is approximately +/-300 feet.

DATABASE REPORT DATA

Database	AMSD Radius (mile)	Listings Identified		
		Subject Property	Adjoining Properties	Surrounding Area Sites of Concern
Federal NPL	1.00	N	N	N
Delisted NPL Site	0.50	N	N	N
Federal SEMS Site	0.50	N	N	N
Federal SEMS-ARCHIVE	0.50	N	N	N
Federal RCRA CORRACTS Facility	1.00	N	N	N
Federal RCRA TSDF Facility	0.50	N	N	N
Federal RCRA Generators Site (LQG, SQG, VSQG, CESQG)	Subject and Adjoining	N	N	N
Federal IC/EC Registries	Subject Property	N	N	N
Federal ERNS Site	Subject Property	N	N	N
Federal PFAS Facility	0.50	N	N	N
State/Tribal Equivalent NPL	1.00	N	N	N

State/Tribal Equivalent CERCLIS	1.00	N	N	N
State/Tribal Landfill/Solid Waste Disposal Site	0.50	N	N	N
State/Tribal Leaking Storage Tank Site (LUST/LPST)	0.50	N	N	N
State/Tribal Registered Storage Tank Sites (UST/AST)	Subject and Adjoining	N	N	N
State/Tribal IC/EC Registries	Subject and Adjoining	N	N	N
State/Tribal Voluntary Cleanup Sites (VCP)	0.50	N	N	N
State/Tribal Spills	0.25	N	N	N
Federal Brownfield Sites	0.50	N	N	N
State Brownfield Sites	0.50	N	N	N
State PFAS Facility	0.50	N	N	N
Additional Databases	Subject and Adjoining	**Y**	**Y**	N

4.2.2 Subject Property Listings

The subject property was identified on the Facility Registry Service/Facility Index (FINDS/FRS), Riverside County-Medical Waste Facilities (MED WST RIVERSIDE), and RCRA Non-Generators (RCRA NON GEN) databases in the regulatory database report, as discussed below:

SUBJECT PROPERTY DATABASE LISTING

	Database:	FINDS/FRS, MED WST RIVERSIDE, RCRA NON GEN
	Site Name:	The Bradley Gardens, GHD of San Jacinto DBA The Bradley Gardens
	Address:	980 West 7th Street
Discussion:	The rehabilitation and convalescent care center on the subject property is listed on the FINDS/FRS database (ID 110071738266) for unspecified hazardous waste generation under RCRA oversight at a continuing care and retirement community. The Riverside County database listing indicates the The Bradley Gardens is a small quantity generator of Medical Waste under Facility ID FA0000079, with a permit issue date of December 8, 2020. Based on the RCRA NON GEN listing for the EPA ID assigned to The Bradley Gardens (CAL000485599), no compliance or enforcement records were associated with	

	the facility. According to the DTSC HWTS, no manifest records indicating the types and amounts of hazardous wastes removed from the property were available since the creation of the EPA ID Number in 2024. Based on the lack of evidence of a release or significant regulatory violations, along with the regulatory oversight and status, these listings for the subject property are not expected to represent a significant environmental concern.

4.2.3 Adjoining Property Listings

One or more adjoining properties were identified on the California Environmental Reporting System (CERS) Hazardous Waste Sites (HAZ), Clandestine Drug Lab Sites (CDL), Toxic Pollutant Emissions Facilities (EMISSIONS), FINDS/FRS, Riverside County-Hazardous Waste Generator Sites List (HWG RIVERSIDE), and Riverside County-Disclosure Facility List (HZH RIVERSIDE) databases in the regulatory database report, as discussed below:

ADJOINING PROPERTY DATABASE LISTING

Property Name:	Talley Metal Fabrication, J Talley Corp, Talley & Ochoa Metal Fabrication
Address:	989 West 7th Street
Direction:	North
Hydrological Gradient:	Down-Gradient
Database Listing:	CERS HAZ, EMISSIONS, FINDS/FRS, HZH RIVERSIDE, RMP RIVERSIDE
Discussion:	The north adjoining property is occupied by Talley Metal Fabrication (Talley) for the storage of metal building materials fabrication of metal structures and building systems. Talley is listed on the FINDS/FRS database (IDs 110070089402, 110071787626) as a fabricated metal products and ornamental metal work manufacturing facility regulated under industrial stormwater and air emissions programs. The Riverside County listings indicate that Talley is an inactive Hazardous Materials Handler under Facility ID FA0022387. According to the CERS HAZ listing, Talley was issued a few minor regulatory compliance violations following inspections of the facility by the RCDEH in 2021 and 2024 for storing hazardous materials for metal cutting equipment that were not previously disclosed and lack of hazardous materials handling training documentation. The violations were subsequently resolved during follow-up inspections in 2022 and 2025. The EMISSIONS database indicates that Talley maintains an active PTO with the SCAQMD for the operation of a spray booth with solvent under the Facility ID 123141. Three Notices to Comply were issued by the SCAQMD to the site in 2009, 2001, and 2012 to maintain emission records for coasting sprayed inside the spray booth, and to only use complaint coatings and solvents, which were listed as in Compliance following reinspection later each of those years. Based on the regulatory oversight and absence of documented releases, these site listings are not expected to represent a significant environmental concern to the subject property.

ADJOINING PROPERTY DATABASE LISTING

Property Name:	Parkview Estates
Address:	913 South Grand Avenue
Direction:	Southwest
Hydrological Gradient:	Cross-Gradient
Database Listing:	CDL
Discussion:	The southwest adjoining property is occupied by a mobile home park, Parkview Estates. Based on the CDL listings for the property, two illegal drug labs were discovered on the property in the past. In 1996, an illegal drug lab was discovered at space 24, and in 2005 an illegal drug lab was discovered at space 18. No further information regarding the removal or cleanup of the illegal drug labs was available. Based on the absence of documented releases to the subsurface, along with the regulatory oversight of cleanup, these site listings are not expected to represent a significant environmental concern to the subject property.

Based on the findings, vapor migration is not considered an environmental concern at this time.

4.2.4 Surrounding Area Listings of Sites of Concern

No sites of concern are identified in the regulatory database report. Listed sites within the specified search radius of the subject property which appeared on local, State, or Federally published lists of sites that have had releases of hazardous substances, have been granted regulatory closure, were determined to be of sufficient distance, and/or are situated hydrologically cross- or down-gradient such that impact to the subject property is unlikely.

Based on the findings, vapor migration is not considered an environmental concern at this time.

4.2.5 Unplottable Listings

No unplottable listings are identified in the regulatory database report.

A copy of the regulatory database report is included in Appendix C of this report.

5.0 USER PROVIDED INFORMATION AND INTERVIEWS

In order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the *Brownfields Amendments*), the *User* must conduct the following inquiries required by 40 CFR 312.25, 312.28, 312.29, 312.30, and 312.31. The *User* should provide the following information to the *environmental professional*. Failure to provide this information could result in a determination that *all appropriate inquiries* is not complete. The *User* is asked to provide information or knowledge of the following:

- Review Title and Judicial Records for Environmental Liens and AULs
- Specialized Knowledge or Experience of the User
- Actual Knowledge of the User
- Reason for Significantly Lower Purchase Price
- Commonly Known or *Reasonably Ascertainable* information
- Degree of Obviousness
- Reason for Preparation of this Phase I ESA

Fulfillment of these user responsibilities is key to qualification for the identified defenses to CERCLA liability. Partner requested our Client to provide information to satisfy User Responsibilities as identified in Section 6 of the ASTM guidance.

Pursuant to ASTM Practice E1527-21, Partner requested the following site information from EPD Solutions (User of this report).

USER RESPONSIBILITIES

Item	Provided By User
AAI User Questionnaire	No
Title Records, Environmental Liens, and AULs	No
Specialized Knowledge	No
Actual Knowledge	No
Valuation Reduction for Environmental Issues	No
Identification of Key Site Manager	Yes
Reason for Performing Phase I ESA	Yes
Prior Environmental Reports	No

5.1 Interviews

5.1.1 Interview with Owner

The owner of the subject property since 2024, identified as Real San Jacinto Estate, was not available to be interviewed at the time of the assessment.

5.1.2 Interview with Report User

Please refer to Section 5.2 below for information requested from the Report User.

5.1.3 *Interview with Key Site Manager*

Mr. Tom Corcoran, key site manager, indicated that they had no information pertaining to any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the subject property; any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property; or any notices from a governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.

The key site manager further stated that there are no USTs, ASTs, clarifiers, oil/water separators, groundwater monitoring wells, or hazardous substance storage or generation on the subject property to the best of their knowledge.

5.1.4 *Interviews with Past Owners, Operators and Occupants*

Interviews with past owners, operators, and occupants were not conducted since information regarding the potential for contamination at the subject property was obtained from other sources.

5.2 User Provided Information

5.2.1 *Title Records, Environmental Liens, and AULs*

Partner was not provided with title records or environmental lien and AUL information for review as part of this assessment.

5.2.2 *Specialized Knowledge*

No specialized knowledge of environmental conditions associated with the subject property was provided by the User at the time of the assessment.

5.2.3 *Actual Knowledge of the User*

No actual knowledge of any environmental lien or AULs encumbering the subject property or in connection with the subject property was provided by the User at the time of the assessment.

5.2.4 *Valuation Reduction for Environmental Issues*

No knowledge of valuation reductions associated with the subject property was provided by the User at the time of the assessment.

5.2.5 *Commonly Known or Reasonably Ascertainable Information*

The User did not provide information that is commonly known or reasonably ascertainable within the local community about the subject property at the time of the assessment.

5.2.6 *Previous Reports and Other Provided Documentation*

No previous reports or other pertinent documentation was provided to Partner for review during the course of this assessment.

6.0 SITE RECONNAISSANCE

The weather at the time of the site visit was sunny and clear. Refer to Section 1.5 for limitations encountered during the field reconnaissance and Sections 2.1 and 2.2 for subject property operations. The table below provides the site assessment details:

SITE ASSESSMENT DATA

Site Assessment Performed By:	James Erwin
Site Assessment Conducted On:	February 6, 2026

The table below provides the subject property personnel interviewed during the field reconnaissance:

SITE VISIT PERSONNEL FOR 980 W 7TH ST (SUBJECT PROPERTY)

Name	Title/Role	Contact Number	Site Walk*
Tom Corcoran	CEO Edge Building Services	(951) 304-9776	Yes

* Accompanied Partner during the field reconnaissance activities and provided information pertaining to the current operations and maintenance of the subject property.

No potential environmental concerns were identified during the onsite reconnaissance.

6.1 General Site Characteristics

6.1.1 Solid Waste Disposal

Solid waste generated at the subject property is disposed of in commercial dumpsters located on the east side of the subject property. An independent solid waste disposal contractor, CR&R, removes solid waste from the subject property. Solid waste generated at the subject property includes food waste, household-type trash, and medical waste. Biohazardous medical waste is stored in a closet in Building D and is picked up monthly by a registered biohazardous waste disposal company. No evidence of illegal dumping of solid waste was observed during the Partner site reconnaissance.

6.1.2 Sewage Discharge and Disposal

Sanitary discharges on the subject property are directed into the municipal sanitary sewer system. The EMWD services the subject property vicinity. The facility utilized one underground grease trap located north of Building A for the kitchen drains. The grease trap is regularly serviced to prevent backups as the system is undersized for the amount of grease introduced to the drain system by the kitchen. Based on the nature of materials disposed of in the grease trap, its presence in not expected to represent a significant environmental concern,. No septic systems were observed or reported on the subject property.

6.1.3 Stormwater and Surface Water Drainage

Stormwater is removed from the subject property primarily by sheet flow action across the paved surfaces towards a stormwater channel located next to the public right of way or ground infiltration in the unpaved and landscaped areas on the subject property. No drywells were identified on the subject property.

6.1.4 Source of Heating and Cooling

Heating and cooling systems as well as domestic hot water equipment are fueled by electricity and natural gas provided by Southern California Edison (SCE) and Southern California Gas Company (SoCal

Gas Co.). The mechanical system is comprised of rooftop-mounted packaged electrical/natural gas HVAC units. Hot water is provided by individual natural gas water heaters.

6.1.5 Wells and Cisterns

No aboveground evidence of wells or cisterns was observed during the site reconnaissance.

6.1.6 Wastewater

Domestic wastewater generated at the subject property is disposed by means of the sanitary sewer system. No industrial processes are currently performed at the subject property.

6.1.7 Septic Systems

No septic systems were observed or reported on the subject property.

6.1.8 Additional Site Observations

No additional general site characteristics were observed during the site reconnaissance.

6.2 Potential Environmental Hazards

6.2.1 Hazardous Substances and Petroleum Products Used or Stored at the Site

No evidence of the use of reportable quantities of hazardous substances was observed on the subject property.

Small quantities of general maintenance supplies and paints were found to be properly labeled and stored at the time of the assessment with no signs of leaks, stains, or spills. The storage and use of maintenance supplies does not appear to pose a significant threat to the environmental integrity of the subject property at this time.

6.2.2 Aboveground & Underground Hazardous Substance or Petroleum Product Storage Tanks (ASTs/USTs)

No evidence of current or former ASTs or USTs was observed during the site reconnaissance.

6.2.3 Evidence of Releases

No spills, stains, or other indications that a surficial release has occurred at the subject property were observed.

6.2.4 Polychlorinated Biphenyls (PCBs)

Older transformers and other electrical equipment could contain PCBs at a level that subjects them to regulation by the US EPA. PCBs in electrical equipment are controlled by US EPA regulations 40 CFR, Part 761. Under the regulations, there are three categories into which electrical equipment can be classified: 1) Less than 50 parts per million (ppm) of PCBs – “Non-PCB;” 2) 50 ppm-500 ppm – “PCB-Contaminated;” and, 3) Greater than 500 ppm – “PCB-Containing.” The manufacture, process, or distribution in commerce or use of any PCB in any manner other than in a totally enclosed manner was prohibited after July 2, 1979.

The on-site reconnaissance addressed indoor and outdoor transformers that may contain PCBs. One pole-mounted transformer was observed on the subject property. The transformer is labeled indicating Non-PCB content. No staining or leakage was observed in the vicinity of the transformer. Based on the good condition of the equipment, the transformer is not considered an environmental concern.

No other potential PCB-containing equipment (interior transformers, oil-filled switches, hoists, lifts, dock levelers, hydraulic elevators, balers, etc.) was observed on the subject property during Partner's reconnaissance.

6.2.5 Strong, Pungent or Noxious Odors

No strong, pungent or noxious odors were evident during the site reconnaissance.

6.2.6 Pools of Liquid

No pools of liquid were observed on the subject property during the site reconnaissance.

6.2.7 Drains, Sumps and Clarifiers

No drains, sumps, or clarifiers, other than those associated with storm water removal, were observed on the subject property during the site reconnaissance.

6.2.8 Pits, Ponds and Lagoons

No pits, ponds, or lagoons were observed on the subject property.

6.2.9 Stressed Vegetation

No stressed vegetation was observed on the subject property.

6.2.10 Additional Potential Environmental Hazards and Emerging Contaminants

Partner evaluated the current subject property use during the site reconnaissance for potential environmental hazards, including Per- and Polyfluoroalkyl Substances (PFAS) impacts to the subject property. Based on the site observations and/or interview information with the key site contact, likely PFAS impacts to the subject property based on current use were not identified. Based on this information, PFAS are not considered an environmental concern at this time.

No additional environmental hazards, including landfill activities or radiological hazards, were observed.

6.3 Non-ASTM Services

6.3.1 Asbestos-Containing Materials (ACMs)

Asbestos is the name given to a number of naturally occurring, fibrous silicate minerals mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1926.1101 requires certain construction materials to be presumed to contain asbestos, for purposes of this regulation. All thermal system insulation (TSI), surfacing material, and asphalt/vinyl flooring that are present in a building that have not been appropriately tested are "presumed asbestos-containing material" (PACM).

A limited, visual survey of areas accessible from ground level for the presence of suspect ACM at the subject property was conducted. The objective of this visual survey was to note the presence and condition of suspect ACM listed by EPA, OSHA, and other regulatory and recognized sources as suspect ACM and/or considered friable or non-friable. Please refer to the table below for identified suspect ACM:

SUSPECT ACMs

Suspect ACM	Location	Friable Yes/No	Physical Condition
Drywall Systems	Throughout Building A to Interior	No	Good
Floor Tiles	Throughout Building A and B	No	Fair

	Interior		
Floor Tile Mastic	Throughout Building A and B Interior	No	Fair
Spray-Applied Acoustical Material	Portions of the Ceiling of Building B and C	Yes	Fair
Stucco	Throughout Building A to D Exterior	No	Good

Prior to disturbance, renovation, or demolition activities to any of the structures, Partner recommends a comprehensive asbestos survey of the property be completed to determine the presence, condition, friability and likely future condition of suspect or confirmed ACM. All suspect materials must be handled as ACM according to local, state and federal regulations until the results of sampling and analysis indicate the material is a non-ACM. According to the US EPA, ACM that is intact and in good condition can, in general, be managed safely in-place under an Operations and Maintenance (O&M) Program until removal is dictated by renovation, demolition, or deteriorating material condition.

Partner was not provided building plans or specifications for review, which may have been useful in determining areas likely to have used ACM.

6.3.2 Lead-Based Paint (LBP)

Lead is a highly toxic metal that affects virtually every system of the body. LBP is defined as any paint, varnish, stain, or other applied coating that has 1 mg/cm2 (or 5,000 µg/g or 0.5% by weight) or more of lead. Congress passed the Residential Lead-Based Paint Hazard Reduction Act of 1992, also known as "Title X," to protect families from exposure to lead from paint, dust, and soil. Under Section 1017 of Title X, intact LBP on most walls and ceilings is not considered a "hazard," although the condition of the paint should be monitored and maintained to ensure that it does not become deteriorated. Further, Section 1018 of this law directed the Housing and Urban Development (HUD) and the US EPA to require the disclosure of known information on LBP and LBP hazards before the sale or lease of most housing built before 1978.

While LBP was banned for use in residential buildings in 1978, based on the commercial use of the subject property buildings, there is a potential that LBP may still be present. The facility is not considered to be child-occupied, therefore exposure to lead outside of OSHA-related activities is unlikely. Furthermore, all interior and exterior painted surfaces were observed in good condition with no signs of peeling, flaking, or chipping.

Actual material samples would need to be collected in order to determine if LBP is present.

6.3.3 Radon

Radon is a colorless, odorless, naturally occurring, radioactive, inert, gaseous element formed by radioactive decay of radium (Ra) atoms. The US EPA has prepared a map to assist National, State, and local organizations to target their resources and to implement radon-resistant building codes. The map divides the country into three Radon Zones, according to the table below:

EPA RADON ZONES

EPA Zones	Average Predicted Radon Levels	Potential
Zone 1	Exceed 4.0 pCi/L	Highest
Zone 2	Between 2.0 and 4.0 pCi/L	Moderate

Zone 3	Less than 2.0 pCi/L	Low

It is important to note that the EPA has found homes with elevated levels of radon in all three zones, and the US EPA recommends site-specific testing in order to determine radon levels at a specific location. However, the map does give a valuable indication of the propensity of radon gas accumulation in structures.

Review of the US EPA Map of Radon Zones places the subject property in Zone 2. Based upon the radon zone classification, radon is not considered an environmental concern.

6.3.4 Lead in Drinking Water

LEAD IN DRINKING WATER SUMMARY

Water System Operator:	Eastern Municipal Water District (EMWD)
Source of Drinking Water:	Groundwater from the wells in the San Jacinto Upper Pressure Basin , which is balanced by recharge of surface water at percolation sites and water imported from the Colorado River via the State Water Project.
Year of Annual Water Quality Report:	2024
Compliance Status:	Water supplied is in compliance with all State and Federal regulations pertaining to drinking water standards for lead.

Water sampling was not conducted to verify water quality.

6.3.5 Microbial Growth

Molds are microscopic organisms found virtually everywhere, indoors and outdoors. Mold will grow and multiply under the right conditions, needing only sufficient moisture (e.g.in the form of very high humidity, condensation, or water from a leaking pipe, etc.) and organic material (e.g., ceiling tile, drywall, paper, or natural fiber carpet padding).

Partner observed accessible, interior areas of the subject property buildings for significant evidence of microbial growth with the exceptions detailed in Section 1.5 of this report; however, this assessment should not be used as a microbial survey or inspection. Additionally, this limited assessment was not designed to assess all areas of potential microbial growth that may be affected by microbial growth on the subject property. Rather, it is intended to give the client an indication as to whether or not conspicuous (based on observed areas) microbial growth is present at the subject property. This evaluation did not include a review of pipe chases, mechanical systems, or areas behind enclosed walls and ceilings.

The following indications of water damage or microbial growth were observed during Partner's visual assessment:

MICROBIAL GROWTH OBSERVATIONS

Location of area affected	Condition
Building D Maintenance Storage Garage	Minor microbial growth and water damage.

The roof is missing in a portion of the garage and is allowing rainwater to fall into the structure which is causing minor microbial growth and water damage. Building D is slated for demolition and redevelopment.

6.3.6 *Wetlands*

The subject property does not appear to be a potential wetland area based on information obtained from the United States Fish and Wildlife Service's Online Wetlands Mapper; however, a comprehensive wetlands survey would be required in order to formally determine actual wetlands on the subject property. No settling ponds, lagoons, surface impoundments, wetlands or natural catch basins were observed at the subject property during this assessment.

6.4 Adjoining Property Reconnaissance

The adjoining property reconnaissance consisted of observing the adjoining properties from the subject property premises.

6.4.1 *Hazardous Substances and Petroleum Products Used or Stored at the Site*

No hazardous substances or petroleum products were observed on adjoining properties during the limited adjoining property reconnaissance.

6.4.2 *ASTs/USTs for Hazardous Substances or Petroleum Products*

No ASTs or USTs for hazardous substances/petroleum products were observed on adjoining properties during the limited adjoining property reconnaissance.

6.4.3 *Evidence of Releases*

No evidence of a release was observed on adjoining properties during the limited adjoining property reconnaissance.

6.4.4 *PCBs*

No PCB containing materials were observed on adjoining properties during the limited adjoining property reconnaissance.

6.4.5 *Strong, Pungent, or Noxious Odors*

No strong, pungent, or noxious odors were observed on adjoining properties during the limited adjoining property reconnaissance.

6.4.6 *Pools of Liquid*

No pools of liquid were observed on adjoining properties during the limited adjoining property reconnaissance.

6.4.7 *Drains, Sumps, and Clarifiers*

No drains, sumps, or clarifiers were observed on adjoining properties during the limited adjoining property reconnaissance.

6.4.8 *Pits, Ponds, and Lagoons*

No pits, ponds, or lagoons were observed on adjoining properties during the limited adjoining property reconnaissance.

6.4.9 *Stressed Vegetation*

No stressed vegetation was observed on adjoining properties during the limited adjoining property reconnaissance.

6.4.10 Additional Potential Environmental Hazards and Emerging Contaminants

Partner evaluated the current adjoining property uses during the site reconnaissance for potential environmental hazards, including PFAS impacts to the subject property. Based on observations made from the subject property borders and/or information provided by key site contact, likely emerging contaminants or PFAS impacts to the subject property from current adjoining property uses were not identified. Based on this information, PFAS are not considered an environmental concern.

No additional environmental hazards were observed on adjoining properties during the limited adjoining property reconnaissance.

7.0 VAPOR ENCROACHMENT CONDITIONS

Partner conducted a limited non-intrusive vapor screening on the subject property to identify, to the extent feasible, the potential for vapor encroachment conditions (VECs) in connection with the subject property. This included consideration of chemicals of concern (COC) that may migrate as vapors into the subsurface of the subject property as a result of contaminated soil and groundwater on or near the property.

This screening utilized readily available data sources previously discussed in this Phase I ESA that includes:

- the physical setting of the subject property (Section 2.4),
- standard historical sources for the subject property, adjoining, and surrounding area (Section 3.0),
- known or potentially contaminated sites as identified from information from regulatory agencies and sites on Federal, State, tribal and local databases (Section 4.0), and
- information from the site reconnaissance (Section 6.0) of the subject property and observations of the surrounding properties.

The results of our data collection, reconnaissance, and analysis are tabulated below:

POTENTIAL FOR VAPOR ENCROACHMENT TO IMPACT THE SUBJECT PROPERTY

Area of Concern	Likely or Known VEC to Subject Property
Subject Property Existing Operations or Conditions (Sections 2.0 and 6.0)	None identified that impact the subject property.
Historical Uses of the Subject Property (Section 3.0)	None identified that impact the subject property.
Adjoining Property Operations or Existing Conditions (Sections 2.3 and 6.4)	None identified that impact the subject property.
Historical Uses of Adjoining Properties or Nearby Properties (Section 3.0)	None identified that impact the subject property.
Regulatory Review of sites identified on Federal, State, tribal and Local Environmental Databases which were located in the AMSD (Section 4.0)	None identified that impact the subject property.

Based on the findings of the limited non-intrusive vapor screening, vapor intrusion is unlikely to be an issue of concern in connection with the existing structures on the subject property. As such, no further assessment is recommended.

8.0 FINDINGS AND CONCLUSIONS

Findings and Opinions

Recognized Environmental Condition

A recognized environmental condition (REC) refers to the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment.

- Partner did not identify any RECs during the course of this assessment.

Controlled Recognized Environmental Condition

A controlled recognized environmental condition (CREC) refers to a REC affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, activity and use limitations or other property use limitations).

- Partner did not identify any CRECs during the course of this assessment.

Historical Recognized Environmental Condition

A historical recognized environmental condition (HREC) refers to a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls (for example, activity and use limitations or other property use limitations).

- Partner did not identify any HRECs during the course of this assessment.

Business Environmental Risk

A Business Environmental Risk (BER) is a risk which can have a material environmental or environmentally driven impact on the business associated with the current or planned use of commercial real estate, not necessarily related to those environmental issues required to be investigated in this practice. The following was identified during the course of this assessment:

- Due to the age of the subject property buildings, there is a potential that asbestos-containing material (ACM) and/or lead-based paint (LBP) are present. Should these materials be replaced, the identified suspect ACMs would need to be sampled to confirm the presence or absence of asbestos prior to any renovation or demolition activities to prevent potential exposure to workers and/or building occupants. Building D is slated for demolition and redevelopment, and as such should have ACM and LBP sampling and testing conducted prior to demolition activities.

Significant Data Gaps

No significant data gaps affecting the ability of the Environmental Professional to identify a REC were encountered during this assessment.

Conclusions and Recommendations

Partner has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-21 of 980 W 7th St in San Jacinto, Riverside County, California (the "subject property"). Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report.

This assessment has revealed no evidence of RECs, CRECs, or HRECs in connection with the subject property; however, a BER was identified. Based on the conclusions of this assessment, Partner recommends the following:

- An Operations and Maintenance (O&M) Program should be implemented in order to safely manage the suspect ACMs and LBP located at the subject property.

9.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

Partner has performed a Phase I Environmental Site Assessment of the property located at 980 W 7th St in San Jacinto, Riverside County, California in conformance with the scope and limitations of the protocol and the limitations stated earlier in this report. Exceptions to or deletions from this protocol are discussed earlier in this report.

By signing below, Partner declares that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR §312. Partner has the specific qualifications based on education, training, and experience to assess a *property* of the nature, history, and setting of the subject *property*. Partner has developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Reviewed By:



Laura Mohlenkamp
Environmental Professional

10.0 REFERENCES

American Society for Testing and Materials, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM Designation: E1527-21

Environmental Risk Information Services (ERIS), City Directory, Fire Insurance Maps, Historic Aerials, Physical Setting Report, Radius Report, Topographic Maps, February 2026

Federal Emergency Management Agency, Federal Insurance Administration, National Flood Insurance Program, Flood Insurance Map, accessed via the internet, February 2026

United States Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey, accessed via the internet, February 2026

United States Environmental Protection Agency, EPA Map of Radon Zones (Document EPA-402-R-93-071), accessed via the internet, February 2026

United States Fish and Wildlife Service, National Wetlands Inventory, accessed via the internet, February 2026

United States Geological Survey, accessed via the internet, February 2026

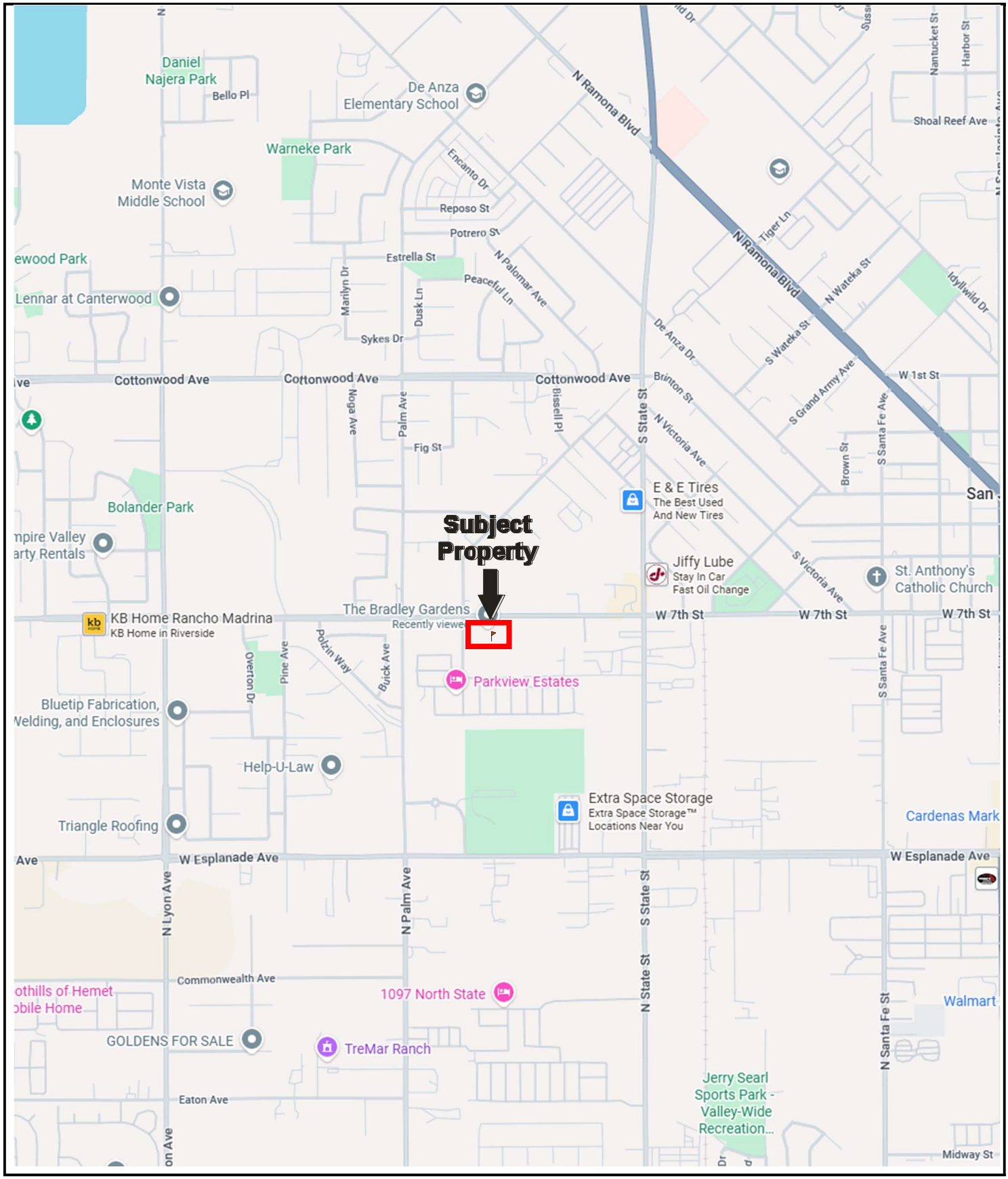
United States Geological Survey Topographic Map 2021, 7.5-minute series, accessed via the internet, February 2026

FIGURES

1: Site Location Map

2: Site Plan

3: Topographic Map



N

Drawing Not To Scale

KEY:
Subject Property

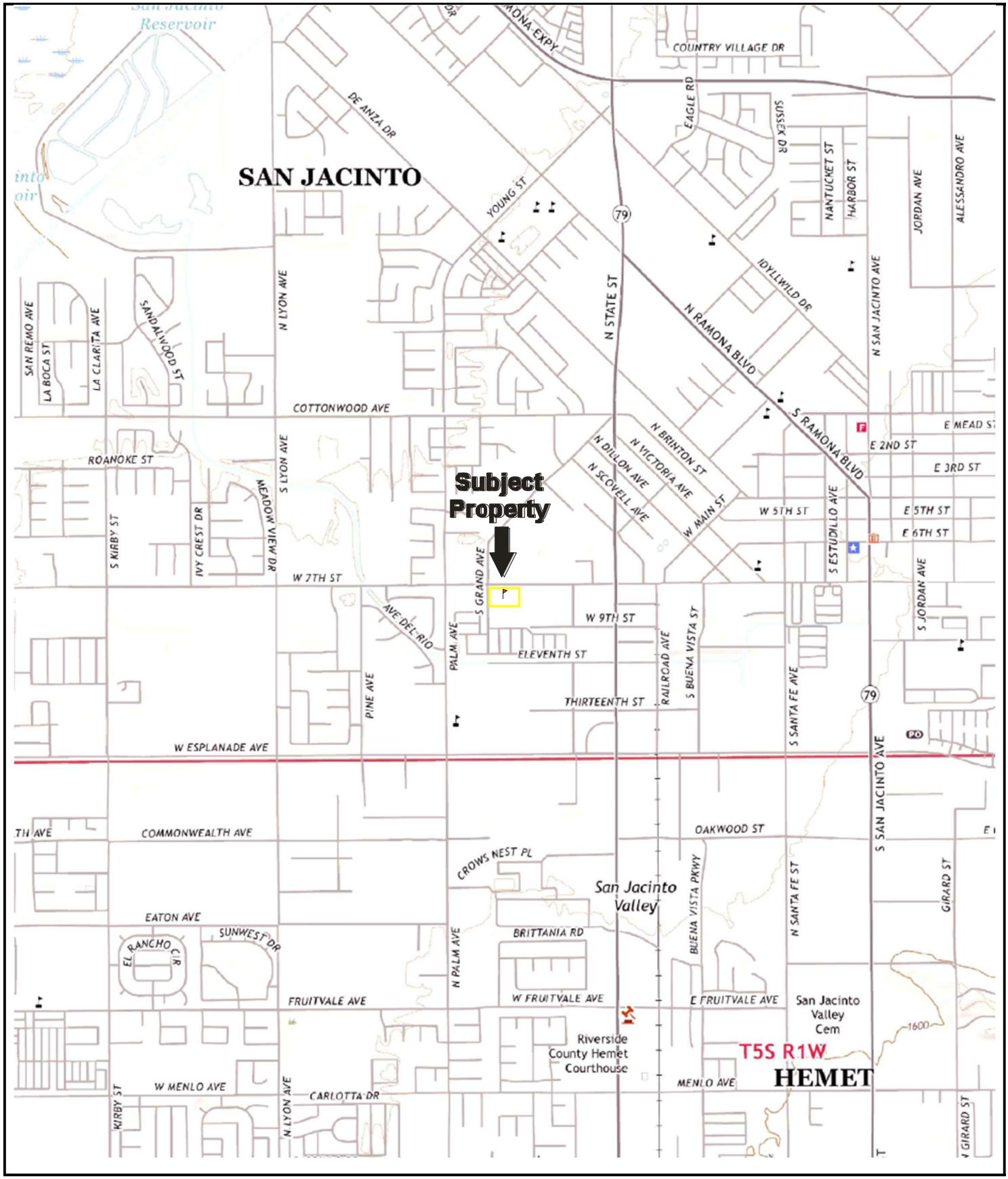
FIGURE 1: SITE LOCATION MAP
Project No. 25-560235.1

PARTNER



FIGURE 2: SITE PLAN
Project No. 25-560235.1

PARTNER



N

USGS 7.5-Minute *San Jacinto, California* Quadrangle
Created: 2021

KEY:
Subject Property

FIGURE 3: TOPOGRAPHIC MAP
Project No. 25-560235.1

PARTNER

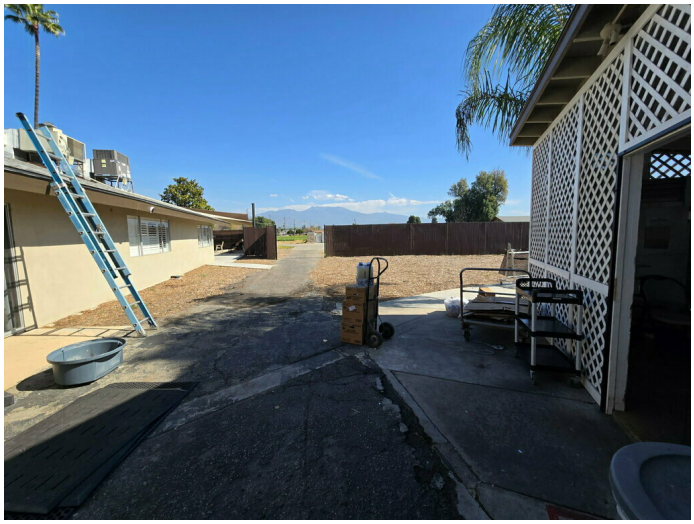
APPENDIX A: SITE PHOTOGRAPHS



1. Building A of The Bradley Gardens Rehabilitation Center from the east side of the parking lot



2. Building A of The Bradley Gardens Rehabilitation Center from the west side of the parking lot



3. East gate to the south side of the property and the cold storage area south of Building A



4. Covered patio area on the east side of Building A



5. Open and landscaped area south of Building A



6. Garden area south of Building A



7. Exercise area on the west side of the property outside Building B



8. Building C on the northwest portion of the property



9. Building C, the vacant medical offices, from West 7th Street



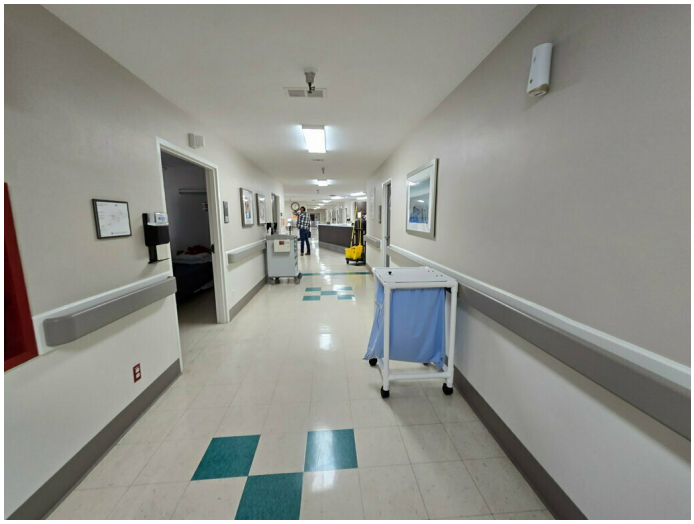
10. Building D on the southeast portion of the property



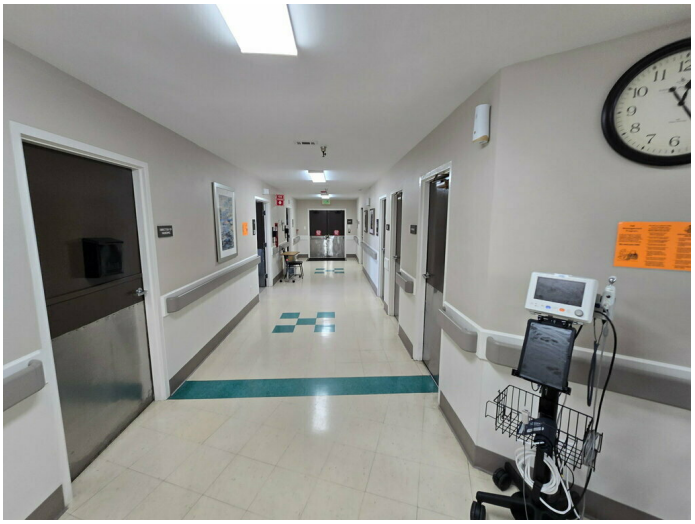
11. East entrance to the property leading to the trash area and Building D



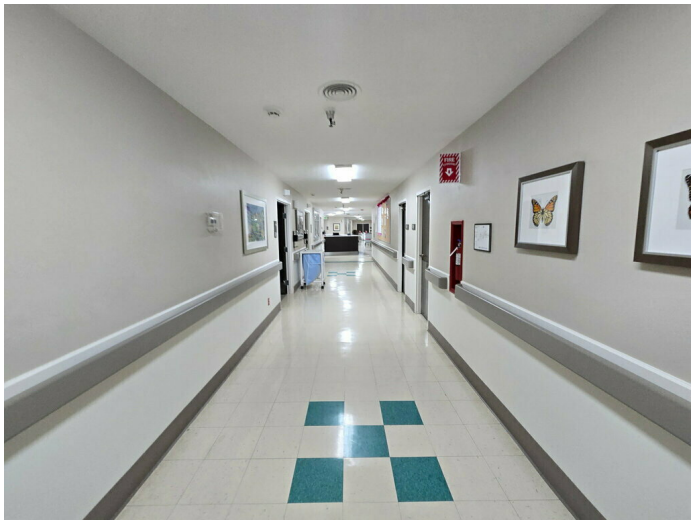
12. South side of Building D, and the biohazardous waste storage closed



13. Northeast hallway to patient room in Building A



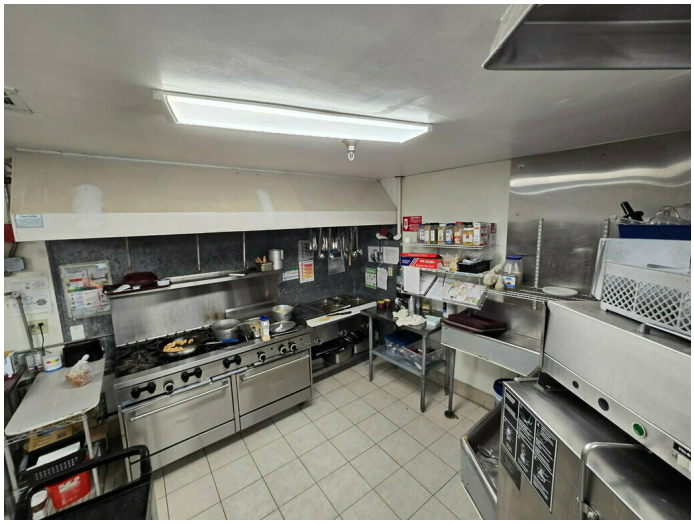
14. Southeast hallway to patient rooms in Building A



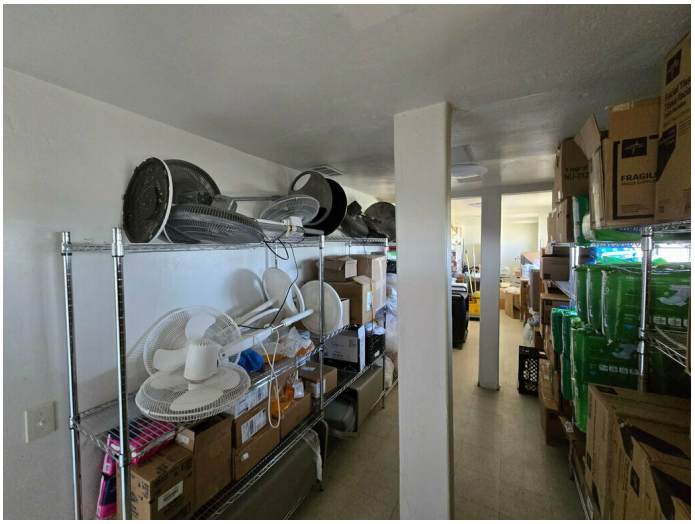
15. Northwest hallway to patient rooms in Building A



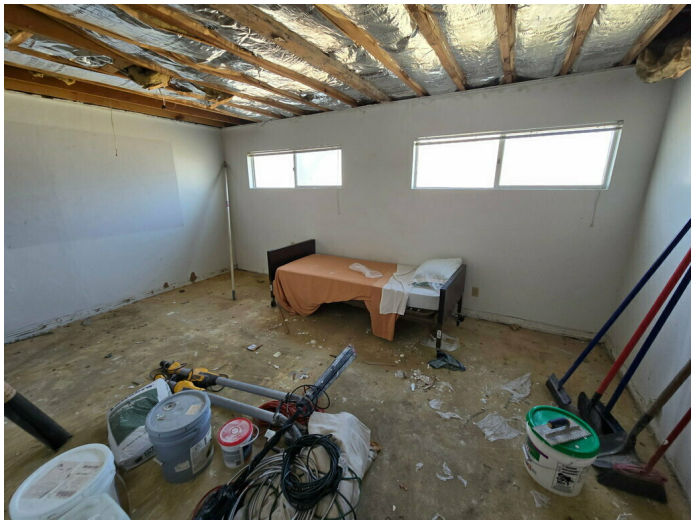
16. Administrative office area in Building B



17. Kitchen within the east portion of Building A



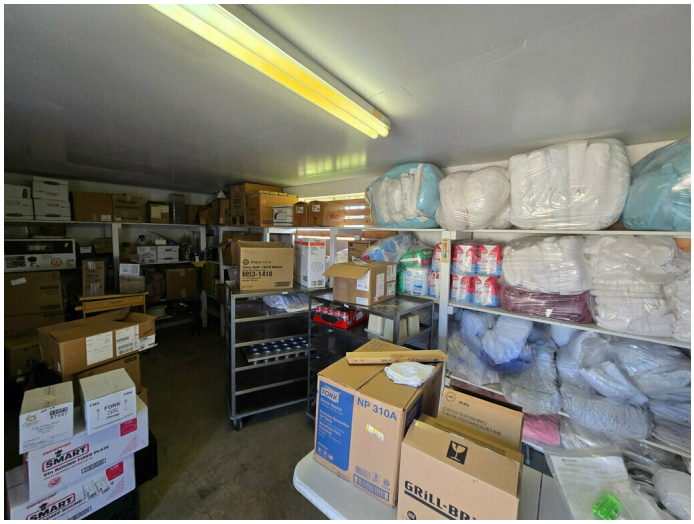
18. Storage room in Building B



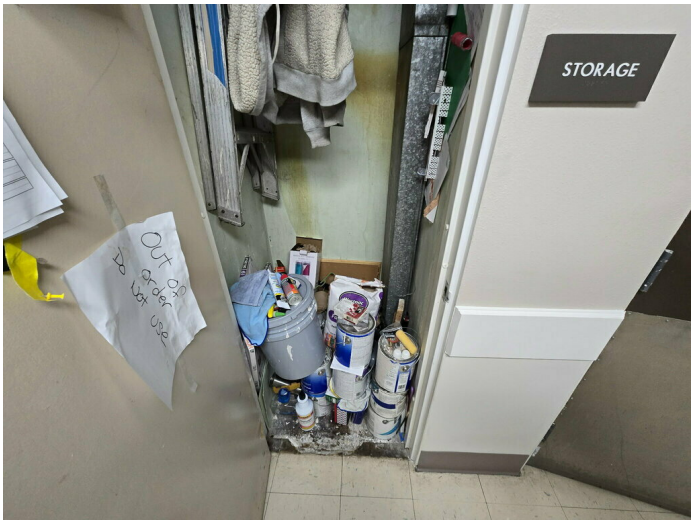
19. Vacant office space being remodeled in Building C



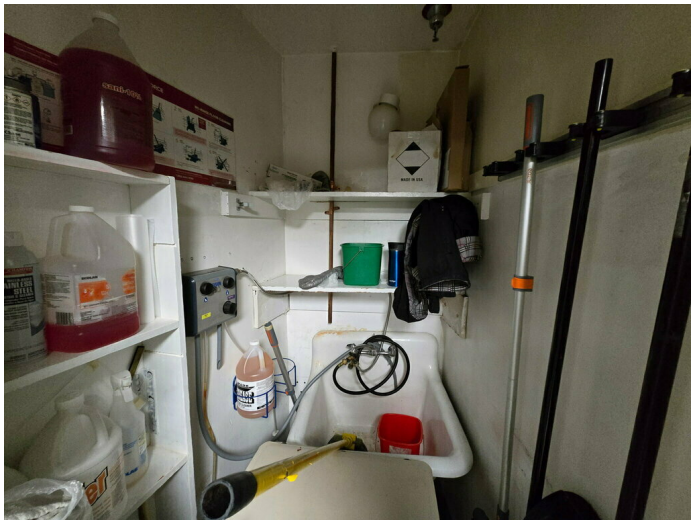
20. Vacant office hallway in Building C



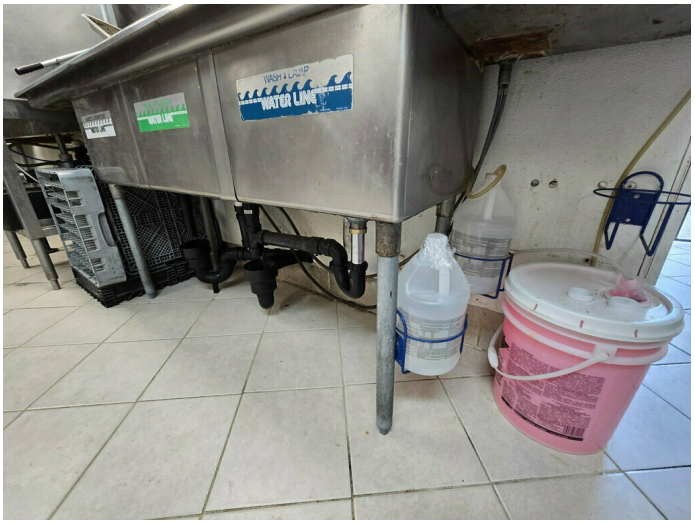
21. Storage room in Building D



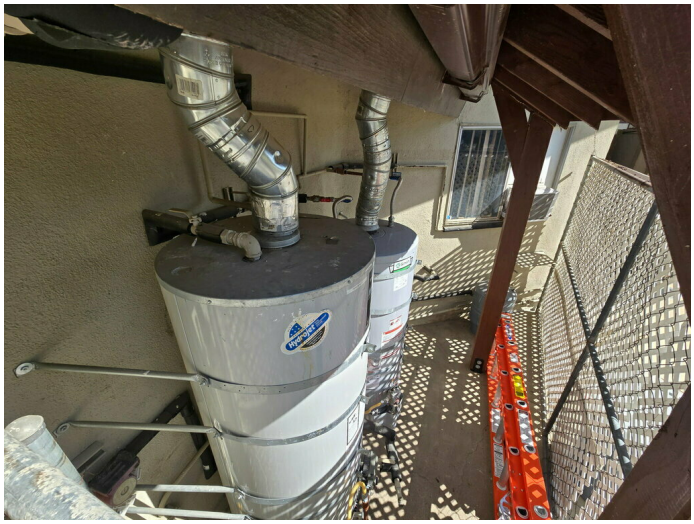
22. Storage closet next to the electrical room with paint containers



23. Janitorial closet near the kitchen with a mop sink and floor cleaners



24. Kitchen sink, drain system, and dish washing detergent



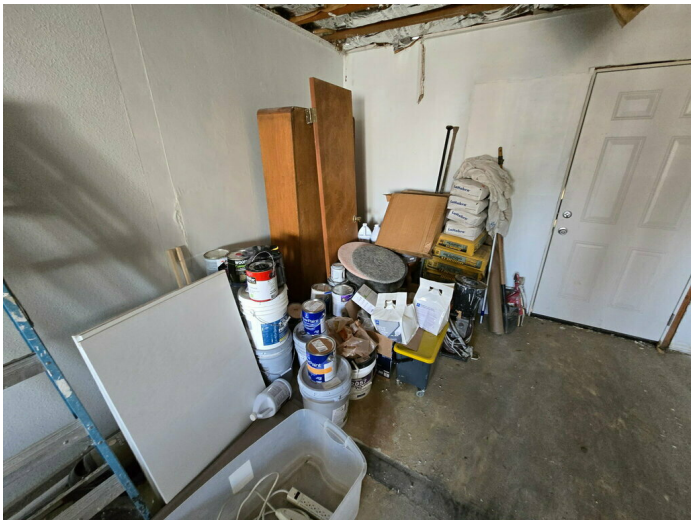
25. Natural gas water heaters in an enclosure on the southwest side of Building A



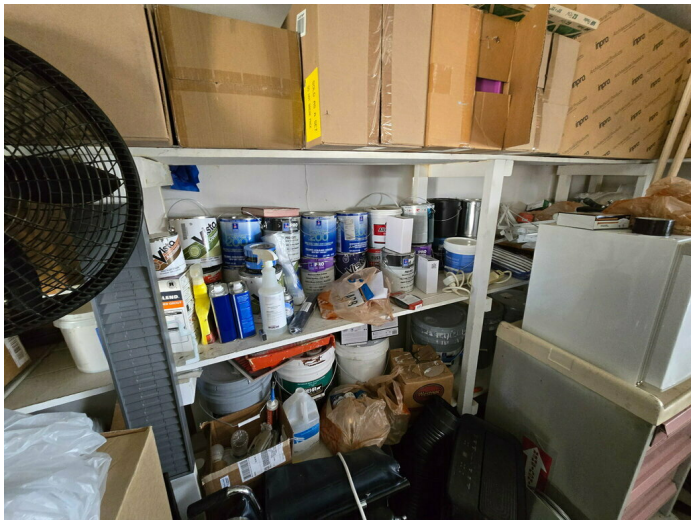
26. Cold storage area on the southeast side of Building A



27. Natural gas water heaters in the cold storage area



28. Construction supplies and paint in Building C



29. Maintenance supplies stored in Building D



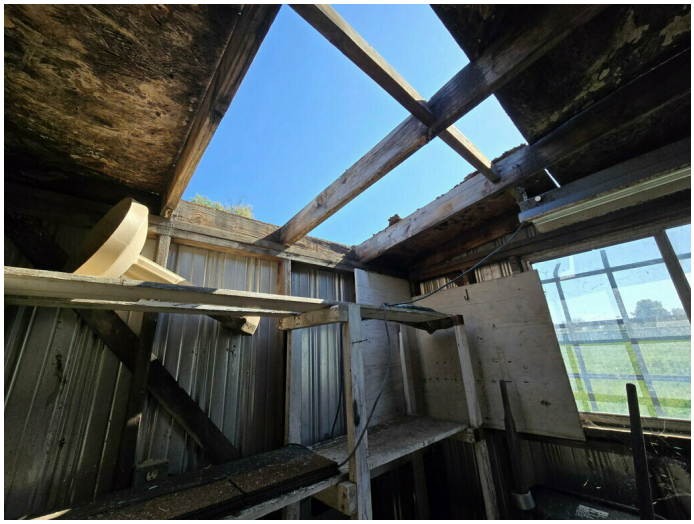
30. Mostly empty paint containers within the maintenance garage of Building D



31. Empty gasoline containers within a flammable storage cabinet in the maintenance garage of Building D



32. Biohazardous waste containers in the storage closet in Building D



33. Hole in the roof of the maintenance garage in Building D causing microbial growth and water damage



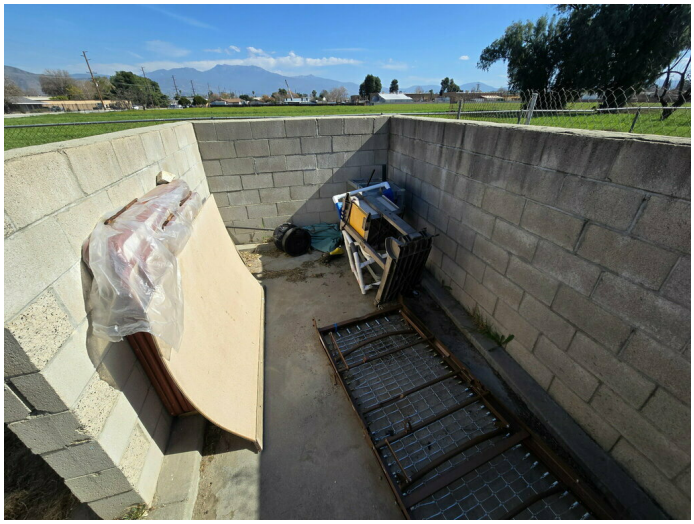
34. Pole-mounted transformer and temporary emergency generator to the north of Building A



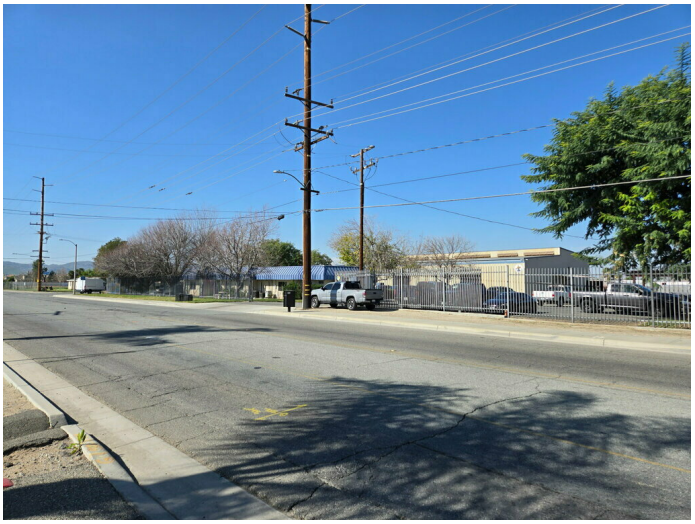
35. Grease trap clean-outs north of Building A



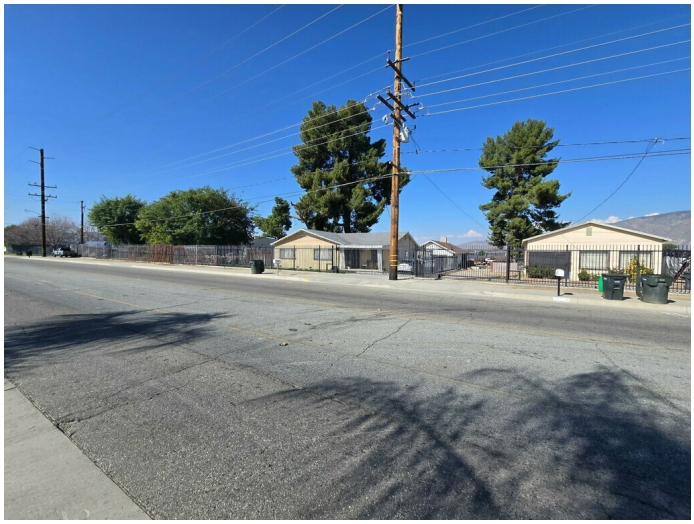
36. Solid waste containers on the east side of the property



37. Solid waste enclosure on the east side of the property used to store bulk waste items



38. North adjoining light industrial metal fabrication facility

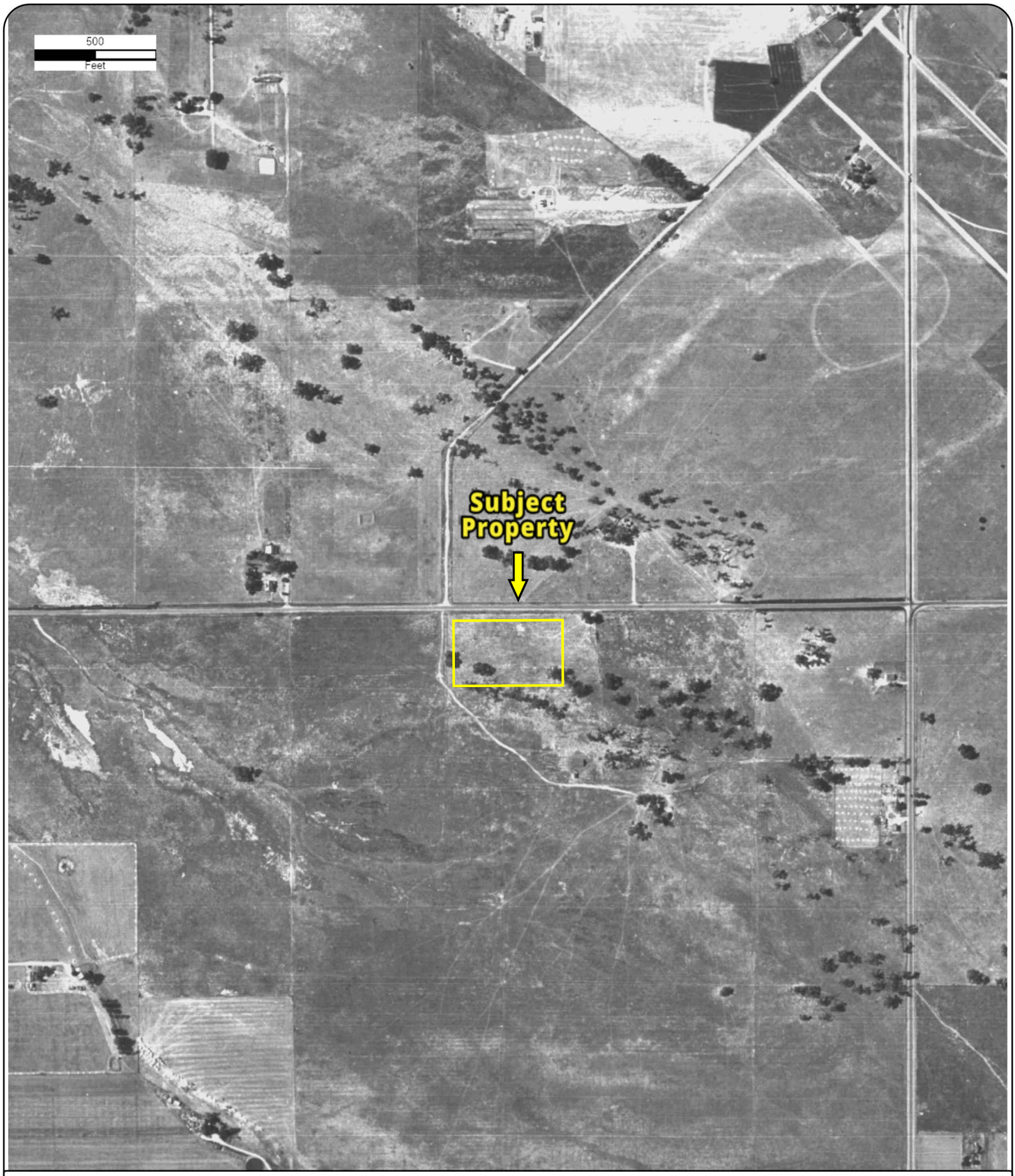


39. Residential homes that are a part of the north adjoining metal fabrication facility



40. Vacant land to the east of the subject property

APPENDIX B: HISTORICAL/REGULATORY DOCUMENTATION



Year: 1938
Source: ASCS
Scale: 1" = 500'
Comment:

Address: 980 W 7th St, SAN JACINTO, CA
Approx Center: -116.97756595,33.77965361

Order No: 26013000754

PARTNER



Year: 1949
Source: ASCS
Scale: 1" = 500'
Comment:

Address: 980 W 7th St, SAN JACINTO, CA
Approx Center: -116.97756595,33.77965361

Order No: 26013000754

PARTNER



Year: 1953
Source: ASCS
Scale: 1" = 500'
Comment:

Address: 980 W 7th St, SAN JACINTO, CA
Approx Center: -116.97756595,33.77965361

Order No: 26013000754

PARTNER



Year: 1962
Source: FAIRCHILD
Scale: 1" = 500'
Comment:

Address: 980 W 7th St, SAN JACINTO, CA
Approx Center: -116.97756595,33.77965361

Order No: 26013000754

PARTNER



Year: 1972
Source: USGS
Scale: 1" = 500'
Comment:

Address: 980 W 7th St, SAN JACINTO, CA
Approx Center: -116.97756595,33.77965361

Order No: 26013000754

PARTNER



Year: 1980
Source: USGS
Scale: 1" = 500'
Comment:

Address: 980 W 7th St, SAN JACINTO, CA
Approx Center: -116.97756595,33.77965361

Order No: 26013000754

PARTNER



Year: 1988
Source: Private
Scale: 1" = 500'
Comment:

Address: 980 W 7th St, SAN JACINTO, CA
Approx Center: -116.97756595,33.77965361

Order No: 26013000754

PARTNER



Year: 1996
Source: USGS
Scale: 1" = 500'
Comment:

Address: 980 W 7th St, SAN JACINTO, CA
Approx Center: -116.97756595,33.77965361

Order No: 26013000754

PARTNER



Year: 2002
Source: USGS
Scale: 1" = 500'
Comment:

Address: 980 W 7th St, SAN JACINTO, CA
Approx Center: -116.97756595,33.77965361

Order No: 26013000754

PARTNER



Year: 2006
Source: USDA
Scale: 1" = 500'
Comment:

Address: 980 W 7th St, SAN JACINTO, CA
Approx Center: -116.97756595,33.77965361

Order No: 26013000754

PARTNER



Year: 2009
Source: USDA
Scale: 1" = 500'
Comment:

Address: 980 W 7th St, SAN JACINTO, CA
Approx Center: -116.97756595,33.77965361

Order No: 26013000754

PARTNER



Year: 2010
Source: USDA
Scale: 1" = 500'
Comment:

Address: 980 W 7th St, SAN JACINTO, CA
Approx Center: -116.97756595,33.77965361

Order No: 26013000754

PARTNER



Year: 2012
Source: USDA
Scale: 1" = 500'
Comment:

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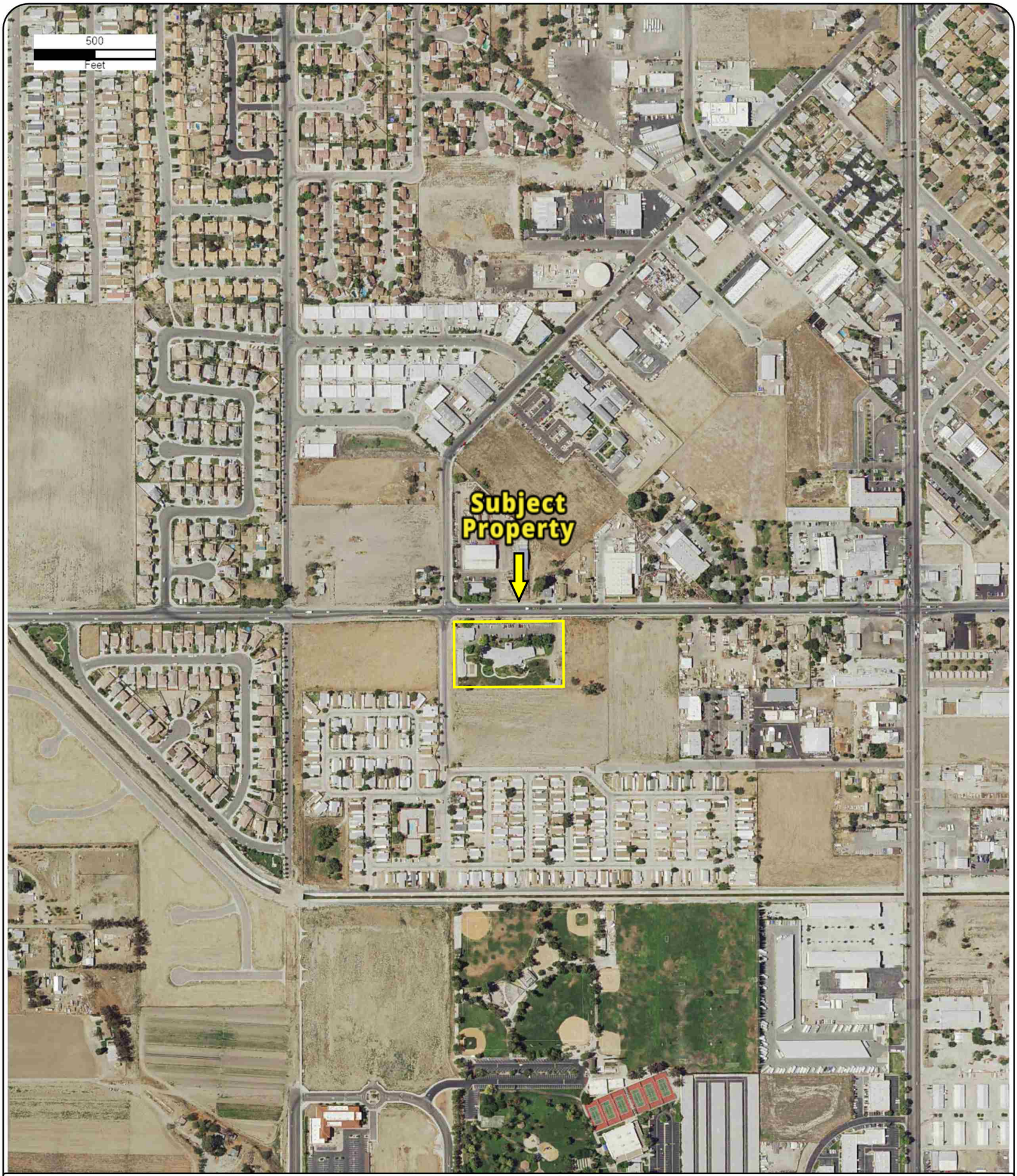
Approx Center: -116.97756595,33.77965361

Order No: 26013000754

PARTNER



Year: 2014
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Approx Center: -116.97756595,33.77965361

Order No: 26013000754

PARTNER



Year: 2016
Source: USDA
Scale: 1" = 500'
Comment:

Address: 980 W 7th St, SAN JACINTO, CA
Approx Center: -116.97756595,33.77965361

Order No: 26013000754

PARTNER



Year: 2018
Source: USDA
Scale: 1" = 500'
Comment:

Address: 980 W 7th St, SAN JACINTO, CA
Approx Center: -116.97756595,33.77965361

Order No: 26013000754

PARTNER

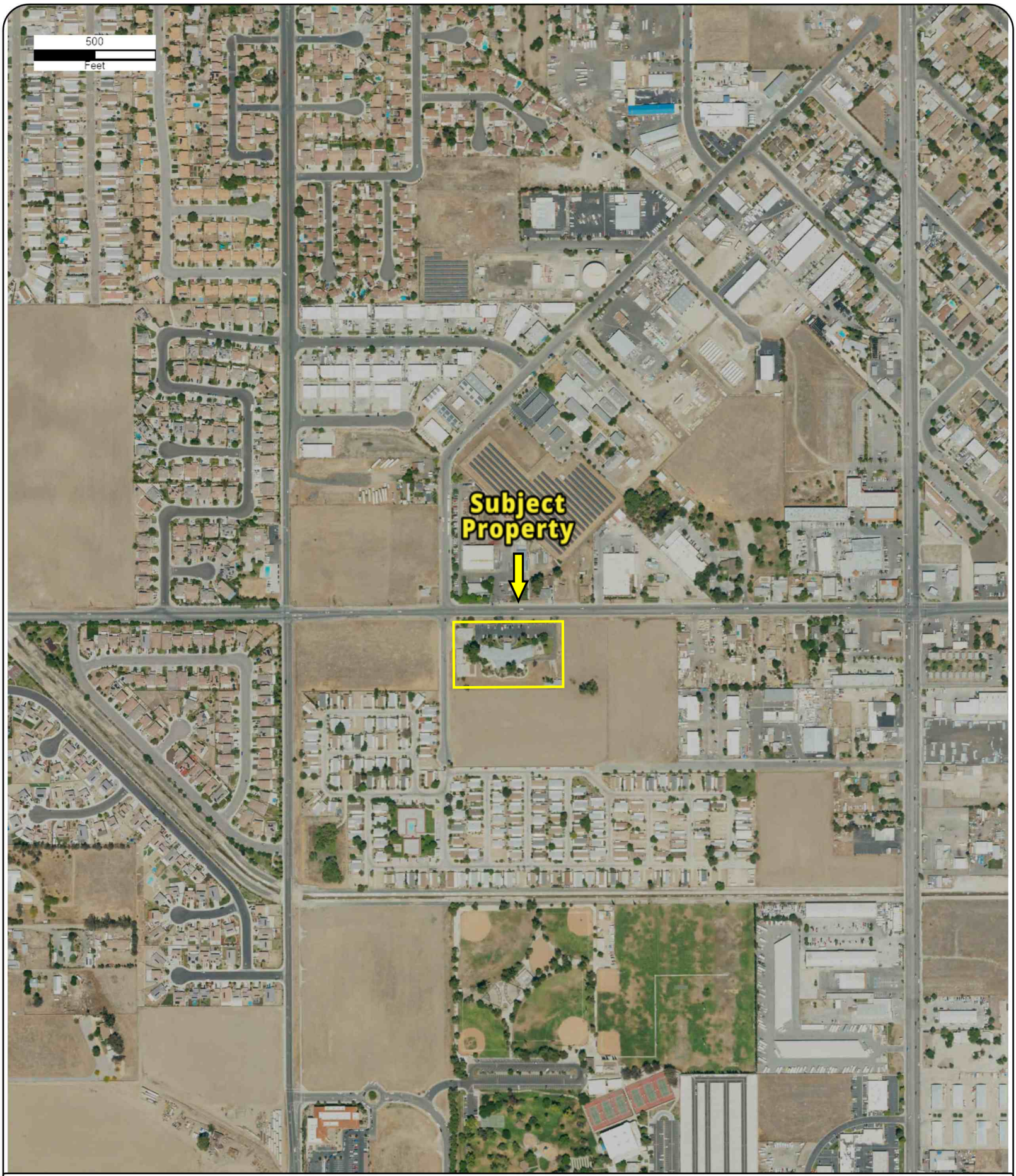


Year: 2020
Source: USDA
Scale: 1" = 500'
Comment:

Address: 980 W 7th St, SAN JACINTO, CA
Approx Center: -116.97756595,33.77965361

Order No: 26013000754

PARTNER



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Source: USDA
Scale: 1" = 500'
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Address: 980 W 7th St, SAN JACINTO, CA
Approx Center: -116.97756595,33.77965361

Order No: 26013000754

PARTNER



Year: 2024
Source: USDA
Scale: 1" = 500'
Comment:

Address: 980 W 7th St, SAN JACINTO, CA
Approx Center: -116.97756595,33.77965361

Order No: 26013000754

PARTNER

FIRE INSURANCE MAPS

Project Property: Bradley Gardens
980 W 7th St SAN JACINTO CA 92582
Project No: 25-560235.1
Requested By: Partner Engineering and Science, Inc.
Order No: 26013000754
Date Completed: January 31, 2026

Please note that no information was found for your site or adjacent properties.

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

CITY DIRECTORY

Project Property:	*Bradley Gardens* *980 W 7th St* *SAN JACINTO,CA 92582*
Project No:	*25-560235.1*
Requested By:	*Partner Engineering and Science, Inc.*
Order No:	*26013000754*
Date Completed:	*February 02, 2026*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

February 02, 2026
RE: CITY DIRECTORY RESEARCH
980 W 7th St
SAN JACINTO,CA 92582

Thank you for contacting ERIS for an City Directory Search for the site described above. Our staff has conducted a reverse listing City Directory search to determine prior occupants of the subject site and adjacent properties. We have provided the nearest addresses(s) when adjacent addresses are not listed. If we have searched a range of addresses, all addresses in that range found in the Directory are included.

Note: Reverse Listing Directories generally are focused on more highly developed areas. Newly developed areas may be covered in the more recent years, but the older directories will tend to cover only the "central" parts of the city. To complete the search, we have either utilized the ACPL, Library of Congress, State Archives, and/or a regional library or history center as well as multiple digitized directories. These do not claim to be a complete collection of all reverse listing city directories produced.

ERIS has made every effort to provide accurate and complete information but shall not be held liable for missing, incomplete or inaccurate information. To complete this search we used the general range(s) below to search for relevant findings. If you believe there are additional addresses or streets that require searching please contact us at 866-517-5204.

Search Criteria:
800-925 of S Grand Ave
900-1015 of W 7th St
ALL of W 9th St
Search Notes:
W 7th St address numbers change prior to 1984 (39170-39280)

Search Results Summary

Date	Source	Comment
2024	DIGITAL BUSINESS DIRECTORY	
2020	DIGITAL BUSINESS DIRECTORY	
2016	DIGITAL BUSINESS DIRECTORY	
2012	DIGITAL BUSINESS DIRECTORY	
2008	DIGITAL BUSINESS DIRECTORY	
2003	DIGITAL BUSINESS DIRECTORY	
2001	HAINES	
1996	HAINES	
1991	HAINES	
1986	HAINES	
1984	HAINES	
1977	HAINES	
1974	HAINES	
1971	HAINES	
1964-65	LUSKEYS	

123 total records. Part 1 of 2

801 CROP PRODUCTION SVC...AGRI PRODUCTS
913 A 8 TRANSPORT LLC...TRUCKING SERVICES
913 ALAN SMITH...RESIDENTIAL
913 ALEXANDER LOZANO...RESIDENTIAL
913 ALFONSO HERRERA...RESIDENTIAL
913 ALFREDO LANDIN...RESIDENTIAL
913 ALICIA AHUMADA...RESIDENTIAL
913 AMY STEVENS...RESIDENTIAL
913 ANNIE CORDERO...RESIDENTIAL
913 APOLINARA ACOSTA...RESIDENTIAL
913 APOLINARIA VILLALPANDO...RESIDENTIAL
913 ARIANA GARCIA...RESIDENTIAL
913 BARBARA SALAS...RESIDENTIAL
913 BELEN RODRIGUEZ...RESIDENTIAL
913 BIATRIZ LOPEZ...RESIDENTIAL
913 BRANDON HUBBARD...RESIDENTIAL
913 BRANTLEY DILLINGHAM...RESIDENTIAL
913 CARLOS DIAZ...RESIDENTIAL
913 CAROL HOWELL...RESIDENTIAL
913 CAROL OTTERSTROM...RESIDENTIAL
913 CELESTE MONTOYA...RESIDENTIAL
913 CHARLES BIDINGER...RESIDENTIAL
913 CHRISTINE INIGUEZ...RESIDENTIAL
913 CLAUDIA LIFORD...RESIDENTIAL
913 CRYSTAL MITCHELL...RESIDENTIAL
913 DAISY VILLALPANDO...RESIDENTIAL
913 DANIEL INIGUEZ...RESIDENTIAL
913 DAVID EASTRIDGE...RESIDENTIAL
913 DAVID MARTINEZ...RESIDENTIAL
913 DAVID SANTOYO...RESIDENTIAL
913 DIANNE FIERRO...RESIDENTIAL
913 DORA PEDRAZA...RESIDENTIAL
913 EDUARDO ALCALA...RESIDENTIAL
913 EDUARDO CANDELAS...RESIDENTIAL
913 ELA NAPOLITANO...RESIDENTIAL
913 EMMANUEL CRAWFORD...RESIDENTIAL
913 ENRIQUE LOPEZ-REYES...RESIDENTIAL
913 ERIKA CRAWFORD...RESIDENTIAL
913 EZEQUIEL CISNEROS...RESIDENTIAL
913 FAVIOLA RAMIREZ...RESIDENTIAL
913 FRANCISCO MARTINEZ...RESIDENTIAL
913 FRANK MAGANA...RESIDENTIAL
913 FREMONT SMITH...RESIDENTIAL
913 GINGER MILLER...RESIDENTIAL
913 GONZALO MENDOZA...RESIDENTIAL
913 GREGORY THRASHER...RESIDENTIAL
913 GUILLERMO LUGO...RESIDENTIAL
913 HEIDI MEZA...RESIDENTIAL
913 HELEN OSAK...RESIDENTIAL
913 HERMAN VELGARA...RESIDENTIAL
913 HUGO TREVIZO...RESIDENTIAL
913 JACK MARTIN...RESIDENTIAL
913 JACKSON MORRIS...RESIDENTIAL
913 JAMEKA SPALITTA...RESIDENTIAL
913 JAMES SPRAGUE...RESIDENTIAL
913 JEFFERY MARTIN...RESIDENTIAL
913 JOCELYN SANCHEZ...RESIDENTIAL
913 JOHN LOPEZ...RESIDENTIAL
913 JOHN MORALES...RESIDENTIAL
913 JORGE RODRIGUEZ...RESIDENTIAL
913 JOSE RODRIGUEZ...RESIDENTIAL
913 JUDITH WILLIS...RESIDENTIAL
913 KAREN VELASQUEZ...RESIDENTIAL
913 KATHY WEBB...RESIDENTIAL
913 KEITH RUBY...RESIDENTIAL
913 L HERNANDEZ...RESIDENTIAL
913 LACEY STEPHENS...RESIDENTIAL
913 LARRY SANDERS...RESIDENTIAL
913 LENYCHA WARREN...RESIDENTIAL

2024 S GRAND AVE
SOURCE: DIGITAL BUSINESS DIRECTORY

Part 2 of 2

913 LINDA PENDERGRAFT...RESIDENTIAL
913 LOLA MAGALLANES...RESIDENTIAL
913 LUPE FOY...RESIDENTIAL
913 MADELINE MONTEZ...RESIDENTIAL
913 MARIA AVALOS...RESIDENTIAL
913 MARIA FIGUEROA...RESIDENTIAL
913 MARIA GONZALEZ...RESIDENTIAL
913 MARIA GUTIERREZ...RESIDENTIAL
913 MARIELA MOJICA...RESIDENTIAL
913 MARTIN GRABOWSKY...RESIDENTIAL
913 MICKEY YOUNG...RESIDENTIAL
913 MIGUEL PEREZ...RESIDENTIAL
913 MONETTE HOLMES...RESIDENTIAL
913 NICOLAS BERUMEN...RESIDENTIAL
913 NICOLE STUART...RESIDENTIAL
913 NIKKOLA SAWYER...RESIDENTIAL
913 NINFA SAMANO...RESIDENTIAL
913 NORA PALOMINO...RESIDENTIAL
913 PARKVIEW ESTATES...MOBILE HOMES-PARKS & COMMUNITIES
913 PATRICIA DUTRO...RESIDENTIAL
913 PATRICIA INIGUEZ...RESIDENTIAL
913 PENNY VANRENSELAAR...RESIDENTIAL
913 RAFAEL GOMEZ...RESIDENTIAL
913 RANDALL HIGGINS...RESIDENTIAL
913 RAVEN JACKSON...RESIDENTIAL
913 RAYMOND WEINBERGER...RESIDENTIAL
913 REINA CORNEJO...RESIDENTIAL
913 REINALDO MACIAS...RESIDENTIAL
913 RHODA KISSEL...RESIDENTIAL
913 RHONDA BIGLER...RESIDENTIAL
913 RICHARD BLAUSER...RESIDENTIAL
913 RICHARD PENDERGRAFT...RESIDENTIAL
913 ROBERT CASTEEL...RESIDENTIAL
913 ROBERT VOORHEES...RESIDENTIAL
913 ROBIN BURNEY...RESIDENTIAL
913 ROCHELLE JIMENEZ...RESIDENTIAL
913 RONALD HOLMES...RESIDENTIAL
913 RONALD WORLITZ...RESIDENTIAL
913 ROSANNA PRESTON...RESIDENTIAL
913 ROSLYN REEDER...RESIDENTIAL
913 RUBEN REYES...RESIDENTIAL
913 SHIRLEY CAUSKY...RESIDENTIAL
913 STEPHAN HUNTER...RESIDENTIAL
913 STEPHANIE VELGARA...RESIDENTIAL
913 STEVEN HILL...RESIDENTIAL
913 SUSAN MORGAN...RESIDENTIAL
913 TAMMIE WALTHERS...RESIDENTIAL
913 TAMMY COUGHLIN...RESIDENTIAL
913 TERRY JIMENEZ...RESIDENTIAL
913 THOMAS WILLARD...RESIDENTIAL
913 TRACEY LOPEZ...RESIDENTIAL
913 TRAVIS ARIAS...RESIDENTIAL
913 VANNESA BEARD...RESIDENTIAL
913 VICKI ECKERLE...RESIDENTIAL

2024 W 7TH ST

SOURCE: DIGITAL BUSINESS DIRECTORY

929 **DOVIE WIGLEY**...*RESIDENTIAL*
980 **BRADLEY GARDENS CONVALESCENT**...*CONVALESCENT HOMES*
980 **JERROLD GAGE**...*RESIDENTIAL*
989 **TALLEY METAL FABRICATION**...*STRUCTURAL STEEL*
989 **TALLEY METAL FABRICATION**...*STEEL FABRICATORS*
1013 **DONNA ALGREN**...*RESIDENTIAL*

2024 W 9TH ST

SOURCE: DIGITAL BUSINESS DIRECTORY

720 **ANDREW AVILA**...*RESIDENTIAL*
723 **ROSALINDA SANCHEZ**...*RESIDENTIAL*
735 **CHRIS BUSTOS**...*RESIDENTIAL*
736 **LUZ OCEGUEDA**...*RESIDENTIAL*
753 **ALERT BARRICADE INC**...*TRAINING CONSULTANTS*
753 **LIL MICHAEL'S CUSTOMS**...*NONCLASSIFIED ESTABLISHMENTS*
775 **E M T RV REPAIR SVC**...*RECREATIONAL VEHICLES-REPAIRING & SVC*
775 **KONSTANTIN DOBREV**...*RESIDENTIAL*
775 **KONSTANTIN DOBREV METAL ARTS**...*WHOLESALE ART METAL WORK*
775 **PAT'S GEARBOX**...*AUTOMOBILE REPAIRING & SERVICE*
817 **C C CARPET**...*CARPET & RUG DEALERS-NEW*
819 **G W COMMUNICATIONS**...*COMMUNICATIONS*
819 **GW COMMUNICATIONS**...*COMMUNICATIONS*
825 **J3 MASONRY CONCRETE**...*MASONRY CONTRACTORS*
825 **SAN DIEGO SCREW PRODUCTS**...*MACHINE SHOPS*
859 **AMER-MEX MANUFACTURING INC**...*MANUFACTURERS*
859 **SHADEMAKER INC**...*AWNINGS & CANOPIES*
869 **AGUILAR INDUSTRIES LLC**...*MANUFACTURERS*
869 **ALL-PRO OFF ROAD INC**...*NEW AUTO PARTS*
869 **CONTRACTORS STEEL SUPPLY**...*STEEL DISTRIBUTION*
869 **FDC CONSTRUCTION**...*OFFICES AND CLINICS OF DENTISTS*
869 **MANGO TECH**...*WHOLESALE MISCELLANEOUS INDUSTRIAL EQUIPMENT & SUPPLIES*
873 **RAM SALES & DISTRIBUTING**...*WHOLESALE ELECTRONIC EQUIPMENT & SUPPLIES*

94 total records. Part 1 of 2

801 **CROP PRODUCTION SVC**...*FERTILIZERSRETAIL*
801 **CROP PRODUCTION SVC**...*AGRICULTURAL PRODUCTS*
801 **CROP PRODUCTION SVC INC**...*FERTILIZERSMANUFACTURERS*
801 **CROP PRODUCTION SVC INC**...*FERTILIZERS (WHLS)*
913 **ALAN SMITH**...*RESIDENTIAL*
913 **ALFONSO HERRERA**...*RESIDENTIAL*
913 **ALFREDO LANDIN**...*RESIDENTIAL*
913 **ALICIA AHUMADA**...*RESIDENTIAL*
913 **AMY STEVENS**...*RESIDENTIAL*
913 **ANTHONY WRIGHT**...*RESIDENTIAL*
913 **APOLINARA ACOSTA**...*RESIDENTIAL*
913 **APOLINARIA VILLALPANDO**...*RESIDENTIAL*
913 **BARBARA DION**...*RESIDENTIAL*
913 **BELEN RODRIGUEZ**...*RESIDENTIAL*
913 **BEVERLY LANDRY**...*RESIDENTIAL*
913 **BRANDON HUBBARD**...*RESIDENTIAL*
913 **CELESTE MONTOYA**...*RESIDENTIAL*
913 **CHELSEY WALTHERS**...*RESIDENTIAL*
913 **CISCOM COMPUTERS**...*COMPUTER & EQUIPMENT DEALERS*
913 **CLAUDIA LIFORD**...*RESIDENTIAL*
913 **DAVID EASTRIDGE**...*RESIDENTIAL*
913 **DAVID SANTOYO**...*RESIDENTIAL*
913 **DAVID ZAZUETA**...*RESIDENTIAL*
913 **DONALD RAYMOND**...*RESIDENTIAL*
913 **DORA PEDRAZA**...*RESIDENTIAL*
913 **DOROTHY BIGNEY**...*RESIDENTIAL*
913 **EDUARDO ALCALA**...*RESIDENTIAL*
913 **ELA NAPOLITANO**...*RESIDENTIAL*
913 **EZEQUIEL CISNEROS**...*RESIDENTIAL*
913 **FAVIOLA RAMIREZ**...*RESIDENTIAL*
913 **FRANCES MORRIS**...*RESIDENTIAL*
913 **GABRIEL VILLANUEVA**...*RESIDENTIAL*
913 **GREGORY THRASHER**...*RESIDENTIAL*
913 **GUILLERMO LUGO**...*RESIDENTIAL*
913 **HERMAN VELGARA**...*RESIDENTIAL*
913 **INA MARTINEZ**...*RESIDENTIAL*
913 **IRAN QUIJANO**...*RESIDENTIAL*
913 **JACK MARTIN**...*RESIDENTIAL*
913 **JACKSON MORRIS**...*RESIDENTIAL*
913 **JAMES MAYNARD**...*RESIDENTIAL*
913 **JAMES SPRAGUE**...*RESIDENTIAL*
913 **JANETT BRIGGS**...*RESIDENTIAL*
913 **JESUS GAMINO**...*RESIDENTIAL*
913 **JOHN LOPEZ**...*RESIDENTIAL*
913 **JOHN MORALES**...*RESIDENTIAL*
913 **JOSE ARREGUIN**...*RESIDENTIAL*
913 **JOSE PALOMINO**...*RESIDENTIAL*
913 **JOSE RODRIGUEZ**...*RESIDENTIAL*
913 **JUDITH WILLIS**...*RESIDENTIAL*
913 **JULIO ORDONEZ**...*RESIDENTIAL*
913 **KAREN VELASQUEZ**...*RESIDENTIAL*
913 **KATHY WEBB**...*RESIDENTIAL*
913 **KEITH RUBY**...*RESIDENTIAL*
913 **KENNETH HOLM**...*RESIDENTIAL*
913 **L HERNANDEZ**...*RESIDENTIAL*
913 **LACEY STEPHENS**...*RESIDENTIAL*
913 **LARRY SANDERS**...*RESIDENTIAL*
913 **LENYCHA WARREN**...*RESIDENTIAL*
913 **LINDA PENDERGRAFT**...*RESIDENTIAL*
913 **LOLA MAGALLANES**...*RESIDENTIAL*
913 **MARIA AVALOS**...*RESIDENTIAL*
913 **MARIA FIGUEROA**...*RESIDENTIAL*
913 **MARIA GONZALEZ**...*RESIDENTIAL*
913 **MARIELA MOJICA**...*RESIDENTIAL*
913 **MARTIN GRABOWSKY**...*RESIDENTIAL*
913 **MARY AGUIRRE**...*RESIDENTIAL*
913 **MARY KNOX**...*RESIDENTIAL*
913 **MICKEY YOUNG**...*RESIDENTIAL*
913 **MIGUEL PEREZ**...*RESIDENTIAL*

2020 S GRAND AVE
SOURCE: DIGITAL BUSINESS DIRECTORY

Part 2 of 2

913 **MONETTE HOLMES**...*RESIDENTIAL*
913 **NICOLAS BERUMEN**...*RESIDENTIAL*
913 **NIKKOLA SAWYER**...*RESIDENTIAL*
913 **NORA PALOMINO**...*RESIDENTIAL*
913 **PARKVIEW ESTATES**...*MOBILE HOMES-PARKS & COMMUNITIES*
913 **RANDALL HIGGINS**...*RESIDENTIAL*
913 **RAYMOND WEINBERGER**...*RESIDENTIAL*
913 **REINA CORNEJO**...*RESIDENTIAL*
913 **RHODA KISSEL**...*RESIDENTIAL*
913 **RICHARD PENDERGRAFT**...*RESIDENTIAL*
913 **ROBERT CASTEEL**...*RESIDENTIAL*
913 **ROBIN IPPOLITO**...*RESIDENTIAL*
913 **ROCHELLE JIMENEZ**...*RESIDENTIAL*
913 **RONALD HOLMES**...*RESIDENTIAL*
913 **ROSANNA PRESTON**...*RESIDENTIAL*
913 **ROSLYN REEDER**...*RESIDENTIAL*
913 **SHIRLEY CAUSKY**...*RESIDENTIAL*
913 **STEPHAN HUNTER**...*RESIDENTIAL*
913 **STEPHANIE VELGARA**...*RESIDENTIAL*
913 **SUSAN MORGAN**...*RESIDENTIAL*
913 **TAMMIE WALTHERS**...*RESIDENTIAL*
913 **THOMAS WILLARD**...*RESIDENTIAL*
913 **TRACEY LOPEZ**...*RESIDENTIAL*
913 **VANNESA BEARD**...*RESIDENTIAL*
913 **VICKI ECKERLE**...*RESIDENTIAL*

2020 W 7TH ST

SOURCE: DIGITAL BUSINESS DIRECTORY

929 **DOVIE WIGLEY**...*RESIDENTIAL*
980 **BRADLEY GARDENS CONVALESCENT**...*CONVALESCENT HOMES*
980 **BRADLEY GARDENS CONVALESCENT**...*CLINICS*
980 **MEDHOST**...*HEALTH SERVICES*
989 **TALLEY METAL FABRICATION**...*STEEL-STRUCTURAL (MFRS)*
989 **TALLEY METAL FABRICATION**...*STEELDISTRIBUTORS & WAREHOUSES (WHLS)*
1013 **DONNA ALGREN**...*RESIDENTIAL*

2020 W 9TH ST

SOURCE: DIGITAL BUSINESS DIRECTORY

720 **ANDREW AVILA**...*RESIDENTIAL*
723 **ROSALINDA SANCHEZ**...*RESIDENTIAL*
735 **JOHN BUSTOS**...*RESIDENTIAL*
753 **EHANDY GADGETS**...*E-COMMERCE*
817 **PATTY'S BARELY USED FURN WRHSE**...*FURNITURE-USED*
819 **G W COMMUNICATIONS**...*COMMUNICATIONS SERVICES-COMMON CARRIERS*
819 **GW COMMUNICATIONS**...*COMMUNICATIONS*
825 **J3 MASONRY CONCRETE**...*MASONRY CONTRACTORS*
825 **PREMIER AUTO BODY**...*AUTOMOBILE BODY-REPAIRING & PAINTING*
825 **SAN DIEGO SCREW PRODUCTS**...*MACHINE SHOPS (MFRS)*
859 **AMER-MEX MANUFACTURING INC**...*MANUFACTURERS*
859 **SHADEMAKER INC**...*OIL FIELD SERVICE*
859 **SHADEMAKER INC**...*TARPAULINSMANUFACTURERS*
859 **SHADEMAKER INC**...*CANVAS & RELATED PRODUCTS (MFRS)*
859 **SHADEMAKER INC**...*AWNINGS & CANOPIES*
869 **ALL-PRO OFF ROAD INC**...*AUTOMOBILE PARTS & SUPPLIES-RETAIL-NEW*
869 **MANGO TECH**...*MISC INDSTRL EQUIP & SUPLS NEC (WHLS)*
869 **SEAT CONCEPTS**...*MOTORCYCLES & MOTOR SCOOTERS-ACCESSORIES*
873 **RAM SALES & DISTRIBUTING**...*ELECTRONIC EQUIPMENT & SUPPLIES-WHLS*

105 total records. Part 1 of 2

801 CROP PRODUCTION SVC...AGRICULTURAL PRODUCTS
801 CROP PRODUCTION SVC INC...FERTILIZERS (WHLS)
913 ALAN SMITH...RESIDENTIAL
913 ALFONSO HERRERA...RESIDENTIAL
913 ALFREDO RODRIGUEZ...RESIDENTIAL
913 AMANDA KNOEFLER...RESIDENTIAL
913 ANTHONY WRIGHT...RESIDENTIAL
913 APOLINARA ACOSTA...RESIDENTIAL
913 ARI JIMENEZ...RESIDENTIAL
913 BARBARA DION...RESIDENTIAL
913 BELEN RODRIGUEZ...RESIDENTIAL
913 BEVERLY LANDRY...RESIDENTIAL
913 BRANDON HUBBARD...RESIDENTIAL
913 CARMEN HERRERA...RESIDENTIAL
913 CARMEN LOPEZ...RESIDENTIAL
913 CELESTE MONTOYA...RESIDENTIAL
913 CHELSEY WALTHERS...RESIDENTIAL
913 CINDY MORRIS...RESIDENTIAL
913 DAVID EASTRIDGE...RESIDENTIAL
913 DAVID MARTINEZ...RESIDENTIAL
913 DAVID SANTOYO...RESIDENTIAL
913 DAVID ZAZUETA...RESIDENTIAL
913 DEBRA SAWYER...RESIDENTIAL
913 DONALD RAYMOND...RESIDENTIAL
913 DOROTHY BIGNEY...RESIDENTIAL
913 EDUARDO ALCALA...RESIDENTIAL
913 ELA NAPOLITANO...RESIDENTIAL
913 EZEQUIEL CISNEROS...RESIDENTIAL
913 FAVIOLA RAMIREZ...RESIDENTIAL
913 FRANCES MORRIS...RESIDENTIAL
913 FRANCISCO LOPEZ...RESIDENTIAL
913 GABRIEL VILLANUEVA...RESIDENTIAL
913 GLORIA CISNEROS...RESIDENTIAL
913 GUILLERMO LUGO...RESIDENTIAL
913 HERMAN VELGARA...RESIDENTIAL
913 IRAN QUIJANO...RESIDENTIAL
913 IRMA RODRIGUEZ...RESIDENTIAL
913 JACK MARTIN...RESIDENTIAL
913 JAMES MAYNARD...RESIDENTIAL
913 JANETT BRIGGS...RESIDENTIAL
913 JESUS GAMINO...RESIDENTIAL
913 JOHN MORALES...RESIDENTIAL
913 JORGE RODRIGUEZ...RESIDENTIAL
913 JOSE ARREGUIN...RESIDENTIAL
913 JOSE GAMINO...RESIDENTIAL
913 JOSE PALOMINO...RESIDENTIAL
913 JOSE RODRIGUEZ...RESIDENTIAL
913 JUDITH WILLIS...RESIDENTIAL
913 KAREN VELASQUEZ...RESIDENTIAL
913 KATHY WEBB...RESIDENTIAL
913 KENNETH HOLM...RESIDENTIAL
913 L HERNANDEZ...RESIDENTIAL
913 LACEY STEPHENS...RESIDENTIAL
913 LARRY SANDERS...RESIDENTIAL
913 LENYCHA WARREN...RESIDENTIAL
913 LINDA PENDERGRAFT...RESIDENTIAL
913 LOLA MAGALLANES...RESIDENTIAL
913 LORI THRASHER...RESIDENTIAL
913 MARCO MORALES...RESIDENTIAL
913 MARIA AVALOS...RESIDENTIAL
913 MARIA GONZALEZ...RESIDENTIAL
913 MARIA LOPEZ...RESIDENTIAL
913 MARIA SANTOYO...RESIDENTIAL
913 MARTIN GRABOWSKY...RESIDENTIAL
913 MARVEL BRIGGS...RESIDENTIAL
913 MARY AGUIRRE...RESIDENTIAL
913 MARY KNOX...RESIDENTIAL
913 MATILDE MEDINA...RESIDENTIAL
913 MICKEY YOUNG...RESIDENTIAL

2016 S GRAND AVE
SOURCE: DIGITAL BUSINESS DIRECTORY

Part 2 of 2

913 MIGUEL GONZALEZ...RESIDENTIAL
913 MIGUEL PEREZ...RESIDENTIAL
913 MONETTE HOLMES...RESIDENTIAL
913 NICOLE MORALES...RESIDENTIAL
913 NIKKOLA SAWYER...RESIDENTIAL
913 NORA COPADO...RESIDENTIAL
913 PARKVIEW ESTATES...MOBILE HOMES-PARKS & COMMUNITIES
913 PATRICIA ARREGUIN...RESIDENTIAL
913 PATRICIA RAMIREZ...RESIDENTIAL
913 RANDALL HIGGINS...RESIDENTIAL
913 RAYMOND WEINBERGER...RESIDENTIAL
913 REBECA GAMINO...RESIDENTIAL
913 REINA CORNEJO...RESIDENTIAL
913 RHODA KISSEL...RESIDENTIAL
913 RICHARD PENDERGRAFT...RESIDENTIAL
913 ROBERT AGUIRRE...RESIDENTIAL
913 ROCHELLE JIMENEZ...RESIDENTIAL
913 RONALD HOLMES...RESIDENTIAL
913 ROSANNA PRESTON...RESIDENTIAL
913 ROSLYN REEDER...RESIDENTIAL
913 SALVADOR FIGUEROA...RESIDENTIAL
913 SHEILA CISNEROS...RESIDENTIAL
913 SHELLY MAYNARD...RESIDENTIAL
913 SOCORRO BERUMEN...RESIDENTIAL
913 SOLEDAD BERUMEN...RESIDENTIAL
913 STEPHAN HUNTER...RESIDENTIAL
913 STEPHANIE VELGARA...RESIDENTIAL
913 TAMI WEINBERGER...RESIDENTIAL
913 TAMMY COUGHLIN...RESIDENTIAL
913 TERRY JIMENEZ...RESIDENTIAL
913 THOMAS WILLARD...RESIDENTIAL
913 TINA WRIGHT...RESIDENTIAL
913 VANNESA BEARD...RESIDENTIAL
913 VICKI ECKERLE...RESIDENTIAL
913 WANDA EASTRIDGE...RESIDENTIAL
913 WENDY WILLARD...RESIDENTIAL

2016 W 7TH ST

SOURCE: DIGITAL BUSINESS DIRECTORY

929 **DOVIE WIGLEY**...*RESIDENTIAL*
929 **KEITH WIGLEY**...*RESIDENTIAL*
980 **BRADLEY GARDENS CONVALESCENT**...*CONVALESCENT HOMES*
989 **TALLEY METAL FABRICATION**...*STEEL-STRUCTURAL (MFRS)*
1013 **DONNA ALGREN**...*RESIDENTIAL*

2016 W 9TH ST

SOURCE: DIGITAL BUSINESS DIRECTORY

735 **JOHN BUSTOS**...*RESIDENTIAL*
775 **PAT'S GEARBOX**...*AUTOMOBILE REPAIRING & SERVICE*
817 **PATTY'S BARELY USED FURN WRHSE**...*FURNITURE-USED*
819 **G W COMMUNICATIONS**...*COMMUNICATIONS*
819 **G W COMMUNICATIONS**...*COMMUNICATIONS SERVICES-COMMON CARRIERS*
819 **GW COMMUNICATIONS**...*COMMUNICATIONS*
825 **PREMIER AUTO BODY**...*AUTOMOBILE BODY-REPAIRING & PAINTING*
859 **SHADEMAKER INC**...*AWNINGS & CANOPIES*
859 **SHADEMAKER INC**...*CANVAS & RELATED PRODUCTS (MFRS)*
869 **MANGO TECH**...*MISC INDSTRL EQUIP & SUPLS NEC (WHLS)*
869 **SEAT CONCEPTS**...*MOTORCYCLES & MOTOR SCOOTERS-ACCESSORIES*
873 **RAM SALES & DISTRIBUTING**...*ELECTRONIC EQUIPMENT & SUPPLIES-WHLS*

2012 S GRAND AVE

SOURCE: DIGITAL BUSINESS DIRECTORY

801 **CROP PRODUCTION SVC INC**...*AGRICULTURAL PRODUCTS*
913 **A CAREY**...*RESIDENTIAL*
913 **ALFREDO LANDIN**...*RESIDENTIAL*
913 **ANTHONY OGLESBY**...*RESIDENTIAL*
913 **APOLINARIA ACOSTA**...*RESIDENTIAL*
913 **B MURPHY**...*RESIDENTIAL*
913 **CARLOS ZAMBRANO**...*RESIDENTIAL*
913 **DANIEL GUANGORENA**...*RESIDENTIAL*
913 **DAVID LOPEZ**...*RESIDENTIAL*
913 **DAVID SANTOYO**...*RESIDENTIAL*
913 **DIANA GONZALEZ**...*RESIDENTIAL*
913 **DONA CAREY**...*RESIDENTIAL*
913 **EDUARDO DURAN**...*RESIDENTIAL*
913 **ELA NATOLITANO**...*RESIDENTIAL*
913 **EMMA SUAREZ**...*RESIDENTIAL*
913 **FLOR LIVINGSTON**...*RESIDENTIAL*
913 **GERRI LUCAS**...*RESIDENTIAL*
913 **GLADYS CORNEJO**...*RESIDENTIAL*
913 **GUEVARA JAY**...*RESIDENTIAL*
913 **HEIDI MEZA**...*RESIDENTIAL*
913 **J HANDLEY**...*RESIDENTIAL*
913 **J LOZANO**...*RESIDENTIAL*
913 **JAMES CAREY**...*RESIDENTIAL*
913 **JESUS MEZA**...*RESIDENTIAL*
913 **JIM LUCAS**...*RESIDENTIAL*
913 **JOHN LAINE**...*RESIDENTIAL*
913 **JOSE LOPEZ**...*RESIDENTIAL*
913 **JUDY O LEARY**...*RESIDENTIAL*
913 **JUDY OLEARY**...*RESIDENTIAL*
913 **K MORRIS**...*RESIDENTIAL*
913 **KATHY WEBB**...*RESIDENTIAL*
913 **LATRICIA ALVAREZ**...*RESIDENTIAL*
913 **LETICIA PEREZ**...*RESIDENTIAL*
913 **M QUINLAN**...*RESIDENTIAL*
913 **MARCOS TAVERA**...*RESIDENTIAL*
913 **MARIA DURAN**...*RESIDENTIAL*
913 **MARIA JUAREZ**...*RESIDENTIAL*
913 **MARIA LOPEZ**...*RESIDENTIAL*
913 **MARIA ORTEGA BANDA**...*RESIDENTIAL*
913 **MATTHEW APPLEGATE**...*RESIDENTIAL*
913 **NINFA SAMANO PADILLA**...*RESIDENTIAL*
913 **NORA PALOMINO**...*RESIDENTIAL*
913 **PAMELA CALOIA**...*RESIDENTIAL*
913 **PARKVIEW ESTATES**...*MOBILE HOMES-PARKS & COMMUNITIES*
913 **PATRICIA HAIR**...*RESIDENTIAL*
913 **R DUCAS**...*RESIDENTIAL*
913 **RALPH LOPEZ**...*RESIDENTIAL*
913 **ROBERT O LEARY**...*RESIDENTIAL*
913 **S ATKINSON**...*RESIDENTIAL*
913 **SARAH ROFFE**...*RESIDENTIAL*
913 **SARAH SMITH**...*RESIDENTIAL*
913 **SHAWN MUTH**...*RESIDENTIAL*
913 **STANETT DIBBLE**...*RESIDENTIAL*
913 **T MACHADO**...*RESIDENTIAL*
913 **TRACEY LOPEZ**...*RESIDENTIAL*
913 **VICTOR CASTRO**...*RESIDENTIAL*
913 **VU LAWS**...*RESIDENTIAL*
913 **YOLANDA LOPEZ**...*RESIDENTIAL*
913 **YURI DOMINGUEZ**...*RESIDENTIAL*

2012 W 7TH ST

SOURCE: DIGITAL BUSINESS DIRECTORY

911 **MAURO LUNA**...*RESIDENTIAL*
911 **NANCY LUNA**...*RESIDENTIAL*
929 **DOVIE WIGLEY**...*RESIDENTIAL*
980 **BRADLEY GARDENS CONVALESCENT**...*NURSING & CONVALESCENT HOMES*

2012 W 9TH ST

SOURCE: DIGITAL BUSINESS DIRECTORY

735 **JOHN BUSTOS**...*RESIDENTIAL*
753 **JONICADE TRAFFIC**...*TRAFFIC CONTROL SERVICES*
775 **PAT'S GEARBOX**...*AUTOMOBILE REPAIRING & SERVICE*
817 **PATTY'S BARELY USED FURN WRHSE**...*FURNITURE-DEALERS-RETAIL*
825 **PREMIER AUTO BODY**...*AUTOMOBILE BODY-REPAIRING & PAINTING*
859 **SHADEMAKER INC**...*AWNINGS & CANOPIES*
869 **MANGO TECH**...*MISC INDSTRL EQUIP & SUPLS NEC (WHLS)*
873 **RAM SALES & DISTRIBUTING**...*ELECTRONIC EQUIPMENT & SUPPLIES-WHLS*

2008 S GRAND AVE

SOURCE: DIGITAL BUSINESS DIRECTORY

801 **WESTERN FARM SERVICE INC**...*WHOL FARM SUPPLIES*
801 **WESTERN FARM SVC**...*WHL FARM SUPPLIES*
801 **WESTERN FARM SVC**...*FERTILIZERS (WHOLESALE)*
913 **BARBARA DION**...*RESIDENTIAL*
913 **CARLOS MARTINEZ**...*RESIDENTIAL*
913 **CLARA LAWS**...*RESIDENTIAL*
913 **DALE NEWTON**...*RESIDENTIAL*
913 **DAVES LANDSCAPE SERVICES**...*LAWN/GARDEN SERVICES*
913 **DONALD R RAYMOND**...*RESIDENTIAL*
913 **FOUR ACES MHP**...*MOBILE HM SITE OPER*
913 **FRED BENJESTORF**...*RESIDENTIAL*
913 **JAMES O'LEARY**...*RESIDENTIAL*
913 **JOANN SANCHEZ**...*RESIDENTIAL*
913 **JOHN GIBBONS**...*RESIDENTIAL*
913 **LAURA CARTER**...*RESIDENTIAL*
913 **LLOYD & HELEN BITTERS**...*RESIDENTIAL*
913 **MARIA PUENTES**...*RESIDENTIAL*
913 **MARY CLONEY**...*RESIDENTIAL*
913 **MARY ENLOW**...*RESIDENTIAL*
913 **NAOMI WHITE**...*RESIDENTIAL*
913 **NORA SPOHN**...*RESIDENTIAL*
913 **P ROBINSON**...*RESIDENTIAL*
913 **PARKVIEW ESTATES**...*MOBILE HOMES-PARKS & COMMUNITIES*
913 **R & B DELRICO**...*RESIDENTIAL*
913 **RACHEL V MARINO**...*RESIDENTIAL*
913 **RICARDO GONZALEZ**...*RESIDENTIAL*
913 **RICHARD BLAUSER**...*RESIDENTIAL*
913 **ROBERT & JUDY O'LEARY**...*RESIDENTIAL*
913 **ROBERT & MARY J AGUIRRE**...*RESIDENTIAL*
913 **ROBERT L O'LEARY**...*RESIDENTIAL*
913 **ROGELIO LOZANO**...*RESIDENTIAL*
913 **ROGER BREWER**...*RESIDENTIAL*
913 **RON GARLAND**...*RESIDENTIAL*
913 **ROSLYN REEDER**...*RESIDENTIAL*
913 **SHIRLEY R CAUSKY**...*RESIDENTIAL*
913 **TAMMIE WALTHERS**...*RESIDENTIAL*
913 **TAY WOODRING**...*RESIDENTIAL*
913 **TRACY OAKLEY**...*RESIDENTIAL*
913 **YURI DOMINGUEZ**...*RESIDENTIAL*

2008 W 7TH ST

SOURCE: DIGITAL BUSINESS DIRECTORY

929 **KEITH WIGLEY**...*RESIDENTIAL*
965 **NINA K CLARKE**...*RESIDENTIAL*
980 **BRADLEY GARDEN CONVALESCENT**...*NURSING HOMES*
980 **BRADLEY GARDEN CONVALESCENT**...*NURSING & CONVALESCENT HOMES*
989 **TALLEY METAL FABRICATION**...*STEEL-STRUCTURAL (MANUFACTURERS)*
989 **TALLEY METAL FABRICATION**...*FABRICATED STRL MTL*

2008 W 9TH ST

SOURCE: DIGITAL BUSINESS DIRECTORY

753 **ALERT BARRICADE INC**...*ELC APPARATUS & EQP*
753 **ALERT BARRICADE INC**...*TRAFFIC SIGNS SIGNALS & EQUIP-WHOL*
753 **GRIFFITH WELDING & RV SVC**...*WELDING REPAIR*
753 **GRIFFITH WELDING & RV SVC**...*WELDING*
753 **STUFF**...*AUTO TRANSMISSION REPAIR*
753 **STUFF TRANSAXLES**...*TRANSMISSIONS-AUTOMOBILE*
753 **WESTERN PUMP INC**...*SPECIAL INDUS MCHY*
775 **PATS GEARBOX & DRIVETRAIN RPR**...*AUTOMOBILE REPAIRING & SERVICE*
775 **PATS GEARBOX & DRIVETRAIN RPR**...*GENERAL AUTO REPAIR*
817 **R V PARTS OUTLET**...*RECREATIONAL VEHICLES-EQUIP/PARTS/SVC*
817 **R V PARTS OUTLET**...*RECREATIONAL VH DLR*
825 **SAN DIEGO SCREW PRODUCTS INC**...*MFG PARTS*
859 **SHADEMAKER INC**...*CANVAS & REL PDTS*
859 **SHADEMAKER INC**...*AWNINGS & CANOPIES*
869 **DAN MCGILL**...*RESIDENTIAL*
869 **MANGO TECH**...*MACH TOOLS,METALWORK*
873 **RAM SALES & DISTRIBUTING**...*ELECTRONIC EQUIPMENT & SUPPLIES-WHOL*
873 **RAM SALES & DISTRIBUTING**...*RADIO,TV EQUIP,PARTS*

2003 S GRAND AVE

SOURCE: DIGITAL BUSINESS DIRECTORY

801 **WESTERN FARM SVC**
913 **CLEO A ELLIOTT**...*RESIDENTIAL*
913 **CRAIG STOLZE**...*RESIDENTIAL*
913 **DALE NEWTON**...*RESIDENTIAL*
913 **DAN NOWAK**...*RESIDENTIAL*
913 **FRANK & BRENDA AGUIRRE**...*RESIDENTIAL*
913 **GIL BALE**...*RESIDENTIAL*
913 **HECTOR GUTIERREZ**...*RESIDENTIAL*
913 **KIMBER DEL RICO**...*RESIDENTIAL*
913 **MAPLE RIDGE MOBILE HOMES INC**
913 **MIRABELLA LUNA**...*RESIDENTIAL*
913 **MIRIAM MARTIN**...*RESIDENTIAL*
913 **NICOLAS FRODSHAM**...*RESIDENTIAL*
913 **PARKVIEW ESTATES**
913 **R & B DELRICO**...*RESIDENTIAL*
913 **RACHEL V MARINO**...*RESIDENTIAL*
913 **RALPH WHITE**...*RESIDENTIAL*
913 **ROBERT & JUDY OLEARY**...*RESIDENTIAL*
913 **ROBERT & MARY C AGUIRRE**...*RESIDENTIAL*
913 **ROGER BREWER**...*RESIDENTIAL*
913 **ROSLYN REEDER**...*RESIDENTIAL*
913 **SALVADOR M PENA**...*RESIDENTIAL*
913 **TONY DISTEFANO**...*RESIDENTIAL*
913 **V EQUIHUA**...*RESIDENTIAL*
913 **WILLIAM GOFF**...*RESIDENTIAL*
913 **WILLIAM WILLIS**...*RESIDENTIAL*

2003 W 7TH ST

SOURCE: DIGITAL BUSINESS DIRECTORY

929 **KEITH WIGLEY**...*RESIDENTIAL*
965 **NINA K CLARKE**...*RESIDENTIAL*
980 **BRADLEY GARDEN CONVALESCENT**
989 **TALLEY & OCHOA METAL FAB**

2003 W 9TH ST

SOURCE: DIGITAL BUSINESS DIRECTORY

720 **SALVADOR MORALES**...*RESIDENTIAL*
735 **JOHN BUSTOS**...*RESIDENTIAL*
753 **SID SPRADLING AUTOMOTIVE**...*ENGINE REPAIR*
775 **B & C AUTOMOTIVE**...*ENGINE REPAIR*
775 **CONNELLY DRILLING CO**...*MACHINE AND OTHER JOB SHOP WORK*
775 **GRIFFITH WELDING & RV SVC**
775 **PAT'S GEARBOX & DRIVETRAIN RPR**...*ENGINE REPAIR*
817 **R V PARTS OUTLET**...*CAMPER AND TRAVEL TRAILER DEALERS*
859 **SHADEMAKER INC**
869 **SPECIAL CARE TRANSPORTATION**...*LOCAL RENTAL TRANSPORTATION*
873 **MUND EQUIPMENT CO**...*AGRICULTURAL MACHINERY AND EQUIPMENT*

2001 S GRAND AVE

SOURCE: HAINES

785 **CAL STATE AUTOMOTIVE**
785 **RAMOS HECTOR**
801 **WESTERN FARM SERV COASTL DIV**
913 **FOUR ACES MOBILE HM**
913 **MAPLE RIDGE MOBILE HOMES INC**
913 **MULTI TENANT RESIDENTIAL**

2001 W 7TH ST

SOURCE: HAINES

529	WIGLEY KESH
865	CLARKE NINA K
865	TALLEY JOE
885	GUADALAJARA EMP INC
910	XXXX
911	LUNA NANCY
943	XXXX
980	BRADLEY GARDENS CONVLSNT CT
989	METAL FABRICATION
989	TALLEY JOE
989	TALLEY&OCHOA
992	XXXX
996	XXXX
1011	PLUEGER FLORENCE
1077	PLUEGER STEVEN

2001 W 9TH ST

SOURCE: HAINES

720	XXXX
723	MAYS RICHARD
735	BUSTOS JOHN
736	XXXX
753	ALERT BARRICADE INC
753	SID SPRADLING AUTOMOTIVE
775	B&C AUTOMOTIVE
775	BOEHNLEIN DELIA
775	CONNELLY DRILLING
775	GRIFFITH WELDING
775	PATS GEARBOX&DRIVETRAIN REPAIR
791	XXXX
793	XXXX
817	XXXX
859	SHADEMAKER INC
861	XXXX
869	MCGILL DAN
869	SPECIAL CARE TRANSPRTN INC
873	MUND EQUIPMENT CO

1996 S GRAND AVE

SOURCE: HAINES

785	**XXXX**
801	**WESTAN FARM SERV**
913	**FOUR ACES MOBILE HM**
913	**MULTI TENANT RESIDENTIAL**

1996 W 7TH ST

SOURCE: HAINES

885	**GUADALAJARA IMP INC**
910	**XXXX**
929	**WIGLEY KEITH**
943	**HULSTROM ALICE V**
965	**CLARKE NINA K**
980	**COLONIAL CVLSNT HSP**
980	**FOGEL MIRIAM**
989	**XXXX**
992	**CARE NET INC**
992	**GUARDIAN SUPPLY**
996	**BRIDGES CHILD DEVLP**
1011	**XXXX**
1013	**XXXX**
1119	**WATERFLOW RNCH BOYS**

1996 W 9TH ST

SOURCE: HAINES

723	**XXXX**
735	**BUSTOS JOHN**
736	**XXXX**
753	**ALERT BARRICADE INC**
775	**CONNELLY DRILLING**
775	**GRIFFITH WLDNG&RV**
787	**JOHNS ROD&CUSTOM**
791	**XXXX**
793	**XXXX**
817	**LITTLE BEARS R V**
819	**XXXX**
825	**XXXX**
829	**CHALET MFG**
859	**SHADEMAKER INC**
863	**ONE HALF PRICE STR**
873	**XXXX**

1991 S GRAND AVE

SOURCE: HAINES

785	**RIVASD CO OFC EDUC**
801	**WESTRN FARM SERV**
820	**XXXX**
913	**FOUR ACES MOBILE HM**
913	**M & M FLOORING**
913	**MULTI TENANT RESIDENTIAL**
913	**RONS MBL CAR CLNG**
921	**XXXX**

1991 W 7TH ST

SOURCE: HAINES

878	1/2 HOLT B L
910	VELOZ DIANA V
911	HOEFS KENNETH A
911	LUNA MAURO JR
929	WIGLEY KELTH
943	HULSTROM ALICE V
965	CLARKE NINA K
980	COLONIAL CVLSNT HSP
980	LANGWORTHY LOUISE
989	ROCK TECH
992	KICENSKI HERMAN MD
992	SAN JACINTO MED CTR
996	BRIDGES CHILD DEVLP
1011	MORA ADOLLO
1013	SHAUL VIRGINIA
1077	HUBERTY GARY

1991 W 9TH ST

SOURCE: HAINES

720	GARCIA PABLO
720	JAIMES ISAIAS G
723	XXXX
735	BUSTOS JOHN
736	XXXX
753	ALERT BARRICADE INC
753	CARRILLO IGNACIO
753	CONSOLTD PATTERN
753	CUSTOM YARDS
775	CONNELLY DRILLING
775	KANDU PRCSN SHT MTL
791	XXXX
793	CAL GAR DOOR CO
817	DOORS N MORE
819	HEMET GRAPHICS
825	MIDWAY PLUMBING INC
859	SHADEMAKER INC
863	W I T INC
869	WILKINSON SIMON T
873	LIGHTING PLSTC ASC
873	WESTHEM RACING INC

1986 S GRAND AVE

SOURCE: HAINES

785	**RIVRSD CO SUPT SC**
801	**WESTRN FARM SERV**
913	**FOUR ACES MOBILE HM**

1986 W 7TH ST

SOURCE: HAINES

871	**DANIELS TED**
878	**HOLT BONNY**
910	**RAMIREZ TANGIE**
911	**XXXX**
929	**WIGLEY KEITH**
943	**HULSTROM ALICE V**
965	**CLARKE NINA K**
980	**COLONIAL CYLSNT HSP**
989	**CHACON CHAS M**
989	**CHACON GLORIA A**
992	**BEHERAKIS JOS MD**
992	**BUSHEY CAROLYN MD**
992	**KICENSKI HERMAN MD**
992	**SAN JACINTO MED CTR**
996	**HARVEST GLEN LTD**
996	**SHELLENBARGER CONST**
1013	**SHAUL VIRGINIA**
1077	**HARTE WM F**
1119	**WATERFLOW RNCH BOYS**

1986 W 9TH ST

SOURCE: HAINES

720 DAVALOS MIGUEL V
723 XXXX
735 BUSTOS JOHN
736 GALBRAITH J
736 GALBRAITH S S
753 CARRILLOS LAWN SRV
753 CUSTOM YARDS
791 MARANATHA GRDN EQP
817 DOUBLE T TANK CO
819 AIR SPECIALISTS
819 SEXTON INSTALLATION
825 T T WILLIAM
859 SHADEMAKER INC
869 WOODENOARE INC

1984 S GRAND AVE

SOURCE: HAINES

785 HEMET DOOR CO INC
801 WESTERN FARM SRV

1984 W 7TH ST

SOURCE: HAINES

871	**DANIELS TED**
911	**RODDA DENNIS**
980	**COLONIAL CYLSNT HSP**
992	**KICENSKI HERMAN MD**
992	**SANJAC MED CENTER**
992	**VIZCARRO C C MD**

1984 W 9TH ST

SOURCE: HAINES

753	**TRI CITY ROOFING**
791	**L T D SALES CORP**
817	**VALLEY RESOURCE CT**

1977 S GRAND AVE

SOURCE: HAINES

RANGE NOT LISTED

1977 W 7TH ST

SOURCE: HAINES

39146	**HACKLER DANL F**
39150	**CLARKE NINA K**
39171	**HALSTEAD BRUCE W MD**
39171	**KICENSKI HERMAN MD**
39173	**XXXX**
39224	**HULSTROM CALMER**
39241	**COLONIAL CNVLST HSP**
39241	**ELLIS ANNA M**
39241	**WILLIAMS G**
39244	**WIGLEY KEITH**
39247	**JONSON SVEN**
39252	**CULBERTSON H Z**
39281	**XXXX**
39284	**DANIELS TED**
39341	**MIDDLETON LUELLA T**

1977 W 9TH ST

SOURCE: HAINES

STREET NOT LISTED

1974 S GRAND AVE

SOURCE: HAINES

511	**WALKER CONSTRUCTION**
850	**KEMPF EDW**
23200	**WHITE EARL C**
23425	**MARTINEZ D J**

1974 W 7TH ST

SOURCE: HAINES

39148	**XXXX**
39150	**CLARKE NINA K**
39171	**JEAN E WEIGHT CNTRL**
39171	**KICENSKI HERMAN MD**
39173	**JEAN E SLF IMPRVMT**
39224	**HULSTROM CALMER**
39241	**COLONIAL CNVLST HSP**
39241	**LAWLER PHILIP W MD**
39241	**SAN JACNTO MDCL CTR**
39244	**WIGLEY DOVIE**
39247	**VOBORA JAS**
39252	**CULBERTSON H Z**
39281	**HEYNCKE Z GLENN**
39284	**DANIELS TED**

1974 W 9TH ST

SOURCE: HAINES

STREET NOT LISTED

1971 S GRAND AVE

SOURCE: HAINES

RANGE NOT LISTED

1971 W 7TH ST

SOURCE: HAINES

RANGE NOT LISTED

1971 W 9TH ST

SOURCE: HAINES

STREET NOT LISTED

1964-65 S GRAND AVE

SOURCE: LUSKEYS

RANGE NOT LISTED

1964-65 W 7TH ST

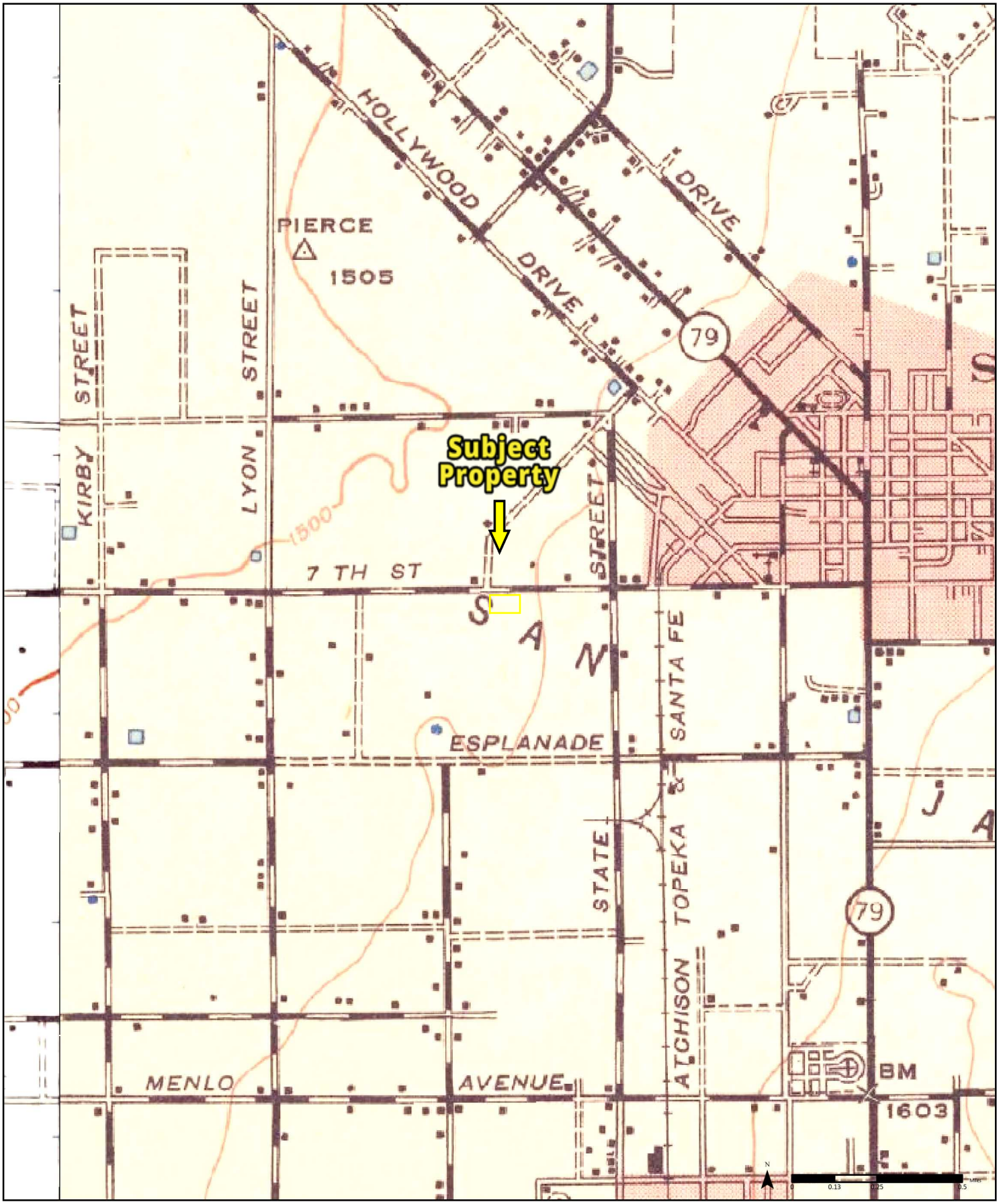
SOURCE: LUSKEYS

39110	**1/2 SHIDELER F L**
39156	**CAPLINGER JANET**
39241	**COLONIAL NURSING HOME**
39241	**PATTERSON H H**
39241	**YOKES IRENE**
39244	**WIGLEY VK**
39284	**DANIELS TED**

1964-65 W 9TH ST

SOURCE: LUSKEYS

STREET NOT LISTED



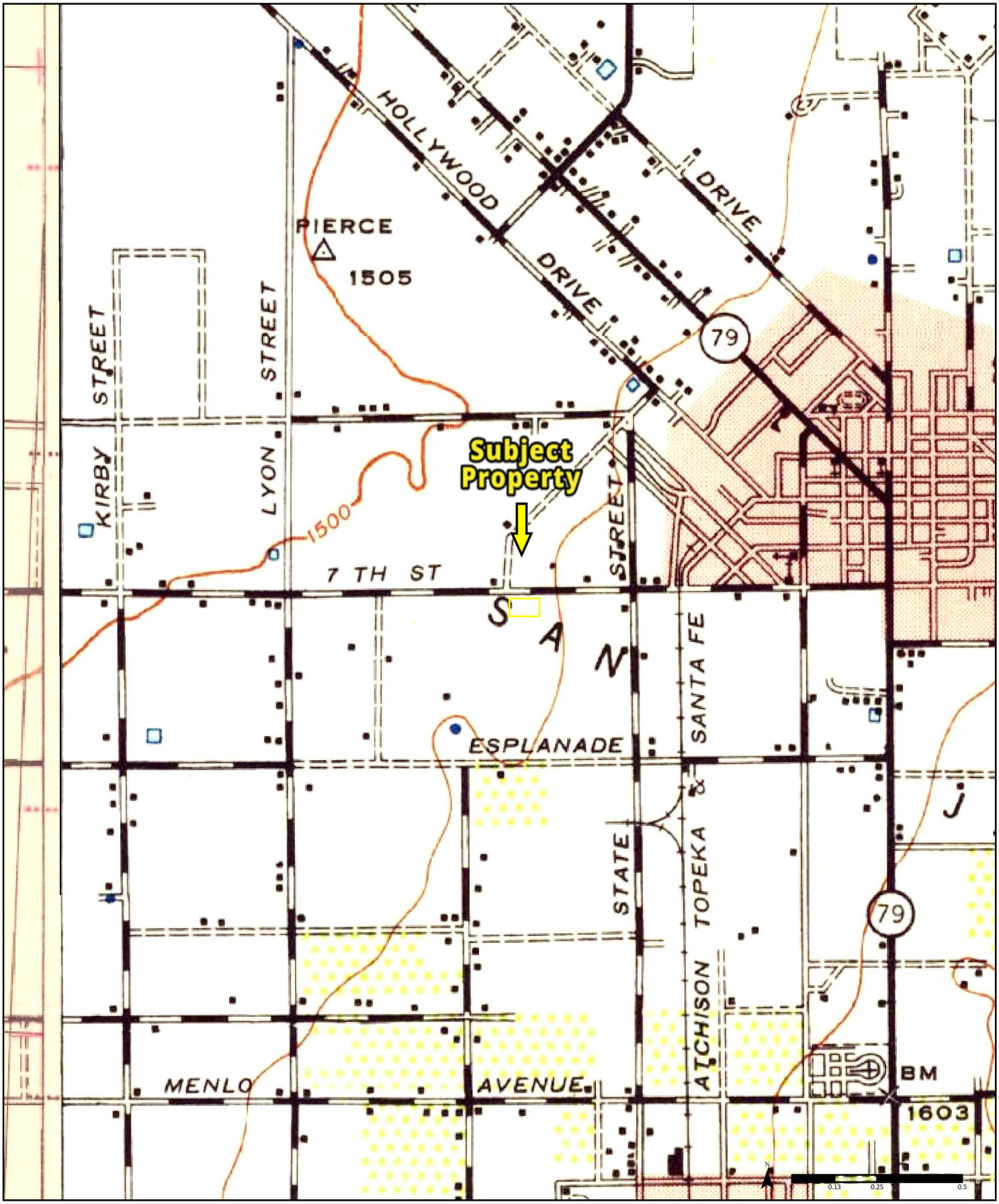
1942 (1-1942) *Aerial Photo Year: 1939* (2-1942) *Aerial Photo Year: 1941*

Available Quadrangle(s): Banning, CA(2-1942)
Perris, CA(1-1942)

Order No. 26013000754

Source: USGS 15 Minute Topographic Map

PARTNER



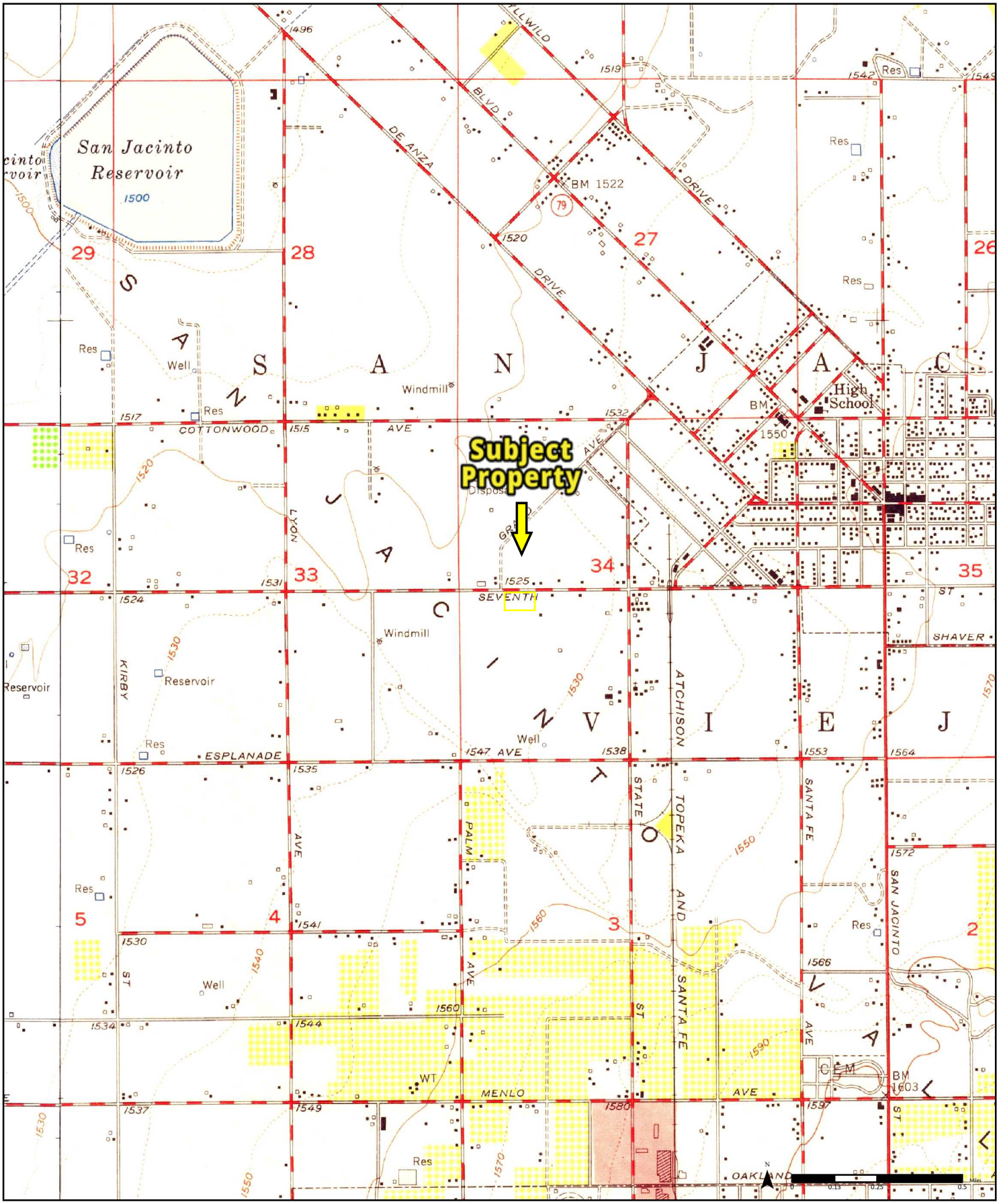
1943 *(1-1943) Aerial Photo Year: 1939* *(2-1943) Aerial Photo Year: 1941*

Available Quadrangle(s): Banning, CA(2-1943)
Perris, CA(1-1943)

Order No. 26013000754

Source: USGS 15 Minute Topographic Map

PARTNER



1953

(1-1953) *Aerial Photo Year: 1949*

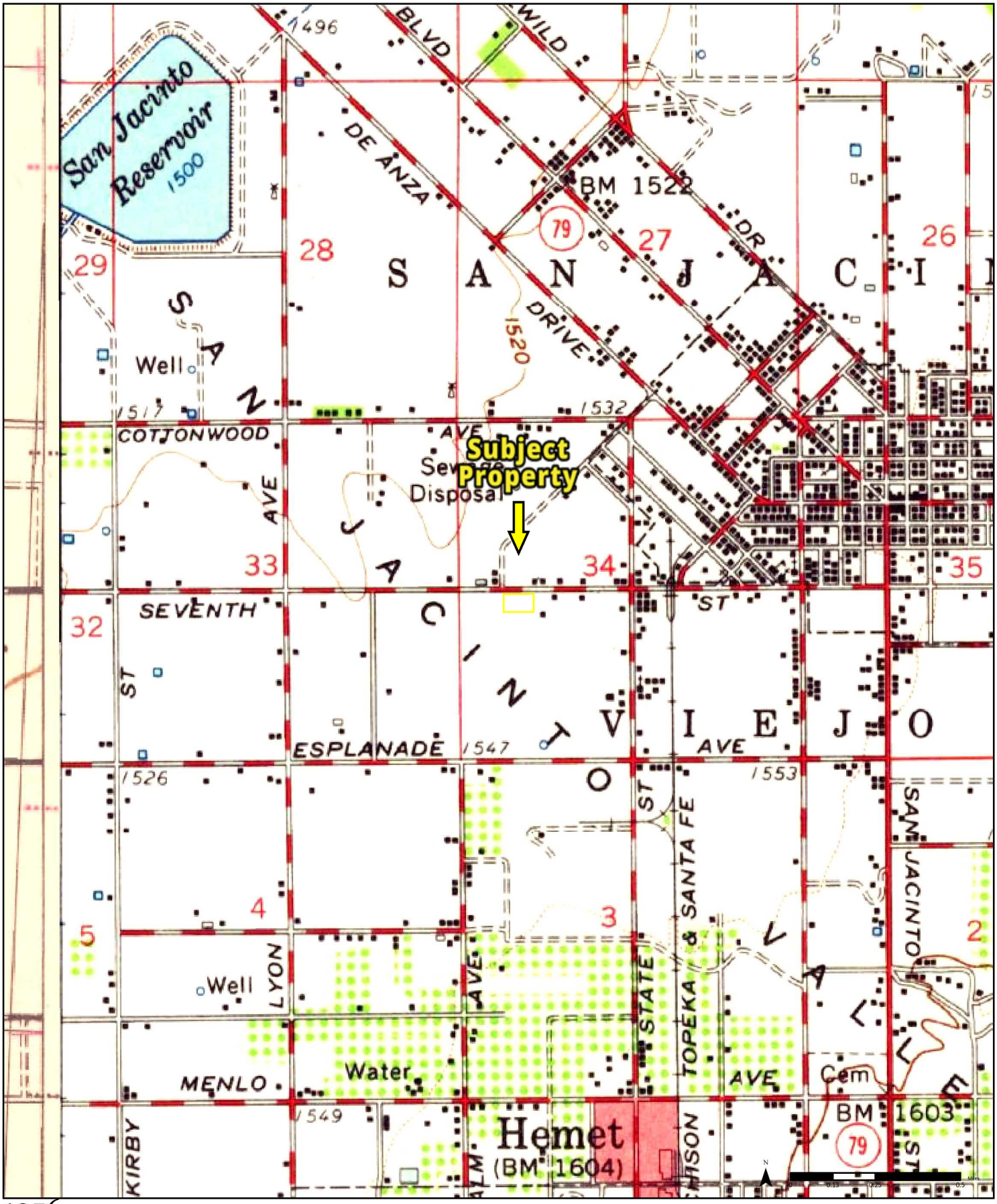
(2-1953) *Aerial Photo Year: 1951*

Available Quadrangle(s): San Jacinto, CA(1-1953)
Lakeview, CA(2-1953)

Order No. 26013000754

Source: USGS 7.5 Minute Topographic Map

PARTNER



1956

(1-1943) *Aerial Photo Year: 1939*

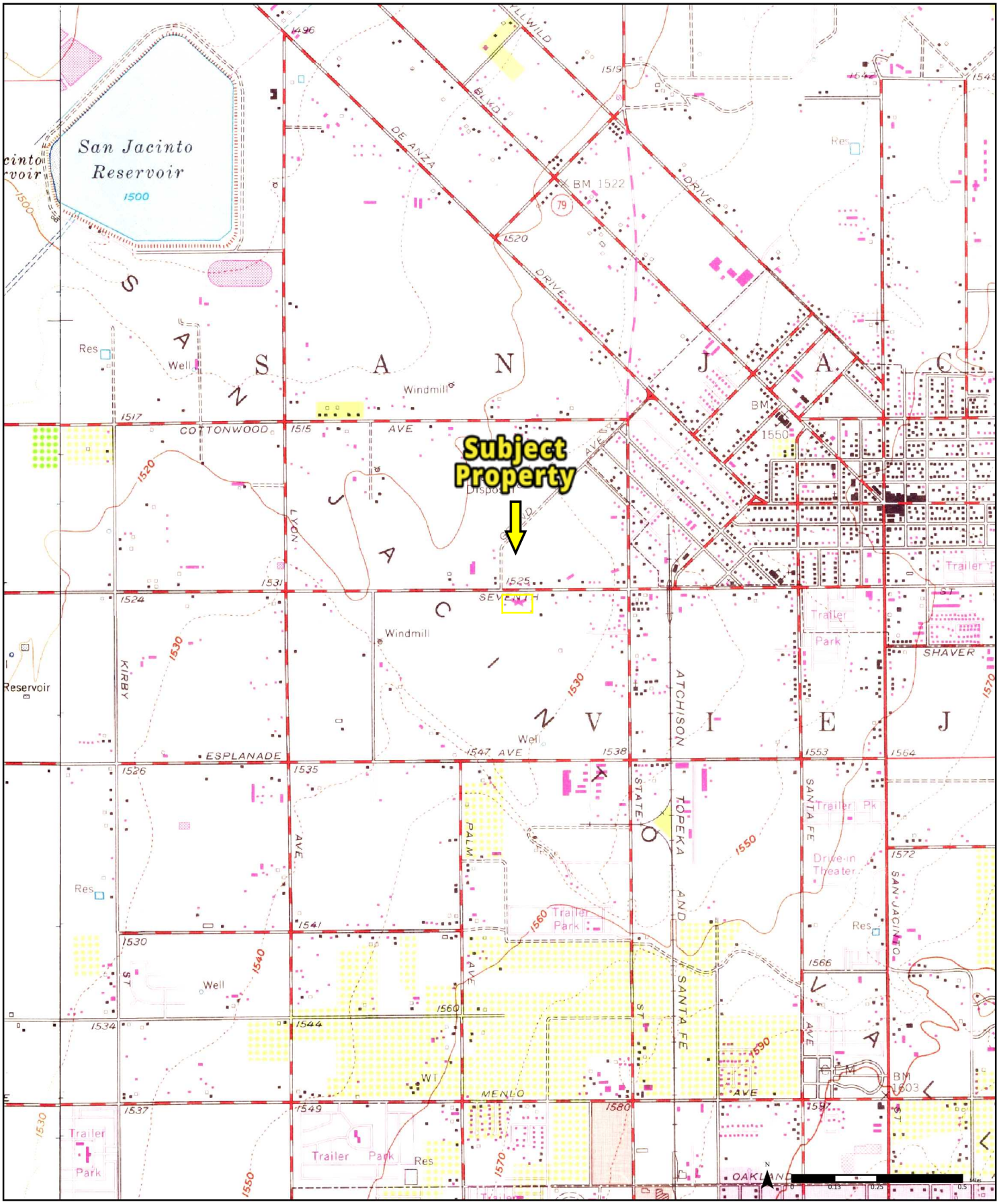
(2-1956) *Aerial Photo Year: 1951*

Available Quadrangle(s): Banning, CA(2-1956)
Perris, CA(1-1943)

Order No. 26013000754

Source: USGS 15 Minute Topographic Map

PARTNER



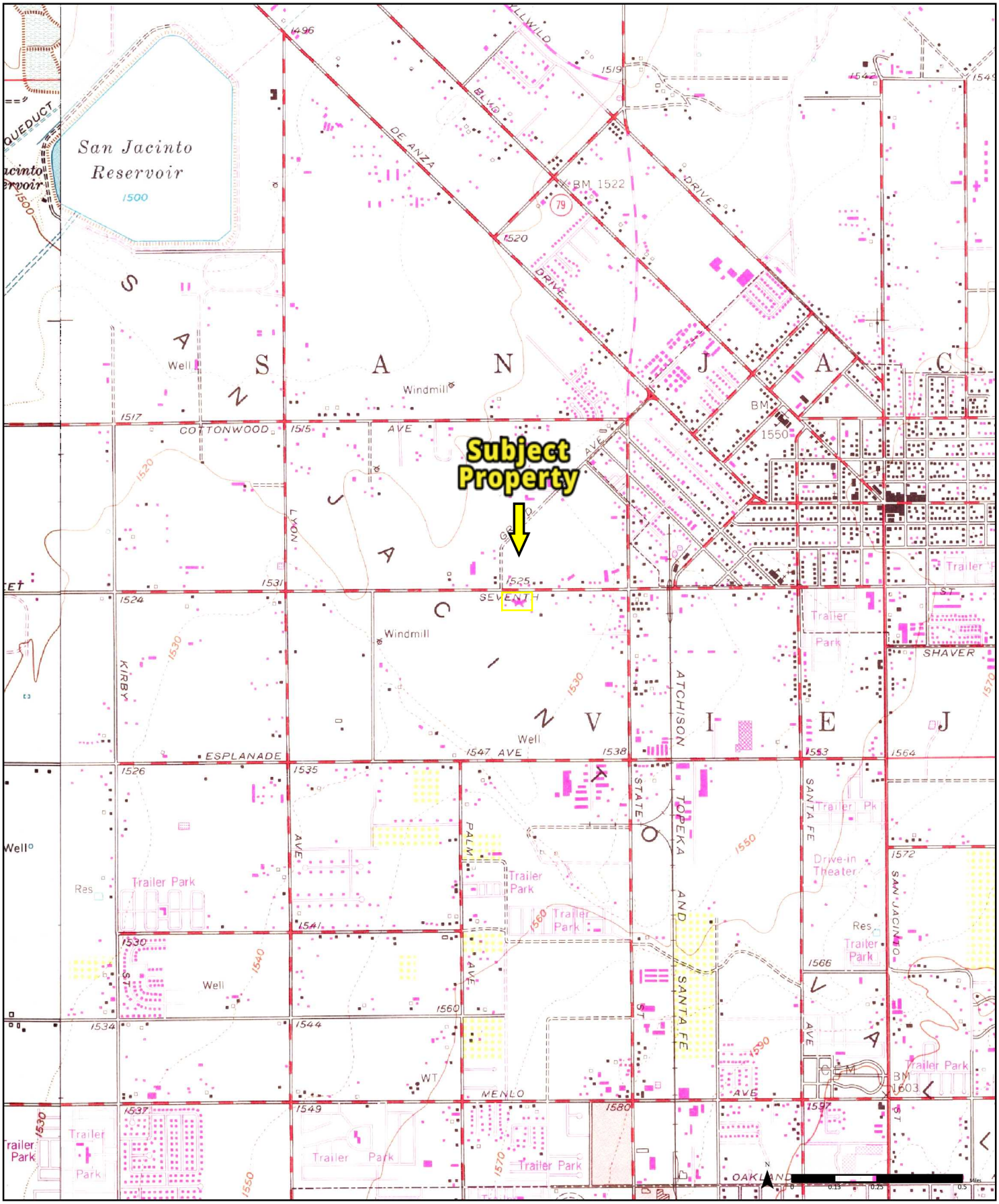
1972 (1-1953) *Aerial Photo Year: 1951* (2-1972) *Aerial Photo Year: 1972* *Photo Revision Year: 1972*

Available Quadrangle(s): San Jacinto, CA(2-1972)
Lakeview, CA(1-1953)

Order No. 26013000754

Source: USGS 7.5 Minute Topographic Map

PARTNER



1979

(1-1979) *Aerial Photo Year: 1978* *Photo Revision Year: 1979*

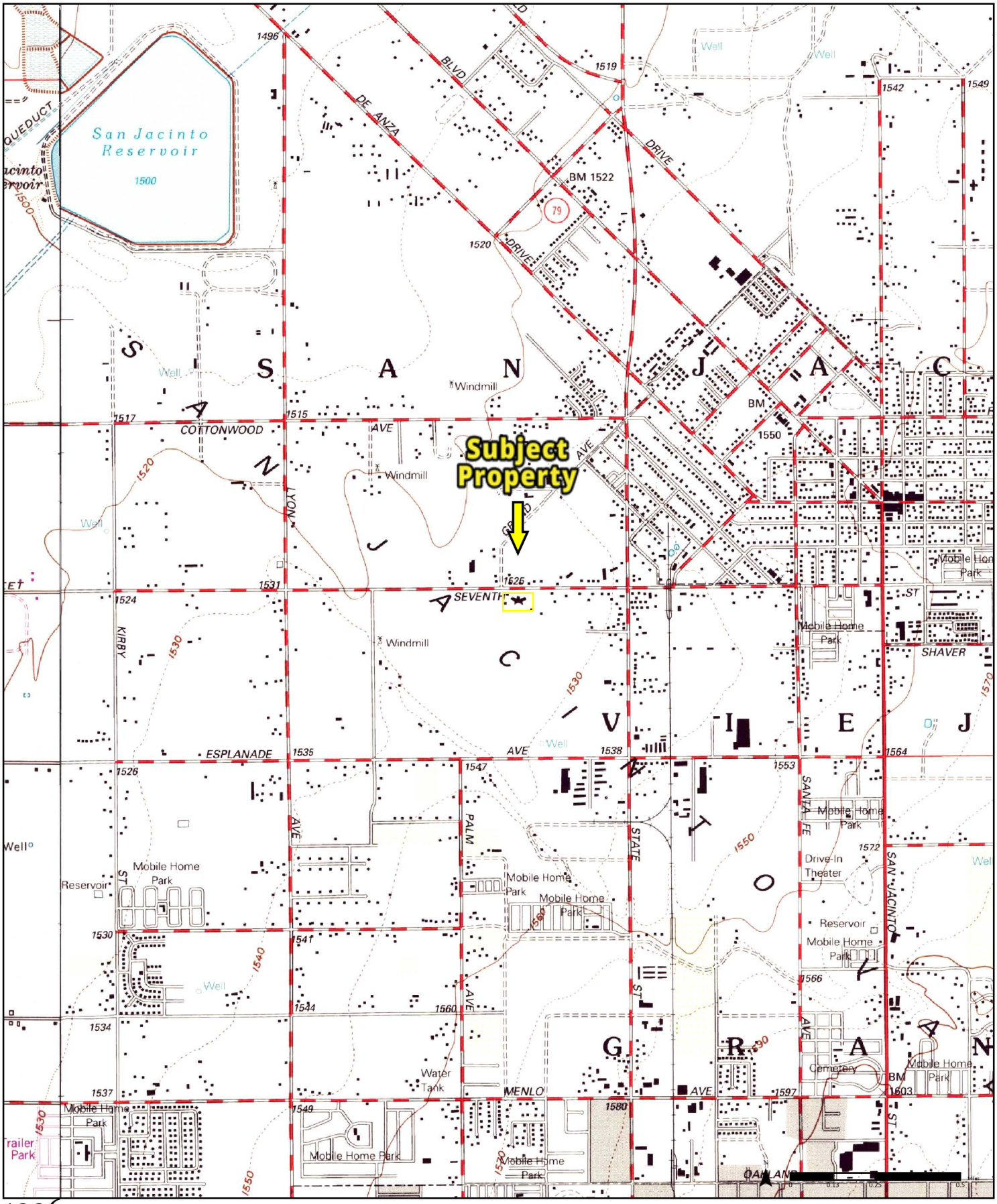
(2-1979) *Aerial Photo Year: 1976* *Photo Revision Year: 1979*

Available Quadrangle(s): San Jacinto, CA(1-1979)
Lakeview, CA(2-1979)

Order No. 26013000754

Source: USGS 7.5 Minute Topographic Map

PARTNER



1996

(1-1979) *Aerial Photo Year: 1976*
Photo Revision Year: 1979

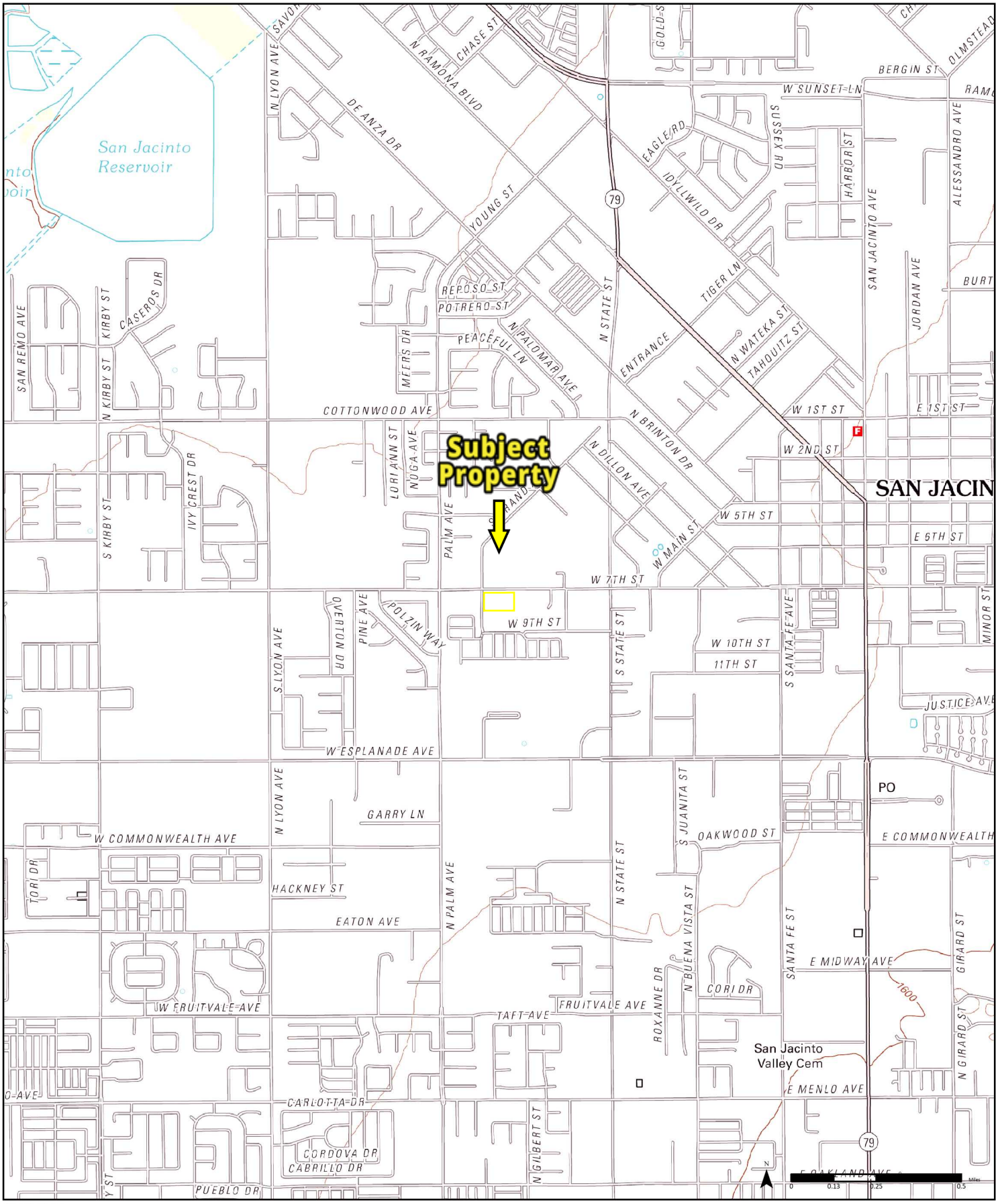
(2-1996) *Aerial Photo Year: 1994*

Available Quadrangle(s): San Jacinto, CA(2-1996)
Lakeview, CA(1-1979)

Order No. 26013000754

Source: USGS 7.5 Minute Topographic Map

PARTNER



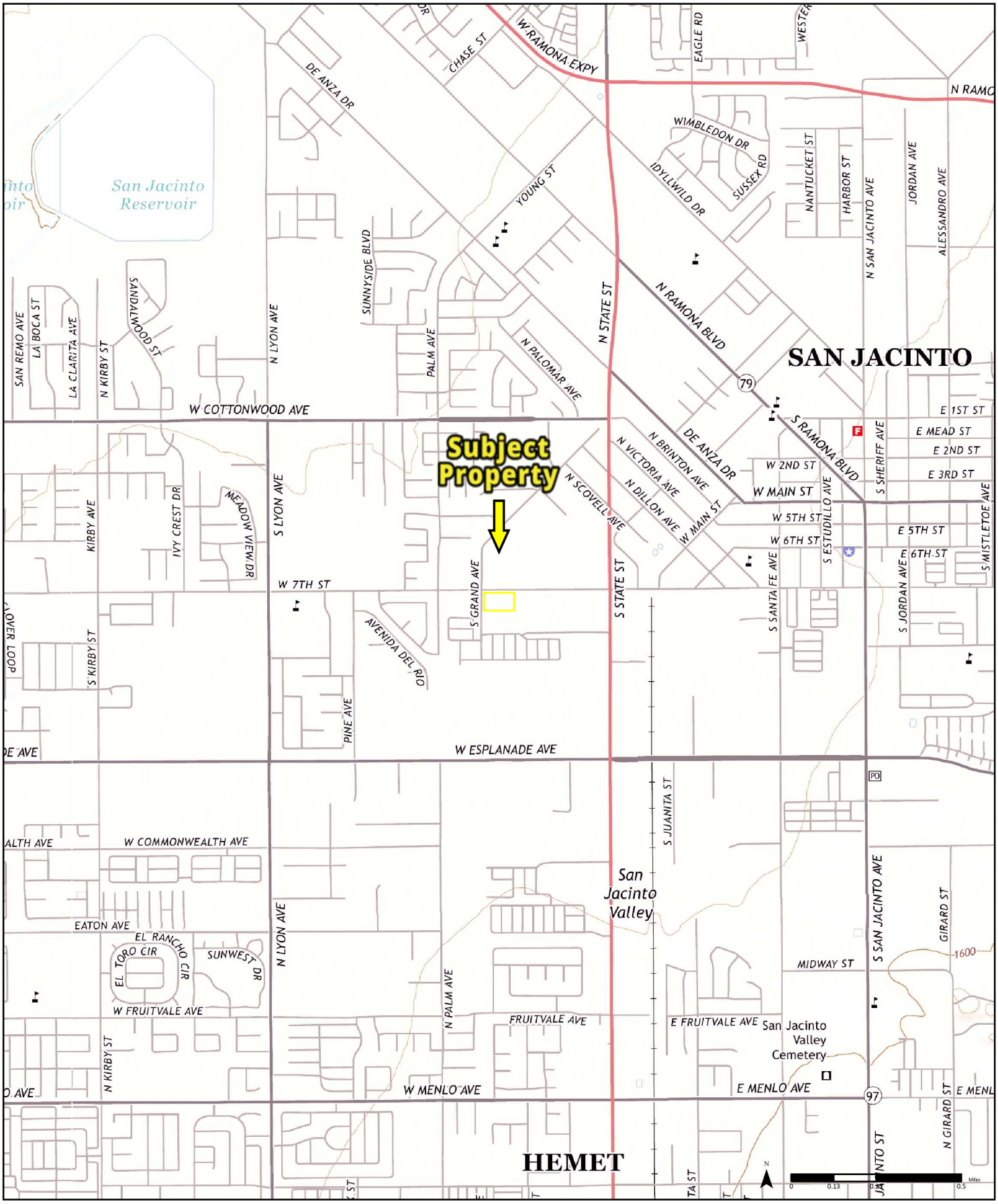
2012

Available Quadrangle(s): San Jacinto, CA
Lakeview, CA

Order No. 26013000754

Source: USGS 7.5 Minute Topographic Map

PARTNER



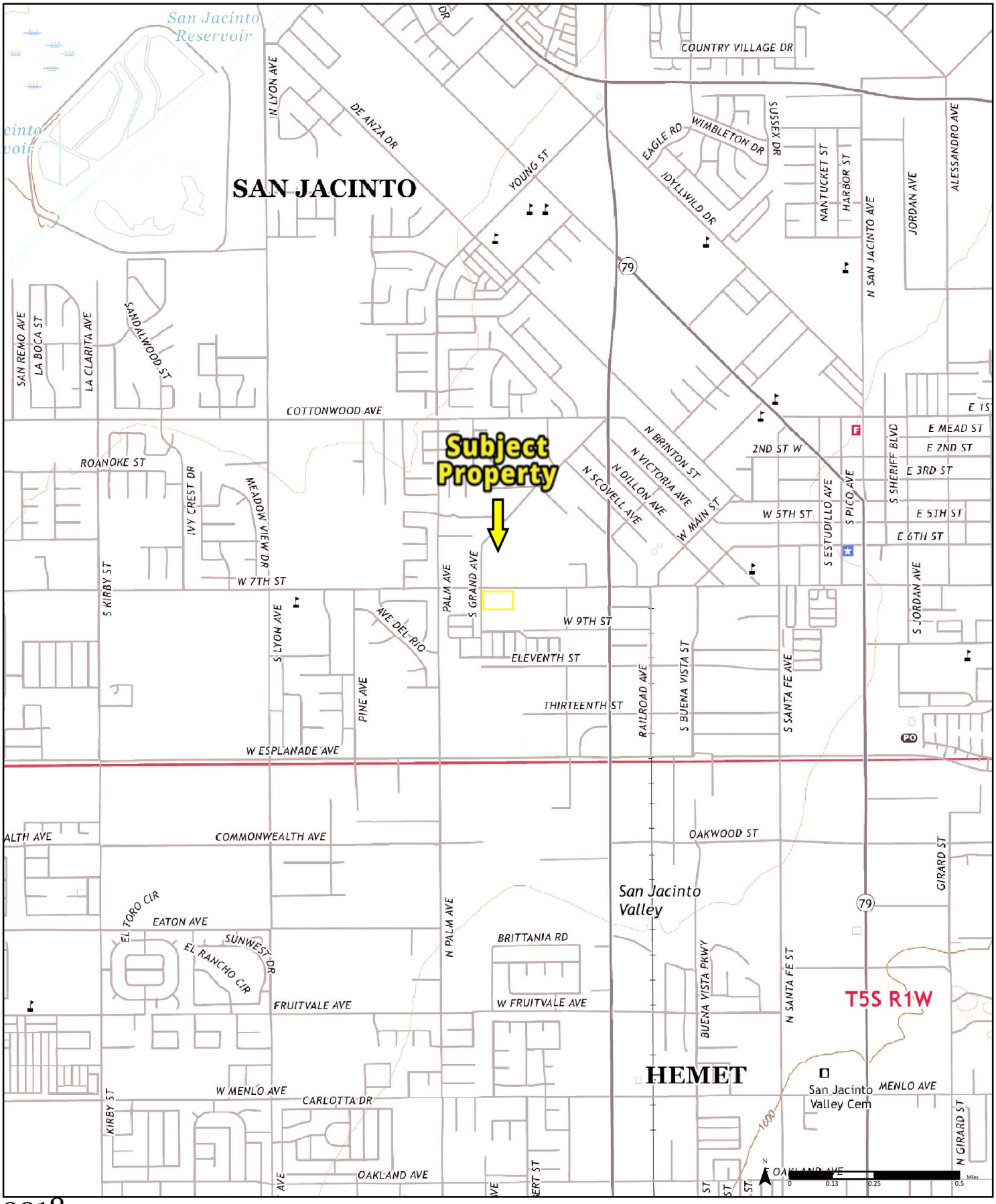
2015

Available Quadrangle(s): San Jacinto, CA
Lakeview, CA

Order No. 26013000754

Source: USGS 7.5 Minute Topographic Map

PARTNER



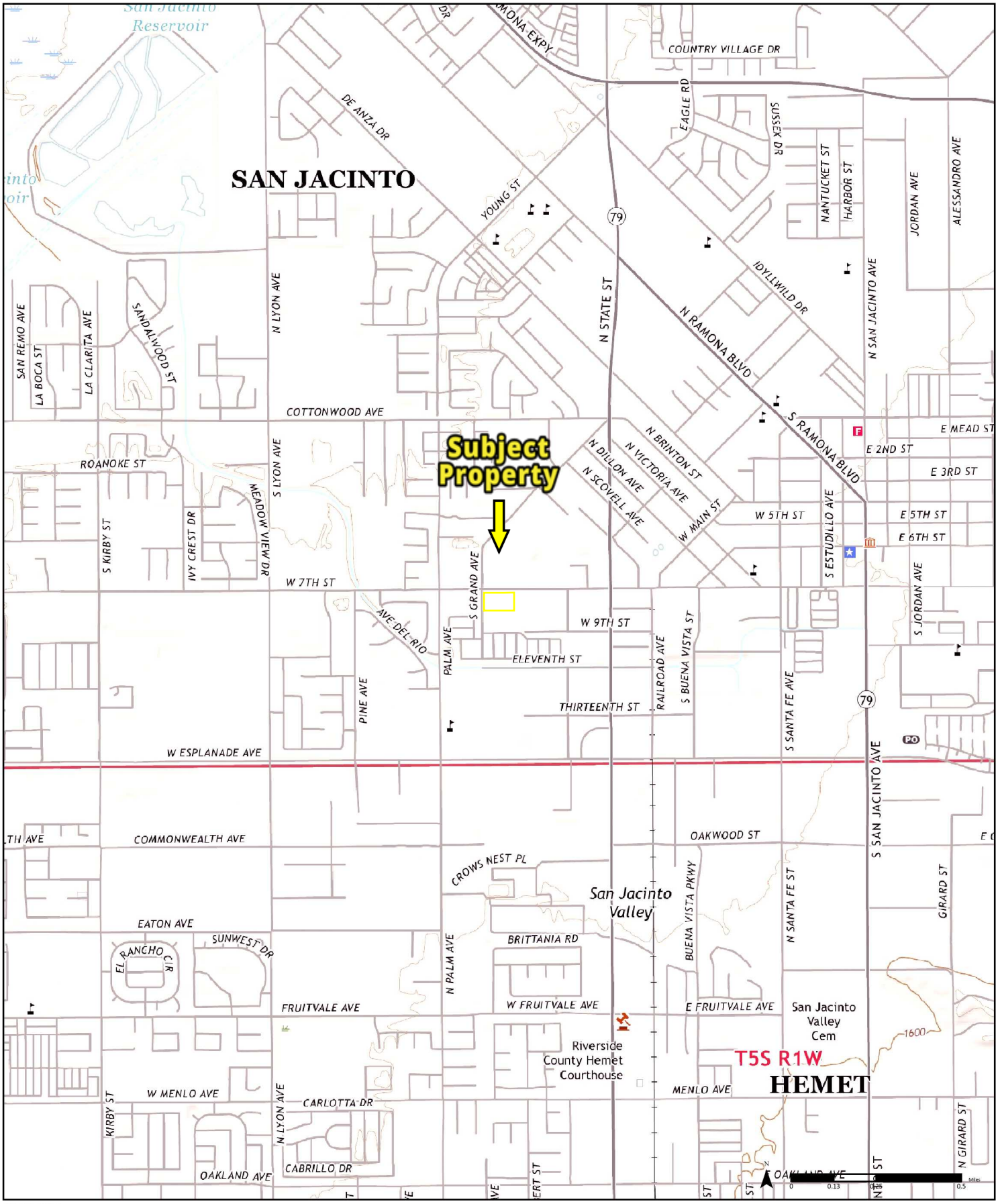
2018

Available Quadrangle(s): San Jacinto, CA
Lakeview, CA

Order No. 26013000754

Source: USGS 7.5 Minute Topographic Map

PARTNER



2021

Available Quadrangle(s): San Jacinto, CA
Lakeview, CA

Order No. 26013000754

Source: USGS 7.5 Minute Topographic Map

PARTNER

CITY OF SAN JACINTO
REQUEST FOR RECORDS

REQUESTS WILL BE PROCESSED WITHIN TEN (10) BUSINESS DAYS PER CALIFORNIA GOVERNMENT CODE SECTIONS 6253 & 6256

James Erwin
Name of Requesting Party

2/6/2026
Date of Request (MM/DD/YYYY)

jerwin@partneresi.com
Email Address

951-590-0046
Telephone Number

361 Corporate Terrace Circle
Street Address

Corona, CA 92879
City, State, Zip Code

CPRA request for electronic copies of public building permit records and certificates of occupancy (no plans) for the property addressed 980 West 7th Street, San Jacinto, CA 92582 for use in a Phase I ESA
Subject of Request / Address or Any Other Identifying Information, Numbers or Dates

Period of Time to be Researched: FROM: 1960 TO: 2026

☑ Number of Copies Requested: 1 ☐ In-House Review of Records Only

Duplication costs for records researched and copied must be paid upon receipt of records as follow:

-Hard-copy: $.25 per page for 8 1/2 x 11 No. of Pages: _____ x $.25 = TOTAL $_____

FOR OFFICE USE ONLY

Request Recieved By (Name & Title) _____

Request Approved – Approved by: _____

Request Disapproved – Reason _____

- Original Requester Notified by: Email Phone In-Person Letter

By:_____ Date:_____
(Name & Title

Submit to City Clerk's Office

City of San Jacinto
595 S. San Jacinto Ave.
Building "A"
San Jacinto, CA 92583
Tel: 951/487-7330
Fax: 951/654-9896
www.ci.san-jacinto.ca.us

Permit No. 22-00129

APPLICATION BUILDING / PUBLIC WORKS PERMIT

Building Address: 980 W 7TH ST SANJ
Assessor's Parcel No.: 435-330-003 Nearest Cross Street: CNA SCHOOL 2 ROOMS
OCC Group: Subdivision Tract #:
Issued By: AT Census Tract #: Date:11-28-2022

Valuation Calculation Information

Occupancy	Type	Factor	Sq Feet	Valuation
	Additional Amount...			80,165.00
	Totals...			$80,165.00*

Owner: HEALTHCARE MANAGEMENT SYSTEMS INC
Mailing Addr 3838 Camino Del Rio N 115
City/State/Zip San Diego Ca 92108
Tel

Special Conditions: N
If Yes, see attached

Contractor: WEATHERTIGHT ROOFING, INC
Address P.O. BOX 5281
City/State/Zip HEMET, CA 92544
Tel. 951-929-0557 State Lic. No. 643691 & Classif. C39

Arch. En:
Address
City/State/Zip
Tel. State Lic. No.

THIS PERMIT BECOMES NULL AND VOID IF NO INSPECTION IS REQUESTED WITHIN 180 DAYS OR IF THERE ARE MORE THAN 180 DAYS BETWEEN INSPECTIONS

Intended Permit Use COMM - RE-ROOF INSTALL CLASS A FIBERGLASS SHINGLES
Sq Ft. Size 0 No. Stories 0 No. Dw. Units 0 Zoning
Category/Description ZRRF /Res. Roof Plan # Acres: 0

Fee Summary

Building Permit Fee	$860.75	Public Works Fee	$0.00	Fire Fees City	$0.00
Plancheck Fee	$0.00	Storage Fee	$16.03	Fire-Riv Cnty	$0.00
Development	$0.00	Fence Fee	$0.00	SMIP Fees	$10.42
Electrical Fee	$0.00	Landscape Fee	$0.00	CBSC Fee	$4.00
Mechanical Fee	$0.00	Fire/Life Safety	$80.17	Zoning/Bldg Surcharge	$10.17
Plumbing/Sewer Fee	$0.00	Investigation	$0.00	Hourly Fees	$50.00

Total Fees: $1,031.54
Total Payments: $1,031.54
Balance: $0.00

CERTIFICATION

I certify that I have read this application and state that the information above and the owner-builder/contractor's declarations are correct. I agree to comply with all city and county ordinances and state laws relating to building construction/public improvements construction and hereby authorize representatives of this city to enter upon the above-mentioned property for Inspection purposes. I agree to comply with all conditions imposed. The original signed Declaration is hereby acknowledged to be on file with the city.

Date _____ **Signature of Applicant** _____

City of San Jacinto
Building & Safety Division
Certificate of Occupancy

This certificate issued pursuant to the requirements of 2022 California Building Code certifying that at the time of issuance this structure was in compliance with the various ordinances of the city regulating building construction or use. Changes in the character or use of this building shall not be made except as specified in the 2022 California Building Code.

Group: E **Type of Construction:** 5N **Use Zone**: IL **Bldg. Permit No.** 22-00986 **Building Owner**

Building Owner Name: HEALTHCARE MGMT SYSTEMS INC **Address:** 980 W 7TH ST, SAN JACINTO, CA

Applicant Name: RAJWANT SANDHU **Applicant Address:** 980 W 7TH ST, SAN JACINTO, CA

Business Name: STAR EDUCATION INSTITUTE **Business Address:** 980 W 7TH ST, SAN JACINTO, CA

Portion of Building: CNA SCHOOL 2 ROOMS **Occupant Signature:**

Building Official: D.HUSTER **Date:** 07-06-2022

This Certificate shall be posted in a conspicuous place on the premises and shall not be removed except by the authority of the **BUILDING OFFICIAL.**

595 S San Jacinto Ave, San Jacinto, CA 92583 951-487-7330

Search By Keyword

6 sites found

Pacific Sheet Metal
1042 E ENTERPRISE AVE
SAN JACINTO CA 92582

AUTOMOTIVE COLLISION REFINISH SPECIALIST
1011 ENTERPRISE AVE
SAN JACINTO CA 92582-3802

Talley Metal Fabrication
989 W 7TH STREET
SAN JACINTO CA 92582

Talley Metal Fabrication
989 W 7TH ST
SAN JACINTO CA 92583

J TALLEY CORP, TALLEY & OCHOA METAL FAB.
989 W SEVENTH ST
SAN JACINTO CA 92582-3813

GUADALAJARA IMPORTS INC
885 W 7TH ST
SAN JACINTO CA 92582-3815



Skip to main content

County of Riverside - California

NextRequest

Request Visibility: Unpublished

Request 26-730 Closed

1 of 41

Dates

Due

February 13, 2026

Received

February 02, 2026 via web

Requester

James Erwin

jerwin@partneresi.com

361 Corporate Terrace Circle, Corona, CA, 92879

7142443655

Partner ESI

Additional information

Request

CPRA records request for a Phase I ESA at the property addressed 980 West 7th Street, San Jacinto, CA 92582. APN: 435-330-003. I am seeking public records from the following agencies:

- RCDEH records related to wells, spill incidents, hazmat permits, hazardous waste inspections, aboveground storage tanks, or underground storage tanks.
- RCFD records for any fires that may have occurred at the property.

Timeline Documents

Request closed Anyone with access to this request

All nonexempt records have been released, and your request has been fulfilled

February 13, 2026, 12:07pm by Edina Fang, EHS III (Staff)

If you are requesting records from multiple departments, please use the drop-down to add each department to your request.

Invoices

No invoices due

Staff assigned

Departments

Environmental Health

Fire Department

Point of contact

Eddie Olvera

Message to requester

Requester + Staff

The Environmental Cleanup Program (ECP) does not have files for the location listed.

February 13, 2026, 12:03pm by Edina Fang, EHS III (Staff)

Department assignment

Anyone with access to this request

Removed: TLMA Building & Safety .

February 13, 2026, 9:36am by Wendy, TLMA Planning and Building & Safety (Staff)

Department assignment

Anyone with access to this request

Added: TLMA Building & Safety .

February 13, 2026, 9:12am by Eddie Olvera, Administrative Services Assistant (Staff)

Message to requester

Requester + Staff

Department of Environmental Health Hazardous Materials Management Branch does not have responsive records to this request.

February 10, 2026, 8:07am by Dakodah Hiemstra, Office Assistant III (Staff)

Message from requester

Requester + Staff

Hi, the City of San Jacinto Building and Safety Department is reporting they have no records related to this request. The buildings on the property were constructed between 1964 and 1971 according to the Riverside County Assessor. I'd like to add on the RCTLMA Building and Safety Department to my request for potential building permit records related to this property.

February 9, 2026, 3:33pm by James Erwin

Message to requester

Requester + Staff

Hello James,

Department of Environmental Health, Land Use (septic systems and water wells) does not have records pertaining to this request.

Best regards,

DEH Land Use.

February 9, 2026, 7:42am by Ting Hsiung, EHS III (Staff)

Document(s) released to requester

Requester + Staff

26-730.pdf

February 4, 2026, 2:10pm by Erin Bailey, Research Specialist Supervisor – Riverside Unit (Staff)

Message to requester

Requester + Staff

Riverside County Fire Department has reviewed your request and has determined that no responsive records exist in relation to this request. We are aware that CALFIRE holds records of the type being requested and may have responsive records in relation to this request. Please find attached response letter.

If you request involved other county departments, they may response separately to this request.

Thank you

February 4, 2026, 2:10pm by Erin Bailey, Research Specialist Supervisor – Riverside Unit (Staff)

Message to requester

Requester + Staff

Thank you for submitting your request to the Riverside County Public Records Request

system. We will review your request and will respond within the required timeframe.

February 2, 2026, 9:56am

Department assignment Anyone with access to this request

Environmental Health, Fire Department

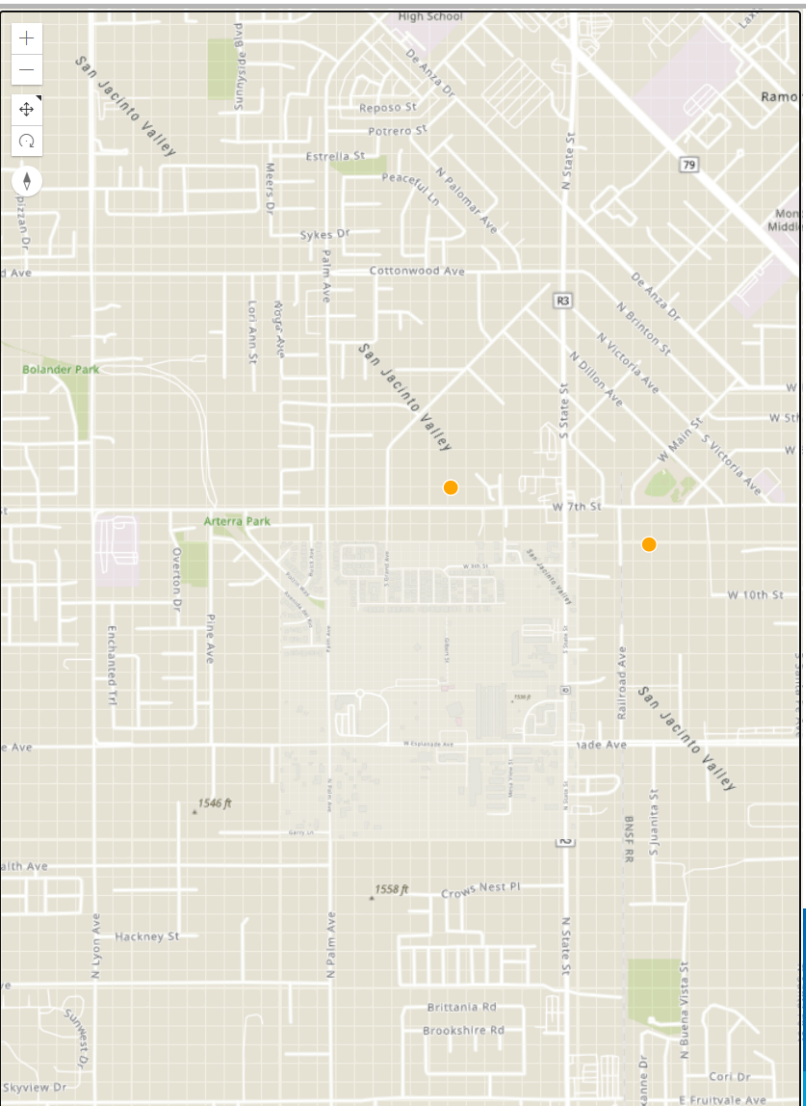
February 2, 2026, 9:56am by James Erwin

Request opened Anyone with access to this request

Request received via web

February 2, 2026, 9:56am by James Erwin

Select Search Type: Find a Facility | Name | Street: 7th | City: San Jacinto | Zip | RECLAIM | TITLE V | SEARCH



SEARCH RESULTS

8 Results

Street: 7th | City: San Jacinto | Clear all Filters | Sort: Status

79831
Facility Name GUADALAJARA IMPORTS INC
Facility Address: 885 W 7TH ST, SAN JACINTO, CA 92583
Status: ACTIVE

149533
Facility Name PETERSON EQUIPMENT SYSTEMS INC
Facility Address: 885 W 7TH ST, SAN JACINTO, CA 92582
Status: ACTIVE

70309
Facility Name EASTERN MUNICIPAL WATER DISTRICT
Facility Address: 1587 E 7TH ST, SAN JACINTO, CA 92583
Status: ACTIVE

196865
Facility Name EASTERN MUNICIPAL WATER DISTRICT
Facility Address: 1305 E 7TH ST, SAN JACINTO, CA 92583
Status: ACTIVE

196856
Facility Name EASTERN MUNICIPAL WATER DISTRICT
Facility Address: 1140 E 7TH ST, SAN JACINTO, CA 92583
Status: ACTIVE

26154
Facility Name AGRI EMPIRE CORP
Facility Address: 630 W 7TH ST, SAN JACINTO, CA 92583
Status: ACTIVE

33176
Facility Name AGRI EMPIRE CORP 026154
Facility Address: 19645 W 7TH ST, SAN JACINTO, CA

70308
Facility Name EASTERN MUNICIPAL WATER DISTRICT
Facility Address: 41375 E 7TH ST, SAN JACINTO, CA 92383

Export all records to Excel

South Coast Air Quality Management District
21865 Copley Dr, Diamond Bar, CA 91765
909-396-2000

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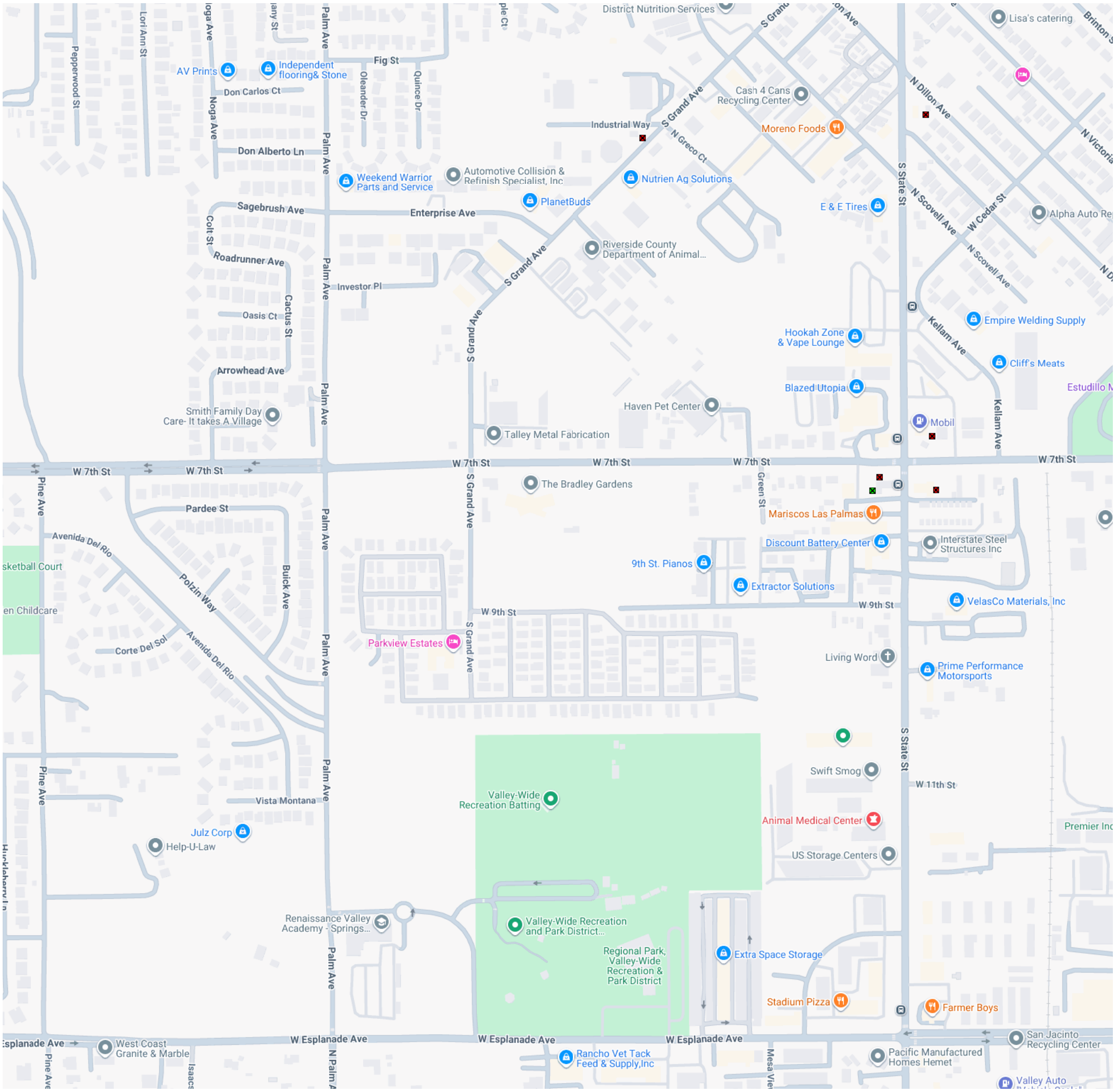
Questions/Need info? | Report Website Problem



LEGEND - CHOOSE MORE SITES

- LUST Cleanup Sites - REMOVE
- Cleanup Program Sites - REMOVE
- Military Cleanup Sites - REMOVE
- Military Privatized Sites - REMOVE
- Military UST Sites - REMOVE
- Military UST Privatized Sites - REMOVE

Signifies a Closed Site

ACTIVE MAP COVERAGES:

- Military Bases - REMOVE

LIST SITES VISIBLE ON MAP

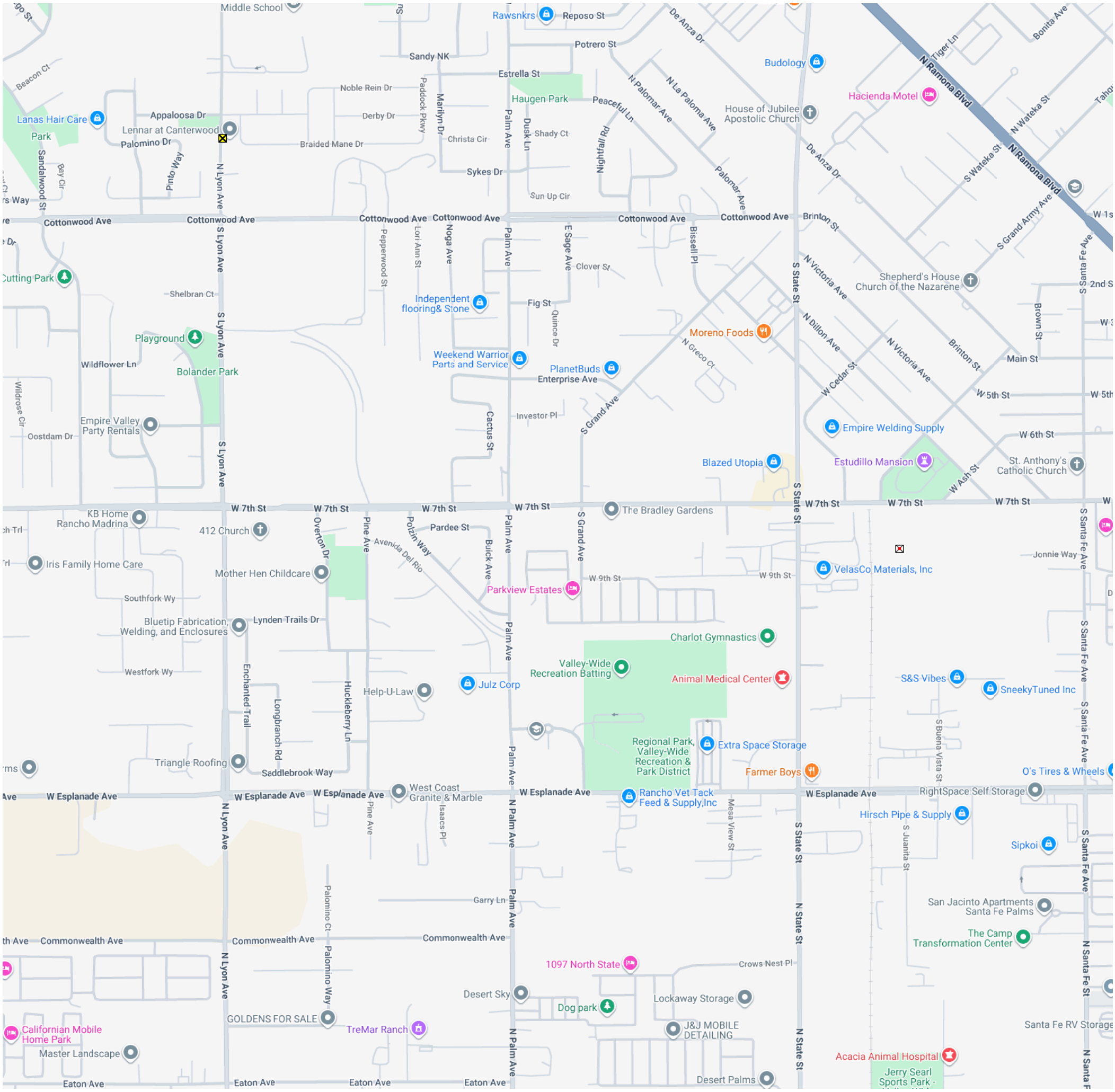
Map data ©2026 Google 50 m Report a map error

Sites Shown on Map: 6 Total Sites 0 Open Sites 6 Closed Sites 0 Sites w/Water Quality Data

EnviroStor | Search for a Project | Search for an Address | Home | Download Data | Tools | Contact Us

LEGEND - CHOOSE MORE SITES
- Federal Superfund - REMOVE
- State Response - REMOVE
- Voluntary Cleanup - REMOVE
- School Cleanup - REMOVE
- Evaluation - REMOVE
- School Investigation - REMOVE
- Military Evaluation - REMOVE
- Tiered Permit - REMOVE
- Corrective Action - REMOVE
- Historical - REMOVE
- Field Points - REMOVE
- Operating - REMOVE
- Post-Closure - REMOVE
- Non-Operating - REMOVE

☒ Signifies a Closed Site

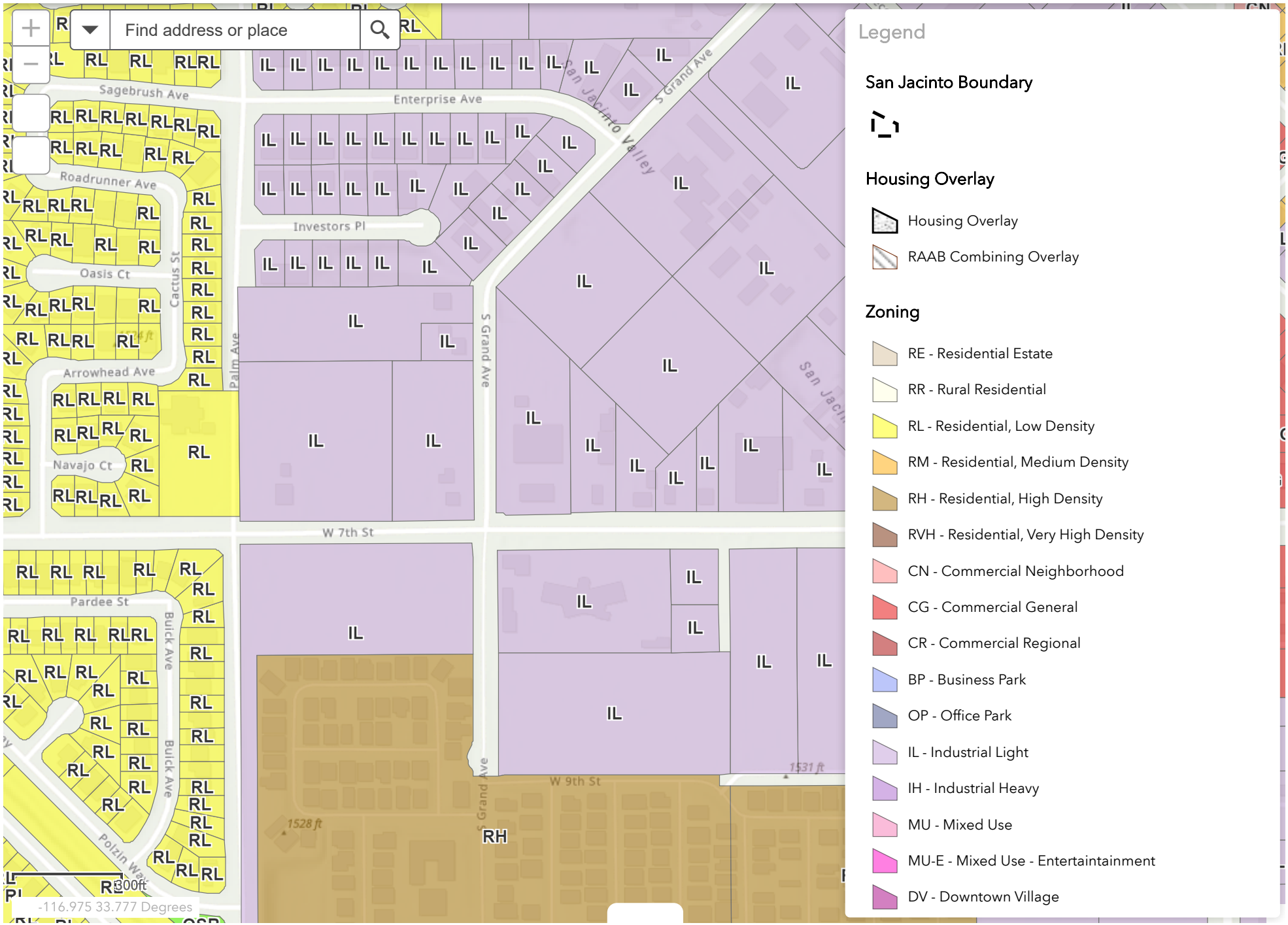


LIST SITES VISIBLE ON MAP

Map data ©2026 Google 100 m Report a map error

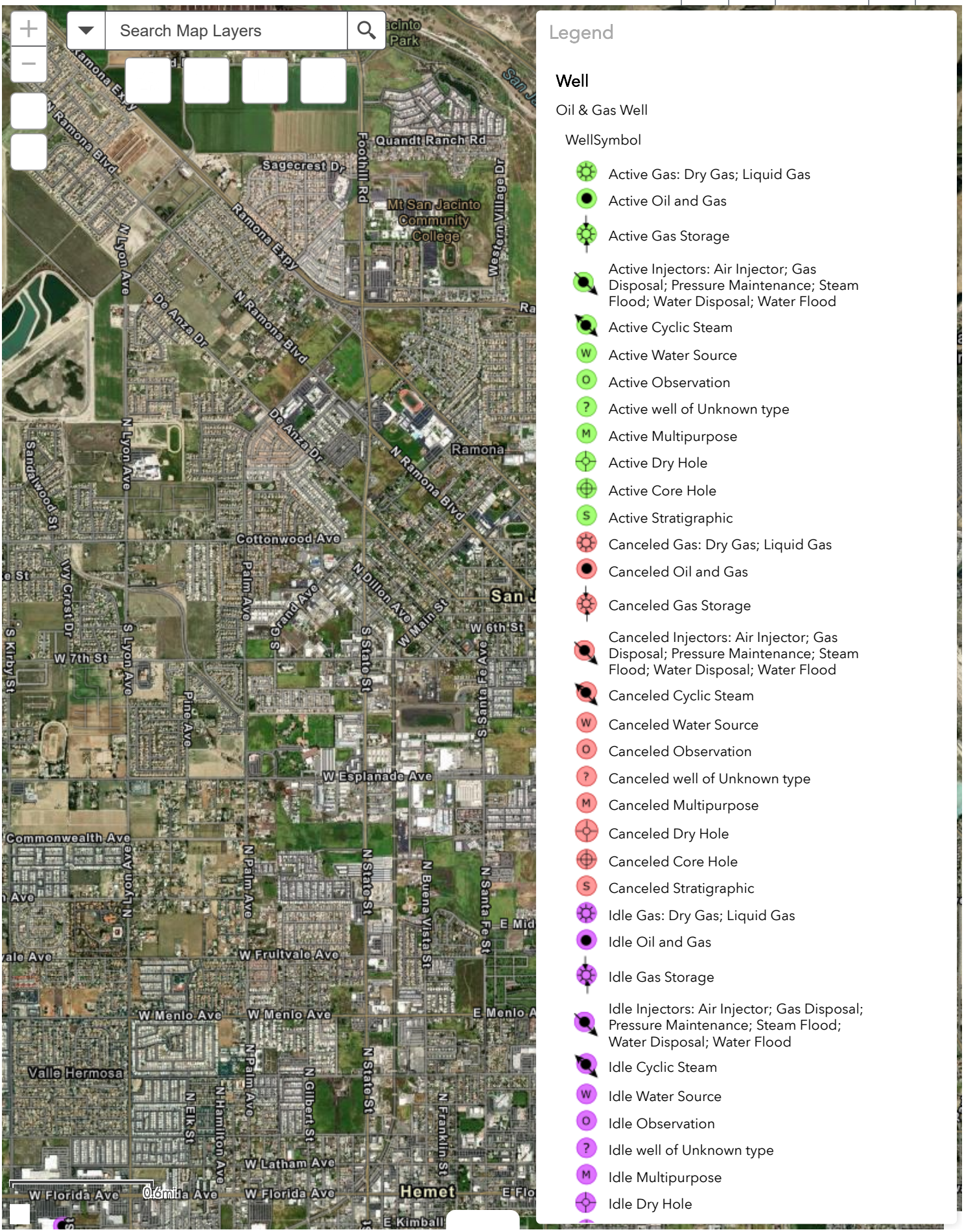
Sites Shown on Map: 2 Total Sites

San Jacinto Zoning/GPLU



Well Finder

CalGEM GIS Powered by WellSTAR



Legend

Well

Oil & Gas Well

WellSymbol

- Active Gas: Dry Gas; Liquid Gas
- Active Oil and Gas
- Active Gas Storage
- Active Injectors: Air Injector; Gas Disposal; Pressure Maintenance; Steam Flood; Water Disposal; Water Flood
- Active Cyclic Steam
- Active Water Source
- Active Observation
- Active well of Unknown type
- Active Multipurpose
- Active Dry Hole
- Active Core Hole
- Active Stratigraphic
- Canceled Gas: Dry Gas; Liquid Gas
- Canceled Oil and Gas
- Canceled Gas Storage
- Canceled Injectors: Air Injector; Gas Disposal; Pressure Maintenance; Steam Flood; Water Disposal; Water Flood
- Canceled Cyclic Steam
- Canceled Water Source
- Canceled Observation
- Canceled well of Unknown type
- Canceled Multipurpose
- Canceled Dry Hole
- Canceled Core Hole
- Canceled Stratigraphic
- Idle Gas: Dry Gas; Liquid Gas
- Idle Oil and Gas
- Idle Gas Storage
- Idle Injectors: Air Injector; Gas Disposal; Pressure Maintenance; Steam Flood; Water Disposal; Water Flood
- Idle Cyclic Steam
- Idle Water Source
- Idle Observation
- Idle well of Unknown type
- Idle Multipurpose
- Idle Dry Hole

National Flood Hazard Layer FIRMette

FEMA

116°58'58"W 33°47'2"N



Feet

0 250 500 1,000 1,500 2,000

1:6,000

116°58'21"W 33°46'32"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

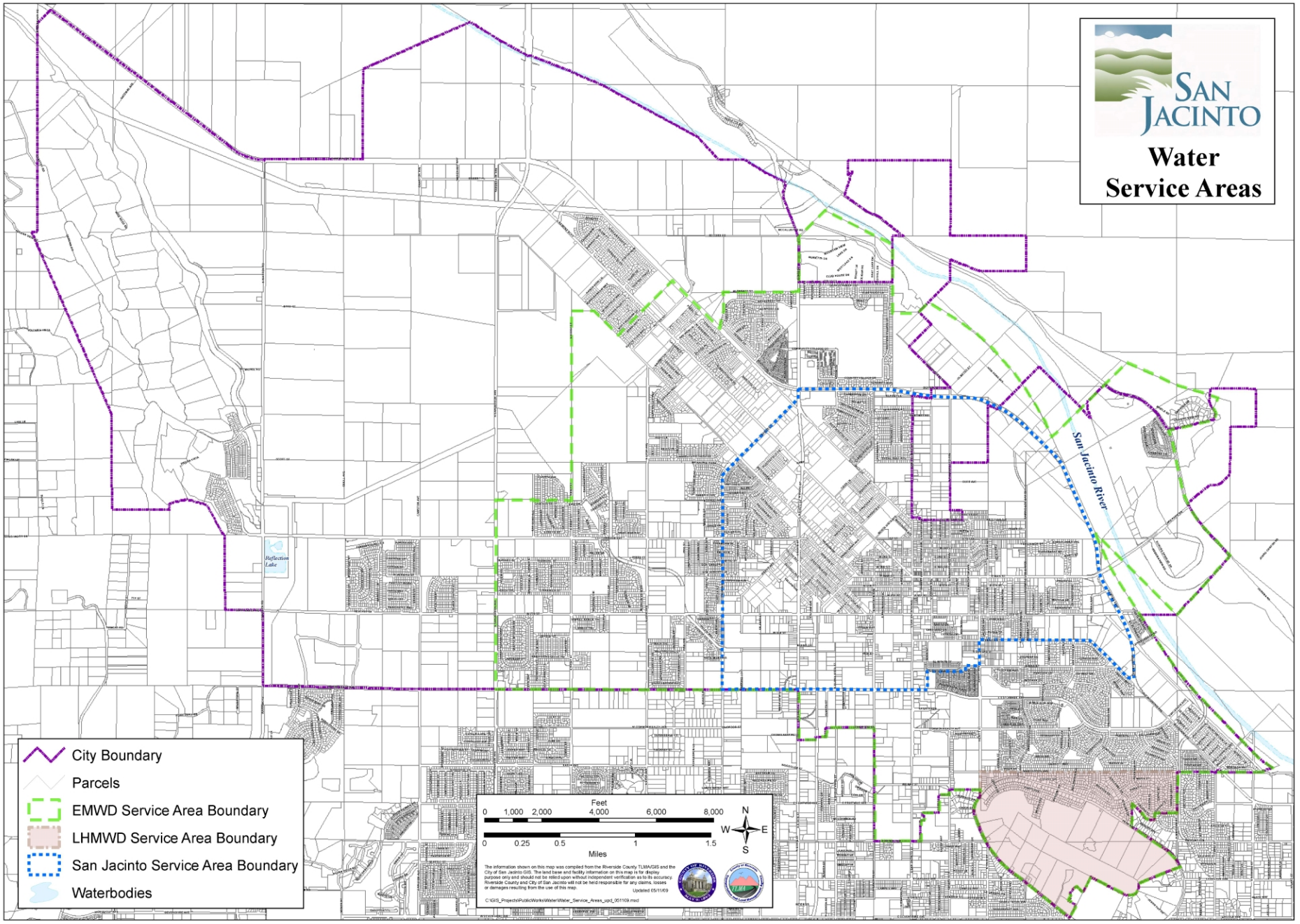
N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/23/2026 at 5:55 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.


San Jacinto
Water
Service Areas
San Jacinto River
Reflection Lake
City Boundary
Parcels
EMWD Service Area Boundary
LHMWD Service Area Boundary
San Jacinto Service Area Boundary
Waterbodies
Feet
0 1,000 2,000 4,000 6,000 8,000
Miles
0 0.25 0.5 1 1.5
N
W E
S
The information shown on this map was compiled from the Riverside County TLMA/GIS and the City of San Jacinto GIS. The land base and facility information on this map is for display purpose only and should not be relied upon without independent verification as to its accuracy. Riverside County and City of San Jacinto will not be held responsible for any claims, losses or damages resulting from the use of this map.
Updated 05/11/09
C:\GIS_Projects\PublicWorks\Water\Water_Service_Areas_upd_051109.mxd

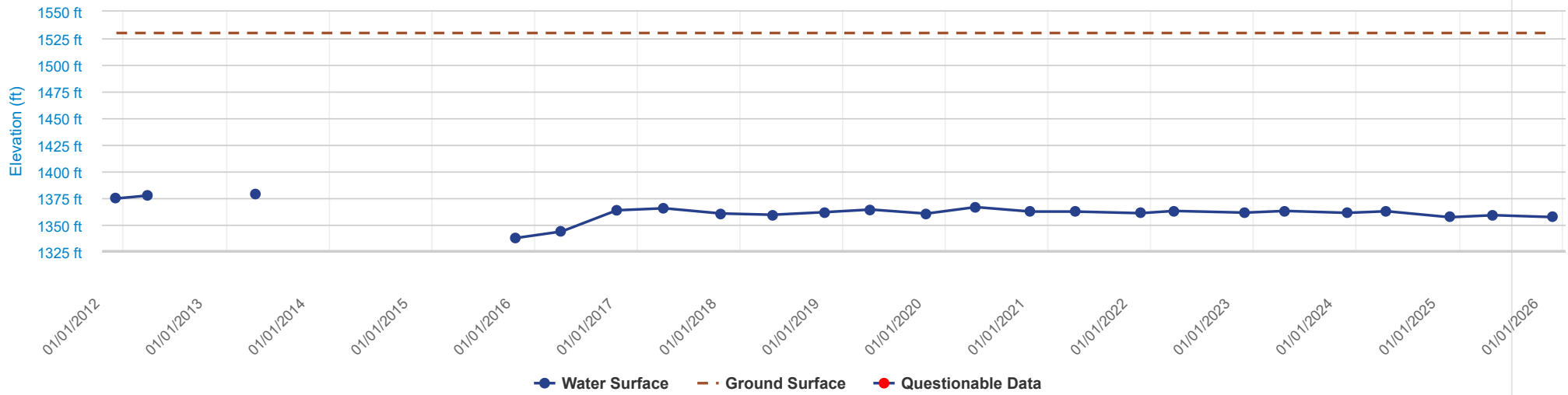
Back to Search

Groundwater Level Report

Station 337748N1169760W001

Station Data | **Groundwater Level Data**

Groundwater Levels for Well 337748N1169760W001



Download Data

Measurement Date (PST)	Reference Point Elevation	Ground Surface Elevation	Distance from RP to WS	Groundwater Elevation	Ground Surface to Water Surface	Measurement Issue	Submitting Organization	Collecting Organization	Water Level Measurement Comments
10/24/2014 00:00:00	1530.000	1529.890				NM:Temporarily inaccessible	Eastern Municipal Water D...	Eastern Municipal Water District	
11/01/2012 00:00:00	1530.000	1529.890				NM:Temporarily inaccessible	Eastern Municipal Water D...	Eastern Municipal Water District	
11/01/2013 00:00:00	1530.000	1529.890				NM:Temporarily inaccessible	Eastern Municipal Water D...	Eastern Municipal Water District	
04/23/2015 00:00:00	1530.000	1529.890				NM:Temporarily inaccessible	Eastern Municipal Water D...	Eastern Municipal Water District	
05/01/2014 00:00:00	1530.000	1529.890				NM:Pumping	Eastern Municipal Water D...	Eastern Municipal Water District	
04/15/2013 00:00:00	1530.000	1529.890	151.2	1378.8	151.09		Eastern Municipal Water D...	Eastern Municipal Water District	
03/29/2012 00:00:00	1530.000	1529.890	152.6	1377.4	152.49		Eastern Municipal Water D...	Eastern Municipal Water District	
12/06/2011 00:00:00	1530.000	1529.890	155.4	1374.6	155.29		Eastern Municipal Water D...	Eastern Municipal Water District	
04/16/2020 00:00:00	1530.000	1529.890	163.5	1366.5	163.39		Eastern Municipal Water D...	Eastern Municipal Water District	
04/05/2017 00:00:00	1530.000	1529.890	164.6	1365.4	164.49		Eastern Municipal Water D...	Eastern Municipal Water District	
04/09/2019 00:00:00	1530.000	1529.890	165.8	1364.2	165.69		Eastern Municipal Water D...	Eastern Municipal Water District	

10/18/2016 00:00:00	1530.000	1529.890	166.5	1363.5	166.39		Eastern Municipal Water D...	Eastern Municipal Water District
04/20/2023 00:00:00	1530.000	1529.890	167.1	1362.9	166.99		Eastern Municipal Water D...	Eastern Municipal Water District
03/21/2022 00:00:00	1530.000	1529.890	167.1	1362.9	166.99		Eastern Municipal Water D...	Eastern Municipal Water District
04/16/2024 00:00:00	1530.000	1529.890	167.4	1362.6	167.29		Eastern Municipal Water D...	Eastern Municipal Water District
04/07/2021 00:00:00	1530.000	1529.890	167.7	1362.3	167.59		Eastern Municipal Water D...	Eastern Municipal Water District
10/29/2020 00:00:00	1530.000	1529.890	167.7	1362.3	167.59		Eastern Municipal Water D...	Eastern Municipal Water District
10/31/2018 00:00:00	1530.000	1529.890	168.2	1361.8	168.09		Eastern Municipal Water D...	Eastern Municipal Water District
11/29/2022 00:00:00	1530.000	1529.890	168.7	1361.3	168.59		Eastern Municipal Water D...	Eastern Municipal Water District
11/27/2023 00:00:00	1530.000	1529.890	168.9	1361.1	168.79		Eastern Municipal Water D...	Eastern Municipal Water District
11/23/2021 00:00:00	1530.000	1529.890	169.2	1360.8	169.09		Eastern Municipal Water D...	Eastern Municipal Water District
10/24/2017 00:00:00	1530.000	1529.890	169.5	1360.5	169.39		Eastern Municipal Water D...	Eastern Municipal Water District
10/23/2019 00:00:00	1530.000	1529.890	169.6	1360.4	169.49		Eastern Municipal Water D...	Eastern Municipal Water District
04/25/2018 00:00:00	1530.000	1529.890	170.7	1359.3	170.59		Eastern Municipal Water D...	Eastern Municipal Water District
04/30/2025 12:15:00	1530.000	1529.890	171.1	1358.9	170.99		Hemet-San Jacinto Basin -...	Hemet-San Jacinto Basin - Adjudicated Area

1 to 25 of 29 records

< 1 2 >

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CONSUMER CONFIDENCE REPORT



YOUR 2024 WATER QUALITY

emwd CONSUMER CONFIDENCE REPORT

2270 Trumble Road

P.O. Box 8300

Perris, CA 92572-8300

EMWD Main Phone Number:
951.928.3777

EMWD Customer Service:
800.426.3693

Careers: emwd.org/joinemwd

Conservation Hotline: ext. 3322

Water Quality: ext. 3327

Systems Outages, Trouble Calls:
ext. 6265 or 800.698.0400

Public and Governmental Affairs:
ext. 3430
PublicandGovtAffairs@emwd.org

EMWD publications are designed to keep EMWD's customers and the public informed of matters affecting them.

FOLLOW US

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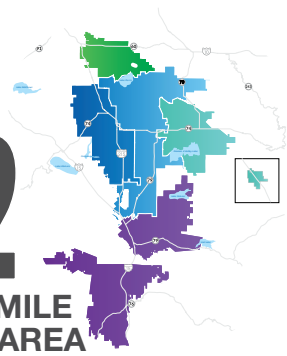
www.emwd.org

2024 SERVICE BY THE NUMBERS
QUALITY YOU CAN COUNT ON 24/7/365



6TH CALIFORNIA'S SIXTH-LARGEST RETAIL AGENCY



682 SQUARE MILE SERVICE AREA

SERVING NEARLY 1 MILLION PEOPLE

1,000,000

TESTS PERFORMED ON **36** DRINKING WATER SOURCES

TESTED FOR **382** CONTAMINANTS

8,120 WATER SAMPLES COLLECTED

48,194 TESTS PERFORMED TO MONITOR AND ENSURE QUALITY

INSIDE THIS REPORT

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Regulations
Contaminants
Sensitive populations
Nitrate
Arsenic
Unregulated contaminants
Lead and copper
PFAS

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The communities we serve

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Facts about total coliform bacteria
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Get your report electronically
Public meeting and contact information

OUR MISSION

To deliver value to our diverse customers and the communities we serve by providing safe, reliable, economical and environmentally sustainable water, wastewater and recycled water services.

OUR VISION

To be recognized as a leading organization in performance, technology, and advocacy; advancing innovative solutions that provide an exceptional level of customer and community service.

EMWD wants you, our valued customer, to be confident that your drinking water is safe.

OUR CONTINUING COMMITMENT TO YOU

EMWD and its trained, certified water quality professionals are committed to...

- Providing high quality, safe drinking water at the lowest price possible.
- Monitoring and testing the water we serve to optimize quality and ensure it is always safe to drink.
- Finding and developing new water supply sources to ensure continued reliability for our customers.
- Providing educated staff to answer any questions from our customers.

Dear Valued EMWD Customer,

At Eastern Municipal Water District (EMWD), our guiding principles as an organization are rooted in public trust.

For 75 years, we have proudly served the community and done so with transparency, accountability, and safety at the forefront of our decisions as an organization. That commitment is reaffirmed every time you turn on your tap and a safe, clean and reliable water supply is delivered to you and your family.

That is why we are pleased to present our annual water quality report, which details the high-quality drinking water we delivered throughout 2024. This annual report shows how EMWD continues to meet all drinking water quality standards established by the United States Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Water Board).

EMWD uses state-of-the-art water treatment processes to provide a safe and highly reliable water supply while protecting public health. By efficiently maintaining and operating our facilities along with conducting rigorous monitoring and testing, EMWD consistently delivers high-quality tap water service. Water samples are collected throughout the year from EMWD's 36 drinking water sources to carefully test for 382 water quality constituents. In 2024, EMWD collected 8,120 water samples and performed 48,194 tests to monitor and ensure quality.

EMWD supports science-based standards that provide health benefits to the public in an economically balanced manner. While groundwater or surface waters can have trace contaminants, EMWD protects your health and safety by treating the water we deliver—ensuring your water meets or surpasses all regulated drinking water standards.

In 2024, our service area continued to grow in both population and geographic footprint. EMWD completed a consolidation of the City of Perris water system and began providing wholesale water service to northern San Diego County. While we serve one of the fastest-growing regions in California, we are focused on ensuring every customer can have confidence in the quality of water we provide.

The State Water Board requires that EMWD customers receive an annual copy of this report, which summarizes the results of water quality tests and provides specific details about sources and quality of the water served in your community. The guidelines for distributing this report allow for electronic delivery, instead of a paper copy in the mail. By delivering this report electronically, we reduce costs and eliminate paper waste associated with printing and mailing the report to our more than 171,000 accounts. We will be happy to provide you with a paper copy of this report upon request through our website at emwd.org/CCR or by calling us at 951-928-3777, extension 3430. Please note that you may change your delivery preference at any time.

We strongly encourage you to read this report and if you have any water quality questions, please feel free to contact Michelle Karras, Principal Environmental Analyst, or any of our Water Quality staff at 951-928-3777, extension 3327. We also encourage you to get the latest news and information from EMWD through our website at emwd.org.

Thank you for being part of the EMWD family and for trusting us to provide for you and your family with a safe and reliable water supply.

Joe Mouawad, P.E.
GENERAL MANAGER
EASTERN MUNICIPAL WATER DISTRICT

This annual water quality report contains important and useful information about the source and the tests used to ensure the quality and safety of your drinking water. It also describes how EMWD meets all drinking water standards as set by the United States Environmental Protection Agency (USEPA) and enforced by the State Water Resources Control Board (State Water Board).

About Regulations



In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Water Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

CONTAMINANTS THAT MAY BE PRESENT IN SOURCE WATER INCLUDE:

- MICROBIAL CONTAMINANTS, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock, and wildlife.
- INORGANIC CONTAMINANTS, such as salts and metals, can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- ORGANIC CHEMICAL CONTAMINANTS, including synthetic and volatile organic chemicals may be by-products of industrial processes or petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems.
- PESTICIDES AND HERBICIDES may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- RADIOACTIVE CONTAMINANTS can be naturally-occurring or be the result of oil and gas production and mining activities.

SENSITIVE POPULATIONS

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised individuals such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about their drinking water from their health care providers. USEPA and Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

ABOUT NITRATE

Nitrate in drinking water at levels above 10 parts per million (ppm) is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of an infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 ppm may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should seek advice from your health care provider.

ABOUT ARSENIC

While your drinking water meets the federal and state standard for arsenic, some of our sources do contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The USEPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

UNREGULATED CONTAMINANTS

Unregulated contaminant monitoring helps USEPA and the State Water Board determine where certain contaminants occur and whether the contaminants need to be regulated.

ABOUT LEAD AND COPPER

Lead and copper are rarely found in source waters; however, both of these metals can enter drinking water by leaching from household plumbing and fixtures. Water that sits in your pipes for long periods of time may dissolve tiny amounts of lead and/or copper (parts per billion levels) into household water. The USEPA has developed the Lead and Copper Rule to protect public health by establishing an action level of 15 parts per billion (ppb) for lead and 1300 ppb for copper.

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. EMWD is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact EMWD Water Quality staff at 951-928-3777, extension 3327. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead.

In 2024, EMWD conducted an inventory of water service lines required by U.S. EPA's Lead and Copper Rule Revisions. EMWD determined through historical records, information provided directly by customers, and information acquired during physical field inspections that the water system contains no lead service lines or galvanized service lines requiring replacement in its distribution system. For more information or to access the inventory, visit https://www.emwd.org/lead-service-line-inventory.

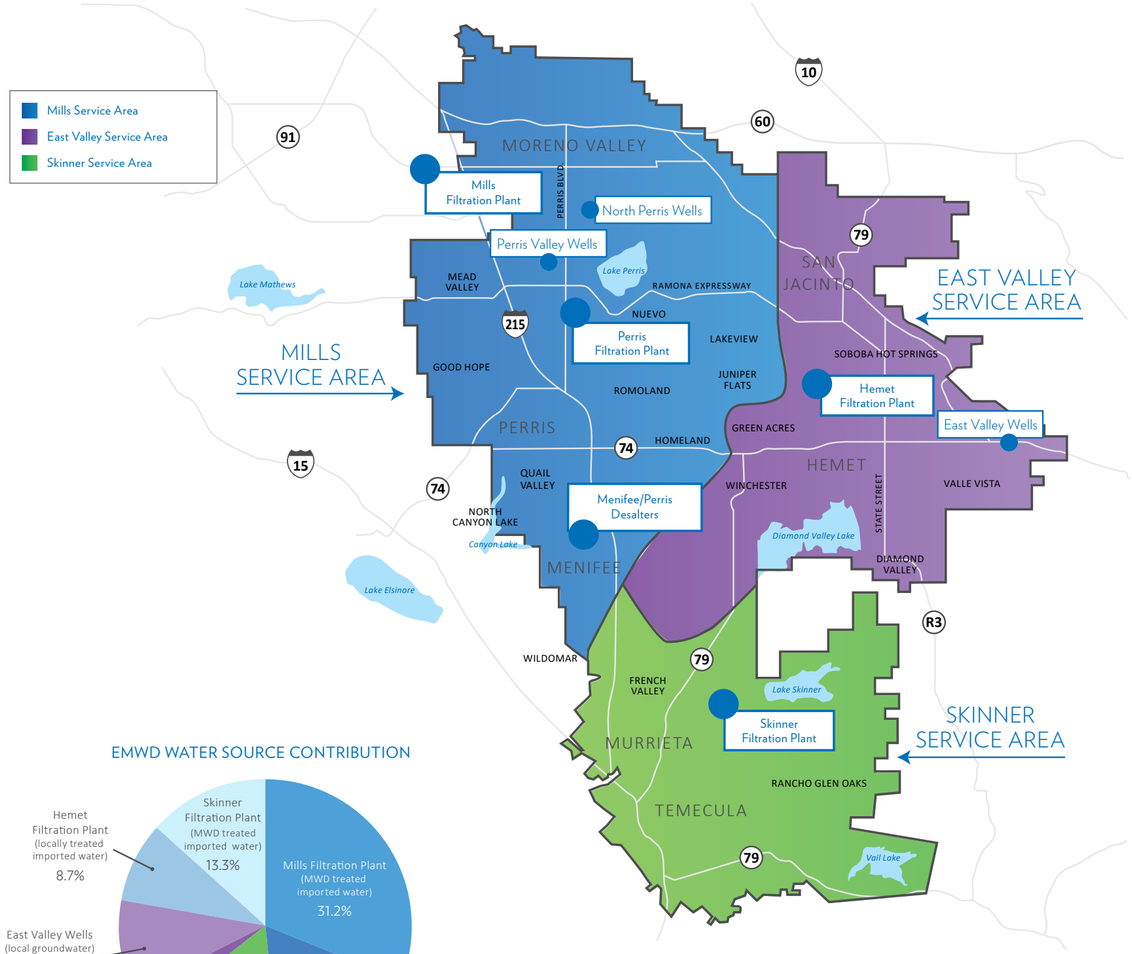
PFAS (PER- AND POLYFLUOROALKYL SUBSTANCES)

PFAS are chemicals that are resistant to heat, water and oil and have been used for decades in hundreds of consumer products and industrial applications. As a result, these chemicals are often found in the environment.

Although PFAS compounds such as perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) are no longer manufactured in the United States, many products that contain the chemicals still exist, such as cosmetics, food packaging, clothing and furniture fabrics. In addition, other countries still make products containing these chemicals, which may be imported into the United States. PFAS have been monitored by water agencies and reported based on United States Environmental Protection Agency (USEPA) regulations. Information on PFAS in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or at www.epa.gov/pfas.

THE SOURCES OF YOUR TAP WATER...

To help you find specific details about your tap water, we have organized this report according to the communities we serve.



EMWD WATER SOURCE CONTRIBUTION

Total Annual Water Usage: 27.6 billion gallons

THE COMMUNITIES WE SERVE...

COMMUNITIES SERVED

Good Hope
Homeland
Juniper Flats
Lakeview
Mead Valley
Menifee**
Moreno Valley
North Canyon Lake
Nuevo
Perris
Quail Valley
Romoland
Wildomar

WEST COMMUNITIES SERVED

Diamond Valley
Green Acres
Hemet
San Jacinto
Winchester***

EAST COMMUNITIES SERVED

Hemet
San Jacinto
Soboba Hot Springs
Valle Vista

COMMUNITIES SERVED

French Valley
Menifee**
Murrieta
Rancho Glen Oaks****
Temecula
Winchester***

MILLS SERVICE AREA | Water for this service area comes from a combination of sources:

- The Henry J. Mills Filtration Plant* treats imported surface water supplied solely from northern California through the State Water Project (SWP). The Mills Filtration Plant adjusts the fluoride levels in the water to an optimal level recommended by the Centers for Disease Control and Prevention (CDC) for oral health, and uses chloramine for final disinfection.

WATER FROM THE MILLS FILTRATION PLANT IS BLENDED WITH SEVERAL OTHER EMWD WATER SOURCES:

- Two Perris Valley Wells serve a limited area of Perris – along Perris Boulevard north and south of the Ramona Expressway.
- Four North Perris Wells serve the northeast area of Perris.
- The Perris Water Filtration Plant (PWFP) treats both Colorado River and SWP waters. This plant uses the latest ultrafiltration technology to remove particulate contaminants to produce quality, potable water. The PWFP serves Lakeview, Nuevo, Romoland, Homeland, and Juniper Flats. This plant uses chloramine for final disinfection.
- The Desalination Complex (Menifee and Perris I Desalters, and Perris II Desalter) convert salty groundwater into potable water using a reverse osmosis process. Menifee, North Canyon Lake, and Quail Valley are communities within the Mills Service Area to receive blended water from this desalination plant. The Desalination Complex uses chloramine for final disinfection.

EAST VALLEY SERVICE AREA | This service area is split into two regions:

WEST OF STATE STREET:

- The Hemet Water Filtration Plant (HWFP) treats both Colorado River and SWP waters. This plant uses the latest ultrafiltration technology to remove particulate contaminants and produce quality drinking water. This treatment plant uses chloramine for final disinfection. Local groundwater also supplies this area.

EAST OF STATE STREET:

- A system of deep groundwater wells serves these communities. These wells are treated by adding free chlorine for final disinfection.

SKINNER SERVICE AREA | Water for this service area comes from:

- The Robert A. Skinner Filtration Plant* treats water from the Colorado River and from the SWP. The Skinner Plant adjusts the fluoride levels in the water to an optimal level recommended by the CDC for oral health, and uses chloramine for final disinfection.

** The Mills and Skinner Filtration Plants are owned and operated by The Metropolitan Water District of Southern California. ** Typically served by the Mills Filtration Plant and occasionally served by the Skinner Filtration Plant. *** Typically served by the Hemet Water Filtration Plant and occasionally served by the Skinner Filtration Plant. **** This area is served water produced by Rancho California Water District (RCWD). You may view RCWD's Consumer Confidence Report on their website at www.ranchowater.com.*

PROTECTING YOUR DRINKING WATER

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at (800) 426-4791 or online at www.epa.gov/ground-water-and-drinking-water.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. The land that the water comes into contact with is called the watershed; everything that happens to or in the watershed can affect the quality of your drinking water supply.

EMWD uses several sources of water to serve its customers, including surface water from the Colorado River and the State Water Project (SWP), as well as local groundwater.

An initial assessment of all the watersheds, both surface water and groundwater, was completed. The Colorado River, a surface water source, was reassessed in 2022 and found to be most vulnerable to recreational activities, urban and storm water runoff, increasing urbanization in the watershed, and wastewater.

Water from the SWP, also a surface water source, was reassessed in 2021 and found to be most vulnerable to urban and storm water runoff, wildlife, agriculture, recreational activities, and wastewater.

An assessment of all EMWD wells was completed in 2013. Two sources were considered vulnerable to airports and airplane maintenance associated with a contaminant detected in the water supply. In addition, other EMWD wells were considered most vulnerable to the following due to proximity (not associated with any contaminants): commercial and industrial activities, residential activities, agriculture, and other activities such as recreation and transportation.

You can view vulnerability assessments online at www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/DWSAP.html. You can also call 951-928-3777, ext. 3327 for a copy of EMWD's vulnerability assessments.

Protecting the sources of drinking water helps protect our health. It's everyone's responsibility, and here are a few ways you can help:

- **Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.**
- **Pick up after your pets.**
- **Dispose of chemicals properly; take used motor oil to a recycling center.**

Facts about Total Coliform Bacteria

Water agencies test for the presence of coliform bacteria as an indicator of drinking water quality.

Coliform bacteria are naturally present in the environment and are generally not harmful. Coliform bacteria may occur in soil, vegetation, animal waste, sewage, and surface waters.

All water systems are required to comply with the state Revised Total Coliform Rule. All water systems are also required to comply with the federal Revised Total Coliform Rule. The federal rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e. total coliform and E. coli *bacteria). The USEPA anticipates greater public health protection as the rule requires water systems that are vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. If found, these must be corrected by the water system.*

Eastern Municipal Water District routinely tests for the presence of coliform bacteria as an indicator of the sanitary quality of drinking water. EMWD analyzed 3,198 coliform samples in 2024, five of which were total coliform positive. The maximum allowed by USEPA for coliforms is no more than 5 percent in any month. The highest monthly coliform result in 2024 was 0.4 percent, which complies with this standard. EMWD also tests for *E. coli* bacteria, which indicate fecal or sewage contamination. Zero samples tested positive for *E. coli* in 2024.

The City of Perris analyzed 312 coliform samples in 2024, none of which were total coliform positive. The highest monthly coliform result was zero percent. Zero samples tested positive for *E. coli* in 2024. A positive coliform test result does not necessarily mean a maximum contaminant level (MCL) has been exceeded, or that there is a problem in the water system.

More information and general guidelines on ways to lessen the risk of infection by microbes are available from the USEPA's Safe Drinking Water Hotline at **(800) 426-4791** or at **epa.gov/ground-water-and-drinking-water**.

ABBREVIATIONS

AL	Action Level
CCRDL	Consumer Confidence Report Detection Levels
CFU/mL	Colony-Forming Units per milliliter
DLR	Detection Limits for purposes of Reporting
grains/gallon	Grains per gallon
HPC	Heterotrophic Plate Count
HFPO-DA	Hexafluoropropylene Oxide Dimer Acid
LRAA	Locational Running Annual Average
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MRDL	Maximum Residual Disinfectant Level
MRDLG	Maximum Residual Disinfectant Level Goal
MRL	Minimum Reporting Level: set by EPA for unregulated contaminant monitoring
NA	Not Applicable: no State or Federal standards are established
ND	Non-Detected: sample was taken and chemical was not detected
NL	Notification Level
NR	No Range: all result(s) were the same value
NTU	Nephelometric Turbidity Units
pCi/L	PicoCuries per Liter
PFAS	Per- and Polyfluoroalkyl Substances
PFBS	Perfluorobutanesulfonic Acid
PFHxS	Perfluorohexanesulfonic Acid
PFNA	Perfluorononanoic Acid
PHG	Public Health Goal
ppb	Parts per billion or micrograms per liter (µg/L)
ppm	Parts per million or milligrams per liter (mg/L)
ppt	Parts per trillion or nanograms per liter (ng/L)
RAA	Running Annual Average
RL	Reporting Limit
TDS	Total Dissolved Solids
TON	Threshold Odor Number
TT	Treatment Technique
µS/cm	MicroSiemens per centimeter; or micromhos per centimeter (µmho/cm)
—	Samples not required
=	Equal
>	Greater than
<	Less than
≤	Less than or equal to
#	Number
%	Percent

DEFINITIONS

90th Percentile: The value in a data set in which 90 percent of the set is less than or equal to this value.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Detection Limits for purposes of Reporting (DLR): State-determined level that a test can detect the chemical.

Disinfection By-Product: Compounds which are formed from mixing of organic or mineral precursors in the water with ozone, chlorine or chloramine. Bromate, Total Trihalomethanes, and Haloacetic Acids are disinfection by-products.

Grains per Gallon (grains/gallons): A measure of water hardness. One grain/gallon equals 17.1 ppm or mg/L

Heterotrophic Plate Count (HPC): a bacteriological test that counts the number of bacteria per milliliter of sample.

Locational Running Annual Average (LRAA): The Running Annual Average (RAA) at one sample location.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the Public Health Goals (PHGs) or Maximum Contaminant Level Goals (MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Notification Level (NL): Notification levels are health-based advisory levels established by the State Water Board for chemicals in drinking water that lack MCLs.

Primary Drinking Water Standard (Primary Standard): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Running Annual Average (RAA): The yearly average which is calculated every 3 months using the previous 12 months' data.

Secondary Drinking Water Standard (Secondary Standard): MCLs for contaminants that do not affect health but are used to monitor the aesthetics of the water.

Treatment Technique (TT): A required treatment process intended to reduce the level of a contaminant in drinking water.

EASTERN MUNICIPAL WATER DISTRICT DISTRIBUTION SYSTEM DATA FOR 2024

Parameter	Units	State or Federal Maximum Contaminant Level (MCL)	California Public Health Goal (PHG)	State Detection Limit for Reporting (DLR)	Range / Average	EMWD's Entire Distribution System	SERVICE AREA: Mills	East Valley	Skinner	North Perris	City of Perris
PRIMARY STANDARDS – MANDATORY HEALTH-RELATED STANDARDS											
MICROBIOLOGICAL											
Total Coliform Bacteria	# Positive coliforms	A	MCLG = 0	NA	# positives in 2024	5	---	---	---	---	---
					Highest monthly %	0.4	4	1	0	0	0
Fecal Coliform Bacteria *(E. coli)*	# positive *E. coli*	B	MCLG = 0	NA	# positives in 2024	0	0	0	0	0	0
Heterotrophic Plate Count (HPC)	# HPCs > 500 CFU/mL	C	NA	NA	# HPC>500 in 2024	10	---	---	---	---	---
					Lowest monthly %	98.8	9	0	1	0	0
DISINFECTION BY-PRODUCTS AND DISINFECTANT RESIDUALS											
Bromate (Mills & Skinner plants only) D	ppb	RAA = 10	0.1	1	Range	---	ND - 19	---	ND - 6	---	---
					Highest RAA	---	7.9	---	1.5	---	---
Haloacetic Acids (5) (HAA5s) E	ppb	LRAA = 60	NA	E	Range	ND - 27	ND - 27	ND - 27	ND - 18	1.3 - 2.4	3 - 24
					Highest LRAA	28	20	28	18	1.9 F	17
Total Trihalomethanes (TTHMs) G	ppb	LRAA = 80	NA	1	Range	2.7 - 70	9.1 - 70	2.7 - 65	21 - 50	8.9 - 10	16 - 67
					Highest LRAA	64	60	64	54	9.6 F	67
Total Chlorine Residual Chlorine and Chloramines H	ppm	MRDL = 4.0 as Cl_2	MRDLG = 4 as Cl_2	NA	Range	ND - 4.3	ND - 4.3	ND - 4.1	ND - 3.1	0.45 - 1.1	0.04 - 3.4
					Average	1.8	1.6	1.8	1.6	0.79	1.7
METALS AS A BY-PRODUCT OF CORROSION OF CONSUMERS' PLUMBING I											
Copper	ppb	AL = 1300	300	50	NA	NA	90th percentile of 50 samples: 134 ppb | Zero samples exceeded the AL			J	K
Lead	ppb	AL = 15	0.2	5	NA	NA	90th percentile of 50 samples: 2 ppb | Zero samples exceeded the AL			J	K
SECONDARY STANDARDS – AESTHETIC STANDARDS											
PHYSICAL PARAMETERS H											
Color	Units	15	NA	NA	Range	ND - 15	NR	ND - 15	NR	NR	---
					Average	ND	ND	ND	ND	ND	---
Odor Threshold	TON	3	NA	1	Range	1 - 2	NR	NR	NR	1 - 2	---
					Average	1	1	1	1	1	---
pH	pH unit	6.5 - 8.5	NA	NA	Range	6.3 - 8.9	6.3 - 8.9	7.3 - 8.3	6.3 - 8.6	---	---
					Average	8.0	8.1	7.9	7.9	---	---
Turbidity	NTU	5	NA	0.1	Range	ND - 0.4	ND - 0.9	ND - 1	ND - 0.3	ND - 0.3	---
					Average	ND	ND	ND	ND	ND	---



FOOTNOTES

A Total coliform MCLs: No more than 5.0% of the monthly samples may be total coliform-positive. Compliance is based on distribution system samples. The MCL was not violated in 2024.

B Fecal coliform/*E. coli* MCLs: An MCL violation is the occurrence of two (2) consecutive total coliform-positive samples, one of which contains fecal coliform or *E. coli.* There were zero detected fecal coliforms. The MCL was not violated in 2024.

C HPCs were tested only in distribution system samples, which had no detectable chlorine residual. No less than 95% of all distribution system samples in one month may have no detectable chlorine residual and an HPC greater than 500 colony forming units per mL. The HPC results were no less than 98.8% in any month in 2024.

D Bromate is a disinfection by-product resulting from the use of ozone. Currently, the Mills and Skinner Filtration plants use ozone. Values above the MCL may be acceptable so long as the RAA complies with the MCL.

E DLR = 1.0 ppb for each Haloacetic Acid 5 (HAA5) analyte (dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid) except for monochloroacetic acid which has a DLR = 2.0 ppb. Locational running annual averages and ranges are calculated from 12 samples sites collected quarterly throughout the distribution system. HAA5s are a by-product of drinking water chlorination.

F The North Perris System is monitored annually for TTHM and HAA5. Compliance is determined by individual sample results and must be less than or equal to the MCL

G Total Trihalomethanes (TTHMs) are the sum of the following analytes: bromodichloromethane, bromoform, chloroform, and dibromochloromethane. Locational Running Annual Averages (LRAA) and ranges are calculated from 12 sample sites collected quarterly throughout the distribution system. TTHMs are a by-product of drinking water chlorination. Values above the MCL may be acceptable so long as the LRAA complies with the MCL.

H Compliance is determined by the average, however all samples are reviewed and any values outside the compliance range are noted and corrected if possible. Values above the MRDL or MCL may be acceptable so long as the average complies with the MCL.

I Lead and Copper are regulated as a Treatment Technique under the Lead and Copper Rule, which requires EMWD to take 50 water samples at the consumers' tap every three years. Results are from 2022. 20 tap samples are collected within the City of Perris water system service, and 20 tap samples are collected within the North Perris Water System service area every 3 years. Neither lead nor copper are typically found in the source waters but can get into water by way of internal corrosion of household plumbing.

J North Perris Water System last conducted lead and copper tap sampling in 2023. A total of 20 samples were collected, with 90th percentile lead result of <5 ppb and copper result of 180 ppb.

K The City of Perris water system last conducted lead and copper tap sampling in 2024. A total of 20 samples were collected, with 90th percentile lead result of <5 ppb and copper result of 150 ppb.

EASTERN MUNICIPAL WATER DISTRICT 2024 WATER QUALITY TABLE

WE ARE REQUIRED TO MONITOR YOUR DRINKING WATER FOR SPECIFIC CONTAMINANTS ON A REGULAR BASIS. ***RESULTS ARE AN INDICATOR THAT YOUR DRINKING WATER MEETS HEALTH STANDARDS.***

Parameter	Units	State or Federal Maximum Contaminant Level (MCL)	California Public Health Goal (PHG)	State Detection Limit for Reporting (DLR)	MENIFEE, MORENO VALLEY, NORTH CANYON LAKE, PERRIS & WILDOMAR										MURRIETA		HEMET & SAN JACINTO				Major Sources in Drinking Water
					Desalination Complex (L)		Mills Filtration Plant		North Perris Wells		Perris Filtration Plant		Perris Valley Wells (M)		Skinner Filtration Plant		East Valley Wells		Hemet Filtration Plant		
Percent of total water delivered by EMWD	%	---	---	---	15.9%		31.2%				17.3%		3.0%		13.3%		10.4%		8.7%		---
					Range	Average	Range	Average	Range	Average	Range	Average	Range	Average	Range	Average	Range	Average	Range	Average	---
PRIMARY DRINKING WATER STANDARDS – MANDATORY HEALTH-RELATED STANDARDS																					
CLARITY							Highest NTU	% ≤ 0.3	Highest NTU	% ≤ 0.1	Highest NTU	% ≤ 0.1			Highest NTU	% ≤ 0.3			Highest NTU	% ≤ 0.1	
Combined Filter Effluent Turbidity	NTU and %	(N)	NA	(N)	---	---	0.08	100	---	---	0.74	97	---	---	0.07	100	---	---	0.15	100	Soil runoff
INORGANIC CHEMICALS																					
Aluminum	ppb	1000 (O) 200	600	50	NR	ND	ND - 110	ND	NR	ND	NR	ND	NR	ND	ND - 160	74	NR	ND	NR	ND	Residue from water treatment process; natural deposits erosion
Arsenic	ppb	10	0.004	2	NR	ND	NR	ND	NR	ND	NR	ND	NR	2.5	NR	ND	ND - 5.6	2.3	NR	2.3	Natural deposits erosion; runoff from orchards; glass and electronics production wastes
Barium	ppb	1000	2000	100	NR	ND	NR	ND	120 - 140	130	NR	ND	NR	209	NR	116	ND - 187	114	NR	ND	Discharges of oil drilling wastes and from metal refineries; natural deposits erosion
Fluoride (P)	ppm	2.0	1	0.1	NR	ND	0.6 - 0.9	0.7	0.4 - 0.6	0.5	ND - 0.3	ND	NR	0.4	0.6 - 0.8	0.7	0.1 - 0.3	0.2	ND - 0.1	ND	Erosion of natural deposits; discharge from fertilizer and aluminum factories; water additive to promote strong teeth
Hexavalent Chromium	ppb	10	0.02	0.1	NR	ND	NR	ND	ND - 0.2	ND	NR	ND	NR	1.2	NR	ND	NR	ND	NR	ND	Runoff/leaching from natural deposits; discharge from industrial wastes
Nitrate (as N)	ppm	10	10	0.4	ND - 2.1	1.7	NR	0.8	ND - 0.87	0.43	ND - 1.1	ND	5.7 - 6.5	0.6	NR	ND	ND - 3.4	0.75	ND - 1.6	ND	Runoff/leaching from fertilizer use; septic tank and sewage; natural deposits erosion
Nitrite (as N)	ppm	1	1	0.4	ND - 0.53	ND	NR	ND	NR	ND	ND - 0.83	ND	NR	ND	NR	ND	NR	ND	ND - 0.8	ND	Runoff/leaching from fertilizer use; septic tank and sewage; natural deposits erosion
Perchlorate	ppb	6	1	2	NR	ND	NR	ND	NR	ND	NR	ND	NR	2.3	NR	ND	NR	ND	NR	ND	Naturally-occuring in arid regions; industrial waste discharge
Selenium	ppb	50	30	5	NR	ND	NR	ND	NR	ND	NR	ND	NR	ND	NR	ND	ND - 12	ND	NR	ND	Refineries, mines, and chemical waste discharge; runoff from livestock lots
RADIOLOGICALS																					
Gross Alpha	pCi/L	15	MCLG = 0	3	3.3 - 4.5	3.9	NR	ND	ND - 3.9	ND	NR	ND	NR	5.2	ND - 4	ND	ND - 10.6	3.5	NR	ND	Erosion of natural deposits
Gross Beta	pCi/L	50	MCLG = 0	4	13 - 16	14	NR	ND	---	---	NR	12.9	NR	9.6	ND - 5	4	ND - 20	8.5	NR	18.6	Decay of natural and man-made deposits
Radium - 226	pCi/L	5 (Q)	0.05	1	NR	ND	NR	ND	0.38 - 0.72	0.48	NR	ND	NR	ND	NR	ND	NR	ND	NR	ND	Erosion of natural deposits
Radium - 228	pCi/L	5 (Q)	0.019	1	NR	ND	ND - 1	ND	ND - 1.2	ND	NR	ND	NR	ND	NR	ND	NR	ND	NR	ND	Erosion of natural deposits
Uranium	pCi/L	20	0.43	1	NR	ND	NR	ND	1 - 2	1.4	NR	ND	NR	1.8	ND - 3	2	ND - 6.6	2.4	NR	ND	Erosion of natural deposits
SECONDARY DRINKING WATER STANDARDS – AESTHETIC STANDARDS																					
Chloride	ppm	500	NA	NA	95 - 145	115	41 - 67	54	86 - 97	91	48 - 120	71	NR	233	92 - 100	96	9.8 - 105	33	38 - 84	58	Runoff/leaching from natural deposits; seawater influence
Color	units	15	NA	3	NR	ND	1 - 2	2	NR	ND	NR	ND	NR	ND	1 - 2	2	NR	ND	ND - 2.5	1.9	Naturally-ocurring organic materials
Specific Conductance	uS/cm	1600	NA	NA	307 - 629	518	317 - 466	392	591 - 643	612	346 - 1210	502	NR	1120	903 - 917	910	316 - 938	509	280 -527	396	Substances that form ions in water; seawater influence
Iron (R)	ppb	300	NA	100	ND - 668	ND	NR	ND	NR	ND	NR	ND	NR	ND	NR	ND	ND - 213	ND	NR	ND	Leaching from natural deposits; industrial waste
Manganese	ppb	50	500	20	ND - 24	ND	NR	ND	NR	ND	NR	ND	NR	ND	NR	ND	NR	ND	NR	ND	Leaching from natural deposits
Sulfate	ppm	500	NA	0.5	15 - 29	21	21 - 47	34	22 - 34	28	19 - 224	46	NR	53	195 - 203	199	9.7 - 177	56	15 - 46	30	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	ppm	1000	NA	NA	259 - 462	332	178 - 263	220	381 - 412	396	199 - 715	289	800 - 852	826	560 - 572	566	196 - 582	313	157 - 305	228	Runoff/leaching from natural deposits; seawater influence
Turbidity, Laboratory (S)	NTU	5	NA	0.1	NR	ND	NR	ND	ND - 0.3	ND	NR	ND	NR	ND	NR	ND	ND - 0.26	ND	NR	ND	Soil runoff

Represents 2019-2020 Data Values *Represents 2023 Data Values*

FOOTNOTES

(L) Data is representative of the Menifee and Perris I Desalters, and Perris II Desalter, also known as the Desalination Complex.

(M) Values are from Well 59 after granular activated carbon treatment.

(N) The turbidity level of the combined filter effluent at the Mills and Skinner Filtration plants shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1 NTU at any time. For the Perris and Hemet Filtration plants, the turbidity level of the combined filter effluent shall be less than or equal to 0.1 NTU in 95% of the measurements taken each month and shall not exceed 1 NTU at any time. Turbidity is a measure of the cloudiness of the water, is regulated as a treatment technique (TT) and is an indicator of treatment performance.

(O) Aluminum has both primary (1,000 ppb) and secondary (200 ppb) standards (MCLs).

(P) Metropolitan began fluoride treatment of water at Mills and Skinner Filtration plants in 2007.

(Q) The MCL of 5 pCi/Lis for combined radium (radium-226 + radium-228)

(R) Compliance is determined by the average, however all samples are reviewed and any values outside the compliance range are noted and corrected if possible. Values above the MRDL or MCL may be acceptable so long as the average complies with the MCL.

(S) Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Secondary standards were based either on the treatment plant effluent or raw well water.



EASTERN MUNICIPAL WATER DISTRICT 2024 WATER QUALITY TABLE

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Parameter	Units	State or Federal Maximum Contaminant Level (MCL)	California Public Health Goal (PHG)	State Detection Limit for Reporting (DLR)	MENIFEE, MORENO VALLEY, NORTH CANYON LAKE, PERRIS & WILDOMAR										MURRIETA		HEMET & SAN JACINTO				Major Sources in Drinking Water
					Desalination Complex		Mills Filtration Plant		North Perris Wells		Perris Filtration Plant		Perris Valley Wells		Skinner Filtration Plant		East Valley Wells		Hemet Filtration Plant		
					Range	Average	Range	Average	Range	Average	Range	Average	Range	Average	Range	Average	Range	Average	Range	Average	---
OTHER PARAMETERS																					
Alkalinity Total (CaCO3)	ppm	NA	NA	NA	23 - 59	41	68 - 71	70	123 - 139	132	62 - 135	84	NR	121	103 - 107	105	102 - 193	134	57 - 94	72	Naturally-occurring carbonates; measures water's ability to neutralize acid
Boron	ppb	NL = 1000	NA	100	183 - 508	372	NR	130	132 - 190	155	81 - 175	132	NR	381	NR	130	ND - 222	ND	ND - 167	118	Runoff/leaching from natural deposits; industrial wastes
Calcium	ppb	NA	NA	NA	24 - 110	35	15 - 22	18	42 - 49	45	19 - 83	27	NR	84	61 - 62	62	34 - 80	55	14 - 27	19	Naturally-occurring mineral
Hardness as Calcium Carbonate (T)	grains/gallon	NA	NA	NA	4.8 - 27	6.7	4.0 - 5.8	4.9	9.2 - 11	9.9	4.8 - 16	6.8	NR	18	14.1 - 14.2	14.1	5.5 - 14.8	9.4	3.8 - 7.0	5.1	Naturally-occurring; the sum of calcium and magnesium in the water
Magnesium	ppm	NA	NA	NA	5.1 - 44	7.5	8.4 - 11	9.7	13 - 17	14	8.6 - 29	12	NR	24	22 - 23	22	2.3 - 14.6	5.8	7.4 - 13	9.7	Naturally-occurring mineral
Potassium	ppm	NA	NA	NA	1.1 - 4.8	1.4	1.9 - 3.1	2.5	3.3 - 4.1	3.7	2.1 - 5.9	3.1	NR	2.7	4.6 - 4.9	4.8	2.5 - 7.2	4.0	1.9 - 3.8	2.7	Naturally-occurring mineral
Sodium	ppm	NA	NA	NA	44 - 214	57	35 - 54	44	56 - 60	58	36 - 121	55	NR	93	91 - 95	93	23 - 90	39	30 - 63	46	Various natural and man-made sources; TOC is a precursor for the formation of disinfection byproducts
Total Organic Carbon	ppm	TT	NA	0.3	NR	ND	1.5 - 2.5	2.2	0.5 - 0.7	0.6	1.7 - 2.7	2.2	NR	0.4	2.3 - 3.0	2.6	ND - 2.3	0.7	2.0 - 3.2	2.6	Naturally-occurring mineral
UNREGULATED CONTAMINANT MONITORING																					
Lithium	ppb	NA	NA	9	NR	ND	NR	ND	NR	ND	ND - 9.1	ND	NR	10	24 - 32	28	NR	ND	NR	ND	Naturally-occuring; used in electrochemical cells; batteries, and organic syntheses and pharmaceuticals
PERFLUOROALKYL AND POLYFLUOROALKYL SUBSTANCES (PFAS) (U)																					
Perfluorobutanesulfonic acid (PFBS)	ppt	(V)	NA	3	NR	ND	NR	ND	NR	ND	NR	ND	ND - 3.1	ND	NR	ND	NR	ND	NR	ND	Industrial chemical factory discharges; runoff or leaching from landfills; used in fire-retardant foams and various industrial processes
Perfluorobutanoic acid (PFBA)	ppt	NA	NA	5	NR	ND	NR	ND	NR	ND	ND - 5.3	ND	ND - 35	22	NR	ND	NR	ND	NR	ND	
Perfluorohexanoic acid (PFHxA)	ppt	NA	NA	3	NR	ND	NR	ND	NR	ND	NR	ND	ND - 24	5.7	NR	ND	NR	ND	NR	ND	
Perfluoropentanoic acid (PFPeA)	ppt	NA	NA	3	NR	ND	NR	ND	NR	ND	NR	ND	ND - 100	33	NR	ND	NR	ND	NR	ND	



FOOTNOTES

(T) Water hardness, measured in grains per gallon as calcium carbonate, is characterized by the following scale: 0 - 4.4 is soft, 4.4 - 8.8 is moderately hard, 8.8 - 17.5 is hard and greater than 17.5 is very hard.

(U) A total of 29 PFAS compounds were analyzed. Detected compounds are presented in the report, all other PFAS compounds were non-detected.

(V) The State NL and RL is 500 ppt and 5,000 ppt, respectively. EPA MCL's were adopted in April 2024. Compliance is determined by a PFAS mixture containing at least two or more of PFHxS, PFNA, HFPO-DA, and PFBS. The calculated co-occuring levels shall not exceed a Hazard Index of 1 (unitless).

ONE PART PER MILLION (PPM) (mg/L) IS LIKE

- 1 second in 11.5 days
- 1 teaspoon in 1,302 gallons
- 1 drop in 13.6 gallons



The State allows EMWD to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Data presented is from sampling completed in 2024, unless otherwise indicated. Some of EMWD's data, though representative, are more than one year old.

ONE PART PER BILLION (PPB) (mg/L) IS LIKE

- 1 second in nearly 32 years
- 1 teaspoon in 1.3 million gallons
- 1 drop in 13,563 gallons



EMWD supports science-based standards that provide health benefits to the public in an economically balanced manner. Should more stringent standards be set, EMWD will meet them. EMWD's water has met and will continue to meet all regulations.

ONE PART PER TRILLION (PPT) (ng/L) IS LIKE

- 1 second in nearly 32,000 years
- 1 teaspoon in 1.3 billion gallons
- 1 drop in 13,563,368 gallons



Unregulated contaminant monitoring helps EPA and the State Water Board determine where certain contaminants occur and whether the contaminants need to be regulated.

Eastern Municipal Water District
2270 Trumble Road
PO Box 8300
Perris, CA 92572-8300

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Your 2024 Water Quality

CONSUMER CONFIDENCE REPORT

Issued July 2025

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For more information on this report, contact: **Water Quality (951) 928-3777, extension 3327** or visit **www.emwd.org/WaterQuality**.

Why You Should Read This Report

THIS YEAR'S DRINKING WATER QUALITY REPORT…

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- Provides science-based data and facts about the sources, quality, and safety of your drinking water.
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APPENDIX C: REGULATORY DATABASE REPORT

DATABASE REPORT

Project Property:	*Bradley Gardens* *980 W 7th St* *SAN JACINTO CA 92582*
Project No:	*25-560235.1*
Report Type:	*Database Report*
Order No:	*26013000754*
Requested by:	*Partner Engineering and Science, Inc.*
Date Completed:	*February 2, 2026*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

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Executive Summary

Property Information:

Project Property:	*Bradley Gardens* *980 W 7th St SAN JACINTO CA 92582*
Project No:	*25-560235.1*

Coordinates:

Latitude:	*33.7796824*
Longitude:	*-116.9775798*
UTM Northing:	*3,737,725.07*
UTM Easting:	*502,077.07*
UTM Zone:	*11S*

Elevation: *1,528 FT*

Order Information:

Order No:	*26013000754*
Date Requested:	*January 30, 2026*
Requested by:	*Partner Engineering and Science, Inc.*
Report Type:	*Database Report*

Historicals/Products:

Aerial Photographs	*Historical Aerials (with Project Boundaries)*
City Directory Search	*Smart CD Search*
ERIS Xplorer	*ERIS Xplorer*
Excel Add-On	*Excel Add-On*
Fire Insurance Maps	*US Fire Insurance Maps*
Physical Setting Report (PSR)	*Physical Setting Report (PSR)*
Topographic Map	*Topographic Maps*
Vapor Screening Tool	*Vapor Screening Tool*

Executive Summary: Report Summary

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
Standard Environmental Records								
Federal								
NPL	Y	1	0	0	0	0	0	0
PROPOSED NPL	Y	1	0	0	0	0	0	0
DELETED NPL	Y	0.5	0	0	0	0	-	0
SEMS	Y	0.5	0	0	0	0	-	0
ODI	Y	0.5	0	0	0	0	-	0
SEMS ARCHIVE	Y	0.5	0	0	0	**1**	-	**1**
CERCLIS	Y	0.5	0	0	0	**1**	-	**1**
IODI	Y	0.5	0	0	0	0	-	0
CERCLIS NFRAP	Y	0.5	0	0	0	**1**	-	**1**
CERCLIS LIENS	Y	PO	0	-	-	-	-	0
RCRA CORRACTS	Y	1	0	0	0	0	0	0
RCRA TSD	Y	0.5	0	0	0	**4**	-	**4**
RCRA LQG	Y	0.25	0	0	0	-	-	0
RCRA SQG	Y	0.25	0	0	**1**	-	-	**1**
RCRA VSQG	Y	0.25	0	0	0	-	-	0
RCRA NON GEN	Y	0.25	**1**	**4**	**18**	-	-	**23**
RCRA CONTROLS	Y	0.5	0	0	0	0	-	0
FED ENG	Y	0.5	0	0	0	0	-	0
FED INST	Y	0.5	0	0	0	0	-	0
LUCIS	Y	0.5	0	0	0	0	-	0
NPL IC	Y	0.5	0	0	0	0	-	0
ERNS 1982 TO 1986	Y	PO	0	-	-	-	-	0
ERNS 1987 TO 1989	Y	PO	0	-	-	-	-	0
ERNS	Y	PO	0	-	-	-	-	0
FED BROWNFIELDS	Y	0.5	0	0	0	0	-	0
FEMA UST	Y	0.25	0	0	0	-	-	0
FRP	Y	0.25	0	0	0	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
DELISTED FRP	Y	0.25	0	0	0	-	-	0
HIST GAS STATIONS	Y	0.25	0	0	0	-	-	0
REFN	Y	0.25	0	0	0	-	-	0
BULK TERMINAL	Y	0.25	0	0	0	-	-	0
SEMS LIEN	Y	PO	0	-	-	-	-	0
SUPERFUND ROD	Y	1	0	0	0	0	0	0
State								
RESPONSE	Y	1	0	0	0	0	0	0
ENVIROSTOR	Y	1	0	0	0	**1**	0	**1**
DELISTED ENVS	Y	1	0	0	0	0	0	0
SWF/LF	Y	0.5	0	0	0	0	-	0
SWRCB SWF	Y	0.5	0	0	0	0	-	0
WMUD	Y	0.5	0	0	0	0	-	0
HWP	Y	1	0	0	0	0	0	0
SWAT	Y	0.5	0	0	0	0	-	0
C&D DEBRIS RECY	Y	0.5	0	0	0	0	-	0
RECYCLING	Y	0.5	0	0	0	**1**	-	**1**
PROCESSORS	Y	0.5	0	0	0	0	-	0
CONTAINER RECY	Y	0.5	0	0	0	0	-	0
LDS	Y	0.5	0	0	0	0	-	0
LUST	Y	0.5	0	0	**1**	**4**	-	**5**
DELISTED LST	Y	0.5	0	0	0	0	-	0
UST	Y	0.25	0	0	0	-	-	0
UST CLOSURE	Y	0.5	0	0	0	0	-	0
HHSS	Y	0.25	0	0	**3**	-	-	**3**
UST SWEEPS	Y	0.25	0	0	**1**	-	-	**1**
AST	Y	0.25	0	0	0	-	-	0
AST SWRCB	Y	0.25	0	0	0	-	-	0
TANK OIL GAS	Y	0.25	0	0	0	-	-	0
DELISTED TNK	Y	0.25	0	0	0	-	-	0
CERS TANK	Y	0.25	0	0	**1**	-	-	**1**
DELISTED CTNK	Y	0.25	0	0	**1**	-	-	**1**
HIST TANK	Y	0.25	0	0	**3**	-	-	**3**
LUR	Y	0.5	0	0	0	0	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
CALSITES	Y	0.5	0	0	0	**1**	-	**1**
HLUR	Y	0.5	0	0	0	0	-	0
DEED	Y	0.5	0	0	0	0	-	0
VCP	Y	0.5	0	0	0	0	-	0
CLEANUP SITES	Y	0.5	0	0	**1**	0	-	**1**
DELISTED CLEANUP	Y	0.5	0	0	0	0	-	0
DELISTED COUNTY	Y	0.25	0	0	0	-	-	0
DELISTED COUNTY TANK	Y	0.25	0	0	0	-	-	0
DELISTED COUNTY LTANK	Y	0.5	0	0	0	0	-	0
Tribal								
INDIAN LUST	Y	0.5	0	0	0	0	-	0
INDIAN UST	Y	0.25	0	0	0	-	-	0
DELISTED INDIAN LST	Y	0.5	0	0	0	0	-	0
DELISTED INDIAN UST	Y	0.25	0	0	0	-	-	0
County								
LOP RIVERSIDE	Y	0.5	0	0	**1**	**2**	-	**3**
UST RIVERSIDE	Y	0.25	0	0	**1**	-	-	**1**
Additional Environmental Records								
Federal								
PFAS GHG	Y	0.5	0	0	0	0	-	0
OSC RESPONSE	Y	0.125	0	0	-	-	-	0
FINDS/FRS	Y	PO	**1**	**2**	-	-	-	**3**
TRIS	Y	PO	0	-	-	-	-	0
PFAS NPL	Y	0.5	0	0	0	0	-	0
PFAS FED SITES	Y	0.5	0	0	0	0	-	0
PFAS SSEHRI	Y	0.5	0	0	0	0	-	0
PFAS ERNS	Y	0.5	0	0	0	0	-	0
PFAS NPDES	Y	0.5	0	0	0	0	-	0
PFAS TRI	Y	0.5	0	0	0	0	-	0
PFAS WATER	Y	0.5	0	0	0	0	-	0
PFAS TSCA	Y	0.5	0	0	0	0	-	0
PFAS E-MANIFEST	Y	0.5	0	0	0	0	-	0
PFAS IND	Y	0.5	0	0	0	0	-	0
HMIRS	Y	0.125	0	0	-	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
NCDL	Y	0.125	0	0	-	-	-	0
TSCA	Y	0.125	0	0	-	-	-	0
HIST TSCA	Y	0.125	0	0	-	-	-	0
FTTS ADMIN	Y	PO	0	-	-	-	-	0
FTTS INSP	Y	PO	0	-	-	-	-	0
PRP	Y	PO	0	-	-	-	-	0
SCRD DRYCLEANER	Y	0.5	0	0	0	0	-	0
ICIS	Y	PO	0	-	-	-	-	0
FED DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DELISTED FED DRY	Y	0.25	0	0	0	-	-	0
FUDS	Y	1	0	0	0	0	0	0
FUDS MRS	Y	1	0	0	0	0	0	0
FORMER NIKE	Y	1	0	0	0	0	0	0
PIPELINE INCIDENT	Y	PO	0	-	-	-	-	0
MLTS	Y	PO	0	-	-	-	-	0
HIST MLTS	Y	PO	0	-	-	-	-	0
MINES	Y	0.25	0	0	0	-	-	0
SMCRA	Y	1	0	0	0	0	0	0
MRDS	Y	1	0	0	0	0	0	0
LM SITES	Y	1	0	0	0	0	0	0
ALT FUELS	Y	0.25	0	0	0	-	-	0
CONSENT DECREES	Y	0.25	0	0	0	-	-	0
AFS	Y	PO	0	-	-	-	-	0
SSTS	Y	0.25	0	0	**1**	-	-	**1**
PCBT	Y	0.5	0	0	0	0	-	0
PCB	Y	0.5	0	0	0	0	-	0
POWER PLANTS	Y	0.125	0	0	-	-	-	0
HIST RISK	Y	0.125	0	0	-	-	-	0
State								
PFAS SAMPLING	Y	0.5	0	0	0	0	-	0
DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DELISTED DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DRYC GRANT	Y	0.25	0	0	0	-	-	0
PFAS GT CLEANUPS	Y	0.5	0	0	0	0	-	0
PFAS GW	Y	0.5	0	0	0	0	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
PFAS INVEST	Y	0.5	0	0	0	0	-	0
HWSS CLEANUP	Y	0.5	0	0	0	0	-	0
TOXIC PITS	Y	1	0	0	0	0	0	0
DTSC HWF	Y	0.5	0	0	0	0	-	0
INSP COMP ENF	Y	1	0	0	0	0	0	0
SCH	Y	1	0	0	0	0	**3**	**3**
CHMIRS	Y	PO	0	-	-	-	-	0
HIST CHMIRS	Y	PO	0	-	-	-	-	0
HAZNET	Y	PO	0	-	-	-	-	0
HAZ GEN	Y	PO	0	-	-	-	-	0
HAZ TSD	Y	0.5	0	0	0	**1**	-	**1**
HIST MANIFEST	Y	PO	0	-	-	-	-	0
HW TRANSPORT	Y	0.125	0	0	-	-	-	0
WASTE TIRE	Y	PO	0	-	-	-	-	0
MEDICAL WASTE	Y	0.25	0	0	0	-	-	0
HIST CORTESE	Y	0.5	0	0	0	0	-	0
CDO/CAO	Y	0.5	0	0	0	0	-	0
CERS HAZ	Y	0.125	0	**1**	-	-	-	**1**
DELISTED HAZ	Y	0.5	0	0	0	**1**	-	**1**
GEOTRACKER	Y	0.125	0	0	-	-	-	0
MINE	Y	1	0	0	0	0	0	0
LIEN	Y	PO	0	-	-	-	-	0
WASTE DISCHG	Y	0.25	0	0	0	-	-	0
EMISSIONS	Y	0.25	0	**2**	**7**	-	-	**9**
CDL	Y	0.125	0	**2**	-	-	-	**2**
Tribal	***No Tribal additional environmental record sources available for this State.***							
County								
HWG RIVERSIDE	Y	0.125	0	0	-	-	-	0
HZH RIVERSIDE	Y	0.125	0	**1**	-	-	-	**1**
MED WST RIVERSIDE	Y	0.25	**1**	0	**1**	-	-	**2**
RMP RIVERSIDE	Y	PO	0	**1**	-	-	-	**1**
Total:			***3***	***13***	***41***	***18***	***3***	***78***

**** PO – Property Only***
**** 'Property and adjoining properties' database search radii are set at 0.25 miles.***

Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
1	FINDS/FRS	GHD OF SAN JACINTO LLC DBA THE BRADLEY GARDENS	980 W 7TH ST SAN JACINTO CA 92582 ***Registry ID:*** *110071738266*	ENE	0.00 / 0.00	0	32
1	MED WST RIVERSIDE	The Bradley Gardens OOB	980 W 7th St San Jacinto CA 92582-3814	ENE	0.00 / 0.00	0	32
1	RCRA NON GEN	GHD OF SAN JACINTO LLC DBA THE BRADLEY GARDENS	980 W 7TH ST SAN JACINTO CA 92582 ***Handler ID | Recycler Activity?:*** *CAL000485599 | NO*	ENE	0.00 / 0.00	0	33

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
2	CERS HAZ	Talley Metal Fabrication	989 W 7TH ST SAN JACINTO CA 92583	NNW	0.02 / 99.23	-1	35
2	EMISSIONS	J TALLEY CORP, TALLEY & OCHOA METAL FAB.	989 W SEVENTH ST SAN JACINTO CA 92582	NNW	0.02 / 99.23	-1	38
2	FINDS/FRS	TALLEY METAL FABRICATION	989 W 7TH ST SAN JACINTO CA 92582 ***Registry ID:*** 110070089402	NNW	0.02 / 99.23	-1	43
2	FINDS/FRS	J TALLEY CORP, TALLEY & OCHOA METAL FAB.	989 W SEVENTH ST SAN JACINTO CA 92582 ***Registry ID:*** 110071787626	NNW	0.02 / 99.23	-1	44
2	HZH RIVERSIDE	Talley Metal Fabrication	989 W 7th St CA	NNW	0.02 / 99.23	-1	44
2	RMP RIVERSIDE	Talley Metal Fabrication	989 W 7th St San Jacinto CA 92583	NNW	0.02 / 99.23	-1	45
3	EMISSIONS	GUADALAJARA IMPORTS INC	885 W 7TH ST SAN JACINTO CA 92583	ENE	0.06 / 333.12	1	45
4	RCRA NON GEN	871 W 7TH ST	871 W 7TH ST SAN JACINTO CA 92582 ***Handler ID | Recycler Activity?:*** CAC003071156 | NO	ENE	0.09 / 450.23	1	47
5	CDL		913 S GRANT, #18 SAN JACINTO CA 92582	SSW	0.10 / 501.75	0	49
5	CDL		913 SOUTH GRAND AVE #24 SAN JACINTO CA 92583	SSW	0.10 / 501.75	0	49
6	RCRA NON GEN	AMER-MEX MFG INC	861 W 9TH ST SAN JACINTO CA 92582 ***Handler ID | Recycler Activity?:*** CAL000456896 | NO	ESE	0.10 / 517.25	2	49
7	RCRA NON GEN	FRED KORNOFF	825B 9TH STREET SAN JACINTO CA 92582 ***Handler ID | Recycler Activity?:*** CAC003284234 | NO	ESE	0.10 / 546.63	2	51

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
8	RCRA NON GEN	LO LYNCH INC	856 W 7TH ST SAN JACINTO CA 92582	E	0.11 / 557.87	2	54
			***Handler ID	Recycler Activity?:*** CAL000257320 | NO			
9	RCRA NON GEN	DIESEL REPAIR DEPOT	590 S GRAND AVE SAN JACINTO CA 92583	NNW	0.16 / 821.09	-3	56
			***Handler ID	Recycler Activity?:*** CAC003339707 | NO			
10	RCRA NON GEN	DISCOVERY MOOD & ANXIETY	1119 W 7TH ST SAN JACINTO CA 92582	W	0.16 / 844.97	-3	59
			***Handler ID	Recycler Activity?:*** CAL000473020 | NO			
11	EMISSIONS	ALL-SPEC ENCLOSURES, INC.	582 S GRAND AVE SAN JACINTO CA 92582	N	0.18 / 968.34	-3	61
12	RCRA NON GEN	SIN LEY AUTO	1090 INVESTORS PL SAN JACINTO CA 92582-3874 ***Handler ID	Recycler Activity?:*** CAL000395276 | NO	NW	0.19 / 978.16	-5	61
13	RCRA NON GEN	RA SERVICE REPAIR LLC	1035 INVESTOR PL SAN JACINTO CA 92583	NNW	0.19 / 998.02	-4	63
			***Handler ID	Recycler Activity?:*** CAL000438194 | NO			
13	RCRA NON GEN	RIVIERA RACING LLC	1035 INVESTORS PL SAN JACINTO CA 92582-3874 ***Handler ID	Recycler Activity?:*** CAL000386752 | NO	NNW	0.19 / 998.02	-4	66
14	RCRA SQG	VENABLE RESEARCH & DVPT CORP	586 GRAND AVE SAN JACINTO CA 92582	N	0.20 / 1,041.45	-2	68
			***Handler ID	Recycler Activity?:*** CAD983593757 | NO			
15	RCRA NON GEN	LATINOS AUTO REPAIR	998 ENTERPRISE AVE SAN JACINTO CA 92582-3880 ***Handler ID	Recycler Activity?:*** CAL000303875 | NO	NNW	0.21 / 1,101.55	-3	70
16	RCRA NON GEN	OMAR RODRIGUEZ DBA PERFORMANCE AUTO LUBE	1012 ENTERPRISE AVE SAN JACINTO CA 92582	NNW	0.21 / 1,105.09	-3	72
			***Handler ID	Recycler Activity?:*** CAL000439912 | NO			
17	EMISSIONS	GRAND AUTO BODY & MECH,ISABEL L30ENZANA	556 GRAND AVE SAN JACINTO CA 92582	N	0.22 / 1,154.95	-1	74
17	EMISSIONS	GRAND AUTO BODY & MECH,ISABEL LORENZANA	556 GRAND AVE SAN JACINTO CA 92582	N	0.22 / 1,154.95	-1	75
18	MED WST RIVERSIDE	Primo's Auto Repair / OOB	718 W 7th St Hemet CA 92583	E	0.23 / 1,214.40	4	75

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
18	RCRA NON GEN	SIN-LEY TIRES & WHEELS	718 W 7TH ST SAN JACINTO CA 92582 ***Handler ID	Recycler Activity?:*** CAL000433607 | NO	E	0.23 / 1,214.40	4	76
19	RCRA NON GEN	TIME OUT AUTO INC	1054 ENTERPRISE AVE SAN JACINTO CA 95983 ***Handler ID	Recycler Activity?:*** CAL000465610 | NO	NNW	0.24 / 1,263.88	-5	78
20	EMISSIONS	MATTHEWS INTL. C30P., BRONZE DIV.	580 STATE ST UNIT 108 SAN JACINTO CA 92583	ENE	0.24 / 1,264.31	4	80
20	EMISSIONS	MATTHEWS INTL. CORP., BRONZE DIV.	580 STATE ST UNIT 108 SAN JACINTO CA 92583	ENE	0.24 / 1,264.31	4	80
20	EMISSIONS	SAN JACINTO AUTO COLLISION	580 S STATE ST UNIT 5 SAN JACINTO CA 92583	ENE	0.24 / 1,264.31	4	80
20	RCRA NON GEN	MATTHEWS INTERNATIONAL CORPORATION	580 S. STATE STREET STE. 8 SAN JACINTO CA 92583 ***Handler ID	Recycler Activity?:*** CAP000339291 | NO	ENE	0.24 / 1,264.31	4	81
21	CERS TANK	Nutrien Ag Solutions - San Jacinto	801 S GRAND AVE SAN JACINTO CA 92582 ***Site ID:*** 390750	NNE	0.24 / 1,283.04	3	83
21	HHSS	WESTERN FARM SERVICE INC	801 S GRAND AVENUE SAN JACINTO CA 92383	NNE	0.24 / 1,283.04	3	96
21	HIST TANK	WESTERN FARM SERVICE, INC.	801 S. GRAND AVENUE SAN JACINTO CA	NNE	0.24 / 1,283.04	3	96
21	RCRA NON GEN	NUTRIEN AG SOLUTIONS	801 S GRAND AVE SAN JACINTO CA 92583 ***Handler ID	Recycler Activity?:*** CAD982030744 | NO	NNE	0.24 / 1,283.04	3	96
21	SSTS	Nutrien Ag Solutions 603	801 South Grand Avenue - San Jacinto CA 92582 ***Establishment No:*** 51896-CA-60	NNE	0.24 / 1,283.04	3	99
22	CLEANUP SITES	MINIMART	700 S STATE ST SAN JACINTO CA 92583 ***Global ID:*** T0606500525	E	0.24 / 1,287.40	5	100
22	HHSS	WAHL TEXACO	700 S. STATE ST. SAN JACINTO CA 92383	E	0.24 / 1,287.40	5	102

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
22	HHSS	TEXACO SERVICE STATION	700 S STATE STREET SAN JACINTO CA 92383	E	0.24 / 1,287.40	5	102
22	HIST TANK	TEXACO SERVICE STATION	700 S. STATE STREET SAN JACINTO CA	E	0.24 / 1,287.40	5	103
22	HIST TANK	WAHL TEXACO	700 S. STATE ST. SAN JACINTO CA	E	0.24 / 1,287.40	5	103
22	LOP RIVERSIDE	Texaco Wahl's	700 S State St San Jacinto CA	E	0.24 / 1,287.40	5	103
			***Site ID	Status Desc:*** 87207 | CLOSED/ACTION COMPLETED			
22	LUST	TEXACO WAHL'S	700 S STATE ST SAN JACINTO CA 92383	E	0.24 / 1,287.40	5	103
			***Global ID	Status:*** T0606500201 |			
22	UST RIVERSIDE	Paul's Gas & Mini MartOOB	700 S State St San Jacinto CA 92583-4909	E	0.24 / 1,287.40	5	106
			Establishment ID: FA0016468 ***Status	No of Underground Storage:*** Inactive | 5			
22	UST SWEEPS	TEXACO STATION	700 S STATE ST SAN JACINTO CA	E	0.24 / 1,287.40	5	106
			***C C	Status:*** A33-000-13449 | ACTIVE ***Tank ID:*** 000003, 000001, 000002, 000004			
23	RCRA NON GEN	PERFORMANCE TRANSMISSION #2	1043 ENTERPRISE AVE SAN JACINTO CA 92582	NNW	0.24 / 1,288.39	-4	107
			***Handler ID	Recycler Activity?:*** CAL000350105 | NO			
23	RCRA NON GEN	PERFORMANCE TRANSMISSION INC	1043 ENTERPRISE AVE SAN JACINTO CA 92582	NNW	0.24 / 1,288.39	-4	110
			***Handler ID	Recycler Activity?:*** CAL000449097 | NO			
24	DELISTED CTNK	Greco	530 N GRECO CT SAN JACINTO CA 92582	NE	0.24 / 1,289.98	3	112
25	RCRA NON GEN	CM MACHINE INC	560 S GRAND AVE SAN JACINTO CA 92582	N	0.24 / 1,291.27	0	112
			***Handler ID	Recycler Activity?:*** CAC003324934 | NO			
26	RCRA NON GEN	PROBITY AUTOMOTIVE SPECIALISTS	1092 ENTERPRISE AVE SAN JACINTO CA 92582-3802	NW	0.25 / 1,295.51	-6	115
			***Handler ID	Recycler Activity?:*** CAL000315988 | NO			
27	RCRA NON GEN	NACHOS AUTO ELECTRIC	995 ENTERPRISE AVE SAN JACINTO CA 92582	N	0.25 / 1,301.52	-3	117

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
			Handler ID | Recycler Activity?: CAL000349702 | NO				
27	RCRA NON GEN	PINK'S MOTOR SERVICE INC	995 ENTERPRISE AVE SAN JACINTO CA 92582	N	0.25 / 1,301.52	-3	119
			Handler ID | Recycler Activity?: CAL000474926 | NO				
28	EMISSIONS	AUTOMOTIVE COLLISION REFINISH SPECIALIST	1011 ENTERPRISE AVE SAN JACINTO CA 92582	NNW	0.25 / 1,304.01	-3	121
28	RCRA NON GEN	AUTOMOTIVE COLLISION & REFINISH SPECIALISTS	1011 ENTERPRISE AVE SAN JACINTO CA 92582-3802	NNW	0.25 / 1,304.01	-3	123
			Handler ID | Recycler Activity?: CAL000328243 | NO				
29	RCRA TSD	J&H FLEET SERVICE & AUTOMOTIVE REPAIR	1093 ENTERPRISE AVE SAN JACINTO CA 92582	NW	0.28 / 1,460.04	-6	125
			Handler ID | Recycler Activity?: CAL000445956 | YES				
30	HAZ TSD	PALMER NATURAL PRODUCTS	831 S STATE ST STE C SAN JACINTO CA 925834919	E	0.29 / 1,546.45	6	128
31	LUST	SAN JACINTO CITY YARD	910 INDUSTRIAL WAY SAN JACINTO CA 92583	NNE	0.30 / 1,571.32	3	128
			Global ID | Status: T0606500470 |				
32	RCRA TSD	JATT BROTHERS, INC DBA MOBIL	697 SOUTH STATE STREET SAN JACINTO CA 92583	E	0.30 / 1,578.20	7	131
			Handler ID | Recycler Activity?: CAC003007890 | NO				
33	LOP RIVERSIDE	Discount Furniture	711 S State St San Jacinto CA	E	0.30 / 1,606.22	7	133
			Site ID | Status Desc: 970374 | CLOSED/ACTION COMPLETED				
33	LUST	DISCOUNT FURNITURE	711 S STATE ST SAN JACINTO CA 92583	E	0.30 / 1,606.22	7	134
			Global ID | Status: T0606500493 |				
34	LUST	CIRCLE K #1271	697 S STATE ST SAN JACINTO CA 92383	E	0.31 / 1,626.18	7	137
			Global ID | Status: T0606500073 |				
35	RCRA TSD	AYS & ASSOCIATES INC DBA AYS AUTO GROUP	1102 S STATE ST UNIT 1 SAN JACINTO CA 92583	ESE	0.33 / 1,758.03	7	140
			Handler ID | Recycler Activity?: CAL000445867 | YES				
36	DELISTED HAZ	Autohaus Bavaria	691 W 7TH ST SAN JACINTO CA 92583	E	0.35 / 1,832.26	9	142

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
37	RECYCLING	Cash 4 Cans Recycle Llc	494 N Scovell Ave San Jacinto CA 92582	NE	0.39 / 2,045.04	7	142
38	CALSITES	AGRI-EMPIRE COMPANY	630 WEST 7TH STREET SAN JACINTO CA 92383	E	0.42 / 2,207.14	11	143
38	ENVIROSTOR	AGRI-EMPIRE COMPANY	630 WEST 7TH STREET SAN JACINTO CA 92383 ***Envirostor ID:*** 33280152 ***Cleanup Status:*** NO FURTHER ACTION AS OF 8/3/1988	E	0.42 / 2,207.14	11	143
38	RCRA TSD	BRUNO FARMS INC	630 W 7TH ST SAN JACINTO CA 92583 ***Handler ID | Recycler Activity?:*** CAL000445402 | YES	E	0.42 / 2,207.14	11	145
39	CERCLIS	AGRI EMPIRE CO	S MAIN AND 7TH SAN JACINTO CA 92383 ***Site EPA ID:*** CAD981569999	E	0.43 / 2,256.20	12	147
39	CERCLIS NFRAP	AGRI EMPIRE CO	S MAIN AND 7TH SAN JACINTO CA 92383 ***Site EPA ID:*** CAD981569999	E	0.43 / 2,256.20	12	149
39	SEMS ARCHIVE	AGRI EMPIRE CO	S MAIN AND 7TH SAN JACINTO CA 92383 ***EPA ID:*** CAD981569999	E	0.43 / 2,256.20	12	150
40	LOP RIVERSIDE	Inland Commercial Fueling Inc	315 S State St San Jacinto CA ***Site ID | Status Desc:*** 9915143 | CLOSED/ACTION COMPLETED	NE	0.43 / 2,288.39	11	150
41	LUST	INLAND COMMERCIAL FUELING	315 S STATE ST SAN JACINTO CA 92583 ***Global ID | Status:*** T0606500591 |	NE	0.43 / 2,292.22	11	151
42	SCH	NEW HIGH SCHOOL SITE NO. 6	Commonwealth Avenue/Cawston Avenue San Jacinto CA 92583 ***Envirostor ID:*** 33010079 ***Cleanup Status:*** NO FURTHER ACTION AS OF 11/10/2003	SW	0.89 / 4,704.68	18	154
43	SCH	San Jacinto High School Expansion Site	500 Idyllwild Drive San Jacinto CA 92583 ***Envirostor ID:*** 60000229 ***Cleanup Status:*** NO ACTION REQUIRED AS OF 5/8/2006	NE	0.99 / 5,240.41	10	156
44	SCH	Lyon Ave. New Elementary & Middle Schools	425 North Lyon Avenue San Jacinto CA 92582 ***Envirostor ID:*** 60001838 ***Cleanup Status:*** CERTIFIED AS OF 1/21/2020	NW	1.00 / 5,262.94	-19	158

Executive Summary: Summary by Data Source

Standard

Federal

SEMS ARCHIVE - SEMS List 8R Archive Sites

A search of the SEMS ARCHIVE database, dated Aug 27, 2025 has found that there are 1 SEMS ARCHIVE site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
AGRI EMPIRE CO	S MAIN AND 7TH SAN JACINTO CA 92383	E	0.43 / 2,256.20	39
	***EPA ID**: CAD981569999*			

CERCLIS - Comprehensive Environmental Response, Compensation and Liability Information System - CERCLIS

A search of the CERCLIS database, dated Oct 25, 2013 has found that there are 1 CERCLIS site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
AGRI EMPIRE CO	S MAIN AND 7TH SAN JACINTO CA 92383	E	0.43 / 2,256.20	39
	***Site EPA ID**: CAD981569999*			

CERCLIS NFRAP - CERCLIS - No Further Remedial Action Planned

A search of the CERCLIS NFRAP database, dated Oct 25, 2013 has found that there are 1 CERCLIS NFRAP site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
AGRI EMPIRE CO	S MAIN AND 7TH SAN JACINTO CA 92383	E	0.43 / 2,256.20	39
	***Site EPA ID**: CAD981569999*			

RCRA TSD - RCRA non-CORRACTS TSD Facilities

A search of the RCRA TSD database, dated Nov 30, 2025 has found that there are 4 RCRA TSD site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
JATT BROTHERS, INC DBA MOBIL	697 SOUTH STATE STREET SAN JACINTO CA 92583	E	0.30 / 1,578.20	32
	***Handler ID** | **Recycler Activity?**: CAC003007890 | NO*			
AYS & ASSOCIATES INC DBA AYS AUTO GROUP	1102 S STATE ST UNIT 1 SAN JACINTO CA 92583	ESE	0.33 / 1,758.03	35
	***Handler ID** | **Recycler Activity?**: CAL000445867 | YES*			

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
BRUNO FARMS INC	630 W 7TH ST SAN JACINTO CA 92583	E	0.42 / 2,207.14	38
	Handler ID* | *Recycler Activity?: *CAL000445402* | *YES*			

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
J&H FLEET SERVICE & AUTOMOTIVE REPAIR	1093 ENTERPRISE AVE SAN JACINTO CA 92582	NW	0.28 / 1,460.04	29
	Handler ID* | *Recycler Activity?: *CAL000445956* | *YES*			

RCRA SQG - RCRA Small Quantity Generators List

A search of the RCRA SQG database, dated Nov 30, 2025 has found that there are 1 RCRA SQG site(s) within approximately 0.25 miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
VENABLE RESEARCH & DVPT CORP	586 GRAND AVE SAN JACINTO CA 92582	N	0.20 / 1,041.45	14
	Handler ID* | *Recycler Activity?: *CAD983593757* | *NO*			

RCRA NON GEN - RCRA Non-Generators

A search of the RCRA NON GEN database, dated Nov 30, 2025 has found that there are 23 RCRA NON GEN site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
GHD OF SAN JACINTO LLC DBA THE BRADLEY GARDENS	980 W 7TH ST SAN JACINTO CA 92582	ENE	0.00 / 0.00	1
	Handler ID* | *Recycler Activity?: *CAL000485599* | *NO*			
871 W 7TH ST	871 W 7TH ST SAN JACINTO CA 92582	ENE	0.09 / 450.23	4
	Handler ID* | *Recycler Activity?: *CAC003071156* | *NO*			
AMER-MEX MFG INC	861 W 9TH ST SAN JACINTO CA 92582	ESE	0.10 / 517.25	6
	Handler ID* | *Recycler Activity?: *CAL000456896* | *NO*			
FRED KORNOFF	825B 9TH STREET SAN JACINTO CA 92582	ESE	0.10 / 546.63	7
	Handler ID* | *Recycler Activity?: *CAC003284234* | *NO*			
LO LYNCH INC	856 W 7TH ST SAN JACINTO CA 92582	E	0.11 / 557.87	8
	Handler ID* | *Recycler Activity?: *CAL000257320* | *NO*			
SIN-LEY TIRES & WHEELS	718 W 7TH ST SAN JACINTO CA 92582	E	0.23 / 1,214.40	18
	Handler ID* | *Recycler Activity?: *CAL000433607* | *NO*			
MATTHEWS INTERNATIONAL CORPORATION	580 S. STATE STREET STE. 8 SAN JACINTO CA 92583	ENE	0.24 / 1,264.31	20

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
	Handler ID* | *Recycler Activity?: *CAP000339291* | *NO*			
NUTRIEN AG SOLUTIONS	801 S GRAND AVE SAN JACINTO CA 92583	NNE	0.24 / 1,283.04	21
	Handler ID* | *Recycler Activity?: *CAD982030744* | *NO*			
CM MACHINE INC	560 S GRAND AVE SAN JACINTO CA 92582	N	0.24 / 1,291.27	25
	Handler ID* | *Recycler Activity?: *CAC003324934* | *NO*			

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
DIESEL REPAIR DEPOT	590 S GRAND AVE SAN JACINTO CA 92583	NNW	0.16 / 821.09	9
	Handler ID* | *Recycler Activity?: *CAC003339707* | *NO*			
DISCOVERY MOOD & ANXIETY	1119 W 7TH ST SAN JACINTO CA 92582	W	0.16 / 844.97	10
	Handler ID* | *Recycler Activity?: *CAL000473020* | *NO*			
SIN LEY AUTO	1090 INVESTORS PL SAN JACINTO CA 92582-3874	NW	0.19 / 978.16	12
	Handler ID* | *Recycler Activity?: *CAL000395276* | *NO*			
RIVIERA RACING LLC	1035 INVESTORS PL SAN JACINTO CA 92582-3874	NNW	0.19 / 998.02	13
	Handler ID* | *Recycler Activity?: *CAL000386752* | *NO*			
RA SERVICE REPAIR LLC	1035 INVESTOR PL SAN JACINTO CA 92583	NNW	0.19 / 998.02	13
	Handler ID* | *Recycler Activity?: *CAL000438194* | *NO*			
LATINOS AUTO REPAIR	998 ENTERPRISE AVE SAN JACINTO CA 92582-3880	NNW	0.21 / 1,101.55	15
	Handler ID* | *Recycler Activity?: *CAL000303875* | *NO*			
OMAR RODRIGUEZ DBA PERFORMANCE AUTO LUBE	1012 ENTERPRISE AVE SAN JACINTO CA 92582	NNW	0.21 / 1,105.09	16
	Handler ID* | *Recycler Activity?: *CAL000439912* | *NO*			
TIME OUT AUTO INC	1054 ENTERPRISE AVE SAN JACINTO CA 95983	NNW	0.24 / 1,263.88	19
	Handler ID* | *Recycler Activity?: *CAL000465610* | *NO*			
PERFORMANCE TRANSMISSION #2	1043 ENTERPRISE AVE SAN JACINTO CA 92582	NNW	0.24 / 1,288.39	23
	Handler ID* | *Recycler Activity?: *CAL000350105* | *NO*			
PERFORMANCE TRANSMISSION INC	1043 ENTERPRISE AVE SAN JACINTO CA 92582	NNW	0.24 / 1,288.39	23
	Handler ID* | *Recycler Activity?: *CAL000449097* | *NO*			

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
PROBITY AUTOMOTIVE SPECIALISTS	1092 ENTERPRISE AVE SAN JACINTO CA 92582-3802	NW	0.25 / 1,295.51	26
	Handler ID* | *Recycler Activity?: *CAL000315988* | *NO*			
NACHOS AUTO ELECTRIC	995 ENTERPRISE AVE SAN JACINTO CA 92582	N	0.25 / 1,301.52	27
	Handler ID* | *Recycler Activity?: *CAL000349702* | *NO*			
PINK'S MOTOR SERVICE INC	995 ENTERPRISE AVE SAN JACINTO CA 92582	N	0.25 / 1,301.52	27
	Handler ID* | *Recycler Activity?: *CAL000474926* | *NO*			
AUTOMOTIVE COLLISION & REFINISH SPECIALISTS	1011 ENTERPRISE AVE SAN JACINTO CA 92582-3802	NNW	0.25 / 1,304.01	28
	Handler ID* | *Recycler Activity?: *CAL000328243* | *NO*			

State

ENVIROSTOR - EnviroStor Database

A search of the ENVIROSTOR database, dated Oct 2, 2025 has found that there are 1 ENVIROSTOR site(s) within approximately 1.00 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
AGRI-EMPIRE COMPANY	630 WEST 7TH STREET SAN JACINTO CA 92383	E	0.42 / 2,207.14	38
	Envirostor ID: *33280152* ***Cleanup Status***: *NO FURTHER ACTION AS OF 8/3/1988*			

RECYCLING - Recycling Centers

A search of the RECYCLING database, dated Nov 16, 2025 has found that there are 1 RECYCLING site(s) within approximately 0.50 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Cash 4 Cans Recycle Llc	494 N Scovell Ave San Jacinto CA 92582	NE	0.39 / 2,045.04	37

LUST - Leaking Underground Fuel Tank Reports

A search of the LUST database, dated Aug 11, 2025 has found that there are 5 LUST site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
TEXACO WAHL'S	700 S STATE ST SAN JACINTO CA 92383	E	0.24 / 1,287.40	22
	Global ID* | *Status: *T0606500201* |			
SAN JACINTO CITY YARD	910 INDUSTRIAL WAY SAN JACINTO CA 92583	NNE	0.30 / 1,571.32	31

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
	Global ID* | *Status: *T0606500470* |			
DISCOUNT FURNITURE	711 S STATE ST SAN JACINTO CA 92583	E	0.30 / 1,606.22	33
	Global ID* | *Status: *T0606500493* |			
CIRCLE K #1271	697 S STATE ST SAN JACINTO CA 92383	E	0.31 / 1,626.18	34
	Global ID* | *Status: *T0606500073* |			
INLAND COMMERCIAL FUELING	315 S STATE ST SAN JACINTO CA 92583	NE	0.43 / 2,292.22	41
	Global ID* | *Status: *T0606500591* |			

HHSS - Historical Hazardous Substance Storage Information Database

A search of the HHSS database, dated Aug 27, 2015 has found that there are 3 HHSS site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
WESTERN FARM SERVICE INC	801 S GRAND AVENUE SAN JACINTO CA 92383	NNE	0.24 / 1,283.04	21
TEXACO SERVICE STATION	700 S STATE STREET SAN JACINTO CA 92383	E	0.24 / 1,287.40	22
WAHL TEXACO	700 S. STATE ST. SAN JACINTO CA 92383	E	0.24 / 1,287.40	22

UST SWEEPS - Statewide Environmental Evaluation and Planning System

A search of the UST SWEEPS database, dated Oct 1, 1994 has found that there are 1 UST SWEEPS site(s) within approximately 0.25 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
TEXACO STATION	700 S STATE ST SAN JACINTO CA	E	0.24 / 1,287.40	22
	C C* | *Status: *A33-000-13449* | *ACTIVE* ***Tank ID***: *000003, 000001, 000002, 000004*			

CERS TANK - California Environmental Reporting System (CERS) Tanks

A search of the CERS TANK database, dated Jan 12, 2026 has found that there are 1 CERS TANK site(s) within approximately 0.25 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Nutrien Ag Solutions - San Jacinto	801 S GRAND AVE SAN JACINTO CA 92582	NNE	0.24 / 1,283.04	21

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
	***Site ID**: 390750*			

DELISTED CTNK - Delisted California Environmental Reporting System (CERS) Tanks

A search of the DELISTED CTNK database, dated Jan 12, 2026 has found that there are 1 DELISTED CTNK site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Greco	530 N GRECO CT SAN JACINTO CA 92582	NE	0.24 / 1,289.98	24

HIST TANK - Historical Hazardous Substance Storage Container Information - Facility Summary

A search of the HIST TANK database, dated May 27, 1988 has found that there are 3 HIST TANK site(s) within approximately 0.25 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
WESTERN FARM SERVICE, INC.	801 S. GRAND AVENUE SAN JACINTO CA	NNE	0.24 / 1,283.04	21
WAHL TEXACO	700 S. STATE ST. SAN JACINTO CA	E	0.24 / 1,287.40	22
TEXACO SERVICE STATION	700 S. STATE STREET SAN JACINTO CA	E	0.24 / 1,287.40	22

CALSITES - CALSITES Database

A search of the CALSITES database, dated May 1, 2004 has found that there are 1 CALSITES site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
AGRI-EMPIRE COMPANY	630 WEST 7TH STREET SAN JACINTO CA 92383	E	0.42 / 2,207.14	38

CLEANUP SITES - GeoTracker Cleanup Program Sites

A search of the CLEANUP SITES database, dated Aug 11, 2025 has found that there are 1 CLEANUP SITES site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
MINIMART	700 S STATE ST SAN JACINTO CA 92583	E	0.24 / 1,287.40	22
	***Global ID**: T0606500525*			

County

LOP RIVERSIDE - Riverside County - Local Oversight Program List

A search of the LOP RIVERSIDE database, dated Feb 6, 2024 has found that there are 3 LOP RIVERSIDE site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Texaco Wahl's	700 S State St San Jacinto CA	E	0.24 / 1,287.40	22
	Site ID* | *Status Desc: *87207* | *CLOSED/ACTION COMPLETED*			
Discount Furniture	711 S State St San Jacinto CA	E	0.30 / 1,606.22	33
	Site ID* | *Status Desc: *970374* | *CLOSED/ACTION COMPLETED*			
Inland Commercial Fueling Inc	315 S State St San Jacinto CA	NE	0.43 / 2,288.39	40
	Site ID* | *Status Desc: *9915143* | *CLOSED/ACTION COMPLETED*			

UST RIVERSIDE - Riverside County - Underground Storage Tanks List

A search of the UST RIVERSIDE database, dated Oct 1, 2025 has found that there are 1 UST RIVERSIDE site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Paul's Gas & Mini MartOOB	700 S State St San Jacinto CA 92583-4909	E	0.24 / 1,287.40	22
	Establishment ID: *FA0016468* ***Status* | *No of Underground Storage***: *Inactive* | *5*			

Non Standard

Federal

FINDS/FRS - Facility Registry Service/Facility Index

A search of the FINDS/FRS database, dated Oct 10, 2025 has found that there are 3 FINDS/FRS site(s) within approximately 0.02miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
GHD OF SAN JACINTO LLC DBA THE BRADLEY GARDENS	980 W 7TH ST SAN JACINTO CA 92582	ENE	0.00 / 0.00	1
	Registry ID: *110071738266*			

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
J TALLEY CORP, TALLEY & OCHOA METAL FAB.	989 W SEVENTH ST SAN JACINTO CA 92582	NNW	0.02 / 99.23	2
	Registry ID: *110071787626*			
TALLEY METAL FABRICATION	989 W 7TH ST SAN JACINTO CA 92582	NNW	0.02 / 99.23	2

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
	***Registry ID**: 110070089402*			

SSTS - Registered Pesticide Establishments

A search of the SSTS database, dated Sep 26, 2025 has found that there are 1 SSTS site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Nutrien Ag Solutions 603	801 South Grand Avenue - San Jacinto CA 92582 ***Establishment No**: 51896-CA-60*	NNE	0.24 / 1,283.04	21

State

SCH - School Property Evaluation Program Sites

A search of the SCH database, dated Oct 2, 2025 has found that there are 3 SCH site(s) within approximately 1.00miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
NEW HIGH SCHOOL SITE NO. 6	Commonwealth Avenue/Cawston Avenue San Jacinto CA 92583 ***Envirostor ID**: 33010079* ***Cleanup Status**: NO FURTHER ACTION AS OF 11/10/2003*	SW	0.89 / 4,704.68	42
San Jacinto High School Expansion Site	500 Idyllwild Drive San Jacinto CA 92583 ***Envirostor ID**: 60000229* ***Cleanup Status**: NO ACTION REQUIRED AS OF 5/8/2006*	NE	0.99 / 5,240.41	43

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
Lyon Ave. New Elementary & Middle Schools	425 North Lyon Avenue San Jacinto CA 92582 ***Envirostor ID**: 60001838* ***Cleanup Status**: CERTIFIED AS OF 1/21/2020*	NW	1.00 / 5,262.94	44

HAZ TSD - TSDF from Hazardous Waste Manifest Data

A search of the HAZ TSD database, dated Feb 20, 2025 has found that there are 1 HAZ TSD site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
PALMER NATURAL PRODUCTS	831 S STATE ST STE C SAN JACINTO CA 925834919	E	0.29 / 1,546.45	30

CERS HAZ - California Environmental Reporting System (CERS) Hazardous Waste Sites

A search of the CERS HAZ database, dated Jan 12, 2026 has found that there are 1 CERS HAZ site(s) within approximately 0.12miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
Talley Metal Fabrication	989 W 7TH ST SAN JACINTO CA 92583	NNW	0.02 / 99.23	2

DELISTED HAZ - Delisted Environmental Reporting System (CERS) Hazardous Waste Sites

A search of the DELISTED HAZ database, dated Nov 29, 2018 has found that there are 1 DELISTED HAZ site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Autohaus Bavaria	691 W 7TH ST SAN JACINTO CA 92583	E	0.35 / 1,832.26	36

EMISSIONS - Toxic Pollutant Emissions Facilities

A search of the EMISSIONS database, dated Dec 31, 2021 has found that there are 9 EMISSIONS site(s) within approximately 0.25 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
GUADALAJARA IMPORTS INC	885 W 7TH ST SAN JACINTO CA 92583	ENE	0.06 / 333.12	3
MATTHEWS INTL. CORP., BRONZE DIV.	580 STATE ST UNIT 108 SAN JACINTO CA 92583	ENE	0.24 / 1,264.31	20
SAN JACINTO AUTO COLLISION	580 S STATE ST UNIT 5 SAN JACINTO CA 92583	ENE	0.24 / 1,264.31	20
MATTHEWS INTL. C30P., BRONZE DIV.	580 STATE ST UNIT 108 SAN JACINTO CA 92583	ENE	0.24 / 1,264.31	20

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
J TALLEY CORP, TALLEY & OCHOA METAL FAB.	989 W SEVENTH ST SAN JACINTO CA 92582	NNW	0.02 / 99.23	2
ALL-SPEC ENCLOSURES, INC.	582 S GRAND AVE SAN JACINTO CA 92582	N	0.18 / 968.34	11
GRAND AUTO BODY & MECH, ISABEL LORENZANA	556 GRAND AVE SAN JACINTO CA 92582	N	0.22 / 1,154.95	17

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
GRAND AUTO BODY & MECH, ISABEL L30ENZANA	556 GRAND AVE SAN JACINTO CA 92582	N	0.22 / 1,154.95	17
AUTOMOTIVE COLLISION REFINISH SPECIALIST	1011 ENTERPRISE AVE SAN JACINTO CA 92582	NNW	0.25 / 1,304.01	28

CDL - Clandestine Drug Lab Sites

A search of the CDL database, dated Dec 21, 2022 has found that there are 2 CDL site(s) within approximately 0.12miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
	913 S GRANT, #18 SAN JACINTO CA 92582	SSW	0.10 / 501.75	5
	913 SOUTH GRAND AVE #24 SAN JACINTO CA 92583	SSW	0.10 / 501.75	5

County

HZH RIVERSIDE - Riverside County - Disclosure Facility List

A search of the HZH RIVERSIDE database, dated Oct 3, 2025 has found that there are 1 HZH RIVERSIDE site(s) within approximately 0.12miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
Talley Metal Fabrication	989 W 7th St CA	NNW	0.02 / 99.23	2

MED WST RIVERSIDE - Riverside County - Medical Waste Facilities

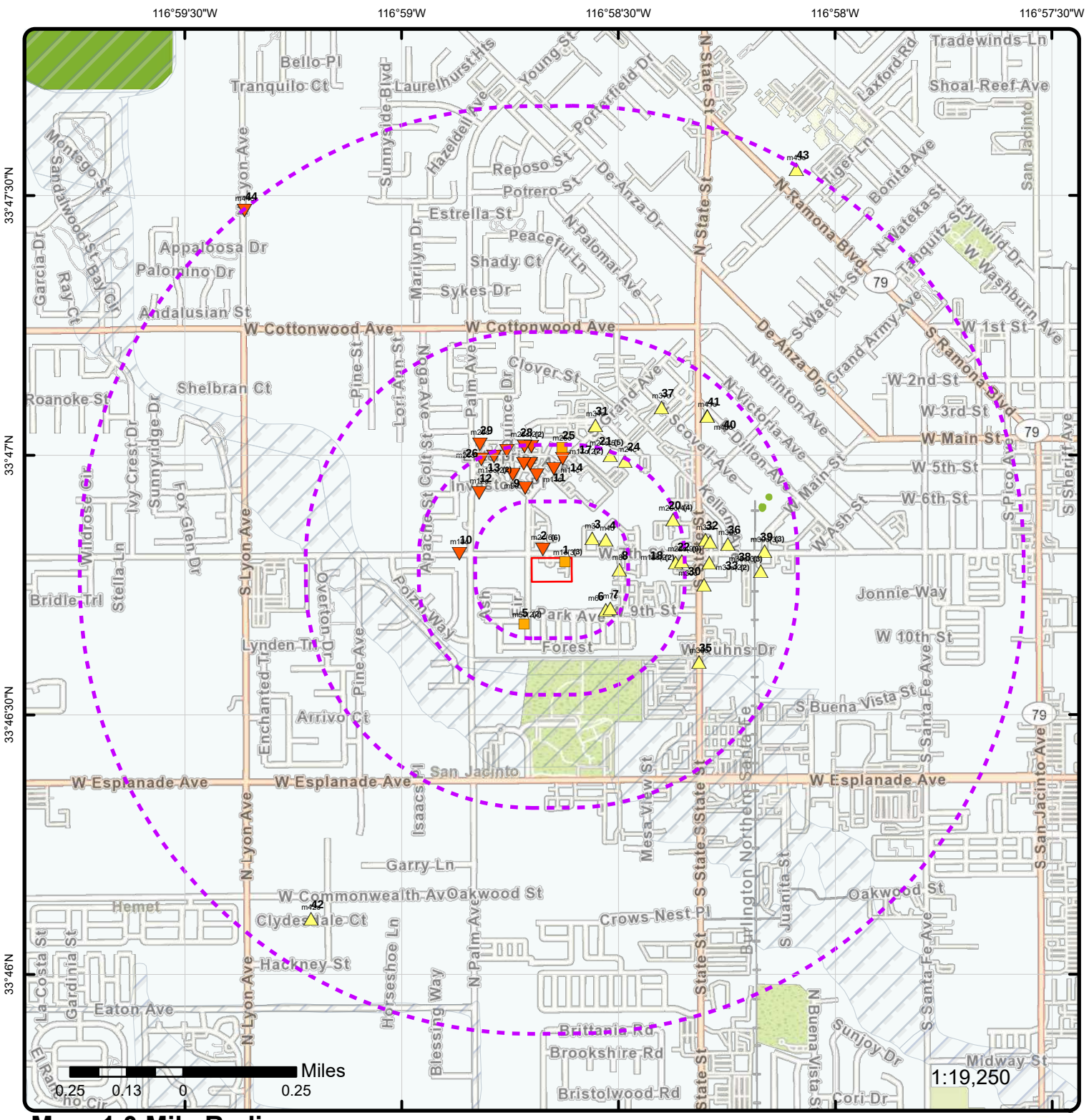
A search of the MED WST RIVERSIDE database, dated Oct 6, 2025 has found that there are 2 MED WST RIVERSIDE site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
The Bradley Gardens OOB	980 W 7th St San Jacinto CA 92582-3814	ENE	0.00 / 0.00	1
Primo's Auto Repair / OOB	718 W 7th St Hemet CA 92583	E	0.23 / 1,214.40	18

RMP RIVERSIDE - Riverside County - California Accidental Release Prevention Program Sites

A search of the RMP RIVERSIDE database, dated Feb 6, 2024 has found that there are 1 RMP RIVERSIDE site(s) within approximately 0.02miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
Talley Metal Fabrication	989 W 7th St San Jacinto CA 92583	NNW	0.02 / 99.23	2



Map: 1.0 Mile Radius

Order Number: 26013000754

Address: 980 W 7th St, SAN JACINTO, CA

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

Source: © 2021 ESRI StreetMap Premium

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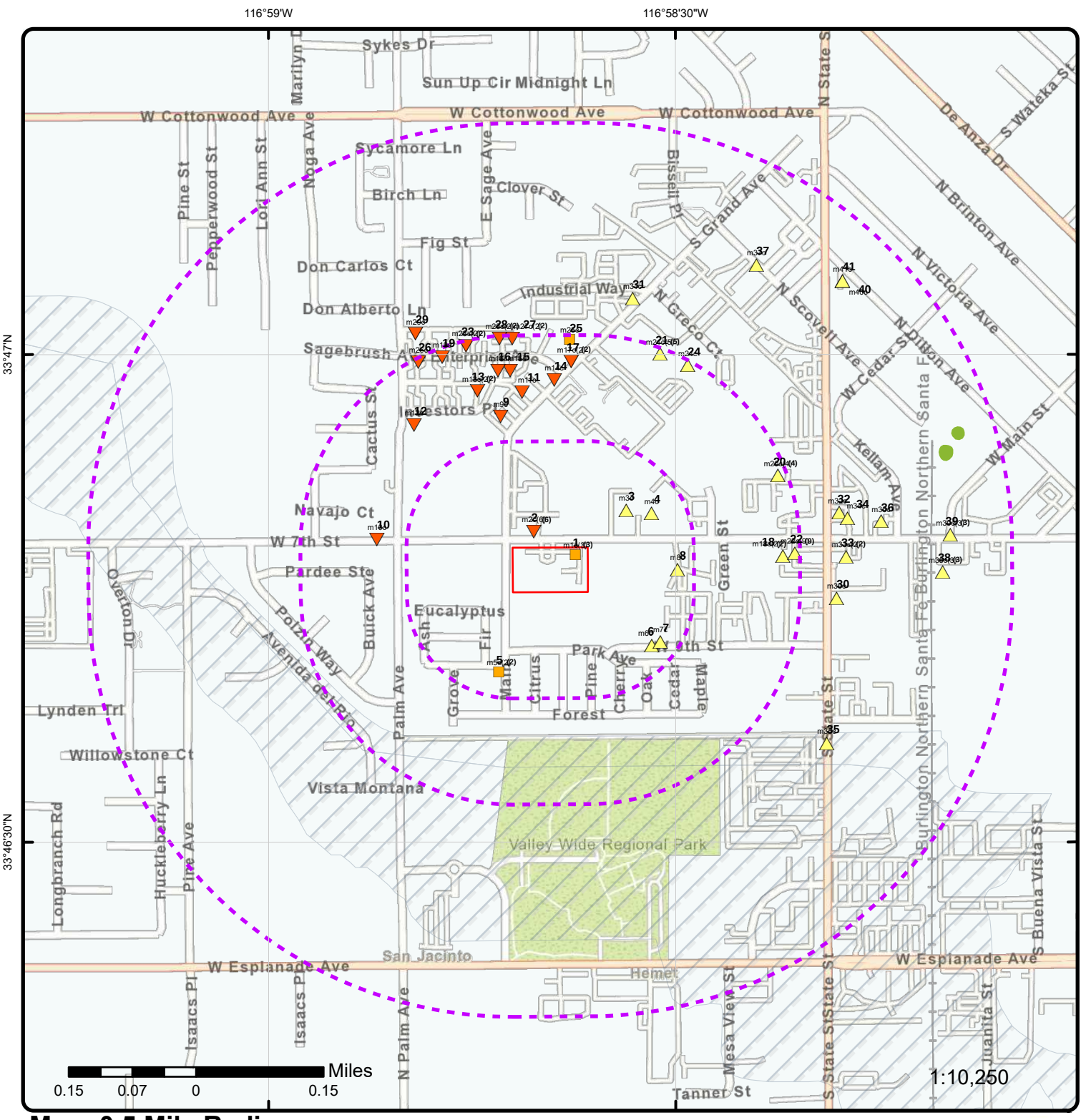

Map: 0.5 Mile Radius

Order Number: 26013000754

Address: 980 W 7th St, SAN JACINTO, CA

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

Source: © 2021 ESRI StreetMap Premium

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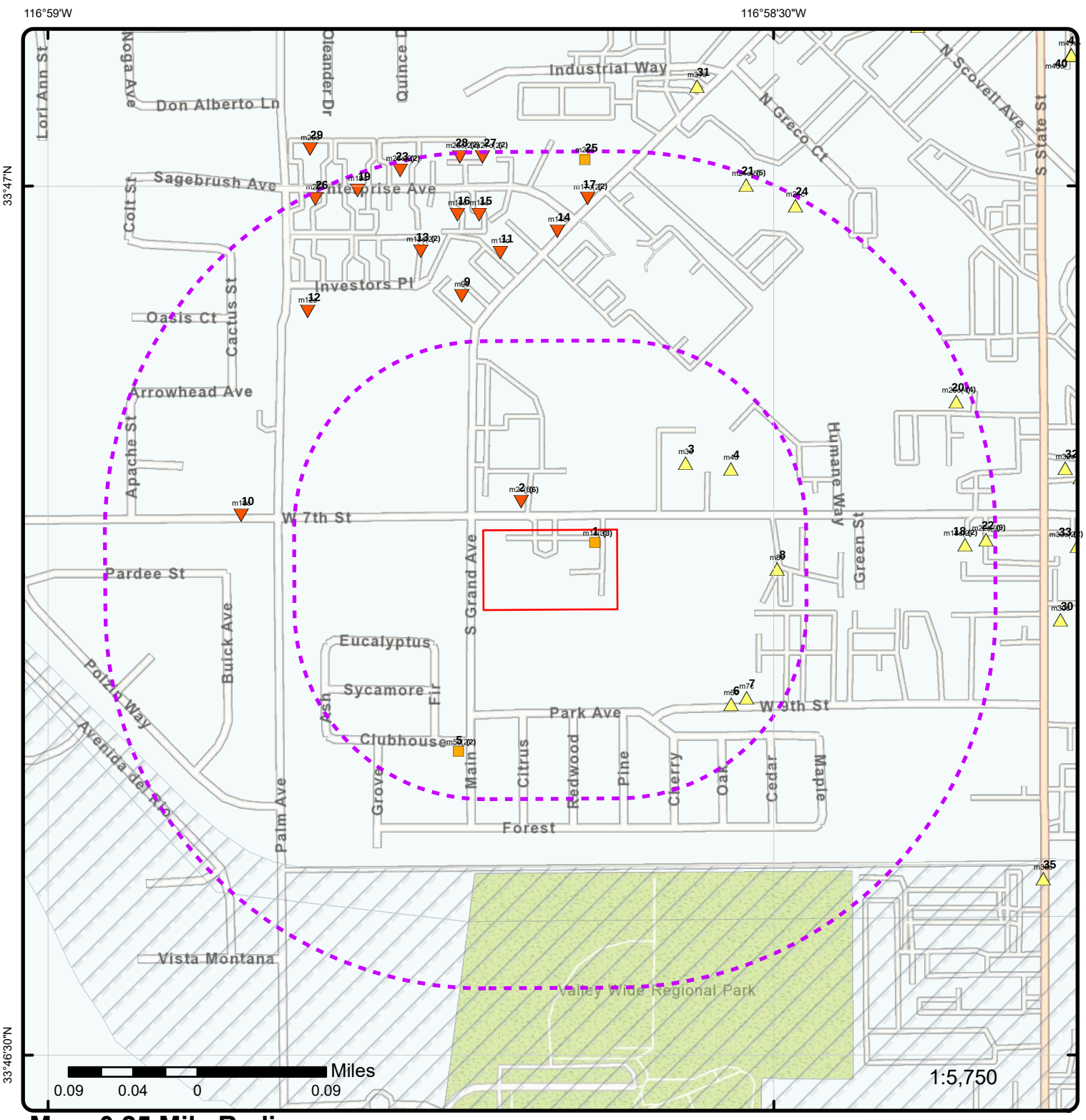

Map: 0.25 Mile Radius

Order Number: 26013000754

Address: 980 W 7th St, SAN JACINTO, CA

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

Source: © 2021 ESRI StreetMap Premium

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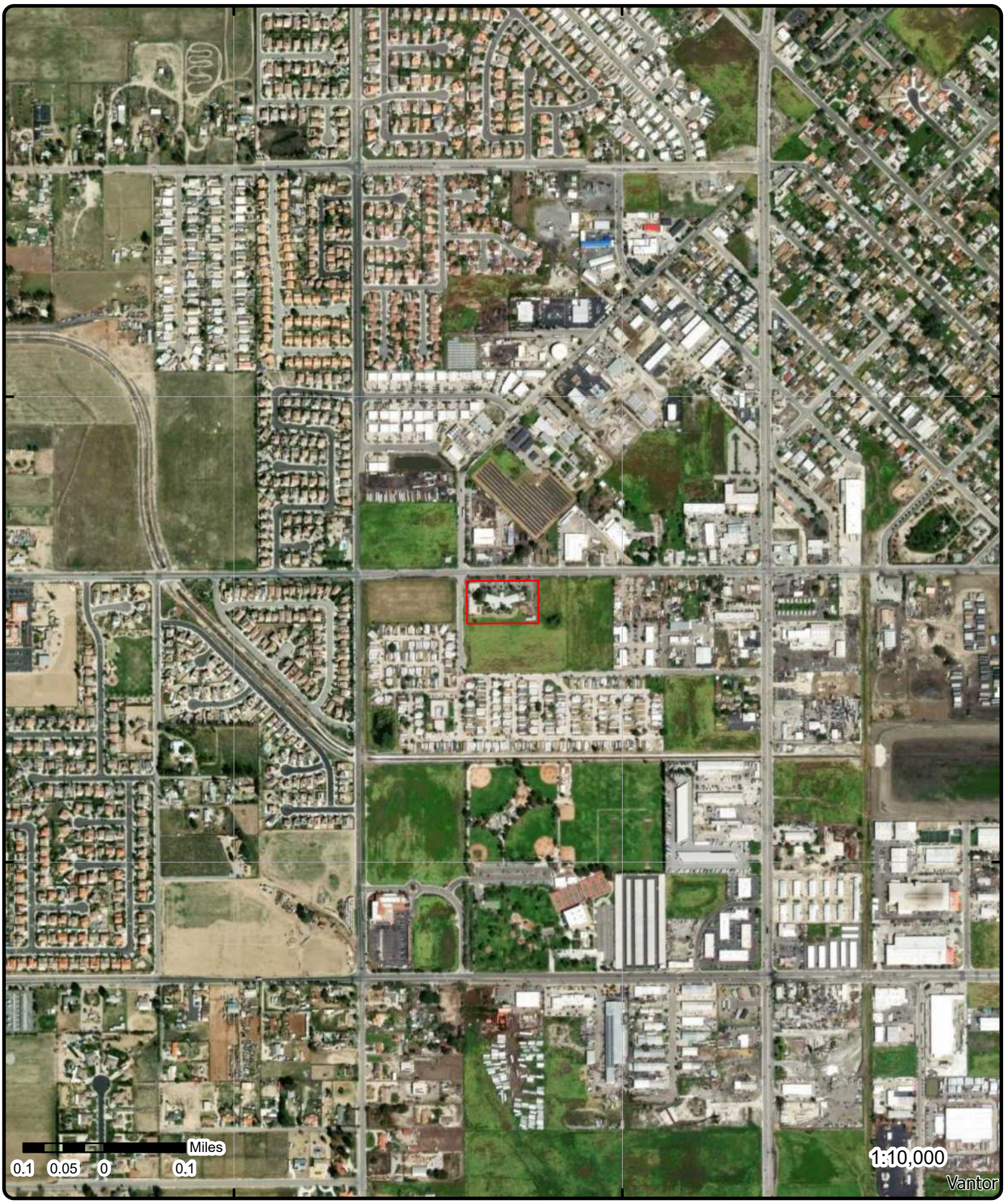

Aerial **Year: 2024**

Address: 980 W 7th St, SAN JACINTO, CA

Source: ESRI World Imagery

Order Number: 26013000754

ERIS

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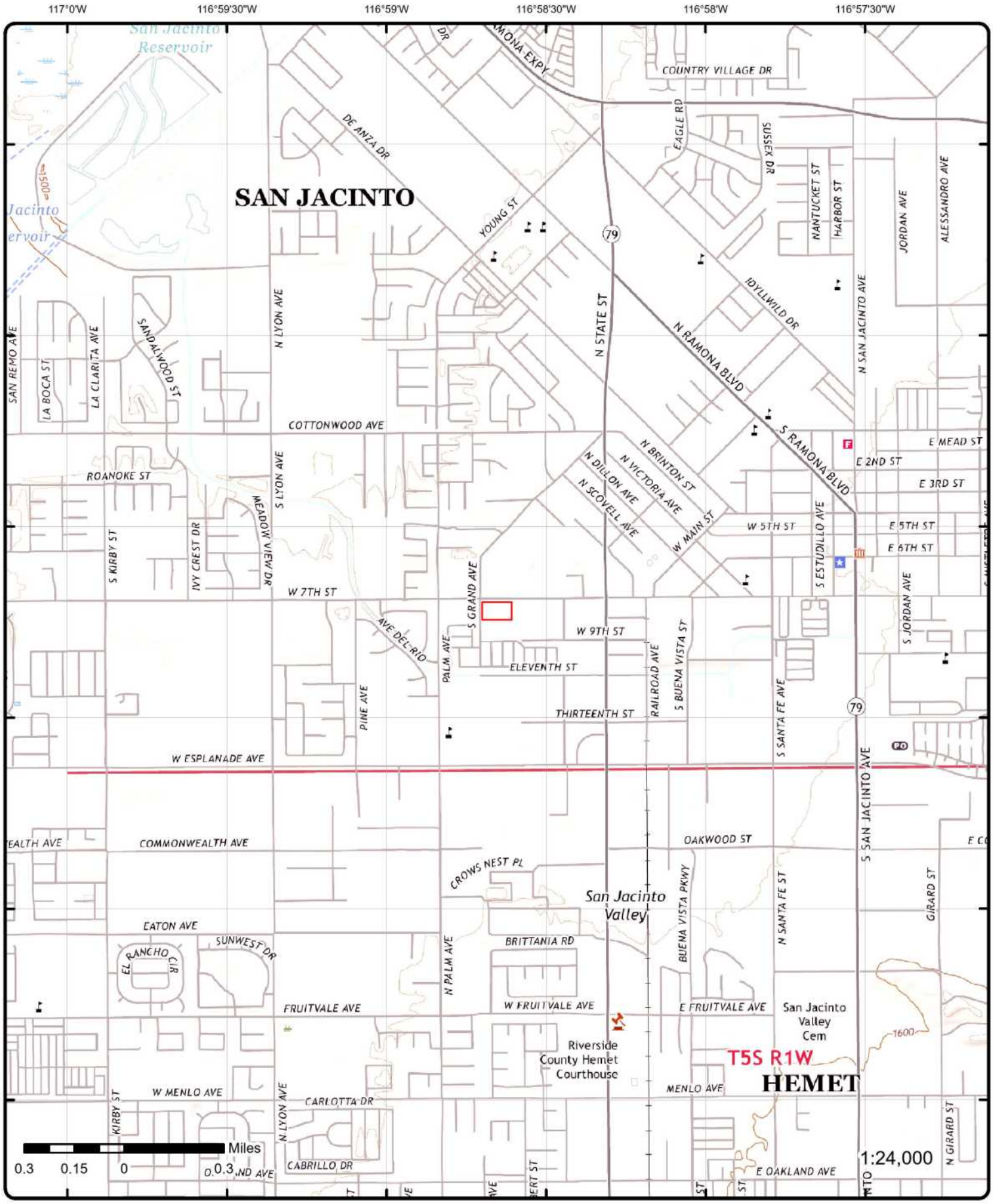

Topographic Map

Year: 2021

Order Number: 26013000754

Address: 980 W 7th St, CA

Quadrangle(s): Lakeview CA, San Jacinto CA

Source: USGS Topographic Map

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Detail Report

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
1	1 of 3	ENE	0.00 / 0.00	1,528.62 / 0	GHD OF SAN JACINTO LLC DBA THE BRADLEY GARDENS 980 W 7TH ST SAN JACINTO CA 92582	FINDS/FRS

Registry ID: 110071738266
FIPS Code: 06065
HUC Code: 18070202
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 08-JUL-24
Update Date:
Interest Types: UNSPECIFIED UNIVERSE
SIC Codes:
SIC Code Descriptions:
NAICS Codes: 623311
NAICS Code Descriptions: CONTINUING CARE RETIREMENT COMMUNITIES.
Conveyor: RCRAINFO
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No: 41
Census Block Code: 060650435072004
EPA Region Code:
County Name: RIVERSIDE
US/Mexico Border Ind:
Latitude: 33.780157
Longitude: -116.97759
Reference Point: ENTRANCE POINT OF A FACILITY OR STATION
Coord Collection Method: GDT-ADDRESS MATCHING (GEOCODING)
Accuracy Value:
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110071738266
Program Acronyms:

RCRAINFO:CAL000485599

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
1	2 of 3	ENE	0.00 / 0.00	1,528.62 / 0	The Bradley Gardens OOB 980 W 7th St San Jacinto CA 92582-3814	MED WST RIVERSIDE

Fac ID: FA0000079
APN: 435330003
Program Type: Medical Waste
Facility Phone No: 9516549347
Lat: 33.779694
Long: -116.977609

Detail

Permit No: PR0000539
Status: Inactive
Permit Type Code: 4332
Permit Sub Type:
Permit Type: Med Small Quantity Generator
Permit Issued Date: 12/08/2020
Permit Valid To: 12/31/2021
Permit Valid From: 01/01/2021

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Location Details:	SQG, Off-site Treatment					
1	3 of 3	ENE	0.00 / 0.00	1,528.62 / 0	GHD OF SAN JACINTO LLC DBA THE BRADLEY GARDENS 980 W 7TH ST SAN JACINTO CA 92582	RCRA NON GEN

Handler ID: CAL000485599
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		

Used Oil Market Burner: No
Used Oil Spec Marketer: No

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	623311
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20240510	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	33.780157
In Handler Univ:	N	**Location Longitude:**	-116.97759
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner: HQ
State Waste Generator Owner: CA
State Waste Generator: 2
Short Term Generator: N
Uni Waste: N
Universal Waste Dest Facility: N
Federal Universal Waste: N
As Federally Regulated Tsdf: ------
As Converter Tsdf: ------
As State Regulated Tsdf: ------
As State Regulated Handler: ---
Federal Indicator: ---
Hsm: N
Subpart K: ----
GPRA Permit: N
GPRA Renewal: N
Permit Renewal Wrkld: ------
Permwrk ID: ------
Perm Prog: ------
Pcwrkld: ------

Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20240511
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	GHD OF SAN JACINTO LLC DBA THE BRADLEY GARDENS
Location Street No:	
Location Street1:	980 W 7TH ST
Location Street2:	
Location City:	SAN JACINTO
Location State:	CA
Location Zip:	92582
Location County Code:	CA065
Location County Name:	RIVERSIDE
Location Country:	US
Contact Name:	LAUREN CALVANI
Contact Street No:	
Contact Street1:	980 W 7TH ST
Contact Street2:	
Contact City:	SAN JACINTO
Contact State:	CA
Contact Zip:	92582
Contact Country:	
Contact Phone & Ext:	951-654-9347
Contact Fax:	
Contact Email Address:	ACCOUNTING@LIFEEN.NET
Contact Title:	
Owner Name:	GHC OF SAN JACINTO LLC
Owner Type:	O
Owner Seq:	1
Operator Name:	LAUREN CALVANI
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20240510
Handler Name:	GHD OF SAN JACINTO LLC DBA THE BRADLEY GARDENS
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer
TSD Activity:	N

Owner/Operator Details

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street1:**	6 HUTTON CENTER DR STE 400
Name:	GHC OF SAN JACINTO LLC	**Street2:**	
Dt Became Current:		**City:**	SANTA ANA
Dt Ended Current:		**State:**	CA
Phone:	714-241-5600	**Country:**	
Source Type:	Implementer	**Zip:**	92707

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street1:**	980 W 7TH ST
Name:	LAUREN CALVANI	**Street2:**	
Dt Became Current:		**City:**	SAN JACINTO
Dt Ended Current:		**State:**	CA
Phone:	951-654-9347	**Country:**	
Source Type:	Implementer	**Zip:**	92582

2	**1 of6**	**NNW**	**0.02 / 99.23**	**1,527.62 / -1**	**Talley Metal Fabrication** **989 W 7TH ST** **SAN JACINTO CA 92583**	**CERS HAZ**

Latitude: 33.781010
Longitude: -116.978060

Regulated Programs

EI ID:	10321147	**EI Description:**	Chemical Storage Facilities

Violations

Violation Date:	08/22/2024	**Violation Source:**	CERS
Violation Program:	HMRRP	**Violation Division:**	Riverside County Department of Env Health
Citation:	HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)		
Violation Notes:			

Returned to compliance on 01/30/2025. OBSERVATION: The most recent business plan submission in the statewide information management system (CERS) failed to contain a chemical inventory description page for Quikrete Cement and Quikrete Anchoring Cement. Facility had roughly 1,350 lbs of Quikrete Anchoring Cement and roughly 3,150 lbs of Quikrete Cement. In addition facility has spools of Arc welding wire in reportable quantities (>500lbs). Material is a flammable solid that during its use and introduction to water and heat releases flammable gas. This will also need to be added to the Facilities inventory list. CORRECTIVE ACTION: Owner/operator shall complete a chemical inventory page for all reportable hazardous materials on site and submit to the statewide information management system (e.g. CERS) at http://cers.calepa.ca.gov.

Violation Description:

Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violations

Violation Date:	08/22/2024	**Violation Source:**	CERS
Violation Program:	HMRRP	**Violation Division:**	Riverside County Department of Env Health
Citation:	HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)		
Violation Notes:			

Returned to compliance on 01/30/2025. OBSERVATION: No training records observed/provided during inspection. Operator stated that the individual who manages this documentation was currently not in the office. CORRECTIVE ACTION: Owner/operator shall provide training to all employees. Documentation shall be retained and be made available for inspection for a minimum period of 3 years from the date of the training. Facility shall provide documentation of training for employees as it pertains to hazard materials for 2022, 2023, 2024. Documentation may be emailed to inspector at SaCunningham@RivCo.org.

Violation Description:

Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.

Violations

Violation Date: 09/23/2021
Violation Source: CERS
Violation Program: HMRRP
Violation Division: Riverside County Department of Env Health
Citation: HSC 6.95 25508.1(a)-(f) - California Health and Safety Code, Chapter 6.95, Section(s) 25508.1(a)-(f)
Violation Notes:

Returned to compliance on 02/03/2022. OBSERVATION: A previously undisclosed material was brought on site more than 30 days prior to the inspection. Observed two 55 gallon drums of Plasma Queen on site for the plasma cutting machine. CORRECTIVE ACTION: Owner/operator shall update and submit a new hazardous material inventory page in the statewide information management system (e.g. CERS) at https://cers.calepa.ca.gov for each chemical stored on site at or above threshold quantities.

Violation Description:

Failure to electronically update business plan within 30 days of any one of the following events:
A 100 percent or more increase in the quantity of a previously disclosed material.
Any handling of a previously undisclosed hazardous materials at or above reportable quantities.
A change of business address, business ownership, or business name.
A substantial change in the handler's operations that requires modification to any portion of the business plan.

Evaluations

Eval Date: 10/29/2015
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 09/23/2021
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Facility is a metal fabrication shop that handles propane, CO2, argon, oxygen, acetylene, acetone, paint, and coolant. Note: Facility utilizes a new plasma cutting machine. Machine utilizes coolant, cuts are made above the coolant and the excess steel falls into the coolant to cool. Coolant is then drained, excess steel is removed and recycled, coolant is pumped back in. No waste stream from process. Informed facility if process eventually ends in a sludge, or any other non-recyclable byproduct, to ensure it is containerized and tested for hazardous properties.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/22/2024
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 09/27/2018
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Affiliations

Affil Type Desc: Identification Signer
Entity Name: Joe DeRoche
Entity Title: Compliance Manager
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Document Preparer
Entity Name: Joe DeRoche
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Environmental Contact
Entity Name: Joe DeRoche
Entity Title:
Address: 989 W 7th St, PO BOX 850
City: San Jacinto
State: CA
Country:
Zip Code: 92581
Phone:

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 989 W 7th St, PO BOX 850
City: San Jacinto
State: CA
Country:
Zip Code: 92581
Phone:

Affil Type Desc: Legal Owner
Entity Name: Talley Metal Fabrication
Entity Title:
Address: 989 W 7th St, PO BOX 850
City: San Jacinto
State: CA
Country: United States
Zip Code: 92581
Phone: (951) 654-2123

Affil Type Desc: CUPA District
Entity Name: Riverside Cnty Env Health
Entity Title:
Address: 4065 County Circle Drive, Room 104
City: Riverside
State: CA
Country:
Zip Code: 92503
Phone: (951) 358-5055

Affil Type Desc: Operator
Entity Name: Talley Metal Fabrication
Entity Title:
Address:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

City:
State:
Country:
Zip Code:
Phone: (951) 654-2123

Affil Type Desc: Parent Corporation
Entity Name: Talley Metal Fabrication
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

---

2 | **2 of6** | **NNW** | **0.02 / 99.23** | **1,527.62 / -1** | **J TALLEY CORP, TALLEY & OCHOA METAL FAB.**
989 W SEVENTH ST
SAN JACINTO CA 92582 | **EMISSIONS**

2004 Criteria Data

Facility ID:	123141	**CERR Code:**	
Facility SIC Code:	3441	**TOGT:**	5.4205
CO:	33	**ROGT:**	5.01857095
Air Basin:	SC	**COT:**	
District:	SC	**NOXT:**	
COID:	RIV	**SOXT:**	
DISN:	SOUTH COAST AQMD	**PMT:**	
CHAPIS:		**PM10T:**	

2004 Toxic Data

Facility ID:	123141	**COID:**	RIV
Facility SIC Code:	3441	**DISN:**	SOUTH COAST AQMD
CO:	33	**CHAPIS:**	
Air Basin:	SC	**CERR Code:**	
District:	SC		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2005 Criteria Data

Facility ID:	123141	**CERR Code:**	
Facility SIC Code:	3441	**TOGT:**	13.037232007288187063467962344366838748 86
CO:	33	**ROGT:**	11.567
Air Basin:	SC	**COT:**	
District:	SC	**NOXT:**	
COID:	RIV	**SOXT:**	
DISN:	SOUTH COAST AQMD	**PMT:**	
CHAPIS:	Y	**PM10T:**	

2005 Toxic Data

Facility ID:	123141	**COID:**	RIV
Facility SIC Code:	3441	**DISN:**	SOUTH COAST AQMD
CO:	33	**CHAPIS:**	Y
Air Basin:	SC	**CERR Code:**	

District: SC
TS:
Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:

2006 Criteria Data

Facility ID: 123141
Facility SIC Code: 3441
CO: 33
Air Basin: SC
District: SC
COID: RIV
DISN: SOUTH COAST AQMD
CHAPIS: Y
CERR Code:
TOGT: 7.71262058406721328069642676384249417958
ROGT: 7.061
COT:
NOXT:
SOXT:
PMT:
PM10T:

2006 Toxic Data

Facility ID: 123141
Facility SIC Code: 3441
CO: 33
Air Basin: SC
District: SC
TS:
Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
COID: RIV
DISN: SOUTH COAST AQMD
CHAPIS: Y
CERR Code:

2007 Criteria Data

Facility ID: 123141
Facility SIC Code: 3441
CO: 33
Air Basin: SC
District: SC
COID: RIV
DISN: SOUTH COAST AQMD
CHAPIS:
CERR Code:
TOGT: 7.71262058406721328069642676384249417958
ROGT: 7.061
COT:
NOXT:
SOXT:
PMT:
PM10T:

2007 Toxic Data

Facility ID: 123141
Facility SIC Code: 3441
CO: 33
Air Basin: SC
District: SC
TS:
Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
COID: RIV
DISN: SOUTH COAST AQMD
CHAPIS:
CERR Code:

2008 Criteria Data

Facility ID: 123141
Facility SIC Code: 3441
CO: 33
Air Basin: SC
District: SC
COID: RIV
CERR Code:
TOGT: 20.13094987473428484664439720619495900395
ROGT: 17.48625
COT:
NOXT:
SOXT:

DISN:	SOUTH COAST AQMD	**PMT:**	
CHAPIS:		**PM10T:**	

2008 Toxic Data

Facility ID:	123141	**COID:**	RIV
Facility SIC Code:	3441	**DISN:**	SOUTH COAST AQMD
CO:	33	**CHAPIS:**	
Air Basin:	SC	**CERR Code:**	
District:	SC		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2009 Criteria Data

Facility ID:	123141	**CERR Code:**	
Facility SIC Code:	3441	**TOGT:**	3.4542514424536896447008806559368357121 2
CO:	33	**ROGT:**	3.14
Air Basin:	SC	**COT:**	
District:	SC	**NOXT:**	
COID:	RIV	**SOXT:**	
DISN:	SOUTH COAST AQMD	**PMT:**	
CHAPIS:		**PM10T:**	

2009 Toxic Data

Facility ID:	123141	**COID:**	RIV
Facility SIC Code:	3441	**DISN:**	SOUTH COAST AQMD
CO:	33	**CHAPIS:**	
Air Basin:	SC	**CERR Code:**	
District:	SC		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2010 Toxic Data

Facility ID:	123141	**COID:**	RIV
Facility SIC Code:	3441	**DISN:**	SOUTH COAST AQMD
CO:	33	**CHAPIS:**	
Air Basin:	SC	**CERR Code:**	
District:	SC		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2011 Criteria Data

Facility ID:	123141	**CERR Code:**	
Facility SIC Code:	3441	**TOGT:**	.8334749721631744103654216013766575564328
CO:	33	**ROGT:**	.82137
Air Basin:	SC	**COT:**	
District:	SC	**NOXT:**	
COID:	RIV	**SOXT:**	
DISN:	SOUTH COAST AQMD	**PMT:**	
CHAPIS:		**PM10T:**	

2011 Toxic Data

Facility ID:	123141	***COID:***	RIV
Facility SIC Code:	3441	***DISN:***	SOUTH COAST AQMD
CO:	33	***CHAPIS:***	
Air Basin:	SC	***CERR Code:***	
District:	SC		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2012 Criteria Data

Facility ID:	123141	***CERR Code:***	
Facility SIC Code:	3441	***TOGT:***	.8507480716671727907682963862739143638028
CO:	33	***ROGT:***	.83974
Air Basin:	SC	***COT:***	
District:	SC	***NOXT:***	
COID:	RIV	***SOXT:***	
DISN:	SOUTH COAST AQMD	***PMT:***	
CHAPIS:		***PM10T:***	

2012 Toxic Data

Facility ID:	123141	***COID:***	RIV
Facility SIC Code:	3441	***DISN:***	SOUTH COAST AQMD
CO:	33	***CHAPIS:***	
Air Basin:	SC	***CERR Code:***	
District:	SC		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2013 Criteria Data

Facility ID:	123141	***CERR Code:***	
Facility SIC Code:	3441	***TOGT:***	1.11392853527684988359145662516449033303
CO:	33	***ROGT:***	1.10045
Air Basin:	SC	***COT:***	
District:	SC	***NOXT:***	
COID:	RIV	***SOXT:***	
DISN:	SOUTH COAST AQMD	***PMT:***	
CHAPIS:		***PM10T:***	

2013 Toxic Data

Facility ID:	123141	***COID:***	RIV
Facility SIC Code:	3441	***DISN:***	SOUTH COAST AQMD
CO:	33	***CHAPIS:***	
Air Basin:	SC	***CERR Code:***	
District:	SC		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2015 Toxic Data

Facility ID:	123141	***COID:***	RIV
Facility SIC Code:	3446	***DISN:***	SOUTH COAST AQMD
CO:	33	***CHAPIS:***	
Air Basin:	SC	***CERR Code:***	
District:	SC		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2016 Toxic Data

Facility ID:	123141	***TS:***	
Facility SIC Code:	3446	***HRA:***	
CERR CODE:		***CH Index:***	
COID:	RIV	***AH Index:***	
CO:	33	***Air Basin:***	SC
DISN:	SOUTH COAST AQMD	***District:***	SC
CHAPIS:			

2018 Criteria Data

Facility ID:	123141	***CERR Code:***	
Facility SIC Code:	3446	***TOGT:***	.4946452070047575665553193643081283530721
CO:	33	***ROGT:***	.48866
Air Basin:	SC	***COT:***	
District:	SC	***NOXT:***	
COID:	RIV	***SOXT:***	
DISN:	SOUTH COAST AQMD	***PMT:***	.072555
CHAPIS:		***PM10T:***	.0696528

2018 Toxic Data

Facility ID:	123141	***COID:***	RIV
Facility SIC Code:	3446	***DISN:***	SOUTH COAST AQMD
CO:	33	***CHAPIS:***	
Air Basin:	SC	***CERR Code:***	
District:	SC		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2020 Criteria Data

CO:	33	***CHAPIS:***	
Air Basin:	SC	***CERR Code:***	
Facility ID:	123141	***ROGT:***	.07
District:	SC	***COT:***	
Facility SIC Code:	3446	***NOXT:***	
CO ID:	RIV	***SOXT:***	
DISN:	SOUTH COAST AQMD		
TOGT:	.07085737422816074501467759894726186861 01		
PMT:	.05		
PM10T:	.048		

2020 Toxic Data

CO:	33	***DISN:***	SOUTH COAST AQMD

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Air Basin: SC
Facility ID: 123141
District: SC
Facility SIC Code: 3446
COID: RIV
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
CHAPIS:
CHERR Code:
TS:
Health Risk Asmt:

2021 Toxic Data

Co: 33
Air Basin: SC
Facility ID: 123141
District: SC
Facility SIC Code: 3446
COID: RIV
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
DISN: SOUTH COAST AQMD
CHAPIS:
Cerr Code:
TS:
Health Risk Asmt:

2021 Criteria Data

Co: 33
Air Basin: SC
Facility ID: 123141
District: SC
Facility SIC Code: 3446
CO ID: RIV
DISN: SOUTH COAST AQMD
TOGT: .701209636602895029861321996153456827614 1
PMT: .0601125
PM10T: .057708
CHAPIS:
Cerr Code:
ROGT: .692725
COT:
NOXT:
SOXT:

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2 | ***3 of6*** | ***NNW*** | ***0.02 / 99.23*** | ***1,527.62 / -1*** | ***TALLEY METAL FABRICATION***
989 W 7TH ST
SAN JACINTO CA 92582 | ***FINDS/FRS***

Registry ID: 110070089402
FIPS Code: 06065
HUC Code: 18070202
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 07-AUG-17
Update Date: 24-MAY-22
Interest Types: ICIS-NPDES NON-MAJOR, OSHA ESTABLISHMENT, STATE MASTER, STORM WATER INDUSTRIAL
SIC Codes: 3499
SIC Code Descriptions: FABRICATED METAL PRODUCTS, NOT ELSEWHERE CLASSIFIED
NAICS Codes: 332323
NAICS Code Descriptions: ORNAMENTAL AND ARCHITECTURAL METAL WORK MANUFACTURING.
Conveyor: ICIS
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No: 41
Census Block Code: 060650513002032
EPA Region Code: 09
County Name: RIVERSIDE COUNTY
US/Mexico Border Ind:
Latitude: 33.7802
Longitude: -116.97817
Reference Point:
Coord Collection Method:
Accuracy Value:
Datum: NAD83
Source:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110070089402
Program Acronyms:

CA-ENVIROVIEW:159564, NPDES:CAZ210889, OSHA-OIS:342686409

2	4 of6	NNW	0.02 / 99.23	1,527.62 / -1	J TALLEY CORP, TALLEY & OCHOA METAL FAB. 989 W SEVENTH ST SAN JACINTO CA 92582	FINDS/FRS

Registry ID: 110071787626
FIPS Code: 06065
HUC Code: 18070202
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 16-JUL-24
Update Date: 27-AUG-24
Interest Types: AIR EMISSIONS CLASSIFICATION UNKNOWN
SIC Codes: 3446
SIC Code Descriptions: ARCHITECTURAL AND ORNAMENTAL METALWORK
NAICS Codes: 332312
NAICS Code Descriptions: FABRICATED STRUCTURAL METAL MANUFACTURING.
Conveyor: EIS
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No: 41
Census Block Code: 060650513002032
EPA Region Code: 09
County Name: RIVERSIDE
US/Mexico Border Ind:
Latitude: 33.78025
Longitude: -116.9781
Reference Point:
Coord Collection Method:
Accuracy Value:
Datum: NAD83
Source:
Facility Detail Rprt URL: https://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110071787626
Program Acronyms:

CARB-TCH:33SCSC123141, EIS:10191311

2	5 of6	NNW	0.02 / 99.23	1,527.62 / -1	Talley Metal Fabrication 989 W 7th St CA	HZH RIVERSIDE

Disclosed Facility Details

Establishment ID: FA0022387
Establishment Name: Talley Metal Fabrication
Site Address: 989 W 7th St
City State Zip: San Jacinto, CA 92582-3813
Status: Inactive
Permit Type: CUPA Electronic Surcharge
Program Type: CUPA - Hazardous Materials Disclosure/HMBP

Disclosed Facility Details

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Establishment ID: FA0022387
Establishment Name: Talley Metal Fabrication
Site Address: 989 W 7th St
City State Zip: San Jacinto, CA 92582-3813
Status: Active
Permit Type: HMBP Level I Handler
Program Type: CUPA - Hazardous Materials Disclosure/HMBP

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
2	6 of6	NNW	0.02 / 99.23	1,527.62 / -1	Talley Metal Fabrication 989 W 7th St San Jacinto CA 92583	RMP RIVERSIDE

Facility ID: FA0022387

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
3	1 of1	ENE	0.06 / 333.12	1,528.88 / 1	GUADALAJARA IMPORTS INC 885 W 7TH ST SAN JACINTO CA 92583	EMISSIONS

1997 Criteria Data

Facility ID: 79831
Facility SIC Code: 3499
CO: 33
Air Basin: SC
District: SC
COID: RIV
DISN: SOUTH COAST AQMD
CHAPIS:
CERR Code:
TOGT: .049
ROGT: .0352123
COT: .047
NOXT: .175
SOXT: .001
PMT: .01
PM10T: .01

1997 Toxic Data

Facility ID: 79831
Facility SIC Code: 3499
CO: 33
Air Basin: SC
District: SC
TS:
Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
COID: RIV
DISN: SOUTH COAST AQMD
CHAPIS:
CERR Code:

1998 Criteria Data

Facility ID: 79831
Facility SIC Code: 3499
CO: 33
Air Basin: SC
District: SC
COID: RIV
DISN: SOUTH COAST AQMD
CHAPIS:
CERR Code:
TOGT: .051
ROGT: .0360569
COT: .047
NOXT: .175
SOXT: .001
PMT: .01
PM10T: .01

1998 Toxic Data

Facility ID: 79831
Facility SIC Code: 3499
CO: 33
Air Basin: SC
District: SC
TS:
COID: RIV
DISN: SOUTH COAST AQMD
CHAPIS:
CERR Code:

Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:

1999 Criteria Data

Facility ID:	79831	***CERR Code:***	
Facility SIC Code:	3499	***TOGT:***	.049
CO:	33	***ROGT:***	.0352123
Air Basin:	SC	***COT:***	.047
District:	SC	***NOXT:***	.175
COID:	RIV	***SOXT:***	.001
DISN:	SOUTH COAST AQMD	***PMT:***	.01
CHAPIS:		***PM10T:***	.01

1999 Toxic Data

Facility ID:	79831	***COID:***	RIV
Facility SIC Code:	3499	***DISN:***	SOUTH COAST AQMD
CO:	33	***CHAPIS:***	
Air Basin:	SC	***CERR Code:***	
District:	SC		

TS:
Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:

2000 Criteria Data

Facility ID:	79831	***CERR Code:***	
Facility SIC Code:	3499	***TOGT:***	.049
CO:	33	***ROGT:***	.03
Air Basin:	SC	***COT:***	.047
District:	SC	***NOXT:***	.175
COID:	RIV	***SOXT:***	.001
DISN:	SOUTH COAST AQMD	***PMT:***	.01
CHAPIS:		***PM10T:***	.01

2000 Toxic Data

Facility ID:	79831	***COID:***	RIV
Facility SIC Code:	3499	***DISN:***	SOUTH COAST AQMD
CO:	33	***CHAPIS:***	
Air Basin:	SC	***CERR Code:***	
District:	SC		

TS:
Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:

2001 Criteria Data

Facility ID:	79831	***CERR Code:***	
Facility SIC Code:	3499	***TOGT:***	.04
CO:	33	***ROGT:***	.03
Air Basin:	SC	***COT:***	.05
District:	SC	***NOXT:***	.18
COID:	RIV	***SOXT:***	0
DISN:	SOUTH COAST AQMD	***PMT:***	.01
CHAPIS:		***PM10T:***	.01

2001 Toxic Data

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Facility ID:	79831			**COID:**	RIV	
Facility SIC Code:	3499			**DISN:**	SOUTH COAST AQMD	
CO:	33			**CHAPIS:**		
Air Basin:	SC			**CERR Code:**		
District:	SC					
TS:						
Health Risk Asmt:						
Non-Cancer Chronic Haz Ind:						
Non-Cancer Acute Haz Ind:						

4	1 of1	ENE	0.09 / 450.23	1,529.62 / 1	871 W 7TH ST 871 W 7TH ST SAN JACINTO CA 92582	RCRA NON GEN

Handler ID: CAC003071156
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		

Used Oil Market Burner: No
Used Oil Spec Marketer: No

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	56299
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20200617	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	33.780213
In Handler Univ:	N	**Location Longitude:**	-116.975798
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner: HQ
State Waste Generator Owner: CA
State Waste Generator: 2
Short Term Generator: N
Uni Waste: N
Universal Waste Dest Facility: N
Federal Universal Waste: N
As Federally Regulated Tsdf: ------
As Converter Tsdf: ------
As State Regulated Tsdf: ------
As State Regulated Handler: ---
Federal Indicator: ---

Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20241211
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	871 W 7TH ST
Location Street No:	
Location Street1:	871 W 7TH ST
Location Street2:	
Location City:	SAN JACINTO
Location State:	CA
Location Zip:	92582
Location County Code:	CA065
Location County Name:	RIVERSIDE
Location Country:	US
Contact Name:	DENIELLE ABIHIDER
Contact Street No:	
Contact Street1:	871 W 7TH ST
Contact Street2:	
Contact City:	SAN JACINTO
Contact State:	CA
Contact Zip:	92582
Contact Country:	
Contact Phone & Ext:	951-634-3964
Contact Fax:	
Contact Email Address:	URBINAFAM@YAHOO.COM
Contact Title:	
Owner Name:	DENIELLE ABIHIDER
Owner Type:	O
Owner Seq:	1
Operator Name:	DENIELLE ABIHIDER
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20200617

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Handler Name: 871 W 7TH ST
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer
TSD Activity: N

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Other
Name: DENIELLE ABIHIDER
Dt Became Current:
Dt Ended Current:
Phone: 951-634-3964
Source Type: Implementer
Street No:
Street1: 871 W 7TH ST
Street2:
City: SAN JACINTO
State: CA
Country:
Zip: 92582

Owner/Operator Ind: Current Operator
Type: Other
Name: DENIELLE ABIHIDER
Dt Became Current:
Dt Ended Current:
Phone: 951-634-3964
Source Type: Implementer
Street No:
Street1: 871 W 7TH ST
Street2:
City: SAN JACINTO
State: CA
Country:
Zip: 92582

5	1 of2	SSW	0.10 / 501.75	1,528.62 / 0	913 S GRANT, #18 SAN JACINTO CA 92582	CDL

Clue: 2005-07-043
Date: 7/27/2005
County: RIVERSIDE
Lab Type: L
Lab Type Desc: Illegal Drug Lab - location where an illegal drug lab was operated or drug lab equipment and/or materials were stored.

5	2 of2	SSW	0.10 / 501.75	1,528.62 / 0	913 SOUTH GRAND AVE #24 SAN JACINTO CA 92583	CDL

Clue: 1996-09-060
Date: 9/18/1996
County: RIVERSIDE
Lab Type: L
Lab Type Desc: Illegal Drug Lab - location where an illegal drug lab was operated or drug lab equipment and/or materials were stored.

6	1 of1	ESE	0.10 / 517.25	1,530.62 / 2	AMER-MEX MFG INC 861 W 9TH ST SAN JACINTO CA 92582	RCRA NON GEN

Handler ID: CAL000456896
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	56299
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20200921	***NAIC 4:***	
Active Site:	-----	***State:***	CA
Land Type:		***Location Latitude:***	33.77845
In Handler Univ:	N	***Location Longitude:***	-116.975718
In A Universe:	N	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	AG
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	N		
Universal Waste Dest Facility:	N		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		
Snc:	N		
Unaddressed Snc:	N		
Addressed Snc:	N		
Snc With Comp Sched:	N		
Fa Required:	-----		
Hhandler Last Change:	20200927		
Recognized Trader Importer:	N		
Recognized Trader Exporter:	N		
Slab Importer:	N		
Slab Exporter:	N		

Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	AMER-MEX MFG INC
Location Street No:	
Location Street1:	861 W 9TH ST
Location Street2:	
Location City:	SAN JACINTO
Location State:	CA
Location Zip:	92582
Location County Code:	CA065
Location County Name:	RIVERSIDE
Location Country:	US
Contact Name:	MIGUEL LOPEZ
Contact Street No:	
Contact Street1:	861 W 9TH ST
Contact Street2:	
Contact City:	SAN JACINTO
Contact State:	CA
Contact Zip:	92582
Contact Country:	
Contact Phone & Ext:	951-654-6618
Contact Fax:	
Contact Email Address:	MIGUEL@AMERMEXMFG.COM
Contact Title:	
Owner Name:	AMER-MEX MFG INC
Owner Type:	O
Owner Seq:	1
Operator Name:	MIGUEL LOPEZ
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20200921
Handler Name:	AMER-MEX MFG INC
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer
TSD Activity:	N

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	3990 SORKSBILL
Name:	AMER-MEX MFG INC	***Street2:***	
Dt Became Current:		***City:***	HEMET
Dt Ended Current:		***State:***	CA
Phone:	619-710-1417	***Country:***	
Source Type:	Implementer	***Zip:***	92545
Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	861 W 9TH ST
Name:	MIGUEL LOPEZ	***Street2:***	
Dt Became Current:		***City:***	SAN JACINTO
Dt Ended Current:		***State:***	CA
Phone:	951-654-6618	***Country:***	
Source Type:	Implementer	***Zip:***	92582

7	***1 of1***	***ESE***	***0.10 / 546.63***	***1,530.62 / 2***	***FRED KORNOFF 825B 9TH STREET***	***RCRA NON GEN***

Handler ID: CAC003284234
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		

Used Oil Market Burner: No
Used Oil Spec Marketer: No

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	236210
Seq No:	2	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20240724	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	33.778441
In Handler Univ:	N	**Location Longitude:**	-116.973212
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner: HQ
State Waste Generator Owner: CA
State Waste Generator: D
Short Term Generator: N
Uni Waste: N
Universal Waste Dest Facility: N
Federal Universal Waste: N
As Federally Regulated Tsdf: ------
As Converter Tsdf: ------
As State Regulated Tsdf: ------
As State Regulated Handler: ---
Federal Indicator: ---
Hsm: N
Subpart K: ----
GPRA Permit: N
GPRA Renewal: N
Permit Renewal Wrkld: ------
Permwrk ID: ------
Perm Prog: ------
Pcwrkld: ------
Closwrkld: ------
GPRA Ca: N
Cawrkld: N
Subjca Tsd Discretion: N
NCAPS: N

EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20240919
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	FRED KORNOFF
Location Street No:	
Location Street1:	825B 9TH STREET
Location Street2:	
Location City:	SAN JACINTO
Location State:	CA
Location Zip:	92582
Location County Code:	CA065
Location County Name:	RIVERSIDE
Location Country:	US
Contact Name:	FRED KORNOFF
Contact Street No:	
Contact Street1:	2264 VIRAZON DRIVE
Contact Street2:	
Contact City:	LHH
Contact State:	CA
Contact Zip:	90631
Contact Country:	
Contact Phone & Ext:	565-694-8358
Contact Fax:	
Contact Email Address:	FREDKORNOFF@GMAIL.COM
Contact Title:	
Owner Name:	
Owner Type:	
Owner Seq:	
Operator Name:	
Operator Type:	
Operator Seq:	
Public Notes:	

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20240423
Handler Name:	FRED KORNOFF
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer
TSD Activity:	N

Hazardous Waste Handler Details

Seq No:	2
Receive Date:	20240724
Handler Name:	FRED KORNOFF
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer

TSD Activity: N

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	2264 VIRAZON DRIVE
Name:	FRED KORNOFF	***Street2:***	
Dt Became Current:		***City:***	LHH
Dt Ended Current:		***State:***	CA
Phone:	951-830-2765	***Country:***	
Source Type:	Implementer	***Zip:***	90631

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	2264 VIRAZON DRIVE
Name:	FRED KORNOFF	***Street2:***	
Dt Became Current:		***City:***	LHH
Dt Ended Current:		***State:***	CA
Phone:	565-694-8358	***Country:***	
Source Type:	Implementer	***Zip:***	90631

Historical Handler Details

Receive Dt:	20240423
Generator Code Description:	Not a Generator, Verified
Handler Name:	FRED KORNOFF

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	1 of1	E	0.11 / 557.87	1,530.62 / 2	LO LYNCH INC 856 W 7TH ST SAN JACINTO CA 92582	RCRA NON GEN

Handler ID:	CAL000257320
Generator Status:	N
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	42183
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20020809	***NAIC 4:***	
Active Site:	H----	***State:***	CA
Land Type:		***Location Latitude:***	33.780157

In Handler Univ:	Y	***Location Longitude:***	-116.974962
In A Universe:	Y	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	AG
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		

Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	CA
State Waste Generator:	2
Short Term Generator:	N
Uni Waste:	Y
Universal Waste Dest Facility:	Y
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal WrkId:	------
Permwrk ID:	------
Perm Prog:	------
PcwrkId:	------
CloswrkId:	------
GPRA Ca:	N
CawrkId:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20180905
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	LO LYNCH INC
Location Street No:	
Location Street1:	856 W 7TH ST
Location Street2:	
Location City:	SAN JACINTO
Location State:	CA
Location Zip:	92582
Location County Code:	CA065
Location County Name:	RIVERSIDE
Location Country:	US
Contact Name:	ALICIA KOMIVES
Contact Street No:	
Contact Street1:	856 W 7TH ST
Contact Street2:	
Contact City:	SAN JACINTO
Contact State:	CA
Contact Zip:	92582
Contact Country:	
Contact Phone & Ext:	909-654-7724
Contact Fax:	

Contact Email Address: MFN@LYNCHWELLS.COM
Contact Title:
Owner Name: KEITH SWARTHOUT & EMIL WORM
Owner Type: O
Owner Seq: 1
Operator Name: ALICIA KOMIVES
Operator Type: O
Operator Seq: 2
Public Notes:

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20020809
Handler Name: LO LYNCH INC
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer
TSD Activity: N

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	856 W 7TH ST
Name:	KEITH SWARTHOUT & EMIL WORM	***Street2:***	
Dt Became Current:		***City:***	SAN JACINTO
Dt Ended Current:		***State:***	CA
Phone:	909-654-7724	***Country:***	
Source Type:	Implementer	***Zip:***	92582

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	856 W 7TH ST
Name:	ALICIA KOMIVES	***Street2:***	
Dt Became Current:		***City:***	SAN JACINTO
Dt Ended Current:		***State:***	CA
Phone:	909-654-7724	***Country:***	
Source Type:	Implementer	***Zip:***	92582

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
9	1 of1	NNW	0.16 / 821.09	1,525.62 / -3	DIESEL REPAIR DEPOT 590 S GRAND AVE SAN JACINTO CA 92583	RCRA NON GEN

Handler ID: CAC003339707
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No

Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	811111
Seq No:	2	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20250831	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	33.782121
In Handler Univ:	N	**Location Longitude:**	-116.978364
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	CA
State Waste Generator:	N
Short Term Generator:	N
Uni Waste:	N
Universal Waste Dest Facility:	N
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20250904
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	
Handler Name:	DIESEL REPAIR DEPOT
Location Street No:	
Location Street1:	590 S GRAND AVE
Location Street2:	
Location City:	SAN JACINTO
Location State:	CA

Location Zip: 92583
Location County Code: CA065
Location County Name: RIVERSIDE
Location Country: US
Contact Name:
Contact Street No:
Contact Street1:
Contact Street2:
Contact City:
Contact State:
Contact Zip:
Contact Country:
Contact Phone & Ext:
Contact Fax:
Contact Email Address:
Contact Title:
Owner Name:
Owner Type:
Owner Seq:
Operator Name:
Operator Type:
Operator Seq:
Public Notes:

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20250521
Handler Name: DIESEL REPAIR DEPOT
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer
TSD Activity: N

Hazardous Waste Handler Details

Seq No: 2
Receive Date: 20250831
Handler Name: DIESEL REPAIR DEPOT
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer
TSD Activity: N

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Other
Name: CHRISTIAN MOLINA
Dt Became Current:
Dt Ended Current:
Phone: 951-357-8262
Source Type: Implementer
Street No:
Street1: 590 S GRAND AVE
Street2:
City: SAN JACINTO
State: CA
Country:
Zip: 92583

Owner/Operator Ind: Current Owner
Type: Other
Name: CHRISTIAN MOLINA
Dt Became Current:
Dt Ended Current:
Phone: 951-357-8262
Source Type: Implementer
Street No:
Street1: 590 S GRAND AVE
Street2:
City: SAN JACINTO
State: CA
Country:
Zip: 92583

Historical Handler Details

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Receive Dt: 20250521
Generator Code Description: Not a Generator, Verified
Handler Name: DIESEL REPAIR DEPOT

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
10	1 of1	W	0.16 / 844.97	1,525.62 / -3	DISCOVERY MOOD & ANXIETY 1119 W 7TH ST SAN JACINTO CA 92582	RCRA NON GEN

Handler ID: CAL000473020
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	623990
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20220901	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	33.780203
In Handler Univ:	N	**Location Longitude:**	-116.981566
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner: HQ
State Waste Generator Owner: CA
State Waste Generator: 2
Short Term Generator: N
Uni Waste: N
Universal Waste Dest Facility: N
Federal Universal Waste: N
As Federally Regulated Tsdf: ------
As Converter Tsdf: ------
As State Regulated Tsdf: ------
As State Regulated Handler: ---
Federal Indicator: ---
Hsm: N
Subpart K: ----
GPRA Permit: N
GPRA Renewal: N
Permit Renewal Wrkld: ------
Permwrk ID: ------

Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20220902
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	DISCOVERY MOOD & ANXIETY
Location Street No:	
Location Street1:	1119 W 7TH ST
Location Street2:	
Location City:	SAN JACINTO
Location State:	CA
Location Zip:	92582
Location County Code:	CA065
Location County Name:	RIVERSIDE
Location Country:	US
Contact Name:	JENNIFER MARQUEZ
Contact Street No:	
Contact Street1:	1119 W 7TH ST
Contact Street2:	
Contact City:	SAN JACINTO
Contact State:	CA
Contact Zip:	92582
Contact Country:	
Contact Phone & Ext:	951-345-6570
Contact Fax:	
Contact Email Address:	REGULATORYAFFAIRS@DISCOVERYBH.COM
Contact Title:	
Owner Name:	DISCOVERY PRACTICE MANAGEMENT INC
Owner Type:	O
Owner Seq:	1
Operator Name:	JENNIFER MARQUEZ
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20220901
Handler Name:	DISCOVERY MOOD & ANXIETY
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer
TSD Activity:	N

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	4281 KATELLA AVE #111
Name:	DISCOVERY PRACTICE MANAGEMENT INC	***Street2:***	
Dt Became Current:		***City:***	LOS ALAMITOS
Dt Ended Current:		***State:***	CA
Phone:	657-289-3029	***Country:***	
Source Type:	Implementer	***Zip:***	90720
Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	1119 W 7TH ST
Name:	JENNIFER MARQUEZ	***Street2:***	
Dt Became Current:		***City:***	SAN JACINTO
Dt Ended Current:		***State:***	CA
Phone:	951-345-6570	***Country:***	
Source Type:	Implementer	***Zip:***	92582

11	*1 of1*	*N*	*0.18 / 968.34*	*1,525.62 / -3*	***ALL-SPEC ENCLOSURES, INC.*** ***582 S GRAND AVE*** ***SAN JACINTO CA 92582***	***EMISSIONS***

2015 Toxic Data

Facility ID:	147212	***COID:***	RIV
Facility SIC Code:	3999	***DISN:***	SOUTH COAST AQMD
CO:	33	***CHAPIS:***	
Air Basin:	SC	***CERR Code:***	
District:	SC		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2016 Toxic Data

Facility ID:	147212	***TS:***	
Facility SIC Code:	3999	***HRA:***	
CERR CODE:		***CH Index:***	
COID:	RIV	***AH Index:***	
CO:	33	***Air Basin:***	SC
DISN:	SOUTH COAST AQMD	***District:***	SC
CHAPIS:			

12	*1 of1*	*NW*	*0.19 / 978.16*	*1,523.62 / -5*	***SIN LEY AUTO*** ***1090 INVESTORS PL*** ***SAN JACINTO CA 92582-3874***	***RCRA NON GEN***

Handler ID:	CAL000395276
Generator Status:	N
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		

Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	811111
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20140326	**NAIC 4:**	
Active Site:	H----	**State:**	CA
Land Type:		**Location Latitude:**	33.782058
In Handler Univ:	Y	**Location Longitude:**	-116.98034
In A Universe:	Y	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	CA
State Waste Generator:	2
Short Term Generator:	N
Uni Waste:	Y
Universal Waste Dest Facility:	Y
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20180906
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Contact Language: EN
Handler Name: SIN LEY AUTO
Location Street No:
Location Street1: 1090 INVESTORS PL
Location Street2:
Location City: SAN JACINTO
Location State: CA
Location Zip: 92582-3874
Location County Code: CA065
Location County Name: RIVERSIDE
Location Country: US
Contact Name: JUAN ACOSTA
Contact Street No:
Contact Street1: 1090 INVESTORS PL
Contact Street2:
Contact City: SAN JACINTO
Contact State: CA
Contact Zip: 92582
Contact Country:
Contact Phone & Ext: 951-654-4663
Contact Fax: 951-654-4799
Contact Email Address: LGBOOKKEEPINGTAX@GMAIL.COM
Contact Title:
Owner Name: JUAN CARLOS ACOSTA
Owner Type: O
Owner Seq: 1
Operator Name: JUAN ACOSTA
Operator Type: O
Operator Seq: 2
Public Notes:

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20140326
Handler Name: SIN LEY AUTO
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer
TSD Activity: N

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Other
Name: JUAN CARLOS ACOSTA
Dt Became Current:
Dt Ended Current:
Phone: 951-654-4663
Source Type: Implementer
Street No:
Street1: 924 HEREFORD WAY
Street2:
City: PERRIS
State: CA
Country:
Zip: 92571-9459

Owner/Operator Ind: Current Operator
Type: Other
Name: JUAN ACOSTA
Dt Became Current:
Dt Ended Current:
Phone: 951-654-4663
Source Type: Implementer
Street No:
Street1: 1090 INVESTORS PL
Street2:
City: SAN JACINTO
State: CA
Country:
Zip: 92582

13	1 of2	NNW	0.19 / 998.02	1,524.62 / -4	RA SERVICE REPAIR LLC 1035 INVESTOR PL SAN JACINTO CA 92583	RCRA NON GEN

Handler ID:	CAL000438194
Generator Status:	N
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	811111
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20180809	**NAIC 4:**	
Active Site:	H----	**State:**	CA
Land Type:		**Location Latitude:**	33.782411
In Handler Univ:	Y	**Location Longitude:**	-116.97914
In A Universe:	Y	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	CA
State Waste Generator:	2
Short Term Generator:	N
Uni Waste:	Y
Universal Waste Dest Facility:	Y
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N

Operating Tsdf: ------
Full Enforcement: ------
Snc: N
Unaddressed Snc: N
Addressed Snc: N
Snc With Comp Sched: N
Fa Required: -----
Hhandler Last Change: 20180907
Recognized Trader Importer: N
Recognized Trader Exporter: N
Slab Importer: N
Slab Exporter: N
Manifest Broker: N
Subpart P: N
Contact Language: EN
Handler Name: RA SERVICE REPAIR LLC
Location Street No:
Location Street1: 1035 INVESTOR PL
Location Street2:
Location City: SAN JACINTO
Location State: CA
Location Zip: 92583
Location County Code: CA065
Location County Name: RIVERSIDE
Location Country: US
Contact Name: JAMES BLACKMORE
Contact Street No:
Contact Street1: 1654 MARIN CT
Contact Street2:
Contact City: SAN JACINTO
Contact State: CA
Contact Zip: 92583
Contact Country:
Contact Phone & Ext: 951-818-1383
Contact Fax:
Contact Email Address: AMBERGAISA@YAHOO.COM
Contact Title:
Owner Name: ROBERT MACCACHREN
Owner Type: O
Owner Seq: 1
Operator Name: JAMES BLACKMORE
Operator Type: O
Operator Seq: 2
Public Notes:

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20180809
Handler Name: RA SERVICE REPAIR LLC
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer
TSD Activity: N

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Other
Name: JAMES BLACKMORE
Dt Became Current:
Dt Ended Current:
Phone: 951-818-1383
Source Type: Implementer
Street No:
Street1: 1654 MARIN CT
Street2:
City: SAN JACINTO
State: CA
Country:
Zip: 92583

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street1:**	7430 W VERDE WAY
Name:	ROBERT MACCACHREN	**Street2:**	
Dt Became Current:		**City:**	LAS VEGAS
Dt Ended Current:		**State:**	NV
Phone:	702-592-1919	**Country:**	
Source Type:	Implementer	**Zip:**	89149

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
13	2 of2	NNW	0.19 / 998.02	1,524.62 / -4	RIVIERA RACING LLC 1035 INVESTORS PL SAN JACINTO CA 92582-3874	RCRA NON GEN

Handler ID: CAL000386752
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	711219
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20130627	**NAIC 4:**	
Active Site:	H----	**State:**	CA
Land Type:		**Location Latitude:**	33.782411
In Handler Univ:	Y	**Location Longitude:**	-116.97914
In A Universe:	Y	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	Y		
Universal Waste Dest Facility:	Y		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		

GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20180906
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	RIVIERA RACING LLC
Location Street No:	
Location Street1:	1035 INVESTORS PL
Location Street2:	
Location City:	SAN JACINTO
Location State:	CA
Location Zip:	92582-3874
Location County Code:	CA065
Location County Name:	RIVERSIDE
Location Country:	US
Contact Name:	JIM BLACKMORE
Contact Street No:	
Contact Street1:	1654 MARIN CT
Contact Street2:	
Contact City:	SAN JACINTO
Contact State:	CA
Contact Zip:	92583
Contact Country:	
Contact Phone & Ext:	951-818-1383
Contact Fax:	951-654-7650
Contact Email Address:	RIVIERARACING3@HOTMAIL.COM
Contact Title:	
Owner Name:	RIVIERA RACING LLC
Owner Type:	O
Owner Seq:	1
Operator Name:	JIM BLACKMORE
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20130627
Handler Name:	RIVIERA RACING LLC
Fed Waste Generator:	N

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Generator Code Description: Not a Generator, Verified
Source Type: Implementer
TSD Activity: N

Owner/Operator Details

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street1:**	30012 IVY GLEN SUITE 135
Name:	RIVIERA RACING LLC	**Street2:**	
Dt Became Current:		**City:**	LAGUNA NIGUEL
Dt Ended Current:		**State:**	CA
Phone:	949-388-2667	**Country:**	
Source Type:	Implementer	**Zip:**	92677-0000

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street1:**	1654 MARIN CT
Name:	JIM BLACKMORE	**Street2:**	
Dt Became Current:		**City:**	SAN JACINTO
Dt Ended Current:		**State:**	CA
Phone:	951-818-1383	**Country:**	
Source Type:	Implementer	**Zip:**	92583

14	1 of1	N	0.20 / 1,041.45	1,526.62 / -2	**VENABLE RESEARCH & DVPT CORP** **586 GRAND AVE** **SAN JACINTO CA 92582**	**RCRA SQG**

Handler ID: CAD983593757
Generator Status: SQG
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	N	**NAIC 1:**	
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	19910722	**NAIC 4:**	
Active Site:	H----	**State:**	CA
Land Type:	O	**Location Latitude:**	33.782265
In Handler Univ:	Y	**Location Longitude:**	-116.97818
In A Universe:	Y	**Loc GIS Primary:**	N
Gen Status:	SQG	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	CA
Accessibility:		**State District:**	4

Region:	09
Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	
State Waste Generator:	
Short Term Generator:	N
Uni Waste:	N
Universal Waste Dest Facility:	N
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20020627
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	VENABLE RESEARCH & DVPT CORP
Location Street No:	
Location Street1:	586 GRAND AVE
Location Street2:	
Location City:	SAN JACINTO
Location State:	CA
Location Zip:	92582
Location County Code:	CA065
Location County Name:	RIVERSIDE
Location Country:	US
Contact Name:	JACQUES DARRELL
Contact Street No:	
Contact Street1:	586 GRAND AVE
Contact Street2:	
Contact City:	SAN JACINTO
Contact State:	CA
Contact Zip:	92582
Contact Country:	US
Contact Phone & Ext:	714-654-0053
Contact Fax:	
Contact Email Address:	
Contact Title:	
Owner Name:	VENABLE RESEARCH & DVPT CORP
Owner Type:	P
Owner Seq:	1

Operator Name: NOT REQUIRED
Operator Type: P
Operator Seq: 2
Public Notes:

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 19910722
Handler Name: VENABLE RESEARCH & DVPT CORP
Fed Waste Generator: 2
Generator Code Description: Small Quantity Generator
Source Type: Notification
TSD Activity: N

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Private
Name: NOT REQUIRED
Dt Became Current:
Dt Ended Current:
Phone: 415-555-1212
Source Type: Notification
Street No:
Street1: NOT REQUIRED
Street2:
City: NOT REQUIRED
State: ME
Country:
Zip: 99999

Owner/Operator Ind: Current Owner
Type: Private
Name: VENABLE RESEARCH & DVPT CORP
Dt Became Current:
Dt Ended Current:
Phone: 415-555-1212
Source Type: Notification
Street No:
Street1: NOT REQUIRED
Street2:
City: NOT REQUIRED
State: ME
Country:
Zip: 99999

15	1 of1	NNW	0.21 / 1,101.55	1,525.62 / -3	LATINOS AUTO REPAIR 998 ENTERPRISE AVE SAN JACINTO CA 92582-3880	RCRA NON GEN

Handler ID: CAL000303875
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer: No
Mixed Waste Gen: No
Transporter: No
Transfer Facility: No
Recycler: No
Onsite Burner Exem: No
Furnace Exemption: No
Underground Injec: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No
Used Oil Transpor: No
Used Oil Trans Fac: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Commercial TSD: No
Recycl Nonstorage: No

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	811111
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20060227	***NAIC 4:***	
Active Site:	H----	***State:***	CA
Land Type:		***Location Latitude:***	33.7833
In Handler Univ:	Y	***Location Longitude:***	-116.978398
In A Universe:	Y	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	AG
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		

Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	CA
State Waste Generator:	2
Short Term Generator:	N
Uni Waste:	Y
Universal Waste Dest Facility:	Y
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20180905
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	LATINOS AUTO REPAIR
Location Street No:	
Location Street1:	998 ENTERPRISE AVE
Location Street2:	
Location City:	SAN JACINTO
Location State:	CA
Location Zip:	92582-3880
Location County Code:	CA065
Location County Name:	RIVERSIDE
Location Country:	US
Contact Name:	RICARDO RODRIGUEZ
Contact Street No:	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Contact Street1:	998 ENTERPRISE AVE
Contact Street2:	
Contact City:	SAN JACINTO
Contact State:	CA
Contact Zip:	92582
Contact Country:	
Contact Phone & Ext:	951-654-8052
Contact Fax:	000-000-0000
Contact Email Address:	LATINOS.AUTO@AOL.COM
Contact Title:	
Owner Name:	RICARDO RODRIGUEZ
Owner Type:	O
Owner Seq:	1
Operator Name:	RICARDO RODRIGUEZ
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20060227
Handler Name:	LATINOS AUTO REPAIR
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer
TSD Activity:	N

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	220 QUANDT RANCH RD
Name:	RICARDO RODRIGUEZ	***Street2:***	
Dt Became Current:		***City:***	SAN JACINTO
Dt Ended Current:		***State:***	CA
Phone:	951-236-8147	***Country:***	
Source Type:	Implementer	***Zip:***	92583-6330
Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	998 ENTERPRISE AVE
Name:	RICARDO RODRIGUEZ	***Street2:***	
Dt Became Current:		***City:***	SAN JACINTO
Dt Ended Current:		***State:***	CA
Phone:	951-654-8052	***Country:***	
Source Type:	Implementer	***Zip:***	92582

16	***1 of1***	***NNW***	***0.21 / 1,105.09***	***1,525.62 / -3***	***OMAR RODRIGUEZ DBA PERFORMANCE AUTO LUBE 1012 ENTERPRISE AVE SAN JACINTO CA 92582***	***RCRA NON GEN***

Handler ID:	CAL000439912
Generator Status:	N
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	811111
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20181016	***NAIC 4:***	
Active Site:	H----	***State:***	CA
Land Type:		***Location Latitude:***	33.783294
In Handler Univ:	Y	***Location Longitude:***	-116.978668
In A Universe:	Y	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	AG
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	Y		
Universal Waste Dest Facility:	Y		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		
Snc:	N		
Unaddressed Snc:	N		
Addressed Snc:	N		
Snc With Comp Sched:	N		
Fa Required:	-----		
Hhandler Last Change:	20181120		
Recognized Trader Importer:	N		
Recognized Trader Exporter:	N		
Slab Importer:	N		
Slab Exporter:	N		

Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	OMAR RODRIGUEZ DBA PERFORMANCE AUTO LUBE
Location Street No:	
Location Street1:	1012 ENTERPRISE AVE
Location Street2:	
Location City:	SAN JACINTO
Location State:	CA
Location Zip:	92582
Location County Code:	CA065
Location County Name:	RIVERSIDE
Location Country:	US
Contact Name:	OMAR RODRIGUEZ
Contact Street No:	
Contact Street1:	1237 CAMERON ST
Contact Street2:	
Contact City:	BEAUMONT
Contact State:	CA
Contact Zip:	92223
Contact Country:	
Contact Phone & Ext:	909-647-7423
Contact Fax:	
Contact Email Address:	PERFORMANCEAUTOLUBE@GMAIL.COM
Contact Title:	
Owner Name:	OMAR RODRIGUEZ
Owner Type:	O
Owner Seq:	1
Operator Name:	OMAR RODRIGUEZ
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20181016
Handler Name:	OMAR RODRIGUEZ DBA PERFORMANCE AUTO LUBE
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer
TSD Activity:	N

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	1237 CAMERON ST
Name:	OMAR RODRIGUEZ	***Street2:***	
Dt Became Current:		***City:***	BEAUMONT
Dt Ended Current:		***State:***	CA
Phone:	909-647-7423	***Country:***	
Source Type:	Implementer	***Zip:***	92223
Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	1012 ENTERPRISE AVE
Name:	OMAR RODRIGUEZ	***Street2:***	
Dt Became Current:		***City:***	SAN JACINTO
Dt Ended Current:		***State:***	CA
Phone:	951-999-3313	***Country:***	
Source Type:	Implementer	***Zip:***	92582

17	*1 of2*	*N*	*0.22 / 1,154.95*	*1,527.62 / -1*	*GRAND AUTO BODY & MECH, ISABEL L30ENZANA*	***EMISSIONS***

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
					556 GRAND AVE SAN JACINTO CA 92582	

2015 Toxic Data

Facility ID:	145745	***COID:***	RIV
Facility SIC Code:	9999	***DISN:***	SOUTH COAST AQMD
CO:	33	***CHAPIS:***	
Air Basin:	SC	***CERR Code:***	
District:	SC		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
17	2 of2	N	0.22 / 1,154.95	1,527.62 / -1	GRAND AUTO BODY & MECH, ISABEL LORENZANA 556 GRAND AVE SAN JACINTO CA 92582	EMISSIONS

2016 Toxic Data

Facility ID:	145745	***TS:***	
Facility SIC Code:	9999	***HRA:***	
CERR CODE:		***CH Index:***	
COID:	RIV	***AH Index:***	
CO:	33	***Air Basin:***	SC
DISN:	SOUTH COAST AQMD	***District:***	SC
CHAPIS:			

2017 Toxic Data

Facility ID:	145745	***COID:***	RIV
Facility SIC Code:	9999	***DISN:***	SOUTH COAST AQMD
CO:	33	***CHAPIS:***	
Air Basin:	SC	***CERR Code:***	
District:	SC		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
18	1 of2	E	0.23 / 1,214.40	1,532.62 / 4	Primo's Auto Repair / OOB 718 W 7th St Hemet CA 92583	MED WST RIVERSIDE

Fac ID:	FA0026397	***Facility Phone No:***	9516545553
APN:		***Lat:***	33.78684
Program Type:	Medical Waste	***Long:***	-116.9549

Detail

Permit No:	PR0051651	***Permit Issued Date:***	
Status:	Inactive	***Permit Valid To:***	
Permit Type Code:	4336	***Permit Valid From:***	
Permit Sub Type:			
Permit Type:	Limited Quantity Hauling - Fixed Fee		
Location Details:			

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
18	2 of2	E	0.23 / 1,214.40	1,532.62 / 4	SIN-LEY TIRES & WHEELS 718 W 7TH ST SAN JACINTO CA 92582	RCRA NON GEN

Handler ID: CAL000433607
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		

Used Oil Market Burner: No
Used Oil Spec Marketer: No

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	811111
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20180212	**NAIC 4:**	
Active Site:	H----	**State:**	CA
Land Type:		**Location Latitude:**	33.780158
In Handler Univ:	Y	**Location Longitude:**	-116.972781
In A Universe:	Y	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner: HQ
State Waste Generator Owner: CA
State Waste Generator: 2
Short Term Generator: N
Uni Waste: Y
Universal Waste Dest Facility: Y
Federal Universal Waste: N
As Federally Regulated Tsdf: ------
As Converter Tsdf: ------
As State Regulated Tsdf: ------
As State Regulated Handler: ---
Federal Indicator: ---
Hsm: N
Subpart K: ----
GPRA Permit: N
GPRA Renewal: N
Permit Renewal Wrkld: ------
Permwrk ID: ------
Perm Prog: ------
Pcwrkld: ------
Closwrkld: ------
GPRA Ca: N
Cawrkld: N
Subjca Tsd Discretion: N

NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20180907
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	SIN-LEY TIRES & WHEELS
Location Street No:	
Location Street1:	718 W 7TH ST
Location Street2:	
Location City:	SAN JACINTO
Location State:	CA
Location Zip:	92582
Location County Code:	CA065
Location County Name:	RIVERSIDE
Location Country:	US
Contact Name:	ORLANDO ACOSTA
Contact Street No:	
Contact Street1:	718 W 7TH ST
Contact Street2:	
Contact City:	SAN JACINTO
Contact State:	CA
Contact Zip:	92582
Contact Country:	
Contact Phone & Ext:	951-421-2894
Contact Fax:	951-654-8196
Contact Email Address:	
Contact Title:	
Owner Name:	ORLANDO ACOSTA
Owner Type:	O
Owner Seq:	1
Operator Name:	ORLANDO ACOSTA
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20180212
Handler Name:	SIN-LEY TIRES & WHEELS
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer
TSD Activity:	N

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	718 W 7TH ST
Name:	ORLANDO ACOSTA	***Street2:***	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Dt Became Current:		**City:**	SAN JACINTO
Dt Ended Current:		**State:**	CA
Phone:	951-421-2894	**Country:**	
Source Type:	Implementer	**Zip:**	92582
Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street1:**	718 W 7TH ST
Name:	ORLANDO ACOSTA	**Street2:**	
Dt Became Current:		**City:**	SAN JACINTO
Dt Ended Current:		**State:**	CA
Phone:	951-421-2894	**Country:**	
Source Type:	Implementer	**Zip:**	92582

19	1 of1	NNW	0.24 / 1,263.88	1,523.62 / -5	TIME OUT AUTO INC 1054 ENTERPRISE AVE SAN JACINTO CA 95983	RCRA NON GEN

Handler ID:	CAL000465610
Generator Status:	N
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	811111
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20210920	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	33.783332
In Handler Univ:	N	**Location Longitude:**	-116.979622
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	N		
Universal Waste Dest Facility:	N		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		

As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20211011
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	TIME OUT AUTO INC
Location Street No:	
Location Street1:	1054 ENTERPRISE AVE
Location Street2:	
Location City:	SAN JACINTO
Location State:	CA
Location Zip:	95983
Location County Code:	CA065
Location County Name:	RIVERSIDE
Location Country:	US
Contact Name:	GEORGE FRANCIS ROSTEN IV
Contact Street No:	
Contact Street1:	1054 ENTERPRISE AVE
Contact Street2:	
Contact City:	SAN JACINTO
Contact State:	CA
Contact Zip:	95983
Contact Country:	
Contact Phone & Ext:	951-259-1796
Contact Fax:	
Contact Email Address:	
Contact Title:	
Owner Name:	TIME OUT AUTO INC
Owner Type:	O
Owner Seq:	1
Operator Name:	GEORGE FRANCIS ROSTEN IV
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Seq No: 1
Receive Date: 20210920
Handler Name: TIME OUT AUTO INC
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer
TSD Activity: N

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Other
Name: GEORGE FRANCIS ROSTEN IV
Dt Became Current:
Dt Ended Current:
Phone: 951-259-1796
Source Type: Implementer
Street No:
Street1: 1054 ENTERPRISE AVE
Street2:
City: SAN JACINTO
State: CA
Country:
Zip: 95983

Owner/Operator Ind: Current Owner
Type: Other
Name: TIME OUT AUTO INC
Dt Became Current:
Dt Ended Current:
Phone: 951-259-1796
Source Type: Implementer
Street No:
Street1: 1054 ENTERPRISE AVE
Street2:
City: SAN JACINTO
State: CA
Country:
Zip: 95983

20	1 of4	ENE	0.24 / 1,264.31	1,532.62 / 4	MATTHEWS INTL. C30P., BRONZE DIV. 580 STATE ST UNIT 108 SAN JACINTO CA 92583	EMISSIONS

2015 Toxic Data

Facility ID: 148462
Facility SIC Code: 9999
CO: 33
Air Basin: SC
District: SC
TS:
Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
COID: RIV
DISN: SOUTH COAST AQMD
CHAPIS:
CERR Code:

20	2 of4	ENE	0.24 / 1,264.31	1,532.62 / 4	MATTHEWS INTL. CORP., BRONZE DIV. 580 STATE ST UNIT 108 SAN JACINTO CA 92583	EMISSIONS

2016 Toxic Data

Facility ID: 148462
Facility SIC Code: 7999
CERR CODE:
COID: RIV
CO: 33
DISN: SOUTH COAST AQMD
CHAPIS:
TS:
HRA:
CH Index:
AH Index:
Air Basin: SC
District: SC

20	3 of4	ENE	0.24 / 1,264.31	1,532.62 / 4	SAN JACINTO AUTO COLLISION 580 S STATE ST UNIT 5 SAN JACINTO CA 92583	EMISSIONS

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

2019 Toxic Data

CO:	33	***DISN:***	SOUTH COAST AQMD
Air Basin:	SC	***CHAPIS:***	
Faccility ID:	190899	***CERR Code:***	
District:	SC	***TS:***	
Facility SIC Code:	7538	***Health Risk Asmt:***	
COID:	RIV		
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

20	*4 of4*	*ENE*	*0.24 / 1,264.31*	*1,532.62 / 4*	***MATTHEWS INTERNATIONAL CORPORATION*** ***580 S. STATE STREET STE. 8*** ***SAN JACINTO CA 92583***	***RCRA NON GEN***

Handler ID:	CAP000339291
Generator Status:	N
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	331529
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20220902	***NAIC 4:***	
Active Site:	-----	***State:***	CA
Land Type:	P	***Location Latitude:***	33.781389
In Handler Univ:	N	***Location Longitude:***	-116.973611
In A Universe:	N	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	UC
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	D		
Short Term Generator:	N		
Uni Waste:	N		
Universal Waste Dest Facility:	N		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		

As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20240725
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	MATTHEWS INTERNATIONAL CORPORATION
Location Street No:	580
Location Street1:	S. STATE STREET
Location Street2:	STE. 8
Location City:	SAN JACINTO
Location State:	CA
Location Zip:	92583
Location County Code:	CA065
Location County Name:	RIVERSIDE
Location Country:	US
Contact Name:	YURIJ WOWCZUK
Contact Street No:	2
Contact Street1:	NORTH SHORE CENTER
Contact Street2:	
Contact City:	PITTSBURGH
Contact State:	PA
Contact Zip:	15212
Contact Country:	US
Contact Phone & Ext:	412-442-8279
Contact Fax:	
Contact Email Address:	YWOWCZUK@MATW.COM
Contact Title:	SENIOR DIRECTOR & HEAD - GLOBAL PRODUCTION
Owner Name:	
Owner Type:	
Owner Seq:	
Operator Name:	
Operator Type:	
Operator Seq:	
Public Notes:	

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20220602
Handler Name: MATTHEWS INTERNATIONAL CORPORATION
Fed Waste Generator: 1
Generator Code Description: Large Quantity Generator
Source Type: Notification
TSD Activity: N

Waste Code Details

Waste Code: 181
Waste Code Desc: Other inorganic solid waste

Waste Code: 214
Waste Code Desc: Unspecified solvent mixture

Waste Code: D001
Waste Code Desc: IGNITABLE WASTE

Waste Code: D008
Waste Code Desc: LEAD

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20220902
Handler Name: MATTHEWS INTERNATIONAL CORPORATION
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer
TSD Activity: N

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Private
Name: MATTHEWS INTERNATIONAL CORPORATION
Dt Became Current: 20060701
Dt Ended Current:
Phone: 412-442-8279
Source Type: Notification
Street No: TWO
Street1: NORTHSHORE CENTER
Street2:
City: PITTSBURGH
State: PA
Country: US
Zip: 15212

Owner/Operator Ind: Current Owner
Type: Private
Name: MATTHEWS INTERNATIONAL CORPORATION
Dt Became Current: 20060701
Dt Ended Current:
Phone: 412-442-8279
Source Type: Notification
Street No: TWO
Street1: NORTHSHORE CENTER
Street2:
City: PITTSBURGH
State: PA
Country: US
Zip: 15212

Historical Handler Details

Receive Dt: 20220602
Generator Code Description: Large Quantity Generator
Handler Name: MATTHEWS INTERNATIONAL CORPORATION

21	1 of5	NNE	0.24 / 1,283.04	1,531.70 / 3	Nutrien Ag Solutions - San Jacinto 801 S GRAND AVE SAN JACINTO CA 92582	CERS TANK

Site ID: 390750
Latitude: 33.783459

Longitude: -116.975708

Regulated Programs

EI ID: 10190578
EI Description: Aboveground Petroleum Storage

EI ID: 10190578
EI Description: Hazardous Waste Generator

EI ID: 10190578
EI Description: Hazardous Chemical Management

Violations

Violation Date: 03/11/2020 ***Violation Source:*** CERS
Violation Program: APSA ***Violation Division:*** Riverside County Department of Env Health
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

Returned to compliance on 09/08/2020.

Violation Description:

Failure to implement the SPCC Plan.

Violations

Violation Date: 12/05/2017 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Riverside County Department of Env Health
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

Returned to compliance on 01/19/2018.

Violation Description:

Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violations

Violation Date: 03/11/2020 ***Violation Source:*** CERS
Violation Program: APSA ***Violation Division:*** Riverside County Department of Env Health
Citation: HSC 6.11 25404.1 - California Health and Safety Code, Chapter 6.11, Section(s) 25404.1
Violation Notes:

Returned to compliance on 04/15/2020.

Violation Description:

Failure to maintain a valid permit.

Violations

Violation Date: 03/11/2020 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Riverside County Department of Env Health
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

Returned to compliance on 04/01/2020. OBSERVATION: Observed an emergency response plan submitted on CERS from 2013 containing incorrect information. Specifically, the business name is reported as "Crop Production Services" when business is operating under "Nutrien Ag Solutions."

CORRECTIVE ACTION: Owner/operator shall update the emergency response plans and procedures to reflect the business name.

Violation Description:

Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.

Violations

Violation Date: 03/11/2020 ***Violation Source:*** CERS
Violation Program: CalARP ***Violation Division:*** Riverside County Department of Env Health
Citation: 19 CCR 4.5 2745.10(f) - California Code of Regulations, Title 19, Chapter 4.5, Section(s) 2745.10(f)
Violation Notes:

Returned to compliance on 05/07/2020.

Violation Description:

Failure to contact the UPA within 30 days of a change of owner or operator to update the registration information.

Violations

Violation Date: 03/11/2020 ***Violation Source:*** CERS
Violation Program: CalARP ***Violation Division:*** Riverside County Department of Env Health
Citation: 19 CCR 4.5 2745.1(d) - California Code of Regulations, Title 19, Chapter 4.5, Section(s) 2745.1(d)
Violation Notes:

Returned to compliance on 05/07/2020.

Violation Description:

Failure of a new or modified stationary source to submit a Risk Management Plan to the UPA prior to the date in which a regulated substance is first present in a process above the listed threshold quantity.

Violations

Violation Date: 11/21/2014 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Riverside County Department of Env Health
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Notes:

Returned to compliance on 02/27/2015. [LOCAL ORDINANCE VIOLATION 104A] NFPA 704 sign(s) have been posted appropriately.

Violation Description:

Business Plan Program - Administration/Documentation - General

Violations

Violation Date: 11/21/2014 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Riverside County Department of Env Health
Citation: HSC 6.95 25508(d) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(d)
Violation Notes:

Returned to compliance on 02/27/2015.

Violation Description:

Failure to complete and/or electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.

Violations

Violation Date: 12/05/2017 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Riverside County Department of Env Health
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

Returned to compliance on 01/19/2018.

Violation Description:

Failure to complete and electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.

Violations

Violation Date: 11/21/2014 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Riverside County Department of Env Health
Citation: 19 CCR 6.95 25508(a)(1) - California Code of Regulations, Title 19, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

Returned to compliance on 02/27/2015.

Violation Description:

Failure to complete and electronically submit the Business Activities Page and/or Business Owner Operator Identification Page.

Violations

Violation Date: 12/05/2017 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Riverside County Department of Env Health
Citation: Un-Specified
Violation Notes:

Returned to compliance on 01/19/2018.

Violation Description:

Business Plan Program - Operations/Maintenance - General Local Ordinance

Violations

Violation Date: 03/11/2020 ***Violation Source:*** CERS
Violation Program: CalARP ***Violation Division:*** Riverside County Department of Env Health
Citation: 19 CCR 4.5 2750.1 - California Code of Regulations, Title 19, Chapter 4.5, Section(s) 2750.1
Violation Notes:

Returned to compliance on 05/07/2020.

Violation Description:

Failure to prepare a worst-case release scenario analysis as provided in Section 2750.3.

Violations

Violation Date: 03/11/2020 ***Violation Source:*** CERS
Violation Program: APSA ***Violation Division:*** Riverside County Department of Env Health
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

Returned to compliance on 09/08/2020.

Violation Description:

Failure to prepare a Spill Prevention, Control, and Countermeasures (SPCC) Plan.

Violations

Violation Date: 03/11/2020 ***Violation Source:*** CERS
Violation Program: APSA ***Violation Division:*** Riverside County Department of Env Health
Citation: HSC 6.67 25270.6(b) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.6(b)
Violation Notes:

Returned to compliance on 04/15/2020.

Violation Description:

Failure to pay the APSA Program fee.

Violations

Violation Date: 03/11/2020 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Riverside County Department of Env Health
Citation: Un-Specified
Violation Notes:

Returned to compliance on 04/01/2020. OBSERVATION: Observed bulk container number 5 without proper labeling. At the time of inspection the container was determined to be empty. CORRECTIVE ACTION: Owner/operator shall ensure all hazardous materials containers are properly labeled. Label bulk container number 5 "Empty." If the container holds any material in the future it shall be labeled with the product name and an appropriate NFPA sign. Submit photos to this department at darios@rivco.org

Violation Description:

Business Plan Program - Operations/Maintenance - General Local Ordinance

Violations

Violation Date: 05/25/2023 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Riverside County Department of Env Health
Citation: 22 CCR 11 66261.7 - California Code of Regulations, Title 22, Chapter 11, Section(s) 66261.7
Violation Notes:

Returned to compliance on 05/25/2023. OBSERVATION: Observed a fiberglass storage container on a trailer behind the maintenance shop which was empty and not labeled properly. Site manager placed label on tank by end of inspection. Violation corrected on-site. CORRECTIVE ACTION: Owner/operator shall properly label all empty containers larger than 5 gallons with the dates they were emptied.

Violation Description:

Failure to manage empty containers greater than 5 gallons in capacity that previously held a hazardous material/waste in accordance with 22 CCR 11 66261.7 including but not limited to the following:

(e)(2)By reclaiming its scrap value onsite or shipping the container or inner liner to a person who reclaims its scrap value; or

(3) By reconditioning or re manufacturing the container or inner liner onsite for subsequent reuse, or shipping the container or inner liner to a person who reconditions or re-manufactures the container or inner liner; or

(4) By shipping the container or inner liner to a supplier or to another intermediate collection location for accumulation prior to managing the container or inner liner pursuant to subsections (e)(2) or (e)(3) of 22 CCR 11 66261.7; or

(i) By shipping the container or inner liner back to the supplier for the purpose of being refilled.

(f) A container or an inner liner removed from a container larger than five gallons in capacity which is managed pursuant to subsection (e) of 22 CCR 11 66261.7 shall be marked with the date it has been emptied and shall be managed within one year of being emptied.

Violations

Violation Date: 03/11/2020 ***Violation Source:*** CERS
Violation Program: APSA ***Violation Division:*** Riverside County Department of Env Health
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

Returned to compliance on 09/08/2020.

Violation Description:

Failure to have a licensed professional engineer properly review and certify the SPCC Plan.

Violations

Violation Date: 05/11/2015 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Riverside City Fire Department
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Notes:

Returned to compliance on 05/14/2015.

Violation Description:

Failure to annually review and electronically certify that the business plan is complete, accurate, and up-to-date.

Violations

Violation Date: 12/05/2017 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Riverside County Department of Env Health
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

Returned to compliance on 01/19/2018.

Violation Description:

Failure to complete and electronically submit a site map with all required content.

Violations

Violation Date: 11/21/2014 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Riverside County Department of Env Health
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Notes:

Returned to compliance on 02/27/2015. [LOCAL ORDINANCE VIOLATION 105D] Hazardous materials containers have been labeled properly.

Violation Description:

Business Plan Program - Operations/Maintenance - General

Violations

Violation Date: 03/11/2020 ***Violation Source:*** CERS
Violation Program: CalARP ***Violation Division:*** Riverside County Department of Env Health
Citation: 19 CCR 4.5 2740.1(b) - California Code of Regulations, Title 19, Chapter 4.5, Section(s) 2740.1(b)
Violation Notes:

Returned to compliance on 05/07/2020.

Violation Description:

Failure to complete the registration information required in section 2740.1(d) and submit it with the Risk Management Plan to the UPA.

Violations

Violation Date: 03/11/2020
Violation Source: CERS
Violation Program: HW
Violation Division: Riverside County Department of Env Health
Citation: Un-Specified
Violation Notes:

Returned to compliance on 04/15/2020.

Violation Description:

Hazardous Waste Generator Program - Administration/Documentation - General Local Ordinance

Violations

Violation Date: 05/25/2023
Violation Source: CERS
Violation Program: HW
Violation Division: Riverside County Department of Env Health
Citation: HSC 6.5 25123.3(h)(1) - California Health and Safety Code, Chapter 6.5, Section(s) 25123.3(h)(1)
Violation Notes:

Returned to compliance on 06/27/2023. OBSERVATION: Observed 2 intermodal bulk containers on site that contain spray oil rinseate water without an accumulation start date/label. Observed last pickup to be more than 3 years ago, one container to be 7/8 full and the other to be 1/4 full. CORRECTIVE ACTION: Owner/operator shall ensure all hazardous wastes are transported off site within 180 days of reaching 100kg/27gal/220lbs. Owner/operator shall have the 2 IBCs of rinse water hazardous waste properly hauled off site by a registered hazardous waste transporter within 30 days of this inspection. Email/provide copy of the manifest to psinclair@rivco.org once the waste has been picked up.

Violation Description:

Failure to send hazardous waste offsite for treatment, storage, or disposal of acute/extremely hazardous waste after the first 1-kilogram threshold amount was accumulated within a 90 day period.

Violations

Violation Date: 03/11/2020
Violation Source: CERS
Violation Program: CalARP
Violation Division: Riverside County Department of Env Health
Citation: 19 CCR 4.5 2750.1 - California Code of Regulations, Title 19, Chapter 4.5, Section(s) 2750.1
Violation Notes:

Returned to compliance on 05/07/2020.

Violation Description:

Failure to complete the five-year accident history as provided in Section 2750.9

Violations

Violation Date: 05/25/2023
Violation Source: CERS
Violation Program: HMRRP
Violation Division: Riverside County Department of Env Health
Citation: Un-Specified
Violation Notes:

Returned to compliance on 05/25/2023. OBSERVATION: Observed 1 intermodal bulk container of usable product at the South end of the facility without a product label. Observed 2 other intermodal containers of the same product beside the unlabeled one. CORRECTIVE ACTION: Owner/operator shall ensure all hazardous materials containers are labeled with a product name. Container labeled by end of inspection. Violation corrected on-site.

Violation Description:

Business Plan Program - Operations/Maintenance - General Local Ordinance

Violations

Violation Date: 03/11/2020 ***Violation Source:*** CERS
Violation Program: CalARP ***Violation Division:*** Riverside County Department of Env Health
Citation: 19 CCR 4.5 2735.5(b)(2) - California Code of Regulations, Title 19, Chapter 4.5, Section(s) 2735.5(b)(2)
Violation Notes:

Returned to compliance on 05/07/2020.

Violation Description:

Failure to include a registration in the Risk Management Plan that reflects all covered processes.

Violations

Violation Date: 03/11/2020 ***Violation Source:*** CERS
Violation Program: CalARP ***Violation Division:*** Riverside County Department of Env Health
Citation: 19 CCR 4.5 2740.1(d) - California Code of Regulations, Title 19, Chapter 4.5, Section(s) 2740.1(d)
Violation Notes:

Returned to compliance on 05/07/2020.

Violation Description:

Failure to include the data required in 2740.1 (d)(1) through (d)(20) in the registration.

Violations

Violation Date: 03/11/2020 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Riverside County Department of Env Health
Citation: HSC 6.95 25508.1(a)-(f) - California Health and Safety Code, Chapter 6.95, Section(s) 25508.1(a)-(f)
Violation Notes:

Returned to compliance on 04/01/2020. OBSERVATION: Observed the emergency response plan submitted on CERS from 2013 containing incorrect information. Specifically, the business name is reported as "Crop Production Services" when business is operating under "Nutrien Ag Solutions." CORRECTIVE ACTION: Owner/Operator shall update and submit a new business emergency plan on CERS.

Violation Description:

Failure to electronically update business plan within 30 days of any one of the following events:
A 100 percent or more increase in the quantity of a previously disclosed material.
Any handling of a previously undisclosed hazardous materials at or above reportable quantities.
A change of business address, business ownership, or business name.
A substantial change in the handler's operations that requires modification to any portion of the business plan.

Violations

Violation Date: 03/11/2020 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Riverside County Department of Env Health
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Notes:

Returned to compliance on 04/03/2020.

Violation Description:

Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violations

Violation Date: 05/25/2023 ***Violation Source:*** CERS

Violation Program: HW ***Violation Division:*** Riverside County Department of Env Health
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Notes:

Returned to compliance on 05/25/2023. OBSERVATION: Observed 2 intermodal bulk containers housing rinse water contaminated with mineral oil deemed a hazardous waste that were missing proper labels. CORRECTIVE ACTION: Owner/operator shall label hazardous waste containers with all the required information. Label shall include at least: the words "hazardous waste", generator name and address, accumulation start date, composition and physical state of waste, and hazardous property statement. Labels completed and affixed to containers by end of inspection. Violation corrected on-site. NOTE: Be advised that once deemed a hazardous waste then all applicable rules/regulations for storing and labeling per Title 22 are required.

Violation Description:

Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violations

Violation Date: 11/21/2014 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Riverside County Department of Env Health
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Notes:

Returned to compliance on 02/27/2015. [LOCAL ORDINANCE VIOLATION 101C] Approved HMBP accessible on site and available for review.

Violation Description:

Business Plan Program - Administration/Documentation - General

Violations

Violation Date: 03/11/2020 ***Violation Source:*** CERS
Violation Program: CalARP ***Violation Division:*** Riverside County Department of Env Health
Citation: 19 CCR 4.5 2745.9(a) - California Code of Regulations, Title 19, Chapter 4.5, Section(s) 2745.9(a)
Violation Notes:

Returned to compliance on 05/07/2020.

Violation Description:

Failure to submit in the Risk Management Plan the certification statement provided in Section 2735.5(d)(4)

Violations

Violation Date: 03/11/2020 ***Violation Source:*** CERS
Violation Program: APSA ***Violation Division:*** Riverside County Department of Env Health
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

Returned to compliance on 09/08/2020.

Violation Description:

Failure to maintain a complete copy of the SPCC Plan at the facility if the facility is normally attended at least four hours per day, or at the nearest field office if the facility is not so attended.

Enforcements

Enf Action Date: 11/21/2014 ***Enf Action Program:*** HMRRP
Enf Action Type: Notice of Violation (Unified Program) ***Enf Action Source:*** CERS
Enf Action Division: Riverside County Department of Env Health
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:

Enf Action Date: 05/11/2015
Enf Action Program: HMRRP
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Source: CERS
Enf Action Division: Riverside City Fire Department
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:

Fines/Penalties Assessed: $100.00. Administrative citation.

Evaluations

Eval Date: 05/25/2023
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Riverside County Department of Env Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Facility is a small quantity generator agricultural supplier. Hazardous waste generated is rinse water contaminated with mineral oil. All violations shall be corrected. A re-inspection/return-to-compliance will be conducted on or after 06/24/23 to verify corrections.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/11/2020
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Riverside County Department of Env Health
Eval Program: CalARP
Eval Source: CERS
Eval Notes:

Eval Date: 05/11/2015
Violations Found: Yes
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Riverside City Fire Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 11/21/2014
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Disclosure inspection w/ Mike Shalhub; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/15/2015
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Riverside City Fire Department
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Eval Date: 11/21/2014
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Riverside County Department of Env Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Generator inspection; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/05/2017
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 03/11/2020
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Riverside County Department of Env Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

COS Made for SQG Permit 3-11-20; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/01/2020
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Riverside County Department of Env Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Email to owner for SPCC plan implementation and establishment.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/15/2015
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Riverside City Fire Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 05/25/2023
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Facility is an agricultural supplier that houses various pesticides, fertilizers and mineral oils. All noted violations were corrected by conclusion of inspection.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/05/2017

Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Riverside County Department of Env Health
Eval Program: CalARP
Eval Source: CERS
Eval Notes:

Eval Date: 02/27/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Follow up inspection; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/19/2018
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 03/11/2020
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Riverside County Department of Env Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

APSA inspection for Nutrien Ag Solution 801 S. Grand Ave, San Jacinto. COS submitted for APSA program.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/21/2014
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Riverside County Department of Env Health
Eval Program: CalARP
Eval Source: CERS
Eval Notes:

Eval Date: 03/11/2020
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Riverside County Department of Env Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 05/25/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Riverside County Department of Env Health
Eval Program: APSA

Eval Source: CERS
Eval Notes:

Affiliations

Affil Type Desc: Identification Signer
Entity Name: Pius Wehrle
Entity Title: Site Safety Coordinator
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Property Owner
Entity Name: Nutrien Ag Solutions
Entity Title:
Address: 3005 Rocky Mountain Ave
City: Loveland
State: CO
Country: United States
Zip Code: 80538
Phone: (970) 685-3768

Affil Type Desc: Parent Corporation
Entity Name: CROP PRODUCTION SERVICES, INC.
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: CUPA District
Entity Name: Riverside Cnty Env Health
Entity Title:
Address: 4065 County Circle Drive, Room 104
City: Riverside
State: CA
Country:
Zip Code: 92503
Phone: (951) 358-5055

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 801 S Grand Ave
City: San Jacinto
State: CA
Country:
Zip Code: 92582
Phone:

Affil Type Desc: Operator
Entity Name: Nutrien Ag Solutions
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (951) 654-9301

Affil Type Desc: Document Preparer
Entity Name: Pius Wehrle

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Legal Owner
Entity Name: Nutrien Ag Solutions
Entity Title:
Address: 3005 Rocky Mountain Ave
City: Loveland
State: CO
Country: United States
Zip Code: 80538
Phone: (970) 685-3768

Affil Type Desc: Environmental Contact
Entity Name: Alex Aguilar
Entity Title:
Address: 2010 Norris Rd
City: Bakersfield
State: CA
Country:
Zip Code: 93308
Phone:

Coordinates

Env Int Type Code: HMBP
Program ID: 10190578
Latitude: 33.783460
Longitude: -116.975710
Coord Name:
Ref Point Type Desc: Center of a facility or station.

21	2 of5	NNE	0.24 / 1,283.04	1,531.70 / 3	**WESTERN FARM SERVICE INC** **801 S GRAND AVENUE** **SAN JACINTO CA 92383**	HHSS

County:
Tank Details Microfiche: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0001f55f.pdf

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21	3 of5	NNE	0.24 / 1,283.04	1,531.70 / 3	**WESTERN FARM SERVICE, INC.** **801 S. GRAND AVENUE** **SAN JACINTO CA**	HIST TANK

Owner Name: COASTAL DIVISION, WESTERN FARM
Owner Street: P.O. BOX 1307 1015 E. WOOLEY R
Owner City: OXNARD
Owner State: CA
Owner Zip: 93032
No of Containers: 2
County: RIVERSIDE
Facility State: CA
Facility Zip: 92383

21	4 of5	NNE	0.24 / 1,283.04	1,531.70 / 3	**NUTRIEN AG SOLUTIONS** **801 S GRAND AVE** **SAN JACINTO CA 92583**	RCRA NON GEN

Handler ID: CAD982030744
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO VIOLATIONS: All of the compliance records associated with this facility (EPA ID) indicate NO VIOLATIONS; Compliance Monitoring and Enforcement table dated Nov 2025.

Evaluation Details

Eval Start Date: 19921028
Eval Type Desc: COMPLIANCE EVALUATION INSPECTION
Viol Short Desc:
Actual Rtc Date:
Eval Agency: State Contractor/Grantee

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		

Used Oil Market Burner: No
Used Oil Spec Marketer: No

Additional Handler Summary Details

Source Type:	D	**NAIC 1:**	
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20200403	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:	O	**Location Latitude:**	33.783882
In Handler Univ:	N	**Location Longitude:**	-116.976218
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	CA
Accessibility:		**State District:**	4
Region:	09		

Fed Waste Gen Owner: HQ
State Waste Generator Owner: CA
State Waste Generator: D
Short Term Generator: N
Uni Waste: N
Universal Waste Dest Facility: N
Federal Universal Waste: N
As Federally Regulated Tsdf: ------
As Converter Tsdf: ------
As State Regulated Tsdf: ------
As State Regulated Handler: ---
Federal Indicator: ---
Hsm: N
Subpart K: ----
GPRA Permit: N
GPRA Renewal: N
Permit Renewal Wrkld: ------
Permwrk ID: ------
Perm Prog: ------
Pcwrkld: ------
Closwrkld: ------
GPRA Ca: N
Cawrkld: N
Subjca Tsd Discretion: N
NCAPS: N
EC Indicator: N
Ca725 Indicator: N

Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20200406
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	NUTRIEN AG SOLUTIONS
Location Street No:	
Location Street1:	801 S GRAND AVE
Location Street2:	
Location City:	SAN JACINTO
Location State:	CA
Location Zip:	92583
Location County Code:	CA065
Location County Name:	RIVERSIDE
Location Country:	US
Contact Name:	ALEJANDRO AGUILAR
Contact Street No:	
Contact Street1:	801 S GRAND AVE
Contact Street2:	
Contact City:	SAN JACINTO
Contact State:	CA
Contact Zip:	92383
Contact Country:	US
Contact Phone & Ext:	661-858-3097
Contact Fax:	
Contact Email Address:	ALEJANDRO.AGUILAR@NUTRIEN.COM
Contact Title:	SHE MANAGER
Owner Name:	NUTRIEN AG SOLUTIONS
Owner Type:	P
Owner Seq:	1
Operator Name:	NUTRIEN AG SOLUTIONS
Operator Type:	P
Operator Seq:	2
Public Notes:	

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	19870810
Handler Name:	WESTERN FARM INC
Fed Waste Generator:	1
Generator Code Description:	Large Quantity Generator
Source Type:	Notification
TSD Activity:	N

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20200403
Handler Name:	NUTRIEN AG SOLUTIONS
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Deactivation
TSD Activity:	N

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Private	***Street1:***	3005 ROCKY MOUNTAIN AVE
Name:	NUTRIEN AG SOLUTIONS	***Street2:***	
Dt Became Current:		***City:***	LOVELAND
Dt Ended Current:		***State:***	CO
Phone:		***Country:***	US
Source Type:	Deactivation	***Zip:***	80538

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Private	***Street1:***	3005 ROCKY MOUNTAIN AVE
Name:	NUTRIEN AG SOLUTIONS	***Street2:***	
Dt Became Current:		***City:***	LOVELAND
Dt Ended Current:		***State:***	CO
Phone:	415-555-1212	***Country:***	US
Source Type:	Deactivation	***Zip:***	80538

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Private	***Street1:***	NOT REQUIRED
Name:	WESTERN FARMS SERVICE	***Street2:***	
Dt Became Current:		***City:***	NOT REQUIRED
Dt Ended Current:		***State:***	ME
Phone:	415-555-1212	***Country:***	
Source Type:	Notification	***Zip:***	99999

Historical Handler Details

Receive Dt:	19870810
Generator Code Description:	Large Quantity Generator
Handler Name:	WESTERN FARM INC

21	*5 of5*	*NNE*	*0.24 / 1,283.04*	*1,531.70 / 3*	***Nutrien Ag Solutions 603 801 South Grand Avenue - San Jacinto CA 92582***	***SSTS***

EPA Region:	9
Establishment No:	51896-CA-60
Est Create Update Date:	
Est Site County:	Riverside
Est Site Country:	USA
Est Mailing Address:	801 South Grand Avenue
Est Mailing Address Line 2:	-
Est Mail City:	San Jacinto
Est Mail State:	CA
Est Mail Zip:	92582
Est Mail Country:	USA

Details

Company Name:	CROP PRODUCTION SERVICES INC.
Company HQ Addr 1:	3005 Rocky Mountain Avenue
Company HQ Addr 2:	-
Company HQ City:	Loveland
Company HQ State:	CO
Company HQ Zip:	80538
Company HQ Country:	USA
Co HQ Mailing Addr 1:	PO BOX 22
Co HQ Mailing Addr 2:	-
Co HQ City:	Loveland
Co HQ State:	CO
Co HQ Zip:	80539
Co HQ Country:	USA

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
22	1 of9	E	0.24 / 1,287.40	1,533.51 / 5	MINIMART 700 S STATE ST SAN JACINTO CA 92583	CLEANUP SITES

Global ID: T0606500525
Site Fac Type (SRCH): CLEANUP PROGRAM SITE
Status (SRCH): COMPLETED - CASE CLOSED
Status (DL): Completed - Case Closed
Status Date (DL): 12/16/2005
Cleanup Status: COMPLETED - CASE CLOSED
Site Facility Type: CLEANUP PROGRAM SITE
Case Type (DL): Cleanup Program Site
RWQCB Region (DL): SANTA ANA RWQCB (REGION 8)
Census Tract (SRCH): 6065043507
Latitude (DL): 33.7798469
Longitude (DL): -116.97238
Site Facility Name (SRCH): MINIMART
Address (SRCH): 700 S STATE ST
City (SRCH): SAN JACINTO
Zip (SRCH): 92583
County (SRCH): RIVERSIDE
Street No (DL): 700
Street Name (DL): S STATE ST
City (DL): SAN JACINTO
Zip (DL): 92583
County (DL): Riverside
State (DL): CA
Site Facility Name : MINIMART
Address : 700 S STATE ST
City : SAN JACINTO
Zip : 92583
County : RIVERSIDE
Report Source: GeoTracker Search Results (SRCH); Cleanup Sites from GeoTracker Cleanup Sites Data Download; GeoTracker Search Results Report (as of 11 Aug 2025)

GeoTracker Sites Data Download - Site Details

RB Case No: 083303172T
Local Case No:
Begin Date: 4/23/1998
Lead Agency: RIVERSIDE COUNTY
Local Agency: RIVERSIDE COUNTY
CUF Case:
CalEnvScreen Score:
EPA Region: 9
Qty Rlsd Gallons:
Potential COC: Gasoline
How Discovered:
Stop Method:
Stop Description:
Case Worker: RL
Military DoD Site: No
Leak Reported Dt: 1998-04-29 00:00:00
No Further Action Dt: 2005-12-16 00:00:00
Potential Media of Concern: Soil
How Discovered Description:
Calwater Watershed Name: San Jacinto Valley - San Jacinto - Gilman Hot Springs (802.21)
DWR GW Subbasin Name: San Jacinto (8-005)
Disadvantaged Community:
Coordinate Source: Google Geocode
Discharge Cause:
Discharge Source:
Facility Project Sub Type:
Calenviroscreen 3 Score: 81-85%
Calenviroscreen 4 Score: 55-60%
File Location: Local Agency
Claim No:
Claim Status:
A2022 Assembly District: 60
A2022 Congressional District: 25
A2022 Senate District: 31
Site History:

GeoTracker Sites Data Download - Status History

Status: Completed - Case Closed
Status Date: 2005-12-16 00:00:00

Status: Open - Site Assessment
Status Date: 1998-04-23 00:00:00

Status: Open - Case Begin Date
Status Date: 1998-04-23 00:00:00

GeoTracker Sites Data Download - Regulatory Contacts

Contact Type: Regional Board Caseworker
Contact Name: MIGUEL OVIEDO
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 Main Street, Suite 500
City: RIVERSIDE
Email: miguel.oviedo@waterboards.ca.gov
Phone No: 9517823238

Contact Type: Local Agency Caseworker - Primary Caseworker
Contact Name: ROBERT LEHMANN
Organization Name: RIVERSIDE COUNTY
Address: 800 S. SANDERSON AVE
City: HEMET
Email: rlehmann@rivcocha.org
Phone No:

GeoTracker Search - Facilities

Project Status:
Cuf Claim No:
CUF Priority Assign:
CUF Amount Paid:
Composting Method:
Facility Type:
WDR Place Type:
WDR File No:
WDR Order No:
File Location: LOCAL AGENCY
User Defined Beneficial Use:
Designated Beneficial Use: MUN, AGR, IND, PROC - Note: Also incl parts of 802.23.
Designated Beneficl Use Desc: Municipal and Domestic Supply, Agricultural Supply, Industrial Service Supply, Industrial Process Supply - Note: Also incl parts of 802.23.
Project Oversight Agencies:
Report Link: https://geotracker.waterboards.ca.gov/profile_report?global_id=T0606500525
Cleanup Status Detail: COMPLETED - CASE CLOSED AS OF 12/16/2005
Potential COC: GASOLINE
Potential Media of Concern: SOIL
Groundwater Monitoring Freq:
DWR GW Sub Basin: San Jacinto (8-005)
CalWater Watershed Name: San Jacinto Valley - San Jacinto - Gilman Hot Springs (802.21)
Post Closure Site Management:
Future Land Use:
Cleanup Oversight Agencies: RIVERSIDE COUNTY (LEAD)
CASE MANAGER: ROBERT LEHMANN
SANTA ANA RWQCB (REGION 8) - CASE #: 083303172T
CASE MANAGER: MIGUEL OVIEDO
Cleanup History Link: https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T0606500525&tabname=regulatoryhistory
Site History:

No site history available

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

GeoTracker Search - Regulatory Activities

Action Type: Other Regulatory Actions
Action: Closure/No Further Action Letter
Action Date: 12/16/2005
Received Issue Date: 12/16/2005
Doc Link:
Title Description Comments:

Riv Co HMMD issued NFA letter 12/16/2005

Action Type: Leak Action
Action: Leak Reported
Action Date: 4/29/1998
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Discovery
Action Date: 4/23/1998
Received Issue Date:
Doc Link:
Title Description Comments:

GeoTracker Search - Documents

Document Type: Site Documents
Type: LETTER
Document Date: 5/7/2007
Submitted:
Submitted By: SHARON BOLTINGHOUSE (REGULATOR)
Title: NFA LETTER
Title Link: https://geotracker.waterboards.ca.gov/site_documents/7979130387/Minimart%20%20700%20S%20State%20St%20Closure%20Letter%2Epdf

GeoTracker Search - Cleanup Status History

Status: Completed - Case Closed
Date: 12/16/2005

Status: Open - Case Begin Date
Date: 4/23/1998

Status: Open - Site Assessment
Date: 4/23/1998

22	2 of9	E	0.24 / 1,287.40	1,533.51 / 5	WAHL TEXACO 700 S. STATE ST. SAN JACINTO CA 92383	HHSS

County:
Tank Details Microfiche: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002d926.pdf

22	3 of9	E	0.24 / 1,287.40	1,533.51 / 5	TEXACO SERVICE STATION 700 S STATE STREET SAN JACINTO CA 92383	HHSS

County:
Tank Details Microfiche: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0001f7c6.pdf

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
22	4 of9	E	0.24 / 1,287.40	1,533.51 / 5	TEXACO SERVICE STATION 700 S. STATE STREET SAN JACINTO CA	HIST TANK

Owner Name: M.A.P. OIL CO., INC. DBA AMEND
Owner Street: 1405 W. RIALTO AVENUE
Owner City: SAN BERNARDINO
Owner State: CA
Owner Zip: 92410
No of Containers: 4
County: RIVERSIDE
Facility State: CA
Facility Zip: 92383

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
22	5 of9	E	0.24 / 1,287.40	1,533.51 / 5	WAHL TEXACO 700 S. STATE ST. SAN JACINTO CA	HIST TANK

Owner Name: AMENDT OIL CO.
Owner Street: 1405 RIALTO AVE.
Owner City: SAN BERNARDINO
Owner State: CA
Owner Zip: 92410
No of Containers: 5
County: RIVERSIDE
Facility State: CA
Facility Zip: 92383

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
22	6 of9	E	0.24 / 1,287.40	1,533.51 / 5	Texaco Wahl's 700 S State St San Jacinto CA	LOP RIVERSIDE

Site ID: 87207
Status Code: 9
Status Desc: CLOSED/ACTION COMPLETED
Case Type Code: S
Case Type Desc: SOIL ONLY IS IMPACTED
Closed Code: Y
Closed Desc: CLOSED SITE
Employee: Rogers

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
22	7 of9	E	0.24 / 1,287.40	1,533.51 / 5	TEXACO WAHL'S 700 S STATE ST SAN JACINTO CA 92383	LUST

Global ID: T0606500201
Site Facility Type: LUST CLEANUP SITE
Site Fac Type (SRCH): LUST CLEANUP SITE
Status:
Status (SRCH): COMPLETED - CASE CLOSED
Status (DL): Completed - Case Closed
Status Date (DL): 2/15/1991
Cleanup Status: COMPLETED - CASE CLOSED
Site Facility Name (SRCH): TEXACO WAHL'S
Address (SRCH): 700 S STATE ST
City (SRCH): SAN JACINTO
Zip (SRCH): 92383
County (SRCH): RIVERSIDE
Street No (DL): 700
Street Name (DL): S STATE ST
City (DL): SAN JACINTO
Zip (DL): 92383
County (DL): Riverside
State (DL): CA
Business Name (DL): TEXACO WAHL'S
Site Facility Name: TEXACO WAHL'S
Address : 700 S STATE ST
City : SAN JACINTO
Zip : 92383
County : RIVERSIDE
Report Source: LUST Cleanup Sites & Military UST Site from GeoTracker Project Search Results Export; LUST Cleanup Sites & Military UST Site from GeoTracker Cleanup Sites Data Download; LUST Cleanup Sites from GeoTracker Search
Case Type (DL): LUST Cleanup Site
Oil Field (SRCH):
Oil Field Oper (SRCH):
Census Tract (SRCH): 6065043507
Latitude (DL): 33.7800155877883
Longitude (DL): -116.972288209262
RWQCB Region (DL): SANTA ANA RWQCB (REGION 8)

GeoTracker Sites Data Download - Site Details

CUF Case:	
Lead Agency:	RIVERSIDE COUNTY
Case Worker:	RIV
Local Agency:	RIVERSIDE COUNTY
RB Case No:	083301606T
Local Case No:	87207
File Location:	Local Agency Warehouse
Potential COC:	Gasoline
Potential Media of Concern:	Soil
Begin Date:	3/27/1987
How Discovered:	Nuisance Conditions
How Discovered Description:	
Stop Method:	Close and Remove Tank
Stop Description:	
Calwater Watershed Name:	San Jacinto Valley - San Jacinto - Gilman Hot Springs (802.21)
DWR GW Subbasin Name:	San Jacinto (8-005)
Disadvantaged Community:	
CalEnvScreen Score:	
Coordinate Source:	Google Map Move
Discharge Cause:	Unknown
Discharge Source:	Piping
EPA Region:	9
Leak Reported Dt:	1990-07-19 00:00:00
Military DoD Site:	No
No Further Action Dt:	1991-02-15 00:00:00
Qty Rlsd Gallons:	
Facility Project Sub Type:	
Calenviroscreen 3 Score:	81-85%
Calenviroscreen 4 Score:	55-60%
Claim No:	
Claim Status:	
A2022 Assembly District:	60
A2022 Congressional District:	25
A2022 Senate District:	31
Site History:	

GeoTracker Sites Data Download - Regulatory Contacts

Contact Type:	Local Agency Caseworker - Primary Caseworker
Contact Name:	Riverside County LOP
Organization Name:	RIVERSIDE COUNTY
Address:	3880 LEMON ST SUITE 200
City:	RIVERSIDE
Email:	
Phone No:	9519558980

GeoTracker Sites Data Download - Status History

Status:	Completed - Case Closed
Status Date:	2/15/1991
Status:	Open - Remediation
Status Date:	7/30/1990
Status:	Open - Case Begin Date
Status Date:	3/27/1987

GeoTracker Search - Regulatory Profile

Site Facility Name:	TEXACO WAHL'S
Site Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED

Address:	700 S STATE ST
City:	SAN JACINTO
Zip:	92383
County:	RIVERSIDE
Report Link:	https://geotracker.waterboards.ca.gov/profile_report?global_id=T0606500201
Cleanup Status Detail:	COMPLETED - CASE CLOSED AS OF 2/15/1991
Project Status:	
Cleanup History Link:	https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T0606500201&tabname=regulatoryhistory
Potential COC:	GASOLINE
Potential Media of Concern:	SOIL
File Location:	LOCAL AGENCY WAREHOUSE
User Defined Beneficial Use:	
Designated Beneficial Use:	MUN, AGR, IND, PROC - Note: Also incl parts of 802.23.
DWR GW Sub Basin:	San Jacinto (8-005)
Calwater Watershed Name:	San Jacinto Valley - San Jacinto - Gilman Hot Springs (802.21)
Post Closure Site Management:	NOTIFY PRIOR TO CHANGE IN LAND USE
Future Land Use:	UNKNOWN
Cleanup Oversight Agencies:	RIVERSIDE COUNTY (LEAD) - CASE #: 87207 CASE MANAGER: Riverside County LOP SANTA ANA RWQCB (REGION 8) - CASE #: 083301606T
CUF Claim No:	
CUF Priority Assig:	
CUF Amount Paid:	
WDR Place Type:	
WDR File No:	
WDR Order No:	
Project Oversight Agencies:	
Facility Type:	
Composting Method:	
Grndwtr Monitoring Frequency:	
Designated Beneficial Use Desc:	Municipal and Domestic Supply, Agricultural Supply, Industrial Service Supply, Industrial Process Supply - Note: Also incl parts of 802.23.
Site History:	

No site history available

GeoTracker Search - Cleanup Status History

Status:	Completed - Case Closed
Date :	2/15/1991
Status:	Open - Remediation
Date :	7/30/1990
Status:	Open - Case Begin Date
Date :	3/27/1987

GeoTracker Search - Regulatory Activities

Action Type:	Other Regulatory Actions
Action:	Closure/No Further Action Letter - #Riv Co Closure
Action Date:	2/15/1991
Received Issue Date:	2/15/1991
Doc Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0606500201&enforcement_id=6001590&temptable=ENFORCEMENT
Title Description Comments:	

Riv Co Site Closure

Action Type:	Leak Action
Action:	Leak Reported
Action Date:	7/19/1990
Received Issue Date:	
Doc Link:	
Title Description Comments:	

Action Type: Other Regulatory Actions
Action: File review - #RCDEH Upload Site File 10/29/2015
Action Date: 7/18/1990
Received Issue Date: 7/18/1990
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0606500201&enforcement_id=6074006&temptable=ENFORCEMENT
Title Description Comments:

RCDEH Upload Site File 10/29/2015

Action Type: Leak Action
Action: Leak Discovery
Action Date: 3/27/1987
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Stopped
Action Date: 3/27/1987
Received Issue Date:
Doc Link:
Title Description Comments:

GeoTracker Search - Documents

Document Type: Site Documents
Type: CLOSURE/NO FURTHER ACTION LETTER
Submitted By: RIVERSIDE COUNTY LOP (REGULATOR)
Title: RIV CO SITE CLOSURE
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0606500201&enforcement_id=6001590
Document Date: 2/15/1991
Submitted:

Document Type: Site Documents
Type: FILE REVIEW
Submitted By: LINDA SHURLOW (REGULATOR)
Title: RCDEH UPLOAD SITE FILE 10/29/2015
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0606500201&enforcement_id=6074006
Document Date: 7/18/1990
Submitted:

22	8 of9	E	0.24 / 1,287.40	1,533.51 / 5	**Paul's Gas & Mini MartOOB** **700 S State St** **San Jacinto CA 92583-4909**	**UST** **RIVERSIDE**

Establishment ID: FA0016468
Program Type: CUPA - Underground Storage Tanks
City State Zip: San Jacinto, CA 92583-4909
State: CA

Details

Permit Type: UST Facility
Status: Inactive
No of Underground Storage: 5

22	9 of9	E	0.24 / 1,287.40	1,533.51 / 5	**TEXACO STATION** **700 S STATE ST** **SAN JACINTO CA**	**UST SWEEPS**

C C: A33-000-13449
BOE: 44-017968
Comp: 13449
Status: ACTIVE
D Filename: SITE16B
Page No: 133
County: RIVERSIDE
State : CA

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

No of Tanks:	4	**Zip:**	92383
Jurisdict:	RIVERSIDE COUNTY	**Latitude:**	33.786388
Agency:	ENVIRONMENTAL HEALTH - U.S.T.	**Longitude:**	-116.97187
Phone:		**Georesult:**	S5HPNTSC-A

Tank Details

Tank ID:	000003	**S Contain:**	
O Tank ID:	VII	**Stg:**	P
SWRCB No:	33-000-013449-000003	**Storage :**	
Removed:		**Storag Type:**	PRODUCT
Installed:		**P Contain:**	
A Date:	11-19-92	**Content:**	DIESEL
Capac:	10000	**ONA:**	
Tank Use:	M.V. FUEL	**D File Name:**	TANK16A

Tank Details

Tank ID:	000001	**S Contain:**	
O Tank ID:	V	**Stg:**	P
SWRCB No:	33-000-013449-000001	**Storage :**	
Removed:		**Storag Type:**	PRODUCT
Installed:		**P Contain:**	
A Date:	11-19-92	**Content:**	REG UNLEADED
Capac:	6000	**ONA:**	
Tank Use:	M.V. FUEL	**D File Name:**	TANK16A

Tank Details

Tank ID:	000002	**S Contain:**	
O Tank ID:	VI	**Stg:**	P
SWRCB No:	33-000-013449-000002	**Storage :**	
Removed:		**Storag Type:**	PRODUCT
Installed:		**P Contain:**	
A Date:	11-19-92	**Content:**	LEADED
Capac:	10000	**ONA:**	
Tank Use:	M.V. FUEL	**D File Name:**	TANK16A

Tank Details

Tank ID:	000004	**S Contain:**	
O Tank ID:	VIII	**Stg:**	P
SWRCB No:	33-000-013449-000004	**Storage :**	
Removed:		**Storag Type:**	PRODUCT
Installed:		**P Contain:**	
A Date:	11-19-92	**Content:**	REG UNLEADED
Capac:	10000	**ONA:**	
Tank Use:	M.V. FUEL	**D File Name:**	TANK16A

23	*1 of2*	***NNW***	***0.24 / 1,288.39***	***1,524.62 / -4***	***PERFORMANCE TRANSMISSION #2 1043 ENTERPRISE AVE SAN JACINTO CA 92582***	***RCRA NON GEN***

Handler ID:	CAL000350105
Generator Status:	N
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	D	**NAIC 1:**	811111
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20190906	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:		**Location Latitude:**	33.783389
In Handler Univ:	N	**Location Longitude:**	-116.979339
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	N		
Short Term Generator:	N		
Uni Waste:	N		
Universal Waste Dest Facility:	N		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		
Snc:	N		
Unaddressed Snc:	N		
Addressed Snc:	N		
Snc With Comp Sched:	N		
Fa Required:	-----		
Hhandler Last Change:	20190918		
Recognized Trader Importer:	N		

Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	PERFORMANCE TRANSMISSION #2
Location Street No:	1043
Location Street1:	ENTERPRISE AVE
Location Street2:	
Location City:	SAN JACINTO
Location State:	CA
Location Zip:	92582
Location County Code:	CA065
Location County Name:	RIVERSIDE
Location Country:	US
Contact Name:	LINO RODRIGUEZ
Contact Street No:	1043
Contact Street1:	ENTERPRISE AVE
Contact Street2:	
Contact City:	SAN JACINTO
Contact State:	CA
Contact Zip:	92582
Contact Country:	US
Contact Phone & Ext:	951-654-9500
Contact Fax:	951-654-9500
Contact Email Address:	LTRANSBRAKE@AOL.COM
Contact Title:	
Owner Name:	LINO RODRIGUEZ
Owner Type:	O
Owner Seq:	1
Operator Name:	LINO RODRIGUEZ
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20190906
Handler Name:	PERFORMANCE TRANSMISSION #2
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Deactivation
TSD Activity:	N

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	1583 LELAND ST
Name:	LINO RODRIGUEZ	***Street2:***	
Dt Became Current:		***City:***	BEAUMONT
Dt Ended Current:		***State:***	CA
Phone:	313-810-9343	***Country:***	US
Source Type:	Deactivation	***Zip:***	92223

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	1583 LELAND ST
Name:	LINO RODRIGUEZ	***Street2:***	
Dt Became Current:		***City:***	BEAUMONT
Dt Ended Current:		***State:***	CA
Phone:	951-654-9500	***Country:***	US
Source Type:	Deactivation	***Zip:***	92223

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
23	2 of2	NNW	0.24 / 1,288.39	1,524.62 / -4	PERFORMANCE TRANSMISSION INC 1043 ENTERPRISE AVE SAN JACINTO CA 92582	RCRA NON GEN

Handler ID: CAL000449097
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		

Used Oil Market Burner: No
Used Oil Spec Marketer: No

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	811198
Seq No:	2	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20250620	**NAIC 4:**	
Active Site:	-----	**State:**	CA
Land Type:	O	**Location Latitude:**	33.783389
In Handler Univ:	N	**Location Longitude:**	-116.979339
In A Universe:	N	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner: HQ
State Waste Generator Owner: CA
State Waste Generator: 2
Short Term Generator: N
Uni Waste: N
Universal Waste Dest Facility: N
Federal Universal Waste: N
As Federally Regulated Tsdf: ------
As Converter Tsdf: ------
As State Regulated Tsdf: ------
As State Regulated Handler: ---
Federal Indicator: ---
Hsm: N
Subpart K: ----
GPRA Permit: N
GPRA Renewal: N
Permit Renewal WrkId: ------
Permwrk ID: ------
Perm Prog: ------
Pcwrkld: ------
Closwrkld: ------
GPRA Ca: N

CawrkId:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20250709
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	PERFORMANCE TRANSMISSION INC
Location Street No:	
Location Street1:	1043 ENTERPRISE AVE
Location Street2:	
Location City:	SAN JACINTO
Location State:	CA
Location Zip:	92582
Location County Code:	CA065
Location County Name:	RIVERSIDE
Location Country:	US
Contact Name:	LINO RODRIGUEZ
Contact Street No:	
Contact Street1:	1043 ENTERPRISE AVE
Contact Street2:	
Contact City:	SAN JACINTO
Contact State:	CA
Contact Zip:	92582
Contact Country:	US
Contact Phone & Ext:	951-654-9500
Contact Fax:	651-654-5777
Contact Email Address:	PERFORMANCETI04@GMAIL.COM
Contact Title:	
Owner Name:	PERFORMANCE TRANSMISSION INC
Owner Type:	O
Owner Seq:	1
Operator Name:	PERFORMANCE TRANSMISSION INC
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20190919
Handler Name:	PERFORMANCE TRANSMISSION INC
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer
TSD Activity:	N

Hazardous Waste Handler Details

Seq No:	2

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Receive Date: 20250620
Handler Name: PERFORMANCE TRANSMISSION INC
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer
TSD Activity: N

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Other
Name: PERFORMANCE TRANSMISSION INC
Dt Became Current:
Dt Ended Current:
Phone: 951-654-9500
Source Type: Implementer
Street No:
Street1: 1043 ENTERPRISE AVE
Street2:
City: SAN JACINTO
State: CA
Country: US
Zip: 92582

Owner/Operator Ind: Current Operator
Type: Other
Name: LINO RODRIGUEZ
Dt Became Current:
Dt Ended Current:
Phone: 951-654-9500
Source Type: Implementer
Street No:
Street1: 1043 ENTERPRISE AVE
Street2:
City: SAN JACINTO
State: CA
Country:
Zip: 92582

Owner/Operator Ind: Current Owner
Type: Other
Name: PERFORMANCE TRANSMISSION INC
Dt Became Current:
Dt Ended Current:
Phone: 951-654-9500
Source Type: Implementer
Street No:
Street1: 1043 ENTERPRISE AVE
Street2:
City: SAN JACINTO
State: CA
Country: US
Zip: 92582

Owner/Operator Ind: Current Owner
Type: Other
Name: PERFORMANCE TRANSMISSION INC
Dt Became Current:
Dt Ended Current:
Phone: 951-654-9500
Source Type: Implementer
Street No:
Street1: 1043 ENTERPRISE AVE
Street2:
City: SAN JACINTO
State: CA
Country:
Zip: 92582

Historical Handler Details

Receive Dt: 20190919
Generator Code Description: Not a Generator, Verified
Handler Name: PERFORMANCE TRANSMISSION INC

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
24	1 of1	NE	0.24 / 1,289.98	1,531.60 / 3	Greco 530 N GRECO CT SAN JACINTO CA 92582	DELISTED CTNK

Site ID: 445344
Site ID:
County:
Tank Type:
Record Date: 13-FEB-2019
Original Source: CTNK
Latitude: 33.783618
Longitude: -116.974513
Latitude (Web):
Longitude (Web):

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
25	1 of1	N	0.24 / 1,291.27	1,528.56 / 0	CM MACHINE INC 560 S GRAND AVE SAN JACINTO CA 92582	RCRA NON GEN

Handler ID: CAC003324934
Generator Status: N

Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		

Used Oil Market Burner: No
Used Oil Spec Marketer: No

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	33271
Seq No:	2	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20250508	***NAIC 4:***	
Active Site:	-----	***State:***	CA
Land Type:		***Location Latitude:***	33.783301
In Handler Univ:	N	***Location Longitude:***	-116.977038
In A Universe:	N	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	AG
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		

Fed Waste Gen Owner: HQ
State Waste Generator Owner: CA
State Waste Generator: D
Short Term Generator: N
Uni Waste: N
Universal Waste Dest Facility: N
Federal Universal Waste: N
As Federally Regulated Tsdf: ------
As Converter Tsdf: ------
As State Regulated Tsdf: ------
As State Regulated Handler: ---
Federal Indicator: ---
Hsm: N
Subpart K: ----
GPRA Permit: N
GPRA Renewal: N
Permit Renewal Wrkld: ------
Permwrk ID: ------
Perm Prog: ------
Pcwrkld: ------
Closwrkld: ------
GPRA Ca: N
Cawrkld: N
Subjca Tsd Discretion: N
NCAPS: N
EC Indicator: N
Ca725 Indicator: N
Ca750 Indicator: N
Operating Tsdf: ------
Full Enforcement: ------

Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20250603
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	CM MACHINE INC
Location Street No:	
Location Street1:	560 S GRAND AVE
Location Street2:	
Location City:	SAN JACINTO
Location State:	CA
Location Zip:	92582
Location County Code:	CA065
Location County Name:	RIVERSIDE
Location Country:	US
Contact Name:	MIKE TOMONI
Contact Street No:	
Contact Street1:	560 S GRAND AVE
Contact Street2:	
Contact City:	SAN JACINTO
Contact State:	CA
Contact Zip:	92582
Contact Country:	
Contact Phone & Ext:	951-654-6019
Contact Fax:	
Contact Email Address:	MTOMONI@CMMACHINEINC.COM
Contact Title:	
Owner Name:	
Owner Type:	
Owner Seq:	
Operator Name:	
Operator Type:	
Operator Seq:	
Public Notes:	

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20250206
Handler Name:	CM MACHINE INC
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer
TSD Activity:	N

Hazardous Waste Handler Details

Seq No:	2
Receive Date:	20250508
Handler Name:	CM MACHINE INC
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer
TSD Activity:	N

Owner/Operator Details

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street1:**	560 S GRAND AVE
Name:	MIKE TOMONI	**Street2:**	
Dt Became Current:		**City:**	SAN JACINTO
Dt Ended Current:		**State:**	CA
Phone:	951-654-6019	**Country:**	
Source Type:	Implementer	**Zip:**	92582

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street1:**	560 S GRAND AVE
Name:	MIKE TOMONI	**Street2:**	
Dt Became Current:		**City:**	SAN JACINTO
Dt Ended Current:		**State:**	CA
Phone:	951-645-6019	**Country:**	
Source Type:	Implementer	**Zip:**	92582

Historical Handler Details

Receive Dt:	20250206
Generator Code Description:	Not a Generator, Verified
Handler Name:	CM MACHINE INC

26	*1 of1*	*NW*	*0.25 / 1,295.51*	*1,522.62 / -6*	***PROBITY AUTOMOTIVE SPECIALISTS 1092 ENTERPRISE AVE SAN JACINTO CA 92582-3802***	***RCRA NON GEN***

Handler ID:	CAL000315988
Generator Status:	N
Recycler Activity?:	NO
Recycler Activity Note:	This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	811111
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20070201	**NAIC 4:**	
Active Site:	H----	**State:**	CA
Land Type:		**Location Latitude:**	33.78324
In Handler Univ:	Y	**Location Longitude:**	-116.980352
In A Universe:	Y	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	

Region:	09
Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	CA
State Waste Generator:	2
Short Term Generator:	N
Uni Waste:	Y
Universal Waste Dest Facility:	Y
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20180905
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	PROBITY AUTOMOTIVE SPECIALISTS
Location Street No:	
Location Street1:	1092 ENTERPRISE AVE
Location Street2:	
Location City:	SAN JACINTO
Location State:	CA
Location Zip:	92582-3802
Location County Code:	CA065
Location County Name:	RIVERSIDE
Location Country:	US
Contact Name:	HECTOR CURIEL
Contact Street No:	
Contact Street1:	850 YORKSHIRE LN
Contact Street2:	
Contact City:	SAN JACINTO
Contact State:	CA
Contact Zip:	92583
Contact Country:	
Contact Phone & Ext:	951-654-7450
Contact Fax:	951-654-7475
Contact Email Address:	CURIELPLYS@MSN.COM
Contact Title:	
Owner Name:	HECTOR CURIEL
Owner Type:	O
Owner Seq:	1

Operator Name: HECTOR CURIEL
Operator Type: O
Operator Seq: 2
Public Notes:

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20070201
Handler Name: PROBITY AUTOMOTIVE SPECIALISTS
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer
TSD Activity: N

Owner/Operator Details

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street1:**	850 YORKSHIRE LN
Name:	HECTOR CURIEL	**Street2:**	
Dt Became Current:		**City:**	SAN JACINTO
Dt Ended Current:		**State:**	CA
Phone:	951-654-7450	**Country:**	
Source Type:	Implementer	**Zip:**	92583

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street1:**	850 YORKSHIRE LN
Name:	HECTOR CURIEL	**Street2:**	
Dt Became Current:		**City:**	SAN JACINTO
Dt Ended Current:		**State:**	CA
Phone:	951-654-7450	**Country:**	
Source Type:	Implementer	**Zip:**	92583-0000

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
27	1 of2	N	0.25 / 1,301.52	1,525.62 / -3	NACHOS AUTO ELECTRIC 995 ENTERPRISE AVE SAN JACINTO CA 92582	RCRA NON GEN

Handler ID: CAL000349702
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	811111
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20100203	***NAIC 4:***	
Active Site:	H----	***State:***	CA
Land Type:		***Location Latitude:***	33.783354
In Handler Univ:	Y	***Location Longitude:***	-116.97833
In A Universe:	Y	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	AG
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		

Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	CA
State Waste Generator:	2
Short Term Generator:	N
Uni Waste:	Y
Universal Waste Dest Facility:	Y
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20181120
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	NACHOS AUTO ELECTRIC
Location Street No:	
Location Street1:	995 ENTERPRISE AVE
Location Street2:	
Location City:	SAN JACINTO
Location State:	CA
Location Zip:	92582
Location County Code:	CA065
Location County Name:	RIVERSIDE
Location Country:	US
Contact Name:	ADRIAN CONTRERAS

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Contact Street No:
Contact Street1: 995 ENTERPRISE AVE
Contact Street2:
Contact City: SAN JACINTO
Contact State: CA
Contact Zip: 92582
Contact Country:
Contact Phone & Ext: 951-487-7070
Contact Fax: 951-487-7071
Contact Email Address: NACHOSAUTO1@HOTMAIL.COM
Contact Title:
Owner Name: IGNACIO CONTRERAS
Owner Type: O
Owner Seq: 1
Operator Name: ADRIAN CONTRERAS
Operator Type: O
Operator Seq: 2
Public Notes:

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20100203
Handler Name: NACHOS AUTO ELECTRIC
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer
TSD Activity: N

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Other
Name: IGNACIO CONTRERAS
Dt Became Current:
Dt Ended Current:
Phone: 951-292-1722
Source Type: Implementer
Street No:
Street1: 605 SAN MARCOS PL
Street2:
City: SAN JACINTO
State: CA
Country:
Zip: 92582-3880

Owner/Operator Ind: Current Operator
Type: Other
Name: ADRIAN CONTRERAS
Dt Became Current:
Dt Ended Current:
Phone: 951-487-7070
Source Type: Implementer
Street No:
Street1: 995 ENTERPRISE AVE
Street2:
City: SAN JACINTO
State: CA
Country:
Zip: 92582

27	2 of2	N	0.25 / 1,301.52	1,525.62 / -3	PINK'S MOTOR SERVICE INC 995 ENTERPRISE AVE SAN JACINTO CA 92582	RCRA NON GEN

Handler ID: CAL000474926
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	811111
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20221130	***NAIC 4:***	
Active Site:	-----	***State:***	CA
Land Type:		***Location Latitude:***	33.783396
In Handler Univ:	N	***Location Longitude:***	-116.978343
In A Universe:	N	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	AG
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	N		
Universal Waste Dest Facility:	N		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		
Snc:	N		
Unaddressed Snc:	N		
Addressed Snc:	N		
Snc With Comp Sched:	N		
Fa Required:	-----		
Hhandler Last Change:	20221202		
Recognized Trader Importer:	N		
Recognized Trader Exporter:	N		
Slab Importer:	N		
Slab Exporter:	N		

Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	PINK'S MOTOR SERVICE INC
Location Street No:	
Location Street1:	995 ENTERPRISE AVE
Location Street2:	
Location City:	SAN JACINTO
Location State:	CA
Location Zip:	92582
Location County Code:	CA065
Location County Name:	RIVERSIDE
Location Country:	US
Contact Name:	SHAMIL BLANCO ROJAS
Contact Street No:	
Contact Street1:	1416 CHASE ST
Contact Street2:	
Contact City:	SAN JACINTO
Contact State:	CA
Contact Zip:	92583
Contact Country:	
Contact Phone & Ext:	951-388-6033
Contact Fax:	
Contact Email Address:	PINKSMOTORSERVICE@GMAIL.COM
Contact Title:	
Owner Name:	PINK'S MOTOR SERVICE INC
Owner Type:	O
Owner Seq:	1
Operator Name:	SHAMIL BLANCO ROJAS
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20221130
Handler Name:	PINK'S MOTOR SERVICE INC
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer
TSD Activity:	N

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	995 ENTERPRISE AVE
Name:	PINK'S MOTOR SERVICE INC	***Street2:***	
Dt Became Current:		***City:***	SAN JACINTO
Dt Ended Current:		***State:***	CA
Phone:	951-388-6033	***Country:***	
Source Type:	Implementer	***Zip:***	92582
Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	1416 CHASE ST
Name:	SHAMIL BLANCO ROJAS	***Street2:***	
Dt Became Current:		***City:***	SAN JACINTO
Dt Ended Current:		***State:***	CA
Phone:	951-388-6033	***Country:***	
Source Type:	Implementer	***Zip:***	92583

28	*1 of2*	*NNW*	*0.25 / 1,304.01*	*1,525.62 / -3*	***AUTOMOTIVE COLLISION REFINISH SPECIALIST***	***EMISSIONS***

1011 ENTERPRISE AVE
SAN JACINTO CA 92582

2004 Criteria Data

Facility ID:	142081	***CERR Code:***	
Facility SIC Code:	7532	***TOGT:***	.0927
CO:	33	***ROGT:***	.08805093
Air Basin:	SC	***COT:***	
District:	SC	***NOXT:***	
COID:	RIV	***SOXT:***	
DISN:	SOUTH COAST AQMD	***PMT:***	.00142
CHAPIS:		***PM10T:***	.0013632

2004 Toxic Data

Facility ID:	142081	***COID:***	RIV
Facility SIC Code:	7532	***DISN:***	SOUTH COAST AQMD
CO:	33	***CHAPIS:***	
Air Basin:	SC	***CERR Code:***	
District:	SC		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2015 Toxic Data

Facility ID:	153758	***COID:***	RIV
Facility SIC Code:	9999	***DISN:***	SOUTH COAST AQMD
CO:	33	***CHAPIS:***	
Air Basin:	SC	***CERR Code:***	
District:	SC		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2016 Toxic Data

Facility ID:	153758	***TS:***	
Facility SIC Code:	9999	***HRA:***	
CERR CODE:		***CH Index:***	
COID:	RIV	***AH Index:***	
CO:	33	***Air Basin:***	SC
DISN:	SOUTH COAST AQMD	***District:***	SC
CHAPIS:			

2017 Toxic Data

Facility ID:	153758	***COID:***	RIV
Facility SIC Code:	9999	***DISN:***	SOUTH COAST AQMD
CO:	33	***CHAPIS:***	
Air Basin:	SC	***CERR Code:***	
District:	SC		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2018 Toxic Data

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Facility ID: 153758
Facility SIC Code: 9999
CO: 33
Air Basin: SC
District: SC
TS:
Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
COID: RIV
DISN: SOUTH COAST AQMD
CHAPIS:
CERR Code:

2019 Toxic Data

CO: 33
Air Basin: SC
Faccility ID: 153758
District: SC
Facility SIC Code: 9999
COID: RIV
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
DISN: SOUTH COAST AQMD
CHAPIS:
CERR Code:
TS:
Health Risk Asmt:

2020 Toxic Data

CO: 33
Air Basin: SC
Facility ID: 153758
District: SC
Facility SIC Code: 9999
COID: RIV
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
DISN: SOUTH COAST AQMD
CHAPIS:
CHERR Code:
TS:
Health Risk Asmt:

2021 Toxic Data

Co: 33
Air Basin: SC
Facility ID: 153758
District: SC
Facility SIC Code: 9999
COID: RIV
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
DISN: SOUTH COAST AQMD
CHAPIS:
Cerr Code:
TS:
Health Risk Asmt:

28	2 of2	NNW	0.25 / 1,304.01	1,525.62 / -3	AUTOMOTIVE COLLISION & REFINISH SPECIALISTS 1011 ENTERPRISE AVE SAN JACINTO CA 92582-3802	RCRA NON GEN

Handler ID: CAL000328243
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	No	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	811121
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20071226	**NAIC 4:**	
Active Site:	H----	**State:**	CA
Land Type:		**Location Latitude:**	33.783353
In Handler Univ:	Y	**Location Longitude:**	-116.9786
In A Universe:	Y	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		

Fed Waste Gen Owner:	HQ
State Waste Generator Owner:	CA
State Waste Generator:	2
Short Term Generator:	N
Uni Waste:	Y
Universal Waste Dest Facility:	Y
Federal Universal Waste:	N
As Federally Regulated Tsdf:	------
As Converter Tsdf:	------
As State Regulated Tsdf:	------
As State Regulated Handler:	---
Federal Indicator:	---
Hsm:	N
Subpart K:	----
GPRA Permit:	N
GPRA Renewal:	N
Permit Renewal Wrkld:	------
Permwrk ID:	------
Perm Prog:	------
Pcwrkld:	------
Closwrkld:	------
GPRA Ca:	N
Cawrkld:	N
Subjca Tsd Discretion:	N
NCAPS:	N
EC Indicator:	N
Ca725 Indicator:	N
Ca750 Indicator:	N
Operating Tsdf:	------
Full Enforcement:	------
Snc:	N
Unaddressed Snc:	N
Addressed Snc:	N
Snc With Comp Sched:	N
Fa Required:	-----
Hhandler Last Change:	20180905
Recognized Trader Importer:	N
Recognized Trader Exporter:	N
Slab Importer:	N
Slab Exporter:	N
Manifest Broker:	N
Subpart P:	N
Contact Language:	EN

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Handler Name:	AUTOMOTIVE COLLISION & REFINISH SPECIALISTS
Location Street No:	
Location Street1:	1011 ENTERPRISE AVE
Location Street2:	
Location City:	SAN JACINTO
Location State:	CA
Location Zip:	92582-3802
Location County Code:	CA065
Location County Name:	RIVERSIDE
Location Country:	US
Contact Name:	JOHN O'BOURKE
Contact Street No:	
Contact Street1:	31033 IRON CIR
Contact Street2:	
Contact City:	TEMECULA
Contact State:	CA
Contact Zip:	92591
Contact Country:	
Contact Phone & Ext:	951-487-8383
Contact Fax:	951-487-8384
Contact Email Address:	ACRSCOLLISION@YAHOO.COM
Contact Title:	
Owner Name:	JOHN O'BOURKE
Owner Type:	O
Owner Seq:	1
Operator Name:	JOHN O'BOURKE
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20071226
Handler Name:	AUTOMOTIVE COLLISION & REFINISH SPECIALISTS
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer
TSD Activity:	N

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	31033 IRON CIR
Name:	JOHN O'BOURKE	***Street2:***	
Dt Became Current:		***City:***	TEMECULA
Dt Ended Current:		***State:***	CA
Phone:	951-487-8383	***Country:***	
Source Type:	Implementer	***Zip:***	92591
Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	31033 IRON CIR
Name:	JOHN O'BOURKE	***Street2:***	
Dt Became Current:		***City:***	TEMECULA
Dt Ended Current:		***State:***	CA
Phone:	951-514-1766	***Country:***	
Source Type:	Implementer	***Zip:***	92591-4996

29	*1 of1*	*NW*	*0.28 / 1,460.04*	*1,522.62 / -6*	***J&H FLEET SERVICE & AUTOMOTIVE REPAIR 1093 ENTERPRISE AVE SAN JACINTO CA 92582***	***RCRA TSD***

Handler ID:	CAL000445956
Generator Status:	N
Recycler Activity?:	YES
Recycler Activity Note:	This facility has been identified as a Recycler Facility from the RCRA Handler Report Module with a 'Yes' for Recycler Activity with or without Storage.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	Yes	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	811111
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20190515	**NAIC 4:**	
Active Site:	H----	**State:**	CA
Land Type:		**Location Latitude:**	33.783669
In Handler Univ:	Y	**Location Longitude:**	-116.98038
In A Universe:	Y	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG
Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	Y		
Universal Waste Dest Facility:	Y		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		

Operating Tsdf: ------
Full Enforcement: ------
Snc: N
Unaddressed Snc: N
Addressed Snc: N
Snc With Comp Sched: N
Fa Required: -----
Hhandler Last Change: 20190628
Recognized Trader Importer: N
Recognized Trader Exporter: N
Slab Importer: N
Slab Exporter: N
Manifest Broker: N
Subpart P: N
Contact Language: EN
Handler Name: J&H FLEET SERVICE & AUTOMOTIVE REPAIR
Location Street No:
Location Street1: 1093 ENTERPRISE AVE
Location Street2:
Location City: SAN JACINTO
Location State: CA
Location Zip: 92582
Location County Code: CA065
Location County Name: RIVERSIDE
Location Country: US
Contact Name: JORGE CALVILLO
Contact Street No:
Contact Street1: 913 S GRAND AVE SPC 162
Contact Street2:
Contact City: SAN JACINTO
Contact State: CA
Contact Zip: 92582
Contact Country:
Contact Phone & Ext: 951-660-0582
Contact Fax:
Contact Email Address: JANDHFLEETSERVICE18@GMAIL.COM
Contact Title:
Owner Name: JORGE CALVILLO
Owner Type: O
Owner Seq: 1
Operator Name: JORGE CALVILLO
Operator Type: O
Operator Seq: 2
Public Notes:

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20190515
Handler Name: J&H FLEET SERVICE & AUTOMOTIVE REPAIR
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Tsd Activity: Y
Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Other
Name: JORGE CALVILLO
Dt Became Current:
Dt Ended Current:
Phone: 951-660-0582
Source Type: Implementer
Street No:
Street1: 913 S GRAND AVE SPC 162
Street2:
City: SAN JACINTO
State: CA
Country:
Zip: 92582

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street1:**	913 S GRAND AVE SPC 162
Name:	JORGE CALVILLO	**Street2:**	
Dt Became Current:		**City:**	SAN JACINTO
Dt Ended Current:		**State:**	CA
Phone:	951-660-0582	**Country:**	
Source Type:	Implementer	**Zip:**	92582

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
30	1 of1	E	0.29 / 1,546.45	1,534.62 / 6	PALMER NATURAL PRODUCTS 831 S STATE ST STE C SAN JACINTO CA 925834919	HAZ TSD

EPA ID:	CAC002607241	**Facility County:**	33
Facility Street2:		**County:**	Riverside

Details DTSC HWTS: The Department of Toxic Substances Control (DTSC) makes available a Waste Code Matrix showing each Waste Code, its description, and annual amounts in its Hazardous Waste Tracking System: https://hwts.dtsc.ca.gov/search

Handler Profile URL: https://hwts.dtsc.ca.gov/facility/CAC002607241

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
31	1 of1	NNE	0.30 / 1,571.32	1,531.67 / 3	SAN JACINTO CITY YARD 910 INDUSTRIAL WAY SAN JACINTO CA 92583	LUST

Global ID:	T0606500470	**Case Type (DL):**	LUST Cleanup Site
Site Facility Type:	LUST CLEANUP SITE	**Oil Field (SRCH):**	
Site Fac Type (SRCH):	LUST CLEANUP SITE	**Oil Field Oper (SRCH):**	
Status:		**Census Tract (SRCH):**	6065051300
Status (SRCH):	COMPLETED - CASE CLOSED	**Latitude (DL):**	33.7842935
Status (DL):	Completed - Case Closed	**Longitude (DL):**	-116.9758797
Status Date (DL):	10/30/1998	**RWQCB Region (DL):**	SANTA ANA RWQCB (REGION 8)
Cleanup Status:	COMPLETED - CASE CLOSED		

Site Facility Name (SRCH):	SAN JACINTO CITY YARD
Address (SRCH):	910 INDUSTRIAL WAY
City (SRCH):	SAN JACINTO
Zip (SRCH):	92583
County (SRCH):	RIVERSIDE
Street No (DL):	910
Street Name (DL):	INDUSTRIAL WAY
City (DL):	SAN JACINTO
Zip (DL):	92583
County (DL):	Riverside
State (DL):	CA
Business Name (DL):	SAN JACINTO CITY YARD
Site Facility Name:	SAN JACINTO CITY YARD
Address :	910 INDUSTRIAL WAY
City :	SAN JACINTO
Zip :	92583
County :	RIVERSIDE
Report Source:	LUST Cleanup Sites & Military UST Site from GeoTracker Project Search Results Export; LUST Cleanup Sites & Military UST Site from GeoTracker Cleanup Sites Data Download; LUST Cleanup Sites from GeoTracker Search

GeoTracker Sites Data Download - Site Details

CUF Case:	
Lead Agency:	RIVERSIDE COUNTY
Case Worker:	RIV
Local Agency:	RIVERSIDE COUNTY
RB Case No:	083302871T
Local Case No:	960795
File Location:	Local Agency Warehouse
Potential COC:	Gasoline
Potential Media of Concern:	Soil
Begin Date:	3/20/1996
How Discovered:	Tank Closure
How Discovered Description:	Remove

Stop Method:	Close and Remove Tank
Stop Description:	
Calwater Watershed Name:	San Jacinto Valley - San Jacinto - Gilman Hot Springs (802.21)
DWR GW Subbasin Name:	San Jacinto (8-005)
Disadvantaged Community:	
CalEnvScreen Score:	
Coordinate Source:	Manual Entry on Screens
Discharge Cause:	Unknown
Discharge Source:	Other
EPA Region:	9
Leak Reported Dt:	1996-07-30 00:00:00
Military DoD Site:	No
No Further Action Dt:	1998-10-30 00:00:00
Qty Rlsd Gallons:	
Facility Project Sub Type:	
Calenviroscreen 3 Score:	56-60%
Calenviroscreen 4 Score:	45-50%
Claim No:	
Claim Status:	
A2022 Assembly District:	60
A2022 Congressional District:	25
A2022 Senate District:	31
Site History:	

GeoTracker Sites Data Download - Regulatory Contacts

Contact Type:	Local Agency Caseworker - Primary Caseworker
Contact Name:	Riverside County LOP
Organization Name:	RIVERSIDE COUNTY
Address:	3880 LEMON ST SUITE 200
City:	RIVERSIDE
Email:	
Phone No:	9519558980

Contact Type:	Regional Board Caseworker
Contact Name:	MIGUEL OVIEDO
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 Main Street, Suite 500
City:	RIVERSIDE
Email:	miguel.oviedo@waterboards.ca.gov
Phone No:	9517823238

GeoTracker Sites Data Download - Status History

Status:	Completed - Case Closed
Status Date:	10/30/1998

Status:	Open - Site Assessment
Status Date:	6/12/1997

Status:	Open - Site Assessment
Status Date:	7/30/1996

Status:	Open - Case Begin Date
Status Date:	3/20/1996

Status:	Open - Site Assessment
Status Date:	3/20/1996

GeoTracker Search - Regulatory Profile

Site Facility Name:	SAN JACINTO CITY YARD
Site Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Address:	910 INDUSTRIAL WAY

City:	SAN JACINTO
Zip:	92583
County:	RIVERSIDE
Report Link:	https://geotracker.waterboards.ca.gov/profile_report?global_id=T0606500470
Cleanup Status Detail:	COMPLETED - CASE CLOSED AS OF 10/30/1998
Project Status:	
Cleanup History Link:	https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T0606500470&tabname=regulatoryhistory
Potential COC:	GASOLINE
Potential Media of Concern:	SOIL
File Location:	LOCAL AGENCY WAREHOUSE
User Defined Beneficial Use:	
Designated Beneficial Use:	MUN, AGR, IND, PROC - Note: Also incl parts of 802.23.
DWR GW Sub Basin:	San Jacinto (8-005)
Calwater Watershed Name:	San Jacinto Valley - San Jacinto - Gilman Hot Springs (802.21)
Post Closure Site Management:	NOTIFY PRIOR TO CHANGE IN LAND USE
Future Land Use:	
Cleanup Oversight Agencies:	RIVERSIDE COUNTY (LEAD) - CASE #: 960795 CASE MANAGER: Riverside County LOP SANTA ANA RWQCB (REGION 8) - CASE #: 083302871T CASE MANAGER: MIGUEL OVIEDO
CUF Claim No:	
CUF Priority Assig:	
CUF Amount Paid:	
WDR Place Type:	
WDR File No:	
WDR Order No:	
Project Oversight Agencies:	
Facility Type:	
Composting Method:	
Grndwtr Monitoring Frequency:	
Designated Beneficial Use Desc:	Municipal and Domestic Supply, Agricultural Supply, Industrial Service Supply, Industrial Process Supply - Note: Also incl parts of 802.23.
Site History:	

No site history available

GeoTracker Search - Cleanup Status History

Status:	Completed - Case Closed
Date :	10/30/1998
Status:	Open - Site Assessment
Date :	6/12/1997
Status:	Open - Site Assessment
Date :	7/30/1996
Status:	Open - Case Begin Date
Date :	3/20/1996
Status:	Open - Site Assessment
Date :	3/20/1996

GeoTracker Search - Regulatory Activities

Action Type:	Other Regulatory Actions
Action:	Closure/No Further Action Letter - #Site Closure
Action Date:	2/17/2009
Received Issue Date:	2/17/2009
Doc Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0606500470&enforcement_id=6003211&temptable=ENFORCEMENT
Title Description Comments:	

RivCo Site Closure

Action Type: Other Regulatory Actions
Action: File review - #RCDEH Upload Site File 9/14/2010
Action Date: 2/16/2009
Received Issue Date: 2/16/2009
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0606500470&enforcement_id=6063965&temptable=ENFORCEMENT
Title Description Comments:

RCDEH Upload Site File 9/14/2010

Action Type: Leak Action
Action: Leak Discovery
Action Date: 7/30/1996
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Reported
Action Date: 7/30/1996
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Stopped
Action Date: 3/27/1996
Received Issue Date:
Doc Link:
Title Description Comments:

GeoTracker Search - Documents

Document Type: Site Documents ***Document Date:*** 2/17/2009
Type: CLOSURE/NO FURTHER ACTION LETTER ***Submitted:***
Submitted By: RIVERSIDE COUNTY LOP (REGULATOR)
Title: RIVCO SITE CLOSURE
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0606500470&enforcement_id=6003211

Document Type: Site Documents ***Document Date:*** 2/16/2009
Type: FILE REVIEW ***Submitted:***
Submitted By: STEVEN COOK (REGULATOR)
Title: RCDEH UPLOAD SITE FILE 9/14/2010
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0606500470&enforcement_id=6063965

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
32	1 of1	E	0.30 / 1,578.20	1,535.68 / 7	JATT BROTHERS, INC DBA MOBIL 697 SOUTH STATE STREET SAN JACINTO CA 92583	RCRA TSD

Handler ID: CAC003007890
Generator Status: N
Recycler Activity?: NO
Recycler Activity Note: This facility has not been identified as a Recycler Facility from both the RCRA Handler and Biennial Report Modules.

Violation/Evaluation Summary

Note: NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	No	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	447110
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20190329	***NAIC 4:***	
Active Site:	H----	***State:***	CA
Land Type:		***Location Latitude:***	33.780591
In Handler Univ:	Y	***Location Longitude:***	-116.971299
In A Universe:	Y	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	AG
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	Y		
Universal Waste Dest Facility:	Y		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		
Snc:	N		
Unaddressed Snc:	N		
Addressed Snc:	N		
Snc With Comp Sched:	N		
Fa Required:	-----		
Hhandler Last Change:	20190626		
Recognized Trader Importer:	N		
Recognized Trader Exporter:	N		
Slab Importer:	N		
Slab Exporter:	N		

Manifest Broker: N
Subpart P: N
Contact Language: EN
Handler Name: JATT BROTHERS, INC DBA MOBIL
Location Street No:
Location Street1: 697 SOUTH STATE STREET
Location Street2:
Location City: SAN JACINTO
Location State: CA
Location Zip: 92583
Location County Code: CA065
Location County Name: RIVERSIDE
Location Country: US
Contact Name: WILLIE MOLINA
Contact Street No:
Contact Street1: 697 SOUTH STATE STREET
Contact Street2:
Contact City: SAN JACINTO
Contact State: CA
Contact Zip: 92583
Contact Country:
Contact Phone & Ext: 562-755-5975
Contact Fax:
Contact Email Address: JESSICAQUE@YAHOO.COM
Contact Title:
Owner Name: WILLIE MOLINA
Owner Type: O
Owner Seq: 1
Operator Name: WILLIE MOLINA
Operator Type: O
Operator Seq: 2
Public Notes:

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20190329
Handler Name: JATT BROTHERS, INC DBA MOBIL
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Tsd Activity: Y
Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	697 SOUTH STATE STREET
Name:	WILLIE MOLINA	***Street2:***	
Dt Became Current:		***City:***	SAN JACINTO
Dt Ended Current:		***State:***	CA
Phone:	562-755-5975	***Country:***	
Source Type:	Implementer	***Zip:***	92583

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	697 SOUTH STATE STREET
Name:	WILLIE MOLINA	***Street2:***	
Dt Became Current:		***City:***	SAN JACINTO
Dt Ended Current:		***State:***	CA
Phone:	951-654-7548	***Country:***	
Source Type:	Implementer	***Zip:***	92583

33	*1 of2*	*E*	*0.30 / 1,606.22*	*1,535.62 / 7*	*Discount Furniture 711 S State St*	*LOP RIVERSIDE*

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
					San Jacinto CA	

Site ID: 970374
Status Code: 9
Status Desc: CLOSED/ACTION COMPLETED
Case Type Code: S
Case Type Desc: SOIL ONLY IS IMPACTED
Closed Code: Y
Closed Desc: CLOSED SITE
Employee: Brown

---

33 | 2 of2 | E | 0.30 / 1,606.22 | 1,535.62 / 7 | DISCOUNT FURNITURE
711 S STATE ST
SAN JACINTO CA 92583 | LUST

Global ID: T0606500493
Site Facility Type: LUST CLEANUP SITE
Site Fac Type (SRCH): LUST CLEANUP SITE
Status:
Status (SRCH): COMPLETED - CASE CLOSED
Status (DL): Completed - Case Closed
Status Date (DL): 10/29/1997
Cleanup Status: COMPLETED - CASE CLOSED
Case Type (DL): LUST Cleanup Site
Oil Field (SRCH):
Oil Field Oper (SRCH):
Census Tract (SRCH): 6065043507
Latitude (DL): 33.779860227362
Longitude (DL): -116.971422317058
RWQCB Region (DL): SANTA ANA RWQCB (REGION 8)
Site Facility Name (SRCH): DISCOUNT FURNITURE
Address (SRCH): 711 S STATE ST
City (SRCH): SAN JACINTO
Zip (SRCH): 92583
County (SRCH): RIVERSIDE
Street No (DL): 711
Street Name (DL): S STATE ST
City (DL): SAN JACINTO
Zip (DL): 92583
County (DL): Riverside
State (DL): CA
Business Name (DL): DISCOUNT FURNITURE
Site Facility Name: DISCOUNT FURNITURE
Address : 711 S STATE ST
City : SAN JACINTO
Zip : 92583
County : RIVERSIDE
Report Source: LUST Cleanup Sites & Military UST Site from GeoTracker Project Search Results Export; LUST Cleanup Sites & Military UST Site from GeoTracker Cleanup Sites Data Download; LUST Cleanup Sites from GeoTracker Search

GeoTracker Sites Data Download - Site Details

CUF Case:
Lead Agency: RIVERSIDE COUNTY
Case Worker: RIV
Local Agency: RIVERSIDE COUNTY
RB Case No: 083303011T
Local Case No: 970374
File Location: Local Agency Warehouse
Potential COC: Waste Oil / Motor / Hydraulic / Lubricating
Potential Media of Concern: Soil
Begin Date: 1/14/1997
How Discovered: Tank Closure
How Discovered Description: tank removal
Stop Method: Close and Remove Tank
Stop Description:
Calwater Watershed Name: San Jacinto Valley - San Jacinto - Gilman Hot Springs (802.21)
DWR GW Subbasin Name: San Jacinto (8-005)
Disadvantaged Community:
CalEnvScreen Score:
Coordinate Source: Google Map Move
Discharge Cause: Unknown
Discharge Source: Other
EPA Region: 9
Leak Reported Dt: 1997-06-09 00:00:00

Military DoD Site: No
No Further Action Dt: 1997-10-29 00:00:00
Qty Rlsd Gallons:
Facility Project Sub Type:
Calenviroscreen 3 Score: 81-85%
Calenviroscreen 4 Score: 55-60%
Claim No:
Claim Status:
A2022 Assembly District: 60
A2022 Congressional District: 25
A2022 Senate District: 31
Site History:

GeoTracker Sites Data Download - Regulatory Contacts

Contact Type: Local Agency Caseworker - Primary Caseworker
Contact Name: Riverside County LOP
Organization Name: RIVERSIDE COUNTY
Address: 3880 LEMON ST SUITE 200
City: RIVERSIDE
Email:
Phone No: 9519558980

GeoTracker Sites Data Download - Status History

Status: Completed - Case Closed
Status Date: 10/29/1997

Status: Open - Site Assessment
Status Date: 8/5/1997

Status: Open - Site Assessment
Status Date: 4/8/1997

Status: Open - Case Begin Date
Status Date: 1/14/1997

GeoTracker Search - Regulatory Profile

Site Facility Name: DISCOUNT FURNITURE
Site Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Address: 711 S STATE ST
City: SAN JACINTO
Zip: 92583
County: RIVERSIDE
Report Link: https://geotracker.waterboards.ca.gov/profile_report?global_id=T0606500493
Cleanup Status Detail: COMPLETED - CASE CLOSED AS OF 10/29/1997
Project Status:
Cleanup History Link: https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T0606500493&tabname=regulatoryhistory
Potential COC: WASTE OIL / MOTOR / HYDRAULIC / LUBRICATING
Potential Media of Concern: SOIL
File Location: LOCAL AGENCY WAREHOUSE
User Defined Beneficial Use:
Designated Beneficial Use: MUN, AGR, IND, PROC - Note: Also incl parts of 802.23.
DWR GW Sub Basin: San Jacinto (8-005)
Calwater Watershed Name: San Jacinto Valley - San Jacinto - Gilman Hot Springs (802.21)
Post Closure Site Management: NOTIFY PRIOR TO CHANGE IN LAND USE
Future Land Use:
Cleanup Oversight Agencies: RIVERSIDE COUNTY (LEAD) - CASE #: 970374
CASE MANAGER: Riverside County LOP
SANTA ANA RWQCB (REGION 8) - CASE #: 083303011T
CUF Claim No:
CUF Priority Assig:
CUF Amount Paid:

WDR Place Type:
WDR File No:
WDR Order No:
Project Oversight Agencies:
Facility Type:
Composting Method:
Grndwtr Monitoring Frequency:
Designated Beneficial Use Desc: Municipal and Domestic Supply, Agricultural Supply, Industrial Service Supply, Industrial Process Supply - Note: Also incl parts of 802.23.
Site History:

No site history available

GeoTracker Search - Cleanup Status History

Status: Completed - Case Closed
Date : 10/29/1997

Status: Open - Site Assessment
Date : 8/5/1997

Status: Open - Site Assessment
Date : 4/8/1997

Status: Open - Case Begin Date
Date : 1/14/1997

GeoTracker Search - Regulatory Activities

Action Type: Other Regulatory Actions
Action: Closure/No Further Action Letter - #Site Closure
Action Date: 1/27/2009
Received Issue Date: 1/27/2009
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0606500493&enforcement_id=6000820&temptable=ENFORCEMENT
Title Description Comments:

RivCo Site Closure

Action Type: Other Regulatory Actions
Action: File review - #RCDEH Upload Site File 3/11/2015
Action Date: 1/26/2009
Received Issue Date: 1/26/2009
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0606500493&enforcement_id=6050490&temptable=ENFORCEMENT
Title Description Comments:

RCDEH Upload Site File 3/11/2015

Action Type: Other Regulatory Actions
Action: Closure/No Further Action Letter
Action Date: 10/29/1997
Received Issue Date: 10/29/1997
Doc Link:
Title Description Comments:

LETTER WAS ISSUED BY THE CRDEH.

Action Type: Leak Action
Action: Leak Reported
Action Date: 6/9/1997
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Discovery
Action Date: 4/8/1997
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Stopped
Action Date: 1/14/1997
Received Issue Date:
Doc Link:
Title Description Comments:

GeoTracker Search - Documents

Document Type: Site Documents ***Document Date:*** 1/27/2009
Type: CLOSURE/NO FURTHER ACTION LETTER ***Submitted:***
Submitted By: RIVERSIDE COUNTY LOP (REGULATOR)
Title: RIVCO SITE CLOSURE
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0606500493&enforcement_id=6000820

Document Type: Site Documents ***Document Date:*** 1/26/2009
Type: FILE REVIEW ***Submitted:***
Submitted By: LINDA SHURLOW (REGULATOR)
Title: RCDEH UPLOAD SITE FILE 3/11/2015
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0606500493&enforcement_id=6050490

34	1 of1	E	0.31 / 1,626.18	1,535.69 / 7	CIRCLE K #1271 697 S STATE ST SAN JACINTO CA 92383	LUST

Global ID: T0606500073
Site Facility Type: LUST CLEANUP SITE
Site Fac Type (SRCH): LUST CLEANUP SITE
Status:
Status (SRCH): COMPLETED - CASE CLOSED
Status (DL): Completed - Case Closed
Status Date (DL): 4/4/1989
Cleanup Status: COMPLETED - CASE CLOSED
Site Facility Name (SRCH): CIRCLE K #1271
Address (SRCH): 697 S STATE ST
City (SRCH): SAN JACINTO
Zip (SRCH): 92383
County (SRCH): RIVERSIDE
Street No (DL): 697
Street Name (DL): S STATE ST
City (DL): SAN JACINTO
Zip (DL): 92383
County (DL): Riverside
State (DL): CA
Business Name (DL): CIRCLE K #1271
Site Facility Name: CIRCLE K #1271
Address : 697 S STATE ST
City : SAN JACINTO
Zip : 92383
County : RIVERSIDE
Report Source: LUST Cleanup Sites & Military UST Site from GeoTracker Project Search Results Export; LUST Cleanup Sites & Military UST Site from GeoTracker Cleanup Sites Data Download; LUST Cleanup Sites from GeoTracker Search

Case Type (DL): LUST Cleanup Site
Oil Field (SRCH):
Oil Field Oper (SRCH):
Census Tract (SRCH): 6065043602
Latitude (DL): 33.780536
Longitude (DL): -116.971481
RWQCB Region (DL): SANTA ANA RWQCB (REGION 8)

GeoTracker Sites Data Download - Site Details

CUF Case:	
Lead Agency:	SANTA ANA RWQCB (REGION 8)
Case Worker:	JML
Local Agency:	RIVERSIDE COUNTY
RB Case No:	083300655T
Local Case No:	
File Location:	
Potential COC:	Gasoline
Potential Media of Concern:	Soil
Begin Date:	9/3/1987
How Discovered:	Tank Tightness Test
How Discovered Description:	
Stop Method:	
Stop Description:	
Calwater Watershed Name:	San Jacinto Valley - San Jacinto - Gilman Hot Springs (802.21)
DWR GW Subbasin Name:	San Jacinto (8-005)
Disadvantaged Community:	
CalEnvScreen Score:	
Coordinate Source:	Google Geocode
Discharge Cause:	Unknown
Discharge Source:	Tank
EPA Region:	9
Leak Reported Dt:	1987-09-04 00:00:00
Military DoD Site:	No
No Further Action Dt:	1989-04-04 00:00:00
Qty Rlsd Gallons:	
Facility Project Sub Type:	
Calenviroscreen 3 Score:	56-60%
Calenviroscreen 4 Score:	60-65%
Claim No:	
Claim Status:	
A2022 Assembly District:	60
A2022 Congressional District:	25
A2022 Senate District:	31
Site History:	

GeoTracker Sites Data Download - Regulatory Contacts

Contact Type:	Regional Board Caseworker - Primary Caseworker
Contact Name:	JESSICA LAW
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 Main Street, Suite 500
City:	RIVERSIDE
Email:	jessica.law@waterboards.ca.gov
Phone No:	9517824381

Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP
Organization Name:	RIVERSIDE COUNTY
Address:	3880 LEMON ST SUITE 200
City:	RIVERSIDE
Email:	
Phone No:	9519558980

GeoTracker Sites Data Download - Status History

Status:	Completed - Case Closed
Status Date:	4/4/1989

Status:	Open - Site Assessment
Status Date:	10/15/1987

Status:	Open - Case Begin Date
Status Date:	9/3/1987

GeoTracker Search - Regulatory Profile

Site Facility Name:	CIRCLE K #1271
Site Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Address:	697 S STATE ST
City:	SAN JACINTO
Zip:	92383
County:	RIVERSIDE
Report Link:	https://geotracker.waterboards.ca.gov/profile_report?global_id=T0606500073
Cleanup Status Detail:	COMPLETED - CASE CLOSED AS OF 4/4/1989
Project Status:	
Cleanup History Link:	https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T0606500073&tabname=regulatoryhistory
Potential COC:	GASOLINE
Potential Media of Concern:	SOIL
File Location:	
User Defined Beneficial Use:	
Designated Beneficial Use:	MUN, AGR, IND, PROC - Note: Also incl parts of 802.23.
DWR GW Sub Basin:	San Jacinto (8-005)
Calwater Watershed Name:	San Jacinto Valley - San Jacinto - Gilman Hot Springs (802.21)
Post Closure Site Management:	
Future Land Use:	
Cleanup Oversight Agencies:	SANTA ANA RWQCB (REGION 8) (LEAD) - CASE #: 083300655T CASE MANAGER: JESSICA LAW RIVERSIDE COUNTY CASE MANAGER: Riverside County LOP
CUF Claim No:	
CUF Priority Assig:	
CUF Amount Paid:	
WDR Place Type:	
WDR File No:	
WDR Order No:	
Project Oversight Agencies:	
Facility Type:	
Composting Method:	
Grndwtr Monitoring Frequency:	
Designated Beneficial Use Desc:	Municipal and Domestic Supply, Agricultural Supply, Industrial Service Supply, Industrial Process Supply - Note: Also incl parts of 802.23.
Site History:	

No site history available

GeoTracker Search - Cleanup Status History

Status:	Completed - Case Closed
Date :	4/4/1989
Status:	Open - Site Assessment
Date :	10/15/1987
Status:	Open - Case Begin Date
Date :	9/3/1987

GeoTracker Search - Regulatory Activities

Action Type:	Other Regulatory Actions
Action:	Closure/No Further Action Letter
Action Date:	4/4/1989
Received Issue Date:	4/4/1989
Doc Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0606500073&enforcement_id=5898949&temptable=ENFORCEMENT
Title Description Comments:	

NOTE: URR WAS DATED 9/4/87.

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Action Type: Leak Action
Action: Leak Reported
Action Date: 9/4/1987
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Discovery
Action Date: 9/3/1987
Received Issue Date:
Doc Link:
Title Description Comments:

GeoTracker Search - Documents

Document Type: Site Documents
Type: CLOSURE/NO FURTHER ACTION LETTER
Submitted By: (REGULATOR)
Title: NOTE: URR WAS DATED 9/4/87.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0606500073&enforcement_id=5898949
Document Date: 4/4/1989
Submitted:

35	1 of1	ESE	0.33 / 1,758.03	1,535.62 / 7	**AYS & ASSOCIATES INC DBA AYS AUTO GROUP** **1102 S STATE ST UNIT 1** **SAN JACINTO CA 92583**	RCRA TSD

Handler ID: CAL000445867
Generator Status: N
Recycler Activity?: YES
Recycler Activity Note: This facility has been identified as a Recycler Facility from the RCRA Handler Report Module with a 'Yes' for Recycler Activity with or without Storage.

Violation/Evaluation Summary

Note: NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	**Used Oil Transpor:**	No
Mixed Waste Gen:	No	**Used Oil Trans Fac:**	No
Transporter:	No	**Used Oil Processor:**	No
Transfer Facility:	No	**Used Oil Refiner:**	No
Recycler:	Yes	**Used Oil Burner:**	No
Onsite Burner Exem:	No	**Commercial TSD:**	No
Furnace Exemption:	No	**Recycl Nonstorage:**	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	**NAIC 1:**	441120
Seq No:	1	**NAIC 2:**	
Non Notifier:		**NAIC 3:**	
Receive Date:	20190508	**NAIC 4:**	
Active Site:	H----	**State:**	CA
Land Type:		**Location Latitude:**	33.776703
In Handler Univ:	Y	**Location Longitude:**	-116.971918
In A Universe:	Y	**Loc GIS Primary:**	N
Gen Status:	N	**Loc GIS Origin:**	AG

Report Cycle:		**State District Owner:**	
Accessibility:		**State District:**	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	Y		
Universal Waste Dest Facility:	Y		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		
Snc:	N		
Unaddressed Snc:	N		
Addressed Snc:	N		
Snc With Comp Sched:	N		
Fa Required:	-----		
Hhandler Last Change:	20190628		
Recognized Trader Importer:	N		
Recognized Trader Exporter:	N		
Slab Importer:	N		
Slab Exporter:	N		
Manifest Broker:	N		
Subpart P:	N		
Contact Language:	EN		
Handler Name:	AYS & ASSOCIATES INC DBA AYS AUTO GROUP		
Location Street No:			
Location Street1:	1102 S STATE ST UNIT 1		
Location Street2:			
Location City:	SAN JACINTO		
Location State:	CA		
Location Zip:	92583		
Location County Code:	CA065		
Location County Name:	RIVERSIDE		
Location Country:	US		
Contact Name:	MARTIN VILLALOBOS		
Contact Street No:			
Contact Street1:	1102 S STATE ST UNIT 1		
Contact Street2:			
Contact City:	SAN JACINTO		
Contact State:	CA		
Contact Zip:	92583		
Contact Country:			
Contact Phone & Ext:	951-658-1775		
Contact Fax:	213-270-9811		
Contact Email Address:	MARTINV@AYSAUTOGROUP.COM		
Contact Title:			
Owner Name:	AYS & ASSOCIATES INC		

Owner Type: O
Owner Seq: 1
Operator Name: MARTIN VILLALOBOS
Operator Type: O
Operator Seq: 2
Public Notes:

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No: 1
Receive Date: 20190508
Handler Name: AYS & ASSOCIATES INC DBA AYS AUTO GROUP
Fed Waste Generator: N
Generator Code Description: Not a Generator, Verified
Tsd Activity: Y
Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Other
Name: MARTIN VILLALOBOS
Dt Became Current:
Dt Ended Current:
Phone: 951-658-1775
Source Type: Implementer
Street No:
Street1: 1102 S STATE ST UNIT 1
Street2:
City: SAN JACINTO
State: CA
Country:
Zip: 92583

Owner/Operator Ind: Current Owner
Type: Other
Name: AYS & ASSOCIATES INC
Dt Became Current:
Dt Ended Current:
Phone: 310-722-5958
Source Type: Implementer
Street No:
Street1: 2333 CAPET ST
Street2:
City: SAN JACINTO
State: CA
Country:
Zip: 92583

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
36	1 of1	E	0.35 / 1,832.26	1,537.72 / 9	Autohaus Bavaria 691 W 7TH ST SAN JACINTO CA 92583	DELISTED HAZ

Siteid: 96216
Latitude: 33.780233
Longitude: -116.971609
Original Source: CHAZ
Record Date: 09-JUL-2018

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
37	1 of1	NE	0.39 / 2,045.04	1,535.61 / 7	Cash 4 Cans Recycle Llc 494 N Scovell Ave San Jacinto CA 92582	RECYCLING

Account No: RC335845.001

Details

Program Name: Cash 4 Cans Recycle Llc
Facility County: Riverside
Facility Address: 494 N Scovell Ave
Facility City: San Jacinto
Facility State: CA
Facility Pstl Cd: 92582
Oper Begin Dt: 9/30/2024
Organization Name: Cash 4 Cans Recycle Llc
Address: 494 N Scovell Ave
City: San Jacinto
State: CA
Postal Code: 92582
Phone No: (951) 764-5828
Website:

Rural: No
Email:
By Appt Only: No
Hours of Operation: Mon - Fri 8:00 am - 4:00 pm; Sat 8:00 am - 2:00 pm; Sun Closed

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38 | 1 of3 | E | 0.42 / 2,207.14 | 1,539.62 / 11 | AGRI-EMPIRE COMPANY
630 WEST 7TH STREET
SAN JACINTO CA 92383 | CALSITES

ID No: 33280152
Status Date: 08/03/1988
NPL:
Tier:
Fund:
Access : U
Access Code: UNCONTROLLED
Cortese:
Hrscore:
Hrsdate:
Groundwater Contam:
GW Code: NOT REPORTED
No Sources: 0
RWQCB Name: SANTA ANA
Branch Name: SOUTHERN CA. - B
Staff:
Senior: MMONROY
Status Name: NO FURTHER ACTION FOR DTSC
Type Name: N/A
Lead Name: N/A
SIC Name: MANU - CHEMICALS & ALLIED PRODUCTS
Filename:
Comments:

Assembly:
Senate:
Region: 4
Region Name: LONG BEACH
County Co: 33
Facility County: RIVERSIDE
Lat Deg: 0
Lat Min: 0
Lat Sec: 0
Lat Dir:
Long Deg: 0
Long Min: 0
Long Sec: 0
Long Dir:
LImethod:
LIdesc:

FACILITY IDENTIFIED ID DURRING FIELD CHECK FOR SAN JACINTO FACILITY DRIVE-BY AGRICULTURAL CHEM MFG. RESIN SMELL.TWO PITS BEHIND BLDG. CHAINED LINK FENCE SURROUNDS PITS-SHOWS EVIDENCE OF LIQ WASTE DUMP. FINAL STRATEGY SITE REFERRED: TO HWMB/ENF SITE SCREENING DONE PA RECOM BASED ON INDICATION OF WST DISP ON SITE FACILITY DRIVE-BY LARGE POTATO FARM,PHOTOS TAKEN,NO WASTE PITS SEEN ONLY IRRIGATION CATCH BASINS FOR REUSING WATER. ALSO USED WASTE WAS HAULED FROM POTATO WASHING PROCESS. NO PESTICIDE CONTAINERS SEEN RIVERSIDE CO. HEALTH -PAST INSPECTION REPORTS RWQCB FILES-RECLAIMED WATER FROM EASTERN MUNICIPAL WATER DISTRICT PRELIM ASSESS DONE NOT A MFG. , NO HAZARDOUS WASTE DISPOSAL SUBMIT TO EPA NFA UNDER CERCLA 2 SITE SCREENING DONE NFA UNDER CERCLA AND SITE MITIGATION CALSITES VALIDATION PROGRAM CONFIRMS NFA FOR DTSC.

Background:

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38 | 2 of3 | E | 0.42 / 2,207.14 | 1,539.62 / 11 | AGRI-EMPIRE COMPANY
630 WEST 7TH STREET
SAN JACINTO CA 92383 | ENVIROSTOR

Envirostor ID: 33280152
Site History:

A PA was performed and documented back in 1987. No violations or hazards were noted.

Facilities Details

Estor/EPA ID: 33280152
Program Type: HISTORICAL
Program Type1:
Status: NO FURTHER ACTION
Site Facility Name: AGRI-EMPIRE COMPANY
Site Type: * HISTORICAL
Address Desc: 630 WEST 7TH STREET
City: SAN JACINTO
County: RIVERSIDE
Zip: 92383

Site Code:
APN: NONE SPECIFIED
Assembly District: 60
Census Tract: 6065043507
Funding:
Office: CLEANUP CYPRESS
Project Manager:
Special Program: * CERC2
Supervisor: EILEEN MANANIAN
Senate District: 31

Acres: 200 ACRES
Public Participation Specialis:
Cal Enviro Screen Score: 55-60%
National Priority List: NO
Past Use that Caused Contam: AGRICULTURAL - ROW CROPS
Permit Renewal Lead:
Cleanup Oversight Agencies: NONE SPECIFIED
Cleanup Status: NO FURTHER ACTION AS OF 8/3/1988
Potential Conta of Conc: PESTICIDES - RINSE WATERS
Potential Media Affected: OTHER GROUNDWATER AFFECTED (USES OTHER THAN DRINKING WATER), SOIL
School District:
Summary Link: https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=33280152

Completed Activities

Title: Site Screening
Title Link:
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Site Screening
Date Completed: 3/9/1987
Comments: SITE SCREENING DONE PA RECOM BASED ON INDICATION OF WST DISP ON SITE
Activity Type: Completed Activities

Title: Site Inspection report
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=33280152&enforcement_id=60441220
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Site Inspections/Visit (Non LUR)
Date Completed: 5/23/2013
Comments: Site inspection performed on 4/25/2013
Activity Type: Completed Activities

Title: Site Screening
Title Link:
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Site Screening
Date Completed: 10/25/1994
Comments: CALSITES VALIDATION PROGRAM CONFIRMS NFA FOR DTSC.
Activity Type: Completed Activities

Title: Preliminary Assessment Report
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=33280152&doc_id=5007017
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Preliminary Assessment Report
Date Completed: 12/30/1987
Comments: PRELIM ASSESS DONE NOT A MFG. , NO HAZARDOUS WASTE DISPOSAL
Activity Type: Completed Activities

Title: Site Screening
Title Link:
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Site Screening
Date Completed: 3/19/1989
Comments: SITE SCREENING DONE NFA UNDER CERCLA AND SITE MITIGATION

Activity Type:	Completed Activities
Title:	Internal file review to decrease file room linear footage.
Title Link:	
Area Name:	
Area Link:	
Sub Area:	
Sub Area Link:	
Document Type:	Correspondence
Date Completed:	2/27/2018
Comments:	File review completed. Further action to be taken in deciding final outcome of physical records.
Activity Type:	Completed Activities
Title:	Discovery
Title Link:	
Area Name:	
Area Link:	
Sub Area:	
Sub Area Link:	
Document Type:	* Discovery
Date Completed:	5/24/1983
Comments:	FACILITY IDENTIFIED ID DURRING FIELD CHECK FOR SAN JACINTO FACILITY DRIVE-BY AGRICULTURAL CHEM MFG. RESIN SMELL.TWO PITS BEHIND BLDG. CHAINED LINK FENCE SURROUNDS PITS-SHOWS EVIDENCE OF LIQ WASTE DUMP. FINAL STRATEGY SITE REFERRED: TO HWMB/ENF
Activity Type:	Completed Activities

Sites Details

Status:	No Further Action	**Assembly:**	60
Status Date:	8/03/1988	**Division Branch:**	Cleanup Cypress
Site Code:		**Funding:**	
Site Type:	Historical	**Lead Agency:**	NONE SPECIFIED
Site Type Detailed:	* Historical	**Project Manager:**	
Special Program:	* CERC2	**Supervisor:**	Eileen Mananian
City:	SAN JACINTO	**Restricted Use:**	NO
County:	RIVERSIDE	**Senate:**	31
Congres Dis:	25	**Site Mgmt Req:**	NONE SPECIFIED
State :	CA	**Acres:**	200
Latitude:	33.7790791332792	**Zip:**	92383
Longitude:	-116.968828594476		
Address:	630 WEST 7TH STREET		
National Priorities List:	NO		
APN:	NONE SPECIFIED		
Confirmed Coc:	10076-NO		
Past Uses:	AGRICULTURAL - ROW CROPS		
Potential Coc:	10076		
Potential Media Affected:	OTH, SOIL		
Project Name:	AGRI-EMPIRE COMPANY		
Regulatory Agencies Involved:	NONE SPECIFIED		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
38	3 of3	E	0.42 / 2,207.14	1,539.62 / 11	**BRUNO FARMS INC** **630 W 7TH ST** **SAN JACINTO CA 92583**	RCRA TSD

Handler ID:	CAL000445402
Generator Status:	N
Recycler Activity?:	YES
Recycler Activity Note:	This facility has been identified as a Recycler Facility from the RCRA Handler Report Module with a 'Yes' for Recycler Activity with or without Storage.

Violation/Evaluation Summary

Note:	NO RECORDS: As of Nov 2025, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer:	No	***Used Oil Transpor:***	No
Mixed Waste Gen:	No	***Used Oil Trans Fac:***	No
Transporter:	No	***Used Oil Processor:***	No
Transfer Facility:	No	***Used Oil Refiner:***	No
Recycler:	Yes	***Used Oil Burner:***	No
Onsite Burner Exem:	No	***Commercial TSD:***	No
Furnace Exemption:	No	***Recycl Nonstorage:***	No
Underground Injec:	No		
Used Oil Market Burner:	No		
Used Oil Spec Marketer:	No		

Additional Handler Summary Details

Source Type:	I	***NAIC 1:***	112519
Seq No:	1	***NAIC 2:***	
Non Notifier:		***NAIC 3:***	
Receive Date:	20190419	***NAIC 4:***	
Active Site:	H----	***State:***	CA
Land Type:		***Location Latitude:***	33.780151
In Handler Univ:	Y	***Location Longitude:***	-116.969267
In A Universe:	Y	***Loc GIS Primary:***	N
Gen Status:	N	***Loc GIS Origin:***	AG
Report Cycle:		***State District Owner:***	
Accessibility:		***State District:***	
Region:	09		
Fed Waste Gen Owner:	HQ		
State Waste Generator Owner:	CA		
State Waste Generator:	2		
Short Term Generator:	N		
Uni Waste:	Y		
Universal Waste Dest Facility:	Y		
Federal Universal Waste:	N		
As Federally Regulated Tsdf:	------		
As Converter Tsdf:	------		
As State Regulated Tsdf:	------		
As State Regulated Handler:	---		
Federal Indicator:	---		
Hsm:	N		
Subpart K:	----		
GPRA Permit:	N		
GPRA Renewal:	N		
Permit Renewal Wrkld:	------		
Permwrk ID:	------		
Perm Prog:	------		
Pcwrkld:	------		
Closwrkld:	------		
GPRA Ca:	N		
Cawrkld:	N		
Subjca Tsd Discretion:	N		
NCAPS:	N		
EC Indicator:	N		
Ca725 Indicator:	N		
Ca750 Indicator:	N		
Operating Tsdf:	------		
Full Enforcement:	------		
Snc:	N		
Unaddressed Snc:	N		
Addressed Snc:	N		
Snc With Comp Sched:	N		
Fa Required:	-----		
Hhandler Last Change:	20190628		
Recognized Trader Importer:	N		
Recognized Trader Exporter:	N		
Slab Importer:	N		
Slab Exporter:	N		

Manifest Broker:	N
Subpart P:	N
Contact Language:	EN
Handler Name:	BRUNO FARMS INC
Location Street No:	
Location Street1:	630 W 7TH ST
Location Street2:	
Location City:	SAN JACINTO
Location State:	CA
Location Zip:	92583
Location County Code:	CA065
Location County Name:	RIVERSIDE
Location Country:	US
Contact Name:	NICHOLAS BRUNO
Contact Street No:	
Contact Street1:	PO BOX 620
Contact Street2:	
Contact City:	SAN JACINTO
Contact State:	CA
Contact Zip:	92567
Contact Country:	
Contact Phone & Ext:	919-376-0006
Contact Fax:	
Contact Email Address:	BIGVALLEYFARMS@YAHOO.COM
Contact Title:	
Owner Name:	NICK BRUNO
Owner Type:	O
Owner Seq:	1
Operator Name:	NICHOLAS BRUNO
Operator Type:	O
Operator Seq:	2
Public Notes:	

Contact DTSC for information.

Hazardous Waste Handler Details

Seq No:	1
Receive Date:	20190419
Handler Name:	BRUNO FARMS INC
Fed Waste Generator:	N
Generator Code Description:	Not a Generator, Verified
Tsd Activity:	Y
Source Type:	Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street1:***	PO BOX 620
Name:	NICK BRUNO	***Street2:***	
Dt Became Current:		***City:***	SAN JACINTO
Dt Ended Current:		***State:***	CA
Phone:	909-376-0006	***Country:***	
Source Type:	Implementer	***Zip:***	92567

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street1:***	PO BOX 620
Name:	NICHOLAS BRUNO	***Street2:***	
Dt Became Current:		***City:***	SAN JACINTO
Dt Ended Current:		***State:***	CA
Phone:	919-376-0006	***Country:***	
Source Type:	Implementer	***Zip:***	92567

39	*1 of3*	*E*	*0.43 / 2,256.20*	*1,540.62 / 12*	*AGRI EMPIRE CO S MAIN AND 7TH*	*CERCLIS*

SAN JACINTO CA 92383

Site ID:	0902451	***RNPL Status Code:***	N
Site EPA ID:	CAD981569999	***NPL Status:***	Not on the NPL
Site Street Address 2:		***RFED Facility Code:***	N
Site County Name:	RIVERSIDE	***RFED Facility Desc:***	Not a Federal Facility
Site FIPS Code:	06065	***USGS Hydro Unit No.:***	18070202
Region Code:	09	***Site Cong. Dist. Code:***	37
Site SMSA No.:	6780	***ROT Desc:***	Private
Site Prim. Latitude:	33D47M00S	***FR NPL Update No.:***	
Site Prim. Longitude:	116D57M24S	***RFRA Code:***	
Lat Long Source:			

RNON NPL Status Desc: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS Assess History

OU ID:	00	***RALT Short Name:***	EPA In-House
Act Code ID:	001	***Act Start Date:***	
RAT Code:	VS	***Act Complete Date:***	12/13/1988 00:00:00
RAT Short Name:	ARCH SITE	***AGT Order No.:***	1500
RAT Name:	ARCHIVE SITE	***SH OU:***	
RAT Hist. Only Flag:		***SH Code:***	
RAT NSI Indicator:	B	***SH Seq:***	
RAT Level:	1	***SH Start Date:***	
RAT DEF OU:	00	***SH Complete Date:***	
RFBS Code:		***SH Lead:***	
SPA Code:	13		

RAT Def: The decision is made that no further activity is planned at the site.

Site Desc:

Site Alias:

CERCLIS Assess History

OU ID:	00	***RALT Short Name:***	State (Fund)
Act Code ID:	001	***Act Start Date:***	
RAT Code:	DS	***Act Complete Date:***	11/1/1987 00:00:00
RAT Short Name:	DISCVRY	***AGT Order No.:***	10
RAT Name:	DISCOVERY	***SH OU:***	
RAT Hist. Only Flag:		***SH Code:***	
RAT NSI Indicator:	B	***SH Seq:***	
RAT Level:	1	***SH Start Date:***	
RAT DEF OU:	00	***SH Complete Date:***	
RFBS Code:		***SH Lead:***	
SPA Code:	13		

RAT Def: The process by which a potential hazardous waste site is brought to the attention of the EPA. The process can occur through the use of several mechanisms such as a phone call or referral by another government agency.

Site Desc:

Site Alias:

CERCLIS Assess History

OU ID:	00	***RALT Short Name:***	State (Fund)
Act Code ID:	001	***Act Start Date:***	
RAT Code:	PA	***Act Complete Date:***	12/13/1988 00:00:00
RAT Short Name:	PA	***AGT Order No.:***	130
RAT Name:	PRELIMINARY ASSESSMENT	***SH OU:***	
RAT Hist. Only Flag:		***SH Code:***	
RAT NSI Indicator:	B	***SH Seq:***	
RAT Level:	1	***SH Start Date:***	
RAT DEF OU:	00	***SH Complete Date:***	
RFBS Code:	P	***SH Lead:***	
SPA Code:	13		

RAT Def: Collection of diverse existing information about the source and nature of the site hazard. It is EPA policy to complete the preliminary assessment within one year of site discovery.

Site Desc:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Site Alias:

CERCLIS Assess History

OU ID:	00	**RALT Short Name:**	
Act Code ID:		**Act Start Date:**	
RAT Code:		**Act Complete Date:**	
RAT Short Name:		**AGT Order No.:**	0
RAT Name:		**SH OU:**	
RAT Hist. Only Flag:		**SH Code:**	
RAT NSI Indicator:		**SH Seq:**	
RAT Level:		**SH Start Date:**	
RAT DEF OU:		**SH Complete Date:**	
RFBS Code:		**SH Lead:**	
SPA Code:			
RAT Def:			

Site Desc: No description available
.

Site Alias: No alias data available

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
39	2 of3	E	0.43 / 2,256.20	1,540.62 / 12	AGRI EMPIRE CO S MAIN AND 7TH SAN JACINTO CA 92383	CERCLIS NFRAP

Site ID:	902451	**Site FIPS Code:**	6065
Site EPA ID:	CAD981569999	**Region Code:**	9
Site Parent ID:		**Site Cong. Dist. Code:**	37
Site County Name:	RIVERSIDE	**Federal Facility:**	
Parent Site Name:			

CERCLIS-NFRAP Assess History

OU ID:	0	**Act Start Date:**	
Act Code ID:	1	**Act Complete Date:**	12/13/1988
RAT Code:	VS	**AGT Order No.:**	1500
RAT Short Name:	ARCH SITE	**SH OU:**	
RAT Name:	ARCHIVE SITE	**SH Code:**	
RAT Hist. Only Flag:		**SH Seq:**	
RAT NSI Indicator:	B	**SH Start Date:**	
RAT Level:	1	**SH Complete Date:**	
RAT DEF OU:	00	**SH Lead:**	
RFBS Code:		**SH Qual:**	
SPA Code:	13	**RAQ Act. Qual Short:**	
RALT Short Name:	EPA In-House	**RNPL Status Code:**	N
RAT Def:	The decision is made that no further activity is planned at the site.		
RNON NPL Status Desc:	NFRAP-Site does not qualify for the NPL based on existing information		

CERCLIS-NFRAP Assess History

OU ID:	0	**Act Start Date:**	
Act Code ID:	1	**Act Complete Date:**	11/1/1987
RAT Code:	DS	**AGT Order No.:**	10
RAT Short Name:	DISCVRY	**SH OU:**	
RAT Name:	DISCOVERY	**SH Code:**	
RAT Hist. Only Flag:		**SH Seq:**	
RAT NSI Indicator:	B	**SH Start Date:**	
RAT Level:	1	**SH Complete Date:**	
RAT DEF OU:	00	**SH Lead:**	
RFBS Code:		**SH Qual:**	
SPA Code:	13	**RAQ Act. Qual Short:**	
RALT Short Name:	State (Fund)	**RNPL Status Code:**	N
RAT Def:	The process by which a potential hazardous waste site is brought to the attention of the EPA. The process can occur through the use of several mechanisms such as a phone call or referral by another government agency.		
RNON NPL Status Desc:	NFRAP-Site does not qualify for the NPL based on existing information		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

CERCLIS-NFRAP Assess History

OU ID:	0	***Act Start Date:***	
Act Code ID:	1	***Act Complete Date:***	12/13/1988
RAT Code:	PA	***AGT Order No.:***	130
RAT Short Name:	PA	***SH OU:***	
RAT Name:	PRELIMINARY ASSESSMENT	***SH Code:***	
RAT Hist. Only Flag:		***SH Seq:***	
RAT NSI Indicator:	B	***SH Start Date:***	
RAT Level:	1	***SH Complete Date:***	
RAT DEF OU:	00	***SH Lead:***	
RFBS Code:	P	***SH Qual:***	
SPA Code:	13	***RAQ Act. Qual Short:***	NFRAP
RALT Short Name:	State (Fund)	***RNPL Status Code:***	N

RAT Def: Collection of diverse existing information about the source and nature of the site hazard. It is EPA policy to complete the preliminary assessment within one year of site discovery.

RNON NPL Status Desc: NFRAP-Site does not qualify for the NPL based on existing information

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39 | ***3 of3*** | ***E*** | ***0.43 / 2,256.20*** | ***1,540.62 / 12*** | ***AGRI EMPIRE CO***
S MAIN AND 7TH
SAN JACINTO CA 92383 | ***SEMS ARCHIVE***

Site ID:	0902451	***FIPS Code:***	06065
EPA ID:	CAD981569999	***Cong District:***	37
Superfund Alte Agr:	No	***Region:***	09
Federal Facility:	No	***County:***	RIVERSIDE
FF Docket:	No		

NPL: Not on the NPL

Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

Action Information

Operable Units:	00	***Qual:***	N
Action Code:	PA	***SEQ:***	1
Action Name:	PA	***FF:***	No
Start Actual:		***FF Docket:***	No
Finish Actual:	12/13/1988 5:00:00 AM	***Region:***	09
Curr Action Lead:	St Perf		
NPL:	N		

Operable Units:	00	***Qual:***	
Action Code:	VS	***SEQ:***	1
Action Name:	ARCH SITE	***FF:***	No
Start Actual:		***FF Docket:***	No
Finish Actual:	12/13/1988 5:00:00 AM	***Region:***	09
Curr Action Lead:	EPA Perf In-Hse		
NPL:	N		

Operable Units:	00	***Qual:***	
Action Code:	DS	***SEQ:***	1
Action Name:	DISCVRY	***FF:***	No
Start Actual:	11/1/1987 5:00:00 AM	***FF Docket:***	No
Finish Actual:	11/1/1987 5:00:00 AM	***Region:***	09
Curr Action Lead:	St Perf		
NPL:	N		

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40 | ***1 of1*** | ***NE*** | ***0.43 / 2,288.39*** | ***1,539.56 / 11*** | ***Inland Commercial Fueling Inc***
315 S State St
San Jacinto CA | ***LOP RIVERSIDE***

Site ID:	9915143	***Closed Code:***	Y
Status Code:	9	***Closed Desc:***	CLOSED SITE
Status Desc:	CLOSED/ACTION COMPLETED	***Employee:***	Shurlow-LOP
Case Type Code:	S		
Case Type Desc:	SOIL ONLY IS IMPACTED		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
41	1 of1	NE	0.43 / 2,292.22	1,539.56 / 11	INLAND COMMERCIAL FUELING 315 S STATE ST SAN JACINTO CA 92583	LUST

Global ID: T0606500591
Site Facility Type: LUST CLEANUP SITE
Site Fac Type (SRCH): LUST CLEANUP SITE
Status:
Status (SRCH): COMPLETED - CASE CLOSED
Status (DL): Completed - Case Closed
Status Date (DL): 11/14/2002
Cleanup Status: COMPLETED - CASE CLOSED
Case Type (DL): LUST Cleanup Site
Oil Field (SRCH):
Oil Field Oper (SRCH):
Census Tract (SRCH): 6065043602
Latitude (DL): 33.7845889
Longitude (DL): -116.971581
RWQCB Region (DL): SANTA ANA RWQCB (REGION 8)
Site Facility Name (SRCH): INLAND COMMERCIAL FUELING
Address (SRCH): 315 S STATE ST
City (SRCH): SAN JACINTO
Zip (SRCH): 92583
County (SRCH): RIVERSIDE
Street No (DL): 315
Street Name (DL): S STATE ST
City (DL): SAN JACINTO
Zip (DL): 92583
County (DL): Riverside
State (DL): CA
Business Name (DL): INLAND COMMERCIAL FUELING
Site Facility Name: INLAND COMMERCIAL FUELING
Address : 315 S STATE ST
City : SAN JACINTO
Zip : 92583
County : RIVERSIDE
Report Source: LUST Cleanup Sites & Military UST Site from GeoTracker Project Search Results Export; LUST Cleanup Sites & Military UST Site from GeoTracker Cleanup Sites Data Download; LUST Cleanup Sites from GeoTracker Search

GeoTracker Sites Data Download - Site Details

CUF Case:
Lead Agency: RIVERSIDE COUNTY
Case Worker: RIV
Local Agency: RIVERSIDE COUNTY
RB Case No: 083303481T
Local Case No: 9915143
File Location: Local Agency Warehouse
Potential COC: Gasoline
Potential Media of Concern: Soil
Begin Date: 3/24/1999
How Discovered: Tank Closure
How Discovered Description:
Stop Method: Close and Remove Tank
Stop Description:
Calwater Watershed Name: San Jacinto Valley - San Jacinto - Gilman Hot Springs (802.21)
DWR GW Subbasin Name: San Jacinto (8-005)
Disadvantaged Community:
CalEnvScreen Score:
Coordinate Source: Google Geocode
Discharge Cause: Unknown
Discharge Source: Other
EPA Region: 9
Leak Reported Dt: 1999-04-29 00:00:00
Military DoD Site: No
No Further Action Dt: 2002-11-14 00:00:00
Qty Rlsd Gallons:
Facility Project Sub Type:
Calenviroscreen 3 Score: 56-60%
Calenviroscreen 4 Score: 60-65%
Claim No: 14443
Claim Status: Active

A2022 Assembly District: 60
A2022 Congressional District: 25
A2022 Senate District: 31
Site History:

GeoTracker Sites Data Download - Regulatory Contacts

Contact Type: Local Agency Caseworker - Primary Caseworker
Contact Name: Riverside County LOP
Organization Name: RIVERSIDE COUNTY
Address: 3880 LEMON ST SUITE 200
City: RIVERSIDE
Email:
Phone No: 9519558980

Contact Type: Regional Board Caseworker
Contact Name: JESSICA LAW
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 Main Street, Suite 500
City: RIVERSIDE
Email: jessica.law@waterboards.ca.gov
Phone No: 9517824381

GeoTracker Sites Data Download - Status History

Status: Completed - Case Closed
Status Date: 11/14/2002

Status: Open - Site Assessment
Status Date: 4/20/1999

Status: Open - Case Begin Date
Status Date: 3/24/1999

GeoTracker Search - Regulatory Profile

Site Facility Name: INLAND COMMERCIAL FUELING
Site Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Address: 315 S STATE ST
City: SAN JACINTO
Zip: 92583
County: RIVERSIDE
Report Link: https://geotracker.waterboards.ca.gov/profile_report?global_id=T0606500591
Cleanup Status Detail: COMPLETED - CASE CLOSED AS OF 11/14/2002
Project Status:
Cleanup History Link: https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T0606500591&tabname=regulatoryhistory
Potential COC: GASOLINE
Potential Media of Concern: SOIL
File Location: LOCAL AGENCY WAREHOUSE
User Defined Beneficial Use:
Designated Beneficial Use: MUN, AGR, IND, PROC - Note: Also incl parts of 802.23.
DWR GW Sub Basin: San Jacinto (8-005)
Calwater Watershed Name: San Jacinto Valley - San Jacinto - Gilman Hot Springs (802.21)
Post Closure Site Management: NOTIFY PRIOR TO CHANGE IN LAND USE
Future Land Use: UNKNOWN
Cleanup Oversight Agencies: RIVERSIDE COUNTY (LEAD) - CASE #: 9915143
CASE MANAGER: Riverside County LOP
SANTA ANA RWQCB (REGION 8) - CASE #: 083303481T
CASE MANAGER: JESSICA LAW
CUF Claim No: 14443
CUF Priority Assig: C
CUF Amount Paid: $80,780
WDR Place Type:
WDR File No:

WDR Order No:
Project Oversight Agencies:
Facility Type:
Composting Method:
Grndwtr Monitoring Frequency:
Designated Beneficial Use Municipal and Domestic Supply, Agricultural Supply, Industrial Service Supply, Industrial Process Supply - Note:
Desc: Also incl parts of 802.23.
Site History:

No site history available

GeoTracker Search - Cleanup Status History

Status: Completed - Case Closed
Date : 11/14/2002

Status: Open - Site Assessment
Date : 4/20/1999

Status: Open - Case Begin Date
Date : 3/24/1999

GeoTracker Search - Regulatory Activities

Action Type: Other Regulatory Actions
Action: Historic Files
Action Date: 7/22/2020
Received Issue Date: 7/22/2020
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0606500591&enforcement_id=6442580&temptable=ENFORCEMENT
Title Description Comments:

Historic Files

Action Type: Other Regulatory Actions
Action: Closure/No Further Action Letter - #Riv Co Closure
Action Date: 11/14/2002
Received Issue Date: 11/14/2002
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0606500591&enforcement_id=6010027&temptable=ENFORCEMENT
Title Description Comments:

Riv Site Co Closure

Action Type: Other Regulatory Actions
Action: File review - #RCDEH Upload Site File 6/3/2010
Action Date: 11/13/2002
Received Issue Date: 11/13/2002
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0606500591&enforcement_id=6052896&temptable=ENFORCEMENT
Title Description Comments:

RCDEH Upload Site File 6/3/2010

Action Type: Leak Action
Action: Leak Reported
Action Date: 4/29/1999
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Discovery

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Action Date: 4/20/1999
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Stopped
Action Date: 3/24/1999
Received Issue Date:
Doc Link:
Title Description Comments:

GeoTracker Search - Documents

Document Type: Site Documents
Type: HISTORIC FILES
Submitted By: ADMINISTRATOR (REGULATOR)
Title: HISTORIC FILES
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0606500591&enforcement_id=6442580
Document Date: 7/22/2020
Submitted:

Document Type: Site Documents
Type: CLOSURE/NO FURTHER ACTION LETTER
Submitted By: RIVERSIDE COUNTY LOP (REGULATOR)
Title: RIV SITE CO CLOSURE
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0606500591&enforcement_id=6010027
Document Date: 11/14/2002
Submitted:

Document Type: Site Documents
Type: FILE REVIEW
Submitted By: STEVEN COOK (REGULATOR)
Title: RCDEH UPLOAD SITE FILE 6/3/2010
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0606500591&enforcement_id=6052896
Document Date: 11/13/2002
Submitted:

42	1 of1	SW	0.89 / 4,704.68	1,546.62 / 18	NEW HIGH SCHOOL SITE NO. 6 Commonwealth Avenue/Cawston Avenue San Jacinto CA 92583	SCH

Envirostor ID: 33010079
Site History:

The site totals 106 acres. 77 acres is agricultural fields at the north and south of the site. 8 acres is comprised of residential property, auto/machinery repair, and debris storage. 21 acres is comprised of foothills on the western edge of the property. Areas of concern include past agricultural use, lead-based painted structures, transformers, salvage yard, machine shop, incinerator use, auto shop, former dairy operations, and disposal areas.

Facilities Details

Estor/EPA ID: 33010079
Program Type: SCHOOL EVALUATION
Program Type1:
Status: NO FURTHER ACTION
Site Facility Name: NEW HIGH SCHOOL SITE NO. 6
Site Type: SCHOOL
Address Description: COMMONWEALTH AVENUE/CAWSTON AVENUE
City: SAN JACINTO
County: RIVERSIDE
Zip: 92583
Acres: 77 ACRES
Public Participation Specialis:
CalEnviroScreen Score: 45-50%
National Priorities List: NO
Past Use that Caused Contam: AGRICULTURAL - ROW CROPS
Site Code: 404481
Apn: NONE SPECIFIED
Assembly District: 60
Census Tract: 6065043506
Funding: SCHOOL DISTRICT
Office: SOUTHERN CALIFORNIA SCHOOLS & BROWNFIELDS OUTREACH
Project Manager:
Special Program:
Supervisor: YOLANDA GARZA
Senate District: 19

Permit Renewal Lead:
Cleanup Oversight Agencies: DTSC - LEAD AGENCY
Cleanup Status: NO FURTHER ACTION AS OF 11/10/2003
Potential Cont of Conc: CADMIUM AND COMPOUNDS
Potential Media Affected: SOIL
School District: HEMET UNIFIED SCHOOL DISTRICT
Summary Link: https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=33010079

Completed Activities

Title: Preliminary Endangerment Assessment Report
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=33010079&doc_id=6004032
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Preliminary Endangerment Assessment Report
Date Completed: 8/9/2004
Comments:
Activity Type: Completed Activities

Title: Environmental Oversight Agreement
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=33010079&enforcement_id=6004030
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Environmental Oversight Agreement
Date Completed: 11/10/2003
Comments:
Activity Type: Completed Activities

Title: * Site Visit - Site Inspections/visit
Title Link:
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Site Inspections/Visit (Non LUR)
Date Completed: 9/24/2003
Comments:
Activity Type: Completed Activities

Title: * Workplan
Title Link:
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: * Workplan
Date Completed: 4/15/2004
Comments: Supervisory review of PEA Work Plan non-approval revised letter. Approved.
Activity Type: Completed Activities

Search Results Details

Program Type: SCHOOL INVESTIGATION
Site Code: 404481
Status: NO FURTHER ACTION
Status Date: 11/10/2003
Calenviroscreen Score: 45-50%
Office: Southern California Schools & Brownfields Outreach
Pm:
Supervisor: * Yolanda Garza
Branch Chief:
Address Description: COMMONWEALTH AVENUE/CAWSTON AVENUE
Site Facility Name: NEW HIGH SCHOOL SITE NO. 6

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

City: SAN JACINTO
County: RIVERSIDE
Zip: 92583
Latitude: 33.76845
Longitude: -116.98682

Sites Details

Status: No Further Action
Status Date: 11/10/2003
Site Code: 404481
Site Type: School Investigation
Site Type Detailed: School
Special Program:
City: San Jacinto
County: RIVERSIDE
Congres Dis: 25
State: CA
Latitude: 33.76845
Longitude: -116.98682
Assembly: 60
Division Branch: Southern California Schools & Brownfields Outreach
Funding: School District
Lead Agency: DTSC
Project Manager:
Supervisor: * Yolanda Garza
Restricted Use: NO
Senate: 19
Site Mgmt Req: NONE SPECIFIED
Acres: 77
Zip: 92583
Address: Commonwealth Avenue/Cawston Avenue
National Priorities List: NO
APN: NONE SPECIFIED
Confirmed Coc: NONE SPECIFIED
Past Uses: AGRICULTURAL - ROW CROPS
Potential Coc: , 30108
Potential Media Affected: SOIL
Project Name: NEW HIGH SCHOOL SITE NO. 6
Regulatory Agencies Involved: DTSC

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
43	1 of1	NE	0.99 / 5,240.41	1,537.91 / 10	San Jacinto High School Expansion Site 500 Idyllwild Drive San Jacinto CA 92583	SCH

Envirostor ID: 60000229
Site History:

The Site consists of a 5-acre portion of the existing San Jacinto High School
that had been historically used for dry land farming. The Site is bordered by vacant land and residential use. Currently the Site consists of approximately 20 buildings, various athletic courts, a portion of a parking lot, and a portion of the agriculture department's livestock area utilized by San Jacinto High School students. The District is proposing to demolish three buildings and replace with facilities including a two-story, 32-classroom building, construct a new gymnasium, add temporary modular buildings, reconfigure athletic courts, expand a staff parking lot and construct a concrete parking lot.

Facilities Details

Estor/EPA ID: 60000229
Program Type: SCHOOL EVALUATION
Program Type1:
Status: NO ACTION REQUIRED
Site Facility Name: SAN JACINTO HIGH SCHOOL EXPANSION SITE
Site Type: SCHOOL
Address Description: 500 IDYLLWILD DRIVE
City: SAN JACINTO
County: RIVERSIDE
Zip: 92583
Acres: 5 ACRES
Public Participation Specialis:
CalEnviroScreen Score: 60-65%
National Priorities List: NO
Past Use that Caused Contam: NONE, AGRICULTURAL - LIVESTOCK
Permit Renewal Lead:
Site Code: 404689
Apn: NONE SPECIFIED
Assembly District: 60
Census Tract: 6065043602
Funding: SCHOOL DISTRICT
Office: SOUTHERN CALIFORNIA SCHOOLS & BROWNFIELDS OUTREACH
Project Manager:
Special Program:
Supervisor: YOLANDA GARZA
Senate District: 31

Cleanup Oversight Agencies: DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY
Cleanup Status: NO ACTION REQUIRED AS OF 5/8/2006
Potential Cont of Conc: NO CONTAMINANTS FOUND
Potential Media Affected: NO MEDIA AFFECTED
School District: SAN JACINTO UNIFIED SCHOOL DISTRICT
Summary Link: https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=60000229

Completed Activities

Title: Phase I
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000229&doc_id=6010798
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Phase 1
Date Completed: 4/14/2006
Comments: Phase I approved.
Activity Type: Completed Activities

Search Results Details

Program Type: SCHOOL INVESTIGATION
Site Code: 404689
Status: NO ACTION REQUIRED
Status Date: 5/8/2006
Calenviroscreen Score: 60-65%
Office: Southern California Schools & Brownfields Outreach
Pm:
Supervisor: * Yolanda Garza
Branch Chief:
Address Description: 500 IDYLLWILD DRIVE
Site Facility Name: SAN JACINTO HIGH SCHOOL EXPANSION SITE
City: SAN JACINTO
County: RIVERSIDE
Zip: 92583
Latitude: 33.794
Longitude: -116.9682

Sites Details

Status: No Action Required
Status Date: 5/08/2006
Site Code: 404689
Site Type: School Investigation
Site Type Detailed: School
Special Program:
City: San Jacinto
County: RIVERSIDE
Congres Dis: 25
State: CA
Latitude: 33.794
Longitude: -116.9682
Address: 500 Idyllwild Drive
National Priorities List: NO
APN: NONE SPECIFIED
Confirmed Coc: 31000
Past Uses: NONE, AGRICULTURAL - LIVESTOCK
Potential Coc: NONE SPECIFIED,31000
Potential Media Affected: NMA
Project Name: San Jacinto High School Expansion Site
Regulatory Agencies Involved: SMBRP

Assembly: 60
Division Branch: Southern California Schools & Brownfields Outreach
Funding: School District
Lead Agency: SMBRP
Project Manager:
Supervisor: * Yolanda Garza
Restricted Use: NO
Senate: 31
Site Mgmt Req: NONE SPECIFIED
Acres: 5
Zip: 92583

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
44	1 of1	NW	1.00 / 5,262.94	1,509.62 / -19	Lyon Ave. New Elementary & Middle Schools 425 North Lyon Avenue San Jacinto CA 92582	SCH

Envirostor ID: 60001838
Site History:

The Site is proposed for the construction of an elementary and a middle school. The Site (within Assessor's Parcel Number 436-280-010) is approximately 39 acres of vacant land (located at 425 N. Lyon Avenue in San Jacinto, Riverside County, California) previously occupied by a rural residential dwelling, located near the southwest corner of the parcel, and historic agricultural use. The site is surrounded by residential development to the north and east. Warneke Park is adjacent to the site along the northeast boundary. Vacant agricultural land is located to the south. San Jacinto Reservoir is located to the northwest across Lyon Avenue. The site is assessable from Lyon Avenue and is bordered by dirt access roads along the northern and southern site boundaries. The site is east of 215 Freeway and west of State Street.

The proposed school site was used primarily as pasture land from the early 1900s through the mid-1960s. The historic residence was constructed in the late 1940s near the southwestern portion of the proposed school site and was demolished prior to 2005. The site was historically used for pasture but based on a review of historic aerial photographs the site was used for irrigated agriculture during the mid to late 1960s.

1938 – The site is vacant undeveloped land with some trees located along Lyon Avenue. No structures are seen.

1953 – The residence is now seen located near the southwestern portion of the site. The remainder of the site appears relatively unchanged in comparison with the 1938 aerial photograph.

1967 - The southern area of the site appears to be irrigated agriculture. The trees along Lyon Avenue are no longer seen.

1980 - The site appears to no longer being used for agriculture. The remainder of the site appears relatively unchanged in comparison with the 1967 aerial photograph.

1989 - The site appears relatively unchanged in comparison to the 1980 aerial photograph.

2002 - The residential structure does not appear to be present. The site appears relatively unchanged in comparison to the 1989 aerial photograph.

2006 – The site appears relatively unchanged in comparison to the 2002 aerial photograph.

During the PEA, the Site soil was investigated for residual pesticides from historic agricultural use and possible termiticides and lead from lead-based paint near the former structure/residence.

Based on SSI Report review (approved on March 18, 2014) and a site visit that was conducted on November 6, 2013, a release or threatened release of hazardous material or the presence of a naturally occurring hazardous material, which would pose a threat to public health or the environment under unrestricted land use, was indicated at the Site. Therefore, DTSC concurs with the conclusion of the SSI Report that a response action for the Site is required and hereby approves the SSI Report. The response should include a Removal Action Workplan (RAW) to mitigate the Site for chlordane.

Per the e-mail response received from the District on July 31, 2014, the Site is put on hold until further notice.

04/10/2018: District sent letter, dated 04/10/18, requesting reactivation of Site in order to implement the response action for the Site.

DTSC is in the process of scheduling a Scoping meeting with the District and the consultant.

On April 11, 2018, the District notified DTSC of its intent to proceed with Site activity. Based on the SSI, a RAW was conducted at the Site. The RAW was approved by DTSC on September 5, 2018, which proposed excavation and offsite disposal of impacted soil. The Removal Action Completion Report (RACR) describes the remediation of chlordane impacted soil at the Site. A total of approximately 140 cubic yards of impacted soil was excavated from the Site.

DTSC processed Certification of the Site on January 21, 2020

Facilities Details

Estor/EPA ID:	60001838	**Site Code:**	404883
Program Type:	SCHOOL CLEANUP	**Apn:**	436-280-010
Program Type1:		**Assembly District:**	60
Status:	CERTIFIED	**Census Tract:**	6065051300
Site Facility Name:	LYON AVE. NEW ELEMENTARY & MIDDLE SCHOOLS	**Funding:**	SCHOOL DISTRICT
Site Type:	SCHOOL	**Office:**	SOUTHERN CALIFORNIA SCHOOLS & BROWNFIELDS OUTREACH
Address Description:	425 NORTH LYON AVENUE	**Project Manager:**	ASLAM SHAREEF
City:	SAN JACINTO	**Special Program:**	

County: RIVERSIDE
Supervisor: SHAHIR HADDAD
Zip: 92582
Senate District: 31
Acres: 39 ACRES
Public Participation Specialis:
CalEnviroScreen Score: 45-50%
National Priorities List: NO
Past Use that Caused Contam: AGRICULTURAL - ORCHARD
Permit Renewal Lead:
Cleanup Oversight Agencies: DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY
Cleanup Status: CERTIFIED AS OF 1/21/2020
Potential Cont of Conc: METALS
ORGANOCHLORINE PESTICIDES (8081 OCPS)
Potential Media Affected: SOIL
School District: SAN JACINTO UNIFIED SCHOOL DISTRICT
Summary Link: https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=60001838

Completed Activities

Title: Site Reactivation Request
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60001838&enforcement_id=60443426
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Correspondence
Date Completed: 4/15/2018
Comments: Letter from District, dated 04/10/18, requesting reactivation of site in order to implement the response action for the site.
Activity Type: Completed Activities

Title: SSI Report
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60001838&doc_id=60340962
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Supplemental Site Investigation Report
Date Completed: 3/18/2014
Comments: DTSC approved the SSI report with a Further Action determination
Activity Type: Completed Activities

Title: FY 19/20 Annual Oversight Cost Estimate
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60001838&enforcement_id=60466762
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Annual Oversight Cost Estimate
Date Completed: 9/6/2019
Comments:
Activity Type: Completed Activities

Title: VCA
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60001838&enforcement_id=60332644
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Standard Voluntary Agreement
Date Completed: 8/19/2013
Comments: Fully executed VCA sent (FedEx) to District.
Activity Type: Completed Activities

Title: VCA Amendment
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60001838&enforcement_id=60375482
Area Name:
Area Link:
Sub Area:

Sub Area Link:
Document Type: Amendment - Order/Agreement
Date Completed: 7/8/2014
Comments:
Activity Type: Completed Activities

Title: SSI Fieldwork
Title Link:
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Fieldwork
Date Completed: 11/6/2013
Comments: SSI Fieldwork Oversight
Activity Type: Completed Activities

Title: PEA Report
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60001838&doc_id=60314894
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Preliminary Endangerment Assessment Report
Date Completed: 6/4/2013
Comments: DTSC approved the PEA with a Further Action determination
Activity Type: Completed Activities

Title: Fieldwork Oversight
Title Link:
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Fieldwork
Date Completed: 10/15/2018
Comments: RAW fieldwork oversight conducted on October 15, 2018
Activity Type: Completed Activities

Title: FY 18/19 Annual Oversight Cost Estimate
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60001838&enforcement_id=60448349
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Annual Oversight Cost Estimate
Date Completed: 8/27/2018
Comments: FY 1819 Estimate: $17,809
Activity Type: Completed Activities

Title: Public Notice
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60001838&doc_id=60443801
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Public Notice
Date Completed: 7/16/2018
Comments: Public Notice published
Activity Type: Completed Activities

Title: Removal Action Completion Report
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60001838&doc_id=60443805
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Removal Action Completion Report
Date Completed: 2/22/2019

Comments: DTSC approved Removal Action Completion Report
Activity Type: Completed Activities

Title: Community Survey
Title Link:
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Community Profile
Date Completed: 5/29/2018
Comments: Completed Community Survey
Activity Type: Completed Activities

Title: Site Certification
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60001838&enforcement_id=60458459
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Certification
Date Completed: 1/21/2020
Comments:
Activity Type: Completed Activities

Title: Fact Sheet
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60001838&doc_id=60443799
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Community Update (Fact Sheets)
Date Completed: 7/17/2018
Comments: DTSC finalized Fact Sheet
Activity Type: Completed Activities

Title: Annual Cost Estimate 17/18
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60001838&enforcement_id=60443813
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Annual Oversight Cost Estimate
Date Completed: 4/25/2018
Comments: Cost Estimate letter, for FY 17/18 & FY 18/19, sent to District on 4/25/18.
Activity Type: Completed Activities

Title: Statement of Findings
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60001838&enforcement_id=60443803
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: CEQA - Responsible Agency Review
Date Completed: 9/7/2018
Comments: DTSC completed Statement of Findings and Notice of Determination (NOD)
Activity Type: Completed Activities

Title: Form SFPD 4.14
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60001838&enforcement_id=60334411
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Correspondence
Date Completed: 8/22/2013
Comments: Form 4.14 processed
Activity Type: Completed Activities

Title: PEA TM Workplan
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60001838&doc_id=60313203
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Preliminary Endangerment Assessment Tech Memo
Date Completed: 1/17/2013
Comments: DTSC approved the Preliminary Environmental Assessment Technical Memorandum for implementation.
Activity Type: Completed Activities

Title: Community Profile
Title Link:
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Community Profile
Date Completed: 5/30/2018
Comments: Completed community profile
Activity Type: Completed Activities

Title: Removal Action Workplan
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60001838&doc_id=60354962
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Removal Action Workplan
Date Completed: 9/5/2018
Comments: DTSC approved RAW for Implementation
Activity Type: Completed Activities

Title: EOA
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60001838&enforcement_id=60312494
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Environmental Oversight Agreement
Date Completed: 12/12/2012
Comments: Fully executed EOA sent (FedEx) to District.
Activity Type: Completed Activities

Title: SSI Workplan
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60001838&doc_id=60322994
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Supplemental Site Investigation Workplan
Date Completed: 10/29/2013
Comments: DTSC approved Supplemental Investigation sampling strategy Workplan
Activity Type: Completed Activities

Search Results Details

Program Type: SCHOOL CLEANUP
Site Code: 404883
Status: CERTIFIED
Status Date: 1/21/2020
Calenviroscreen Score: 45-50%
Office: Southern California Schools & Brownfields Outreach
Pm: ASLAM SHAREEF
Supervisor: Shahir Haddad
Branch Chief: Benjamin Stanphill
Address Description: 425 NORTH LYON AVENUE
Site Facility Name: LYON AVE. NEW ELEMENTARY & MIDDLE SCHOOLS

City:	SAN JACINTO
County:	RIVERSIDE
Zip:	92582
Latitude:	33.789446
Longitude:	-116.989386

Sites Details

Status:	Certified	***Assembly:***	60
Status Date:	1/21/2020	***Division Branch:***	Southern California Schools & Brownfields Outreach
Site Code:	404883	***Funding:***	School District
Site Type:	School Cleanup	***Lead Agency:***	SMBRP
Site Type Detailed:	School	***Project Manager:***	Aslam Shareef
Special Program:		***Supervisor:***	Shahir Haddad
City:	San Jacinto	***Restricted Use:***	NO
County:	RIVERSIDE	***Senate:***	31
Congres Dis:	25	***Site Mgmt Req:***	NONE SPECIFIED
State:	CA	***Acres:***	39
Latitude:	33.789446	***Zip:***	92582
Longitude:	-116.989386		

Address:	425 North Lyon Avenue
National Priorities List:	NO
APN:	436-280-010
Confirmed Coc:	30001-NO,30004-NO,30006-NO,30007-NO,30008-NO,30013-NO,30058-NO,30309-NO,30313-NO,30314-NO, 30315-NO,30316-NO,30587-NO,30594-NO,30261-NO,30308-NO
Past Uses:	AGRICULTURAL - ORCHARD
Potential Coc:	30001, 30004, 30006, 30007, 30008, 30013, 30058, 30261, 30308, 30309, 30313, 30314, 30315, 30316, 30587, 30594
Potential Media Affected:	SOIL
Project Name:	Lyon Ave. New Elementary & Middle Schools
Regulatory Agencies Involved:	SMBRP

Unplottable Summary

Total: 0 Unplottable sites

DB	Company Name/Site Name	Address	City	Zip	ERIS ID

No unplottable records were found that may be relevant for the search criteria.

Unplottable Report

No unplottable records were found that may be relevant for the search criteria.

Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. ERIS updates databases as set out in ASTM Standard E1527-13 and E1527-21, Section 8.1.8 Sources of Standard Source Information:

"Government information from nongovernmental sources may be considered current if the source updates the information at least every 90 days, or, for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the information available to the public."

Standard Environmental Record Sources

Federal

National Priority List: NPL

The U.S. Environmental Protection Agency (EPA)'s National Priorities List (NPL) includes the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program, based primarily on the score a site receives from EPA's Hazard Ranking System. A site must be on the NPL to receive money from the Superfund Trust Fund for remedial action. This data includes NPL sites represented as polygons, where available, that can be sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS), and is limited to those sites where the NPL Status reflects the site is 'Currently on the Final NPL (F)' and/or the 'Site is Part of NPL Site (A)'. These site boundaries represent the footprint of a whole site, the sum of all the Operable Units (OUs) and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. As site investigation and remediation progress, OUs may be added, modified or refined. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Sep 6, 2025

National Priority List - Proposed: PROPOSED NPL

Sites proposed by the U.S. Environmental Protection Agency (EPA), the state agency, or concerned citizens for addition to the National Priorities List (NPL) due to contamination by hazardous waste and identified by the EPA as a candidate for cleanup because it poses a risk to human health and/or the environment. Sites represented as polygons, where available, can be sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS). These site boundaries represent the footprint of a whole site, the sum of all the Operable Units (OUs) and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Sep 6, 2025

Deleted NPL: DELETED NPL

Sites deleted from the U.S. Environmental Protection Agency (EPA)'s National Priorities List (NPL). The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate. Sites represented as polygons, where available, can be sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS). These site boundaries represent the footprint of a whole site, the sum of all the Operable Units (OUs) and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Sep 6, 2025

SEMS List 8R Active Site Inventory: SEMS

The U.S. Environmental Protection Agency's (EPA) Superfund Program has deployed the Superfund Enterprise Management System (SEMS), which integrates multiple legacy systems into a comprehensive tracking and reporting tool. This inventory contains active sites evaluated by the Superfund program that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The Active Site Inventory Report displays site and location information at active SEMS sites. An active site is one at which site assessment, removal, remedial, enforcement, cost recovery, or oversight activities are being planned or conducted. This data includes SEMS sites from the List 8R Active file as well as applicable sites from the EPA's Facility Registry Service map tool. This data may also include applicable sites represented as polygons sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS), and is limited to those sites where the NPL Status reflects the site is 'Not on the NPL (N)' , 'Removed from Proposed (R)', and/or 'Pre-Proposal Site (S)'. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Aug 27, 2025

Inventory of Open Dumps, June 1985: ODI

The Resource Conservation and Recovery Act (RCRA) provides for publication of an inventory of open dumps. The Act defines "open dumps" as facilities which do not comply with EPA's "Criteria for Classification of Solid Waste Disposal Facilities and Practices" (40 CFR 257).

Government Publication Date: Jun 1985

SEMS List 8R Archive Sites: SEMS ARCHIVE

The U.S. Environmental Protection Agency's (EPA) Superfund Enterprise Management System (SEMS) Archived Site Inventory displays site and location information at sites archived from SEMS. An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. This data includes sites from the List 8R Archived site file. This data may also include applicable sites represented as polygons sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS), and is limited to those sites where the NPL Status reflects the site is 'Not on the NPL (N)' , 'Removed from Proposed (R)', and/or 'Pre-Proposal Site (S)'. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Aug 27, 2025

Comprehensive Environmental Response, Compensation and Liability Information System - CERCLIS: CERCLIS

Superfund is a program administered by the United States Environmental Protection Agency (EPA) to locate, investigate, and clean up the worst hazardous waste sites throughout the United States. CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The EPA administers the Superfund program in cooperation with individual states and tribal governments; this database is made available by the EPA.

Government Publication Date: Oct 25, 2013

EPA Report on the Status of Open Dumps on Indian Lands: IODI

Public Law 103-399, The Indian Lands Open Dump Cleanup Act of 1994, enacted October 22, 1994, identified congressional concerns that solid waste open dump sites located on American Indian or Alaska Native (AI/AN) lands threaten the health and safety of residents of those lands and contiguous areas. The purpose of the Act is to identify the location of open dumps on Indian lands, assess the relative health and environment hazards posed by those sites, and provide financial and technical assistance to Indian tribal governments to close such dumps in compliance with Federal standards and regulations or standards promulgated by Indian Tribal governments or Alaska Native entities.

Government Publication Date: Dec 31, 1998

CERCLIS - No Further Remedial Action Planned: CERCLIS NFRAP

An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. The Archive designation means that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Government Publication Date: Oct 25, 2013

CERCLIS Liens: CERCLIS LIENS

A Federal Superfund lien exists at any property where EPA has incurred Superfund costs to address contamination ("Superfund site") and has provided notice of liability to the property owner. A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. This database is made available by the United States Environmental Protection Agency (EPA). This database was provided by the United States Environmental Protection Agency (EPA). Refer to SEMS LIEN as the current data source for Superfund Liens.

Government Publication Date: Jan 30, 2014

RCRA CORRACTS-Corrective Action: RCRA CORRACTS

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. At these sites, the Corrective Action Program ensures that cleanups occur. EPA and state regulators work with facilities and communities to design remedies based on the contamination, geology, and anticipated use unique to each site.

Government Publication Date: Nov 30, 2025

RCRA non-CORRACTS TSD Facilities: RCRA TSD

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. This database includes Non-Corrective Action sites that have indicated engagement in the treatment, storage, or disposal of hazardous waste which requires a RCRA hazardous waste permit.

Government Publication Date: Nov 30, 2025

RCRA Generator List: RCRA LQG

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Large Quantity Generators (LQGs) generate 1,000 kilograms per month or more of hazardous waste or more than one kilogram per month of acutely hazardous waste. This list also includes RCRAInfo sites that have notified as LQGs that do not have a registered Site Manager or Certifier in RCRAInfo.

Government Publication Date: Nov 30, 2025

RCRA Small Quantity Generators List: RCRA SQG

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Small Quantity Generators (SQGs) generate more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste per month. This list also includes RCRAInfo sites that have notified as SQGs that do not have a registered Site Manager or Certifier in RCRAInfo.

Government Publication Date: Nov 30, 2025

RCRA Very Small Quantity Generators List: RCRA VSQG

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Very Small Quantity Generators (VSQG) generate 100 kilograms or less per month of hazardous waste, or one kilogram or less per month of acutely hazardous waste. Additionally, VSQG may not accumulate more than 1,000 kilograms of hazardous waste at any time.

Government Publication Date: Nov 30, 2025

RCRA Non-Generators: RCRA NON GEN

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Non-Generators do not presently generate hazardous waste.

Government Publication Date: Nov 30, 2025

RCRA Sites with Controls: RCRA CONTROLS

List of Resource Conservation and Recovery Act (RCRA) facilities with institutional controls in place. RCRA gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

Government Publication Date: Nov 30, 2025

Federal Engineering Controls-ECs: FED ENG

List of Engineering controls (ECs) made availabe by the United States Environmental Protection Agency (EPA). ECs encompass a variety of engineered and constructed physical barriers (e.g., soil capping, sub-surface venting systems, mitigation barriers, fences) to contain and/or prevent exposure to contamination on a property. The EC listing includes remedy component data from Superfund decision documents for applicable sites on the final or deleted on the National Priorities List (NPL); and sites with a Superfund Alternative Approach (SAA) Agreement in place. The only sites included that are not on the NPL; proposed for NPL; or removed from proposed NPL, are those with an SAA Agreement in place.

Government Publication Date: Nov 28, 2025

Federal Institutional Controls- ICs: FED INST

List of Institutional controls (ICs) made available by the United States Environmental Protection Agency (EPA). ICs are non-engineered instruments, such as administrative and legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Although it is EPA's expectation that treatment or engineering controls will be used to address principal threat wastes and that groundwater will be returned to its beneficial use whenever practicable, ICs play an important role in site remedies because they reduce exposure to contamination by limiting land or resource use and guide human behavior at a site. The IC listing includes remedy component data from Superfund decision documents for applicable sites on the final or deleted on the National Priorities List (NPL); and sites with a Superfund Alternative Approach (SAA) Agreement in place. The only sites included that are not on the NPL; proposed for NPL; or removed from proposed NPL, are those with an SAA Agreement in place.

Government Publication Date: Nov 28, 2025

Land Use Controls Information System: LUCIS

The Land Use Controls Information System (LUCIS) database is sourced from the U.S. Department of the Navy (DON). This data contains information for former Base Realignment and Closure (BRAC) properties across the United States. DON's BRAC office was tasked with tracking certain base closures while requiring the prevention of risks to human health and the environment of those properties with LUCs in place. Regarding currently available LUC Sites data, the sites listing is limited to centroid point locations for the overall installation property boundaries. Formerly obtained LUC Sites data may reflect site details that applied previously for a BRAC property.

Government Publication Date: Jun 13, 2024

Institutional Control Boundaries at NPL sites: NPL IC

These boundaries of Institutional Control areas at sites on the U.S. Environmental Protection Agency's (EPA) National Priorities List (NPL), or as Proposed or Deleted, are sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS). The EPA's NPL includes the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program. Institutional controls are non-engineered instruments such as administrative and legal controls that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes.

Government Publication Date: Sep 6, 2025

Emergency Response Notification System: ERNS 1982 TO 1986

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1982-1986

Emergency Response Notification System: ERNS 1987 TO 1989

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1987-1989

Emergency Response Notification System: ERNS

Database of oil and hazardous substances spill reports made available by the United States Coast Guard National Response Center (NRC). The NRC fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. These data contain initial incident data that has not been validated or investigated by a federal/state response agency.

Government Publication Date: Sep 7, 2025

The Assessment, Cleanup and Redevelopment Exchange System (ACRES) Brownfield Database: FED BROWNFIELDS

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties protects the environment, reduces blight, and takes development pressures off greenspaces and working lands. This data is provided by the United States Environmental Protection Agency (EPA) and includes Brownfield sites from the Cleanups in My Community (CIMC) web application.

Government Publication Date: Sep 8, 2025

FEMA Underground Storage Tank Listing: FEMA UST

The Federal Emergency Management Agency (FEMA) of the Department of Homeland Security maintains a list of FEMA owned underground storage tanks.

Government Publication Date: Dec 31, 2017

Facility Response Plan: FRP

This listing contains facilities that have submitted Facility Response Plans (FRPs) to the U.S. Environmental Protection Agency (EPA). Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit FRPs. Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments. The list includes FRP facilities sourced from the EPA FOIA office and from previously available Homeland Infrastructure Foundation-Level Data (HIFLD) file/s. Disclaimer: Per the EPA FOIA Office, the verification process for current requested FRP data is undergoing review and revision, and any similar reporting will be made public in Fiscal Year 2026. For this reason, the latest available FOIA file may be incomplete.

Government Publication Date: Jun 1, 2025

Delisted Facility Response Plans: DELISTED FRP

Facilities that once appeared in - and have since been removed from - the list of facilities that have submitted Facility Response Plans (FRP) to EPA. Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit Facility Response Plans (FRPs). Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments.

Government Publication Date: Jun 1, 2025

Historical Gas Stations: HIST GAS STATIONS

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

Government Publication Date: Jul 1, 1930

Petroleum Refineries: REFN

This list of petroleum refineries is sourced from the U.S. Energy Information Administration (EIA), Refinery Capacity Report. The listing includes operating and idle petroleum refineries (including new refineries under construction) and refineries shut down during the previous year. The geographic area the report covers is the 50 States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, and other U.S. possessions. Per the EIA, the facility location data represents the approximate location based on research of publicly available information from sources such as Federal agencies, company websites, and satellite images on public websites.

Government Publication Date: Oct 31, 2024

Petroleum Product and Crude Oil Rail Terminals: BULK TERMINAL

A list of petroleum product and crude oil rail terminals from the U.S. Energy Information Administration (EIA), as well as petroleum terminals sourced from Oak Ridge National Laboratory hosted by the Homeland Infrastructure Foundation-Level Database. Data includes operable bulk petroleum product terminals with a total bulk shell storage capacity of 50,000 barrels or more, and/or the ability to receive volumes from tanker, barge, or pipeline; also rail terminals handling the loading and unloading of crude oil with activity between 2017 and 2018. EIA petroleum product terminal data comes from the EIA-815 Bulk Terminal and Blender Report, which includes working, shell in operation, and shell idle for several major product groupings.

Government Publication Date: Jun 5, 2025

LIEN on Property: SEMS LIEN

The U.S. Environmental Protection Agency's (EPA) Superfund Enterprise Management System (SEMS) provides Lien details on applicable properties, such as the Superfund lien on property activity, the lien property information, and the parties associated with the lien.

Government Publication Date: Aug 27, 2025

Superfund Decision Documents: SUPERFUND ROD

This database contains a list of decision documents for Superfund sites. Decision documents serve to provide the reasoning for the choice of (or) changes to a Superfund Site cleanup plan. The decision documents include completed Records of Decision (ROD), ROD Amendments, Explanations of Significant Differences (ESD) for active and archived sites stored in the Superfund Enterprise Management System (SEMS), along with other associated memos and files. This information is maintained and made available by the U.S. Environmental Protection Agency.

Government Publication Date: Oct 30, 2025

State

State Response Sites: RESPONSE

A list of identified confirmed release sites where the Department of Toxic Substances Control (DTSC) is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk. This database serves a purpose similar to that of the federal NPL, functioning as a state-level counterpart for prioritizing cleanup efforts at hazardous substance release sites.

Government Publication Date: Oct 2, 2025

EnviroStor Database: ENVIROSTOR

The EnviroStor Data Management System is made available by the Department of Toxic Substances Control (DTSC). Includes Corrective Action sites, Tiered Permit sites, Historical Sites and Evaluation/Investigation sites. This database serves a purpose similar to that of the federal Superfund Enterprise Management System (SEMS), functioning as a state-level counterpart for tracking potential hazardous substance release sites.

Government Publication Date: Oct 2, 2025

Delisted State Response Sites: DELISTED ENVS

Sites removed from the list of State Response Sites made available by the EnviroStor Data Management System, Department of Toxic Substances Control (DTSC).

Government Publication Date: Oct 2, 2025

Solid Waste Information System (SWIS): SWF/LF

The Solid Waste Information System (SWIS) database made available by the Department of Resources Recycling and Recovery (CalRecycle) contains information on solid waste facilities, operations, and disposal sites throughout the State of California. The types of facilities found in this database include landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, waste tire sites, and closed disposal sites.

Government Publication Date: Nov 30, 2025

Solid Waste Disposal Sites with Waste Constituents Above Hazardous Waste Levels: SWRCB SWF

This is a list of solid waste disposal sites identified by California State Water Resources Control Board with waste constituents above hazardous waste levels outside the waste management unit.

Government Publication Date: Sep 20, 2006

Waste Management Unit Database: WMUD

The Waste Management Unit Database System tracks and inventories waste management units. CCR Title 27 contains criteria stating that Waste Management Units are classified according to their ability to contain wastes. Containment shall be determined by geology, hydrology, topography, climatology, and other factors relating to the ability of the Unit to protect water quality. Water Code Section 13273.1 requires that operators submit a water quality solid waste assessment test (SWAT) report to address leak status. The WMUDS was last updated by the State Water Resources control board in 2000.

Government Publication Date: Jan 1, 2000

EnviroStor Hazardous Waste Facilities: HWP

A list of hazardous waste facilities including permitted, post-closure and historical facilities found in the Department of Toxic Substances Control (DTSC) EnviroStor database.

Government Publication Date: Oct 2, 2025

Sites Listed in the Solid Waste Assessment Test (SWAT) Program Report: SWAT

In a 1993 Memorandum of Understanding, the State Water Resources Control Board (SWRCB) agreed to submit a comprehensive report on the Solid Waste Assessment Test (SWAT) Program to the California Integrated Waste Management Board (CIWMB). This report summarizes the work completed to date on the SWAT Program, and addresses both the impacts that leakage from solid waste disposal sites (SWDS) may have upon waters of the State and the actions taken to address such leakage.

Government Publication Date: Dec 31, 1995

Construction and Demolition Debris Recyclers: C&D DEBRIS RECY

This listing of Construction and Demolition Debris Recyclers is maintained by the California Intergrated Waste Management Board-common C&D materials include lumber, drywall, metals, masonry (brick, concrete, etc.), carpet, plastic, pipe, rocks, dirt, paper, cardboard, or green waste related to land development.

Government Publication Date: Jun 20, 2018

Recycling Centers: RECYCLING

This list of Certified Recycling Centers that are operating under the state of California's Beverage Container Recycling Program is maintained by the California Department of Resources Recycling and Recovery.

Government Publication Date: Nov 16, 2025

Listing of Certified Processors: PROCESSORS

This list of Certified Processors that are operating under the state of California's Beverage Container Recycling Program is maintained by the California Department of Resources Recycling and Recovery.

Government Publication Date: Nov 16, 2025

Listing of Certified Dropoff, Collection, and Community Service Programs: CONTAINER RECY

This list of Certified Dropoff, Collection, and Community Service Programs (non-buyback) operating under the state of California's Beverage Container Recycling Program is maintained by the California Department of Resources Recycling and Recovery.

Government Publication Date: Jul 18, 2025

Land Disposal Sites: LDS

Land Disposal Sites in GeoTracker, the State Water Resources Control Board (SWRCB)'s data management system. The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units. Waste management units include waste piles, surface impoundments, and landfills.

Government Publication Date: Aug 11, 2025

Leaking Underground Fuel Tank Reports: LUST

List of Leaking Underground Storage Tanks within the Cleanup Sites data in GeoTracker database. GeoTracker is the State Water Resources Control Board's (SWRCB) data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks, Department of Defense and Site Cleanup Program) as well as permitted facilities such as operating Underground Storage Tanks. The Leak Prevention Program that overlooks LUST sites is the SWRCB in California's Environmental Protection Agency.

Government Publication Date: Aug 11, 2025

Delisted Leaking Storage Tanks: DELISTED LST

List of Leaking Underground Storage Tanks (LUST) cleanup sites removed from GeoTracker, the State Water Resources Control Board (SWRCB)'s database system, as well as sites removed from the SWRCB's list of UST Case closures.

Government Publication Date: Oct 3, 2025

Permitted Underground Storage Tank (UST) in GeoTracker: UST

List of Permitted Underground Storage Tank (UST) sites made available by the State Water Resources Control Board (SWRCB) in California's Environmental Protection Agency (EPA).

Government Publication Date: Nov 17, 2025

Proposed Closure of Underground Storage Tank Cases: UST CLOSURE

This listing includes Proposed Closure of Underground Storage Tank (UST) Cases which are being considered for closure by either the State Water Resources Control Board at a Future Board Meeting or the Executive Director that have been posted for a 60-day public comment period, and Closure of UST Cases with Closure Denials and Approved Orders. The lists are provided by the California Water Boards.

Government Publication Date: Oct 3, 2025

Historical Hazardous Substance Storage Information Database: HHSS

The Historical Hazardous Substance Storage database contains information collected in the 1980s from facilities that stored hazardous substances. The information was originally collected on paper forms, was later transferred to microfiche, and recently indexed as a searchable database. When using this database, please be aware that it is based upon self-reported information submitted by facilities which has not been independently verified. It is unlikely that every facility responded to the survey and the database should not be expected to be a complete inventory of all facilities that were operating at that time. This database is maintained by the California State Water Resources Control Board's (SWRCB) Geotracker.

Government Publication Date: Aug 27, 2015

Statewide Environmental Evaluation and Planning System: UST SWEEPS

The Statewide Environmental Evaluation and Planning System (SWEEPS) is a historical listing of active and inactive underground storage tanks made available by the California State Water Resources Control Board (SWRCB).

Government Publication Date: Oct 1, 1994

Aboveground Storage Tanks: AST

A statewide list from 2009 of aboveground storage tanks (ASTs) made available by the Cal FIRE Office of the State Fire Marshal (OSFM). This list is no longer maintained or updated by the Cal FIRE OSFM.

Government Publication Date: Aug 31, 2009

SWRCB Historical Aboveground Storage Tanks: AST SWRCB

A list of aboveground storage tanks made available by the California State Water Resources Control Board (SWRCB). Effective January 1, 2008, the Certified Unified Program Agencies (CUPAs) are vested with the responsibility and authority to implement the Aboveground Petroleum Storage Act (APSA).

Government Publication Date: Dec 1, 2007

Oil and Gas Facility Tanks: TANK OIL GAS

Locations of oil and gas tanks that fall under the jurisdiction of the Geologic Energy Management Division of the California Department of Conservation (CalGEM) (CCR 1760). CalGEM was formerly the Division of Oil, Gas, and Geothermal Resources (DOGGR).

Government Publication Date: Nov 4, 2025

Delisted Storage Tanks: DELISTED TNK

This database contains a list of storage tank sites that were removed by the State Water Resources Control Board (SWRCB) in California's Environmental Protection Agency (EPA) and the Cal FIRE Office of State Fire Marshal (OSFM).

Government Publication Date: Nov 17, 2025

California Environmental Reporting System (CERS) Tanks: CERS TANK

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs. The CalEPA oversees the statewide implementation of the Unified Program which applies regulatory standards to protect Californians from hazardous waste and materials. This data also includes military underground storage tank sites sourced from the CalEPA's Water Boards' GeoTracker system.

Government Publication Date: Jan 12, 2026

Delisted California Environmental Reporting System (CERS) Tanks: DELISTED CTNK

This database contains a list of Aboveground Petroleum Storage and Underground Storage Tank sites that were removed from in the California Environmental Protection Agency (CalEPA) Regulated Site Portal.

Government Publication Date: Jan 12, 2026

Historical Hazardous Substance Storage Container Information - Facility Summary: HIST TANK

The State Water Resources Control Board maintained the Hazardous Substance Storage Containers listing and inventory in th 1980s. This facility summary lists historic tank sites where the following container types were present: farm motor vehicle fuel tanks; waste tanks; sumps; pits, ponds, lagoons, and others; and all other product tanks. This set, published in May 1988, lists facility and owner information, as well as the number of containers. This data is historic and will not be updated.

Government Publication Date: May 27, 1988

Site Mitigation and Brownfields Reuse Program Facility Sites with Land Use Restrictions: LUR

The Department of Toxic Substances Control (DTSC) Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents land use restrictions that are active. Some sites have multiple land use restrictions.

Government Publication Date: Oct 2, 2025

CALSITES Database: CALSITES

This historical database was maintained by the Department of Toxic Substance Control (DTSC) for more than a decade. CALSITES contains information on Brownfield properties with confirmed or potential hazardous contamination. In 2006, DTSC introduced EnviroStor as the latest Brownfields site database.

Government Publication Date: May 1, 2004

Hazardous Waste Management Program Facility Sites with Deed / Land Use Restrictions: HLUR

The Department of Toxic Substances Control (DTSC) Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Government Publication Date: Feb 18, 2021

Deed Restrictions and Land Use Restrictions: DEED

List of Deed Restrictions, Land Use Restrictions and Covenants in GeoTracker made available by the State Water Resources Control Board (SWRCB) in California's Environmental Protection Agency. A deed restriction (land use covenant) may be required to facilitate the remediation of past environmental contamination and to protect human health and the environment by reducing the risk of exposure to residual hazardous materials.

Government Publication Date: Sep 13, 2025

Voluntary Cleanup Program: VCP

List of sites in the Voluntary Cleanup Program made available by the Department of Toxic Substances and Control (DTSC). The Voluntary Cleanup Program was designed to respond to lower priority sites. Under the Voluntary Cleanup Program, DTSC enters site-specific agreements with project proponents for DTSC oversight of site assessment, investigation, and/or removal or remediation activities, and the project proponents agree to pay DTSC's reasonable costs for those services.

Government Publication Date: Oct 2, 2025

GeoTracker Cleanup Program Sites: CLEANUP SITES

A list of Cleanup Program sites in the state of California made available by The State Water Resources Control Board (SWRCB) of the California Environmental Protection Agency (EPA). SWRCB tracks leaking underground storage tank cleanups as well as other water board cleanups.

Government Publication Date: Aug 11, 2025

Delisted Cleanup Program Sites: DELISTED CLEANUP

A list of Cleanup Program sites which were once included - and have since been removed from - the list of Cleanup Program Sites in GeoTracker. GeoTracker is the State Water Resource Control Boards' data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Government Publication Date: Sep 13, 2025

Delisted County Records: DELISTED COUNTY

Records removed from county or CUPA databases. Records may be removed from the county lists made available by the respective county departments because they are inactive, or because they have been deemed to be below reportable thresholds.

Government Publication Date: Jan 12, 2026

Delisted County Tanks: DELISTED COUNTY TANK

Storage Tank records removed from county or CUPA databases. Records may be removed from the county lists made available by the respective county departments because they are inactive, or because they have been deemed to be below reportable thresholds.

Government Publication Date: Dec 23, 2025

Delisted County Leaking Tanks: DELISTED COUNTY LTANK

Leaking Storage tank records removed from county or CUPA databases.

Government Publication Date: Dec 3, 2025

Tribal

Leaking Underground Storage Tanks on Tribal/Indian Lands: INDIAN LUST

This list of leaking underground storage tanks (LUSTs) on Tribal/Indian Lands in Region 9, which includes California, is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Nov 21, 2025

Underground Storage Tanks on Tribal/Indian Lands: INDIAN UST

This list of underground storage tanks (USTs) on Tribal/Indian Lands in Region 9, which includes California, is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Nov 21, 2025

Delisted Tribal Leaking Storage Tanks: DELISTED INDIAN LST

Leaking Underground Storage Tank (LUST) facilities which once appeared on - and have since been removed from - the Regional Tribal/Indian LUST lists made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Nov 21, 2025

Delisted Tribal Underground Storage Tanks: DELISTED INDIAN UST

Underground Storage Tank (UST) facilities which once appeared on - and have since been removed from - the Regional Tribal/Indian UST lists made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Nov 21, 2025

County

Riverside County - Local Oversight Program List: LOP RIVERSIDE

A list of Leaking Underground Storage Tank (LUST) facilities in Riverside County. This list is made available by Riverside County Department of Environmental Health. Environmental Cleanup Program provides oversight of assessments and cleanups at properties that have been, or may have been, contaminated with hazardous substances from LUSTs or releases associated with other commercial/industrial use.

Government Publication Date: Feb 6, 2024

Riverside County - Underground Storage Tanks List: UST RIVERSIDE

A list of registered Underground Storage Tank (UST) sites in Riverside County. This list is made available by Riverside County Department of Environmental Health. The Hazardous Materials Management Branch (HMMB) regulates and oversees the inspections of constructions, repairs, upgrades, system operation and removal of UST systems.

Government Publication Date: Oct 1, 2025

Additional Environmental Record Sources

Federal

PFAS Greenhouse Gas Emissions Data: PFAS GHG

The U.S. Environmental Protection Agency's (EPA) Greenhouse Gas Reporting Program (GHGRP) collects Greenhouse Gas (GHG) data from large emitting facilities (25,000 metric tons of carbon dioxide equivalent (CO2e) per year), and suppliers of fossil fuels and industrial gases that results in GHG emissions when used. This dataset is sourced from the EPA's PFAS Analytic Tools, and it includes GHG emissions data for facilities that emit or have emitted since 2010 chemicals identified as PFAS based on EPA's CompTox Chemicals Dashboard lists of PFAS with defined and undefined structures. PFAS emissions data has been identified for facilities engaged in the following industrial processes: Aluminum Production (GHGRP Subpart F), HCFC-22 Production and HFC-23 Destruction (Subpart O), Electronics Manufacturing (Subpart I), Fluorinated Gas Production (Subpart L), Magnesium Production (Subpart T), Electrical Transmission and Distribution Equipment Use (Subpart DD), and Manufacture of Electric Transmission and Distribution Equipment (Subpart SS). Over time, other industrial processes with required GHGRP reporting may include PFAS emissions data and the list of reportable gases may change over time. Note that some regulatory programs have specified chemical structure requirements that define PFAS differently than the lists in EPA's CompTox Chemicals Dashboard.

Government Publication Date: Oct 7, 2025

On-Scene Coordinator Response Sites: OSC RESPONSE

This list of On-Scene Coordinator (OSC) Response Sites is provided by the U.S. Environmental Protection Agency (EPA). OSCs are the federal officials responsible for monitoring or directing responses to all oil spills and hazardous substance releases reported to the federal government. OSCs coordinate all federal efforts with, and provide support and information to local, state, and regional response communities. An OSC is an agent of either EPA or the U.S. Coast Guard (USCG), depending on where the incident occurs. EPA's OSCs have primary responsibility for spills and releases to inland areas and waters. USCG OSCs have responsibility for coastal waters and the Great Lakes. In general, an OSC has the following key responsibilities during and after a response: Assessment, Monitoring, Response Assistance, and Evaluation.

Government Publication Date: Oct 8, 2025

Facility Registry Service/Facility Index: FINDS/FRS

The Facility Registry Service (FRS) is a centrally managed database that identifies facilities, sites, or places subject to environmental regulations or of environmental interest. FRS creates high-quality, accurate, and authoritative facility identification records through rigorous verification and management procedures that incorporate information from program national systems, state master facility records, and data collected from EPA's Central Data Exchange registrations and data management personnel. This list is made available by the U.S. Environmental Protection Agency (EPA).

Government Publication Date: Oct 10, 2025

Toxics Release Inventory (TRI) Program: TRIS

The U.S. Environmental Protection Agency's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of toxic chemicals from U.S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment. There are currently 770 individually listed chemicals and 33 chemical categories covered by the TRI Program. Facilities that manufacture, process or otherwise use these chemicals in amounts above established levels must submit annual reporting forms for each chemical. Note that the TRI chemical list does not include all toxic chemicals used in the U.S. One of TRI's primary purposes is to inform communities about toxic chemical releases to the environment. This database includes TRI Reporting Data for calendar years 1987 through 2021 and Preliminary Data for 2022.

Government Publication Date: Sep 20, 2023

PFOA/PFOS Contaminated Sites: PFAS NPL

This list of Superfund Sites with Per- and Polyfluoroalkyl Substances (PFAS) detections is made available by the U.S. Environmental Protection Agency (EPA) in their PFAS Analytic Tools data, previously the list was obtained by EPA FOIA requests. EPA's Office of Land and Emergency Management and EPA Regional Offices maintain what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment. Limitations: Detections of PFAS at National Priorities List (NPL) sites do not mean that people are at risk from PFAS, are exposed to PFAS, or that the site is the source of the PFAS. The information in the Superfund NPL and Superfund Alternative Agreement (SAA) PFAS detection site list is years old and may not be accurate today. Site information such as site name, site ID, and location has been confirmed for accuracy; however, PFAS-related information such as media sampled, drinking water being above the health advisory, or mitigation efforts has not been verified. For Federal Facilities data, the other Federal agencies (OFA) are the lead agency for their data and provided them to EPA.

Government Publication Date: Dec 29, 2025

Federal Agency Locations with Known or Suspected PFAS Detections: PFAS FED SITES

This list of federal agency locations with known or suspected detections of Per- and Polyfluoroalkyl Substances (PFAS) is made available by the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools data. The EPA outlines that these data are gathered from several federal entities, such as the federal Superfund program, Department of Defense (DOD), National Aeronautics and Space Administration (NASA), Department of Transportation (DOT), and Department of Energy (DOE). The dates this data was extracted for the PFAS Analytic Tools range from 2022 to 2025 per agency entity dataset. Sites on this list do not necessarily reflect the source/s of PFAS contamination and detections do not indicate level of risk or human exposure at the site. Agricultural notifications in this data are limited to DOD sites only. At this time, the EPA is aware that this list is not comprehensive of all Federal agencies.

Government Publication Date: May 30, 2025

SSEHRI PFAS Contamination Sites: PFAS SSEHRI

This PFAS Contamination Site Tracker database is compiled by the PFAS Project Lab, part of the Social Science Environmental Health Research Institute (SSEHRI) at Northeastern University. According to the SSEHRI, the database records qualitative and quantitative data from each known site of PFAS contamination, including timeline of discovery, sources, levels, health impacts, community response, and government response. The goal of this database is to compile information and support public understanding of the rapidly unfolding issue of PFAS contamination. All data presented was extracted from government websites, news articles, or publicly available documents. Locations for the Known PFAS Contamination Sites are sourced from the PFAS Sites and Community Resources Map by the PFAS-REACH team, credited to PFAS Project Lab, Silent Spring Institute, and PFAS Exchange. Disclaimer: The source conveys the data undergoes regular updates as new information becomes available, some sites may be missing and/or contain information that is incorrect or outdated, as well as their information represents all contamination sites SSEHRI is aware of, not all possible contamination sites. This data is not intended to be used for legal purposes. Access the following source link for the most current information: https://pfasproject.com/pfas-sites-and-community-resources/

Government Publication Date: Aug 1, 2025

National Response Center PFAS Spills: PFAS ERNS

This Per- and Poly-Fluoroalkyl Substances (PFAS) Spills dataset is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. The National Response Center (NRC), operated by the U.S. Coast Guard, is the designated federal point of contact for reporting all oil, chemical, and other discharges into the environment, for the United States and its territories. This dataset contains NRC spill information from 1990 to the present that is restricted to records associated with PFAS and PFAS-containing materials. Incidents are filtered to include only records with a "Material Involved" or "Incident Description" related to Aqueous Film Forming Foam (AFFF). The keywords used to filter the data included "AFFF," "Fire Fighting Foam," "Aqueous Film Forming Foam," "Fire Suppressant Foam, "PFAS," "PERFL," "PFOA," "PFOS," and "Genx." Limitations: The data from the NRC website contains initial incident data that has not been validated or investigated by a federal/state response agency. Keyword searches may misidentify some incident reports that do not contain PFAS. This dataset should also not be considered to be exhaustive of all PFAS spills/release incidents.

Government Publication Date: Dec 1, 2025

PFAS NPDES Discharge Monitoring: PFAS NPDES

This list of National Pollutant Discharge Elimination System (NPDES) permitted facilities with required monitoring for Per- and Polyfluoroalkyl (PFAS) Substances is made available via the U.S. Environmental Protection Agency (EPA)'s PFAS Analytic Tools. Any point-source wastewater discharger to waters of the United States must have a NPDES permit, which defines a set of parameters for pollutants and monitoring to ensure that the discharge does not degrade water quality or impair human health. This list includes NPDES permitted facilities associated with permits that monitor for Per- and Polyfluoroalkyl Substances (PFAS), limited to the years 2007 - present. EPA further advises the following regarding these data: currently, fewer than half of states have required PFAS monitoring for at least one of their permittees, and fewer states have established PFAS effluent limits for permittees. For states that may have required monitoring, some reporting and data transfer issues may exist on a state-by-state basis.

Government Publication Date: Dec 16, 2024

Perfluorinated Alkyl Substances (PFAS) from Toxic Release Inventory: PFAS TRI

List of Toxics Release Inventory (TRI) facilities at which the reported chemical is a per- or polyfluoroalkyl (PFAS) substance included in the U.S. Environmental Protection Agency's (EPA) consolidated PFAS Master List of PFAS Substances. Encompasses Toxics Release Inventory records included in the EPA PFAS Analytic Tools. The EPA's TRI database currently tracks information on disposal or releases of 770 individually listed toxic chemicals and 33 chemical categories from thousands of U.S. facilities and details about how facilities manage those chemicals through recycling, energy recovery, and treatment. This listing includes TRI Reporting Data for calendar years 1987 through 2021 and Preliminary Data for 2022.

Government Publication Date: Sep 20, 2023

PFAS Water Quality Portal Sampling Data: PFAS WATER

This Per- and Poly-Fluoroalkyl Substances (PFAS) Environmental Media Sampling Data is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. The Water Quality Portal (WQP), as a cooperative service sponsored by the United States Geological Survey, the EPA, and the National Water Quality Monitoring Council, is part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations, and individuals submit project details and sampling results to this public repository. Limitations: EPA did not carry out the sampling or testing of a majority of the data in the WQP PFAS dataset. EPA can only speak to the accuracy and completeness of the data from projects like the National Aquatic Resource Surveys for which EPA is the data owner/organization. Data may exist within the file on Quality Assurance Project Plans (QAPPs) and the approving agency of the QAPP, if a QAPP is entered.

Government Publication Date: Jul 21, 2025

PFAS TSCA Manufacture and Import Facilities: PFAS TSCA

The U.S. Environmental Protection Agency (EPA) issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. This list is specific only to TSCA Manufacture and Import Facilities with reported per- and poly-fluoroalkyl (PFAS) substances. Data file is sourced from EPA's PFAS Analytic Tools TSCA dataset which includes CDR/Inventory Update Reporting data from 1998 up to 2020. Disclaimer: This data file includes production and importation data for chemicals identified in EPA's CompTox Chemicals Dashboard list of PFAS without explicit structures and list of PFAS structures in DSSTox. Note that some regulations have specific chemical structure requirements that define PFAS differently than the lists in EPA's CompTox Chemicals Dashboard. Reporting information on manufactured or imported chemical substance amounts should not be compared between facilities, as some companies claim Chemical Data Reporting Rule data fields for PFAS information as Confidential Business Information.

Government Publication Date: Jan 5, 2023

PFAS Waste Transfers from RCRA e-Manifest: PFAS E-MANIFEST

This Per- and Poly-Fluoroalkyl Substances (PFAS) Waste Transfers dataset is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. Every shipment of hazardous waste in the U.S. must be accompanied by a shipment manifest, which is a critical component of the cradle-to-grave tracking of wastes mandated by the Resource Conservation and Recovery Act (RCRA). According to the EPA, currently no Federal Waste Code exists for any PFAS compounds. To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: • PFAS • PFOA • PFOS • PERFL • AFFF • GENX • GEN-X (plus the Vermont state-specific waste codes). Limitations: Amount or concentration of PFAS being transferred cannot be determined from the manifest information. Keyword searches may misidentify some manifest records that do not contain PFAS. This dataset should also not be considered to be exhaustive of all PFAS waste transfers.

Government Publication Date: Nov 29, 2025

PFAS Industry Sectors: PFAS IND

This Per- and Poly-Fluoroalkyl Substances (PFAS) Industry Sectors dataset is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. The EPA developed the dataset from various sources that show which industries may be handling PFAS including: EPA's Enforcement and Compliance History Online (ECHO) records restricted to potential PFAS-handling industry sectors; ECHO records for Fire Training Sites identified where fire-fighting foam may have been used in training exercises; and 14 CFR Part 139 Airports compiled from historic and current records from the FAA Airport Data and Information Portal. Since July 2006, all certificated Part 139 Airports are required to have fire-fighting foam onsite that meet certain military specifications, which to date have been fluorinated (Aqueous Film Forming Foam). Limitations: Inclusion in this dataset does not indicate that PFAS are being manufactured, processed, used, or released by the facility. Listed facilities potentially handle PFAS based on their industrial profile, but are unconfirmed by the EPA. Keyword searches in ECHO for Fire Training sites may misidentify some facilities and should not be considered to be an exhaustive list of fire training facilities in the U.S.

Government Publication Date: Dec 1, 2025

Hazardous Materials Information Reporting System: HMIRS

The Hazardous Materials Incident Reporting System (HMIRS) database contains unintentional hazardous materials release information reported to the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration.

Government Publication Date: May 28, 2025

National Clandestine Drug Labs: NCDL

The U.S. Department of Justice ("the Department"), Drug Enforcement Administration (DEA), provides this data as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy.

Government Publication Date: Nov 30, 2023

Toxic Substances Control Act: TSCA

The U.S. Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule. The CDR enables EPA to collect and publish information on the manufacturing, processing, and use of commercial chemical substances and mixtures (referred to hereafter as chemical substances) on the TSCA Chemical Substance Inventory (TSCA Inventory). This includes current information on chemical substance production volumes, manufacturing sites, and how the chemical substances are used. This information helps the Agency determine whether people or the environment are potentially exposed to reported chemical substances. EPA publishes submitted CDR data that is not Confidential Business Information (CBI). EPA CDR collections occur approximately every four years and reporting requirements change per collection.

Government Publication Date: May 12, 2022

Hist TSCA: HIST TSCA

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.
The 2006 IUR data summary report includes information about chemicals manufactured or imported in quantities of 25,000 pounds or more at a single site during calendar year 2005. In addition to the basic manufacturing information collected in previous reporting cycles, the 2006 cycle is the first time EPA collected information to characterize exposure during manufacturing, processing and use of organic chemicals. The 2006 cycle also is the first time manufacturers of inorganic chemicals were required to report basic manufacturing information.

Government Publication Date: Dec 31, 2006

FTTS Administrative Case Listing: FTTS ADMIN

An administrative case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

Government Publication Date: Jan 19, 2007

FTTS Inspection Case Listing: FTTS INSP

An inspection case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

Government Publication Date: Jan 19, 2007

Potentially Responsible Parties List: PRP

Early in the site cleanup process, the U.S. Environmental Protection Agency (EPA) conducts a search to find the Potentially Responsible Parties (PRPs). The EPA looks for evidence to determine liability by matching wastes found at the site with parties that may have contributed wastes to the site. This listing contains PRPs, Noticed Parties, at sites in the EPA's Superfund Enterprise Management System (SEMS).

Government Publication Date: Dec 26, 2025

State Coalition for Remediation of Drycleaners Listing: SCRD DRYCLEANER

The State Coalition for Remediation of Drycleaners (SCRD) was established in 1998, with support from the U.S. Environmental Protection Agency (EPA) Office of Superfund Remediation and Technology Innovation. Coalition members are states with mandated programs and funding for drycleaner site remediation. Current members are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin. Since 2017, the SCRD no longer maintains this data, refer to applicable state source data where available.

Government Publication Date: Nov 08, 2017

Integrated Compliance Information System (ICIS): ICIS

The Integrated Compliance Information System (ICIS) database contains integrated enforcement and compliance information across most of U.S. Environmental Protection Agency's (EPA) programs. The vision for ICIS is to replace EPA's independent databases that contain enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions and a subset of the Permit Compliance System (PCS), which supports the National Pollutant Discharge Elimination System (NPDES). This information is maintained by the EPA Headquarters and at the Regional offices. A future release of ICIS will completely replace PCS and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities that support compliance and enforcement programs, including incident tracking, compliance assistance, and compliance monitoring.

Government Publication Date: Oct 18, 2025

Drycleaner Facilities: FED DRYCLEANERS

A list of drycleaner facilities from Enforcement and Compliance History Online (ECHO) data as made available by the U.S. Environmental Protection Agency (EPA), sourced from the ECHO Exporter file. This EPA source file tracks facilities that possess NAICS and SIC codes that classify businesses as drycleaner establishments.

Government Publication Date: Oct 18, 2025

Delisted Drycleaner Facilities: DELISTED FED DRY

List of sites which once appeared on - and have since been removed from - the list of drycleaner facilities included in Enforcement and Compliance History Online (ECHO) data as made available by the U.S. Environmental Protection Agency (EPA), sourced from the ECHO Exporter file. This EPA source file tracks facilities that possess NAICS and SIC codes that classify businesses as drycleaner establishments.

Government Publication Date: Oct 18, 2025

Formerly Used Defense Sites: FUDS

Formerly Used Defense Sites (FUDS) are properties that were formerly owned by, leased to, or otherwise possessed by and under the jurisdiction of the Secretary of Defense prior to October 1986, where the Department of Defense (DOD) is responsible for an environmental restoration. The FUDS Annual Report to Congress (ARC) is published by the U.S. Army Corps of Engineers (USACE). This data is compiled from the USACE's Geospatial FUDS data layers and Homeland Infrastructure Foundation-Level Data (HIFLD) FUDS dataset which applies to the Fiscal Year 2021 FUDS Inventory.

Government Publication Date: May 15, 2023

FUDS Munitions Response Sites: FUDS MRS

Boundaries of Munitions Response Sites (MRS), published with the Formerly Used Defense Sites (FUDS) Annual Report to Congress (ARC) by the U.S. Army Corps of Engineers (USACE). An MRS is a discrete location within a Munitions response area (MRA) that is known to require a munitions response. An MRA means any area on a defense site that is known or suspected to contain unexploded ordnance (UXO), discarded military munitions (DMM), or munitions constituents (MC). This data is compiled from the USACE's Geospatial MRS data layers and Homeland Infrastructure Foundation-Level Data (HIFLD) MRS dataset.

Government Publication Date: May 15, 2023

Former Military Nike Missile Sites: FORMER NIKE

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites. During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

Government Publication Date: Dec 2, 1984

PHMSA Pipeline Safety Flagged Incidents: PIPELINE INCIDENT

This list of flagged pipeline incidents is made available by the U.S. Department of Transportation (US DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA). PHMSA regulations require incident and accident reports for five different pipeline system types. Accidents reported on hazardous liquid gravity lines (§195.13) and reporting-regulated-only hazardous liquid gathering lines (§195.15) and incidents reported on Type R gas gathering (§192.8(c)) are not included in the flagged incident file data.

Government Publication Date: Jul 10, 2025

Material Licensing Tracking System (MLTS): MLTS

A list of sites that store radioactive material subject to the Nuclear Regulatory Commission (NRC) licensing requirements. This list is maintained by the NRC. As of September 2016, the NRC no longer releases location information for sites. Site locations were last received in July 2016.

Government Publication Date: May 11, 2021

Historic Material Licensing Tracking System (MLTS) sites: HIST MLTS

A historic list of sites that have inactive licenses and/or removed from the Material Licensing Tracking System (MLTS). In some cases, a site is removed from the MLTS when the state becomes an "Agreement State". An Agreement State is a State that has signed an agreement with the Nuclear Regulatory Commission (NRC) authorizing the State to regulate certain uses of radioactive materials within the State.

Government Publication Date: Jan 31, 2010

Mines Master Index File: MINES

The Master Index File (MIF) is provided by the United States Department of Labor, Mine Safety and Health Administration (MSHA). This file, which was originally created in the 1970's, contained many Mine-IDs that were invalid. MSHA removes invalid IDs from the MIF upon discovery. MSHA applicable data includes the following: all Coal and Metal/Non-Metal mines under MSHA's jurisdiction since 1/1/1970; mine addresses for all mines in the database except for Abandoned mines prior to 1998 from MSHA's legacy system (addresses may or may not correspond with the physical location of the mine itself); violations that have been assessed penalties as a result of MSHA inspections beginning on 1/1/2000; and violations issued as a result of MSHA inspections conducted beginning on 1/1/2000.

Government Publication Date: Aug 8, 2025

Surface Mining Control and Reclamation Act Sites: SMCRA

This inventory of land and water impacted by past mining (primarily legacy coal mining operations) is maintained by the U.S. Department of the Interior's Office of Surface Mining Reclamation and Enforcement (OSMRE), as it provides information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). This inventory contains information on the type and extent of Abandoned Mine Land (AML) Problems, as well as information on the cost associated with the reclamation of those problems. The data is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed. Disclaimer: Per the OSMRE, States and tribes who enter their data into e-AMLIS (AML Inventory System) may truncate their latitude and longitude so the precise location of usually dangerous AMLs is not revealed in an effort to protect the public from searching for these AMLs, most of which are on private property. If more precise location information is needed, please contact the applicable state/tribe of interest.

Government Publication Date: Oct 30, 2025

Mineral Resource Data System: MRDS

The Mineral Resource Data System (MRDS) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS. The USGS has ceased systematic updates of the MRDS database with their focus more recently on deposits of critical minerals while providing a well-documented baseline of historical mine locations from USGS topographic maps.

Government Publication Date: Mar 15, 2016

DOE Legacy Management Sites: LM SITES

The U.S. Department of Energy (DOE) Office of Legacy Management (LM) currently manages radioactive and chemical waste, environmental contamination, and hazardous material at over 100 sites across the U.S. The LM manages sites with diverse regulatory drivers (statutes or programs that direct cleanup and management requirements at DOE sites) or as part of internal DOE or congressionally-recognized programs, such as but not limited to: Formerly Utilized Sites Remedial Action Program (FUSRAP), Uranium Mill Tailings Radiation Control Act (UMTRCA Title I, Tile II), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), Decontamination and Decommissioning (D&D), Nuclear Waste Policy Act (NWPA). The intent of the site location is to provide a general reference point to the site on a national scale. The coordinates of each site point can be the location of a site monument, the centroid of the site boundary, or a general location of the site. This site listing includes data exported from the DOE Office of LM's Geospatial Environmental Mapping System (GEMS). GEMS Data disclaimer: The DOE Office of LM makes no representation or warranty, expressed or implied, regarding the use, accuracy, availability, or completeness of the data presented herein.

Government Publication Date: Nov 6, 2025

Alternative Fueling Stations: ALT FUELS

This list of alternative fueling stations is sourced from the Alternative Fuels Data Center (AFDC). The U.S. Department of Energy's Office of Energy Efficiency & Renewable Energy launched the AFDC in 1991 as a repository for alternative fuel vehicle performance data, which provides a wealth of information and data on alternative and renewable fuels, advanced vehicles, fuel-saving strategies, and emerging transportation technologies. The data includes Biodiesel (B20 and above), Compressed Natural Gas (CNG), Electric, Ethanol (E85), Hydrogen, Liquefied Natural Gas (LNG), Propane (LPG), and Renewable Diesel (R20 and above) fuel type locations.

Government Publication Date: Aug 1, 2025

Superfunds Consent Decrees: CONSENT DECREES

This list of Superfund consent decrees is provided by the Department of Justice, Environment & Natural Resources Division (ENRD) through a Freedom of Information Act (FOIA) applicable file. This listing includes Cases filed since 2010 limited to the following: Consent Decrees for CERCLA or Superfund Sites filed and/or as proposed within the ENRD's Case Management System (CMS); and applicable ENRD's Environmental Defense Section (EDS) CERCLA Cases with "Consent" in History Note. CMS may not reflect the latest developments in a case, nor can the agency guarantee the accuracy of the data. ENRD Disclaimer: Congress excluded three discrete categories of law enforcement and national security records from the requirements of the FOIA; response is limited to those records that are subject to the requirements of the FOIA; however, this should not be taken as an indication that excluded records do, or do not, exist.

Government Publication Date: Jun 26, 2024

Air Facility System: AFS

This EPA retired Air Facility System (AFS) dataset contains emissions, compliance, and enforcement data on stationary sources of air pollution. Regulated sources cover a wide spectrum; from large industrial facilities to relatively small operations such as dry cleaners. AFS does not contain data on facilities that are solely asbestos demolition and/or renovation contractors, or landfills. ECHO Clean Air Act data from AFS are frozen and reflect data as of October 17, 2014; the EPA retired this system for Clean Air Act stationary sources and transitioned to ICIS-Air.

Government Publication Date: Oct 17, 2014

Registered Pesticide Establishments: SSTS

This national list of active EPA-registered foreign and domestic pesticide and/or device-producing establishments is based on data from the Section Seven Tracking System (SSTS). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 7 requires that each producing establishment must place its EPA establishment number on the label or immediate container of each pesticide, active ingredient or device produced. An EPA establishment number on a pesticide product label identifies the EPA registered location where the product was produced. The list of establishments is made available by the U.S. Environmental Protection Agency (EPA).

Government Publication Date: Sep 26, 2025

Polychlorinated Biphenyl (PCB) Transformers: PCBT

Locations of Transformers Containing Polychlorinated Biphenyls (PCBs) registered with the United States Environmental Protection Agency. PCB transformer owners must register their transformer(s) with EPA. Although not required, PCB transformer owners who have removed and properly disposed of a registered PCB transformer may notify EPA to have their PCB transformer de-registered. Data made available by EPA.

Government Publication Date: Oct 15, 2019

Polychlorinated Biphenyl (PCB) Notifiers: PCB

Facilities included in the national list of facilities that have notified the United States Environmental Protection Agency (EPA) of Polychlorinated Biphenyl (PCB) activities. Any company or person storing, transporting or disposing of PCBs or conducting PCB research and development must notify the EPA and receive an identification number.

Government Publication Date: May 23, 2024

Power Plants: POWER PLANTS

This list of power plants is provided by the U.S. Energy Information Administration (EIA). The listing includes operable electric generating plants in the United States by energy source, originating from the EIA-860, Annual Electric Generator Report; EIA-860M, Monthly Update to the Annual Electric Generator Report; and EIA-923, Power Plant Operations Report. It includes all operable plants by energy source with a combined nameplate capacity of 1 megawatt or more that are operating, are on standby, or out of service for short- or long-term.

Government Publication Date: Jun 5, 2025

Historical Business Activity Risk: HIST RISK

Proprietary list of sites identified as potentially having engaged in business activity that poses a higher-than-normal risk of contamination. Records originate from historical city directories, and are included in this list based on broad business categories Potentially Hazardous Chemical Users and Fuel and Automotive, including but not limited to Dry Cleaners and Fuel Stations, Garages, etc. Inclusion in this listing does not indicate that there is or ever has been contamination; rather, sites are included in this list due to their potential for having engaged in a business activity presenting an elevated risk of contamination. The list was compiled from various city directories including Polks, Millers, Mullin Kille, Interstate Directory, and State Directory Co; spanning roughly 1920s through 1960 depending on information available by city.

Government Publication Date: Jan 1, 1960

State

PFAS Sampling Locations: PFAS SAMPLING

This data is sourced from the State Water Board's GeoTracker Per- and Polyfluoroalkyl Substances (PFAS) Map tool which contains individual sampling points (i.e., soil boring, groundwater monitoring well, drinking water well for municipal drinking water systems, etc.) or a site location with PFAS analytical data. Includes analytical results that are finalized and submitted electronically by the Responsible Parties via GeoTracker's Electronic Submittal of Information Portal, and after it's accepted by a Regional Water Quality Control Board.

Government Publication Date: Dec 21, 2025

Dry Cleaning Facilities: DRYCLEANERS

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial, linen supply, commercial laundry, dry cleaning and pressing machines - Coin Operated Laundry and Dry Cleaning. This is provided by the Department of Toxic Substance Control.

Government Publication Date: Dec 20, 2021

Delisted Drycleaners: DELISTED DRYCLEANERS

Sites removed from the list of drycleaner related facilities that have EPA ID numbers, made available by the California Department of Toxic Substance Control.

Government Publication Date: Aug 3, 2023

Non-Toxic Dry Cleaning Incentive Program: DRYC GRANT

This list of past Non-Toxic Dry Cleaning Incentive Program grant award recipients is provided by the California Air Resources Board (CARB). The program provided grants to eligible dry cleaning businesses to assist them in transitioning away from perchloroethylene (Perc) machines to alternative non-toxic and non-smog forming technologies such as water-based and CO2 cleaning systems. Per the CARB, this program ended in January 2023 and the information is historical.

Government Publication Date: Aug 3, 2023

PFAS GeoTracker Cleanup Sites: PFAS GT CLEANUPS

A list of applicable cleanup sites from the State Water Resources Control Board's (SWRCB) GeoTracker data management system where one or more of the potential contaminants of concern are identified in the PFAS Structure List and/or PFAS Chemicals Without Explicit Structure List made available by the United States Environmental Protection Agency (US EPA).

Government Publication Date: Sep 13, 2025

PFOA/PFOS Groundwater: PFAS GW

A list of water wells from the Groundwater Ambient Monitoring and Assessment Program (GAMA) Groundwater Information System with the groundwater chemical perfluorooctanoic acid (PFOA) (NL = 0.014 UG/L) or perfluorooctanoic sulfonate (PFOS) (NL = 0.013 UG/L). The GAMA Groundwater Information System search is made available by California Water Boards.

Government Publication Date: Oct 20, 2025

PFAS Investigations: PFAS INVEST

This list of potential Per- and Polyfluoroalkyl Substance (PFAS) sites is compiled from the California State Water Resources Control Board's (SWRCB) PFAS Investigations Map tool. The SWRCB issued investigative orders, per California Water Code (CWC) Section 13267 and/or 13383, to these sites. Orders were also issued to the public water systems to sample wells in the vicinity of these locations. Military facilities have been identified by the Department of Defense (DOD) as part of their efforts to investigate PFAS per the Defense Environmental Restoration Program (DERP) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The data includes locations for Airports, Chrome Plating Facilities, Landfills, Publicly Owned Treatment Works, Refineries and Bulk Terminals, DOD Facilities, and Monitored Drinking Water Wells being investigated for potential PFAS.

Government Publication Date: Jan 23, 2024

Hazardous Waste and Substances Site List - Site Cleanup: HWSS CLEANUP

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. This list is published by California Department of Toxic Substance Control.

Government Publication Date: Mar 15, 2023

Toxic Pit Cleanup Act Sites: TOXIC PITS

The Toxic Pits Cleanup Act (TPCA) list identifies sites suspected of containing hazardous substances where cleanup has not yet been completed. This list was maintained by the State Water Resources Control Board (SWRCB), is not longer maintained, and updates are not planned.

Government Publication Date: Jul 1, 1995

List of Hazardous Waste Facilities Subject to Corrective Action: DTSC HWF

This is a list of hazardous waste facilities identified in Health and Safety Code (HSC) § 25187.5. These facilities are those where Department of Toxic Substances Control (DTSC) has taken or contracted for corrective action because a facility owner/operator has failed to comply with a date for taking corrective action in an order issued under HSC § 25187, or because DTSC determined that immediate corrective action was necessary to abate an imminent or substantial endangerment.

Government Publication Date: Jul 18, 2016

EnviroStor Inspection, Compliance, and Enforcement: INSP COMP ENF

A list of permitted facilities with inspections and enforcements tracked by the California Department of Toxic Substance Control's (DTSC) EnviroStor data management system.

Government Publication Date: Sep 19, 2025

School Property Evaluation Program Sites: SCH

A list of sites registered with The Department of Toxic Substances Control (DTSC) School Property Evaluation and Cleanup (SPEC) Division. SPEC is responsible for assessing, investigating and cleaning up proposed school sites. The Division ensures that selected properties are free of contamination or, if the properties were previously contaminated, that they have been cleaned up to a level that protects the students and staff who will occupy the new school.

Government Publication Date: Oct 2, 2025

California Hazardous Material Incident Report System (CHMIRS): CHMIRS

A list of reported hazardous material incidents, spills, and releases from the California Hazardous Material Incident Report System (CHMIRS). This listing has been made available by the California Governor's Office of Emergency Services (Cal OES).

Government Publication Date: Jul 11, 2025

Historical California Hazardous Material Incident Report System (CHMIRS): HIST CHMIRS

A list of reported hazardous material incidents, spills, and releases from the California Hazardous Material Incident Report System (CHMIRS) prior to 1993. This list has been made available by the California Office of Emergency Services (OES).

Government Publication Date: Jan 1, 1993

Handlers from Hazardous Waste Manifest Data: HAZNET

A list of handlers not otherwise classified as Treatment, Storage, Disposal facilities (TSDF) or generators from the facilities and manifests data made available by the California Department of Toxic Substances Control (DTSC) in their Hazardous Waste Tracking System (HWTS).

Government Publication Date: Feb 20, 2025

Generators from Hazardous Waste Manifest Data: HAZ GEN

List of handlers listed as having generated waste from the facilities and manifests data made available by the California Department of Toxic Substances Control (DTSC) in their Hazardous Waste Tracking System (HWTS).

Government Publication Date: Feb 20, 2025

TSDF from Hazardous Waste Manifest Data: HAZ TSD

List of Treatment, Storage, and Disposal Facilities (TSDFs) from the facilities and manifests data made available by the California Department of Toxic Substances Control (DTSC) in their Hazardous Waste Tracking System (HWTS).

Government Publication Date: Feb 20, 2025

Historical Hazardous Waste Manifest Data: HIST MANIFEST

A list of historic hazardous waste manifests received by the Department of Toxic Substances Control (DTSC) from year the 1980 to 1992. The volume of manifests is typically 900,000 - 1,000,000 annually, representing approximately 450,000 - 500,000 shipments.

Government Publication Date: Dec 31, 1992

DTSC Registered Hazardous Waste Transporters: HW TRANSPORT

The California Department of Toxic Substances Control (DTSC) maintains this list of Registered Hazardous Waste Transporters.

Government Publication Date: Nov 30, 2025

Registered Waste Tire Haulers: WASTE TIRE

This list of registered waste tire haulers is maintained by the California Department of Resources Recycling and Recovery.

Government Publication Date: Jan 11, 2026

California Medical Waste Management Program Facility List: MEDICAL WASTE

This list of Medical Waste Management Program Facilities is maintained by the California Department of Public Health. The Medical Waste Management Program (MWMP) regulates the generation, handling, storage, treatment, and disposal of medical waste by providing oversight for the implementation of the Medical Waste Management Act (MWMA). The MWMP permits and inspects all medical waste off-site treatment facilities, medical waste transporters, and medical waste transfer stations. This list contains transporters, treatment, and transfer facilities.

Government Publication Date: Nov 5, 2025

Historical Cortese List: HIST CORTESE

List of sites which were once included on the Cortese list. The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies and developers to comply with the California Environmental Quality Act requirements for providing information about the location of hazardous sites.

Government Publication Date: Nov 13, 2008

Cease and Desist Orders and Cleanup and Abatement Orders: CDO/CAO

The California Environment Protection Agency "Cortese List" of active Cease and Desist Orders (CDO) and Cleanup and Abatement Orders (CAO). This list contains many CDOs and CAOs that do NOT concern the discharge of wastes that are hazardous materials. Many of the listed orders concern, as examples, discharges of domestic sewage, food processing wastes, or sediment that do not contain hazardous materials, but the Water Boards' database does not distinguish between these types of orders.

Government Publication Date: Dec 6, 2021

California Environmental Reporting System (CERS) Hazardous Waste Sites: CERS HAZ

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the following regulatory programs: Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, RCRA LQ HW Generator. The CalEPA oversees the statewide implementation of the Unified Program which applies regulatory standards to protect Californians from hazardous waste and materials.

Government Publication Date: Jan 12, 2026

Delisted Environmental Reporting System (CERS) Hazardous Waste Sites: DELISTED HAZ

This database contains a list of sites that were removed from the California Environmental Protection Agency (CalEPA) in the following regulatory programs: Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, RCRA LQ HW Generator.

Government Publication Date: Nov 29, 2018

Sites in GeoTracker: GEOTRACKER

GeoTracker is the State Water Resource Control Boards' data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater. This is a list of sites in GeoTracker that aren't otherwise categorized as LUST, Land Disposal Sites (LDS), Cleanup Sites, or sites having Waste Discharge Requirements (WDR). This listing includes program types such as Underground Injection Control (UIC), Confined Animal Facilities (CAF), Irrigated Lands Regulatory Program, plans, and non-case information.

Government Publication Date: Aug 11, 2025

Mines Listing: MINE

This list includes mine site locations extracted from the Mines Online database, maintained by the California Department of Conservation. Mines Online (MOL) is an interactive web map designed with GIS features that provide information such as the mine name, mine status, commodity sold, location, and other mine specific data. Please note: Mine location information is provided to assist experts in determining the location of mine operators in accordance with California Civil Code section 1103.4 and reflects information reported by mine operators in annual reports provided under Public Resources Code section 2207. While the Division of Mine Reclamation (DMR) attempts to populate MOL with accurate location information, the DMR cannot guarantee the accuracy of operator reported location information.

Government Publication Date: Oct 25, 2025

Recorded Environmental Cleanup Liens: LIEN

The California Department of Toxic Substance Control (DTSC) maintains this list of liens placed upon real properties. A lien is utilized by the DTSC to obtain reimbursement from responsible parties for costs associated with the remediation of contaminated properties.

Government Publication Date: Apr 10, 2025

Waste Discharge Requirements: WASTE DISCHG

List of sites in California State Water Resources Control Board (SWRCB) Waste Discharge Requirements (WDRs) Program in California, made available by the SWRCB via GeoTracker. The WDR program regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Government Publication Date: Aug 11, 2025

Toxic Pollutant Emissions Facilities: EMISSIONS

A list of criteria and toxic pollutant emissions data for facilities in California made available by the California Environmental Protection Agency - Air Resources Board (ARB). Risk data may be based on previous inventory submittals. The toxics data are submitted to the ARB by the local air districts as requirement of the Air Toxics "Hot Spots" Program.

Government Publication Date: Dec 31, 2021

Clandestine Drug Lab Sites: CDL

The Department of Toxic Substances Control (DTSC) maintains a listing of drug lab sites. DTSC is responsible for removal and disposal of hazardous substances discovered by law enforcement officials while investigating illegal/clandestine drug laboratories.

Government Publication Date: Dec 21, 2022

Tribal

No Tribal additional environmental record sources available for this State.

County

Riverside County - Hazardous Waste Generator Sites List: HWG RIVERSIDE

A list of Hazardous Waste Generator Sites in the County of Riverside. This list is made available by Riverside County Department of Environmental Health which has been designated as the CUPA for the County.

Government Publication Date: Oct 1, 2025

Riverside County - Disclosure Facility List: HZH RIVERSIDE

A list of facilities disclosed to Riverside County Department of Environmental Health (DEH). This list is made available by Riverside County DEH which has been designated as the CUPA for the County. A business is required to establish and submit a Business Plan if the facility handles hazardous material equal to or greater than 55 gallons, 500 pounds or 200 cubic feet at any time during the year.

Government Publication Date: Oct 3, 2025

Riverside County - Medical Waste Facilities: MED WST RIVERSIDE

This list of active and inactive medical waste facilities is maintained by the County of Riverside Department of Environmental Health.

Government Publication Date: Oct 6, 2025

Riverside County - California Accidental Release Prevention Program Sites: RMP RIVERSIDE

This list of Riverside County California Accidental Release Prevention Program sites is maintained by the County of Riverside Department of Environmental Health. AB 3777 was enacted in 1986 to minimize potential emergencies involving acutely hazardous materials by requiring facilities which handle these materials to submit Risk Management Prevention Plans. The Riverside County Department of Environmental Health Hazardous Materials Branch began implementation of this Program County-wide in January 1991. All cities within Riverside County are included in this list.

Government Publication Date: Feb 6, 2024

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

Unplottables: These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

PSR
PHYSICAL SETTING REPORT

Property Information

Order Number:		26013000754p
Date Completed:		January 31, 2026
Project Number:		25-560235.1
Project Property:		Bradley Gardens 980 W 7th St SAN JACINTO CA 92582
Coordinates:		
	Latitude:	33.7796824
	Longitude:	-116.9775798
	UTM Northing:	3737725.07115 Meters
	UTM Easting:	502077.06995 Meters
	UTM Zone:	UTM Zone 11S
	Elevation:	1,528.38 ft
	Slope Direction:	W

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The ERIS ***Physical Setting Report - PSR*** provides comprehensive information about the physical setting around a site and includes a complete overview of topography and surface topology, in addition to hydrologic, geologic and soil characteristics. The location and detailed attributes of oil and gas wells, water wells, public water systems and radon are also included for review.

The compilation of both physical characteristics of a site and additional attribute data is useful in assessing the impact of migration of contaminants and subsequent impact on soils and groundwater.

Disclaimer

This Report does not provide a full environmental evaluation for the site or adjacent properties. Please see the terms and disclaimer at the end of the Report for greater detail.

Topographic Information



Current USGS Topo (2021)

0 0.2 0.4 0.8 Miles

N

Quadrangle(s): San Jacinto,CA

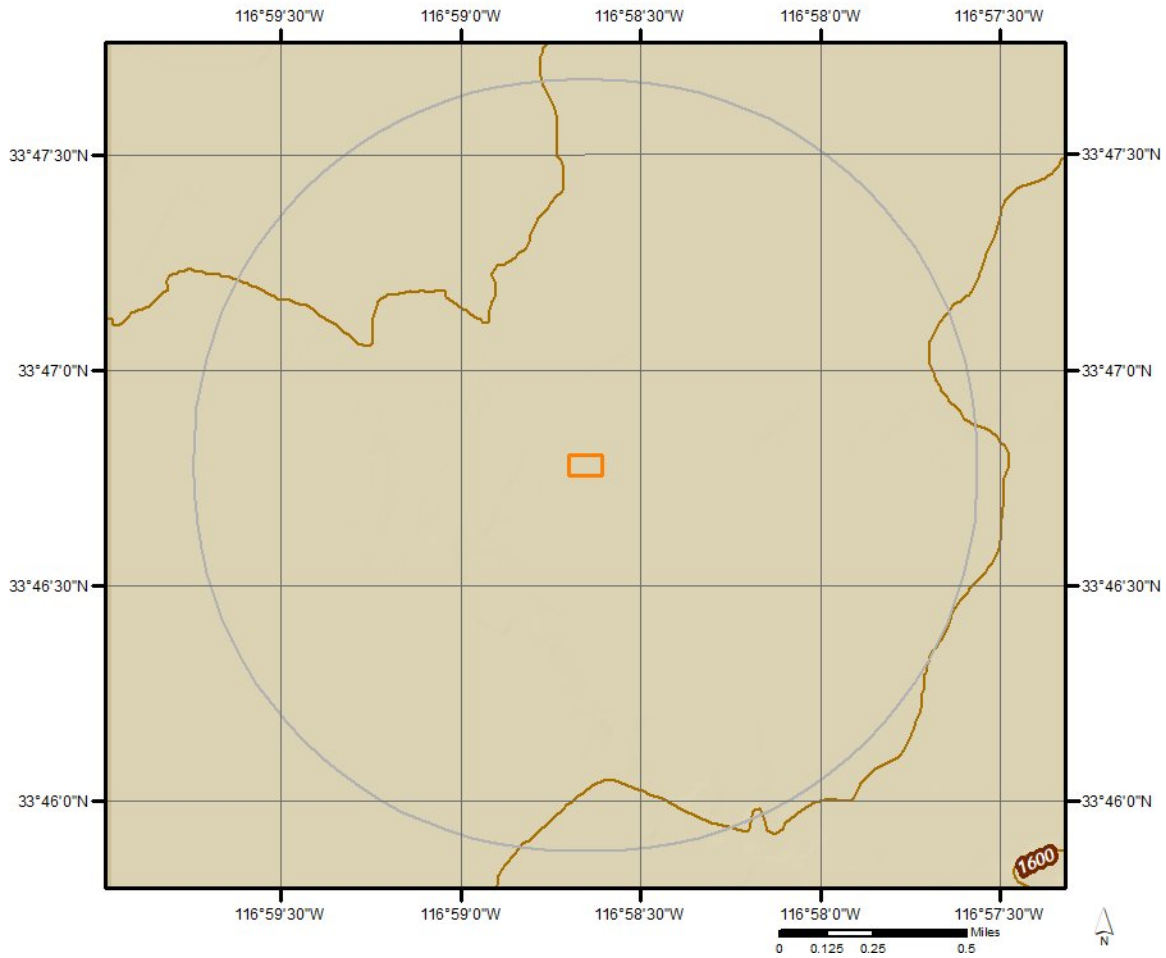
Source: USGS 7.5 Minute Topographic Map

Topographic Information

The previous topographic map(s) are created by seamlessly merging and cutting current USGS topographic data. Below are shaded relief map(s), derived from USGS elevation data to show surrounding topography in further detail.

Topographic information at project property:

Elevation:	1,528.38 ft
Slope Direction:	W



Hydrologic Information



Wetland

Miles
0 0.075 0.15 0.3

N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Flood Hazard Zones

This map shows FEMA flood hazard zones based on FEMA's National Flood Hazard Layer. FIRM Panels are overlayed. An absent FIRM panel represents no data available.

Miles
0 0.075 0.15

N

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee
- Open Water

Quadrangle(s): San Jacinto,CA

ERIS

Hydrologic Information

The Wetland Type map shows wetland existence overlaid on an aerial imagery. The Flood Hazard Zones map shows FEMA flood hazard zones overlaid on an aerial imagery. Relevant FIRM panels and detailed zone information is provided below.
For detailed Zone descriptions please click the link: https://floodadvocate.com/fema-zone-definitions

Available FIRM Panels in area:	06065C1488H(effective:2017-04-19) 06065C1490H(effective:2017-04-19)

Flood Zone A-04

Zone:	A
Zone subtype:	1 PCT ANNUAL CHANCE FLOOD HAZARD CONTAINED IN CHANNEL

Flood Zone X-01

Zone:	X
Zone subtype:	0.2 PCT ANNUAL CHANCE FLOOD HAZARD

Flood Zone X-14

Zone:	X
Zone subtype:	AREA WITH REDUCED FLOOD RISK DUE TO LEVEE

Hydrologic Information

FEMA Flood Zone Definitions

Special Flood Hazard Areas – High Risk

Special Flood Hazard Areas represent the area subject to inundation by 1-percent-annual chance flood. Structures located within the SFHA have a 26-percent chance of flooding during the life of a standard 30-year mortgage. Federal floodplain management regulations and mandatory flood insurance purchase requirements apply in these zones.

ZONE	DESCRIPTION
A	Areas subject to inundation by the 1-percent-annual-chance flood event. Because detailed hydraulic analyses have not been performed, no Base Flood Elevations (BFEs) or flood depths are shown.
AE, A1-A30	Areas subject to inundation by the 1-percent-annual-chance flood event determined by detailed methods. BFEs are shown within these zones. (Zone AE is used on new and revised maps in place of Zones A1–A30.)
AH	Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are 1–3 feet. BFEs derived from detailed hydraulic analyses are shown in this zone.
AO	Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually sheet flow on sloping terrain) where average depths are 1–3 feet. Average flood depths derived from detailed hydraulic analyses are shown within this zone.
AR	Areas that result from the decertification of a previously accredited flood protection system that is determined to be in the process of being restored to provide base flood protection.
A99	Areas subject to inundation by the 1-percent-annual-chance flood event, but which will ultimately be protected upon completion of an under-construction Federal flood protection system. These are areas of special flood hazard where enough progress has been made on the construction of a protection system, such as dikes, dams, and levees, to consider it complete for insurance rating purposes. Zone A99 may be used only when the flood protection system has reached specified statutory progress toward completion. No BFEs or flood depths are shown.

Coastal High Hazard Areas – High Risk

Coastal High Hazard Areas (CHHA) represent the area subject to inundation by 1-percent-annual chance flood, extending from offshore to the inland limit of a primary front al dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. Structures located within the CHHA have a 26-percent chance of flooding during the life of a standard 30-year mortgage. Federal floodplain management regulations and mandatory purchase requirements apply in these zones.

ZONE	DESCRIPTION
V	Areas along coasts subject to inundation by the 1-percent-annual-chance flood event with additional hazards associated with storm-induced waves. Because detailed coastal analyses have not been performed, no BFEs or flood depths are shown.
VE, V1-V30	Areas along coasts subject to inundation by the 1-percent-annual-chance flood event with additional hazards due to storm-induced velocity wave action. BFEs derived from detailed hydraulic coastal analyses are shown within these zones. (Zone VE is used on new and revised maps in place of Zones V1–V30.)

Hydrologic Information

Moderate and Minimal Risk Areas

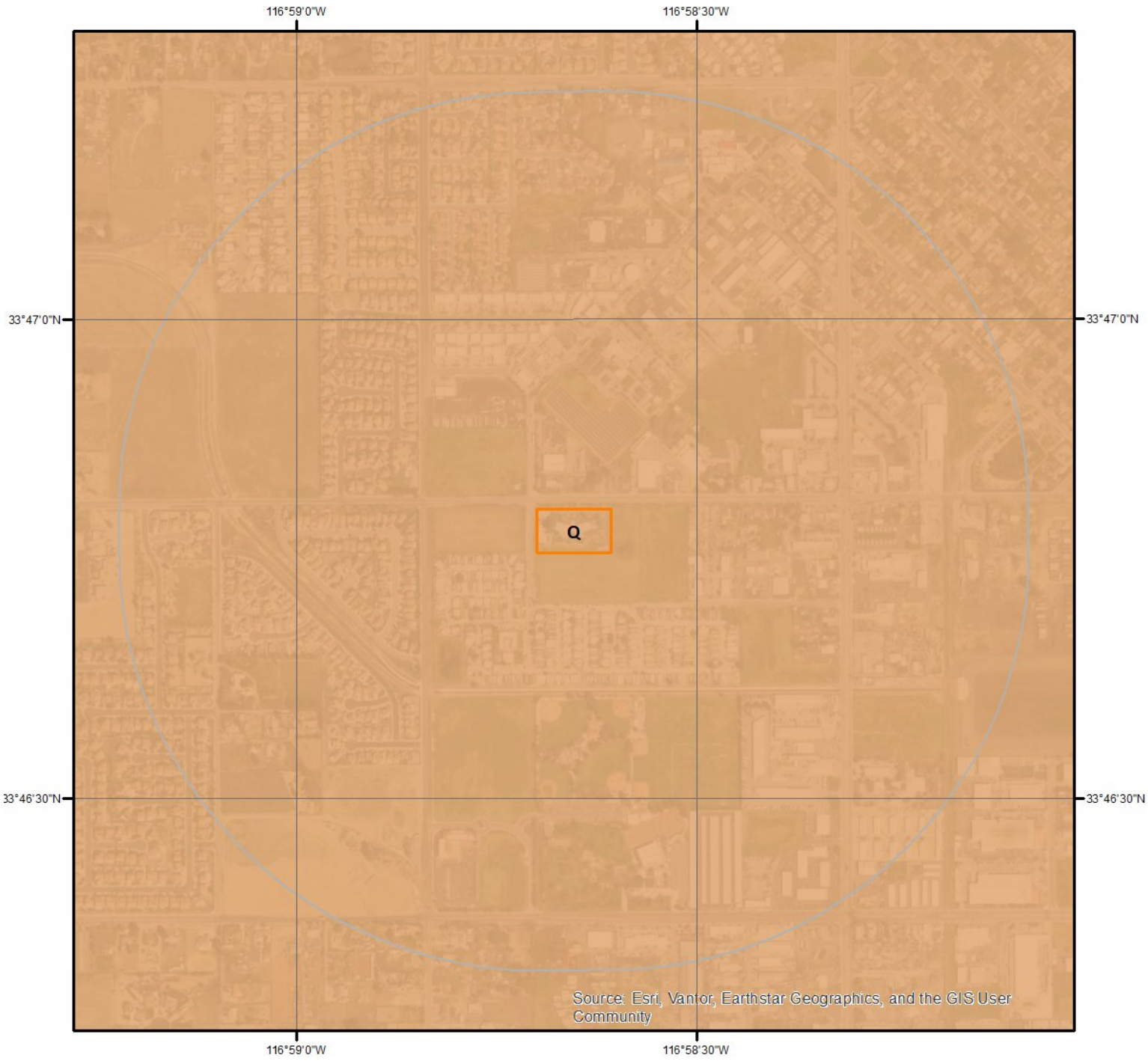
Areas of moderate or minimal hazard are studied based upon the principal source of flood in the area. However, buildings in these zones could be flooded by severe, concentrated rainfall coupled with inadequate local drainage systems. Local stormwater drainage systems are not normally considered in a community's flood insurance study. The failure of a local drainage system can create areas of high flood risk within these zones. Flood insurance is available in participating communities, but is not required by regulation in these zones. Nearly 25-percent of all flood claims filed are for structures located within these zones.

ZONE	DESCRIPTION
B, X (shaded)	Moderate risk areas within the 0.2-percent-annual-chance floodplain, areas of 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1-percent-annual-chance flood by a levee. No BFEs or base flood depths are shown within these zones. (Zone X (shaded) is used on new and revised maps in place of Zone B.)
C, X (unshaded)	Minimal risk areas outside the 1-percent and .2-percent-annual-chance floodplains. No BFEs or base flood depths are shown within these zones. (Zone X (unshaded) is used on new and revised maps in place of Zone C.)

Undetermined Risk Areas

ZONE	DESCRIPTION
D	Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

Geologic Information



Geologic Units

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

N

0 0.125 0.25 Miles

ERIS

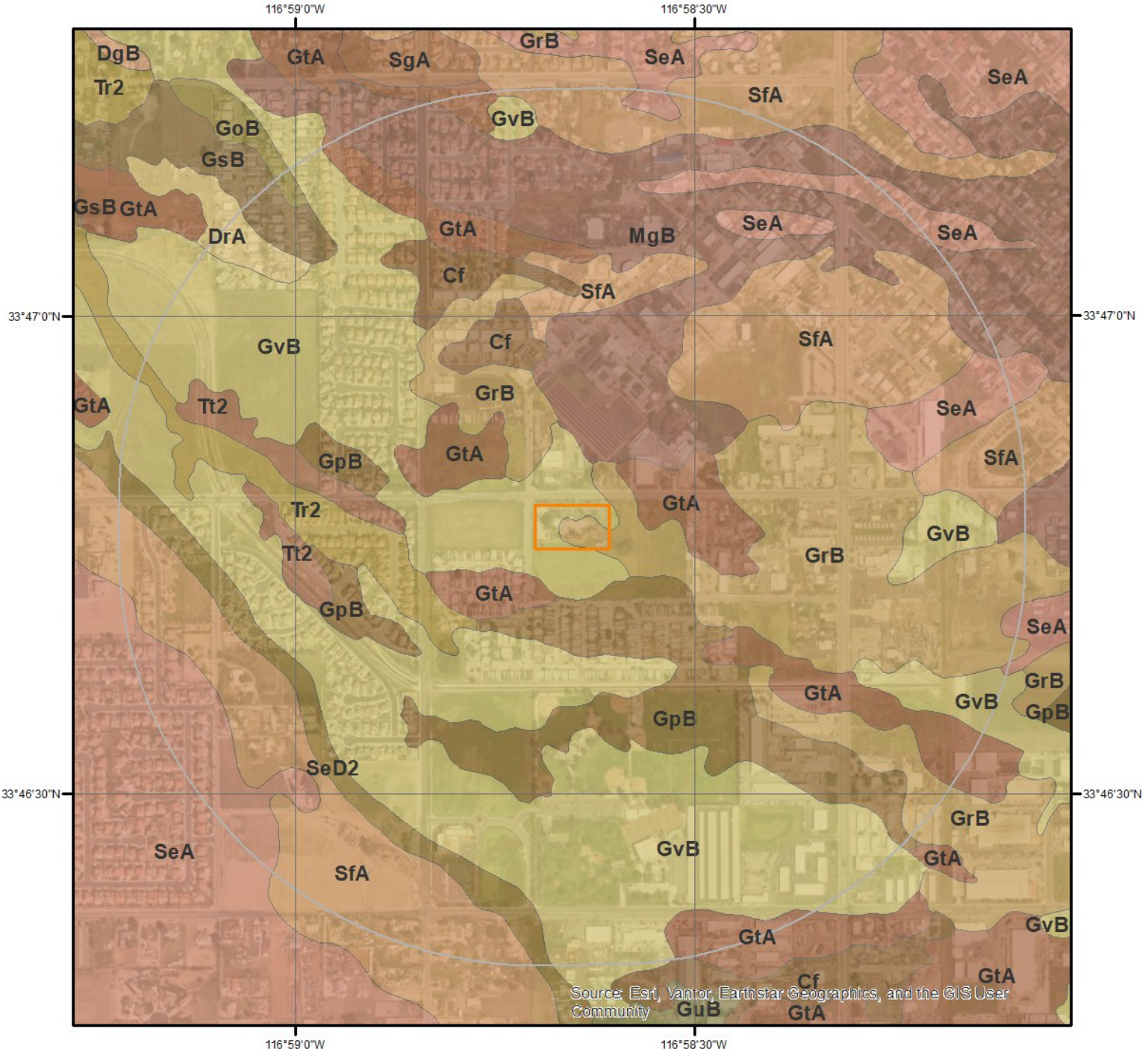
Geologic Information

The previous page shows USGS geology information. Detailed information about each unit is provided below.

Geologic Unit Q

Unit Name:	Quaternary alluvium and marine deposits
Unit Age:	Pleistocene to Holocene
Primary Rock Type:	Coarse-detrital
Secondary Rock Type:	
Unit Description:	Alluvium, lake, playa, and terrace deposits; unconsolidated and semi-consolidated. Mostly nonmarine, but includes marine deposits near the coast.

Soil Information



SSURGO Soils

N

0 0.125 0.25 Miles

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information

The previous page shows a soil map using SSURGO data from USDA Natural Resources Conservation Service. Detailed information about each unit is provided below.

Map Unit Cf (0.42%)

Map Unit Name:	Chino silt loam, drained, saline-alkali
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	0cm
Drainage Class - Dominant:	Somewhat poorly drained
Hydrologic Group - Dominant:	C/D - These soils have moderately high runoff potential when drained and high runoff potential when undrained.

Major components are printed below

Chino(85%)

horizon H1(0cm to 36cm)	Silt loam
horizon H2(36cm to 69cm)	Silty clay loam
horizon H3(69cm to 152cm)	Silty clay loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: Cf - Chino silt loam, drained, saline-alkali

Component: Chino (85%)
The Chino component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March. Organic matter content in the surface horizon is about 2 percent. This component is in the R019XD068CA Silty Basin ecological site. Nonirrigated land capability classification is 4w. Irrigated land capability classification is 3w. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. The soil has a moderately saline horizon within 30 inches of the soil surface.

Component: Unnamed (5%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Component: Chino (5%)
Generated brief soil descriptions are created for major soil components. The Chino soil is a minor component.

Component: Unnamed (3%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Component: Unnamed (2%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Map Unit DrA (0.1%)

Map Unit Name:	Dello loamy fine sand, gravelly substratum, 0 to 2 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	0cm
Drainage Class - Dominant:	Somewhat poorly drained
Hydrologic Group - Dominant:	A/D - These soils have low runoff potential when drained and high runoff potential when undrained.

Major components are printed below

Dello(85%)

horizon H1(0cm to 20cm)	Loamy fine sand

horizon H2(20cm to 91cm)	Sand
horizon H3(91cm to 152cm)	Gravelly coarse sand

Component Description:

Minor map unit components are excluded from this report.

Map Unit: DrA - Dello loamy fine sand, gravelly substratum, 0 to 2 percent slopes

Component: Dello (85%)
The Dello component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, December. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD035CA Sandy (1975) ecological site. Nonirrigated land capability classification is 4w. Irrigated land capability classification is 3w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Hanford (5%)
Generated brief soil descriptions are created for major soil components. The Hanford soil is a minor component.

Component: Grangeville (5%)
Generated brief soil descriptions are created for major soil components. The Grangeville soil is a minor component.

Component: Tujunga (5%)
Generated brief soil descriptions are created for major soil components. The Tujunga soil is a minor component.

Map Unit GoB (0.06%)

Map Unit Name:	Grangeville loamy fine sand, drained, 0 to 5 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	0cm
Drainage Class - Dominant:	Moderately well drained
Hydrologic Group - Dominant:	A/D - These soils have low runoff potential when drained and high runoff potential when undrained.

Major components are printed below

Grangeville(85%)

horizon H1(0cm to 43cm)	Loamy fine sand
horizon H2(43cm to 152cm)	Sandy loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: GoB - Grangeville loamy fine sand, drained, 0 to 5 percent slopes

Component: Grangeville (85%)
The Grangeville component makes up 85 percent of the map unit. Slopes are 0 to 5 percent. This component is on alluvial fans. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, December. Organic matter content in the surface horizon is about 4 percent. This component is in the R019XD070CA Sandy Basin ecological site. Nonirrigated land capability classification is 3w. Irrigated land capability classification is 2s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Dello (5%)
Generated brief soil descriptions are created for major soil components. The Dello soil is a minor component.

Component: Traver (5%)
Generated brief soil descriptions are created for major soil components. The Traver soil is a minor component.

Soil Information

Component: Unnamed (3%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Component: Unnamed (2%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Map Unit GpB (0.65%)

Map Unit Name:	Grangeville sandy loam, drained, saline-alkali, 0 to 5 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	0cm
Drainage Class - Dominant:	Moderately well drained
Hydrologic Group - Dominant:	A/D - These soils have low runoff potential when drained and high runoff potential when undrained.

Major components are printed below

Grangeville(85%)

horizon H1(0cm to 43cm)	Sandy loam
horizon H2(43cm to 152cm)	Sandy loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: GpB - Grangeville sandy loam, drained, saline-alkali, 0 to 5 percent slopes

Component: Grangeville (85%)
The Grangeville component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on alluvial fans. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, December. Organic matter content in the surface horizon is about 4 percent. This component is in the R019XD070CA Sandy Basin ecological site. Nonirrigated land capability classification is 3w. Irrigated land capability classification is 3s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. The soil has a slightly saline horizon within 30 inches of the soil surface.

Component: Dello (10%)
Generated brief soil descriptions are created for major soil components. The Dello soil is a minor component.

Component: Traver (5%)
Generated brief soil descriptions are created for major soil components. The Traver soil is a minor component.

Map Unit GrB (1.46%)

Map Unit Name:	Grangeville sandy loam, sandy substratum, drained, 0 to 5 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	0cm
Drainage Class - Dominant:	Moderately well drained
Hydrologic Group - Dominant:	A/D - These soils have low runoff potential when drained and high runoff potential when undrained.

Major components are printed below

Grangeville(85%)

horizon H1(0cm to 91cm)	Sandy loam
horizon H2(91cm to 152cm)	Sandy loam

Component Description:

Minor map unit components are excluded from this report.

Soil Information

Map Unit: GrB - Grangeville sandy loam, sandy substratum, drained, 0 to 5 percent slopes

Component: Grangeville (85%)
The Grangeville component makes up 85 percent of the map unit. Slopes are 0 to 5 percent. This component is on alluvial fans. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, December. Organic matter content in the surface horizon is about 4 percent. This component is in the R019XD070CA Sandy Basin ecological site. Nonirrigated land capability classification is 3w. Irrigated land capability classification is 3s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Dello (10%)
Generated brief soil descriptions are created for major soil components. The Dello soil is a minor component.

Component: Traver (5%)
Generated brief soil descriptions are created for major soil components. The Traver soil is a minor component.

Map Unit GsB (0.26%)

Map Unit Name:	Grangeville sandy loam, sandy substratum, drained, saline-alkali , 0 to 5 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	0cm
Drainage Class - Dominant:	Moderately well drained
Hydrologic Group - Dominant:	A/D - These soils have low runoff potential when drained and high runoff potential when undrained.

Major components are printed below

Grangeville(85%)

horizon H1(0cm to 91cm)	Sandy loam
horizon H2(91cm to 152cm)	Sandy loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: GsB - Grangeville sandy loam, sandy substratum, drained, saline-alkali , 0 to 5 percent slopes

Component: Grangeville (85%)
The Grangeville component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on alluvial fans. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, December. Organic matter content in the surface horizon is about 4 percent. This component is in the R019XD070CA Sandy Basin ecological site. Nonirrigated land capability classification is 3w. Irrigated land capability classification is 3s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. The soil has a slightly saline horizon within 30 inches of the soil surface.

Component: Dello (10%)
Generated brief soil descriptions are created for major soil components. The Dello soil is a minor component.

Component: Traver (5%)
Generated brief soil descriptions are created for major soil components. The Traver soil is a minor component.

Map Unit GtA (1.02%)

Map Unit Name:	Grangeville fine sandy loam, drained, 0 to 2 percent sl opes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	0cm

Soil Information

Drainage Class - Dominant:	Moderately well drained
Hydrologic Group - Dominant:	A/D - These soils have low runoff potential when drained and high runoff potential when undrained.

Major components are printed below

Grangeville(85%)

horizon H1(0cm to 91cm)	Fine sandy loam
horizon H2(91cm to 163cm)	Sandy loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: GtA - Grangeville fine sandy loam, drained, 0 to 2 percent sl opes

Component: Grangeville (85%)
The Grangeville component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on alluvial fans. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, December. Organic matter content in the surface horizon is about 4 percent. This component is in the R019XD070CA Sandy Basin ecological site. Nonirrigated land capability classification is 3c. Irrigated land capability classification is 1 This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Dello (10%)
Generated brief soil descriptions are created for major soil components. The Dello soil is a minor component.

Component: Traver (4%)
Generated brief soil descriptions are created for major soil components. The Traver soil is a minor component.

Component: Unnamed (1%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Map Unit GvB (3.61%)

Map Unit Name:	Grangeville fine sandy loam, saline-alkali, 0 to 5 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	0cm
Drainage Class - Dominant:	Somewhat poorly drained
Hydrologic Group - Dominant:	B/D - These soils have moderately low runoff potential when drained and high runoff potential when undrained.

Major components are printed below

Grangeville(85%)

horizon H1(0cm to 43cm)	Fine sandy loam
horizon H2(43cm to 152cm)	Sandy loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: GvB - Grangeville fine sandy loam, saline-alkali, 0 to 5 percent slopes

Component: Grangeville (85%)
The Grangeville component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on alluvial fans. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, December. Organic matter content in the surface horizon is about 4 percent. This component is in the R019XD070CA Sandy Basin ecological site. Nonirrigated land capability classification is 4w. Irrigated land capability classification is 3w. This soil does not meet hydric criteria. The calcium carbonate

equivalent within 40 inches, typically, does not exceed 3 percent. The soil has a moderately saline horizon within 30 inches of the soil surface.

Component: Dello (10%)
Generated brief soil descriptions are created for major soil components. The Dello soil is a minor component.

Component: Traver (5%)
Generated brief soil descriptions are created for major soil components. The Traver soil is a minor component.

Map Unit MgB (12.2%)

Map Unit Name:	Metz loamy fine sand, gravelly sand substratum, 0 to 5 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Somewhat excessively drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.

Major components are printed below

Metz(85%)

horizon H1(0cm to 71cm)	Loamy sand
horizon H2(71cm to 91cm)	Stratified sand to silt loam
horizon H3(91cm to 152cm)	Stratified gravelly coarse sand to gravelly sand

Component Description:

Minor map unit components are excluded from this report.

Map Unit: MgB - Metz loamy fine sand, gravelly sand substratum, 0 to 5 percent slopes

Component: Metz (85%)
The Metz component makes up 85 percent of the map unit. Slopes are 0 to 5 percent. This component is on alluvial fans. The parent material consists of alluvium derived from sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD035CA Sandy (1975) ecological site. Nonirrigated land capability classification is 4e. Irrigated land capability classification is 4s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 1 percent.

Component: San Emigdio (10%)
Generated brief soil descriptions are created for major soil components. The San Emigdio soil is a minor component.

Component: Unnamed (5%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Map Unit SeA (75.82%)

Map Unit Name:	San Emigdio fine sandy loam, 0 to 2 percent slopes, occassional frost
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.

Major components are printed below

San Emigdio(85%)

horizon A(0cm to 20cm)	Fine sandy loam
horizon C1(20cm to 102cm)	Fine sandy loam
horizon C2(102cm to 152cm)	Stratified fine sandy loam to silt loam

Soil Information

Component Description:

Minor map unit components are excluded from this report.

Map Unit: SeA - San Emigdio fine sandy loam, 0 to 2 percent slopes, occassional frost

Component: San Emigdio (85%)
The San Emigdio component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on alluvial fans, alluvial plains. The parent material consists of residuum weathered from sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD029CA Loamy (1975) ecological site. Nonirrigated land capability classification is 3c. Irrigated land capability classification is 1 This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Metz (10%)
Generated brief soil descriptions are created for major soil components. The Metz soil is a minor component.

Component: San Timoteo (5%)
Generated brief soil descriptions are created for major soil components. The San Timoteo soil is a minor component.

Map Unit SeD2 (0.51%)

Map Unit Name:	San Emigdio fine sandy loam, 8 to 15 percent slopes, eroded
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.

Major components are printed below

San Emigdio(85%)

horizon H1(0cm to 20cm)	Fine sandy loam
horizon H2(20cm to 102cm)	Fine sandy loam
horizon H3(102cm to 152cm)	Stratified sandy loam to silt loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: SeD2 - San Emigdio fine sandy loam, 8 to 15 percent slopes, eroded

Component: San Emigdio (85%)
The San Emigdio component makes up 85 percent of the map unit. Slopes are 8 to 15 percent. This component is on alluvial fans. The parent material consists of residuum weathered from sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD029CA Loamy (1975) ecological site. Nonirrigated land capability classification is 4e. Irrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Metz (10%)
Generated brief soil descriptions are created for major soil components. The Metz soil is a minor component.

Component: San Timoteo (5%)
Generated brief soil descriptions are created for major soil components. The San Timoteo soil is a minor component.

Map Unit SfA (3.48%)

Soil Information

Map Unit Name:	San Emigdio fine sandy loam, deep, 0 to 2 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.

Major components are printed below

San Emigdio(85%)

horizon H1(0cm to 20cm)	Fine sandy loam
horizon H2(20cm to 102cm)	Fine sandy loam
horizon H3(102cm to 152cm)	Loamy sand

Component Description:

Minor map unit components are excluded from this report.

Map Unit: SfA - San Emigdio fine sandy loam, deep, 0 to 2 percent slopes

Component: San Emigdio (85%)
The San Emigdio component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on alluvial fans. The parent material consists of residuum weathered from sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD029CA Loamy (1975) ecological site. Nonirrigated land capability classification is 3e. Irrigated land capability classification is 2s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Metz (10%)
Generated brief soil descriptions are created for major soil components. The Metz soil is a minor component.

Component: San Timoteo (5%)
Generated brief soil descriptions are created for major soil components. The San Timoteo soil is a minor component.

Map Unit Tr2 (0.27%)

Map Unit Name:	Traver loamy fine sand, saline-alkali, eroded
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Moderately well drained
Hydrologic Group - Dominant:	B - Soils in this group have moderately low runoff potential when thoroughly wet. Water transmission through the soil is unimpeded.

Major components are printed below

Traver(85%)

horizon H1(0cm to 33cm)	Loamy fine sand
horizon H2(33cm to 97cm)	Fine sandy loam
horizon H3(97cm to 152cm)	Stratified fine sandy loam to silty clay loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: Tr2 - Traver loamy fine sand, saline-alkali, eroded

Component: Traver (85%)
The Traver component makes up 85 percent of the map unit. Slopes are 0 to 5 percent. This component is on basins, valley floors. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. There is

no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD070CA Sandy Basin ecological site. Nonirrigated land capability classification is 4s. Irrigated land capability classification is 3s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. The soil has a moderately saline horizon within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Waukena (5%)
Generated brief soil descriptions are created for major soil components. The Waukena soil is a minor component.

Component: Grangeville (5%)
Generated brief soil descriptions are created for major soil components. The Grangeville soil is a minor component.

Component: Dello (5%)
Generated brief soil descriptions are created for major soil components. The Dello soil is a minor component.

Map Unit Tt2 (0.14%)

Map Unit Name:	Traver fine sandy loam, strongly saline-alkali, eroded
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Moderately well drained
Hydrologic Group - Dominant:	B - Soils in this group have moderately low runoff potential when thoroughly wet. Water transmission through the soil is unimpeded.

Major components are printed below

Traver(85%)

horizon H1(0cm to 51cm)	Fine sandy loam
horizon H2(51cm to 152cm)	Stratified fine sandy loam to silty clay loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: Tt2 - Traver fine sandy loam, strongly saline-alkali, eroded

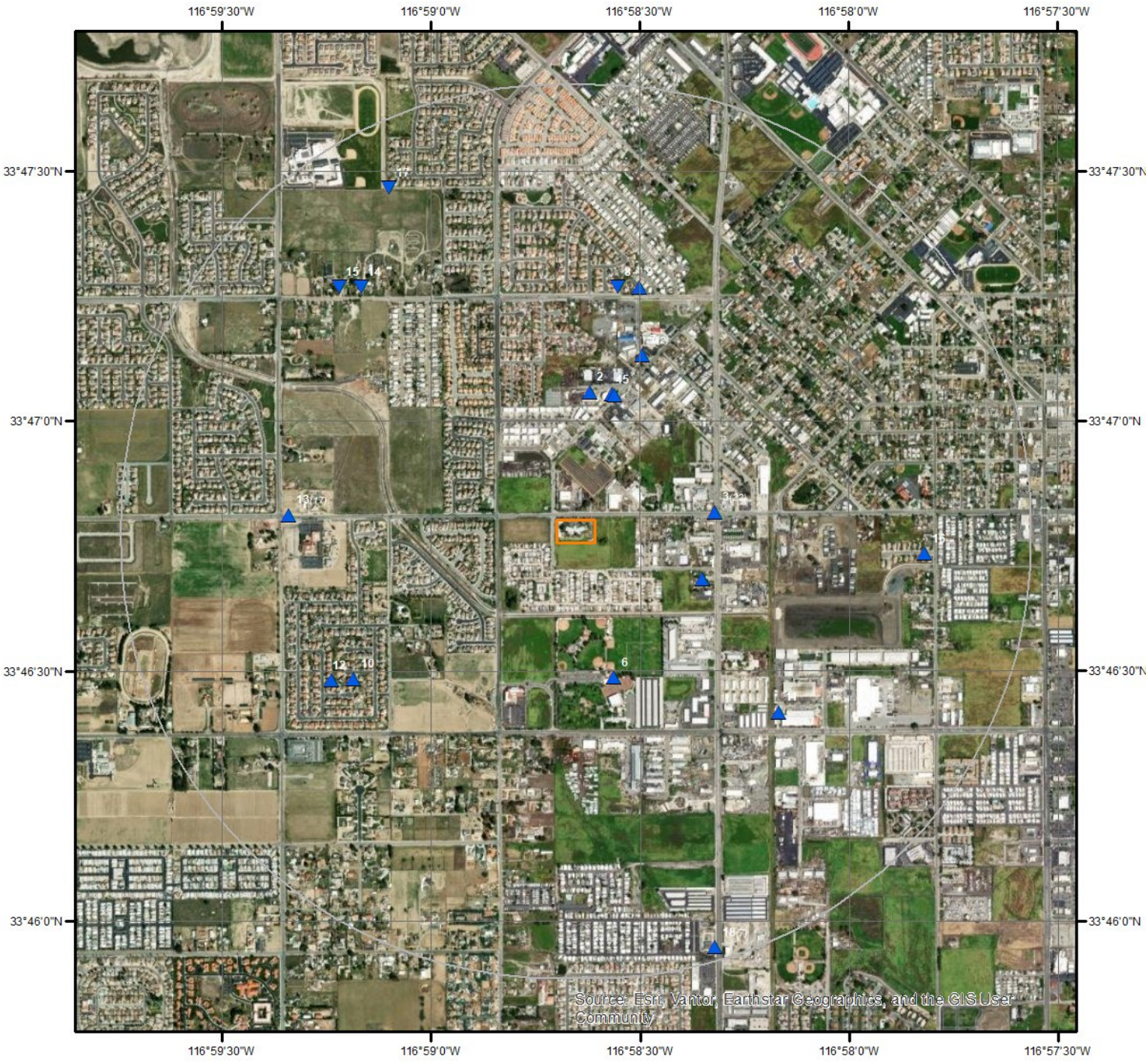
Component: Traver (85%)
The Traver component makes up 85 percent of the map unit. Slopes are 0 to 5 percent. This component is on basins, valley floors. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD070CA Sandy Basin ecological site. Nonirrigated land capability classification is 7s. Irrigated land capability classification is 4s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. The soil has a moderately saline horizon within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Waukena (5%)
Generated brief soil descriptions are created for major soil components. The Waukena soil is a minor component.

Component: Grangeville (5%)
Generated brief soil descriptions are created for major soil components. The Grangeville soil is a minor component.

Component: Dello (5%)
Generated brief soil descriptions are created for major soil components. The Dello soil is a minor component.

Wells and Additional Sources



Wells & Additional Sources

N

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources Summary

Federal Sources

Public Water Systems Violations and Enforcement Data

Map Key	PWS ID	Distance (ft)	Direction
7	CA3310032	2082.97	NNE

Safe Drinking Water Information System (SDWIS)

Map Key	PWS ID	Distance (ft)	Direction
7	CA3310032	2082.97	NNE

USGS National Water Information System

Map Key	Site No	Distance (ft)	Direction
1	USGS-11070160	1368.85	ESE
4	USGS-334705116583201	1535.94	NNE
9	USGS-334716116582701	2873.12	NNE
10	USGS-334629116590801	2955.86	WSW
11	USGS-334625116580701	3028.06	SE
14	USGS-334716116593901	3686.54	NW
16	USGS-11070158	3999.78	E

State Sources

Oil and Gas Wells

Map Key	ID	Distance (ft)	Direction
	No records found		

Periodic Groundwater Level Measurement Locations

Map Key	Site Code	Distance (ft)	Direction
6	337748N1169760W001	1651.20	SSE
8	337878N1169759W001	2836.28	N
12	337747N1169873W001	3190.98	WSW
15	337878N1169870W001	3861.21	NW

Well Completion Reports

Map Key	WCR No	Distance (ft)	Direction
2	WCR2024-003081	1550.24	N
3	WCR0274521	1461.08	E
3	WCR1998-010485	1461.08	E
3	WCR1776-008761	1461.08	E
3	WCR1952-001736	1461.08	E
3	WCR2006-012428	1461.08	E
3	WCR1950-002040	1461.08	E
3	WCR1985-009870	1461.08	E

Wells and Additional Sources Summary

3	WCR2001-013567	1461.08	E
3	WCR1973-003527	1461.08	E
3	WCR1973-003528	1461.08	E
3	WCR1952-001735	1461.08	E
3	WCR2001-012172	1461.08	E
3	WCR2008-009189	1461.08	E
3	WCR0253045	1461.08	E
3	WCR1951-002154	1461.08	E
3	WCR2001-011143	1461.08	E
3	WCR1776-008762	1461.08	E
3	WCR2011-008755	1461.08	E
3	WCR2006-012427	1461.08	E
3	WCR2000-011104	1461.08	E
3	WCR0049102	1461.08	E
3	WCR0188841	1461.08	E
5	WCR2022-004170	1532.92	NNE
13	WCR1776-008760	3239.63	W
13	WCR1950-002039	3239.63	W
13	WCR2005-012525	3239.63	W
13	WCR0130994	3239.63	W
13	WCR1949-000550	3239.63	W
13	WCR1960-002112	3239.63	W
13	WCR1991-020791	3239.63	W
13	WCR1959-001622	3239.63	W
13	WCR2001-012171	3239.63	W
13	WCR1952-001734	3239.63	W
13	WCR2004-014958	3239.63	W
13	WCR1776-008759	3239.63	W
13	WCR1971-002530	3239.63	W
13	WCR1950-002038	3239.63	W
13	WCR1949-000551	3239.63	W
13	WCR1959-001623	3239.63	W
13	WCR0172671	3239.63	W
17	WCR2020-002325	4506.18	NNW
18	WCR1992-016002	5113.62	SSE
18	WCR0218426	5113.62	SSE
18	WCR2001-012945	5113.62	SSE
18	WCR1991-018519	5113.62	SSE
18	WCR1992-017616	5113.62	SSE
18	WCR1955-002218	5113.62	SSE
18	WCR1991-018520	5113.62	SSE

Public Water Systems Violations and Enforcement Data

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
7	NNE	0.39	2,082.97	1,533.62	PWSV

PWS ID:	CA3310032
PWS Type Code:	CWS
PWS Type Description:	Community water system
Primary Source Code:	GW
Primary Source Desc:	Ground water
PWS Activity Code:	A
PWS Activity Description:	Active
PWS Deactivation Date:	
Zip Code:	92583
Phone No:	951-487-7330
Phone Ext No:	755
Admin Name:	OSBORN, MATHEW
Alt Phone No:	
Email Addr:	mosborn@sanjacintoca.gov
Fax No:	
Cds ID:	
Population Served Count:	18950
Epa Region Desc:	Region 9
Epa Region:	09
First Reported Date:	03/22/1979
Gw or Sw:	Groundwater
Gw Sw Code:	GW
Is Grant Eligible Ind:	Yes
Outstanding Performer:	
Is School or Daycare Ind:	No
Is Source Water Protection:	
Is Wholesaler Ind:	No
Lt2 Schedule Cat:	
Lt2 Schedule Cat Code:	
Last Reported Date:	06/30/2025
Org Name:	OSBORN, MATHEW
Outstanding Perform Begin Date:	
Owner Type:	Local government
Pop Cat 11:	10,001-50,000
Pop Cat 2:	10,000+
Pop Cat 3:	3,301-50,000
Pop Cat 4:	10K-49,999
Pop Cat 5:	10,001-100,000
Primacy Agency:	California
Season Begin Date:	

Season End Date:	
Service Connections Count:	4604
Submission Status Code:	Y
Submissionyearquarter:	2025Q2
Primacy Type:	State
Dbpr Schedule Category:	
Submission Status:	Reported and accepted
Reduced Monitoring Begin Date:	
Reduced Monitoring End Date:	
Reduced Rtcr Monitoring:	
Seasonal Startup System:	
Source Protection Begin Date:	
City Served:	SAN JACINTO
County Served:	Riverside
Source Water Protection Code:	

Safe Drinking Water Information System (SDWIS)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
7	NNE	0.39	2,082.97	1,533.62	SDWIS

PWS ID:	CA3310032
PWS Type Code:	CWS
PSW Type:	Community water system
Primary Source Code:	GW
Primary Source:	Ground water
Pws Activity Code:	A
Activity:	Active
PWS Deactivation Dt:	
Phone No:	951-487-7330
Phone Ext No:	755
Admin Name:	OSBORN, MATHEW
Alt Phone No:	
Email Addr:	mosborn@sanjacintoca.gov
Fax No:	
Cds ID:	
Population Served Count:	18950
Epa Region Desc:	Region 9
Epa Region:	09
First Reported Date:	03/22/1979
Gw or Sw:	Groundwater
Is Grant Eligible Ind:	Yes
Outstanding Performer:	
Is School or Daycare Ind:	No
Is Wholesaler Ind:	No

Lt2 Schedule Cat:	
Last Reported Date:	06/30/2025
Org Name:	OSBORN, MATHEW
Outstanding Perform Begin Date:	
Owner Type:	Local government
Pop Cat 11:	10,001-50,000
Pop Cat 2:	10,000+
Pop Cat 3:	3,301-50,000
Pop Cat 4:	10K-49,999
Pop Cat 5:	10,001-100,000
Primacy Agency:	California
Primacy Agency Code:	CA
Season Begin Date:	
Season End Date:	
Service Connections Count:	4604
Submission Yr Qtr:	2025Q2
Primacy Type:	State
Dbpr Schedule Category:	
Submission Status:	Reported and accepted
Reduced Monitoring Begin:	
Reduced Monitoring End Date:	
Reduced Rtcr Monitoring:	
Seasonal Startup System:	
Source Protection Begin Date:	
City Served:	SAN JACINTO
County Served:	Riverside

USGS National Water Information System

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
1	ESE	0.26	1,368.85	1,533.62	FED USGS

Site No:	USGS-11070160
Site Type:	Stream
Formation Type:	
Date Drilled:	
Well Depth:	
Well Depth Unit:	
Well Hole Depth:	
Well Hole Depth Unit:	
Reporting Agency:	USGS California Water Science Center
Station Name:	LINE E STORM DR BL STATE ST NR SAN JACINTO CA
Latitude:	33.77807516000000
Longitude:	-116.9725242000000

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	NNE	0.29	1,535.94	1,531.63	FED USGS

Site No: USGS-334705116583201
Site Type: Well
Formation Type: Cenozoic Erathem
Date Drilled: 19730807
Well Depth: 650
Well Depth Unit: ft
Well Hole Depth: 680
Well Hole Depth Unit: ft
Reporting Agency: USGS California Water Science Center
Station Name: 004S001W34C003S
Latitude: 33.78422220000000
Longitude: -116.9761110000000

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
9	NNE	0.54	2,873.12	1,529.62	FED USGS

Site No: USGS-334716116582701
Site Type: Well
Formation Type:
Date Drilled: 1945
Well Depth:
Well Depth Unit:
Well Hole Depth:
Well Hole Depth Unit:
Reporting Agency: USGS California Water Science Center
Station Name: 004S001W27P005S
Latitude: 33.78779716000000
Longitude: -116.9750244000000

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
10	WSW	0.56	2,955.86	1,540.62	FED USGS

Site No: USGS-334629116590801
Site Type: Well
Formation Type:
Date Drilled:
Well Depth: 374
Well Depth Unit: ft
Well Hole Depth:
Well Hole Depth Unit:
Reporting Agency: USGS California Water Science Center
Station Name: 004S001W33Q001S
Latitude: 33.77474190000000

Longitude: -116.9864134000000

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
11	SE	0.57	3,028.06	1,542.62	FED USGS

Site No: USGS-334625116580701
Site Type: Well
Formation Type:
Date Drilled:
Well Depth: 1008
Well Depth Unit: ft
Well Hole Depth: 1008
Well Hole Depth Unit: ft
Reporting Agency: USGS California Water Science Center
Station Name: 004S001W34Q002S
Latitude: 33.77363080000000
Longitude: -116.9694685000000

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
14	NW	0.70	3,686.54	1,515.62	FED USGS

Site No: USGS-334716116593901
Site Type: Well
Formation Type:
Date Drilled: 1945
Well Depth: 310
Well Depth Unit: ft
Well Hole Depth:
Well Hole Depth Unit:
Reporting Agency: USGS California Water Science Center
Station Name: 004S001W28N003S
Latitude: 33.78779718000000
Longitude: -116.9861358000000

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	E	0.76	3,999.78	1,549.62	FED USGS

Site No: USGS-11070158
Site Type: Stream
Formation Type:
Date Drilled:
Well Depth:
Well Depth Unit:
Well Hole Depth:
Well Hole Depth Unit:

Wells and Additional Sources Detail Report

Reporting Agency: USGS California Water Science Center
Station Name: LINE D STORM DR A SANTA FE ST NR SAN JACINTO CA
Latitude: 33.77890847000000
Longitude: -116.9636350000000

Periodic Groundwater Level Measurement Locations

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
6	SSE	0.31	1,651.20	1,532.62	MONITOR WELLS

Station ID:	48177	Basin Region Desc:	North Lahontan
Site Code:	337748N1169760W001	Basin Region Actv:	Y
WCR No:		Basin Region Order:	8
State Well No:		WLM Method:	
Well Depth:	500.00000	WLM Accuracy:	
Well Use:	Irrigation	Ground Surf Elevtn:	1529.89000
Monitoring Program:	SGMA	GSE Method:	Digital Elevation Model
RPE:	1530.00000	GSE Accuracy:	5 ft.
Basin ID:	209	County Name:	Riverside
Basin Code:	8-005	Latitude:	33.77478
Basin Name:	San Jacinto	Longitude:	-116.97604
Basin Region Code:	8		
Continuous Data Station No:			
Well Name:	EMWD10336		
Well Type:	Single Well		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
8	N	0.54	2,836.28	1,527.61	MONITOR WELLS

Station ID:	39318	Basin Region Desc:	North Lahontan
Site Code:	337878N1169759W001	Basin Region Actv:	Y
WCR No:		Basin Region Order:	8
State Well No:	04S01W27P005S	WLM Method:	
Well Depth:		WLM Accuracy:	
Well Use:	Unknown	Ground Surf Elevtn:	1524.52000
Monitoring Program:	VOLUNTARY	GSE Method:	Unknown
RPE:	1524.52000	GSE Accuracy:	Unknown
Basin ID:	209	County Name:	Riverside
Basin Code:	8-005	Latitude:	33.78780
Basin Name:	San Jacinto	Longitude:	-116.97590
Basin Region Code:	8		
Continuous Data Station No:			
Well Name:	04S01W27P005S		
Well Type:	Unknown		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
12	WSW	0.60	3,190.98	1,539.62	MONITOR WELLS

Station ID:	6404	Basin Region Desc:	North Lahontan
Site Code:	337747N1169873W001	Basin Region Actv:	Y
WCR No:		Basin Region Order:	8
State Well No:	04S01W33Q001S	WLM Method:	
Well Depth:		WLM Accuracy:	
Well Use:	Unknown	Ground Surf Elevtn:	1537.49000
Monitoring Program:	VOLUNTARY	GSE Method:	Unknown
RPE:	1537.49000	GSE Accuracy:	Unknown
Basin ID:	209	County Name:	Riverside
Basin Code:	8-005	Latitude:	33.77470
Basin Name:	San Jacinto	Longitude:	-116.98730
Basin Region Code:	8		
Continuous Data Station No:			
Well Name:	04S01W33Q001S		
Well Type:	Unknown		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
15	NW	0.73	3,861.21	1,515.25	MONITOR WELLS

Station ID:	6392	Basin Region Desc:	North Lahontan
Site Code:	337878N1169870W001	Basin Region Actv:	Y
WCR No:		Basin Region Order:	8
State Well No:	04S01W28N003S	WLM Method:	
Well Depth:		WLM Accuracy:	
Well Use:	Unknown	Ground Surf Elevtn:	1514.51000
Monitoring Program:	VOLUNTARY	GSE Method:	Unknown
RPE:	1514.51000	GSE Accuracy:	Unknown
Basin ID:	209	County Name:	Riverside
Basin Code:	8-005	Latitude:	33.78780
Basin Name:	San Jacinto	Longitude:	-116.98700
Basin Region Code:	8		
Continuous Data Station No:			
Well Name:	04S01W28N003S		
Well Type:	Unknown		

Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
2	N	0.29	1,550.24	1,529.63	WATER WELLS

WCR No:	WCR2024-003081
Location:	906 INDUSTRIAL WAY
City:	SAN JACINTO

County: Riverside
Decimal Latitude: 33.7843
Decimal Longitude: -116.977
Location(OSWCR):
City(OSWCR):
County(OSWCR):
Decimal Lat(OSWCR):
Decim Long(OSWCR):
Data Source: California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	E	0.28	1,461.08	1,534.62	WATER WELLS

WCR No: WCR0274521
Location:
City:
County: Riverside
Decimal Latitude: 33.7803
Decimal Longitude: -116.972
Location(OSWCR):
City(OSWCR):
County(OSWCR): Riverside
Decimal Lat(OSWCR): 33.7803
Decim Long(OSWCR): -116.972
Data Source: California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	E	0.28	1,461.08	1,534.62	WATER WELLS

WCR No: WCR1998-010485
Location: INDUSTRIAL WAY
City: San Jacinto
County: Riverside
Decimal Latitude: 33.7803
Decimal Longitude: -116.972
Location(OSWCR): INDUSTRIAL WAY
City(OSWCR): San Jacinto
County(OSWCR): Riverside
Decimal Lat(OSWCR): 33.7803
Decim Long(OSWCR): -116.972
Data Source: California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	E	0.28	1,461.08	1,534.62	WATER WELLS

WCR No:	WCR1776-008761
Location:	
City:	
County:	Riverside
Decimal Latitude:	33.7803
Decimal Longitude:	-116.972
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7803
Decim Long(OSWCR):	-116.972
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	E	0.28	1,461.08	1,534.62	WATER WELLS

WCR No:	WCR1952-001736
Location:	STATE ST, ESPLANADE AVE
City:	
County:	Riverside
Decimal Latitude:	33.7803
Decimal Longitude:	-116.972
Location(OSWCR):	STATE ST, ESPLANADE AVE
City(OSWCR):	
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7803
Decim Long(OSWCR):	-116.972
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	E	0.28	1,461.08	1,534.62	WATER WELLS

WCR No:	WCR2006-012428
Location:	Esplanade & Buena Vista
City:	San Jacinto
County:	Riverside
Decimal Latitude:	33.7803
Decimal Longitude:	-116.972
Location(OSWCR):	Esplanade & Buena Vista
City(OSWCR):	San Jacinto
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7803
Decim Long(OSWCR):	-116.972
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California

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Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	E	0.28	1,461.08	1,534.62	WATER WELLS

WCR No:	WCR1950-002040
Location:	STATE ST, ESPLANADE AVE
City:	San Jacinto
County:	Riverside
Decimal Latitude:	33.7803
Decimal Longitude:	-116.972
Location(OSWCR):	STATE ST, ESPLANADE AVE
City(OSWCR):	San Jacinto
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7803
Decim Long(OSWCR):	-116.972
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	E	0.28	1,461.08	1,534.62	WATER WELLS

WCR No:	WCR1985-009870
Location:	ESPLANADE, STATE ST
City:	
County:	Riverside
Decimal Latitude:	33.7803
Decimal Longitude:	-116.972
Location(OSWCR):	ESPLANADE, STATE ST
City(OSWCR):	
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7803
Decim Long(OSWCR):	-116.972
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	E	0.28	1,461.08	1,534.62	WATER WELLS

WCR No:	WCR2001-013567
Location:	Fruitdale, Esplanade, Buena Vista St
City:	Hemet
County:	Riverside
Decimal Latitude:	33.7803
Decimal Longitude:	-116.972
Location(OSWCR):	Fruitdale, Esplanade, Buena Vista St

City(OSWCR): Hemet
County(OSWCR): Riverside
Decimal Lat(OSWCR): 33.7803
Decim Long(OSWCR): -116.972
Data Source: California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	E	0.28	1,461.08	1,534.62	WATER WELLS

WCR No: WCR1973-003527
Location:
City:
County: Riverside
Decimal Latitude: 33.7803
Decimal Longitude: -116.972
Location(OSWCR):
City(OSWCR):
County(OSWCR): Riverside
Decimal Lat(OSWCR): 33.7803
Decim Long(OSWCR): -116.972
Data Source: California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	E	0.28	1,461.08	1,534.62	WATER WELLS

WCR No: WCR1973-003528
Location: GRAND AVE, SCOVELL ST
City:
County: Riverside
Decimal Latitude: 33.7803
Decimal Longitude: -116.972
Location(OSWCR): GRAND AVE, SCOVELL ST
City(OSWCR):
County(OSWCR): Riverside
Decimal Lat(OSWCR): 33.7803
Decim Long(OSWCR): -116.972
Data Source: California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	E	0.28	1,461.08	1,534.62	WATER WELLS

WCR No: WCR1952-001735
Location:
City:

County:	Riverside
Decimal Latitude:	33.7803
Decimal Longitude:	-116.972
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7803
Decim Long(OSWCR):	-116.972
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	E	0.28	1,461.08	1,534.62	WATER WELLS

WCR No:	WCR2001-012172
Location:	
City:	
County:	Riverside
Decimal Latitude:	33.7803
Decimal Longitude:	-116.972
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7803
Decim Long(OSWCR):	-116.972
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	E	0.28	1,461.08	1,534.62	WATER WELLS

WCR No:	WCR2008-009189
Location:	856 W 7th Street
City:	San Jacinto
County:	Riverside
Decimal Latitude:	33.7803
Decimal Longitude:	-116.972
Location(OSWCR):	856 W 7th Street
City(OSWCR):	San Jacinto
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7803
Decim Long(OSWCR):	-116.972
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	E	0.28	1,461.08	1,534.62	WATER WELLS

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WCR No:	WCR0253045
Location:	
City:	
County:	Riverside
Decimal Latitude:	33.7803
Decimal Longitude:	-116.972
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7803
Decim Long(OSWCR):	-116.972
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	E	0.28	1,461.08	1,534.62	WATER WELLS

WCR No:	WCR1951-002154
Location:	STATE ST, 7TH ST, SANTA FE, ESPLANADE
City:	San Jacinto
County:	Riverside
Decimal Latitude:	33.7803
Decimal Longitude:	-116.972
Location(OSWCR):	STATE ST, 7TH ST, SANTA FE, ESPLANADE
City(OSWCR):	San Jacinto
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7803
Decim Long(OSWCR):	-116.972
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	E	0.28	1,461.08	1,534.62	WATER WELLS

WCR No:	WCR2001-011143
Location:	
City:	
County:	Riverside
Decimal Latitude:	33.7803
Decimal Longitude:	-116.972
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7803
Decim Long(OSWCR):	-116.972
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California

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Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	E	0.28	1,461.08	1,534.62	WATER WELLS

WCR No:	WCR1776-008762
Location:	STATE ST, 7TH ST
City:	San Jacinto
County:	Riverside
Decimal Latitude:	33.7803
Decimal Longitude:	-116.972
Location(OSWCR):	STATE ST, 7TH ST
City(OSWCR):	San Jacinto
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7803
Decim Long(OSWCR):	-116.972
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	E	0.28	1,461.08	1,534.62	WATER WELLS

WCR No:	WCR2011-008755
Location:	655 Kuhns Drive
City:	San Jacinto
County:	Riverside
Decimal Latitude:	33.7803
Decimal Longitude:	-116.972
Location(OSWCR):	655 Kuhns Drive
City(OSWCR):	San Jacinto
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7803
Decim Long(OSWCR):	-116.972
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	E	0.28	1,461.08	1,534.62	WATER WELLS

WCR No:	WCR2006-012427
Location:	Esplanade & Buena Vista
City:	San Jacinto
County:	Riverside
Decimal Latitude:	33.7803
Decimal Longitude:	-116.972
Location(OSWCR):	Esplanade & Buena Vista

City(OSWCR): San Jacinto
County(OSWCR): Riverside
Decimal Lat(OSWCR): 33.7803
Decim Long(OSWCR): -116.972
Data Source: California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	E	0.28	1,461.08	1,534.62	WATER WELLS

WCR No: WCR2000-011104
Location: 480 N San Jacinto
City: San Jacinto
County: Riverside
Decimal Latitude: 33.7803
Decimal Longitude: -116.972
Location(OSWCR): 480 N San Jacinto
City(OSWCR): San Jacinto
County(OSWCR): Riverside
Decimal Lat(OSWCR): 33.7803
Decim Long(OSWCR): -116.972
Data Source: California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	E	0.28	1,461.08	1,534.62	WATER WELLS

WCR No: WCR0049102
Location:
City:
County: Riverside
Decimal Latitude: 33.7803
Decimal Longitude: -116.972
Location(OSWCR):
City(OSWCR):
County(OSWCR): Riverside
Decimal Lat(OSWCR): 33.7803
Decim Long(OSWCR): -116.972
Data Source: California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	E	0.28	1,461.08	1,534.62	WATER WELLS

WCR No: WCR0188841
Location:
City:

County:	Riverside
Decimal Latitude:	33.7803
Decimal Longitude:	-116.972
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7803
Decim Long(OSWCR):	-116.972
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
5	NNE	0.29	1,532.92	1,531.58	WATER WELLS

WCR No:	WCR2022-004170
Location:	
City:	
County:	Riverside
Decimal Latitude:	33.7842
Decimal Longitude:	-116.976
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7842
Decim Long(OSWCR):	-116.976
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	W	0.61	3,239.63	1,533.62	WATER WELLS

WCR No:	WCR1776-008760
Location:	LYON AVE, 7TH ST
City:	San Jacinto
County:	Riverside
Decimal Latitude:	33.7802
Decimal Longitude:	-116.989
Location(OSWCR):	LYON AVE, 7TH ST
City(OSWCR):	San Jacinto
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7802
Decim Long(OSWCR):	-116.989
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	W	0.61	3,239.63	1,533.62	WATER WELLS

Wells and Additional Sources Detail Report

WCR No:	WCR1950-002039
Location:	GRAND AVE, 7TH ST
City:	San Jacinto
County:	Riverside
Decimal Latitude:	33.7802
Decimal Longitude:	-116.989
Location(OSWCR):	GRAND AVE, 7TH ST
City(OSWCR):	San Jacinto
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7802
Decim Long(OSWCR):	-116.989
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	W	0.61	3,239.63	1,533.62	WATER WELLS

WCR No:	WCR2005-012525
Location:	Cotton Wood & Kirby Street
City:	San Jacinto
County:	Riverside
Decimal Latitude:	33.7802
Decimal Longitude:	-116.989
Location(OSWCR):	Cotton Wood & Kirby Street
City(OSWCR):	San Jacinto
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7802
Decim Long(OSWCR):	-116.989
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	W	0.61	3,239.63	1,533.62	WATER WELLS

WCR No:	WCR0130994
Location:	
City:	
County:	Riverside
Decimal Latitude:	33.7802
Decimal Longitude:	-116.989
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7802
Decim Long(OSWCR):	-116.989
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California

Wells and Additional Sources Detail Report

Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	W	0.61	3,239.63	1,533.62	WATER WELLS

WCR No:	WCR1949-000550
Location:	SEVENTH ST, LION ST
City:	San Jacinto
County:	Riverside
Decimal Latitude:	33.7802
Decimal Longitude:	-116.989
Location(OSWCR):	SEVENTH ST, LION ST
City(OSWCR):	San Jacinto
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7802
Decim Long(OSWCR):	-116.989
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	W	0.61	3,239.63	1,533.62	WATER WELLS

WCR No:	WCR1960-002112
Location:	LYON AVE, ESPLANADE, PINE AVE
City:	Hemet
County:	Riverside
Decimal Latitude:	33.7802
Decimal Longitude:	-116.989
Location(OSWCR):	LYON AVE, ESPLANADE, PINE AVE
City(OSWCR):	Hemet
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7802
Decim Long(OSWCR):	-116.989
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	W	0.61	3,239.63	1,533.62	WATER WELLS

WCR No:	WCR1991-020791
Location:	PALM AVE, COTTONWOOD
City:	San Jacinto
County:	Riverside
Decimal Latitude:	33.7802
Decimal Longitude:	-116.989
Location(OSWCR):	PALM AVE, COTTONWOOD

City(OSWCR): San Jacinto
County(OSWCR): Riverside
Decimal Lat(OSWCR): 33.7802
Decim Long(OSWCR): -116.989
Data Source: California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	W	0.61	3,239.63	1,533.62	WATER WELLS

WCR No: WCR1959-001622
Location: SAN JACINTO LAND ASSOCIATION FARM LOTS
City: San Jacinto
County: Riverside
Decimal Latitude: 33.7802
Decimal Longitude: -116.989
Location(OSWCR): SAN JACINTO LAND ASSOCIATION FARM LOTS
City(OSWCR): San Jacinto
County(OSWCR): Riverside
Decimal Lat(OSWCR): 33.7802
Decim Long(OSWCR): -116.989
Data Source: California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	W	0.61	3,239.63	1,533.62	WATER WELLS

WCR No: WCR2001-012171
Location:
City:
County: Riverside
Decimal Latitude: 33.7802
Decimal Longitude: -116.989
Location(OSWCR):
City(OSWCR):
County(OSWCR): Riverside
Decimal Lat(OSWCR): 33.7802
Decim Long(OSWCR): -116.989
Data Source: California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	W	0.61	3,239.63	1,533.62	WATER WELLS

WCR No: WCR1952-001734
Location: COTTONWOOD AVE, LYON ST
City:

County:	Riverside
Decimal Latitude:	33.7802
Decimal Longitude:	-116.989
Location(OSWCR):	COTTONWOOD AVE, LYON ST
City(OSWCR):	
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7802
Decim Long(OSWCR):	-116.989
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	W	0.61	3,239.63	1,533.62	WATER WELLS

WCR No:	WCR2004-014958
Location:	7th Street
City:	San Jacinto
County:	Riverside
Decimal Latitude:	33.7802
Decimal Longitude:	-116.989
Location(OSWCR):	7th Street
City(OSWCR):	San Jacinto
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7802
Decim Long(OSWCR):	-116.989
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	W	0.61	3,239.63	1,533.62	WATER WELLS

WCR No:	WCR1776-008759
Location:	
City:	
County:	Riverside
Decimal Latitude:	33.7802
Decimal Longitude:	-116.989
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7802
Decim Long(OSWCR):	-116.989
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	W	0.61	3,239.63	1,533.62	WATER WELLS

WCR No:	WCR1971-002530
Location:	COTTONWOOD, KIRBY
City:	San Jacinto
County:	Riverside
Decimal Latitude:	33.7802
Decimal Longitude:	-116.989
Location(OSWCR):	COTTONWOOD, KIRBY
City(OSWCR):	San Jacinto
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7802
Decim Long(OSWCR):	-116.989
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	W	0.61	3,239.63	1,533.62	WATER WELLS

WCR No:	WCR1950-002038
Location:	SEVENTH ST, LYON AVE
City:	
County:	Riverside
Decimal Latitude:	33.7802
Decimal Longitude:	-116.989
Location(OSWCR):	SEVENTH ST, LYON AVE
City(OSWCR):	
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7802
Decim Long(OSWCR):	-116.989
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	W	0.61	3,239.63	1,533.62	WATER WELLS

WCR No:	WCR1949-000551
Location:	LYON AVE, 7TH ST
City:	
County:	Riverside
Decimal Latitude:	33.7802
Decimal Longitude:	-116.989
Location(OSWCR):	LYON AVE, 7TH ST
City(OSWCR):	
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7802
Decim Long(OSWCR):	-116.989
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California

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Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	W	0.61	3,239.63	1,533.62	WATER WELLS

WCR No:	WCR1959-001623
Location:	LION, KIRBY, 7TH ST
City:	San Jacinto
County:	Riverside
Decimal Latitude:	33.7802
Decimal Longitude:	-116.989
Location(OSWCR):	LION, KIRBY, 7TH ST
City(OSWCR):	San Jacinto
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7802
Decim Long(OSWCR):	-116.989
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	W	0.61	3,239.63	1,533.62	WATER WELLS

WCR No:	WCR0172671
Location:	
City:	
County:	Riverside
Decimal Latitude:	33.7802
Decimal Longitude:	-116.989
Location(OSWCR):	
City(OSWCR):	
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7802
Decim Long(OSWCR):	-116.989
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
17	NNW	0.85	4,506.18	1,510.62	WATER WELLS

WCR No:	WCR2020-002325
Location:	425 LYON AVE
City:	SAN JACINTO
County:	Riverside
Decimal Latitude:	33.7911
Decimal Longitude:	-116.985
Location(OSWCR):	425 LYON AVE

City(OSWCR): SAN JACINTO
County(OSWCR): Riverside
Decimal Lat(OSWCR): 33.7911
Decim Long(OSWCR): -116.985
Data Source: California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
18	SSE	0.97	5,113.62	1,559.05	WATER WELLS

WCR No: WCR1992-016002
Location: 1001 N Buena Vista
City: Hemet
County: Riverside
Decimal Latitude: 33.7658
Decimal Longitude: -116.972
Location(OSWCR): 1001 N Buena Vista
City(OSWCR): Hemet
County(OSWCR): Riverside
Decimal Lat(OSWCR): 33.7658
Decim Long(OSWCR): -116.972
Data Source: California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
18	SSE	0.97	5,113.62	1,559.05	WATER WELLS

WCR No: WCR0218426
Location:
City:
County: Riverside
Decimal Latitude: 33.7658
Decimal Longitude: -116.972
Location(OSWCR):
City(OSWCR):
County(OSWCR): Riverside
Decimal Lat(OSWCR): 33.7658
Decim Long(OSWCR): -116.972
Data Source: California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
18	SSE	0.97	5,113.62	1,559.05	WATER WELLS

WCR No: WCR2001-012945
Location: Palm Ave, Menlo Ave
City: Hemet

County:	Riverside
Decimal Latitude:	33.7658
Decimal Longitude:	-116.972
Location(OSWCR):	Palm Ave, Menlo Ave
City(OSWCR):	Hemet
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7658
Decim Long(OSWCR):	-116.972
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
18	SSE	0.97	5,113.62	1,559.05	WATER WELLS

WCR No:	WCR1991-018519
Location:	39312 Cameron Road
City:	
County:	Riverside
Decimal Latitude:	33.7658
Decimal Longitude:	-116.972
Location(OSWCR):	39312 Cameron Road
City(OSWCR):	
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7658
Decim Long(OSWCR):	-116.972
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
18	SSE	0.97	5,113.62	1,559.05	WATER WELLS

WCR No:	WCR1992-017616
Location:	N BUENA VISTA
City:	Hemet
County:	Riverside
Decimal Latitude:	33.7658
Decimal Longitude:	-116.972
Location(OSWCR):	N BUENA VISTA
City(OSWCR):	Hemet
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7658
Decim Long(OSWCR):	-116.972
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
18	SSE	0.97	5,113.62	1,559.05	WATER WELLS

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WCR No:	WCR1955-002218
Location:	STAR RT BOX 33
City:	Hemet
County:	Riverside
Decimal Latitude:	33.7658
Decimal Longitude:	-116.972
Location(OSWCR):	STAR RT BOX 33
City(OSWCR):	Hemet
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7658
Decim Long(OSWCR):	-116.972
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
18	SSE	0.97	5,113.62	1,559.05	WATER WELLS

WCR No:	WCR1991-018520
Location:	S STATE ST
City:	SAN JOSE
County:	Riverside
Decimal Latitude:	33.7658
Decimal Longitude:	-116.972
Location(OSWCR):	S STATE ST
City(OSWCR):	SAN JOSE
County(OSWCR):	Riverside
Decimal Lat(OSWCR):	33.7658
Decim Long(OSWCR):	-116.972
Data Source:	California Department of Water Resources - OSWCR(Well Numbers) (as of 13 Apr 2025); California Department of Water Resources - Well Completion Reports (as of 13 Apr 2025)

Radon Information

This section lists any relevant radon information found for the target property.

Federal EPA Radon Zone for *RIVERSIDE* County: **2**

Zone 1: Counties with predicted average indoor radon screening levels greater than 4 pCi/L
Zone 2: Counties with predicted average indoor radon screening levels from 2 to 4 pCi/L
Zone 3: Counties with predicted average indoor radon screening levels less than 2 pCi/L

Federal Area Radon Information for *RIVERSIDE* County

No Measures/Homes:	24
Geometric Mean:	0.3
Arithmetic Mean:	0.3
Median:	0.5
Standard Deviation:	0.8
Maximum:	1.7
% >4 pCi/L:	0
% >20 pCi/L:	0
Notes on Data Table:	TABLE 1. Screening indoor radon data from the EPA/State Residential Radon Survey of California conducted during 1989-90. Data represent 2-7 day charcoal canister measurements from the lowest level of each home tested.

Appendix

Federal Sources

FEMA National Flood Hazard Layer — **FEMA FLOOD**

The National Flood Hazard Layer (NFHL) data incorporates Flood Insurance Rate Map (FIRM) databases published by the Federal Emergency Management Agency (FEMA), and any Letters Of Map Revision (LOMRs) that have been issued against those databases since their publication date. The FIRM Database is the digital, geospatial version of the flood hazard information shown on the published paper FIRMs. The FIRM Database depicts flood risk information and supporting data used to develop the risk data. The FIRM Database is derived from Flood Insurance Studies (FISs), previously published FIRMs, flood hazard analyses performed in support of the FISs and FIRMs, and new mapping data, where available.

Indoor Radon Data — **INDOOR RADON**

Indoor radon measurements tracked by the Environmental Protection Agency(EPA) and the State Residential Radon Survey.

Public Water Systems Violations and Enforcement Data — **PWSV**

This list of drinking water violations and enforcement actions is sourced from the U.S Environmental Protection Agency's (EPA) Enforcement and Compliance History Online (ECHO) system that incorporates Public Water Systems data from EPA's Safe Drinking Water Information System (SDWIS) database, as part of the national download of Safe Drinking Water Act (SDWA) data. SDWIS contains information on public water systems from the Public Water System Supervision (PWSS) Program, including monitoring, enforcement, and violation data related to requirements established by the SWDA. Address information provided in SWDIS may correspond either with the physical location of the water system, or with a contact address.

Radon Zone Level — **RADON ZONE**

Areas showing the level of Radon Zones (level 1, 2 or 3) by county. This data is maintained by the Environmental Protection Agency (EPA).

Safe Drinking Water Information System (SDWIS) — **SDWIS**

This national download of Safe Drinking Water Act (SDWA) data is sourced from the U.S Environmental Protection Agency's (EPA) Enforcement and Compliance History Online (ECHO) system that incorporates Public Water Systems data from EPA's Safe Drinking Water Information System (SDWIS) database. SDWIS contains information on public water systems from the Public Water System Supervision (PWSS) Program related to requirements established by the Safe Drinking Water Act (SDWA). Address information provided in SWDIS may correspond either with the physical location of the water system, or with a contact address.

Soil Survey Geographic database — **SSURGO**

The Soil Survey Geographic database (SSURGO) contains information about soil as collected by the National Cooperative Soil Survey at the Natural Resources Conservation Service (NRCS). Soil maps outline areas called map units. The map units are linked to soil properties in a database. Each map unit may contain one to three major components and some minor components.

U.S. Fish & Wildlife Service Wetland Data — **US WETLAND**

The U.S. Fish & Wildlife Service Wetland layer represents the approximate location and type of wetlands and deepwater habitats in the United States.

USGS Current Topo — **US TOPO**

US Topo topographic maps are produced by the National Geospatial Program of the U.S. Geological Survey (USGS). The project was launched in late 2009, and the term "US Topo" refers specifically to quadrangle topographic maps published in 2009 and later.

USGS Geology — **US GEOLOGY**

Seamless maps depicting geological information provided by the United States Geological Survey (USGS).

USGS National Water Information System — **FED USGS**

The U.S. Geological Survey's (USGS) National Water Information System (NWIS) is the nation's principal repository of water resources data. The data includes comprehensive information of well-construction details, time-series data for gage height, streamflow, groundwater level, and precipitation and water use data. This NWIS database information is obtained through the Water Quality Data Portal (WQP). The WQP

is a cooperative service sponsored by the USGS, the Environmental Protection Agency (EPA), and the National Water Quality Monitoring Council (NWQMC).

State Sources

Oil and Gas Wells **OGW**

The California Department of Conservation, Geologic Energy Management Division (CalGEM) provides this oil and gas wells dataset. CalGEM makes no warranties, whether expressed or implied, and the data is for informational purposes.

Periodic Groundwater Level Measurement Locations **MONITOR WELLS**

Locations of groundwater level monitoring wells in the Department of Water Resources (DWR)'s Periodic Groundwater Levels dataset. The DWR Periodic Groundwater Levels dataset contains seasonal and long-term groundwater level measurements collected by the Department of Water Resources and cooperating agencies.

Well Completion Reports **WATER WELLS**

List of wells from the Well Completion Reports data made available by the California Department of Water Resources' (DWR) Online System for Well Completion Reports (OSWCR). Please note that the majority of well completion reports have been spatially registered to the center of the 1x1 mile Public Land Survey System section that the well is located in.

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APPENDIX D: QUALIFICATIONS/INSURANCE

PARTNER

James Erwin
Project Geologist

Education

Bachelor of Science, Geology and Environmental Geology, California State University San Bernardino, CA

Highlights

Phase I Environmental Site Assessments
Transaction Screening Assessments
Phase II Subsurface Investigations
Soil, Soil Vapor, Groundwater, and Indoor Air Sampling
Groundwater Monitoring

Experience Summary

James Erwin is based in southern California as a Project Geologist for the environmental segment of Partner Engineering and Science, Inc. (Partner). In this role he works with clients and property owners on Environmental Due Diligence projects, Subsurface Investigations, and Indoor Air Investigations. Mr. Erwin's experience in conducting these types of environmental assessments and investigations brings the knowledge to help clients navigate difficult site-specific concerns and environmental issues, a careful attention to detail, and an emphasis on environmental law and proper sampling procedures.

Mr. Erwin has prepared technical reports and project proposals for Phase I Environmental Site Assessments, subsurface investigation reports, soil excavation and underground storage tank removal reports, soil vapor extraction reports, and groundwater remediation and monitoring reports. Projects have included assessments and investigations at gas stations, dry cleaners, industrial manufacturing facilities, former refineries, machine shops, and automotive repair garages. Additionally, he has provided expertise and guidance to clients and stakeholders for environmental regulations, permitting requirements, and compliance strategies. In completed these projects, he has used a variety of specialized equipment and techniques to sample soil, water, vapor, and indoor air, while adhering to regulatory standards and protocols. Each of these projects required the balance of multiple project schedules, deadlines, and budgets to ensure all project deliverables met client expectations.

Project Experience

Eastern Tank Farm Parcel of the Former Sunland Refinery, Bakersfield, CA, 2022. A high-profile Phase I ESA for a reinvestment plan by the current property of the former Sunland Refinery. The refinery site is continuing to undergo subsurface investigation and remedial system operations to remediate soil, soil vapor, and shallow and deep groundwater contamination due to long-term oil refining operations. The eastern parcel of the Sunland Refinery was not used for oil refining, but for commercial office and bulk petroleum storage operations, and remedial efforts had all but concluded for that portion of the site. By reviewing the overall cleanup efforts for the multiple parcels of the refinery site, it was determined that historical contamination at the site had been controlled and the eastern parcel could be redeveloped with property use restrictions put in place and proper implementation of a Soils Managements Plan during redevelopment.

Former Pamarco Global Graphics Chrome Plating, Orange CA, 2022. Project Manager for a Phase I ESA and subsequent Phase II Subsurface Investigation for a former print roller refurbishment facility that utilized hexavalent chromium for plating and solvent based cleaning operations. Past investigations determined the

subsurface soil was impacted with hexavalent chromium due to the use of a compromised concrete sump, that was excavated to the maximum extent possible, with some contamination left in place. The site obtained closure and property use restrictions were put in place from the remaining contaminated soil. Environmental concerns were identified based on the outdated analytical methods used to rule out soil vapor impacts at the time of closure. A Phase II was recommended and conducted at the site which determined PCE in soil vapor was above regulatory screening levels, with predicted indoor air concentrations based on the site-specific attenuation factor anticipated to be well above the indoor air screening level for PCE. An indoor air investigation and further delineation of soil vapor impacts was recommended as a result.

Former Fleetwood Machine Products, North Hollywood, CA, 2022. Conducted a Phase I ESA for a property owner of a former machine shop that was previously investigated as a Potential Responsible Party (PRP) to the regional groundwater contamination within the Burbank Operable Unit of the San Fernando Valley Area. The property owner was facing a lawsuit from the primary PRP for the Burbank Operable Unit for the recovery of cleanup costs, and sought guidance on how to prove the property was not a PRP. Past sampling and remedial activates showed no direct pathway to groundwater, and it was determined the site was not likely a PRP during closure of the release case at the site. A review of difficult to obtain agency records was used as the primary justification to determine the magnitude of the release at the site was not large enough and there was no evidence to suggest site operations had ever impacted groundwater.

American Electronics, Orange County North Basin NPL RP, Fullerton, CA, 2022. Oversaw the installation of groundwater monitoring wells, in addition to initial development and sampling for an open cleanup case at a responsible party site for the Orange County North Basin Superfund Area. Chlorinated solvents had been utilized at the property for a long period of time in large quantities that resulted in soil, soil vapor, and groundwater impacts at the site. Groundwater and soil vapor extraction were utilized to achieve a no further action determination for soil, and subsequently groundwater despite elevated concentrations of chlorinated solvents remaining in soil and groundwater. In 2019 the cased was reopened by the agencies overseeing the cleanup of the North Basin NPL comingled groundwater contamination plume base on new data obtained for the site and surrounding sites. Groundwater monitoring operations continue at this property.

Miller Avenue and Whiteside Street, Los Angeles, CA, 2022. Supervised the installation, development, and sampling of groundwater monitoring wells at a property following an initial Phase II that determined soil vapor and groundwater contamination across the site which was slated for demolition of the existing buildings and redevelopment. The site was used for heavy industrial manufacturing since the 1920's and contaminants of concern determine to be impacting soil and groundwater included PCE, hexavalent chromium, TPH, and PFAS. The property owner was seeking a No Further Action determination to redevelop the site after conducting groundwater monitoring with the hope show the contamination was related to an offsite, up-gradient source.

Contact

jerwin@partneresi.com

PARTNER

Laura Mohlenkamp
Project Manager

Education
BS, Environmental Science, University of Nevada, Reno

Training
OSHA 40 Hour Hazwoper

Highlights
Ms. Mohlenkamp qualifies as an Environmental Professional with more than 5 years of environmental consulting and project management experience including preparing, reviewing, and managing all aspects of Phase I Environmental Site Assessments (ESAs) in commercial real estate transactions and large scale commercial and residential developments following the current ASTM (AAI) guidelines.

Experience Summary
Specializing in high volume and large-scale projects, Ms. Mohlenkamp has experience in all stages of environmental projects including Phase I ESAs and Phase II analysis. Ms. Mohlenkamp's technical skills include maintaining and meeting project scope and financial responsibilities; client management and communication; coordinating with professional staff, regulatory agencies, and subcontractors; reviewing and evaluating environmental data; preparing and reviewing technical writing documents; preparing project proposals; preparing presentations; and communicating with senior and junior staff.

- Project Management
- Environmental Due Diligence (Phase I ESA)
- Risk and Data Evaluation
- Client Relations and Business Development

Project Experience
Ms. Mohlenkamp's experience includes agricultural properties, industrial manufacturing facilities, plating facilities, fueling and automobile repair facilities, chemical distribution facilities, aerospace engineering facilities, former military bases, medical facilities, hotels and resorts, multi-family apartment complexes, and multi-tenant retail shopping centers with dry cleaning facilities.

Contact
lmohlenkamp@partneresi.com

PARTNER

Mark Lambson
Principal

Education

Bachelor of Arts Degree, Public Administration & Economics, San Diego State University
Executive MBA Program, 2000-2003

Highlights

Over 25 years of experience in the environmental and engineering consulting industry.
Deep understanding of the Commercial Real Estate business process.
Nationwide capabilities and expertise.
Vast experience in managing and delivering multi-site portfolio projects.

Experience Summary

Mark Lambson is a true veteran of the commercial real estate services industry. He has over 25 years of experience managing and performing environmental and engineering consulting projects on a national level. Mr. Lambson serves as a Principal for PARTNER and is located in PARTNER's San Diego County office. Mr. Lambson's team currently provides client management and consulting to a nationwide client base and specializes in advising "Equity" clients during the acquisition phase of commercial property transactions in the U.S., Mexico, and Canada.

Mr. Lambson has assisted clients on over 25,000 commercial real estate transactions throughout his career. His due diligence resume includes experience at all levels. This includes advising REITs, developers, property managers, retail companies, commercial real estate brokers, mortgage brokers, attorneys, lenders, universities, and real estate investment groups with the following nationwide services:

- Property Condition Assessments (PCAs)
- Individual Building System Inspections for Roof, Mechanical Electrical Plumbing + Fire/Life Safety (MEP+FLS), Elevator, Structure, Façade, Building Technology, and ADA/Accessibility
- Facility Condition Assessments (FCAs)
- Phase I Environmental Site Assessments (ESAs)
- Phase II Subsurface Investigations (Soil, soil-vapor, and groundwater sampling and analysis)
- Phase III Environmental Remediation Services & Cost Estimates
- Asbestos, Lead, Radon, Mold Sampling
- Seismic Risk Assessments and Structural Assessments (Seismic PMLs)
- Energy Audits, Benchmarking, ESG, and LEED-related services
- Hydrology, Water Conservation and Efficiency
- Fannie Mae / Freddie Mac / HUD Due Diligence
- Geotechnical and Soils Reports
- Construction Services (Doc & Cost Review, Progress Monitoring, Funds Control)
- Zoning Reports
- ALTA Surveys

Building Sciences
The One, Bel Air, California – Performed Geotechnical/Soils, Engineering, Environmental and Land Surveying for record-setting 74,000 square foot mega-mansion development that listed for $500 million. The highest residential price tag in Los Angeles County history.

Class A Office Campus Acquisition in the San Francisco Bay Area – Performed Property Condition Assessment, MEP+FLS Report, Roof Report, Elevator Report, Structural and Seismic Assessment.

National Bank Branch Locations - ADA Compliance and Accessibility Reviews.

Environmental Assessments
Phase I and Phase II Environmental Site Assessments for a 75-acre aerospace facility in the Northwest U.S.
Over 500 Phase I Environmental Site Assessments for a national fast-food chain
Dry Cleaner Remediation projects in California, Washington, Hawaii, Arizona, Texas, Nevada, and Florida.
Environmental consulting for over 2 million acres of desert land in California, Nevada, and Arizona

Land Surveys
ALTA Surveys for 2400-unit apartment portfolio in the Midwest

Multi-Site Portfolios
113-site office portfolio acquisition for a national REIT
122-site hotel portfolio for a national lending institution
77-site grocery-anchored shopping center portfolio for prominent retail chain
55-site hotel portfolio acquisition for a private investment group
68-site healthcare portfolio acquisition for a national REIT
50-site country club/golf course portfolio acquisition for a private investment group

Energy and Water Efficiency
Energy Efficiency & Water-use consulting for a national property owner that operates and manages 30 retail and office centers on the West Coast and Texas

Affiliations

National Association of Real Estate Investment Trusts (NAREIT)
International Council of Shopping Centers (ICSC)
U.S Green Building Council (USGBC)
Society of Industrial and Office Realtors, San Diego County (SIOR)
National Association of Industrial & Office Parks, Southern California (NAIOP)
San Diego Habitat Conservancy, Board of Directors. 2010 - 2014

Speaking

Bisnow Conference, Panel Moderator, La Jolla, CA, October 2014. Moderated panel on Southern California Real Estate Trends.

Globestreet, ICSC Western States Conference, San Diego, CA May 2013. Video interview regarding retail real estate trends and due diligence.

Publications

Shopping Centers Today, 2010. Authored article on LEED applications for shopping centers and retail assets.

Contact

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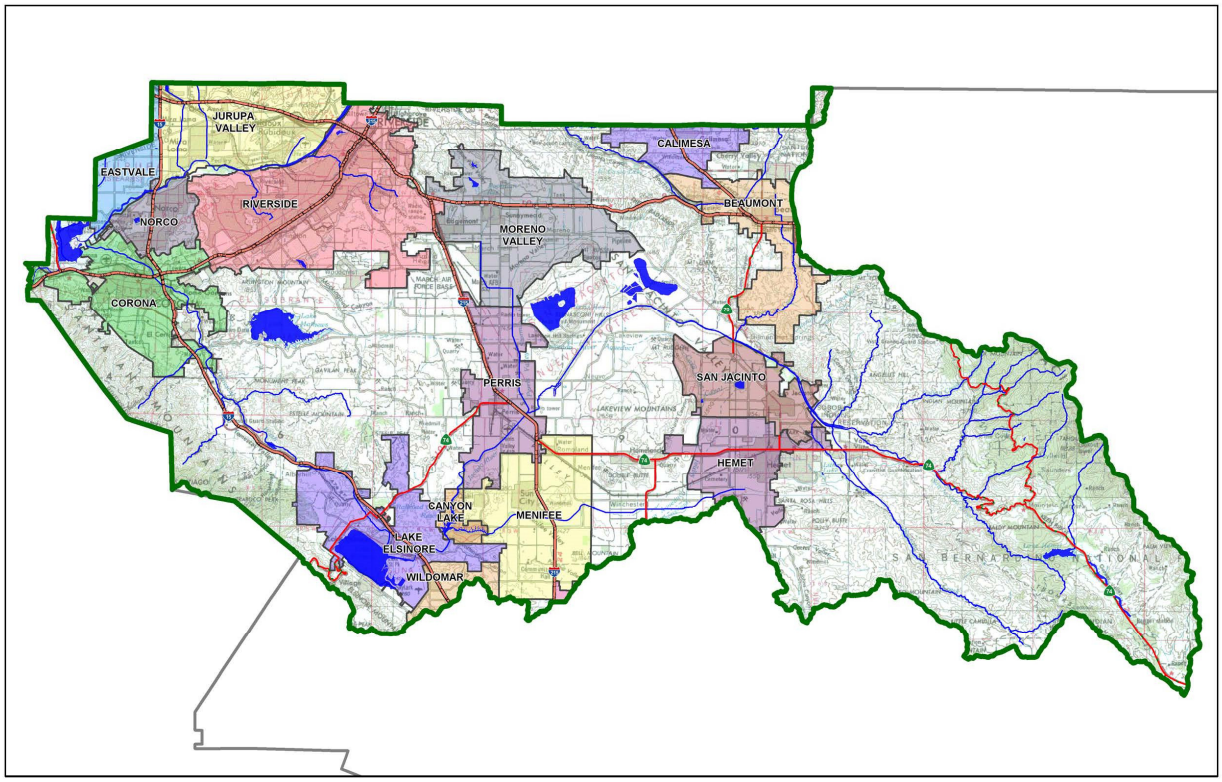
Project Specific Water Quality Management Plan

*A Template for Projects located within the **Santa Ana Watershed** Region of Riverside County*

Project Title: BRADLEY GARDENS EXPANSION (980 W. 7th Ave.)

980 W. 7TH ST San Jacinto, CA

Design Review/Case No: PWQMP26-0025 (PROJ25-0178/PWQMP26-0025)



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JARED BROWN P.E.

☒ **Preliminary**
☐ **Final**

Original Date Prepared: 3/16/2026

Revision Date(s): TBD

Prepared for Compliance with
Regional Board Order No. **R8-2010-0033**

OWNER'S CERTIFICATION

This Project-Specific Water Quality Management Plan (WQMP) has been prepared for Generations Healthcare by GUIDE-ENGINEER, (JARED BROWN) for the BRADLEY GARDENS ADDITION project.(PROJ25-018/PWQMP26-0026)

This WQMP is intended to comply with the requirements of the City of San Jacinto Ordinance No. 13. which includes the requirement for the preparation and implementation of a Project-Specific WQMP.

The undersigned, while owning the property/project described in the preceding paragraph, shall be responsible for the implementation and funding of this WQMP and will ensure that this WQMP is amended as appropriate to reflect up-to-date conditions on the site. In addition, the property owner accepts responsibility for interim operation and maintenance of Stormwater BMPs until such time as this responsibility is formally transferred to a subsequent owner. This WQMP will be reviewed with the facility operator, facility supervisors, employees, tenants, maintenance and service contractors, or any other party (or parties) having responsibility for implementing portions of this WQMP. At least one copy of this WQMP will be maintained at the project site or project office in perpetuity. The undersigned is authorized to certify and to approve implementation of this WQMP. The undersigned is aware that implementation of this WQMP is enforceable under the City of San Jacinto Water Quality Ordinance (Municipal Code Section 14.12.315).

"I, the undersigned, certify under penalty of law that the provisions of this WQMP have been reviewed and accepted and that the WQMP will be transferred to future successors in interest."

Owner's Signature	Date
Owner's Printed Name	Owner's Title/Position

PREPARER'S CERTIFICATION

"The selection, sizing and design of stormwater treatment and other stormwater quality and quantity control measures in this plan meet the requirements of Regional Water Quality Control Board Order No. **R8-2010-0033** and any subsequent amendments thereto."

Preparer's Signature	3/16/2026 Date
Jared Brown Preparer's Printed Name	Principle Preparer's Title/Position

Preparer's Licensure: PE: # C65430

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Section A: Project and Site Information

The project is Bradley Gardens Addition, on approximately 2.9 acre location at the southeast corner of S. Grand Avenue and W. 7th Street in San Jacinto, CA. The development includes building an addition to existing care facility and parking lot. There are three existing buildings on the site these buildings will remain with an addition to the large central building. The parking lot along 7th street will be renovated and repaved. This parking lot area along with a portion of the building is DMA-1 and will have 1093 sf of pervious concrete that this drainage area will drain into. This DMA-1 area is a total of 41,010 sf it will have 8,059 SF of new constructed surface with 426 sf of new lancscaping, 2,235 sf of new building area and 9,370 sf of concrete or pavement. The total area of DMA-1 is 41,010 sf with a total of 13,345 new developed surface. DMA-2 is on the south this area includes additional building expansion and a fire access road along the south and east side of the property and associated landscaping between building and new fire access. The south area is very flat with the buildings sitting slightly higher than the fire lane within the fire lane there will be 3,000 sf of pervious concrete this section of pervious concrete will support the 80,000 lb fire truck load. DMA-2 has 15,129 sf of new building area, 14,228 sf of concrete or pavement, and 6,624 sf of landscaping. This DMA-2 area is a total of 85,512 sf with 38,981 sf of new developed area. The entire area of the project is 126,522 sf with a total of 52,326 sf of new development with a total developed area of 41%. The project site has been evaluated and tested by the project Geotech who has determined the design infiltration rate of 1.97 in/hr. This exceeds the required 1.6 in/hr.

There is a trash enclosure at the northeast corner of the site close to W. 7th Street, this trash enclosure is covered. The landscaping to the south and west is already in place this landscaping includes a basketball court, courtyards, walking paths, grass, and other vegetations this area will not be modified. There will be adjustments to the parking area which include curbs gutters and accessible sidewalks with new storm drain system. There is an existing kitchen that will continue to provide food for the patients and there will be an additional kitchen and dining area. There will be no additional biological waste due to the addition. The site will have no medical Waste Containers.

PROJECT INFORMATION	
Type of Project:	INSTITUTIONAL (SENIOR CARE FACILITY)
Watershed Area:	Watershed – San Jacinto
Community Name:	San Jacinto
Development Name:	Bradley Gardens Addition
PROJECT LOCATION	
Latitude & Longitude (DMS): 33D47’00” N, 116D58’00” W	
Project Watershed and Sub-Watershed: Santa Ana; Santa Ana River, San Jacinto Valley	
APN(s): 435-330-003	
Total Acres=2.96 Acres	
Map Book and Page No.: BK 8, PG 357	
PROJECT CHARACTERISTICS	
Proposed or Potential Land Use(s)	Skilled Nursing Facility

Proposed or Potential SIC Code(s)	8051
Area of Impervious Project Footprint (SF)	91,824
Total Area of proposed Impervious Surfaces within the Project Limits (SF)/or Replacement	91,824
Does the project consist of offsite road improvements?	☐ Y ☒ N
Does the project propose to construct unpaved roads?	☐ Y ☒ N
Is the project part of a larger common plan of development (phased project)?	☐ Y ☒ N
EXISTING SITE CHARACTERISTICS	
Total area of existing Impervious Surfaces within the project limits (SF)	Insert text here.
Is the project located within any MSHCP Criteria Cell?	☐ Y ☒ N
If so, identify the Cell number:	Insert text here.
Are there any natural hydrologic features on the project site?	☐ Y ☒ N
Is a Geotechnical Report attached?	☒ Y ☐ N
If no Geotech. Report, list the NRCS soils type(s) present on the site (A, B, C and/or D)	N/a
What is the Water Quality Design Storm Depth for the project?	0.70 INCHES

A.1 Maps and Site Plans

Appendix 1 includes a map of the local vicinity and existing site. In addition, WQMP Site Plan, located in Appendix 1, includes the following:

- Drainage Management Areas
- Proposed Structural BMPs
- Drainage Path
- Drainage Infrastructure, Inlets, Overflows
- Source Control BMPs
- Buildings, Roof Lines, Downspouts
- Impervious Surfaces
- Standard Labeling

A.2 Receiving Waters

In order of upstream to downstream, the receiving waters that the project site is tributary to are as follows. A map of the receiving waters is included in Appendix 1.

Table A.1 Identification of Receiving Waters

Receiving Waters	Hydrologic Unit	EPA Approved 303(d) List Impairments	Designated Beneficial Uses	Proximity to RARE Beneficial Use
San Jacinto River	801.21	Nutrients, Aluminum, (limited Reaches) Pathogens (potential)	AGR, GWR, REC1, REC2, WARM, WILD	N/A
Canyon Lake	801.27	Nutrients (Nitrogen, Phosphorus), Organic Enrichment/ Low DO	AGR. GWR. REC1, REC2, WARM, WILD	N/A
Lake Elsinore	801.27	Nutrients (Nitrogen, Phosphorus), Pathogens, Organic Enrichment/ Low DO, Sedimentation/ Siltation	MUN, AGR, GWR, REC1, REC2, WARM, WILD	N/A

A.3 Additional Permits/Approvals required for the Project:

Table A.2 Other Applicable Permits

Agency	Permit Required	
State Department of Fish and Game, 1602 Streambed Alteration Agreement	☐ Y	☒ N
State Water Resources Control Board, Clean Water Act (CWA) Section 401 Water Quality Cert.	☐ Y	☒ N
US Army Corps of Engineers, CWA Section 404 Permit	☐ Y	☒ N
US Fish and Wildlife, Endangered Species Act Section 7 Biological Opinion	☐ Y	☒ N
Statewide Construction General Permit Coverage	☒ Y	☐ N
Statewide Industrial General Permit Coverage	☐ Y	☒ N
Western Riverside MSHCP Consistency Approval (e.g., JPR, DBESP)	☐ Y	☒ N
Other *(please list in the space below as required)*		
San Jacinto Conditional Use Permit	☐ Y	☒ N
San Jacinto Design Review	☒ Y	☐ N
San Jacinto Building Permit	☒ Y	☐ N
San Jacinto Grading Permit	☒ Y	☐ N
San Jacinto Construction Permit	☒ Y	☐ N

Section B: Optimize Site Utilization (LID Principles)

Site Optimization

Does the project identify and preserve existing drainage patterns? If so, how? If not, why?

This project will continue to drain towards the north and east. The frontage of the property currently drains in a ditch this will be replaced with a storm drain pipe system.

Does the project identify and protect existing vegetation? If so, how? If not, why?

The project frontage will be expanded this will remove existing landscaping in addtion the east side of the facility will be expanded and the parking lot will be updated. The landscaping at the rear of the facility and in the center of the facility remain

Does the project identify and preserve natural infiltration capacity? If so, how? If not, why?

The proposed site includes a fire access that is on the east and the south of the project. This access will be provided with pervious concrete. The Parking lot will include pervious concrete. The Soils report indicates an infiltration rate of at least 1.98 – 5.95 inches per hour to . (in a 24 hour event the site can drain up to 12 inches of runoff). Per the attached GSI Supplemental Infiltration Feasibility Testing the design infiltration rate is 1.97 in/hr which includes the factor of safety of 3.0.

Does the project identify and minimize impervious area? If so, how? If not, why?

The project will include pervious concrete to allow for infiltration. The project will also include disconected downspouts that will release runnof into the landscaping for infiltration.

Does the project identify and disperse runoff to adjacent pervious areas? If so, how? If not, why?

The front parking lot drains into a concrete pavement area at the north side of the parking lot. The project will also release roof drainage into landcaping.

Section C: Delineate Drainage Management Areas (DMAs)

Table C.1 DMA Classifications

DMA Name or ID	Surface Type(s)	Area (Sq. Ft.)	DMA Type
DMA 1	Build, AC, CONC.	11,605 SF	Infiltration Pervious Concrete
	Pervious Conc.	1093 SF	Infiltration
DMA 2	Build, AC, CONC.	29,357 SF	Infiltration Pervious Concrete
	Pervious Conc.	3,000 SF	Infiltration Pervious Pavement

Table C.2 Type 'A', Self-Treating Areas

DMA Name or ID	Area (Sq. Ft.)	Stabilization Type	Irrigation Type (if any)
DMA 1	426 SF		
DMA 2	6,296 SF		

Table C.3 Type 'B', Self-Retaining Areas

Self-Retaining Area				**Type 'C' DMAs that are draining to the Self-Retaining Area**		
DMA Name/ ID	Post-project surface type	Area (square feet) [A]	Storm Depth (inches) [B]	DMA Name / ID	[C] from Table C.4 = [C]	Required Retention Depth (inches) [D]

$$[D] = [B] + \frac{[B] \cdot [C]}{[A]}$$

Table C.4 Type 'C', Areas that Drain to Self-Retaining Areas

DMA					Receiving Self-Retaining DMA		
DMA Name/ ID	Area (square feet)	Post-project surface type	Runoff factor	Product	DMA name /ID	Area (square feet)	Ratio
	[A]		[B]	[C] = [A] x [B]		[D]	[C]/[D]

Table C.5 Type 'D', Areas Draining to BMPs

DMA Name or ID	BMP Name or ID
DMA-1	DMA-1 North Area total of 41,010 SF
DMA-2	DMA-2 South Area total of 85,522 SF

Section D: Implement LID BMPs

D.1 Infiltration Applicability

Is there an approved downstream 'Highest and Best Use' for stormwater runoff (ref: Chapter 2.4.4 of the WQMP Guidance Document)? ☐ Y ☒ N

Geotechnical Report

A Geotechnical Report is required by the City of Riverside to confirm present and past site characteristics that may affect the use of Infiltration BMPs, see Appendix 3.

Is this project classified as a small project consistent with the requirements of Chapter 2 of the WQMP Guidance Document? ☐ Y ☒ N

Infiltration Feasibility

Table D.1 Infiltration Feasibility

Does the project site…	YES	NO
…have any DMAs with a seasonal high groundwater mark shallower than 10 feet?		
If Yes, list affected DMAs:		No
…have any DMAs located within 100 feet of a water supply well?		
If Yes, list affected DMAs:		No
…have any areas identified by the geotechnical report as posing a public safety risk where infiltration of stormwater could have a negative impact?		
If Yes, list affected DMAs:		No
…have measured in-situ infiltration rates of less than 1.6 inches / hour?		
If Yes, list affected DMAs:		No
…have significant cut and/or fill conditions that would preclude in-situ testing of infiltration rates at the final infiltration surface?		
If Yes, list affected DMAs:		No
…geotechnical report identify other site-specific factors that would preclude effective and safe infiltration?		
Describe here:		No

D.2 Harvest and Use Assessment

The following conditions apply*:*

☐ Reclaimed water will be used for the non-potable water demands for the project.

☐ Downstream water rights may be impacted by Harvest and Use as approved by the Regional Board (verified with the City of Riverside).

☐ The Design Capture Volume will be addressed using Infiltration Only BMPs. (Harvest and Use BMPs are still encouraged, but are not required as the Design Capture Volume will be infiltrated or evapotranspired).

☐ None of the above.

Irrigation Use Feasibility

Step 1: Identify the total area of irrigated landscape on the site, and the type of landscaping used.

Total Area of Irrigated Landscape: 0.47 acres

Type of Landscaping (Conservation Design or Active Turf): Grass, bushes, tees

Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for irrigation use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.

Total Area of Impervious Surfaces: 0.80 Acres

Step 3: Cross reference the Design Storm depth for the project site (see Exhibit A of the WQMP Guidance Document) with the left column of Table 2-3 in Chapter 2 to determine the minimum area of Effective Irrigated Area per Tributary Impervious Area (EIATIA).

The project EIATIA factor: Enter your EIATIA Factor

Step 4: Multiply the unit value obtained from Step 3 by the total of impervious areas from Step 2 to develop the minimum irrigated area that would be required.

Minimum required irrigated area: Insert Area (Acres)

Step 5: Determine if harvesting stormwater runoff for irrigation use is feasible for the project by comparing the total area of irrigated landscape (Step 1) to the minimum required irrigated area (Step 4).

Minimum required irrigated area (Step 4)	Available Irrigated Landscape (Step 1)
Insert Area (Acres)	Insert Area (Acres)

Toilet Use Feasibility

Step 1: Identify the projected total number of daily toilet users during the wet season, and account for any periodic shut downs or other lapses in occupancy:

Projected Number of Daily Toilet Users: Number of daily Toilet Users

Project Type: Enter 'Residential', 'Commercial', 'Industrial' or 'Schools'

Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for toilet use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.

Total Area of Impervious Surfaces: Insert Area (Acres)

Step 3: Enter the Design Storm depth for the project site (see Exhibit A) into the left column of Table 2-1 in Chapter 2 to determine the minimum number or toilet users per tributary impervious acre (TUTIA).

The project TUTIA factor: Enter your TUTIA Factor

Step 4: Multiply the unit value obtained from Step 3 by the total of impervious areas from Step 2 to develop the minimum number of toilet users that would be required.

Minimum number of toilet users: Required number of toilet users

Step 5: Determine if harvesting stormwater runoff for toilet flushing use is feasible for the project by comparing the Number of Daily Toilet Users (Step 1) to the minimum required number of toilet users (Step 4).

Minimum required Toilet Users (Step 4)	**Projected number of toilet users (Step 1)**
Insert Area (Acres)	Insert Area (Acres)

Other Non-Potable Use Feasibility

Are there other non-potable uses for stormwater runoff on the site (e.g. industrial use)? See Chapter 2 of the Guidance for further information. If yes, describe below. If no, write N/A.

Insert narrative description here.

Step 1: Identify the projected average daily non-potable demand, in gallons per day, during the wet season and accounting for any periodic shut downs or other lapses in occupancy or operation.

Average Daily Demand: Projected Average Daily Use (gpd)

Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for the identified non-potable use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.

Total Area of Impervious Surfaces: Insert Area (Acres)

Step 3: Enter the Design Storm depth for the project site (see Exhibit A) into the left column of Table 2-3 in Chapter 2 to determine the minimum demand for non-potable uses per tributary impervious acre.

The project factor: Enter Value from Table 2-3

Step 4: Multiply the unit value obtained from Step 4 by the total of impervious areas from Step 3 to develop the minimum number of gallons per day of non-potable use that would be required.

Minimum required use: Minimum use required (gpd)

Step 5: Determine if harvesting stormwater runoff for other non-potable use is feasible for the project by comparing the Average Daily non-potable demand (Step 1) to the minimum required non-potable use (Step 4).

Minimum required non-potable use (Step 4)	**Projected average daily use (Step 1)**
Minimum use required (gpd)	Projected Average Daily Use (gpd)

D.3 Bioretention and Biotreatment Assessment

Other LID Bioretention and Biotreatment BMPs as described in Chapter 2.4.7 of the WQMP Guidance Document are feasible on nearly all development sites with sufficient advance planning.

For the project, the following applies:

☐ LID Bioretention/Biotreatment BMPs will be used for some or all DMAs of the project as noted below in Section D.4 (note the requirements of Section 3.4.2 in the WQMP Guidance Document).

☐ A site-specific analysis demonstrating the technical infeasibility of all LID BMPs has been performed and is included in Appendix 5.

☐ None of the above.

D.4 Feasibility Assessment Summaries

Table D.2 LID Prioritization Summary Matrix

DMA Name/ID	LID BMP Hierarchy				No LID (Alternative Compliance)
	1. Infiltration	2. Harvest and use	3. Bioretention	4. Biotreatment	
DMA 1	☒	☐	☐	☐	☐
DMA 2	☒	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐

For those DMAs where LID BMPs are not feasible, provide a brief narrative below summarizing why they are not feasible, with technical infeasibility criteria included in Appendix 5, and Alternative Compliance measures for those DMAs documented in Section E. (REMOVE INSTRUCTIONS)

Note: DMA 1 utilizing 1,525 sf pervious concrete area at the north side of the parking lot where the entire paking lot and roof area within the DMA area will flow to. DMA 2 will use pervious concrete at the south side of the project were 3,855 sf of imp

D.5 LID BMP Sizing

Table D.3 DCV Calculations for LID BMPs

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*INFILTRATON AREA BMP-1*		
	[A]		[B]	[C]	[A] x [C]			
DMA 1	*11,605 SF*	*Pervious Concrete*	*1.0*	*0.90*	*10,445 SF*	*Design Storm Depth (in)*	*Design Capture Volume,* $\mathbf{V_{BMP}}$ *(cubic feet)*	*Proposed Volume on Plans (cubic feet)*
	A_T= Σ[A]= 11,605				Σ= [D]10,445	[E] O.70	$[F] = \frac{[D]x[E]}{12} = 609.29$	[G] 1523

[B], [C] are obtained from Section 2.3.1 of the WQMP Guidance Document

[E] is obtained from Exhibit A of the WQMP Guidance Document

[G] is obtained from LID BMP design procedure sheet, placed in Appendix 6

LID BMP Sizing

Table D.4 DCV Calculations for LID BMPs

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*INFILTRATION AREA BMP-2*		
	[A]		[B]	[C]	[A] x [C]			
DMA 2	*29,357 SF*	*Pervious Concrete*	*1.0*	*0.90*	*26,421*	*Design Storm Depth (in)*	*Design Capture Volume,* $\mathbf{V_{BMP}}$ *(cubic feet)*	*Proposed Volume on Plans (cubic feet)*
	A_T= Σ[A]=29,357				Σ= [D] 26,421	[E] O.70	$[F] = \frac{[D]x[E]}{12} = 1{,}541$	[G] =3,853

[B], [C] are obtained from Section 2.3.1 of the WQMP Guidance Document

[E] is obtained from Exhibit A of the WQMP Guidance Document

[G] is obtained from LID BMP design procedure sheet, placed in Appendix 6

Section E: Alternative Compliance (LID Waiver Program)

LID BMPs are expected to be feasible on virtually all projects. Where LID BMPs have been demonstrated to be infeasible as documented in Section D, other Treatment Control BMPs must be used (subject to confirmation of LID waiver approval by the Regional Board). For the project, the following applies:

☒ LID Principles and LID BMPs have been incorporated into the site design to fully address all Drainage Management Areas. No alternative compliance measures are required for this project and thus this Section is not required to be completed.

- *Or* -

☐ The following Drainage Management Areas are unable to be addressed using LID BMPs. A site-specific analysis demonstrating technical infeasibility of LID BMPs has been approved by the Regional Board and included in Appendix 5. Additionally, no downstream regional and/or sub-regional LID BMPs exist or are available for use by the project. The alternative compliance measures on the following pages are being implemented to ensure that any pollutant loads expected to be discharged by not incorporating LID BMPs, are fully mitigated.

E.1 Pollutants of Concern

Table E.1 Potential Pollutants by Land Use Type

Priority Development Project Categories and/or Project Features (check those that apply)	General Pollutant Categories							
	Bacterial Indicators	Metals	Nutrients	Pesticides	Toxic Organic Compounds	Sediments	Trash & Debris	Oil & Grease
☐ Detached Residential Development	P	N	P	P	N	P	P	P
☐ Attached Residential Development	P	N	P	P	N	P	P	P(2)
☒ Commercial/Industrial Development	P(3)	P	P(1)	P(1)	P(5)	P(1)	P	P
☐ Automotive Repair Shops	N	P	N	N	P(4, 5)	N	P	P
☐ Restaurants (>5,000 ft^2)	P	N	N	N	N	N	P	P
☐ Hillside Development (>5,000 ft^2)	P	N	P	P	N	P	P	P
☐ Parking Lots (>5,000 ft^2)	P(6)	P	P(1)	P(1)	P(4)	P(1)	P	P
☐ Retail Gasoline Outlets	N	P	N	N	P	N	P	P
Project Priority Pollutant(s) of Concern	☐	☐	☐	☒	☐	☐	☒	☒

P = Potential

N = Not Potential

(1) A potential Pollutant if non-native landscaping exists or is proposed onsite; otherwise not expected

(2) A potential Pollutant if the project includes uncovered parking areas; otherwise not expected

(3) A potential Pollutant is land use involving animal waste

(4) Specifically petroleum hydrocarbons

(5) Specifically solvents

(6) Bacterial indicators are routinely detected in pavement runoff

E.2 Stormwater Credits

Table E.2 Water Quality Credits

Qualifying Project Categories	Credit Percentage[2]
N/A	
Total Credit Percentage[1]	

[1]Cannot Exceed 50%

[2]Obtain corresponding data from Table 3-8 in the WQMP Guidance Document

E.3 Sizing Criteria

Table E.3 Treatment Control BMP Sizing

DMA Type/ID	**DMA Area (square feet)**	**Post-Project Surface Type**	**Effective Impervious Fraction, I_f**	**DMA Runoff Factor**	**DMA Area x Runoff Factor**		***Enter BMP Name / Identifier Here***		
	[A]		[B]	[C]	[A] x [C]				
						Design Storm Depth (in)	*Minimum Design Capture Volume or Design Flow Rate (cubic feet or cfs)*	*Total Storm Water Credit % Reduction*	*Proposed Volume or Flow on Plans (cubic feet or cfs)*
	A_T = Σ[A]				Σ= [D]	[E]	$[F] = \frac{[D]x[E]}{[G]}$	[F] X (1-[H])	[I]

[B], [C] is obtained as described in Section 2.3.1 from the WQMP Guidance Document

[E] is obtained from Exhibit A in the WQMP Guidance Document

[G] is for Flow-Based Treatment Control BMPs [G] = 43,560, for Volume-Based Control Treatment BMPs, [G] = 12

[H] is from the Total Credit Percentage as Calculated from Table E.2 above

[I] as obtained from a design procedure sheet from the BMP manufacturer and should be included in Appendix 6

E.4 Treatment Control BMP Selection

Treatment Control BMPs typically provide proprietary treatment mechanisms to treat potential pollutants in runoff, but do not sustain significant biological processes. Treatment Control BMPs must have a removal efficiency of a medium or high effectiveness as quantified below:

- **High**: equal to or greater than 80% removal efficiency
- **Medium**: between 40% and 80% removal efficiency

Table E.4 Treatment Control BMP Selection

Selected Treatment Control BMP Name or ID[1]	Priority Pollutant(s) of Concern to Mitigate[2]	Removal Efficiency Percentage[3]
N/A		

[1] Treatment Control BMPs must not be constructed within Receiving Waters. In addition, a proposed Treatment Control BMP may be listed more than once if they possess more than one qualifying pollutant removal efficiency.

[2] Cross Referenced from Table E.1 above.

[3] As documented in a Co-Permittee Approved Study and provided in Appendix 6.

Section F: Hydromodification

F.1 Hydrologic Conditions of Concern (HCOC) Analysis

The project does not create a Hydrologic Condition of Concern, meeting the criteria for HCOC Exemption as shown below:

HCOC EXEMPTION 1: The Priority Development Project disturbs less than one acre. The City of Riverside has the discretion to require a Project-Specific WQMP to address HCOCs on projects less than one acre on a case by case basis. The disturbed area calculation should include all disturbances associated with larger common plans of development.

Does the project qualify for this HCOC Exemption? ☒ Y ☐ N

HCOC EXEMPTION 2: The volume and time of concentration[1] of storm water runoff for the post-development condition is not significantly different from the pre-development condition for a 2-year return frequency storm (a difference of 5% or less is considered insignificant) using one of the following methods to calculate:

- Riverside County Hydrology Manual
- Technical Release 55 (TR-55): Urban Hydrology for Small Watersheds (NRCS 1986), or derivatives thereof, such as the Santa Barbara Urban Hydrograph Method
- Other methods acceptable to the City of Riverside

Does the project qualify for this HCOC Exemption? ☒ Y ☐ N

Results included in Table F.1 below and hydrologic analysis included in Appendix 7.

Table F.1 Hydrologic Conditions of Concern Summary

	2 year – 24 hour		
	Pre-condition	**Post-condition**	**% Difference**
Time of Concentration	12:10	12:05	-0.69%
Flow (CFS)	2.1 CFS	2.28 CFS	8.2%
Volume (Cubic Feet)	5149 CF	4393 CF	-15.8%

[1] Time of concentration is defined as the time after the beginning of the rainfall when all portions of the drainage basin are contributing to flow at the outlet.

HCOC EXEMPTION 3: All downstream conveyance channels to an adequate sump (Prado Dam, Santa Ana River) that will receive runoff from the project are engineered and regularly maintained to ensure design flow capacity; no sensitive stream habitat areas will be adversely affected; or are not identified on the Co-Permittees Hydromodification Sensitivity Maps.

Does the project qualify for this HCOC Exemption? ☒ Y ☐ N

F.2 HCOC Mitigation

As an alternative to the HCOC Exemption Criteria above, HCOC criteria is considered mitigated if the project meets one of the following conditions, as indicated:

☐ a. Additional LID BMPS are implemented onsite or offsite to mitigate potential erosion or habitat impacts as a result of HCOCs. This can be conducted by an evaluation of site-specific conditions utilizing accepted professional methodologies published by entities such as the California Stormwater Quality Association (CASQA), the Southern California Coastal Water Research Project (SCCRWP), or other Co-Permittee approved methodologies for site-specific HCOC analysis.

☐ b. The project is developed consistent with an approved Watershed Action Plan that addresses HCOC in Receiving Waters.

☐ c. Mimicking the pre-development hydrograph with the post-development hydrograph, for a 2-year return frequency storm. Generally, the hydrologic conditions of concern are not significant, if the post-development hydrograph is no more than 10% greater than pre-development hydrograph. In cases where excess volume cannot be infiltrated or captured and reused, discharge from the site must be limited to a flow rate no greater than 110% of the pre-development 2-year peak flow.

☒ d. None of the above.

Section G: Source Control BMPs

The following table identifies the potential sources of runoff pollutants for this project and specifies how they are addressed through permanent controls and operational BMPs:

Table G.1 Permanent and Operational Source Control Measures

Potential Sources of Runoff pollutants	Permanent Structural Source Control BMPs	Operational Source Control BMPs
On-site storm drain inlets	Mark all inlets with words "Only Rain Down the Storm Drain" or similar. Catch Basin Markers may be available from Riverside County Flood Control and Water Conservation District, call 951-955-1200 to verify.	Maintain and periodically repaint or replace inlet markings. Provide stormwater pollution prevention information to new site owners, lessees, or operators. See applicable operational BMPs in Fact Sheet SC-44, "Drainage System Maintenance
Interior Storm Drains	Interior floor drains shall be plumbed to sanitary sewer.	Inspect and Maintain drains to prevent blockages and overflow.
Need for future indoor & structural pest control	Building design features including sealants barriers and fully closing windows and doors have been included to discourage entry of pests.	Integrated Pest management(IPM) information to be provided to owners, lessees, and operators.
Landscape/outdoor pesticide use	Final Landscape Plans will accomplish the following: Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions. Consider using pest-resistant plants, especially adjacent to hardscape. To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	Maintain landscaping using minimum or no pesticides. Prevent erosion of slopes by planting fast-growing, dense ground covering plants. Plant native begetation to reduce the amount of water fertilizers, and pesticides applied to the landscape. Do not overwater. Use irrigation practices such as drip irrigation, soaker hoses or micro-spray systems. Periodically inspect and fix leaks and misdirected sprinklers. Do not rake or blow leaves, clippings, or pruning waste into the street, gutter, or storm drain. Instead, dispose of green waste by composting, hauling it to a permitted landfill, or recycling through your city's program. Integrated Pest Management (IPM) information to be provided to owners, lessees, and operators.

Refuse Areas	Site design features dumpster enclosures. Signs will be posted on or near dumpsters with the words “Do not dump hazardous materials here” or similar.	Periodic inspections for leaky, overfilled, uncovered, or other problematic conditions will occur. Corrective action will be made upon detection, as circumstances permit. Dumping of liquid or hazardous wastes will be prohibited. Spill control materials will be available on-site. All wastes to properly stored and disposed of in accordance with all applicable Local, State and Federal regulations
Building Downspouts	Downspouts shall be disconnected with splash pads.	Annually clean rain gutters and clean downspouts prior to fall season or first rain event.
Pervious Concrete	Remove any debris from concrete surface and remove any soil debris or weed vegetation.	Keep concrete aera clean swept and free of any fine particles that can clog or fill concrete pores. Pressure wash surfaces every year prior to first flush event.

Section H: Construction Plan Checklist

Table H.1 Construction Plan Cross-reference

BMP No. or ID	BMP Identifier and Description	Plan Sheet Number(s)	Latitude / Longitude
BMP-1	Pervious Concrete BMP	Precise Grading Plan (Sheet #'s to be determined at the time of FWQMP).	33°46'48.10" N 116°58'39.33" W
BMP-2	Disconected Downspouts BMP	Precise Grading Plan (Sheet #'s to be determined at the time of FWQMP).	33°46'45.59" N 116°58'39.47" W

TO BE COMPLETED AT TIME OF FINAL WQMP

Section I: Operation, Maintenance and Funding

As required by the City of Riverside, the following Operation, Maintenance and Funding details are provided as summarized:

1. A means to finance and implement facility maintenance in perpetuity, including replacement cost.
2. Acceptance of responsibility for maintenance from the time the BMPs are constructed until responsibility for operation and maintenance is legally transferred.
3. An outline of general maintenance requirements for the Stormwater BMPs selected.
4. Figures delineating and designating pervious and impervious areas, location, and type of Stormwater BMP, and tables of pervious and impervious areas served by each facility.
5. A separate list and location of self-retaining areas or areas addressed by LID Principles that do not require specialized O&M or inspections but will require typical landscape maintenance as noted in Chapter 5, pages 85-86, in the WQMP Guidance.

See Appendix 9 for a detailed Stormwater BMP Operation and Maintenance Plan that sets forth a maintenance schedule for each of the Stormwater BMPs built on site, and an agreement assigning responsibility for maintenance and providing for inspections and certification.

Maintenance Mechanism: See Appendix 9

Will the proposed BMPs be maintained by a Home Owners' Association (HOA) or Property Owners Association (POA)?

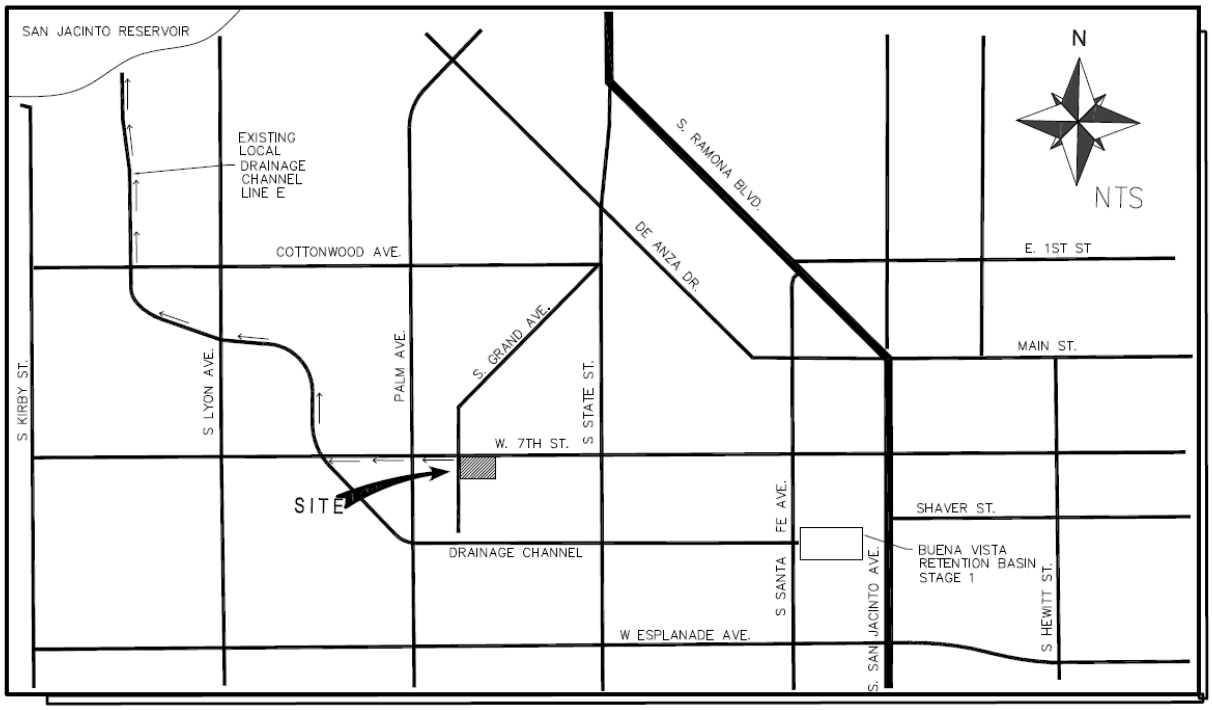
☐ Y ☒ N

Operation and Maintenance Plan and Maintenance Mechanism is included in Appendix 9. Educational materials for those personnel that will be maintaining the proposed BMPs within this Project-Specific WQMP are included in Appendix 10.

Note: To be completed at the time of the FWQMP.

Appendix 1: Maps and Site Plans

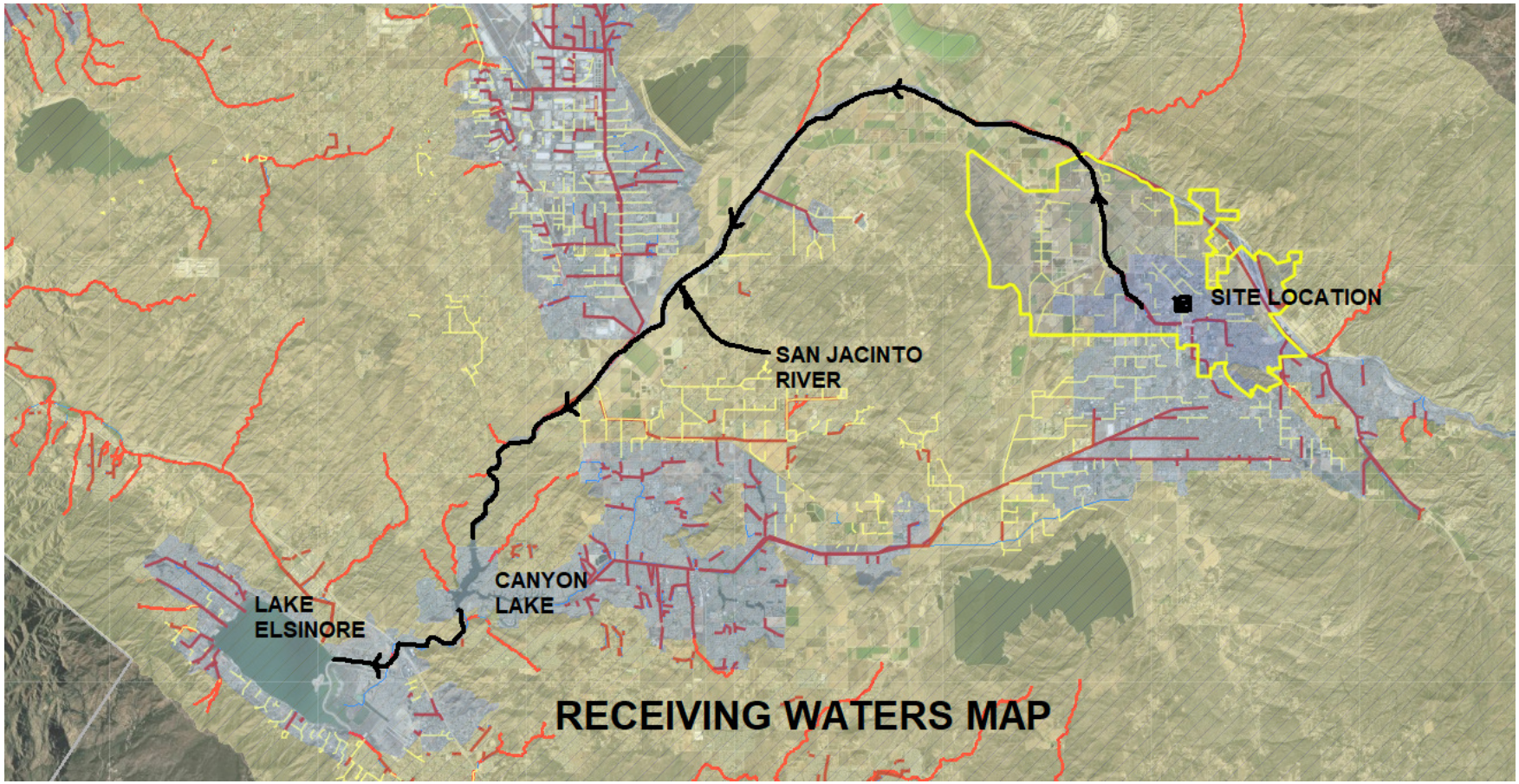
Location Map, WQMP Site Plan and Receiving Waters Map

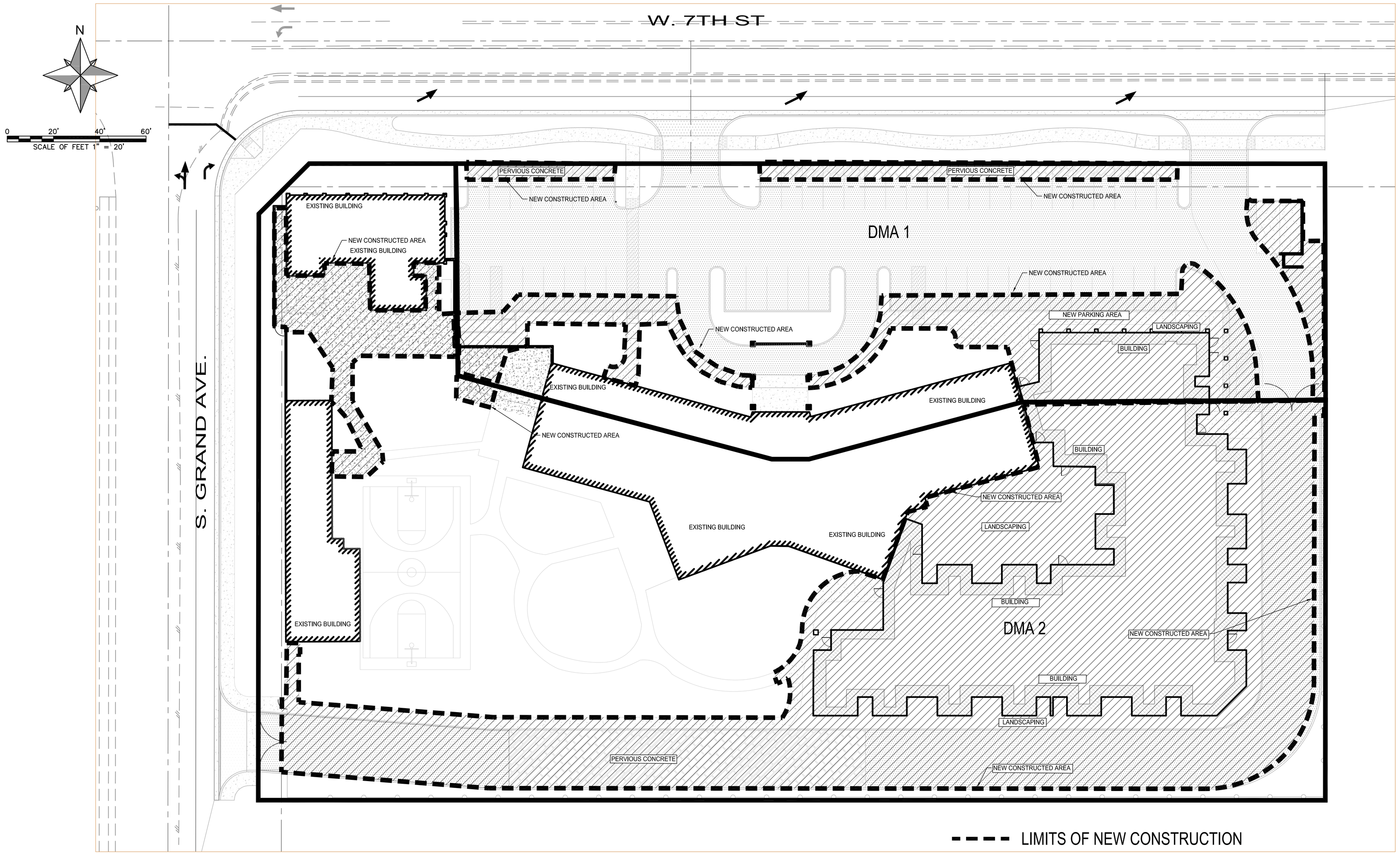


VICINITY MAP

NOT TO SCALE

THE PROPERTY IS LOCATED ON 7TH ST. (SOUTH SIDE OF W. 7TH ST.) IN SAN JACINTO, CA


SITE LOCATION
SAN JACINTO
RIVER
CANYON
LAKE
LAKE
ELSINORE
RECEIVING WATERS MAP



AREA CALCULATION

TOTAL AREA = 126,522 SF
TOTAL DISTURBED AREA = 52,326 SF
TOTAL NEW LANDSCAPING = 7,271 SF
TOTAL NEW CONCRETE OR ASPHALT = 23,598 SF
TOTAL NEW BUILDING = 17,364 SF
PERCENT OF NEW AREA DEVELOPED = 39.1%

DMA 1

DMA AREA = 41,010 SF
TOTAL NEW AREA = 13,345 SF
TOTAL NEW LANDSCAPING = 647 SF
TOTAL NEW PERVIOUS = 1,525 SF
TOTAL NEW IMPERVIOUS = 11,605 SF
MINIMUM PERVIOUS AREA = 1,523 SF
DEPTH OF IMPERVIOUS = 12 INCH
PERCENT ACHIEVED =100%

DMA 2

DMA AREA = 85,512 SF
TOTAL NEW AREA = 38,981 SF
TOTAL NEW LANDSCAPING = 6,624 SF
TOTAL NEW PERVIOUS = 3,854 SF
TOTAL NEW IMPERVIOUS = 29,357 SF
MINIMUM PERVIOUS AREA = 3,853 SF
DEPTH OF IMPERVIOUS = 12 INCH
PERCENT ACHIEVED = 100%

- LIMITS OF NEW CONSTRUCTION
- DMA AREA
- NEW CONSTRUCTION AREA
- PAVEMENT AREA
- PERVIOUS CONCRETE AREA
- CONCRETE SURFACE AREA

NO.	REVISION	APPROVED BY	DATE

DATE: AUG. 2026
SCALE:
DRAWN BY: S.A. & R.S.
DESIGNED BY: J.B. & R.S.
CHECKED BY: J.B. & R.S.

Guide ENGINEERING
LAND ENGINEERING AND PLANNING
5930 GRANITE LAKE DR. #150
GRANITE BAY, CA 95746
PHONE: 916-797-0248
projects@guide-engineering

980 W. 7TH ST
DRAINAGE MANAGEMENT AREA MAP
SAN JACINTO, RIVERSIDE COUNTY, CALIFORNIA

PREPARED UNDER THE DIRECTION OF:

REGISTERED PROFESSIONAL ENGINEER
JARED BROWN
LIC. No. C85430
Exp. 09/30/27
CIVIL
STATE OF CALIFORNIA

NOT APPROVED FOR CONSTRUCTION UNLESS SIGNED BY THE ENGINEER

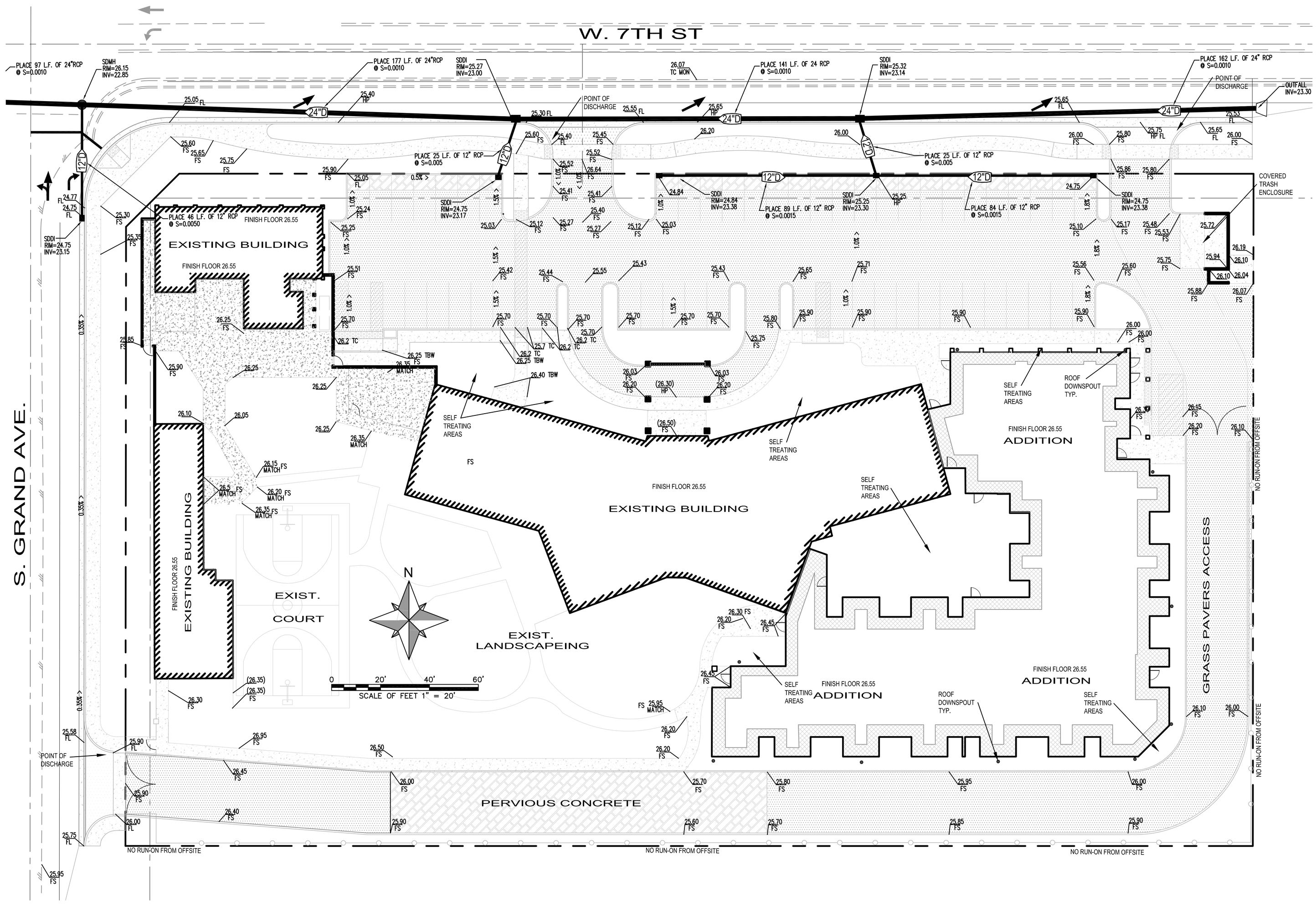
PROJECT NUMBER:

SHEET OF

GUIDE ENGINEERING

LEGEND

- BOUNDARY LINE
- PROPOSED RIGHT-OF-WAY(R/W)
- EXISTING RIGHT-OF-WAY
- PROPOSED PROPERTY LINE
- EXISTING PROPERTY LINE
- CENTERLINE
- ARCHITECTURAL FENCING
- 132.44 — PROPOSED SPOT ELEVATION
- (132.44) — EXISTING SPOT ELEVATION
- DITCH FLOWLINE and DIRECTION
- 132.44 FL — PROPOSED DITCH FLOWLINE (FL)
- (132.44) — EXISTING DITCH FLOWLINE (FL)
- 24"D — PROPOSED PIPE
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED DRAIN INLET



NO.	REVISION	APPROVED BY	DATE

DATE: MAY 2026
SCALE: 1" = 20'
DRAWN BY: S.A. & R.S.
DESIGNED BY: J.B. & R.S.
CHECKED BY: J.B. & R.S.

Guide ENGINEERING
LAND ENGINEERING AND PLANNING
5930 GRANITE LAKE DR. #150
GRANITE BAY, CA 95746
PHONE: 916-797-0248
projects@guide-engineering

BRADLEY GARDENS EXPANSION (PROJ24-0178)
980 W. 7TH ST
POST CONSTRUCTION BMP SITE PLAN
SAN JACINTO, RIVERSIDE COUNTY, CALIFORNIA

PREPARED UNDER THE DIRECTION OF:

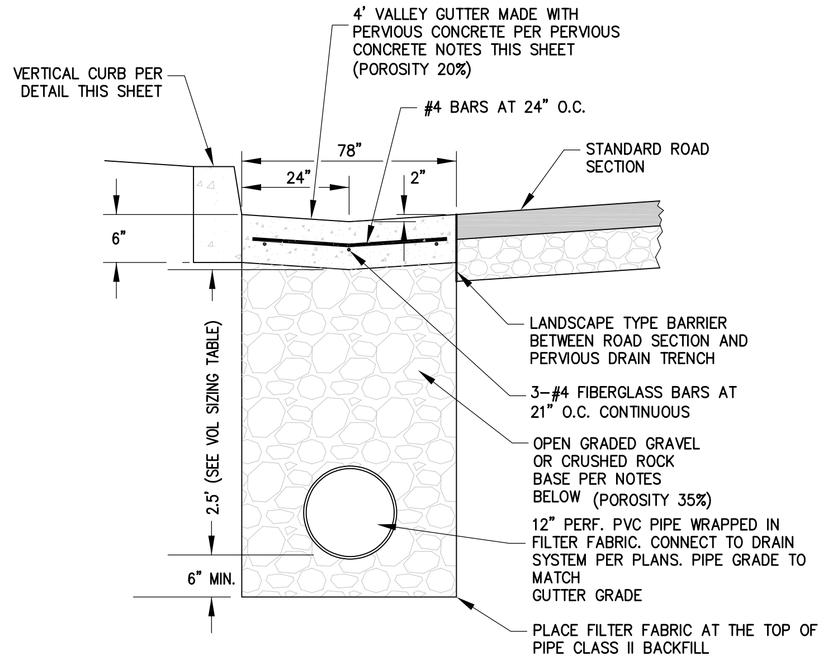
REGISTERED PROFESSIONAL ENGINEER
JARED BROWN
LIC. No. C85430
Exp. 09/30/27
CIVIL
STATE OF CALIFORNIA

NOT APPROVED FOR CONSTRUCTION UNLESS SIGNED BY THE ENGINEER

PROJECT NUMBER:

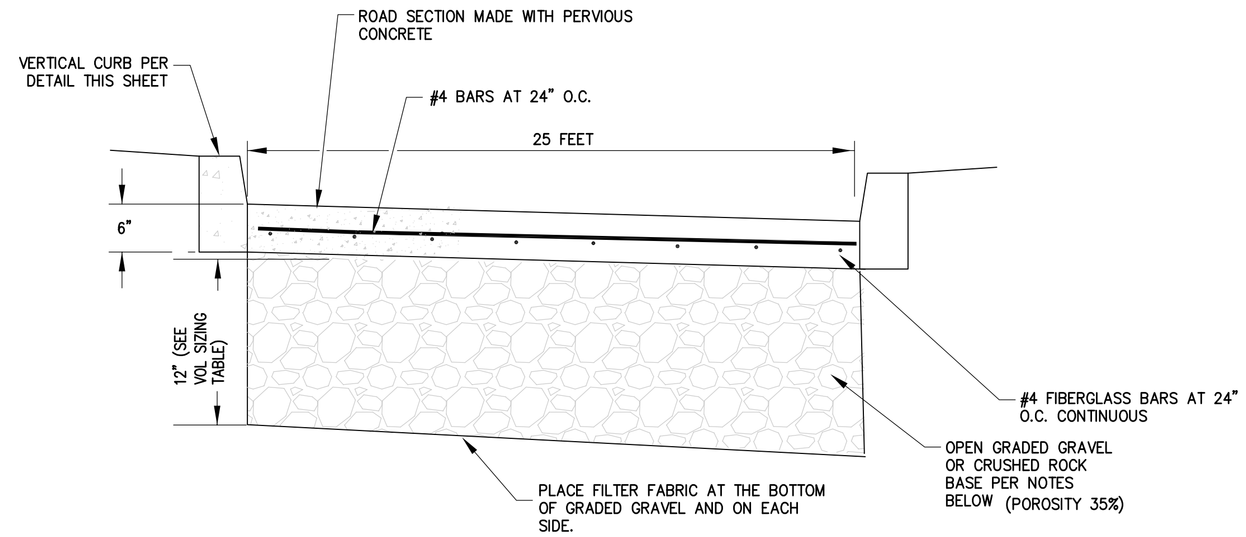
SHEET OF

GUIDE ENGINEERING + PLANNING



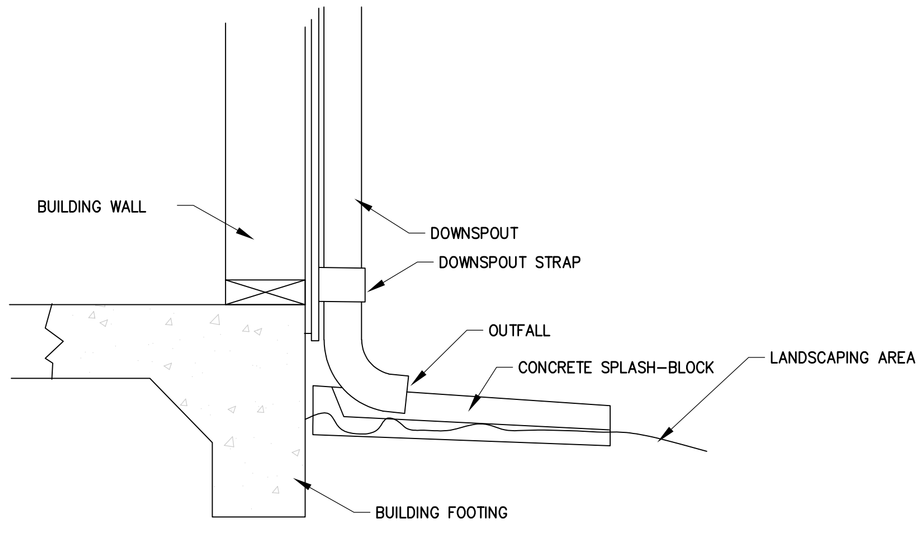
1 PERVIOUS CONCRETE PARKING DETAIL

N.T.S.



2 PERVIOUS CONCRETE DRIVE ISLE DETAIL

N.T.S.



3 DISCONNECTED DOWNSPOUT SPASH BLOCK DETAIL

N.T.S.

NO.	REVISION	APPROVED BY	DATE

DATE: MAY 2026
SCALE: 1" = 20'
DRAWN BY: S.A. & R.S.
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BRADLEY GARDENS EXPANSION (PROJ24-0178)

980 W. 7TH ST

POST CONSTRUCTION BMP DETAILS

SAN JACINTO, RIVERSIDE COUNTY, CALIFORNIA

PREPARED UNDER THE DIRECTION OF:

REGISTERED PROFESSIONAL ENGINEER
JARED BROWN
LIC. No. C65430
Exp. 09/30/27
CIVIL
STATE OF CALIFORNIA

NOT APPROVED FOR CONSTRUCTION UNLESS SIGNED BY THE ENGINEER

PROJECT NUMBER:

SHEET OF

GUIDE ENGINEERING

Appendix 2: Construction Plans

Grading and Drainage Plans

Appendix 3: Soils Information

Geotechnical Study and Other Infiltration Testing Data

PRELIMINARY GEOTECHNICAL INVESTIGATION
PROPOSED BRADLEY GARDENS SKILLED NURSING FACILITY
BUILDING ADDITION, 980 W. 7TH STREET
CITY OF SAN JACINTO, RIVERSIDE COUNTY
CALIFORNIA 92582 (APN 435-330-003)

FOR

CORCORAN CONSTRUCTION, INC.
26590 MADISON AVENUE
MURRIETA, CALIFORNIA 92562

W.O. 9071-A-IE DECEMBER 19, 2025

GeoSoils, Inc.

GeoSoils, Inc.
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December 19, 2025

W.O. 9071-A-IE

Corcoran Construction, Inc.
26590 Madison Avenue
Murrieta, California 92562

Attention: Ms. Kim Corcoran

Subject: Preliminary Geotechnical Investigation, Proposed Bradley Gardens Skilled Nursing Facility Building Addition, 980 W. 7th Street, City of San Jacinto, Riverside County, California 92582 (APN 435-330-003)

Dear Ms. Corcoran:

In accordance with your request and authorization, GeoSoils, Inc. (GSI), has performed a preliminary geotechnical investigation of the subject site. The purpose of our study was to evaluate the general geologic and geotechnical conditions at the existing skilled nursing facility, relative to the currently proposed development thereon, and to present preliminary recommendations for grading and the design, and construction of foundations, earth retaining structures, pavements, and hardscape from a geotechnical viewpoint.

Our evaluation primarily focuses on the proposed 43-bed skilled nursing facility (Building A1) depicted on the overall site plan, dated September 18, 2025, prepared by Gregg Maedo & Associates ([GMA], 2025 [see Appendix A]). It is our understanding that the existing office building renovation into a 16-bed facility (Building C) is still being contemplated, and based on the type of construction (building renovation) is not specifically addressed herein. If necessary, geotechnical recommendations for the proposed building renovation can be provided, once the planning for the proposed renovation is better understood.

Proposed Building A1 on the east side of the existing facility will be constructed in the open area, and will include demolition of a building in the southeast corner of the site. The need for retaining walls is unknown at this time; however, GSI has included recommendations for conventional retaining walls herein, if needed.

EXECUTIVE SUMMARY

Based on our review of the available data (see Appendix A), field exploration, laboratory testing, geologic and geotechnical engineering analyses, as well as our past experience on nearby sites, the proposed development of the skilled nursing facility building addition appears to be feasible from a geotechnical viewpoint, provided the recommendations presented in the

text of this report are properly incorporated into the design and construction of the project. Based on the existing body of geotechnical data accumulated during our recent subsurface exploration and laboratory testing, and from previous geotechnical work on nearby projects, the most significant elements of this study are summarized below:

- The subsurface data obtained, and regional geologic mapping by Dibblee (2003) indicate that the site is mantled by a thin layer of topsoil and disturbed fill, which is underlain by Holocene- to late Pleistocene-age alluvial sand and clay of valley areas (Qa). The topsoil and disturbed fill thickness was relatively thin (approximately 2 to 3 feet). Underlying the topsoil and disturbed fill, Quaternary-age (Holocene- to late Pleistocene-age) alluvial sand and clay of valley areas extend to the depths explored (between 30 and 60 feet below existing grades), although no significant clay layers were encountered during our subsurface investigation. Provided that the recommended remedial earthwork techniques are incorporated into the proposed development plans, the support of new fills and settlement-sensitive improvements by the onsite earth materials is considered feasible. However, proposed settlement-sensitive improvements that do not receive mitigation in the form of remedial earthwork may be subject to ground deformations and associated distress.

- No groundwater was encountered during our site exploration to a depth in excess of 60 feet below the ground surface (bgs). Based on our review of the California Department of Water Resources Water Data Library (CDWR; 2025), nearby well measurements reviewed appear to be regional groundwater measurements at depths of approximately 170 and 155 feet (State Well No. 04S01W27P005S [March 7, 1991], and Site Code No. 337748N1169760W001 [December 6, 2011], respectively) at sites with similar ground surface elevations. However, our review of historic groundwater measurements in the San Jacinto and Temecula basins (U.S. Geological Survey, 1919, Water Supply Paper 429) indicates groundwater in the basin may have been as shallow as 40 feet bgs. Groundwater conditions are subject to change as a result of climatic variations, rainfall, up-gradient irrigation practices, broken or damaged underground utilities.

- While site soils are potentially erodible, based on the flat laying nature of the site the presence of landslide deposits, slumps, or other significant forms of mass wasting were not observed within the proposed development area during fieldwork nor during our geologic map reviews.

- The site is situated in an area of active faults. The nearby San Jacinto and Casa Loma fault zones are considered active and are included within Alquist-Priolo Earthquake Fault Zones. Our review of published data indicates that there are no known active faults crossing the site (Jennings and Bryant, 2010), and the site is not located within an Alquist-Priolo Earthquake Fault Zone (California Geological Survey [CGS], 2018). In

addition, our review of the Riverside County Information Technology (RCIT) Map My County website (2025) indicates no County faults are mapped onsite and site is not located within a County fault zone. Therefore, surface fault rupture to adversely affect the proposed development is considered low. Due to the proximity of regional faults with documented Holocene movement, the proposed development could experience moderate to strong ground motions over its design life, as with all development in southern California. Therefore, the seismic ground motion values and design parameters provided herein should be incorporated into project planning. Further discussions of our fault activity review and photolineament analysis are presented herein.

- Our review indicates that the subject site is susceptible to secondary seismic hazards, including ground deformations from seismically-induced liquefaction or densification. Our review of the RCIT (2025) Map My County website indicates the site is mapped within an area designated as having a "moderate" potential for liquefaction, and is located in a zone of "Active" subsidence (RCIT, 2025). As such, liquefaction and settlement analyses were conducted, and are further discussed herein. However, these secondary seismic hazards can be mitigated to acceptable levels through the proposed site earthwork and foundation design recommended herein.

- Site soils are considered to exhibit a very low expansion potential (Expansion Index [E.I.] ranging between 0 and 20). The design of building foundations and other proposed site improvements should consider these expansive characteristics of the onsite soils.

- GSI conducted sampling of the near-surface onsite earth materials for general soil corrosivity testing. The corrosivity testing included the evaluation of pH, soluble sulfates, chlorides, and saturated resistivity. The test results indicate that the tested sample is moderately alkaline with respect to soil acidity or alkalinity, are is moderately corrosive to ferrous metals when saturated, presents negligible sulfate exposure to concrete (Exposure Class "S0" per Table 19.3.1.1 of American Concrete Institute [ACI] 318-14), and exhibits relatively low concentrations of soluble chlorides. On a preliminary basis, reinforced concrete mix design should minimally conform to Exposure Classes "S0," "C1," and "W0" outlined in Table 19.3.2.1 of ACI 318-14, as the foundations would likely be exposed to moisture. It should be noted that GSI does not practice in the field of corrosion engineering. Therefore, additional recommendations may be obtained from a qualified corrosion engineer should corrosion mitigation be necessary, as determined by the project architect, civil engineer, or structural engineer, as warranted.

- The underlying alluvium has some potential to consolidate due to foundation and fill loading during a seismic event based on historic groundwater levels. Our evaluation of settlement potential (both static and seismic), has considered settlement due to structural loads on footings, subsurface geometry, and historic groundwater levels.

- The minimum depth of remedial earthwork excavations across the area of proposed development are anticipated to be on the order of 5 to 7 feet. The actual depth of remedial grading excavations would be based on the conditions exposed inside the excavation during remedial grading. In areas to receive proposed ancillary surface improvements, such as pavements and flatwork, a minimum 2-foot thick layer of recompacted fill should be provided beneath these improvements. In addition, all footings should be supported by at least 3 feet of recompacted fill, which can be further evaluated once the proposed structural loads are provided for GSI's review.

- Assuming wall loads of 1 to 3 kips/foot, and column loads of 20 to 100 kips, the use of a structural mat foundation, or other foundation designed to tolerate the site's soil conditions and seismic settlement potential may be used. These assumptions should be revisited once the final plans and structural loads are made available to GSI.

- Recommendations for Portland cement concrete (PCC) and asphaltic concrete (AC) pavements are provided herein. Due to the relatively sandy nature of the near-surface soils onsite , pavement subgrades composed of these earth materials are anticipated to perform adequately under anticipated traffic loads.

- Temporary slopes for excavations less than 10 feet deep should not be constructed steeper than a 1:1 horizontal to vertical (h:v) gradient, provided that running sands or groundwater seepage are not present. Based on the proximity of existing building improvements, which will remain in-service adjacent to recommended remedial grading, the use of slot-cutting techniques or localized shoring may be necessary. All temporary slopes should be observed by GSI prior to workers entering excavations.

- The recommendations presented herein should be incorporated into the design and construction considerations of the project.

The opportunity to be of service is sincerely appreciated. If you should have any questions, please do not hesitate to contact our office.

Respectfully submitted,

GeoSoils, Inc.





Todd A. Greer
Engineering Geologist, CEG 2377

Jorge F. Meneses, PhD, PE, GE, BC. GE, F.ASCE
Geotechnical Engineer, GE 3041

TAG/JFM/ek

Distribution: (1) Addressee (email PDF)

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PRELIMINARY GEOTECHNICAL INVESTIGATION
PROPOSED BRADLEY GARDENS SKILLED NURSING FACILITY
BUILDING ADDITION, 980 W. 7TH STREET
CITY OF SAN JACINTO, RIVERSIDE COUNTY
CALIFORNIA 92582 (APN 435-330-003)

SCOPE OF SERVICES

The scope of our services has included the following:

1. Review of in-house geologic and geotechnical literature, maps, and aerial photos of the site and vicinity (text and Appendix A).

2. Geologic reconnaissance mapping and subsurface exploration consisting of the advancement of four (4) exploratory hollow-stem auger borings (B-1 through B-4), with a truck-mounted drill rig, and four (4) Cone Penetration Test (CPT) soundings (CPT-1 through CPT-4), for geotechnical logging and soil sampling (text and Appendix B).

3. Evaluation of geologic, seismic hazards and regional seismicity (text and Appendix C).

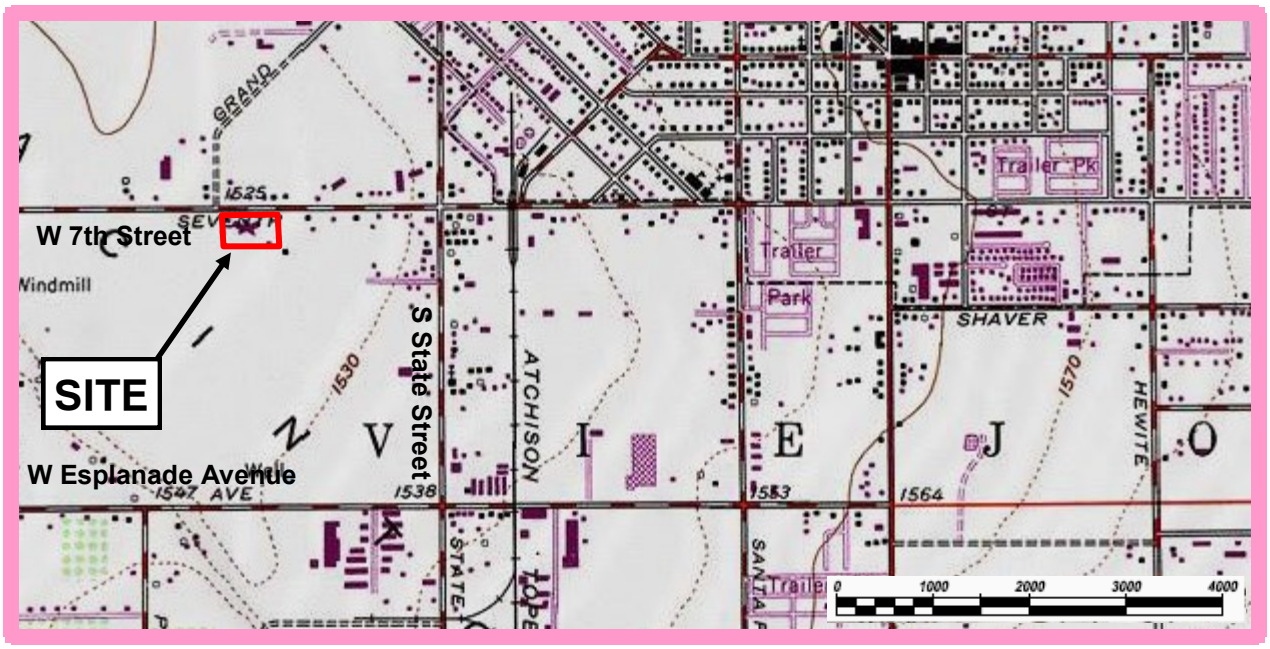
4. Appropriate laboratory testing of representative bulk and relatively undisturbed soil samples collected during our subsurface exploration program (text and Appendix D).

5. Engineering and geologic analyses of data collected (text and Appendix E).

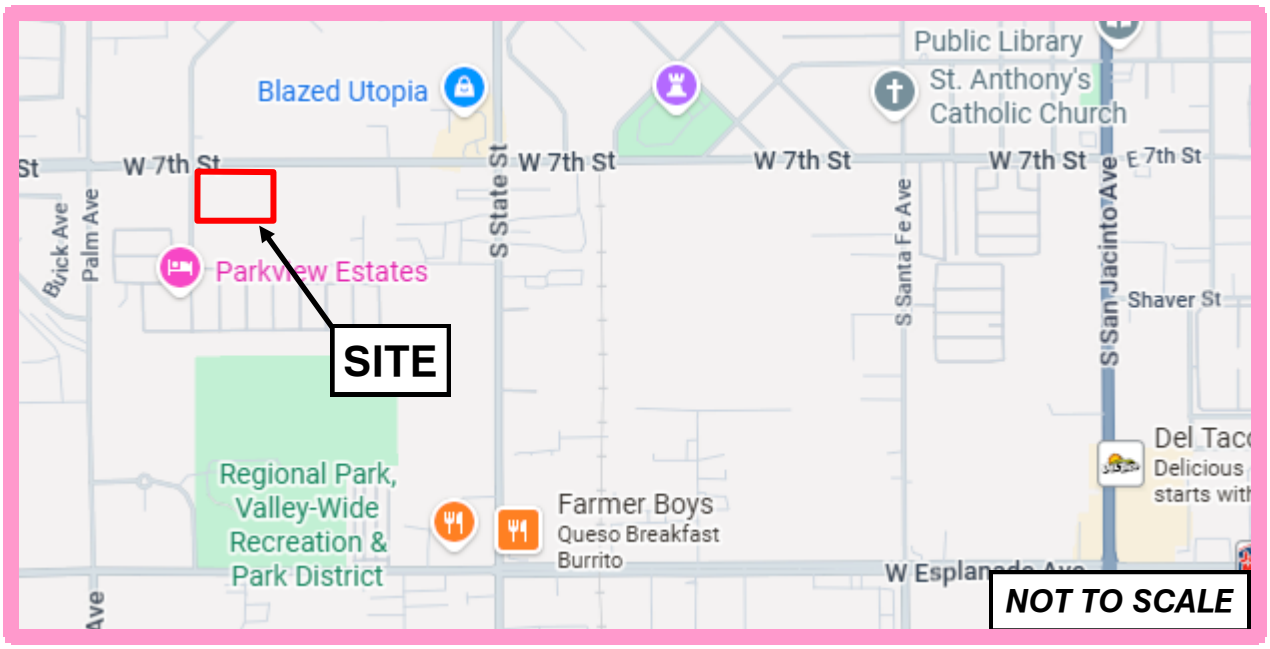
6. Preparation of this geotechnical report, accompaniments, and general grading guidelines (text and Appendix F).

SITE DESCRIPTION AND PROPOSED DEVELOPMENT

The overall site consists of an approximately 2.98-acre, rectangular-shaped area of developed land. The proposed Building A1 is located on the east side of the existing health care facility. The site is located on the southeast corner of the intersection of W 7th Street and S. Grand Avenue, in the City of San Jacinto, Riverside County, California (see Figure 1 - Site Location Map). The physical address of the existing facility is 980 W. 7th Street, City of San Jacinto, Riverside County, California 92582. As discussed herein, the overall care facility is referred to as site, project site, or property.



Base Map: TOPO! Copyright 2003 National Geographic, USGS San Jacinto Quadrangle, 7.5 Minute, Riverside Co., California -- dated 1953, photo-revised 1972.



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SITE LOCATION MAP

Figure 1

The geographic coordinates of the approximate centroid of Building A1 is at a latitude of 33.77956 degrees and a longitude of -116.97718 degrees. The property is bounded by undeveloped land on the south, east and west, by residential development to the southwest, and commercial development to the north, across W 7th Street. In general, the site is flat-lying to very gently sloping in a southeasterly direction. According to Google Earth Pro (GEP, 2025), site elevations vary between approximately 1,527 and 1,525 feet Mean Sea Level (MSL), for an overall relief of about 2 feet. The site is sparsely vegetated and has shrubs and trees surrounding the existing facility. Within the proposed building footprint, the western margin is currently used for an exercise yard by the patients. Elsewhere, it is earthen or covered with gravel (driveway area).

Existing site improvements primarily consist of several single-story buildings with an asphaltic concrete (AC) parking lot to the north. A U-shaped drive aisle exists near the entrance to the site from W 7th Street. Existing underground utilities are present beneath the pavements. There are also improvements in the area of the proposed building which consist of various sidewalks, a basketball court, and exercise yard fences. The proposed development (Building A1) is planned to be a single-story health care building with an improved fire access lane and small parking lot. Building loads are assumed to be typical for these types of structures. Sewage disposal is proposed to tie into the regional municipal system.

BACKGROUND

The facility was first approved to provide Medicare and Medicaid services on May 29, 1968 (Nursing Home Report, 2025). Existing onsite buildings appear to be primarily wood-frame construction and stucco exteriors, with shallow concrete slabs and foundations. The exercise yard area was added sometime between 2011 and 2012. Since that time, the site has been maintained and slightly modified to its current configuration. Construction records of the existing facility were not available at the time of this report and it is believed that most of the single-story facility buildings were constructed upon relatively shallow fill soils (less than 3 feet in thickness). Records of the initial grading on this site were not available for GSI's review. Given the age of the existing development (circa 1968), it is unlikely that a geotechnical report for the development of this site is currently available.

SITE EXPLORATION

Surface observations and subsurface explorations were performed by GSI representatives on November 26, 2025. Near-surface soil and geologic conditions were explored with four (4) exploratory hollow-stem auger borings (B-1 through B-4), advanced with a truck-mounted drill rig. In addition, four (4) supplemental Cone Penetration Test (CPT) soundings (CPT-1 through CPT-4) were also advanced in the footprint of Building A1. The borings and CPT soundings were logged or observed by a geologist from this office who also

collected representative bulk and relatively undisturbed soil samples for appropriate laboratory testing. Logs of the borings and CPT soundings are presented in Appendix B. The approximate locations of the borings and CPT soundings are shown on the attached Geotechnical Map (see Plate 1), which uses the overall site plan by GMA (2025) as a base.

GEOLOGY

Regional Geologic Setting

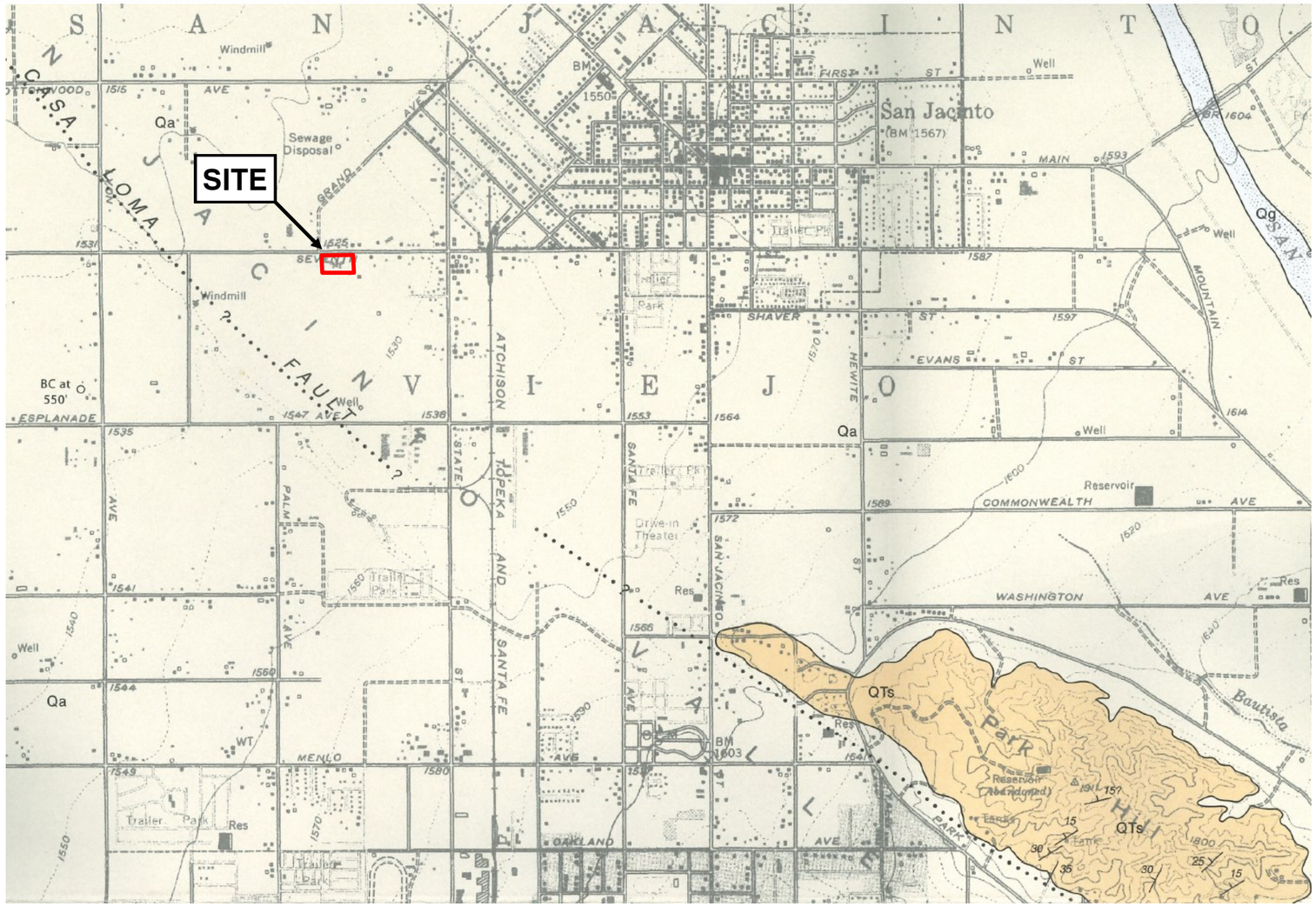
The property is situated near the northeastern margin of the Perris Block, a portion of a prominent natural geomorphic province in southwestern California known as the Peninsular Ranges. The Peninsular Ranges are characterized by steep, elongated ranges and valleys that trend northwesterly. The Peninsular Ranges extend north to the base of the San Gabriel Mountains and south into Baja California, Mexico. The Perris Block is a stable structural block bounded on the west by the Elsinore fault zone and on the east by the San Jacinto fault zone. The province is bounded on the north and northeast by the Transverse Ranges, on the south and southeast by the Colorado Desert geomorphic province. This province is typified by plutonic and metamorphic rocks (bedrock) which comprise the majority of the mountain masses, with relatively thin volcanic and sedimentary deposits discontinuously overlying the bedrock, and with Plio/Pleistocene-age (Quaternary-age) alluvial fan deposits filling in the valleys and younger alluvium filling in the incised drainages. The alluvial deposits are derived from the waterborne deposition of the products of weathering and erosion of the bedrock. Regional geologic mapping by Dibblee (2003) indicates the site is underlain by Holocene- to late Pleistocene-age alluvial sand and clay of valley areas (Qa), although no significant clay layers were encountered during our subsurface investigation. The regional geology of the site and near-vicinity is shown on Figure 2, which uses Dibblee (2003) as a base.

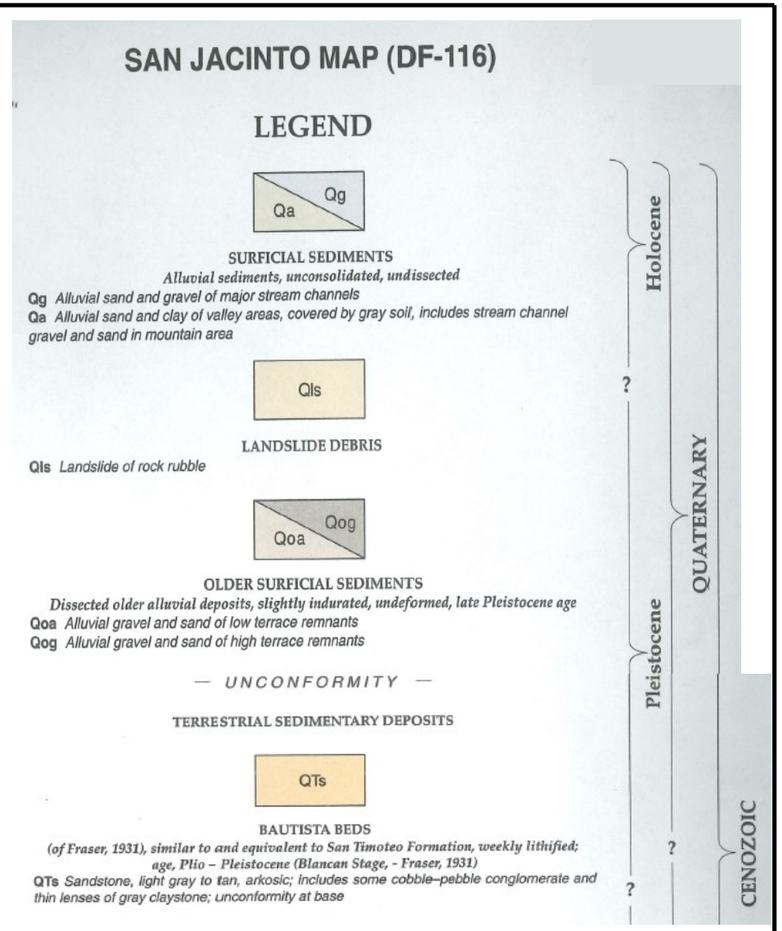
Site Geology

The site geologic units encountered or observed during our subsurface investigation and site reconnaissance included near surface topsoil and disturbed fill, underlain by Holocene- to late Pleistocene-age alluvial sand and clay of valley areas at depth. The earth materials are generally described below from the youngest to the oldest. The distribution of these materials is shown on Plate 1. The relationship of the geological units is shown in profile on Geologic Cross Sections A-A' and B-B' (Plate 2).

Topsoil and Disturbed Fill (Not Mapped)

Topsoil and disturbed fill were encountered in all the borings advanced onsite. The topsoil and disturbed fill generally consist of brown, moist, loose to medium dense silty sands with some occasional roots and rootlets. Based on the available data, the thickness of the topsoil and disturbed fill was relatively thin (approximately 2 to 3 feet). Due to the low relative densities





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1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 KILOMETER

SAN JACINTO QUADRANGLE
CONTOUR INTERVAL 40 FEET
DOTTED LINES REPRESENT 10-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

Figure Adapted from:

GEOLOGIC MAP OF THE
SAN JACINTO QUADRANGLE
RIVERSIDE COUNTY, CALIFORNIA

BY THOMAS W. DIBBLEE, JR., 2003
EDITED BY JOHN A. MINCH

GSI GeoSoils, Inc.

Figure 2

REGIONAL GEOLOGIC MAP

W.O. 9071-A-IE	DATE: 12/25	SCALE: 1"=2,000'

and potential for adverse settlements, all of the existing topsoil and disturbed fill should be removed and recompacted during site grading activities. The removed topsoil and disturbed fill may be reused for compacted fills, provided it has been cleansed of deleterious materials (e.g., weeds, grasses, and concentrations of organic matter) prior to placement onsite as engineered fill.

Quaternary-Age Alluvial Sand and Clay of Valley Areas (Map Symbol - Qa)

In general, the topsoil and disturbed fill is underlain by relatively young (Holocene- to late Pleistocene-age) alluvial deposits, described by Dibblee (2003) as alluvial sand and clay of valley areas. However, as encountered during our subsurface investigation the site soils were generally sandy with minor silt layers encountered at depth. The alluvial deposits generally consist of light brown and dark gray, grayish brown, and light gray, medium dense, silty sand and silt with a few minor sandy layers. The alluvium is generally damp to moist and locally wet to saturated. The observed alluvial deposits extend to depths beyond 60 feet, and are estimated to be hundreds of feet in thickness based on the data reviewed. The near surface alluvial deposits (upper 5 to 7 feet) should be removed and recompacted during site grading. In-place low density alluvial deposits should be removed to competent materials (e.g., greater than or equal to 105 pcf or greater than or equal to 85 percent compaction). The removed alluvial deposits may be reused for compacted fills, provided that they have been cleansed of deleterious materials prior to placement onsite as engineered fill.

GROUNDWATER

No groundwater or seepage were encountered during our field exploration in Borings B-1 through B-4 nor CPTs 1 through 4, at depths ranging between approximately 30 and 60 feet bgs. As such, groundwater is not expected to be a factor during construction of the proposed project. Based on our review of the California Department of Water Resources Water Data Library (CDWR; 2025), nearby well measurements reviewed appear to be regional groundwater measurements at depths of approximately 170 and 155 feet (State Well No. 04S01W27P005S [March 7, 1991], and Site Code No. 337748N1169760W001 [December 6, 2011], respectively) at sites with similar ground surface elevations. However, our review of historic groundwater measurements in the San Jacinto and Temecula basins (U.S. Geological Survey, 1919, Water Supply Paper 429) indicates groundwater near the center of the basin may have been as shallow as 40 feet bgs. However, in California, the legislature passed the Sustainable Groundwater Management Act (SGMA), creating a statewide framework for groundwater regulation. The Eastern Municipal Water District (EMWD), and several other water purveyors, have been actively managing the San Jacinto basin as part of a voluntary Assembly Bill 3030 effort passed in 1992. As such, it is unlikely the groundwater will reach historic levels as the basin is now adjudicated.

However, there is a potential for perched water to occur both during and following site development along zones of contrasting permeability (e.g., fill lifts, sandy and clayey bedding, or discontinuities). Sources of perched water may include infiltrated rain water, over-irrigation, or damaged underground utilities. These observations reflect site conditions at the time of our investigation and do not preclude future changes in local groundwater conditions that were not obvious at the time of our investigation.

FAULTING AND REGIONAL SEISMICITY

Our review indicates that there are no known active faults crossing this site (Jennings and Bryant, 2010), and the site is not within an Alquist-Priolo Earthquake Fault Zone (California Geological Survey [CGS], 2018). In addition, our review of the RCIT Map My County website (2025) indicates no County faults are mapped onsite and site is not located within a County fault zone. However, the site is situated in a region of active faulting, as is all of southern California. These faults include, but are not limited to: the San Andreas fault; the San Jacinto fault; and the Elsinore fault zone.

The closest known active fault is the San Jacinto fault, located at an approximate distance of 2.0 miles (3.2 kilometers) to the east-northeast. However, the nearby San Andreas fault, and design fault for the subject site, is located at an approximate distance of 17.1 miles (27.5 kilometers) to the northeast.

Portions of the San Jacinto and San Andreas faults have demonstrated movement in the Holocene Epoch (last 11,700 years); and therefore, are considered active and located within Alquist-Priolo Earthquake Fault Zones (CGS, 2018). Cao, et al. (2003) indicates that the San Andreas fault is an "A" fault with a slip rate of 24.0 ($\pm$6.0) millimeters per year, and is capable of producing a maximum magnitude (M_w) 7.5 earthquake. The location of the San Andreas and San Jacinto faults, and other major faults that could have an effect on the site in the form of moderate to strong ground motions, are shown on the Regional Fault Map (see Figure 3). In addition, the Riverside County Information Technology (RCIT) fault hazard mapping in the site vicinity is shown on the County Fault Map (see Figure 4).

Fault Activity Review (Alquist-Priolo Fault Zones)

Based on our review of available fault hazard mapping (CGS, 2025 and 2018 and RCIT, 2025) a small splay of the San Jacinto fault projects towards the subject property. This fault trace is described as the "Casa Loma" segment of the San Jacinto fault zone.

Our fault activity review included reviews of previous fault-finding and geotechnical investigations by Gary S. Rasmussen & Associates (GR&A, 1986, County Geo. No. 409), Lewis S. Lohr & Associates (LSL&A, 1991, County Geo. No. 790) and by Leighton & Associates (L&A, 2003, County Geo. No. 1189). These previous investigations, just northwest of the site, found no evidence of offsets or active faulting within the trench exposures evaluated. As such, it appears the small fault splay dies-out before reaching the

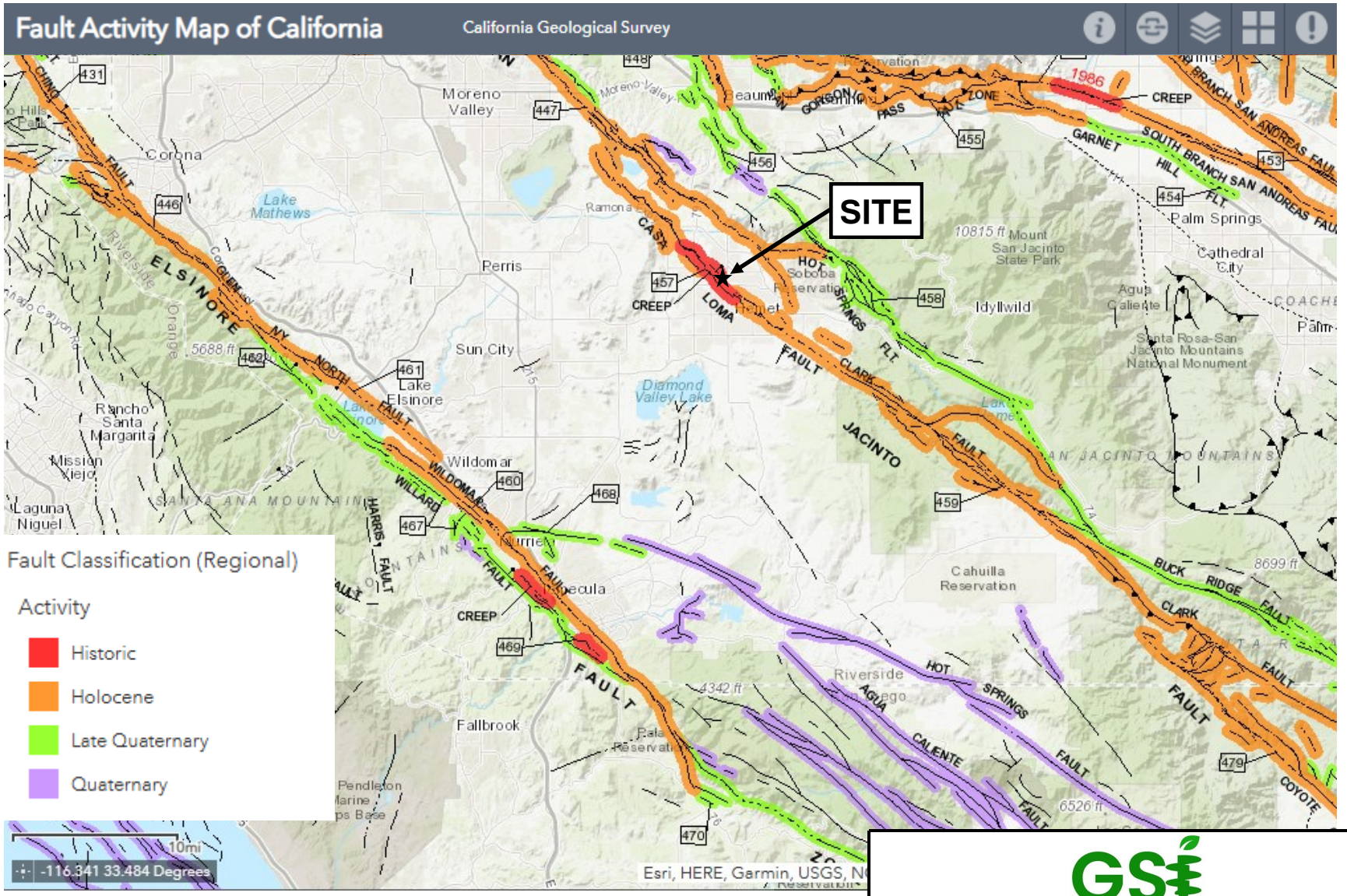

Figure Adapted from: Fault Activity Map of California, by the California Geological Survey, 2025

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Figure 3

REGIONAL FAULT MAP

W.O. 9071-A-IE	DATE: 12/25	SCALE: See Bar Scale

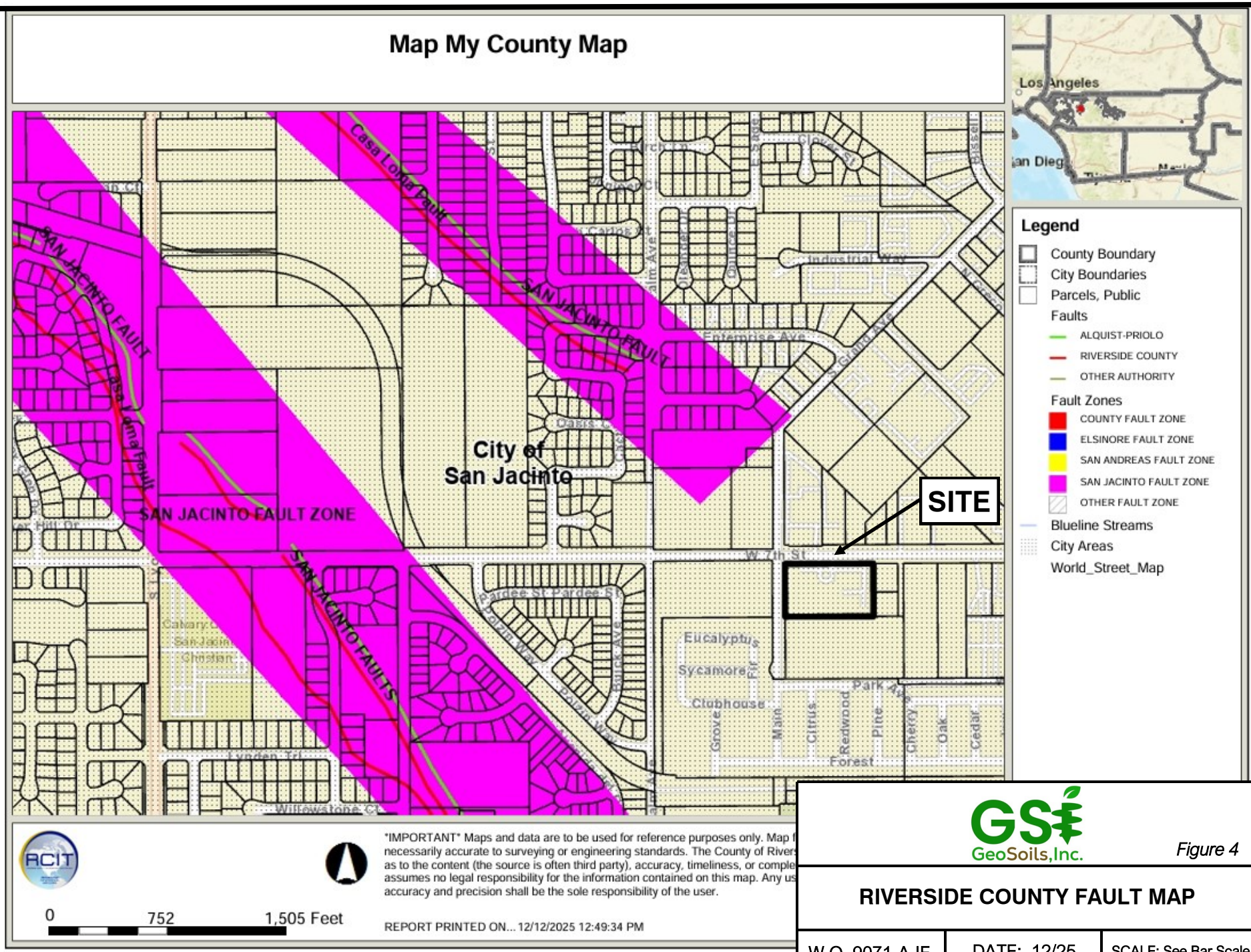

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Figure 4

RIVERSIDE COUNTY FAULT MAP

W.O. 9071-A-IE	DATE: 12/25	SCALE: See Bar Scale

Figure Adapted from: Riverside County Information Technology (RCIT), Map My County Website, 2025

site proximity. A map showing the Alquist-Priolo earthquake zones of required investigation (CGS, 2025) is provided on Figure 5. A map showing the nearby Alquist-Priolo site investigation reports reviewed (GR&A, 1986, LSL&A, 1991, and L&A, 2003) is provided on Figure 6.

Aerial-photographic Lineament Analysis

In order to identify possible unmapped faults and to evaluate topographic expressions of published fault traces in the proximity, a lineament analysis was performed using stereoscopic black-and-white aerial photographs (United States Department of Agriculture [USDA], 1980). Lineaments were generally classified as strong, moderate, or weak. A strong lineament is a well-defined feature that can be continuously traced several hundred feet to a few thousand feet. A moderate lineament is less well-defined, somewhat discontinuous, and can be traced for only a few hundred feet. A weak lineament is discontinuous, poorly defined, and can be traced for a few hundred feet or less. Based on our review and analysis, a moderate photolineament was noted west- northwest of the site, and correlates well with the mapped location of the Casa Loma segment of the San Jacinto fault zone. No lineaments specifically cross or project toward the project site. Furthermore, the site is not transected by geomorphic features indicative of active faulting.

Regional Seismicity

General

The subject site is located within a seismically active region, subject to moderate to strong earthquakes occurring along many active fault splays. The possibility of ground motions at the site, may be considered as approximately similar to the southern California region as a whole.

Historical Site Earthquake Records

Historical site seismicity was evaluated with the USGS website application "Search Earthquake Catalog" (https://earthquake.usgs.gov/earthquakes/search/). This program performs a search of the historical earthquake records for magnitude 5.0 to greater than 7.0 seismic events within a search area, between the years of January, 1800 through December, 2025. A historical earthquake epicenter map is generated from the historical data, and is presented on Figure 7. Our research of regional geologic and seismic data did not reveal any known instances of ground failure within the site associated with regional seismic activity.

Seismic Ground Motion Values

Using a latitude of 33.77956 degrees and a longitude of -116.97718, a Risk Category of III (provided by the architect) and based on the site conditions, the following table summarizes the design criteria obtained from the 2022 CBC, Chapter 16 Structural Design, Section 1613, Earthquake Loads. The ASCE Hazard Tool (ASCE Hazard Tool) has been used to aid in

Department of Conservation
California Geological Survey

Earthquake Zones of Required Investigation

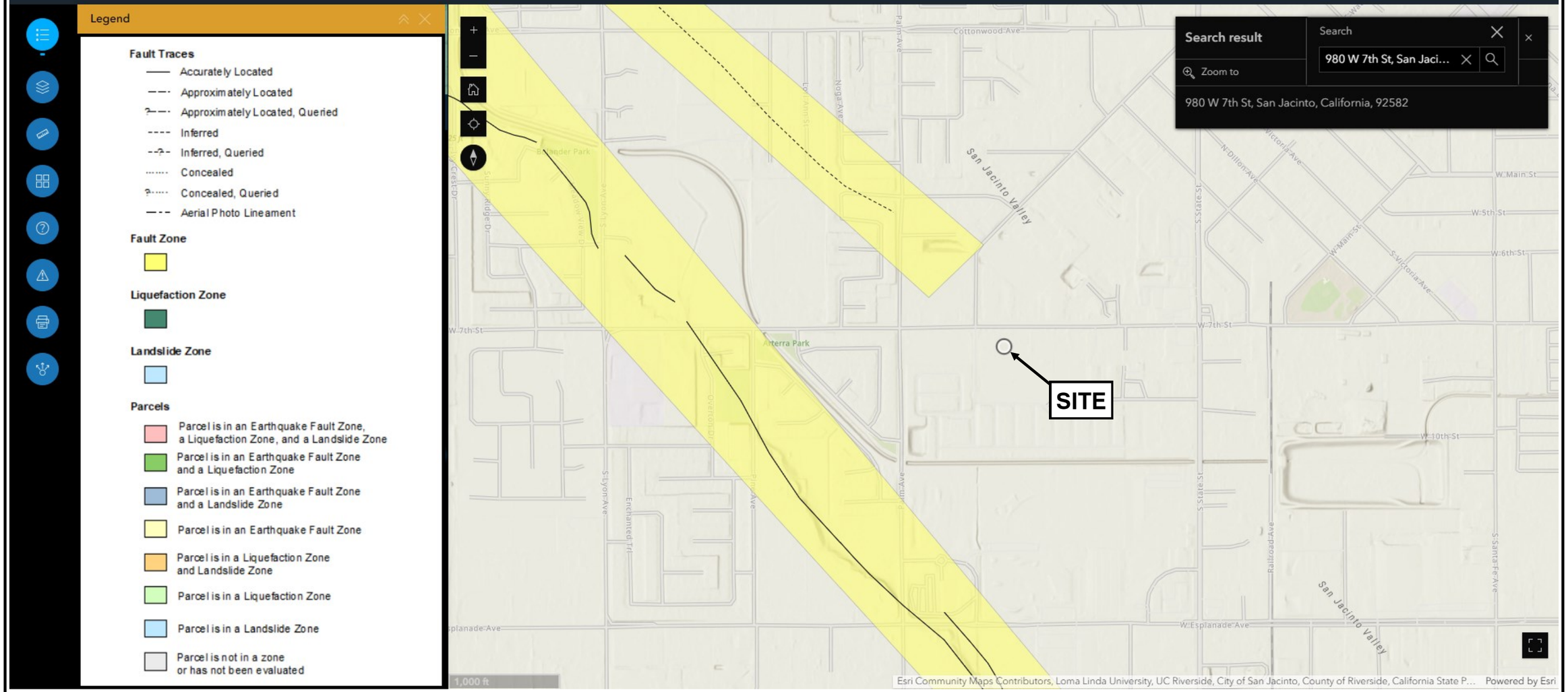

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Figure 5

ALQUIST-PRIOLO - EARTHQUAKE ZONES OF REQUIRED INVESTIGATION

W.O. 9071-A-IE	DATE: 12/25	SCALE: See Bar Scale

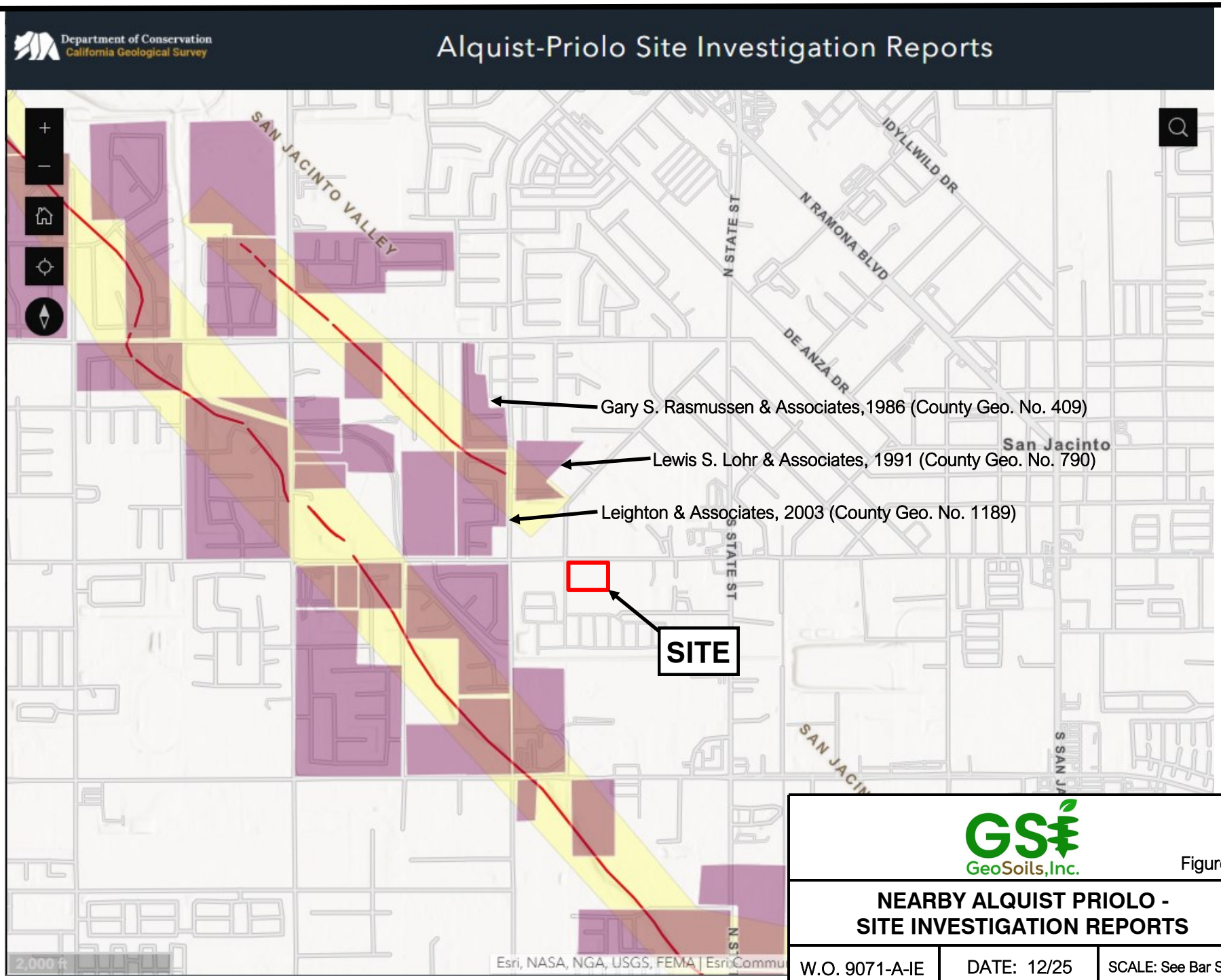

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Figure 6

NEARBY ALQUIST PRIOLO - SITE INVESTIGATION REPORTS

W.O. 9071-A-IE	DATE: 12/25	SCALE: See Bar Scale

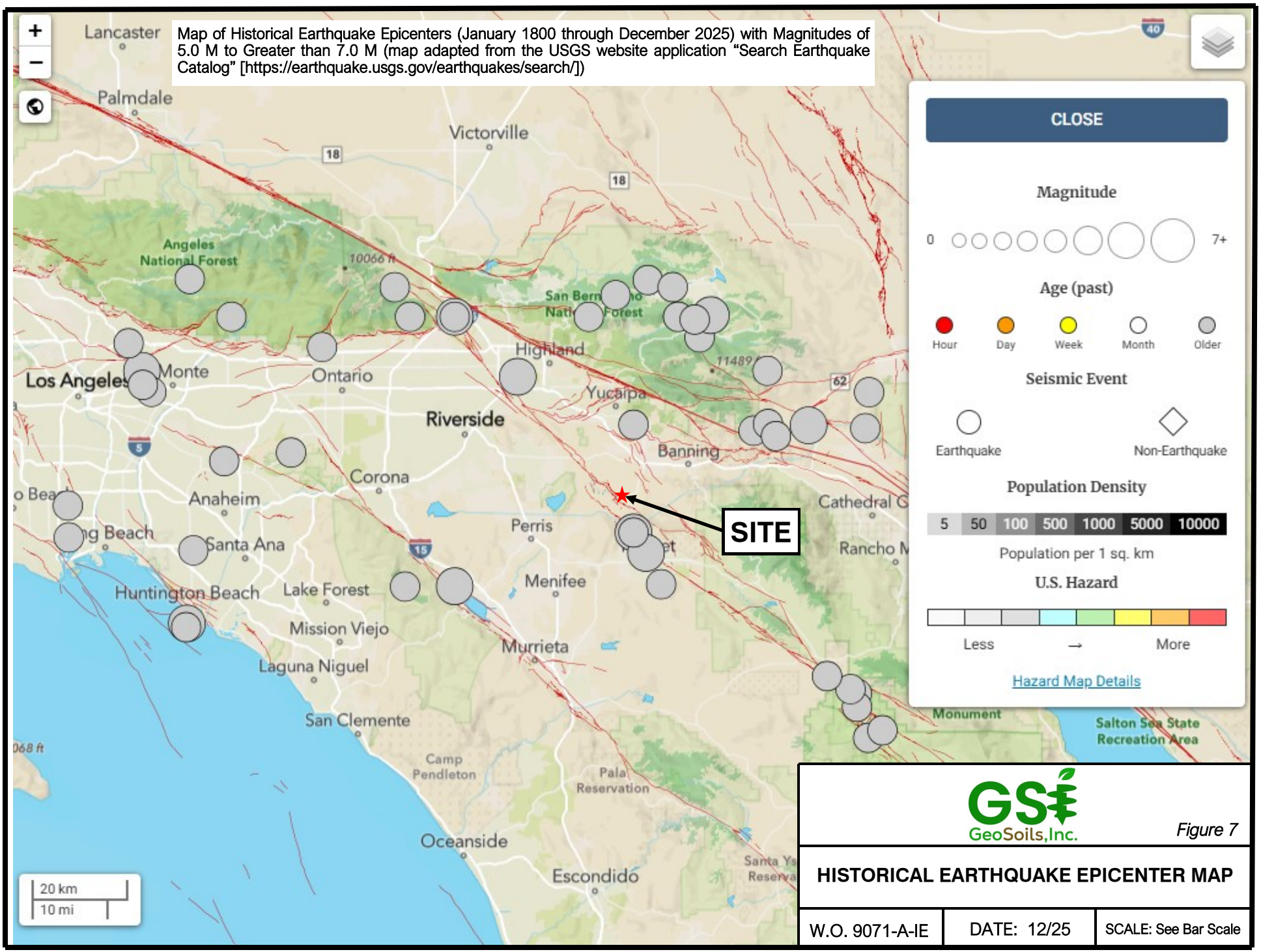

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Figure 7

HISTORICAL EARTHQUAKE EPICENTER MAP

W.O. 9071-A-IE	DATE: 12/25	SCALE: See Bar Scale

design. As the site is potentially liquefiable, the site may be classified as Site Class F. However, as we assume that the fundamental period of the proposed structure is less than 0.5 seconds, the site is classified as D (Appendix C). Since site class is D, a site-specific procedure would be required, but it is not performed as we follow the Exception of Section 11.4.8.1, ASCE 7-16, Supplement 3. A printout of the ASCE Design Hazards Report is presented in Appendix C.

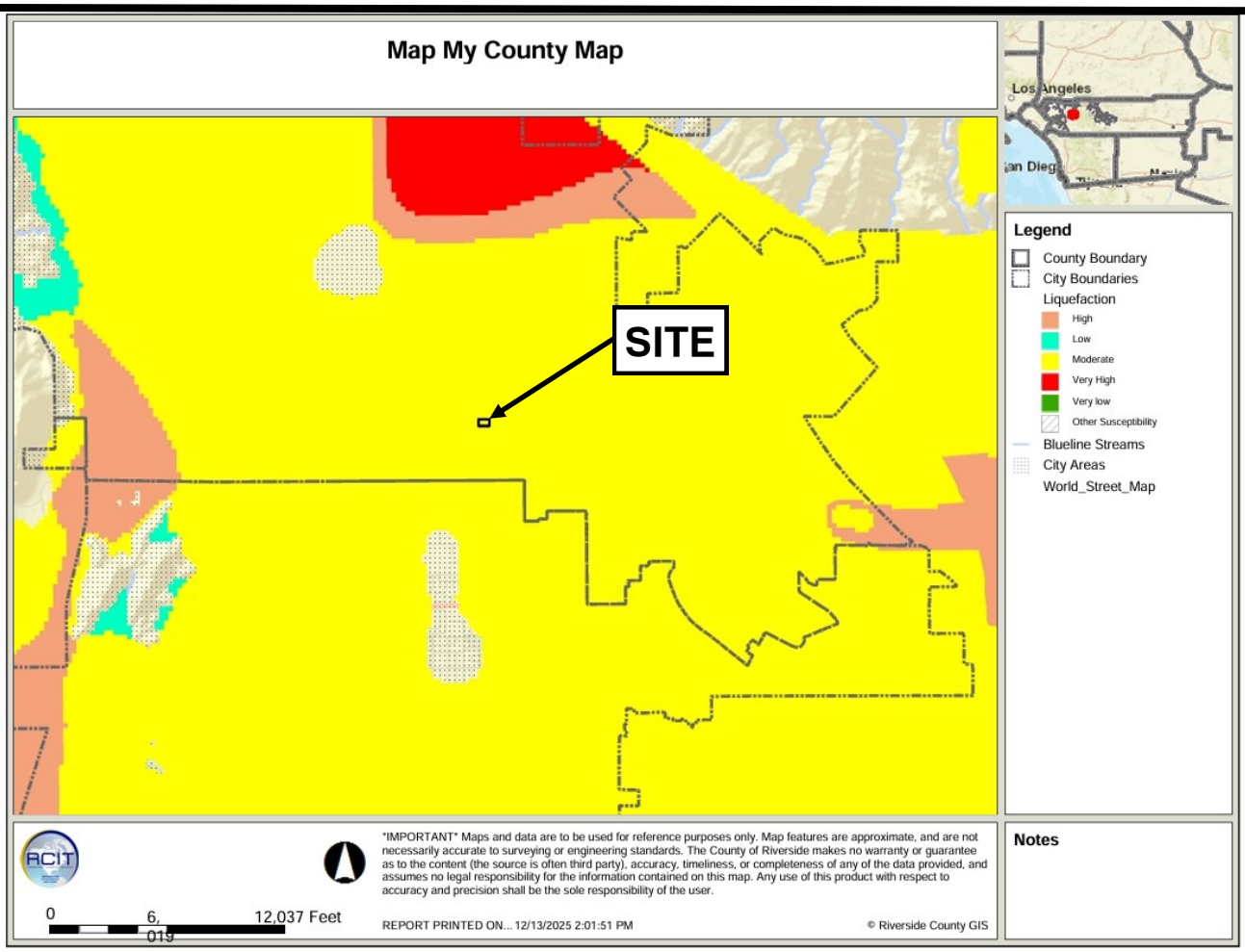
2022 CBC SEISMIC GROUND MOTIONS		
PARAMETER	VALUE	2022 CBC OR REFERENCE
Risk Category	III	Table 1604.5
Site Class	D	Chapter 20, ASCE 7-16
MCE_R spectral acceleration - (0.2 sec), S_s	2.161 g	Section 1613.2.1
MCE_R spectral acceleration - (1.0 sec), S_1	0.875 g	Section 1613.2.1
Site Coefficient, F_a	1.0	ASCE 7-16, Supplement 3
Site Coefficient, F_v	1.7	ASCE 7-16, Supplement 3
MCE_R spectral acceleration (0.2 sec), S_{MS}	2.161 g	Section 1613.2.3
MCE_R spectral acceleration (1.0 sec), S_{M1}	2.231 g	ASCE 7-16, Supplement 3
Design spectral acceleration (0.2 sec), S_{DS}	1.441 g	Section 1613.2.4
Design spectral acceleration (1.0 sec), S_{D1}	1.488 g	ASCE 7-16, Supplement 3
PGA_M	1.074 g	ASCE 7-16, Section 11.8.3
Seismic Design Category	E	Section 1613.2.5

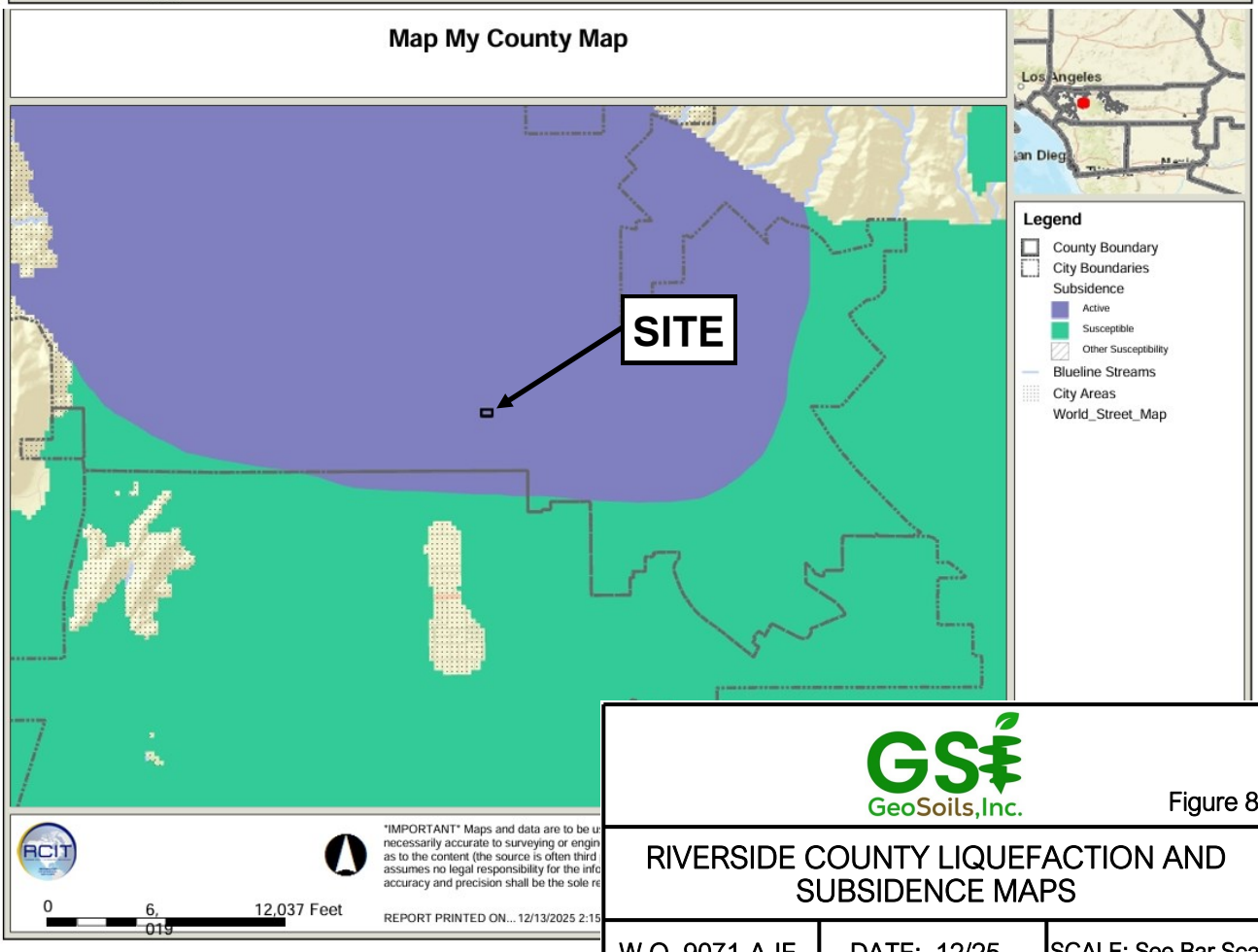
Conformance to the criteria above for seismic design does not constitute any kind of guarantee or assurance that significant structural damage or ground failure will not occur in the event of a large earthquake. The primary goal of seismic design is to protect life, not to eliminate all damage, since such design may be economically prohibitive. Cumulative effects of seismic events are not addressed in the 2022 CBC (CBSC, 2022) and regular maintenance and repair following locally significant seismic events will likely be necessary, as is the case in all southern California.

LIQUEFACTION POTENTIAL

General

Based on our review, the CGS has not prepared Seismic Hazard Mapping for the San Jacinto Quadrangle. However, our review of the RCIT (2025) Map My County website indicates the site is mapped within an area designated as having a "moderate" potential for liquefaction (RCIT, 2025 [see Figure 8, Riverside County Liquefaction and Subsidence Maps]). As such, liquefaction and seismic settlement analyses were conducted, and are discussed below.





GeoSoils, Inc.

Figure 8

RIVERSIDE COUNTY LIQUEFACTION AND SUBSIDENCE MAPS

W.O. 9071-A-IE	DATE: 12/25	SCALE: See Bar Scale

Figures Adapted from: Riverside County Information Technology (RCIT), Map My County Website, 2025

Liquefaction

Liquefaction is a phenomenon where earthquake- induced ground motions increase the pore pressure in saturated, sand-like soils until it is equal to the overburden pressure. When this occurs, the soil can completely lose its shear strength and enter a liquefied state. The possibility of liquefaction is dependent upon grain size, relative density, fines consistency, confining pressure, saturation of the soils, and intensity and duration of seismic ground motions. In order for liquefaction to occur, three criteria must be met: underlying loose, sand-like soils, a groundwater depth of less than about 50 feet, and a potential for seismic ground motions from nearby large-magnitude earthquakes.

Following a review of the subsurface borings, CPT data and laboratory testing, the CPT data was evaluated for liquefaction potential within the site. For the analyses, GSI used a groundwater depth of 40 feet below the existing grade to account for potential historic groundwater levels, although unlikely, at the time of the seismic event for the currently planned development.

The liquefaction analysis was performed, based on the CPT data obtained (CPT-1 through CPT-4) and was conducted using the commercially available CPT liquefaction assessment software, CLiq v.3.5.4.2 (Geologismiki, 2025). We used the soil information from the CPT data, and seismic parameters PGA_M = 1.074g and magnitude M= 8.1 earthquake. This magnitude was calculated from deaggregation analysis using the USGS Tool interactive website (Appendix C). Calculations of liquefaction potential indicate that sandy layers below the ground water table could be potentially liquefiable. No bearing capacity failure, sand boils, or lateral spreading are anticipated, based on the available data. Computer printouts from the analysis are presented in Appendix E.

Seismic Densification

Seismic densification is a phenomenon that typically occurs in low relative density granular soils (e.g., USCS classified as SP, SW, and SM) that are above the groundwater table and are significantly dry of optimum moisture content. During the seismic-induced ground shaking, these natural sediments deform under loading and volumetrically strain, resulting in ground surface settlements. These unsaturated granular soils are susceptible if left in their original density (unmitigated), and are significantly drier than the optimum water content (as defined by the ASTM D 1557). Seismic densification phenomenon has a low, to perhaps moderate potential to affect planned site improvements; however, will be mitigated by recommended remedial grading and appropriate foundation design. Calculations of seismically induced settlements are presented in Appendix E.

We estimate approximately 3-inch of total seismically induced ground settlement may occur at the site. The seismic total settlements at each of the CPT locations, including dry (above GWT) and wet (below GWT) are presented in the Table below.

CPT No.	Dry settlement (in)	Wet settlement (in)	Total Settlement (in)
1	0.62	1.12	1.74
2	1.05	1	2.05
3	3.14	1.21	4.35
4	3.16	0.75	3.91
		Average =	3.01

The differential settlements were calculated using the total settlement at each CPT location and the horizontal distances between them. The angular distortions (Δ/L) are consistent with ASCE 7-16, Chapter 12.13.9. These calculations are presented in the Table below.

CPT No.		Differential Settlement, Δ (in.)	Distance, L (ft)	Δ/L
1	2	0.31	50	0.001
1	3	2.61	87	0.003
1	4	2.17	119	0.002
2	3	2.3	109	0.002
2	4	1.86	152	0.001
3	4	0.44	55	0.001

Lateral Spreading

Lateral spread phenomenon is described as the lateral movement of stiff, surficial, mostly intact blocks of sediment or compacted fill displaced downslope towards a free face along a shear zone that has formed within the liquefied sediment. The resulting ground deformation typically has extensional fissures at the head of the failure, shear deformations along the side margins, and compression or buckling of the soil at the toe. Given, the location and flat laying nature of the site, the potential for lateral spreading to directly affect the site is considered low, based on the available data.

SUBSIDENCE POTENTIAL

Subsidence and Ground Fissures

Our review of the RCIT (2025) Map My County website indicates the site is located in a zone of "Active" subsidence (RCIT, 2025 [see Figure 8, Riverside County Liquefaction and Subsidence Maps]). The effects of areal subsidence and ground fissures generally occur at the transition or boundaries between low-lying areas and adjacent hillside terrain, where materials of substantially different engineering properties (e.g., alluvium vs. bedrock) are present.

Subsidence and ground fissures may also occur due to groundwater or fluid withdrawal and regional tectonics. Documented subsidence within the basin roughly corresponds to the limits of the bounding Casa Loma and San Jacinto fault zones (Lofgren, 1976). There is historical evidence that subsidence has occurred within the San Jacinto basin and the site area, including as much as 0.26 feet (Lofgren, 1976), occurring north of the site during the period of 1964 to 1973. Thus, the subsidence has been attributed to withdrawal of groundwater and regional tectonics along bounding fault zones. However, subsidence has eased appreciably, as a result of the groundwater basin being adjudicated.

The most significant ground fissures are located in the northwestern part of the valley adjacent to and immediately west of the Casa Loma fault, north and northwest of Lakeview (Morton, 1994). Ground fissures in the immediate site vicinity have not been documented.

As such, subsidence and ground fissures at the subject site due to groundwater withdrawal and regional tectonics should be no greater than other nearby already developed areas. As discussed previously, California regulations have been enacted by the Sustainable Groundwater Management Act (SGMA) to mitigate the subsidence potential from the withdraw of groundwater. Provided the SGMA guidelines are properly implemented, the potential for areal subsidence or ground fissures from subsidence owing to groundwater withdrawal, is considered low, but may not be entirely precluded.

OTHER SECONDARY SEISMIC HAZARDS

The following list includes other secondary seismic related hazards that have been considered during our evaluation of the site. The hazards listed are considered negligible or mitigated as a result of site location, soil characteristics, and typical site development procedures indicated herein:

- Lateral spreads
- Ground Lurching or Shallow Ground Rupture
- Tsunami
- Seiche and Dam Inundation

Following implementation of remedial earthwork and design of foundations described herein, this potential would be no greater than that for other existing structures and improvements in the immediate vicinity that comply with current and adopted building standards. Other geologic hazard considerations are addressed below.

Other Geologic Hazard Considerations

The California Geological Survey Note 48 (2022) identifies a number of exceptional geologic hazards that can occur at individual sites, but do not occur statewide. An evaluation of these exceptional conditions is referred to as a Conditional Geologic Assessment by Note 48. Specific assessment items listed in Note 48 are addressed in the table below.

Conditional Geologic Assessment

HAZARD	ASSESSMENT	REFERENCE
Methane Gas, Hydrogen-Sulfide Gas, or Tar Seeps	Not applicable, site is not located with an identified oil field.	California Geological Energy Management Division (CalGEM) Well Finder Program, and DOGGR Online Mapping System (DOMS, 2025).
Volcanic Eruption	Not applicable, site is not in a known hazard area for volcanic eruptions.	U.S. Geological Survey Bulletin 1847 and Geologic mapping by Dibblee (2003).
Flooding and Dam Inundation	The proposed project is located within FEMA Flood Zone X, not located within a County Flood zone, and not located within a dam inundation area.	FEMA Flood Maps, Map My County Website, and Division of Safety of Dams (DSOD).
Tsunami and Seiche Inundation	Not Applicable	See above Sections.
Radon-222 Gas	Not Applicable, typically a concern in the California Coast Ranges.	California Radon Survey (1990) and Nagda (1994).
Naturally Occurring Asbestos	Not Applicable, site is not within an area more likely to contain naturally occurring asbestos.	Churchill and Hill, 2000 (Open-File Report OFR-2000-19)
Hydrocollapse Due to Anthropic Use of Water	Drilling, CPT, and groundwater data indicate that soils are not likely to experience hydrocollapse.	See Groundwater Section.
Regional Subsidence	Our review of Lofgren (1976) and the Map My County Website indicates the site is located within an “Active” zone of subsidence.	Lofgren (1976) and Map My County Website. See above Sections.
Clays and Cyclic Softening	Soils underlying the site are predominately granular. No plastic clays encountered onsite.	See Appendix B and below sections.

LABORATORY TESTING

General

Laboratory testing was performed on representative onsite earth materials in order to evaluate their physical characteristics. The test procedures used and laboratory results obtained are presented below.

Classification

Soils were classified visually according to the Unified Soils Classification System (per ASTM D 2488). The soil classifications are shown on the Boring Logs in Appendix B.

Moisture-Density Relations

The field moisture contents and dry unit weights were measured for relatively undisturbed samples in the laboratory in general accordance with ASTM D 2937 and ASTM D 2216. The dry unit weight was calculated in pounds per cubic foot (pcf), and the field moisture content was calculated as a percentage of the dry unit weight. The results of these tests are indicated on the Boring Logs in Appendix B.

Laboratory Standard

The maximum dry density and optimum moisture content were evaluated for a representative bulk sample of the near-surface soil. The laboratory standard used was ASTM D 1557. The moisture-density relationship obtained for this soil is shown below:

SAMPLE LOCATION AND DEPTH (FT)	SOIL TYPE	MAXIMUM DRY DENSITY (PCF)	OPTIMUM MOISTURE CONTENT (%)
B-2 @ 0-5'	Silty Sand (SM)	113.6	13.1

Expansion Potential

A representative bulk sample of the near-surface soil was evaluated for expansion potential. The Expansion Index (E.I.) test was performed in accordance with ASTM Standard D 4829. The results of the expansion testing are presented in the following table.

SAMPLE LOCATION AND DEPTH (FT)	LABORATORY EXPANSION INDEX (E.I.)	EXPANSION POTENTIAL*
B-1 @ 0-5'	7	Very Low

Direct Shear Tests

Shear testing was performed on relatively undisturbed samples of site soil encountered in the borings. Shear tests were performed in general accordance with ASTM Test Method D 3080 in a Direct Shear Machine of the strain control type. The shear test results are presented in Appendix D, and summarized in the following table:

SAMPLE LOCATION AND DEPTH (FT)	PEAK		RESIDUAL	
	COHESION (PSF)	FRICTION ANGLE (DEGREES)	COHESION (PSF)	FRICTION ANGLE (DEGREES)
B-1 @ 7.5 (undisturbed)	38	36	22	33
B-4 @ 15 (undisturbed)	224	37	87	34

Saturated Resistivity, pH, and Soluble Sulfates

GSI conducted sampling of onsite earth materials for general soil corrosivity testing. The testing included evaluation of soil pH, soluble sulfates, soluble chlorides, and saturated resistivity. These preliminary data should be used by the project structural engineer (or corrosion engineer) in their evaluation of site corrosivity mitigation measures. The soluble sulfate and corrosion potential results are shown as follows, and are presented in Appendix D:

LOCATION AND DEPTH (FT)	SOLUBLE SULFATES PERCENTAGE BY WEIGHT	pH	CHLORIDE (mg/kg)	RESITIVITY (OHMS-CM)
B-1 @ 0-5	0.005	8.0	21	3,500

For preliminary planning purposes, and based upon the soluble sulfate test results and the American Concrete Institute (ACI, 2014), the soluble sulfate content is listed as Exposure Class “S0” (<0.10 Water-Soluble Sulfate in soil, percentage by weight), per the ACI, 2014 (Table 19.3.1.1). Based on the results of the resistivity and pH testing, the onsite soils are

generally considered moderately alkaline (a pH of 7.9 to 8.4 is considered moderately alkaline), and are considered moderately corrosive to ferrous metals in a saturated state (2,000 to 10,000 ohm-cm is considered moderately corrosive). Chlorides are generally low and below action levels.

Although the site soils are categorized as being moderately corrosive to ferrous metals in a saturated state, it is our understanding that ferrous metals embedded in properly poured and formed concrete with the proper mix should be adequately protected from these conditions. As stated above, the soluble sulfate content is listed as Exposure Class "S0" (ACI, 2014). However, reinforced concrete mix design for foundations, slab-on-grade floors, and pavements should also conform to Exposure Classes "S0," "W0," and "C1" in Table 19.3.1.1 of ACI 318-14, as concrete would likely be exposed to moisture. Based upon the laboratory test results obtained, a consulting corrosion engineer may be retained to provide specific recommendations for foundations, utility piping, or other subsurface structures, as warranted.

Resistance Value (R-Value)

Resistance value, or R-Value testing, was performed on a representative soil sample in accordance with CalTrans Test Method 301, and yielded a test result of R=31. The results of R-Value testing are presented in Appendix D. Based on the testing results obtained, preliminary pavement design recommendations are presented herein.

Conformance Testing for Expansion, Corrosion and Concrete Mix Design

Upon completion of grading, additional laboratory testing should be performed on representative samples of soil exposed near pad grade to evaluate its corrosive effects on concrete and steel, and expansion characteristics. Additional comments may be obtained from a qualified corrosion engineer at that time based on the level of corrosion protection required by the project architect, structural engineer, or civil engineer. It is assumed that the need for corrosion protection of steel reinforcement will be further evaluated by the project structural engineer or project architect.

PRELIMINARY CONCLUSIONS AND RECOMMENDATIONS

General

Based on our review of the existing body of near-site geotechnical data, and our field exploration, laboratory testing, and geotechnical engineering analysis, it is our opinion that the project site appears suitable to receive the proposed development from a geotechnical engineering and geologic viewpoint, provided that the recommendations presented in the following sections are incorporated into the design and construction phases of site development. The primary geotechnical concerns with respect to the proposed development are:

1. The presence of existing near-surface topsoil and disturbed fills, and the presence of underlying near-surface loose to medium dense sandy to silty young alluvial deposits.

2. The static and seismic settlement potential of underlying alluvial soils.

3. The depth to competent bearing material below existing grades.

4. The corrosion potential of onsite soils.

5. Regional seismic activity.

The recommendations presented herein consider these as well as other aspects of the site. The engineering analyses, performed, concerning site preparation and the recommendations presented herein have been completed using the information provided and obtained during our field work. In the event that any significant changes are made to proposed site development, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and the recommendations of this report are evaluated or modified in writing by this office. Foundation design parameters are considered preliminary until the foundation design, layout, and structural loads are provided to this office for review.

1. Owing to the presence of potentially compressible existing topsoil and disturbed fill, and near-surface alluvial deposits there will be a potential for distress to settlement-sensitive improvements, absent mitigation. Thus, the near-surface layers of existing topsoil and disturbed fill, and near-surface alluvial deposits should be removed and recompacted to current industry standards and Code as recommended herein within the building footprint. Remedial removals should be conducted to approximately 5 to 7 feet below existing grades. Proposed parking areas and fire access lanes should be graded and recompacted within the upper 2 feet of the existing finish surface.

2. Geotechnical engineering, observation, and testing services should be provided by GSI during grading to aid the contractor in removing unsuitable soils and in their effort to compact the fill. Geologic observations should also be performed during grading to observe and further evaluate site geologic conditions. Although unlikely, if adverse geologic features are encountered, supplemental recommendations and earthwork may be warranted.

3. The near-surface existing topsoil and disturbed fill, and near-surface alluvial deposits (Qa) is considered potentially compressible; and therefore, unsuitable for the support of settlement-sensitive improvements in its present condition, based on current industry standards. In order to reduce the effects of settlement, remedial earthwork should be performed within the areas of proposed development. Remedial grading should be performed to at least 5 feet outside the proposed building footprint, where

feasible. Removals on the order of 2 feet are recommended for other areas supporting settlement-sensitive improvements (e.g., parking lot and fire access lane).

4. Our expansion index test indicates very low expansive soils underlie the site in the near-surface. Preliminary foundation design and construction recommendations are provided herein for these soil conditions.

5. Building foundations will need to be designed to tolerate the soil conditions, and the potential settlements discussed herein. Based on the potential for seismic settlement, the use of a conventional foundation system (e.g., shallow spread and continuous footings) does not appear practical for the proposed building. As such, recommendations for building foundations, including mat slabs, are provided herein.

6. The seismic ground motion values provided herein should be considered during the design and construction of the proposed development.

7. General Earthwork and Grading Guidelines are provided at the end of this report as Appendix F. Specific recommendations are provided in the following sections.

EARTHWORK CONSTRUCTION RECOMMENDATIONS

General

All earthwork should conform to the guidelines presented in the 2022 CBC (CBSC, 2022), the requirements of the City of San Jacinto or County of Riverside, and the General Earthwork and Grading Guidelines presented in Appendix F, except where specifically superseded in the text of this report. Prior to earthwork, a GSI representative should be present at the preconstruction meeting to provide additional earthwork guidelines, if needed, and review the earthwork schedule. GSI should be notified in advance of any fill placement, supplemental regrading of the site, or backfilling underground utility trenches and retaining walls after rough earthwork has been completed. This includes grading for driveway approaches, driveways, and exterior hardscape.

During earthwork construction, all site preparation and the general grading procedures of the contractor should be observed and the fill selectively tested by a representative(s) of GSI. If unusual or unexpected conditions are exposed in the field, they should be reviewed by GSI and, if warranted, modified or additional recommendations will be offered. All applicable requirements of local and national construction and general industry safety orders, the Occupational Safety and Health Act (OSHA), and the Construction Safety Act should be met. It is the onsite general contractor's and individual subcontractors' responsibility to provide a safe working environment for our field staff who are onsite. GSI does not consult in the area of safety engineering.

Site Preparation

All existing improvements (e.g., underground utilities or foundations, if present), vegetation and deleterious debris should be removed from the site prior to the start of construction.

Treatment of Existing Ground

1. Removal of all topsoil and disturbed fill, and near surface weathered alluvial deposits will be necessary prior to fill placement, in areas proposed for settlement-sensitive improvements. The near surface deposits should be removed to competent materials (e.g., greater than or equal to 85 percent compaction, or greater than or equal to 105 pcf for in-place native materials, as evaluated by a GSI representative), if not removed by proposed excavation within areas proposed for settlement-sensitive improvements. For preliminary planning purposes, these depths are estimated to be on the order of 5 to 7 feet across the majority of the site. Variations from these thicknesses should be anticipated. A minimum of 3 feet of 90 percent compaction fill should underlie the proposed foundation. The foundation area shall be defined as the area extending from the edge of the mat for a distance of 5 feet. Actual depths of removals will be evaluated in the field during grading by GSI.

2. After the above removals, the upper 6 inches of the exposed subsoils should be scarified, brought to at least optimum moisture content, and recompacted to a minimum relative compaction of 90 percent of the laboratory standard

3. The existing onsite soils may be reused as compacted fill provided that any significant concentrations of vegetation and miscellaneous trash and debris are removed prior to or during fill placement.

4. Localized deeper removal may be necessary due to buried drainage channel meanders or dry porous materials. The project geotechnical consultant or geologist should observe all removal areas during the grading.

Fill Placement

1. Fill materials should be cleansed of major vegetation and debris prior to placement.

2. Fill materials should be brought to at least optimum moisture, placed in thin 6- to 8-inch lifts and mechanically compacted to obtain a minimum relative compaction of 90 percent of the laboratory standard (ASTM D 1557).

3. Any import materials should be observed and evaluated suitable by GSI prior to placement on the site. Foundation designs may be altered if import materials have a greater sulfate or expansion values than the onsite materials encountered during our preliminary investigation.

Temporary Slopes

Temporary slopes may be constructed at a gradient of 1:1 (h:v) of flatter (Cal-OSHA Type "B" soil), up to 15 feet in height, provided no seepage, groundwater, or running sands are encountered, and no equipment or stockpiles are located within a distance of "H" from the top of the temporary slope, where "H" is the height of the slope. All temporary slopes should be observed by GSI prior to the entry of unprotected workers, as needed. Although not anticipated, should any adverse conditions be exposed, temporary slopes may need to be inclined to flatter gradients or receive shoring. Shored excavations would be recommended if property lines or existing improvements that need to remain in serviceable use do not allow for the temporary slope gradient recommended herein.

Slot-Cut Grading

Due to the necessity for completing removals immediately adjacent to existing foundations that will remain in place, remedial earthwork adjacent to the existing health care facility may need to use "alternating slot" excavation methodology, also referred to as the "A-B-C" slot-cutting method, so that the existing foundation system is not adversely undermined and exposed to an elevated potential for distress. On a preliminary basis, slot widths should not exceed 5 to 6 linear feet. Consultation with the structural engineer is recommended prior to implementing slot excavations near the existing structure, that are above a 1:1 (h:v) projection from the outboard limits of remedial grading excavations. The structural engineer should evaluate if the recommended width of the slots will adversely affect bearing support of the existing improvements. The width of the slots may need to be reduced based on the results of the structural engineer's evaluation. Pre-construction surveys and survey monitoring should be performed in conjunction with site grading and shoring (if used), as necessary. If considered necessary, recommendations for temporary shoring are provided below.

TEMPORARY SHORING RECOMMENDATIONS

If needed, based on the anticipated remedial grading, the following temporary shoring recommendations are provided.

Lateral Earth Pressures for Temporary Shoring Design

1. Pressure diagrams showing the recommended application of active and passive earth pressures, and uniform and live load surcharges on temporary shoring systems are illustrated in Figure 9.

2. The active pressure to be used for temporary shoring design may be computed by the triangular pressure distribution shown in Figure 9.

3. Passive pressure for the design of temporary shoring may be computed as an equivalent fluid as shown in Figure 9.

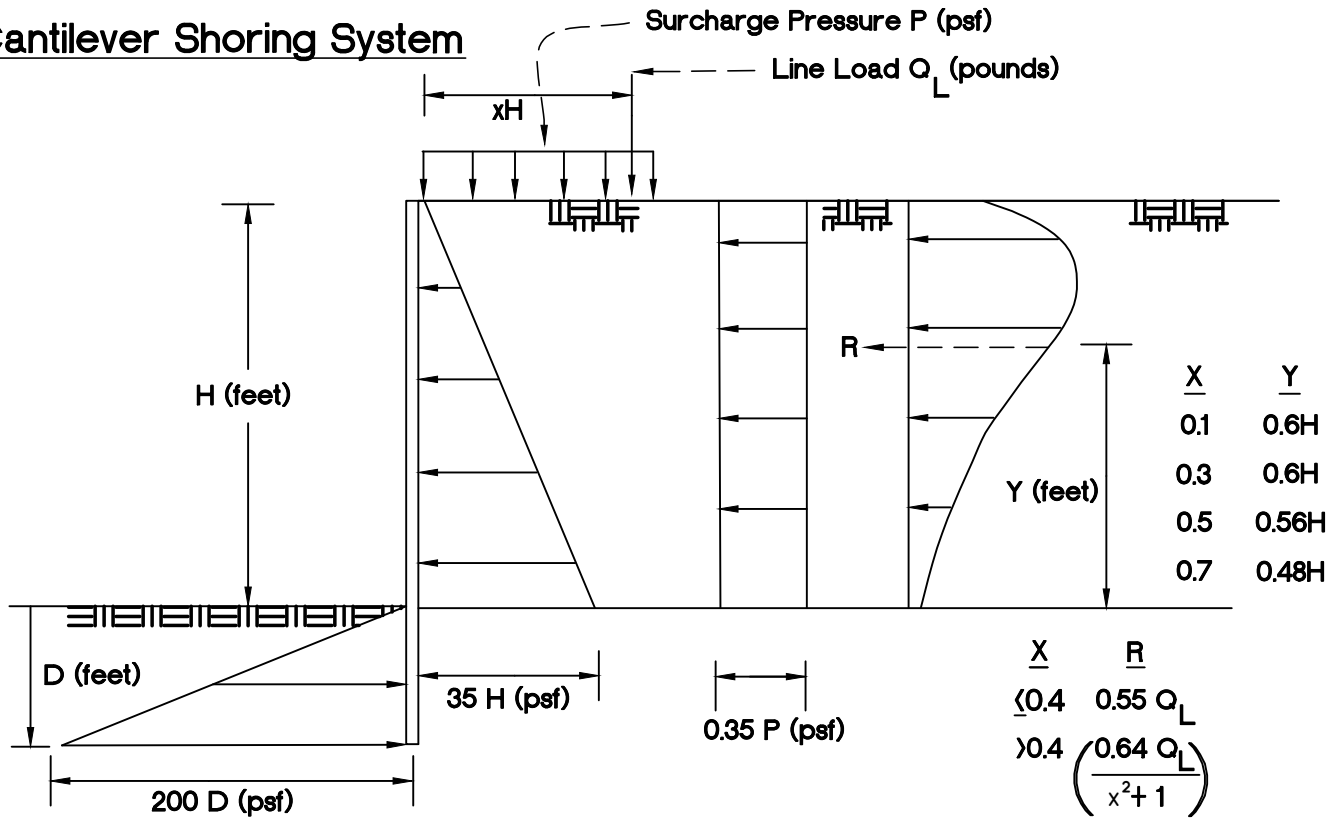
4. The above criteria assume the absence of soils with an E.I. > 20 behind the shoring and that hydrostatic pressure is not allowed to accumulate behind the shoring.

5. These recommendations are for a temporary shoring system with retained soil heights up to approximately 15 feet. Restraining elements, bracing, or the use of walers or rakers would likely be necessary for shoring of greater heights. The use of lateral resisting elements such as tiebacks or soil nails may be infeasible.

6. An empirical equivalent fluid pressure approach may be used to compute the horizontal pressure against the shoring. Appropriate fluid unit weights are provided for specific slope gradients of the retained material (see Figure 9). These do not include other superimposed loading imparted by traffic, structures, earthquakes, or adverse geologic conditions. Traffic surcharge for shoring should be modeled as a minimum 100 psf/ft load for light passenger vehicle traffic and at least 300 psf/ft for heavy (HS20) axle loads in the upper 5 feet of the shoring. These surcharges would apply if traffic will occur within "H" of the back of the shoring (where "H" equals the height of the retained earth). It is not recommended to allow sloping surcharge (other than level backfill) within a distance of "H" behind the shoring system from either stockpiled soils, stockpiled building materials, or temporary or permanent graded slopes, where "H" equals the height of the retained earth. Steeper slope gradients (more than level) will increase the equivalent fluid pressure for shoring design, significantly, and increase shoring costs. Regrading, if possible, is recommended prior to shoring installation to reduce the potential for sloping surcharge.

7. The shoring system should be designed such that the maximum lateral deformation at the top or bottom of the soldier pile does not exceed the value recommended by the shoring designer.

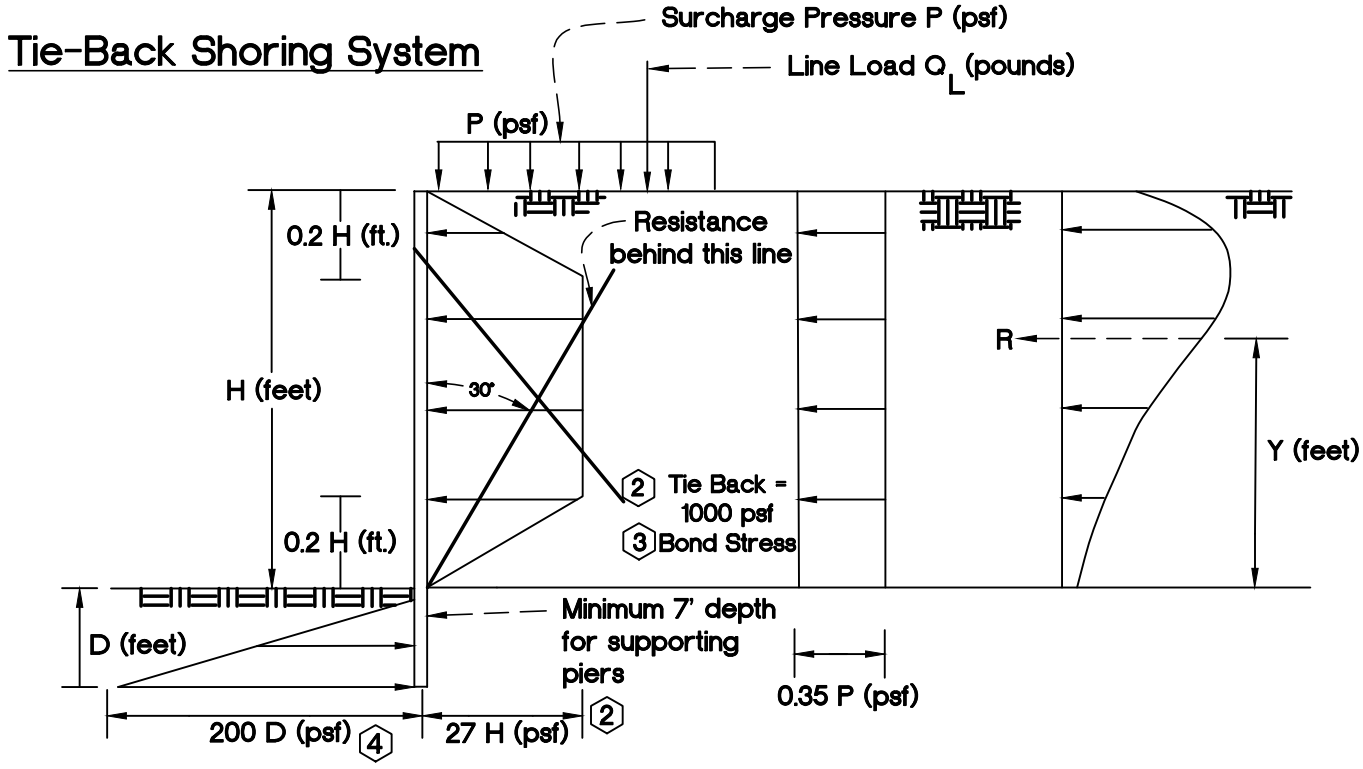
Cantilever Shoring System



X	Y
0.1	0.6H
0.3	0.6H
0.5	0.56H
0.7	0.48H

X	R
<0.4	$0.55\ Q_L$
>0.4	$\left(\frac{0.64\ Q_L}{x^2+1}\right)$

Tie-Back Shoring System



NOTES

1. Include groundwater effects below groundwater level.
2. Include water effects below groundwater level.
3. Grouted length greater than 7 feet; field test anchor strength.
4. Neglect passive pressure below base of excavation to a depth of one pier diameter.

GeoSoils, Inc.

Figure 9

LATERAL EARTH PRESSURES FOR TEMPORARY SHORING SYSTEMS

W.O. 9071-A-IE	DATE: 12/25	SCALE: None

8. The design of restraining elements, walers, bracing, and rakers should be provided by the project structural consultant or shoring designer, if necessary.

Shoring Construction Recommendations

1. The excavation and installation of the soldier piles should be observed and documented by the project geotechnical consultant to further evaluate the geologic conditions within the influence of the shoring and to ensure the soldier pile construction conforms to the requirements of the shoring plan.

2. Drilled excavations for soldier piles should be straight and plumb. The contractor should periodically recheck the drilled excavation for plumbness, especially when oversized rock constituents and debris are encountered.

3. Although not anticipated based on the available subsurface data, casing should be provided in drilled excavations if excessive groundwater or caving conditions are encountered. The bottom of the casing should be at least 4 feet below the top of the concrete as the concrete is placed and the casing is withdrawn. This should be considered during project planning. The exact tip elevation of the soldier piles should be clearly indicated on the shoring plans.

4. All concrete should be delivered through a tremie immediately after the approval of the drilled excavation and steel placement. Care should be taken to prevent striking the walls of the excavations with the tremie during concrete placement. Concrete should not be allowed to free fall more than 5 feet. “Tailgating” concrete is not recommended.

5. The height of exposed soils during vertical excavation should not exceed 4 feet. The entire excavation should receive lagging prior to the end of each workday. Alternatively, loose soil may be used as a temporary buttress located below a 1:1 (h:v) plane projected down and toward the excavation from the top of the unsupported soils. No excavation should be left unsupported overnight.

6. A complete and accurate record of all soldier pile locations, depths, concrete, strengths, quantity of concrete per pile, and other information should be maintained by the special inspector and geotechnical consultant. The shoring design engineer should be notified of any unusual conditions encountered during installation.

Excavation Observation and Monitoring

When excavations are made adjacent to an existing structure (e.g., building or underground utilities) there is a risk of some damage to that improvement, even if a well-designed system of excavation or shoring (if used), is planned and installed. Therefore, we recommend that a

systematic program of observations be made before, during, and after construction to evaluate the effects (if any) of construction on the existing structures.

Monitoring should include the measurement of any horizontal and vertical movements of both the existing structures and any shoring or bracing (if used). If shoring will be included in the proposed development, as determined by the designer, the locations and the type of the monitoring devices should be selected as soon as the total shoring system is designed and approved.

Reference points on the existing structures or improvements should be placed as low as possible on the exterior walls of buildings, adjacent to the excavation. Exact locations may be dictated by critical points within the structure, such as bearing walls or columns for buildings; and surface points on roadways and sidewalks near the top of the excavation. The points on a shoring system (if used) should be placed under or very near the points on the structures.

For a survey monitoring system, an accuracy of a least 0.01 foot should be required. Reference points should be installed and read initially prior to grading or excavation. The readings should continue until all construction below ground has been completed and the backfill has been brought up to final grade.

The frequency of readings will depend upon the results of previous readings and the rate of grading. Weekly readings could be assumed throughout the duration of grading with daily readings during rapid excavation near the bottom and at critical times during slot-cutting or installation of shoring for support. The reading should be plotted by the Surveyor and then reviewed by the Geotechnical Engineer and shoring designer (if used). Video or photographic documentation should be taken, where necessary.

Embankment Factors and Rippability

Embankment factors (shrinkage or bulking) for the site have been estimated based upon our experience with other sites in the general vicinity, and review of laboratory density testing of near-surface soils. It is apparent that shrinkage would vary with depth and with areal extent over the site, based on previous site use and the loose to medium dense nature of the existing topsoil and disturbed fill and native alluvial deposits. Variables include previous vegetation, weed control, discing, and previous filling or exporting. However, all these factors are difficult to define in a three-dimensional fashion, and the contractor's compaction efforts may also contribute some variance. Therefore, the information presented below represents average shrinkage and bulking values, using the following assumptions.

Undocumented Artificial Fill (Afu) ..... 10% to 15% shrinkage
Alluvium Deposits (Qoa) ..... 7% to 10% shrinkage

Rippability

All site soil is anticipated to be readily removed and re-graded with well-working earth moving equipment suitable for the scope of grading.

PRELIMINARY RECOMMENDATIONS - FOUNDATIONS

General

Preliminary recommendations for foundation design and construction are provided in the following sections. These preliminary recommendations have been developed from our understanding of the currently planned site development, site observations, subsurface exploration, laboratory testing, and engineering analyses. Foundation design should be re-evaluated at the conclusion of site grading or remedial earthwork for the as-graded soil conditions. Although not anticipated, revisions to these recommendations may be necessary. In the event that the information concerning the proposed development plan is not correct, or any changes in the design, location or loading conditions of the proposed buildings are made, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and conclusions of this report are modified or approved in writing by this office. We anticipate that the wall loads of 1 to 3 kips/foot, and column loads of 20 to 100 kips will be used. Based on the loads and subgrade conditions, we recommend the use of a structural mat foundation, or other stiffened foundation system designed to tolerate the onsite alluvial deposits and estimated settlement deformations. These assumptions should be revisited once the final plans and structural design are provided for GSI review.

The information and recommendations presented in this section are not meant to supersede design by the project structural engineer or civil engineer specializing in structural design. Upon request, GSI could provide additional input or consultation regarding soil parameters, as related to foundation design. From a geotechnical viewpoint, foundation design and construction should minimally conform to the following:

Structural Mat Foundations - Proposed Health Care Building

A structural mat-type foundation may be considered for the proposed healthcare building, considering the anticipated seismic settlement potential, and the underlying soil conditions.

For a mat foundation uniformly bearing on properly compacted engineered fill, a maximum allowable net bearing capacity of 2,000 psf and a minimum depth of 18 inches below the lowest adjacent grade may be used in the design. These values may be increased by one-third for short-term loads including wind or seismic. Mat-type slab foundations should be designed in accordance with 2022 CBC (CBSC, 2022) criteria for the soil conditions prevalent

onsite. Mat-type foundation may be either ribbed or uniform thickness (UTF) with a perimeter beam.

The passive earth pressure may be computed as an equivalent fluid having a density of 150 pcf, with a maximum earth pressure of 2,000 psf. The upper 6 inches of passive pressure should be neglected if not confined by slabs or pavement. For lateral sliding resistance, a 0.25 coefficient of friction may be utilized for concrete in contact with approved structural fill derived from the onsite soils, when multiplied by the dead load. When combining passive pressure and frictional resistance, the passive pressure component should be reduced by one-third.

A vertical modulus of subgrade reaction (K_s) of 100 pounds per cubic inch (pci) may be used in the design of mat foundations bearing on approved structural fill soils that are very low expansive. The modulus of subgrade reaction is a unit value for a 1-foot square footing and should be scaled in accordance with the following equation when used with the design of larger foundations. This assumes that the foundation and slab is underlain with properly compacted structural fill with an average relative compaction of 90 percent of the laboratory standard (per ASTM D 1557).

$$K_R = K_S \left[\frac{B+1}{2B} \right]^2$$

where: K_S = unit subgrade modulus
K_R = scaled subgrade modulus
B = foundation width (in feet)

Mat slabs may be uniform thickness foundations (UTF) or may incorporate the use of edge footings for moisture cut-off barriers. The recommendations for a mat type of foundation assume that the soils below the slab are compacted fill.

PRELIMINARY SETTLEMENT EVALUATION

GSI has estimated the potential magnitudes of seismic total settlement, differential settlement, and angular distortion for the project. The analyses were based on laboratory test results and subsurface data collected from borings and CPT completed in preparation of this study. Site specific conditions affecting the magnitude of settlement include earth material types, depth of remedial grading (e.g., thickness of planned fills), left-in-place compressible earth materials, moisture content, and density.

Static Settlement

The maximum expected static settlement is on the order of 1 inch with differential settlement on the order of ½ inch in a 30-foot span (e.g., angular distortion of approximately 1/720).

Assuming that remedial earthwork is completed in accordance with the recommendations provided herein, the majority of the foundation settlement on the underlying soils should occur at the end of construction.

Seismic Settlement

We calculated a total seismic settlement of 3 inch and a differential settlement of 0.003L. The seismic settlements have been discussed in the Liquefaction section of this report.

SOIL MOISTURE CONSIDERATIONS

GSI has evaluated the potential for vapor or water transmission through the concrete floor slabs, in light of typical floor coverings and improvements. Please note that slab moisture emission rates range from about 2 to 27 lbs/24 hours/1,000 square feet from a typical slab (Kanare, 2005), while floor covering manufacturers generally recommend about 3 lbs/24 hours as an upper limit. The recommendations in this section are not intended to preclude the transmission of water or vapor through the foundation or slabs.

Foundation systems and slabs shall not allow water or water vapor to enter into the structures so as to cause damage to another building component or to limit the installation of the type of flooring materials typically used for the particular application (State of California, 2025). These recommendations may be exceeded or supplemented by a "water proofing" specialist, the architect, or structural consultant. Thus, the Client or architect will need to evaluate the following in light of a cost vs. benefit analysis, along with disclosure to all interested or affected parties. It should also be noted that vapor transmission will occur in new slab-on-grade floors as a result of chemical reactions taking place within the curing concrete. Vapor transmission through concrete floor slabs as a result of concrete curing has the potential to adversely affect sensitive floor coverings depending on the thickness of the concrete floor slab, and the floor covering. It is possible that a slab moisture sealant may be needed prior to the placement of sensitive floor coverings if a thick mat slab is used and the time frame between concrete and floor covering placement is relatively short.

Considering the E.I. test results, anticipated typical water vapor transmission rates, and floor coverings and improvements (to be chosen by the client or architect) that can tolerate those rates without distress, the following alternatives are provided:

1. Concrete slab should be thicker.

2. Concrete slab underlayment should consist of a 15-mil vapor retarder, or equivalent, with all laps sealed per the 2022 CBC (CBSC, 2022) and the manufacturer's recommendation. The vapor retarder should comply with the ASTM E 1745 - Class A criteria, and be installed in accordance with ACI 302.1R-04, and ASTM D 1643.

3. The 15-mil vapor retarder (ASTM E 1745 - Class A) shall be installed per the recommendations of the manufacturer, including all penetrations (e.g., pipe, ducting, or rebar).

4. The vapor retarder should be underlain with 2 inches of sand (SE>30), and should be overlain by a 2-inch thick layer of sand (SE>30).

5. Concrete should have a maximum water/cement ratio of 0.50. This shall not supersede ACI 318-14 guidelines for corrosion or other corrosive requirements. Additional concrete mix design recommendations should be provided by the project structural consultant or waterproofing specialist. Concrete finishing and workability should be addressed by the project structural consultant and a waterproofing specialist.

6. Where floor slab water to cement ratios are as indicated above, or admixtures used, the Project Structural Consultant should also make changes to the concrete in the grade beams and footings in kind, so that the concrete used in the foundation and slabs are designed or treated for more uniform moisture protection.

7. The owner should be specifically advised which areas are suitable for tile flooring, wood flooring, or other types of water-vapor sensitive flooring.

8. Additional recommendations regarding water or vapor transmission should be provided by the structural engineer or foundation designer and should be consistent with the specified floor coverings indicated by the architect.

Regardless of the mitigation, some limited moisture or moisture vapor transmission through the foundation and floor slab should be anticipated, and areas potentially using moisture sensitive floor coverings or moisture sensitive storage, should be identified. construction crews may require special training for installation of certain product(s), as well as concrete finishing techniques. The use of specialized product(s) should be approved by the slab designer and water-proofing consultant.

PRELIMINARY RETAINING WALL DESIGN PARAMETERS

General

Recommendations for the design and construction of conventional masonry retaining walls are provided herein, if needed. Recommendations for specialty walls (e.g., crib, earthstone, or geogrid) can be provided upon request, and would be based on site specific conditions. If walls allow water to accumulate in the backfill, the water should be conveyed via a non-erosive device to an appropriate inlet, per the recommendations of the design civil engineer.

Conventional Retaining Walls

The design parameters provided below assume native onsite materials with an expansion index up to an E.I. of 20 are used to backfill any retaining wall. The type of backfill, should be specified by the wall designer, and clearly shown on the plans. Building walls, below grade, should be water-proofed. Waterproofing should also be provided for site retaining walls in order to reduce the potential for efflorescence staining.

Preliminary Retaining Wall Foundation Design

The preliminary foundation design for conventional retaining walls should incorporate the following recommendations:

Minimum Footing Embedment - 18 inches below the lowest adjacent grade (excluding landscape layer [upper 6 inches]).

Minimum Footing Width - 24 inches.

Allowable Bearing Pressure - An allowable vertical bearing pressure of 2,000 pcf may be used in the preliminary design of retaining wall foundations provided that the footing maintains a minimum width of 24 inches and extends at least 18 inches into approved engineered fill overlying dense formational materials. This pressure may be increased by one-third for short-term wind and seismic loads.

Passive Earth Pressure - A passive earth pressure of 150 pcf with a maximum earth pressure of 2,250 psf may be used in the preliminary design of retaining wall foundations provided the foundation is embedded into properly compacted silty to clayey sand fill.

Lateral Sliding Resistance - A 0.25 coefficient of friction may be used for a concrete to soil contact when multiplied by the dead load. When combining passive pressure and frictional resistance, the passive pressure component should be reduced by one-third.

Backfill Soil Density - A soil density of 120 to 130 pcf may be used in the design of retaining wall foundations. This assumes an average engineered fill compaction of at least 90 percent of the laboratory standard (ASTM D 1557).

Footing Setbacks - All retaining wall footing setbacks from slopes should comply with Figure 1808.7.1 of the 2022 CBC. GSI recommends a minimum horizontal setback distance of 7 feet, as measured from the bottom, outboard edge of the footing to the face to the 2:1 (h:v) slope face.

Any retaining wall footings near the perimeter of the site, or not within areas of placed compacted fills will likely need to be deepened into unweathered dense formational materials for adequate vertical and lateral bearing support.

Restrained Walls

Any retaining wall that will be restrained prior to placing and compacting backfill material or retaining walls that have re-entrant or male corners, should be designed for an at-rest equivalent fluid pressure (EFP) of 57 pcf. The design should include any applicable surcharge loading. For areas of male or re-entrant corners, the restrained wall design should extend a minimum distance of twice the height of the wall (2H) laterally from the corner.

Cantilevered Walls

The recommendations presented below are for cantilevered retaining walls with retained soil heights up to 10 feet. Design parameters for retaining walls less than 3 feet in height may be superseded by the Riverside County regional standard design. Active earth pressure may be used for retaining wall design, provided the top of the wall is not restrained from minor deflections. An equivalent fluid pressure approach may be used to compute the horizontal pressure against the wall. Appropriate fluid unit weights are given below for specific slope gradients of the retained material. These do not include other superimposed loading conditions due to traffic, structures, seismic events, or adverse geologic conditions. When wall configurations are finalized, the appropriate loading conditions for superimposed loads can be provided upon request.

For preliminary planning purposes, the structural consultant or wall designer should incorporate the surcharge of traffic on the back of retaining walls, if traffic will occur within a horizontal distance of "H" from the backside of the retaining walls, where "H" equals the retained soil height. The traffic surcharge may be taken as 100 psf/ft in the upper 5 feet of the wall for light passenger vehicle traffic (e.g., cars, vans, or pick-up trucks). This does not include the surcharge of parked vehicles which should be evaluated at a higher surcharge to account for the effects of seismic loading. Equivalent fluid pressures for the design of cantilevered retaining walls are provided in the following table:

SURFACE SLOPE OF RETAINED MATERIAL (HORIZONTAL:VERTICAL)	EQUIVALENT FLUID WEIGHT P.C.F.
Level	37
2:1 (h:v)	54

Seismic Surcharge

The Mononobe-Okabe method is commonly utilized for calculating seismically induced active and passive lateral earth pressures and is based on the limit equilibrium Coulomb theory for static stress conditions. This method entails three fundamental assumptions (e.g., Seed and Whitman, 1970): Wall movement is sufficient to ensure either active or passive conditions, the driving soil wedge inducing the lateral earth pressures is formed by a planar failure surface starting at the heel of the wall and extending to the free surface of the backfill, and the driving

soil wedge and the retaining structure act as rigid bodies, and therefore, experiences uniform accelerations throughout the respective bodies (U.S. Army Corps of Engineers, 2003, Engineering and Design - Stability Analysis of Concrete Structures).

- Seismic Lateral Earth Pressure = 39 pcf (equivalent fluid weight).

The seismic lateral earth pressure given above is a triangle increasing with depth, and the resultant of this pressure is an increment of force which should be applied to the back of the wall at 1/3 of the wall height from the wall base. The seismic increment of earth pressure should be added to the static active earth pressure. Even for the at-rest (Ko) condition, the seismic increment of earth pressure should be added to the static active earth pressure, not to the at-rest static earth pressure (SEAOC Seismology Committee, 2019).

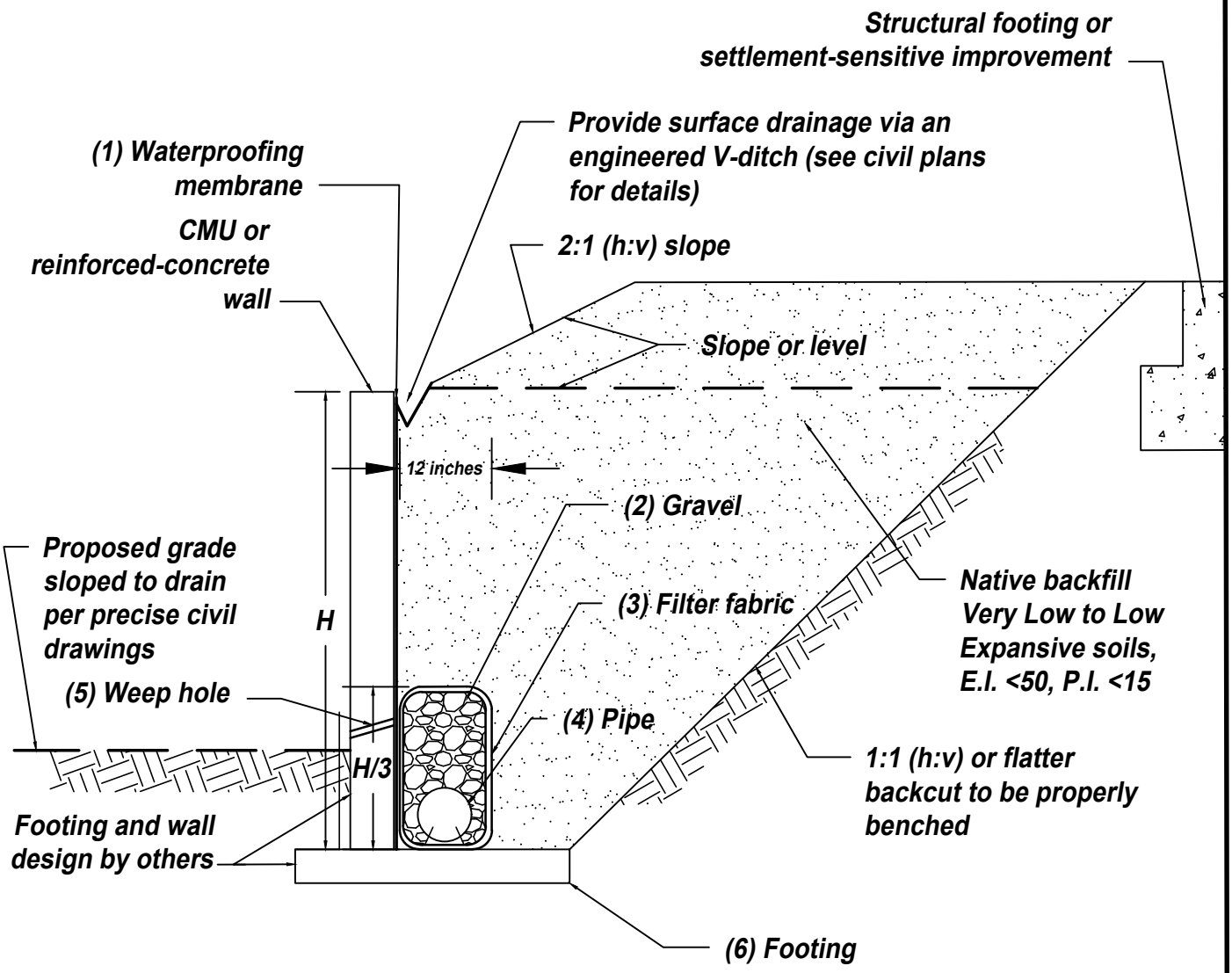
Per 2022 CBC Section 1803.5.12 dynamic seismic lateral earth pressures shall be applied to foundation walls and retaining walls supporting more than 6 feet of backfill. Dynamic seismic lateral earth pressures may also be applied to shorter walls at the discretion of the structural engineer.

Retaining Wall Backfill and Drainage

Positive drainage must be provided behind all retaining walls in the form of gravel wrapped in geofabric and outlets. A backdrain system is considered necessary for retaining walls that are 2 feet or greater in height. Details 1, 2, and 3, present the backdrainage options discussed below. Backdrains should consist of a 4-inch diameter perforated PVC or ABS pipe encased in either Class 2 permeable filter material or ¾-inch to 1½-inch gravel wrapped in approved filter fabric (Mirafi 140 or equivalent). The filter material should extend a minimum of 1 horizontal foot behind the base of the walls and upward at least 1 foot. For limited access and confined areas, (panel) drainage behind the wall may be constructed in accordance with Detail 2 (Retaining Wall Backfill and Subdrain Detail Geotextile Drain).

Materials with an expansion index (E.I.) potential of greater than 20 should not be used as backfill for retaining walls. Retaining wall backfill materials should be moisture conditioned and mixed to achieve the soil's optimum moisture content, placed in relatively thin lifts (6 to 8 inches) with relatively light equipment, and compacted to at least 90 percent relative compaction.

Outlets should consist of a 4-inch diameter solid PVC or ABS pipe spaced no greater than approximately 100 feet apart, with a minimum of two outlets, one on each end. The use of weep holes, only, in walls higher than 2 feet, is not recommended. The surface of the backfill should be sealed by pavement or the top 18 inches compacted with native soil (E.I. ≤ 20).



(1) Waterproofing membrane.

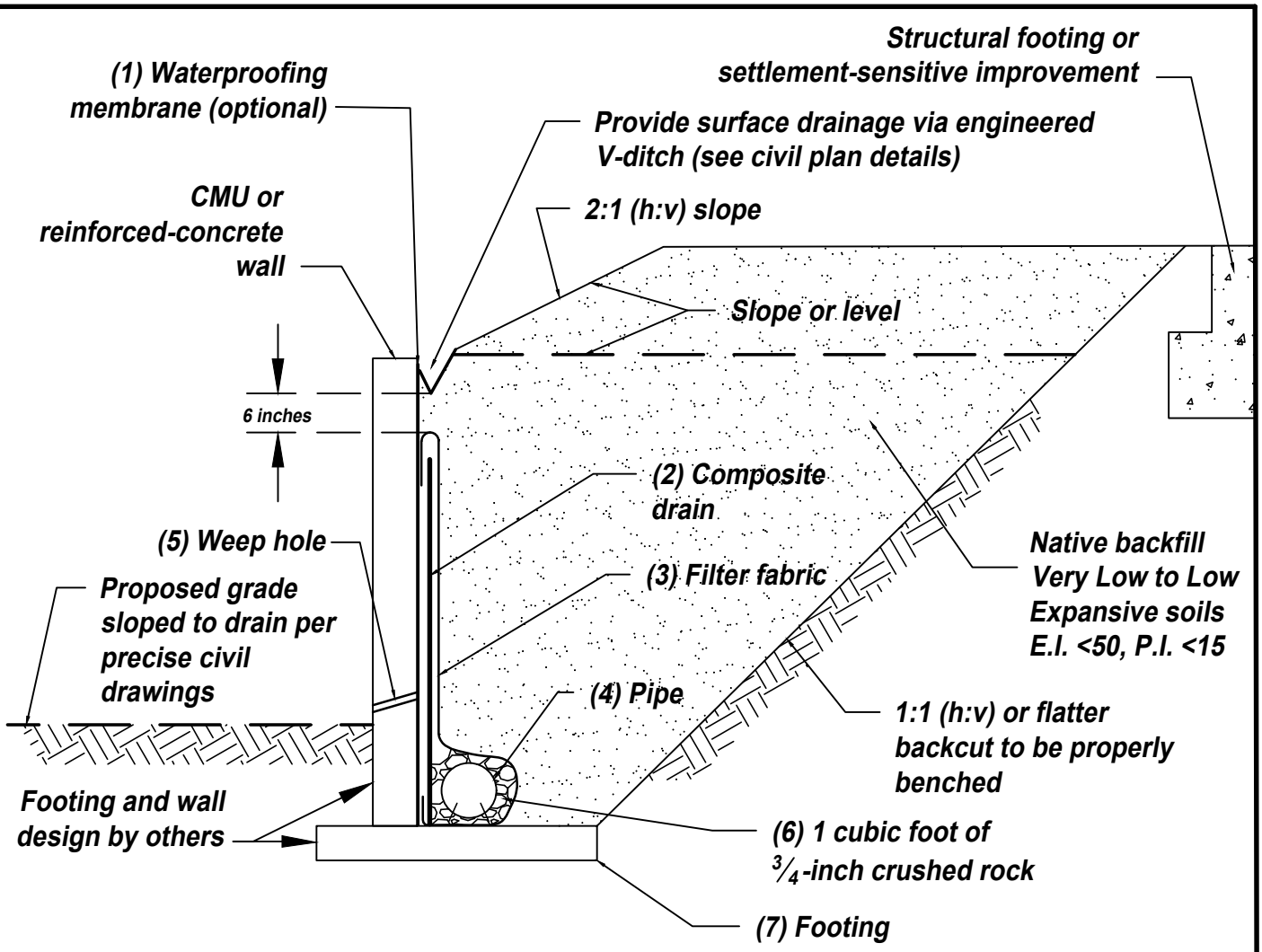
(2) Gravel: Clean, crushed, ¾ to 1½ inch.

(3) Filter fabric: Mirafi 140N or approved equivalent.

(4) Pipe: 4-inch-diameter perforated PVC, Schedule 40, or approved alternative with minimum of 1 percent gradient sloped to suitable, approved outlet point (perforations down).

(5) Weep holes: For CMU walls, Omit grout every other block, at or slightly above finished surface. For reinforced concrete walls, minimum 2-inch diameter weep holesspaced at 20 foot centers along the wall and placed 3 inches above finished surface. Design civil engineer to provide drainage at toe of wall. No weep holes for below-grade walls.

(6) Footing: If bench is created behind the footing greater than the footing width using level fill or cut natural earth materials, an additional "heel" drain will likely be required by geotechnical consultant.



(1) Waterproofing membrane (optional): Liquid boot or approved mastic equivalent.

(2) Drain: Miradrain 6000 or J-drain 200 or equivalent for non-waterproofed walls; Miradrain 6200 or J-drain 200 or equivalent for waterproofed walls (all perforations down).

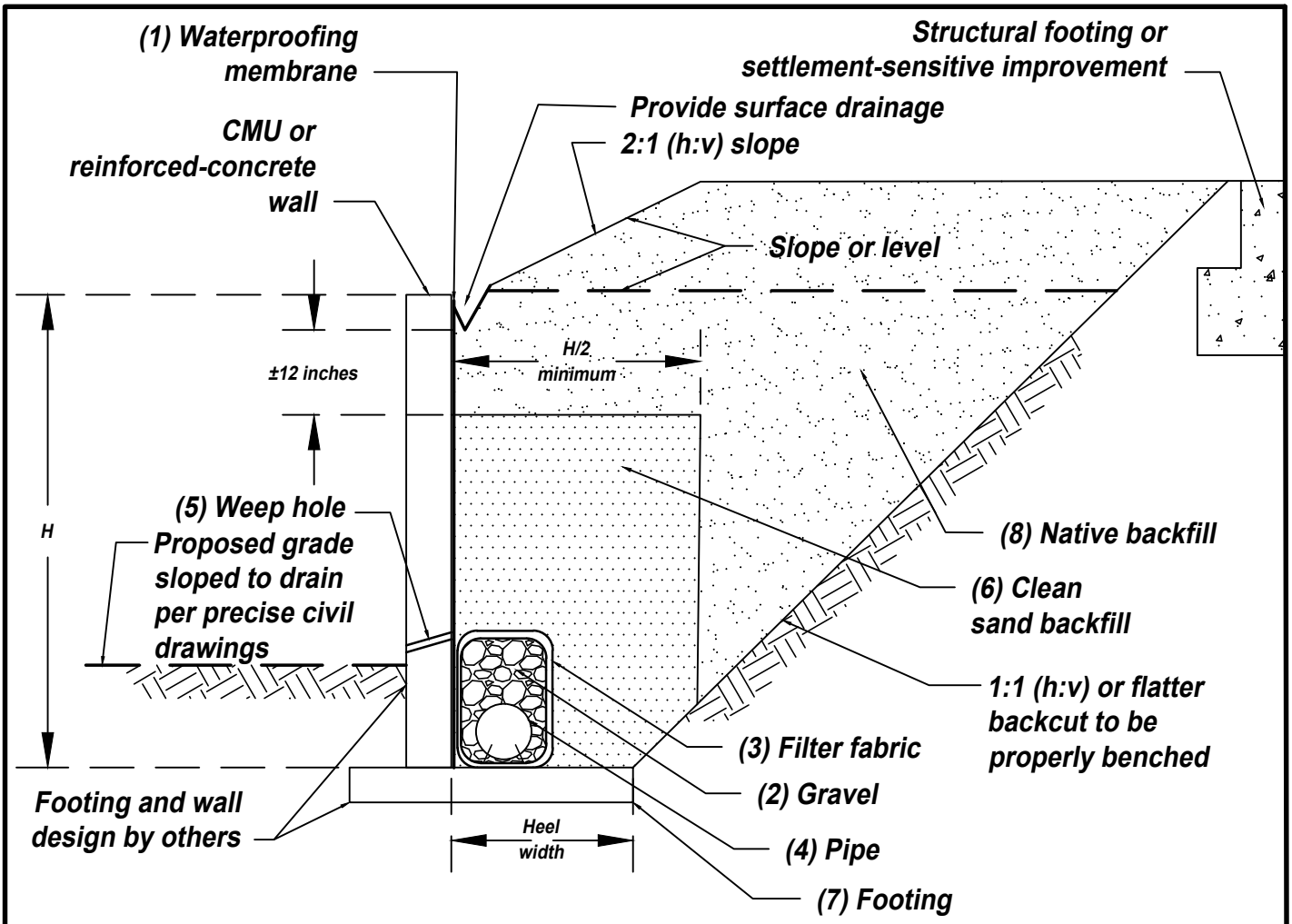
(3) Filter fabric: Mirafi 140N or approved equivalent; place fabric flap behind core.

(4) Pipe: 4-inch-diameter perforated PVC, Schedule 40, or approved alternative with minimum of 1 percent gradient to proper outlet point (perforations down).

(5) Weep holes: For CMU walls, Omit grout every other block, at or slightly above finished surface. For reinforced concrete walls, minimum 2-inch diameter weep holesspaced at 20 foot centers along the wall and placed 3 inches above finished surface. Design civil engineer to provide drainage at toe of wall. No weep holes for below-grade walls.

(6) Gravel: Clean, crushed, ¾ to 1½ inch.

(7) Footing: If bench is created behind the footing greater than the footing width using level fill or cut natural earth materials, an additional "heel" drain will likely be required by geotechnical consultant.



(1) Waterproofing membrane: Liquid boot or approved masticequivalent.

(2) Gravel: Clean, crushed, ¾ to 1½ inch.

(3) Filter fabric: Mirafi 140N or approved equivalent.

(4) Pipe: 4-inch-diameter perforated PVC, Schedule 40, or approved alternative with minimum of 1 percent gradient to proper outlet point (perforations down).

(5) Weep hole: For CMU walls, Omit grout every other block, at or slightly above finished surface. For reinforced concrete walls, minimum 2-inch diameter weep holesspaced at 20 foot centers along the wall and placed 3 inches above finished surface. Design civil engineer to provide drainage at toe of wall. No weep holes for below-grade walls.

(6) Clean sand backfill: Must have sand equivalent value (S.E.) of 35 or greater; can be densified by water jetting upon approval by geotechnical engineer.

(7) Footing: If bench is created behind the footing greater than the footing width using level fill or cut natural earth materials, an additional "heel" drain will likely be required by geotechnical consultant.

(8) Native backfill: If E.I. <21 and S.E. ≥35 then all sand requirements also may not be required and will be reviewed by the geotechnical consultant.

Proper surface drainage should also be provided. For additional mitigation, consideration should be given to applying a water-proof membrane to the back of all retaining structures. The use of a waterstop should be considered for all concrete and masonry joints.

Wall and Retaining Wall Footing Transitions

Site walls are anticipated to be founded on footings designed in accordance with the recommendations in this report. Should wall footings transition from cut to fill, the structural consultant or wall designer may specify either:

a) A minimum of a 2-foot overexcavation and recompaction of cut materials for a distance of 2H, from the point of transition, where "H" equals the wall height.

b) Increase the amount of reinforcing steel and wall detailing (e.g., expansion joints or crack control joints) such that an angular distortion of 1/360 for a distance of 2H on either side of the transition may be accommodated. Expansion joints should be placed no greater than 20 feet on-center, in accordance with the structural engineer's or wall designer's recommendations, regardless of whether or not a transition condition exists. Expansion joints should be sealed with a flexible, non-shrink grout.

c) Embed the footings entirely into suitable native formational material (e.g., deepened footings).

If transitions from cut to fill transect the wall footing alignment at an angle of less than 45 degrees (plan view), then the designer should follow recommendation "a" (above) and until such transition is between 45 and 90 degrees to the wall alignment.

STORM WATER INFILTRATION KSAT RATE EVALUATION AND DISCUSSION

U.S. Department of Agricultural (USDA) Review

A review of the United States Department of Agriculture database ([USDA]; 2025 and 1993) indicates that the surficial soils units mapped at the site consist of the Grangeville sandy loam, 0 to 5 percent slopes (GrB) and the Grangeville fine sandy loam, 0 to 5 percent slopes (GvB). The USDA (2025) indicates that the capacity of the most limiting layer to transmit water (Ksat) within the Grangeville sandy loam, is high (1.98 to 5.95 inches per hour [in/hr]) and falls into hydrologic soil groups (HSGs) "A/D." The USDA (2025) also indicates that capacity of most limiting layer to transmit water (Ksat) within the Grangeville fine sandy loam is moderately high to high (0.57 to 1.98 in/hr) and falls into hydrologic soil groups (HSGs) "B/D." Infiltration into HSG "D" soils are considered potentially feasible with some limitations. However, infiltration into HSG "A and B" soils is potentially feasible.

Infiltration Basin Siting Requirements

Our review of the general infiltration basin siting requirements and limitations (CASQA, 2003), indicates sites characterized as belonging to Hydrologic Soil Group "A," "B," and "C" may be suitable for infiltration, requiring a minimum soil infiltration rate of 0.5 inches/hour (CASQA, 2003). However, the County of Riverside water pollution prevention Water Quality Management Plan (WQMP, 2012), guidance document for the Santa Ana Region states: "the minimum long-term post-development infiltration rate must be at least 0.83 inches per hour."

The design engineer will need to review basin siting requirements by the WQMP (2012) and CASQA (2003) with respect to any proposed water quality BMP system. The recommendations proved herein are based on WQMP (2012), State criteria (CASQA, 2003), and our experience on nearby sites with similar geologic conditions. Based on our review of the USDA data and our subsurface explorations, similar conditions likely prevail throughout the site, including sandy fine-grained surficial soils.

Onsite Storm Water Quality Best Management Practice (BMP) Systems

Should onsite infiltration-systems be planned for Best Management Practices (BMP's) or Low Impact Development (LID) principles for the project, certain guidelines must be followed in the planning, design, and construction of such systems. Such systems, if improperly designed or implemented without consideration of the geotechnical aspects of site conditions, can contribute to flooding, saturation of bearing materials beneath site improvements, slope instability, and possible concentration and contribution of pollutants into the groundwater or storm drain or utility trench systems.

A key factor in these systems is the infiltration rate (often referred to as the percolation rate) which can be ascribed to, or determined for, the earth materials within which these systems are installed. Additionally, the infiltration rate of the designed system (which may include gravel, sand, mulch and topsoil, or other amendments) will need to be considered. Locally, relatively impermeable formations include: clayey surficial soils, igneous and metamorphic bedrock, as well as future fine grained fill soils.

Some of the methods which are used for onsite infiltration include percolation basins, dry wells, bio-swale or bio-retention, permeable pavers and pavement, infiltration trenches, filter boxes and subsurface infiltration galleries or chambers. Some of these systems are constructed using native and import soils, perforated piping, and filter fabrics while others employ structural components such as stormwater infiltration chambers and filters or separators. Every site will have characteristics which should lend themselves to one or more of these methods, but not every site is suitable for BMPs. In practice, BMPs are usually initially designed by the project design civil engineer. Applicable governing agency requirements should be reviewed and included in design considerations.

The following geotechnical guidelines should be considered when designing onsite BMP systems:

- It is not good engineering practice to allow water to saturate soils, especially near slopes or improvements; however, the controlling agency may now require the use of stormwater BMPs.

- Areas adjacent to, or within, the BMP that are subject to inundation should be properly protected against scouring, undermining, and erosion, in accordance with the recommendations of the design engineer.

- Where infiltration BMP systems are located near buildings or improvements, impermeable liners and subdrains should be used along the bottom or sides of bioretention swales or basins located within the influence of structures. Impermeable liners used in conjunction with BMP basins should consist of a 30-mil polyvinyl chloride (PVC) membrane that is covered by a minimum of 12 inches of clean soil, free from rocks and debris, with a maximum 4:1 (h:v) slope inclination, or flatter, and meets the following minimum specifications:

  Solid Soils Specific Gravity (ASTM D792): 1.2 (g/cc, min.); Tensile (ASTM D 882): 73 (lb/in-width, min); Elongation at Break (ASTM D882): 380 (%, min); Modulus (ASTM D882): 32 (lb/in-width, min.); and Tear Strength (ASTM D1004): 8 (lb/in, min); Seam Shear Strength (ASTM D882) 58.4 (lb/in, min); Seam Peel Strength (ASTM D882) 15 (lb/in, min).

- Subdrains should consist of at least 4-inch diameter Schedule 40 or SDR 35 drain pipe with perforations oriented down. The drain pipe should be sleeved with a filter sock.

- Storm drain, standpipes, and utilities that cross BMPs should be slurried with a 3-sack slurry mix, to 5 feet outside the structure.

- Infiltrations systems should not be installed within approximately 8 feet of building foundations utility trenches, and walls, or a 1:1 (horizontal to vertical [h:v]) slope (down and away) from the bottom elements of these improvements. Alternatively, deepened foundations may be used.
- Infiltration systems should not be installed adjacent to pavement or hardscape improvements. Alternatively, deepened or thickened edges and curbs or impermeable liners may be used in areas adjoining the BMP.

- As with any infiltration BMP, localized ponding and groundwater seepage should be anticipated. The potential for seepage or perched groundwater to occur after site development should be disclosed to all interested or affected parties.

- Installation of infiltration BMP systems should avoid expansive soils (Expansion Index [E.I.] ≥51) or soils with a relatively high plasticity index (P.I. > 20).

- Infiltration BMP systems should not be installed where the vertical separation of the groundwater level is less than approximately 10 feet from the base of the system.

- Infiltration BMP systems should be designed using a suitable factor of safety (FOS) to account for uncertainties in the known infiltration rates (as generally required by the controlling authorities), and reduction in performance over time.

- As with any infiltration system, proper care will need to provided. Best management practices should be followed at all times, especially during inclement weather. Provisions for the management of any siltation, debris within the BMP, or overgrown vegetation (including root systems) should be considered. An appropriate inspection schedule will need to adopted and provided to all interested or affected parties.

- Any designed system will require regular and periodic maintenance, which may include rehabilitation or complete replacement of the filter media (e.g., sand, gravel, filter fabrics, topsoil, or mulch) or other components used in construction, so that the design life exceeds 15 years. Due to the potential for piping and adverse seepage conditions, a burrowing rodent control program should also be implemented onsite.

- Newly established vegetation or landscaping (including phreatophytes) may have root systems that will influence the performance of the BMP or nearby LID systems.

- The potential for surface flooding, in the case of system blockage, should be evaluated by the design civil engineer.

- Any proposed utility backfill materials (e.g., inlet or outlet piping or other subsurface utilities) located within or near the proposed area of the BMP may become saturated. This is due to the potential for piping, water migration, and seepage along the utility trench line backfill. If utility trenches cross or are proposed near the BMP, cut-off walls or other water barriers will need to be installed to mitigate the potential for piping and excess water entering the utility backfill materials. Planned or existing utilities may also be subject to piping of fines into open-graded gravel backfill layers unless separated from overlying or adjoining BMP by geotextiles or slurry backfill.

PRELIMINARY PAVEMENT DESIGN RECOMMENDATIONS

General

The governing agency may retain the authority to approve the final structural design sections after subgrade elevations and actual resistance values (R-values) have been obtained at the conclusion of earthwork. Based on a general review of pavement designs for other nearby projects, and for estimation and bidding purposes, the pavement sections provided herein should be considered for preliminary design. Typically, actual pavement sections will likely vary, therefore final pavement sections should be based on actual R-value testing performed during, or shortly after, the access driveway and parking area grading, and for any proposed exterior street and improvements.

Asphaltic Concrete (AC) Pavements

The preliminary design for Asphaltic Concrete (AC) was evaluated based on an R-value of R=31, and the use of concrete shoulders (curb or gutter) at the edge of pavement. The preliminary pavement sections presented are also based on the traffic indices likely for the project (to be assigned by the project civil engineer), County of Riverside roadway design requirements (Standard Plan No. 114), and the guidelines presented in the latest revision to the California Department of Transportation "Highway Design Manual," seventh edition. Based on an R-value of 31, the following preliminary pavement design sections are presented.

STREET CLASSIFICATION	TRAFFIC INDEX (T.I.)[1]	STANDARD PAVEMENT DESIGNS		
		R-VALUE	AC INCHES	CLASS 2 BASE ROCK[2] INCHES
Access Road or Local Street	5.5	31	3.0**	7.0
Enhanced Local Street	6.5	31	3.6**	8.5
Collector (Road)	7.0	31	4.0**	9.0

[1] T.I.s are taken from the County of Riverside Department of Transportation, Standard Plan No. 114, "Roadway Design Requirements" (2022).
[2] Assumed R-values for base rock R=78 - Greenbook or Cal-Trans standard Class 2 base rock.
** County of Riverside minimum Class 2 base or asphaltic concrete

The preliminary pavement sections provided above are intended as a minimum guideline. If thinner or highly variable pavement sections are constructed, increased maintenance and repair could be expected. Consideration should be given to the increased potential for distress from overuse of paved street areas by heavy equipment and construction related heavy traffic (e.g., concrete trucks or loaded supply trucks), particularly when the final section is not in place (e.g., topcoat). Best management construction practices should be followed at all times, especially during inclement weather.

Portland Concrete Cement (PCC) Pavement

The preliminary design for Portland Cement Concrete Pavement (PCCP) was evaluated using a subgrade R-value of 31. The preliminary PCCP sections are provided in the following table.

PORTLAND CONCRETE CEMENT PAVEMENTS (PCCP)*					
TRAFFIC AREAS	CONCRETE TYPE	PCP THICKNESS (INCHES)	TRAFFIC AREAS	CONCRETE TYPE	PCCP THICKNESS (INCHES)
Light Vehicles	520-C-2500	6.0	Dumpster Aprons (Trash Service)	520-C-2500	7.0
	560-C-3250	5.0		560-C-3250	6.0
NOTE: All PCCP is designed as un-reinforced and bearing directly on compacted subgrade. However, a 4-inch thick leveling course of compacted aggregate base, or crushed rock may be considered to improve performance. All PCCP should be properly detailed (jointing) per the industry standard. Pavements may be additionally reinforced with #4 reinforcing bars, placed 18 inches on center, each way, for improved performance. * To be re-evaluated based on exposed field conditions and R-values obtained following rough grading.					

The transition of the pavement from parking to traffic lanes should be made over a distance of 24 inches, with crack control joints (weaken plane) or contact joints at the end of the transition. A minimum 4-inch layer of base rock, in traffic and dumpster areas, should be considered to improve traffic lane performance. Base rock may consist of either ¾-inch crushed rock or Caltrans Class 2 aggregate base. Crushed rock may be compacted by vibratory methods. Aggregate base should be compacted to a minimum relative compaction of 95 percent.

Weakened Plane Joints

Transverse and longitudinal weakened plane joints may be constructed in accordance with County standards. Transverse weakened plane joints should be spaced no farther than 15 feet apart, and no closer than 5 feet. Longitudinal weakened plane joints should be spaced no farther than 20 feet apart, and no less than 5 feet.

Expansion Joints and Contact Joints

Transverse expansion joints should be constructed at 120-foot spacings, or in accordance with County standards. Transverse and longitudinal contact joints should be constructed in accordance with the recommendations of the design engineer. Within large slab areas, joint spacings should be no greater than 20 feet.

Slab Reinforcement

The preliminary PCC Pavements for this project are designed as unreinforced and should perform adequately, assuming proper construction. If additional control of internal slab stresses (e.g., curing shrinkage, thermal expansion and contraction), then the use of No. 4 reinforcing bars, 18 inches on center each way, should be considered.

The upper 12 inches of subgrade should be compacted to a minimum relative compaction of 95 percent of the minimum dry density (ASTM D 1557). Aggregate base compaction should be 95 percent of the maximum dry density (ASTM D 1557). If adverse conditions (e.g., wet or saturated ground) are encountered during preparation of subgrade, special construction methods may need to be employed. R-value testing and pavement design analysis should be performed upon completion of grading for the project.

PAVEMENT GRADING RECOMMENDATIONS

General

All section changes should be properly transitioned. If adverse conditions are encountered during the preparation of subgrade materials, special construction methods may need to be employed. A GSI representative should be present for the preparation of subgrade, base rock, and asphalt concrete.

Subgrade

Within access lanes and parking areas, all surficial deposits of loose soil material should be removed and recompacted as recommended. After the loose soils are removed, the bottom is to be scarified to a depth of at least 6 inches, moisture conditioned as necessary and compacted to 95 percent of the maximum laboratory density or the Riverside County minimum, as determined by test designation ASTM D 1557.

Deleterious material, excessively wet or dry pockets, concentrated zones of oversized rock fragments, and any other unsuitable materials encountered during grading should be removed. The compacted fill material should then be brought to the elevation of the proposed subgrade for the pavement. The subgrade should be proof-rolled in order to promote a uniform firm and unyielding surface. All grading and fill placement should be observed by GSI.

Crushed Aggregate Base Rock

Compaction tests are required for the recommended base section. Minimum relative compaction required will be 95 percent of the laboratory maximum density as determined by ASTM test method D 1557 or Caltrans Test Method Number California 216.

Paving

Prime coat may be omitted if all of the following conditions are met:

1. The asphalt pavement layer is placed within two weeks of completion of base and subbase course.

2. Traffic is not routed over completed base before paving.

3. Construction is completed during the dry season of May through October.

4. The base is kept free of debris prior to placement of asphaltic concrete.

If construction is performed during the wet season of November through April, prime coat may be omitted if no rain occurs between completion of base course and paving and the time between completion of base and paving is reduced to three days, provided the base is free of loose soil or debris. Where prime coat has been omitted and rain occurs, traffic is routed over base course, or paving is delayed, measures shall be taken to restore base course, and subgrade to conditions that will meet specifications as directed by the geotechnical consultant.

Drainage

Positive drainage should be provided for all surface water to drain towards the area swale, curb and gutter, or to an approved drainage channel. Positive site drainage should be maintained at all times. Water should not be allowed to pond or seep into the ground, such as from behind unprotected curbs, both during and after grading. If planters or landscaping are adjacent to paved areas, measures should be taken to minimize the potential for water to enter the pavement section, such as thickened edges, or enclosed planters. Also, best management construction practices should be strictly adhered to at all times to minimize the potential for distress during construction and roadway improvements.

Additional Considerations

To mitigate perched groundwater, consideration should be given to installation of subgrade separators (cut-offs) between pavement subgrade and landscape areas, although this is not a requirement from a geotechnical standpoint. Cut-offs, if used, should be 6 inches wide and at least 12 inches below the pavement subgrade contact or 12 inches below the crushed aggregate base rock, if used.

DRIVEWAY, CONCRETE APRONS, FLATWORK, AND OTHER IMPROVEMENTS

General

The soil materials on site are anticipated to be very low expansive. A GSI representative should be present for the preparation of driveway, aprons, and flatwork subgrade materials. The following recommendations are presented for all exterior flatwork:

1. The subgrade area for concrete slabs should be compacted to achieve a minimum 90 percent relative compaction, and then be presoaked to optimum moisture content, or greater. The moisture content of the subgrade should be proof tested within 72 hours prior to concrete placement.

2. Exterior concrete slabs should be cast over a non-yielding surface, consisting of a 4-inch layer of Class 2 base, crushed rock, gravel, or clean sand (or County minimum, whichever is greater), that should be compacted and level prior to placement of concrete. If very low expansive soils are present, the base, rock, gravel, or sand may be deleted. The layer or subgrade should be wet-down completely prior to placement of concrete, to minimize loss of concrete moisture to the surrounding earth materials.

3. Exterior pedestrian slabs should be a minimum of 4 inches thick. Driveway slabs and approaches should be a minimum of 5 inches thick additionally have a thickened edge (12 inches) adjacent to all landscape areas, to help impede infiltration of landscape water under the slab. Trash disposal (dumpster) area aprons should be a minimum of 6 inches thick and meet minimum County standards, as necessary.

4. The use of transverse and longitudinal control joints is recommended to help control slab cracking due to concrete shrinkage or expansion. Two ways to mitigate such cracking are: a) add a sufficient amount of reinforcing steel, increasing tensile strength of the slab; and, b) provide an adequate amount of control and expansion joints to accommodate anticipated concrete shrinkage and expansion. The exterior slabs should be scored or saw cut, ½ to ⅜ inches deep, often enough so that no section is greater than 10 feet by 10 feet. For sidewalks or narrow slabs, control joints should be provided at intervals of every 6 feet. The slabs should be separated from the foundations and sidewalks with expansion joint filler material.

5. No traffic should be allowed upon the newly placed concrete slabs until they have been properly cured to within 75 percent of design strength. Concrete compression strength should be a minimum of 2,500 psi.

6. Driveways, sidewalks, and patio slabs adjacent to the structure should be separated from the structure with thick expansion joint filler material. In areas directly adjacent to a continuous source of moisture (e.g., irrigation or planters), all joints should be additionally sealed with flexible mastic.

7. Planters and walls (sound walls or retaining walls) should not be tied to the structure.

8. Overhang structures should be supported on the slabs, or structurally designed with continuous footings tied in at least two directions.

9. Any masonry landscape or sound walls that are to be constructed throughout the property should be grouted and articulated in segments no more than 20 feet long. These segments should be keyed or doweled together.

10. If settlement concerns or expansive soils are present, utilities may be enclosed within a closed utilidor (vault) or designed with flexible connections to accommodate differential settlement or expansive soil conditions (if present).

11. Positive site drainage should be maintained at all times. Finish grade on the building pad should provide a minimum of 1 to 2 percent fall to the street, as indicated herein. Drainage reversals could occur, including post-construction settlement, if relatively flat drainage gradients are not periodically maintained by the owner and interested or affected parties.

12. Air conditioning (A/C) units should be supported by slabs that are incorporated into the building foundation or constructed on a rigid slab with flexible couplings for plumbing and electrical lines. A/C waste water lines should be drained to a suitable non-erosive outlet.

13. Shrinkage cracks could become excessive if proper finishing and curing practices are not followed. Finishing and curing practices should be performed per the California Nevada Cement Association (CNCA) guidelines. Mix design should incorporate rate of curing for climate and time of year, sulfate content of soils, corrosion potential of soils, and fertilizers used on site.

DEVELOPMENT CRITERIA

Drainage

Adequate surface drainage is a very important factor in reducing the likelihood of adverse performance of improvements and slopes. Surface drainage should be sufficient to mitigate ponding of water anywhere in the project area, and especially near pavements, and the tops of descending slopes. Surface drainage should be carefully taken into consideration during fine grading, landscaping, and building construction. Future landscaping or construction activities should not create adverse drainage conditions. Positive site drainage within the project area should be provided and maintained at all times. Drainage should not flow uncontrolled down any descending slope. Water should be directed away from foundations, pavements, and tops

of slopes, and not allowed to pond or seep into the ground. In general, the area within 5 feet around the proposed building should slope away from the structure and conform to Section 1804.4 of the 2022 CBC. Whenever possible, surface drainage should be above adjacent paved areas. Consideration should be given to avoiding construction of planters adjacent to structures. Building pad drainage should be directed toward approved drainage facilities. Down spouts, or drainage devices should outlet a minimum of 5 feet from the structure or into a subsurface drainage system. Areas of seepage may develop due to irrigation or heavy rainfall, and should be anticipated. Minimizing irrigation will lessen this potential. If areas of seepage develop, recommendations for reducing this effect could be provided upon request.

Erosion Control

Graded pads and any slopes will be subject to surficial erosion during and after grading. Onsite earth materials have a moderate to high erosion potential. Consideration should be given to providing hay bales and silt fences for the temporary control of surface water, from a geotechnical viewpoint.

Landscape Maintenance

Over-watering the landscape areas will adversely affect the proposed site improvements. We recommend that any proposed open-bottom planters adjacent to structures be eliminated for a minimum distance of 10 feet. As an alternative, closed-bottom type planters could be used. An outlet placed in the bottom of the planter could be installed to direct drainage away from the structure or any exterior concrete flatwork. If planters are constructed adjacent to the structure, the sides and bottom of the planter should be provided with a moisture barrier to prevent infiltration of irrigation water into the subgrade. Provisions should be made to drain the excess irrigation water from the planters without saturating the subgrade below or adjacent to the planters. Consideration should be given to the type of vegetation chosen and their potential effect upon surface improvements (e.g., some trees will have an effect on concrete flatwork with their extensive root systems). From a geotechnical standpoint leaching is not recommended for establishing landscaping. If the surface soils are processed for the purpose of adding amendments, they should be recompacted to at least 90 percent relative density.

Site Improvements

If any additional improvements (e.g., buildings, building additions, walls, pavements, swimming pool, or spa) are planned for the site, recommendations concerning the geological or geotechnical aspects of design and construction of said improvements could be provided upon request. This office should be notified in advance of any fill placement, grading of the site, or trench backfilling after rough grading has been completed. This includes any grading, underground utility trench backfill, pavement or flatwork construction.

Tile Flooring

Tile flooring can crack, reflecting cracks in the concrete slab below the tile, although small cracks in a conventional slab may not be significant. Therefore, the designer should consider additional steel reinforcement for concrete slabs-on-grade where tile will be placed. The tile installer should consider installation methods that reduce possible cracking of the tile such as slipsheets. Slipsheets or a vinyl crack isolation membrane (approved by the Tile Council of America or Ceramic Tile Institute) are recommended between tile and concrete slabs-on-grade.

Additional Grading

This office should be notified in advance of any fill placement, supplemental regrading of the site, or trench backfilling after rough grading has been completed. This includes grading for vehicular and pedestrian pavements and underground utility trench backfill.

Footing Trench Excavations

All footing excavations should be observed by a representative of this firm subsequent to trenching and prior to concrete form and steel reinforcement placement. The purpose of the observations is to evaluate that the excavations have been made into the recommended bearing material and to the minimum widths and depths recommended for construction. If loose or compressible earth materials are exposed within the footing excavation, a deeper footing or the removal and recompaction of the subgrade materials would be recommended at that time.

Underground Utility Trench Backfill

1. All underground utility trench backfill, including under-slab utility trench backfill, should be uniformly moisture conditioned to at least optimum moisture content and then be compacted to obtain a minimum relative density of 90 percent of the laboratory standard (per ASTM D 1557). Observation, selective probing, and field density testing should be provided to evaluate the desired results.

2. Exterior trenches adjacent to, and within areas extending below a 1:1 (h:v) plane projected down and away from the outside, bottom edges of the footings, and all trenches beneath hardscape features and in slopes, should be compacted to a relative density of at least 90 percent of the laboratory standard (per ASTM D 1557). Sand backfill, unless excavated from the trench, should not be used in these backfill areas. Compaction testing and observations, along with selective probing, should be accomplished to evaluate the desired results.

3. All trench excavations should conform to CAL/OSHA, state, federal, and local safety codes.

4. Underground utilities crossing grade beams, perimeter beams, or footings should either pass below the footing or grade beam using a hardened collar or foam spacer, or pass through the footing or grade beam in accordance with the recommendations of the structural engineer.

SUMMARY OF RECOMMENDATIONS REGARDING GEOTECHNICAL OBSERVATION AND TESTING

We recommend that observation and testing be performed by GSI at each of the following construction stages:

- During grading or pad recertification.
- During excavation greater than 4 feet.
- After excavation of the building foundation, retaining wall footings, and any free-standing wall footings, prior to the placement of reinforcing steel or concrete.
- Prior to placement of any concrete slabs-on-grade or flatwork, after presoaking of building pad and other flatwork subgrade, before the placement of concrete, reinforcing steel, capillary break (e.g., sand, pea-gravel, or gravel), or vapor retarders.
- During placement of backfill for area drain, interior (under-slab) plumbing, and underground utility trenches.
- During retaining wall subdrain construction and backfill.
- During vehicular and pedestrian pavement construction.
- When any unusual soil conditions are encountered during any construction operations, subsequent to the issuance of this report.
- When any owner improvements, such as flatwork, walls, pavements, or retaining walls are constructed, prior to construction.
- A report of geotechnical observation and testing should be provided at the conclusion of each of the above stages, in order to provide concise and clear documentation of site work, and to comply with code requirements.

OTHER DESIGN PROFESSIONALS AND CONSULTANTS

The design civil engineer, structural engineer, post-tension designer, architect, landscape architect, or wall designer should review the recommendations provided herein, incorporate those recommendations into all their respective plans, and by explicit reference, make this report part of their project plans. This report presents minimum design criteria for the design of slabs, foundations and other elements possibly applicable to the project. These criteria should not be considered as substitutes for actual designs by the structural engineer or designer. The recommendations contained herein are not intended to preclude the transmission of water or vapor through the slab or foundation. The structural engineer or foundation and slab designer should provide recommendations to not allow water or vapor to enter into the structure so as to cause damage to another building component, or so as to limit the installation of the type of flooring materials typically used for the particular application.

The structural engineer or designer should analyze actual soil-structure interaction and consider, as needed, bearing, expansive soil influence, and strength, stiffness and deflections in the various slab, foundation, and other elements in order to develop appropriate, design-specific details. As conditions dictate, it is possible that other influences will also have to be considered. The structural engineer or designer should consider all applicable codes and authoritative sources where needed. If analyses by the structural engineer or designer result in less critical details than are provided herein as minimums, the minimums presented herein should be adopted. It is considered likely that some, more restrictive details will be required.

If the structural engineer or designer have any questions or requires further assistance, they should not hesitate to call or otherwise transmit their requests to GSI. In order to mitigate potential distress, the foundation and improvement's designer should confirm to GSI and the governing agency, in writing, that the proposed foundations and improvements can tolerate the amount of differential settlement and expansion characteristics, and other design criteria specified herein.

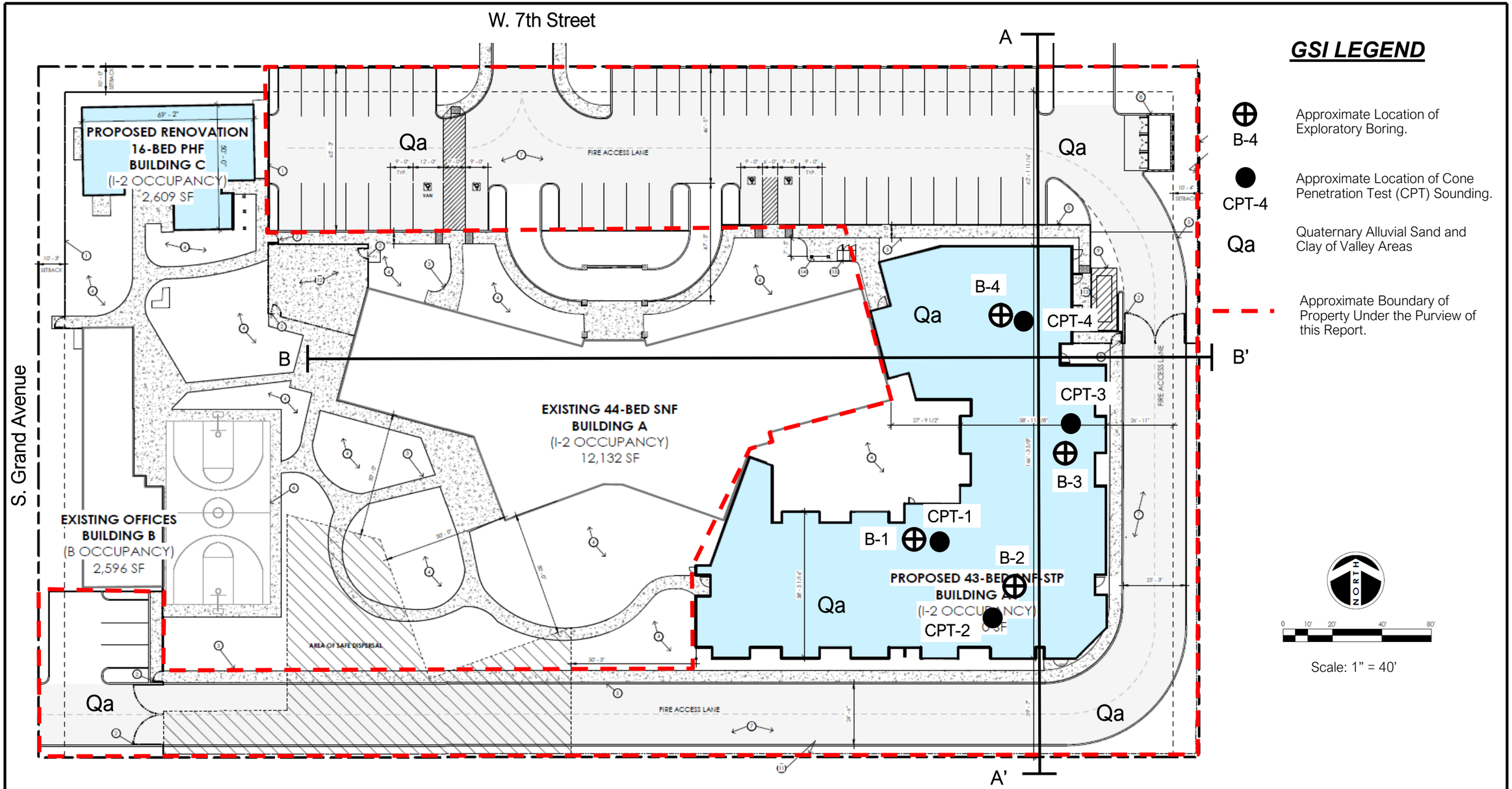
PLAN REVIEW

Final project plans (grading, precise grading, foundation, retaining wall or landscaping), should be reviewed by this office prior to construction, so that construction is in accordance with the conclusions and recommendations of this report. Based on our review, supplemental recommendations or further geotechnical studies may be warranted.

LIMITATIONS

The materials encountered on the project site and used for our analysis are believed representative of the area; however, soil and bedrock materials vary in character between excavations and natural outcrops or conditions exposed during mass grading. Site conditions may vary due to seasonal changes or other factors.

Inasmuch as our study is based upon our review and engineering analyses and laboratory data, the conclusions and recommendations are professional opinions. These opinions have been derived in accordance with current standards of practice, and no warranty, either express or implied, is given. Standards of practice are subject to change with time. GSI assumes no responsibility or liability for work or testing performed by others, or their inaction; or work performed when GSI is not requested to be onsite, to evaluate if our recommendations have been properly implemented. Use of this report constitutes an agreement and consent by the user to all the limitations outlined above, notwithstanding any other agreements that may be in place. In addition, this report may be subject to review by the controlling authorities. Thus, this report brings to completion our scope of services for this portion of the project. All samples will be disposed of after 30 days, unless specifically requested by the client, in writing.



ALL LOCATIONS ARE APPROXIMATE

This document or e-file is not part of the Construction Documents and should not be relied upon as being an accurate depiction of design.

Plate adapted from the Overall Site Plan by Gregg Maedo & Associates dated September 18, 2025.

OVERALL SITE PLAN

ARCHITECTURE + INTERIORS + PLANNING
321 NORTH RAMPART STREET, SUITE 101
ORANGE, CA 92868 . P: 714.937.1985
PROJECT#: 24060 . 18 SEPTEMBER 2025

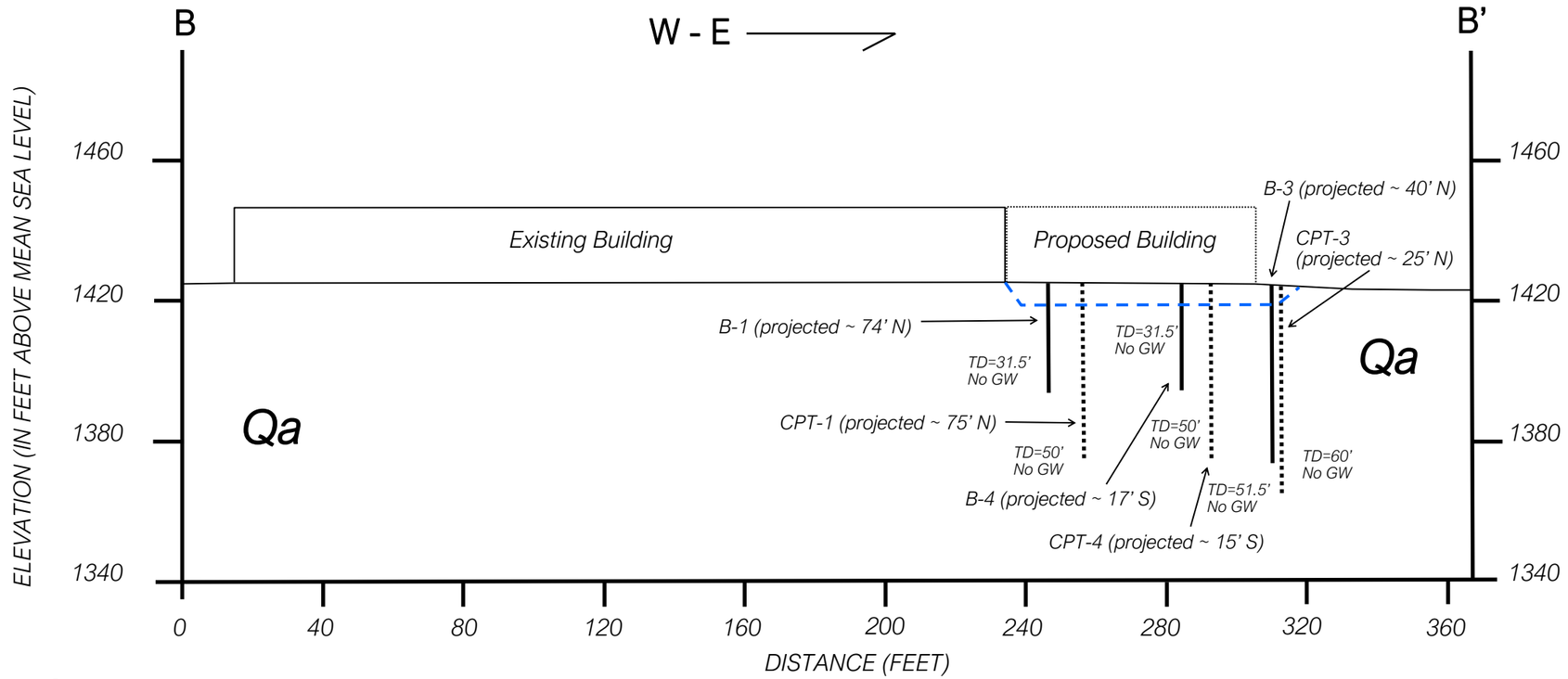
GREGG MAEDO + ASSOCIATES

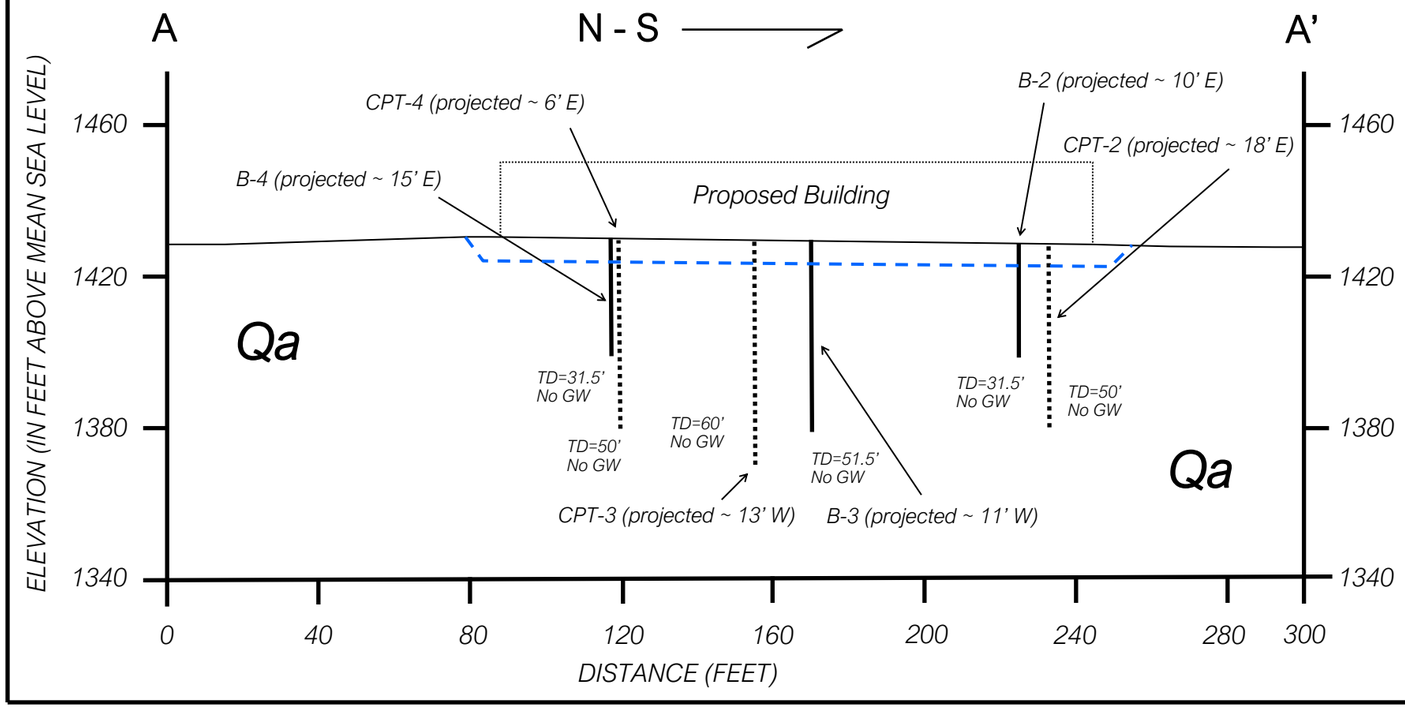
GSI GeoSoils,Inc.

Plate 1

GEOTECHNICAL MAP

W.O. 9071-A-IE	DATE: 12/25	SCALE: See Bar Scale





GSI LEGEND

Qa — Quaternary Alluvial Sand and Clay of Valley Areas.

Approximate Area of Remedial Removals (~5-7').

GeoSoils, Inc.

Plate 2

GEOLOGIC CROSS-SECTIONS

W.O. 9071-A-IE	DATE: 12/25	SCALE: 1"=40'

APPENDIX A

REFERENCES

APPENDIX A

REFERENCES

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APPENDIX B

BORING AND CPT LOGS

UNIFIED SOIL CLASSIFICATION SYSTEM

Major Divisions			Group Symbols	Typical Names
Coarse-Grained Soils More than 50% retained on No. 200 sieve	Gravels 50% or more of coarse fraction retained on No. 4 sieve	Clean Gravels	GW	Well-graded gravels and gravel-sand mixtures, little or no fines
			GP	Poorly graded gravels and gravel-sand mixtures, little or no fines
		Gravel with	GM	Silty gravels gravel-sand-silt mixtures
			GC	Clayey gravels, gravel-sand-clay mixtures
	Sands more than 50% of coarse fraction passes No. 4 sieve	Clean Sands	SW	Well-graded sands and gravelly sands, little or no fines
			SP	Poorly graded sands and gravelly sands, little or no fines
		Sands with Fines	SM	Silty sands, sand-silt mixtures
			SC	Clayey sands, sand-clay mixtures
Fine-Grained Soils 50% or more passes No. 200 sieve	Silts and Clays Liquid limit 50% or less		ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL	Organic silts and organic silty clays of low plasticity
	Silts and Clays Liquid limit greater than 50%		MH	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts
			CH	Inorganic clays of high plasticity, fat clays
			OH	Organic clays of medium to high plasticity
Highly Organic Soils			PT	Peat, mucic, and other highly organic soils

CONSISTENCY OR RELATIVE DENSITY

CRITERIA

Standard Penetration Test

Penetration Resistance N (blows/ft)	Relative Density
0 - 4	Very loose
4 - 10	Loose
10 - 30	Medium
30 - 50	Dense
> 50	Very dense

Standard Penetration Test

Penetration Resistance N (blows/ft)	Consistency	Unconfined Compressive Strength (tons/ft^2)
<2	Very Soft	<0.25
2 - 4	Soft	0.25 - .050
4 - 8	Medium	0.50 - 1.00
8 - 15	Stiff	1.00 - 2.00
15 - 30	Very Stiff	2.00 - 4.00
>30	Hard	>4.00

3" 3/4" #4 #10 #40 #200 U.S. Standard Sieve

Unified Soil Classification	Cobbles	Gravel		Sand			Silt or Clay
		coarse	fine	coarse	medium	fine	

MOISTURE CONDITIONS

Dry	Absence of moisture: dusty, dry to the touch
Slightly Moist	Below optimum moisture content for compaction
Moist	Near optimum moisture content
Very Moist	Above optimum moisture content
Wet	Visible free water; below water table

MATERIAL QUANTITY

trace	0 - 5 %
few	5 - 10 %
little	10 - 25 %
some	25 - 45 %

OTHER SYMBOLS

C Core Sample
S SPT Sample
B Bulk Sample
__ Groundwater
Qp Pocket Penetrometer

BASIC LOG FORMAT:
Group name, Group symbol, (grain size), color, moisture, consistency or relative density. Additional comments: odor, presence of roots, mica, gypsum, coarse grained particles, etc.

EXAMPLE:
Sand (SP), fine to medium grained, brown, moist, loose, trace silt, little fine gravel, few cobbles up to 4" in size, some hair roots and rootlets.

GeoSoils, Inc.

BORING LOG

PROJECT: Corcoran Construction, Inc.
980 West 7th Street, San Jacinto

W.O. 9071-A-IE *BORING* B-1 *SHEET* 1 *OF* 1

DATE EXCAVATED 11/26/25 *LOGGED BY:* DRE *APPROX. ELEV.:* 1,527

SAMPLE METHOD: CAL SAMPLER AND SPT, 140 LB HAMMER @ 30" DROP

Depth (ft.)	Sample: Bulk	Sample: Undisturbed	Sample: Blows/Ft.	USCS Symbol	Dry Unit Wt. (pcf)	Moisture (%)	Saturation (%)	Material Description
0				SM				**TOPSOIL AND DISTURBED FILL:** @ 0' SILTY SAND,brown, moist, loose; rootlets (topsoil), mica.
			33	SM	86.8	4.8	14.2	**QUATERNARY ALLUVIAL SAND AND CLAY OF VALLEY AREAS (Qa):** @ 2' Becomes medium dense to dense. @ 3' SILTY SAND,light brown to gray brown, dry, medium dense; medium to fine grained sands, some mica.
5			39		91.2	5.5	18.1	@ 5' As per 3'; dense; few roots.
			24		106.7	7.4	35.6	@ 7½' SILTY SAND, gray, damp, medium dense; some coarse grained sands, appear granitic.
10			38		111.4	10.2	55.9	@ 10' SILTY SAND, dark grayish brown, moist, dense; oxidation stains.
15			23					@ 15' SILTY SAND with SILT INTERBEDS, brownish gray to dark brownish gray, moist, medium dense.
20			37	SM/ ML	102.0	22.1	94.1	@ 20' SILTY SAND with SILT, dark gray, wet, dense; few oxidation stains, some mica, ½" low plasticity silt interbed.
25			10	ML				@ 25' SILT, gray to dark gray, moist, stiff; root traces, few interbeds, thin to medium laminated.
30			40	SM	114.0	8.5	50.2	@ 30' SILTY SAND, dark gray, damp, dense; coarse to fine grained sand.
								Total Depth = 31½' No seepage or caving Backfilled 11/26/25

▼ *Standard Penetration Test*
⌶ *Undisturbed, Ring Sample*
▽ *Groundwater*
♀ *Seepage*

GeoSoils, Inc.

PLATE B-2

GeoSoils, Inc.

BORING LOG

PROJECT: Corcoran Construction, Inc.
980 West 7th Street, San Jacinto

W.O. 9071-A-IE *BORING* B-2 *SHEET* 1 *OF* 1

DATE EXCAVATED 11/26/25 *LOGGED BY:* DRE *APPROX. ELEV.:* 1,526

SAMPLE METHOD: CAL SAMPLER AND SPT, 140 LB HAMMER @ 30" DROP

Depth (ft.)	Sample: Bulk	Sample: Undisturbed	Blows/Ft.	USCS Symbol	Dry Unit Wt. (pcf)	Moisture (%)	Saturation (%)	Material Description
0				SM				**TOPSOIL AND DISTURBED FILL:** @ 0' SILTY SAND, brown, wet, loose; few roots, some mica.
			12	SM	81.9	27.3	71.0	**QUATERNARY ALLUVIAL SAND AND CLAY OF VALLEY AREAS (Qa):** @ 3' SILTY SAND, light brownish gray, moist, medium dense; few coarse grained sands.
5			25		87.8	13.4	40.1	@ 5' SILTY SAND, brownish gray, damp, medium dense; few coarse grained sands.
			25		106.4	8.5	40.6	@ 7½' SILTY SAND, light gray and brownish gray, damp, medium dense; few sandy layers, few oxidation stains.
10			36		102.8	14.3	62.5	@ 10' SILTY SAND, brownish gray, moist, medium dense; some mica, few medium grained sands.
15			22					@ 15' SILTY SAND, light grayish brown, moist, medium dense.
20			41		112.7	9.3	52.6	@ 20' SILTY SAND, grayish brown, moist, dense; thickly bedded, some yellowish staining.
25			8	ML				@ 25' SILT, dark brownish gray, moist, medium stiff; calcified laminae.
30			27	SM	117.6	5.1	33.5	@ 30' SILTY SAND, dark brownish gray, damp, medium dense.
								Total Depth = 31½' No seepage or caving Backfilled 11/26/25

Standard Penetration Test
Undisturbed, Ring Sample
Groundwater
Seepage

GeoSoils, Inc.

PLATE B-3

GeoSoils, Inc.

BORING LOG

PROJECT: Corcoran Construction, Inc.
980 West 7th Street, San Jacinto

W.O. 9071-A-IE *BORING* B-3 *SHEET* 1 *OF* 2

DATE EXCAVATED 11/26/25 *LOGGED BY:* DRE *APPROX. ELEV.:* 1,526

SAMPLE METHOD: CAL SAMPLER AND SPT, 140 LB HAMMER @ 30" DROP

Depth (ft.)	Sample: Bulk	Sample: Undisturbed	Sample: Blows/Ft.	USCS Symbol	Dry Unit Wt. (pcf)	Moisture (%)	Saturation (%)	Material Description
0				SM				**TOPSOIL AND DISTURBED FILL:** @ 0' SILTY SAND, brown, moist, loose to medium dense.
			10	SM	99.7	15.4	61.8	**QUATERNARY ALLUVIAL SAND AND CLAY OF VALLEY AREAS (Qa):** @ 2½' SILTY SAND, grayish brown, moist, loose.
5			14		89.9	28.1	88.8	@ 5' As per 2½', wet, medium dense.
			23	SP-SM	105.2	2.1	9.6	@ 7½' SILTY SAND and SAND, grayish brown and light brownish gray, dry, medium dense.
10			33	SM	98.6	15.0	58.9	@ 10' SILTY SAND, grayish brown, moist, medium dense; fewer fine grained sands.
15			22	SP-SM				@ 15' SILTY SAND and SAND, dark gray, moist, medium dense.
20			28		110.6	3.1	16.7	@ 20' More medium to medium grained SAND; oxidation stains in root trace.
25			9	ML				@ 25' SANDY SILT, grayish brown, moist, medium stiff to stiff.
30			22	SM	101.0	18.2	75.9	@ 30' SILTY SAND, dark brownish gray to brownish gray, moist, medium dense; few oxidation stains along bedding laminae.

▼ *Standard Penetration Test*
⌶ *Undisturbed, Ring Sample*
▽ *Groundwater*
♀ *Seepage*

GeoSoils, Inc.

BORING LOG

PROJECT: Corcoran Construction, Inc.
980 West 7th Street, San Jacinto

W.O. 9071-A-IE *BORING* B-3 *SHEET* 2 *OF* 2

DATE EXCAVATED 11/26/25 *LOGGED BY:* DRE *APPROX. ELEV.:* 1,526

SAMPLE METHOD: CAL SAMPLER AND SPT, 140 LB HAMMER @ 30" DROP

Depth (ft.)	Sample: Bulk	Sample: Undisturbed	Sample: Blows/Ft.	USCS Symbol	Dry Unit Wt. (pcf)	Moisture (%)	Saturation (%)	Material Description
35			10	ML				@ 35' SILT with FINE SAND, dark brownish gray, moist, medium stiff.
40			30	SM	108.0	19.5	97.2	@ 40' SILTY SAND, dark gray, saturated, medium stiff.
45			17	SM				@ 45' SILTY SAND and SANDY SILT, brownish gray and dark brownish gray, moist, medium dense; sand layer at end of SPT 3", SILT with SAND has reddish yellow oxidation stains, slight mottling.
50			63		104.1	7.2	32.6	@ 50' SILTY SAND, gray to light gray, damp, dense.
								Total Depth = 51½' No seepage or caving Backfilled 11/26/25
55								
60								
65								

▼ *Standard Penetration Test*
⌶ *Undisturbed, Ring Sample*
▽ *Groundwater*
♀ *Seepage*

GeoSoils, Inc.

BORING LOG

PROJECT: Corcoran Construction, Inc.
980 West 7th Street, San Jacinto

W.O. 9071-A-IE *BORING* B-4 *SHEET* 1 *OF* 1

DATE EXCAVATED 11/26/25 *LOGGED BY:* DRE *APPROX. ELEV.:* 1,526

SAMPLE METHOD: CAL SAMPLER AND SPT, 140 LB HAMMER @ 30" DROP

Depth (ft.)	Sample: Bulk	Sample: Undisturbed	Sample: Blows/Ft.	USCS Symbol	Dry Unit Wt. (pcf)	Moisture (%)	Saturation (%)	Material Description
0				SM				**TOPSOIL AND DISTURBED FILL:** @ 0' SILTY SAND, brown, moist, loose; roots.
			13	SM	97.0	8.9	33.3	**QUATERNARY ALLUVIAL SAND AND CLAY OF VALLEY AREAS (Qa):** @ 3' SILTY SAND, dark grayish brown, damp, medium dense; few roots, mica, silty laminae horizontal beds.
5			25		114.4	6.0	35.7	@ 5' SILTY SAND, dark gray, damp, medium dense; few oxidation stains, fewer fines.
			15		87.2	23.2	68.8	@7½' SILTY SAND, becomes light brownish gray, moist, medium dense; sample disturbed.
10			14					@10' SILTY SAND, dark gray, moist, medium dense; few SILT interbeds.
15			22		115.0	11.7	71.0	@ 15' SILTY SAND, brown to brownish gray, moist, medium dense; few coarse grained sands, few oxidation stains.
20			20					@ 20' SILTY SAND, light gray to gray, moist, medium dense; few oxidation stains, gradational bedding, medium to fine graind sands.
25			22	SM/ ML	96.9	23.8	89.1	@ 25' SILT to SILTY SAND, dark gray to gray, wet, very stiff to medium dense; low plasticity SILT, 1cm-1mm laminae bedding, few oxidation stains.
30			21					@ 30' SILTY SAND, gray, moist, medium dense.
								Total Depth = 31½' No seepage or caving Backfilled 11/26/25

▼ *Standard Penetration Test*
⌶ *Undisturbed, Ring Sample*
▽ *Groundwater*
♀ *Seepage*

SUMMARY

OF

CONE PENETRATION TEST DATA

Project:

Bradley Gardens
980 W. 7th Street
San Jacinto, CA
November 26, 2025

Prepared for:

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2. **SUMMARY OF FIELD WORK**
3. **FIELD EQUIPMENT & PROCEDURES**
4. **CONE PENETRATION TEST DATA & INTERPRETATION**

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- CPT Classification/Soil Behavior Chart
- Summary of Shear Wave Velocities
- CPT Data Files (sent via email)

SUMMARY
OF
CONE PENETRATION TEST DATA

1. INTRODUCTION

This report presents the results of a Cone Penetration Test (CPT) program carried out for the Bradley Gardens project located at 980 W. 7th Street in San Jacinto, California. The work was performed by Kehoe Testing & Engineering (KTE) on November 26, 2025. The scope of work was performed as directed by GeoSoils, Inc. (GSI) personnel.

2. SUMMARY OF FIELD WORK

The fieldwork consisted of performing CPT soundings at four locations to determine the soil lithology. A summary is provided in **TABLE 2.1**.

LOCATION	DEPTH OF CPT (ft)	COMMENTS/NOTES:
CPT-1	50	
CPT-2	50	
CPT-3	60	
CPT-4	50	

TABLE 2.1 - Summary of CPT Soundings

3. FIELD EQUIPMENT & PROCEDURES

The CPT soundings were carried out by **KTE** using an integrated electronic cone system manufactured by Vertek. The CPT soundings were performed in accordance with ASTM standards (D5778). The cone penetrometers were pushed using a 30-ton CPT rig. The cone used during the program was a 15 cm^2 cone with a cone net area ratio of 0.83. The following parameters were recorded at approximately 2.5 cm depth intervals:

- Cone Resistance (qc)
- Sleeve Friction (fs)
- Dynamic Pore Pressure (u)
- Inclination
- Penetration Speed

At location CPT-3, shear wave measurements were obtained at approximately 10-foot intervals. The shear wave is generated using an air-actuated hammer, which is located inside the front jack of the CPT rig. The cone has a triaxial geophone, which recorded the shear wave signal generated by the air hammer.

The above parameters were recorded and viewed in real time using a laptop computer. Data is stored at the KTE office for up to 2 years for future analysis and reference. A complete set of baseline readings was taken prior to each sounding to determine temperature shifts and any zero load offsets. Monitoring base line readings ensures that the cone electronics are operating properly.

4. CONE PENETRATION TEST DATA & INTERPRETATION

The Cone Penetration Test data is presented in graphical form in the attached Appendix. These plots were generated using the CPeT-IT program. Penetration depths are referenced to ground surface. The soil behavior type on the CPT plots is derived from the attached CPT SBT plot (Robertson, "Interpretation of Cone Penetration Test…", 2009) and presents major soil lithologic changes. The stratigraphic interpretation is based on relationships between cone resistance (qc), sleeve friction (fs), and penetration pore pressure (u). The friction ratio (Rf), which is sleeve friction divided by cone resistance, is a calculated parameter that is used along with cone resistance to infer soil behavior type. Generally, cohesive soils (clays) have high friction ratios, low cone resistance and generate excess pore water pressures. Cohesionless soils (sands) have lower friction ratios, high cone bearing and generate little (or negative) excess pore water pressures.

The CPT data files have also been provided. These files can be imported in CPeT-IT (software by GeoLogismiki) and other programs to calculate various geotechnical parameters.

It should be noted that it is not always possible to clearly identify a soil type based on qc, fs and u. In these situations, experience, judgement and an assessment of the pore pressure data should be used to infer the soil behavior type.

If you have any questions regarding this information, please do not hesitate to call our office at (714) 901-7270.

Sincerely,

KEHOE TESTING & ENGINEERING



Steven P. Kehoe
President

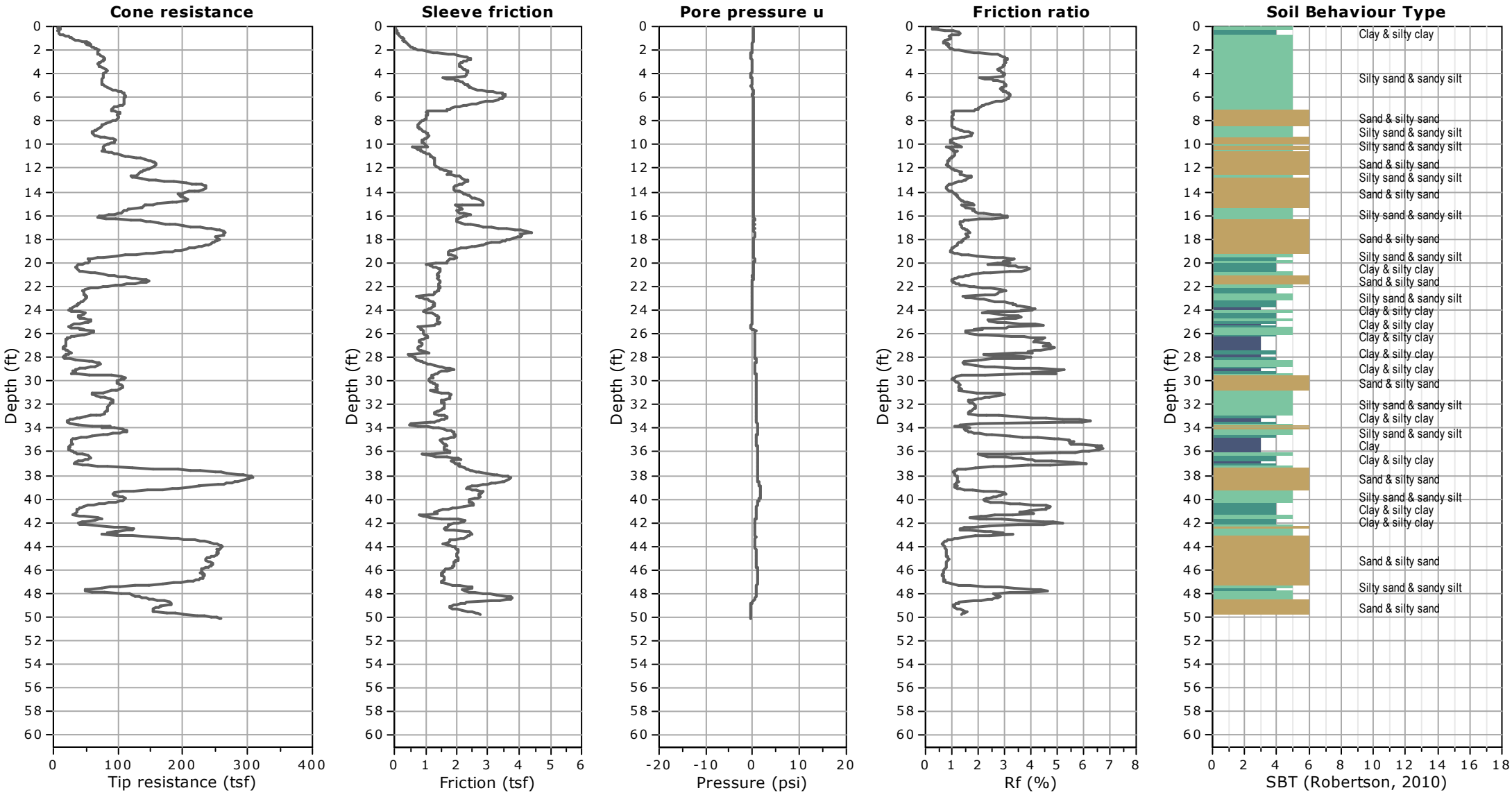
12/06/25-jg-8179

APPENDIX

Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: **GeoSoils / Bradley Gardens**
Location: **980 W. 7th St, San Jacinto, CA**

CPT-1
Total depth: 50.14 ft, Date: 11/26/2025



Kehoe Testing and Engineering
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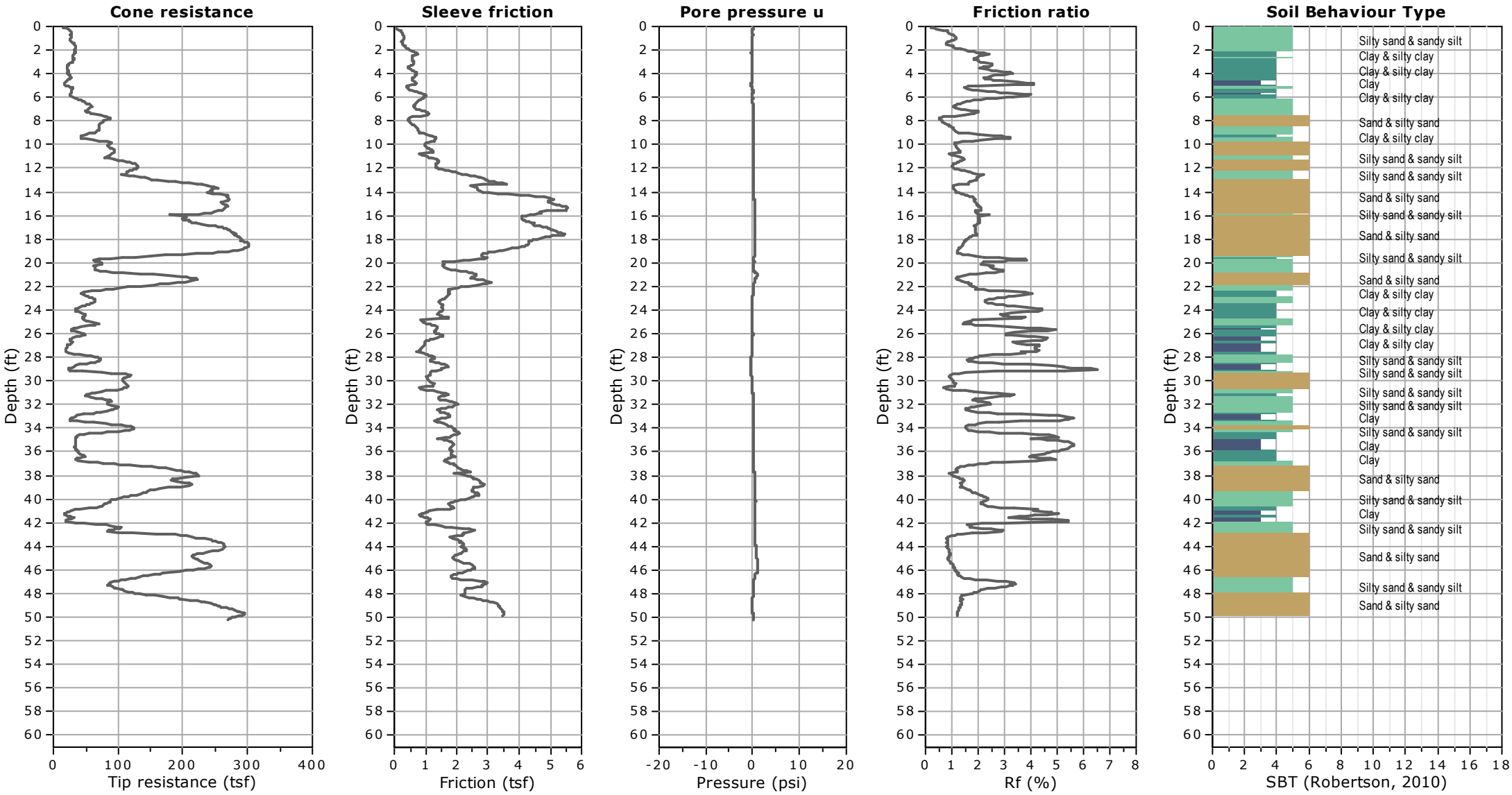
Project: GeoSoils / Bradley Gardens
Location: 980 W. 7th St, San Jacinto, CA

CPT-2
Total depth: 50.27 ft, Date: 11/26/2025



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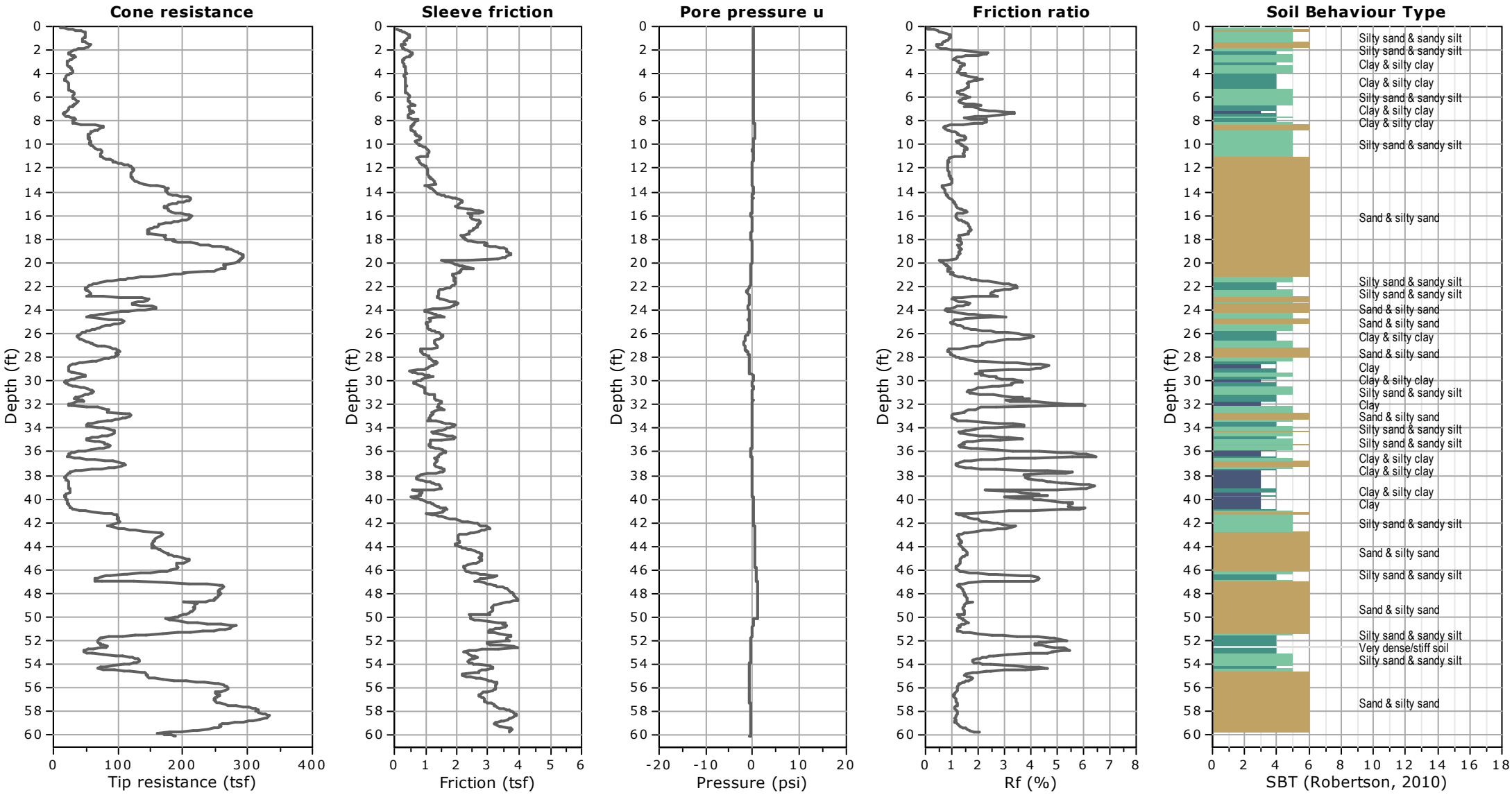
Project: **GeoSoils / Bradley Gardens**
Location: **980 W. 7th St, San Jacinto, CA**

CPT-3
Total depth: 60.11 ft, Date: 11/26/2025



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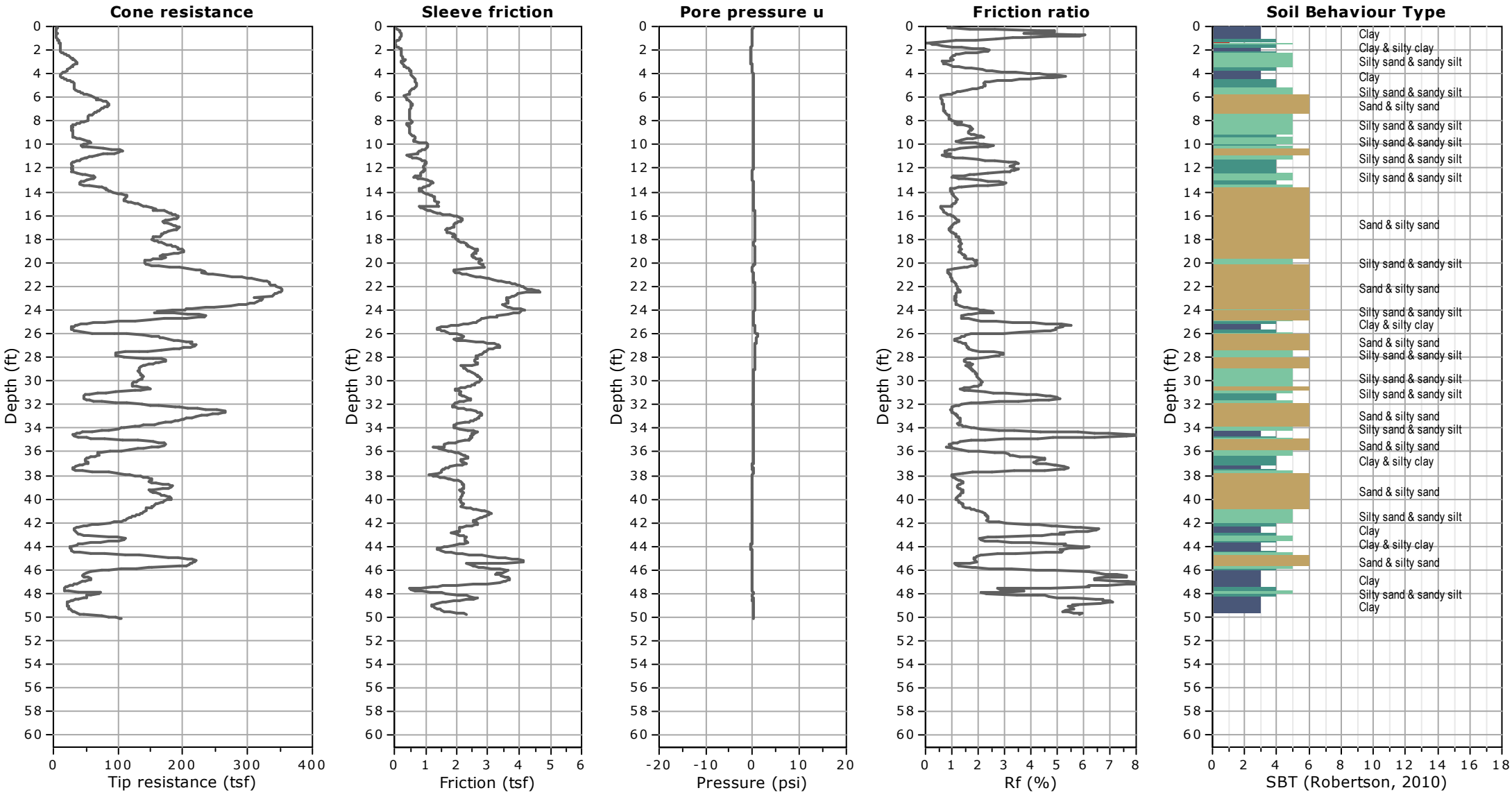
Project: **GeoSoils / Bradley Gardens**
Location: **980 W. 7th St, San Jacinto, CA**

CPT-4
Total depth: 50.14 ft, Date: 11/26/2025



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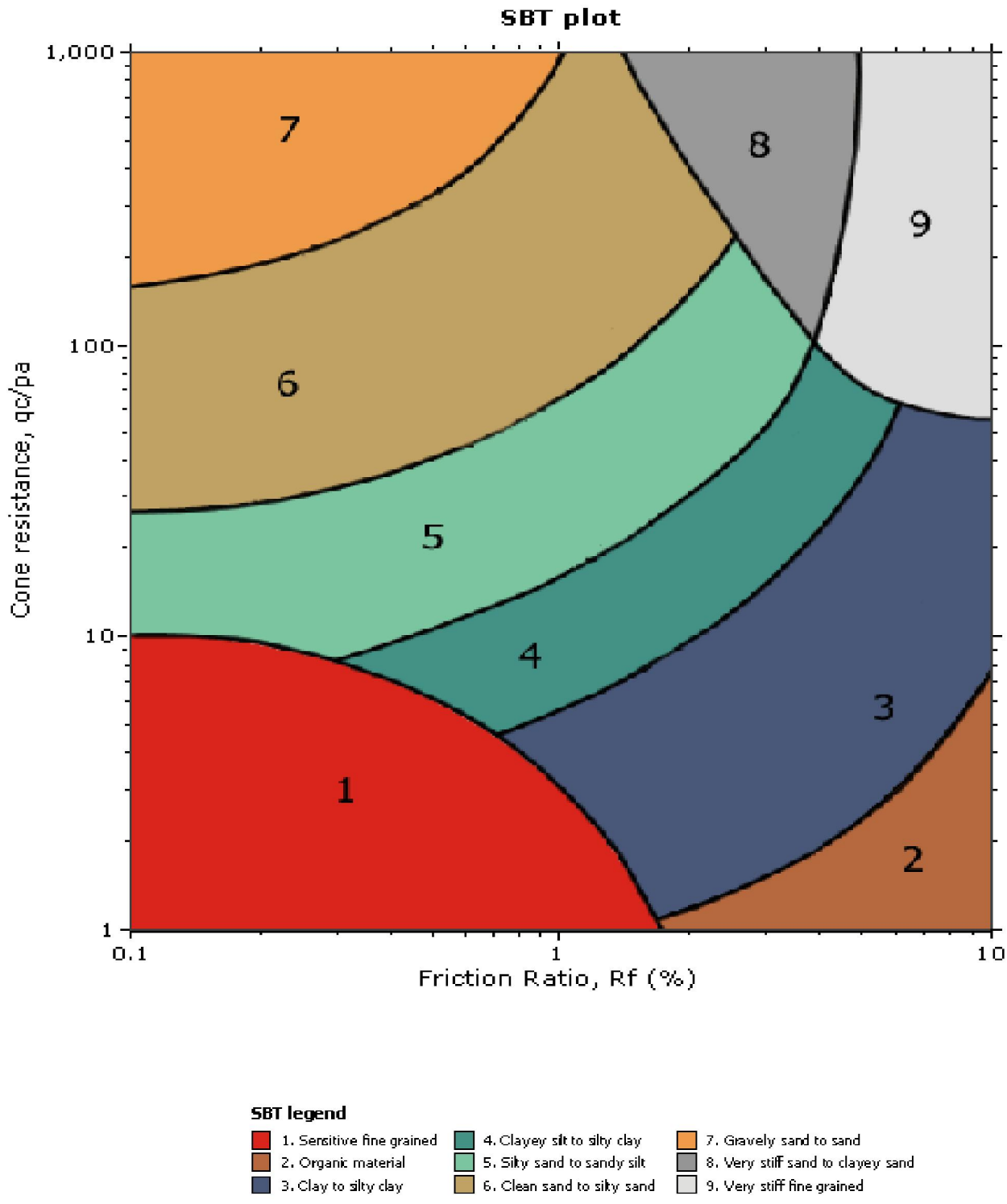


GeoSoils
Bradley Gardens
San Jacinto, CA

CPT Shear Wave Measurements

Location	Tip Depth (ft)	Geophone Depth (ft)	Travel Distance (ft)	S-Wave Arrival (msec)	S-Wave Velocity from Surface (ft/sec)	Interval S-Wave Velocity (ft/sec)
CPT-3	10.01	9.01	9.23	14.56	634	
	20.05	19.05	19.15	25.24	759	929
	30.02	29.02	29.09	39.48	737	698
	40.06	39.06	39.11	52.76	741	755
	50.10	49.10	49.14	61.76	796	1114
	60.10	59.10	59.13	72.36	817	943

Shear Wave Source Offset - 2 ft

S-Wave Velocity from Surface = Travel Distance/S-Wave Arrival
Interval S-Wave Velocity = (Travel Dist2-Travel Dist1)/(Time2-Time1)

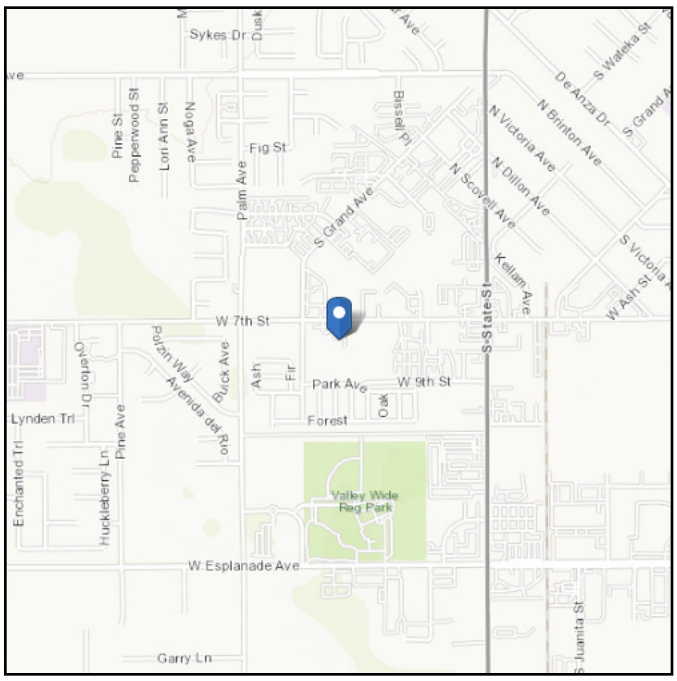
APPENDIX C

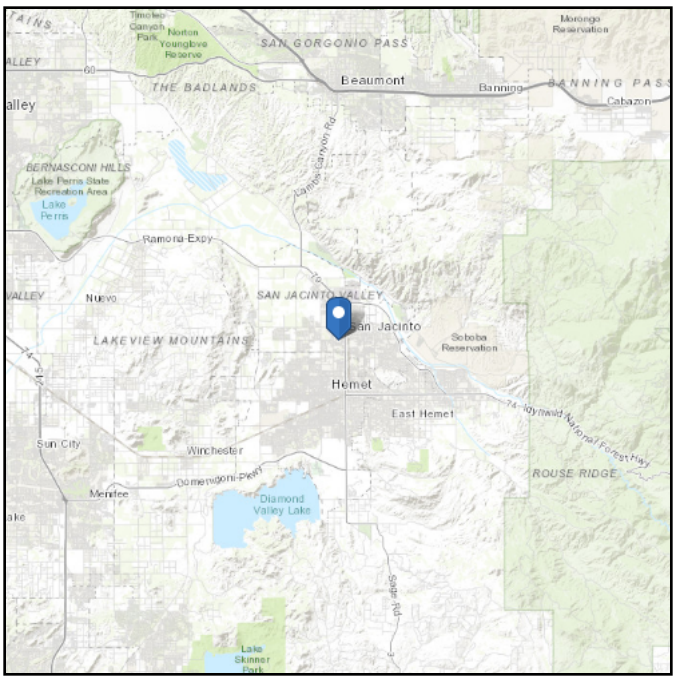
SEISMICITY DATA

ASCE Hazards Report

Address:
No Address at This Location

Standard:	ASCE/SEI 7-16	**Latitude:**	33.77956
Risk Category:	III	**Longitude:**	-116.97718
Soil Class:	D - Stiff Soil	**Elevation:**	1525.6020140554833 ft (NAVD 88)





W.O. 9071-A-IE
Plate C-1

Seismic

Site Soil Class: D - Stiff Soil

Results:

S_S :	2.161	S_{D1} :	N/A
S_1 :	0.875	T_L :	8
F_a :	1	PGA :	0.977
F_v :	N/A	PGA_M :	1.074
S_{MS} :	2.161	F_{PGA} :	1.1
S_{M1} :	N/A	I_e :	1.25
S_{DS} :	1.441	C_v :	1.5

Ground motion hazard analysis may be required. See ASCE/SEI 7-16 Section 11.4.8.

Data Accessed: Tue Dec 02 2025

Date Source: USGS Seismic Design Maps

W.O. 9071-A-IE
Plate C-2

The ASCE Hazard Tool is provided for your convenience, for informational purposes only, and is provided “as is” and without warranties of any kind. The location data included herein has been obtained from information developed, produced, and maintained by third party providers; or has been extrapolated from maps incorporated in the ASCE standard. While ASCE has made every effort to use data obtained from reliable sources or methodologies, ASCE does not make any representations or warranties as to the accuracy, completeness, reliability, currency, or quality of any data provided herein. Any third-party links provided by this Tool should not be construed as an endorsement, affiliation, relationship, or sponsorship of such third-party content by or from ASCE.

ASCE does not intend, nor should anyone interpret, the results provided by this Tool to replace the sound judgment of a competent professional, having knowledge and experience in the appropriate field(s) of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the contents of this Tool or the ASCE standard.

In using this Tool, you expressly assume all risks associated with your use. Under no circumstances shall ASCE or its officers, directors, employees, members, affiliates, or agents be liable to you or any other person for any direct, indirect, special, incidental, or consequential damages arising from or related to your use of, or reliance on, the Tool or any information obtained therein. To the fullest extent permitted by law, you agree to release and hold harmless ASCE from any and all liability of any nature arising out of or resulting from any use of data provided by the ASCE Hazard Tool.

W.O. 9071-A-IE
Plate C-3

U.S. Geological Survey - Earthquake Hazards Program

Unified Hazard Tool

Please do not use this tool to obtain ground motion parameter values for the design code reference documents covered by the U.S. Seismic Design Maps web tools (e.g., the International Building Code and the ASCE 7 or 41 Standard). The values returned by the two applications are not identical.

Please also see the new USGS Earthquake Hazard Toolbox for access to the most recent NSHMs for the conterminous U.S. and Hawaii.

Input

Edition

Dynamic: Conterminous U.S. 2014 (u…

Spectral Period

Peak Ground Acceleration

Latitude

Decimal degrees

33.77956

Time Horizon

Return period in years

2475

Longitude

Decimal degrees, negative values for western longitudes

-116.97718

Site Class

259 m/s (Site class D)

W.O. 9071-A-IE
Plate C-4

Hazard Curve

Please select “Edition”, “Location” & “Site Class” above to compute a hazard curve.

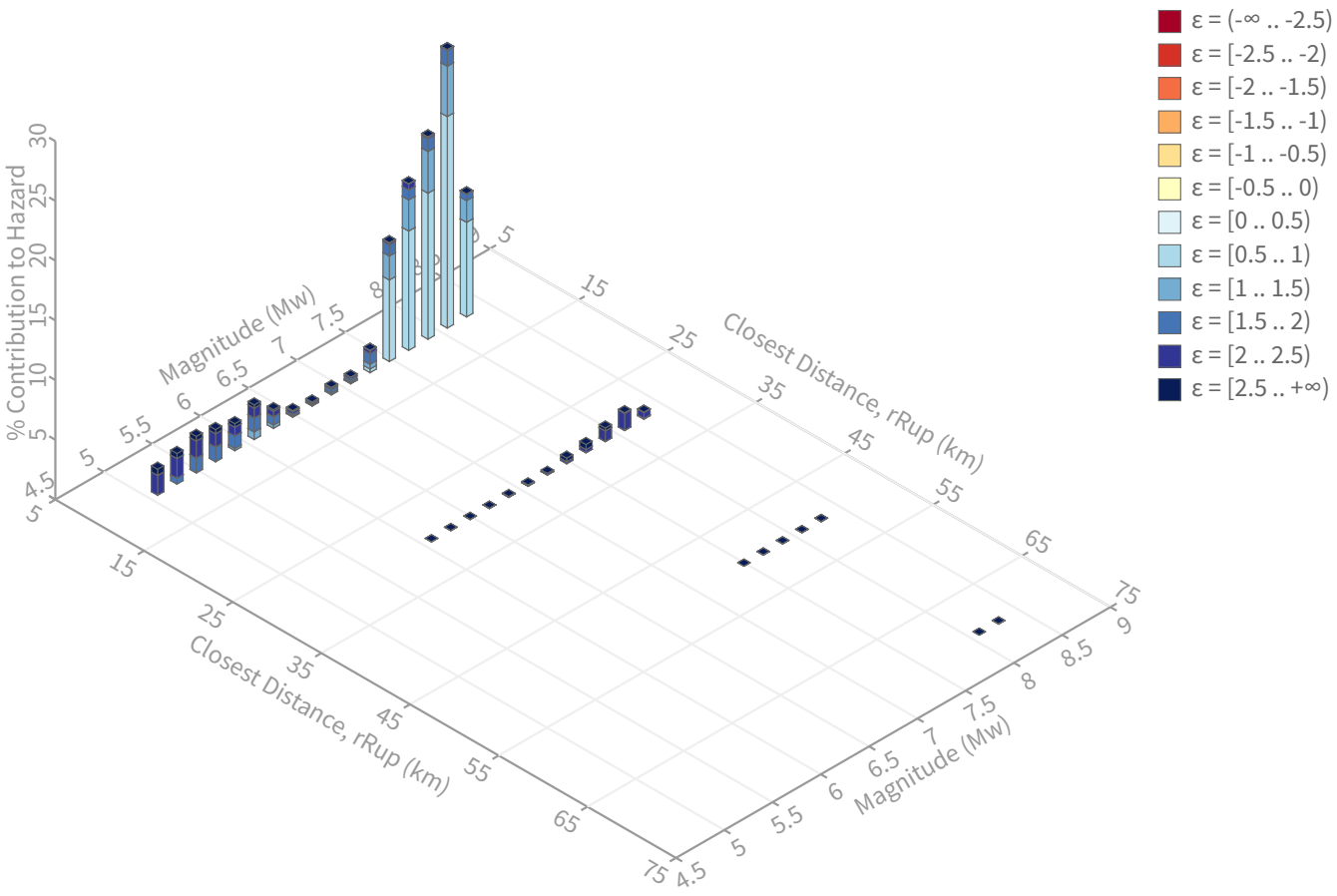
Compute Hazard Curve

W.O. 9071-A-IE
Plate C-5

Deaggregation

Component

Total



W.O. 9071-A-IE
Plate C-6

Summary statistics for, Deaggregation: Total

Deaggregation targets

Return period: 2475 yrs
Exceedance rate: 0.0004040404 yr^{-1}
PGA ground motion: 0.95359974 g

Recovered targets

Return period: 3108.4085 yrs
Exceedance rate: 0.00032170804 yr^{-1}

Totals

Binned: 100 %
Residual: 0 %
Trace: 0.06 %

Mean (over all sources)

m: 7.5
r: 4.09 km
ε_0: 1.3 σ

Mode (largest m-r bin)

m: 8.1
r: 1.47 km
ε_0: 1 σ
Contribution: 23.29 %

Mode (largest m-r-ε_0 bin)

m: 8.1
r: 1.4 km
ε_0: 0.86 σ
Contribution: 17.71 %

Discretization

r: min = 0.0, max = 1000.0, Δ = 20.0 km
m: min = 4.4, max = 9.4, Δ = 0.2
ε: min = -3.0, max = 3.0, Δ = 0.5 σ

Epsilon keys

ε0: [-∞ .. -2.5)
ε1: [-2.5 .. -2.0)
ε2: [-2.0 .. -1.5)
ε3: [-1.5 .. -1.0)
ε4: [-1.0 .. -0.5)
ε5: [-0.5 .. 0.0)
ε6: [0.0 .. 0.5)
ε7: [0.5 .. 1.0)
ε8: [1.0 .. 1.5)
ε9: [1.5 .. 2.0)
ε10: [2.0 .. 2.5)
ε11: [2.5 .. +∞]

W.O. 9071-A-IE
Plate C-7

Deaggregation Contributors

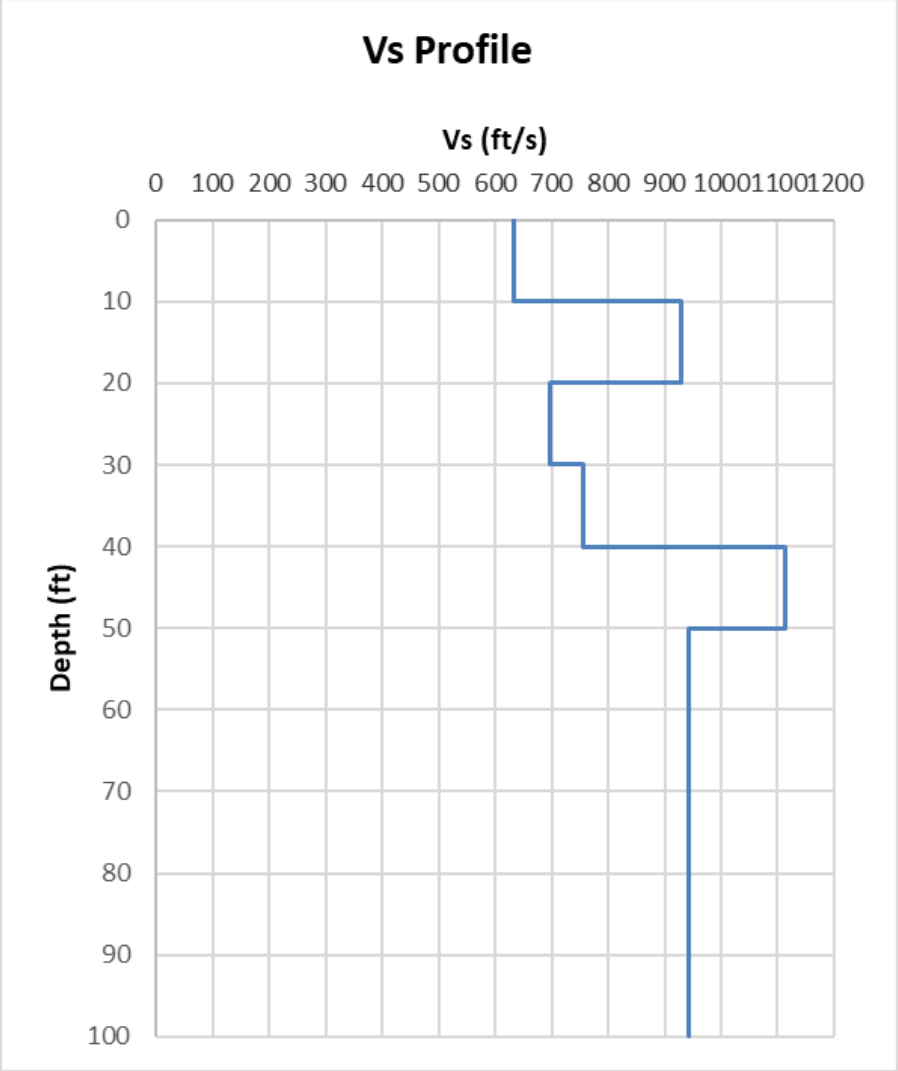
Source Set ↳ Source	Type	r	m	ε_0	lon	lat	az	%
UC33brAvg_FM31	System							40.90
San Jacinto (Stepovers Combined) [2]		1.40	7.92	1.02	116.964°W	33.784°N	65.28	36.90
San Andreas (San Bernardino S) [6]		24.73	7.92	2.32	116.820°W	33.959°N	36.00	1.68
UC33brAvg_FM32	System							40.81
San Jacinto (Stepovers Combined) [2]		1.40	7.92	1.02	116.964°W	33.784°N	65.28	36.78
San Andreas (San Bernardino S) [6]		24.73	7.92	2.32	116.820°W	33.959°N	36.00	1.69
UC33brAvg_FM31 (opt)	Grid							9.15
PointSourceFinite: -116.977, 33.811		6.29	5.59	1.86	116.977°W	33.811°N	0.00	2.58
PointSourceFinite: -116.977, 33.811		6.29	5.59	1.86	116.977°W	33.811°N	0.00	2.58
UC33brAvg_FM32 (opt)	Grid							9.14
PointSourceFinite: -116.977, 33.811		6.29	5.59	1.86	116.977°W	33.811°N	0.00	2.58
PointSourceFinite: -116.977, 33.811		6.29	5.59	1.86	116.977°W	33.811°N	0.00	2.58

W.O. 9071-A-IE
Plate C-8

Calculated V_{s30}

V_{s30} = 861.3 ft/s

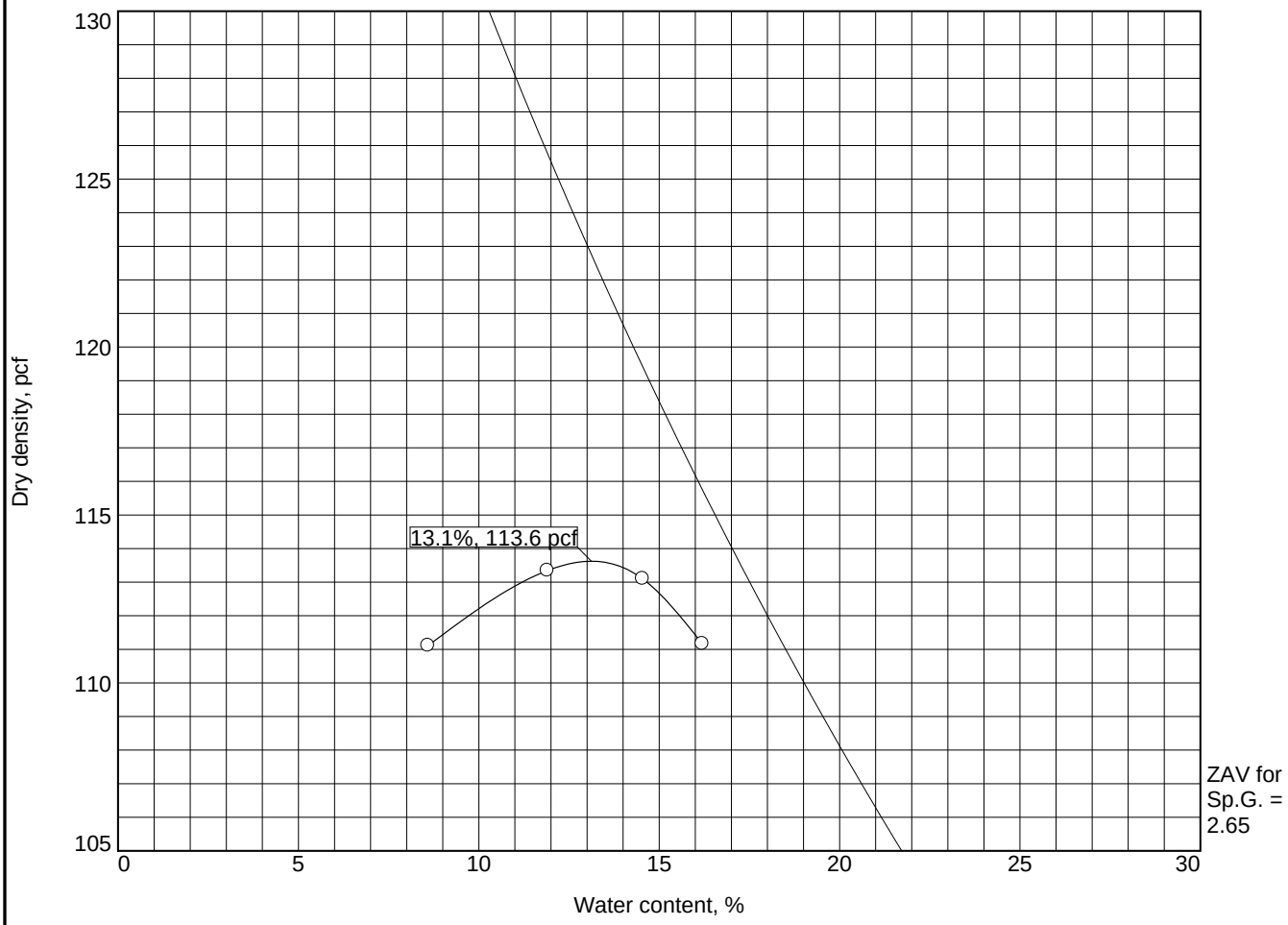
di	vsi	di/vsi
10	634	0.015773
10	929	0.010764
10	698	0.014327
10	755	0.013245
10	1114	0.008977
50	943	0.053022
100		**0.116108**



APPENDIX D

LABORATORY DATA

COMPACTION TEST REPORT For Curve No. B-2, 0-5ft



Test specification: ASTM D 1557-12 Method A Modified

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > #4	% < No.200
	USCS	AASHTO						
0-5ft	SM			2.65			1.0	

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 113.6 pcf Optimum moisture = 13.1 %	Olive Gray Silty Sand

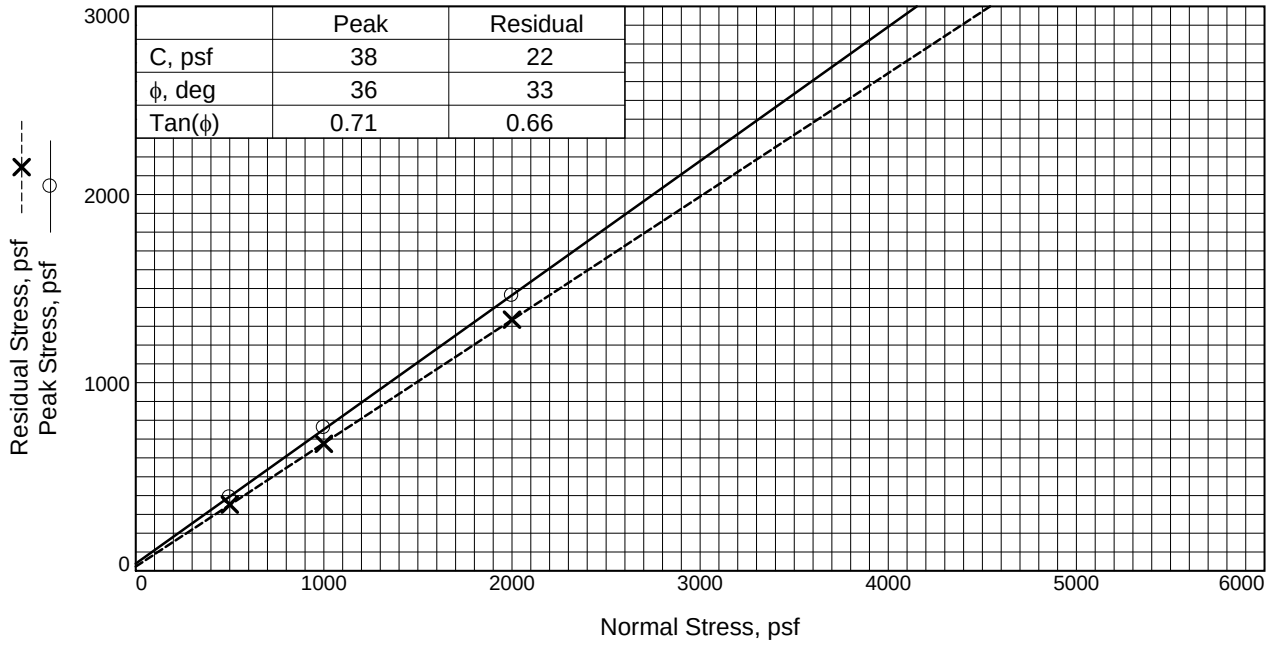
Project No. 9071-A-IE **Client:** Corcoran Construction, Inc.
Project: Bradley Gardens Skilled Nursing Facility
Date: 12-5-25
○ **Source of Sample:** B-2 **Sample Number:** B-2

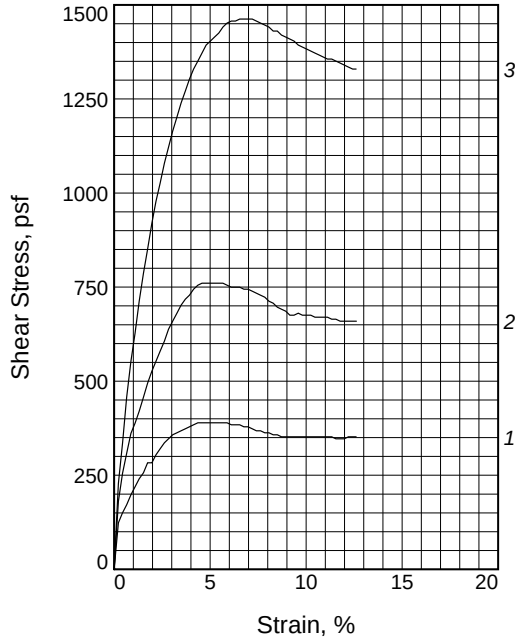
GeoSoils, Inc.

Remarks:

Plate D-1

Tested By: DG **Checked By:** TR





Sample No.		1	2	3
Initial	Water Content, %	7.4	7.4	7.4
	Dry Density, pcf	103.6	105.9	104.8
	Saturation, %	32.9	34.9	33.9
	Void Ratio	0.5967	0.5617	0.5784
	Diameter, in.	2.38	2.38	2.38
	Height, in.	1.00	1.00	1.00
At Test	Water Content, %	19.3	17.9	18.7
	Dry Density, pcf	104.7	107.4	108.7
	Saturation, %	88.2	88.0	95.0
	Void Ratio	0.5808	0.5399	0.5216
	Diameter, in.	2.38	2.38	2.38
	Height, in.	0.99	0.99	0.96
Normal Stress, psf		500	1000	2000
Peak Stress, psf		389	760	1462
Strain, %		5.0	5.2	6.8
Residual Stress, psf		352	675	1335
Strain, %		8.9	9.2	12.2
Strain rate, in./min.		0.008	0.008	0.008

Sample Type: In-Situ
Description: Gray Silty Sand

Specific Gravity= 2.65
Remarks:

Figure _____

Client: Corcoran Construction, Inc.

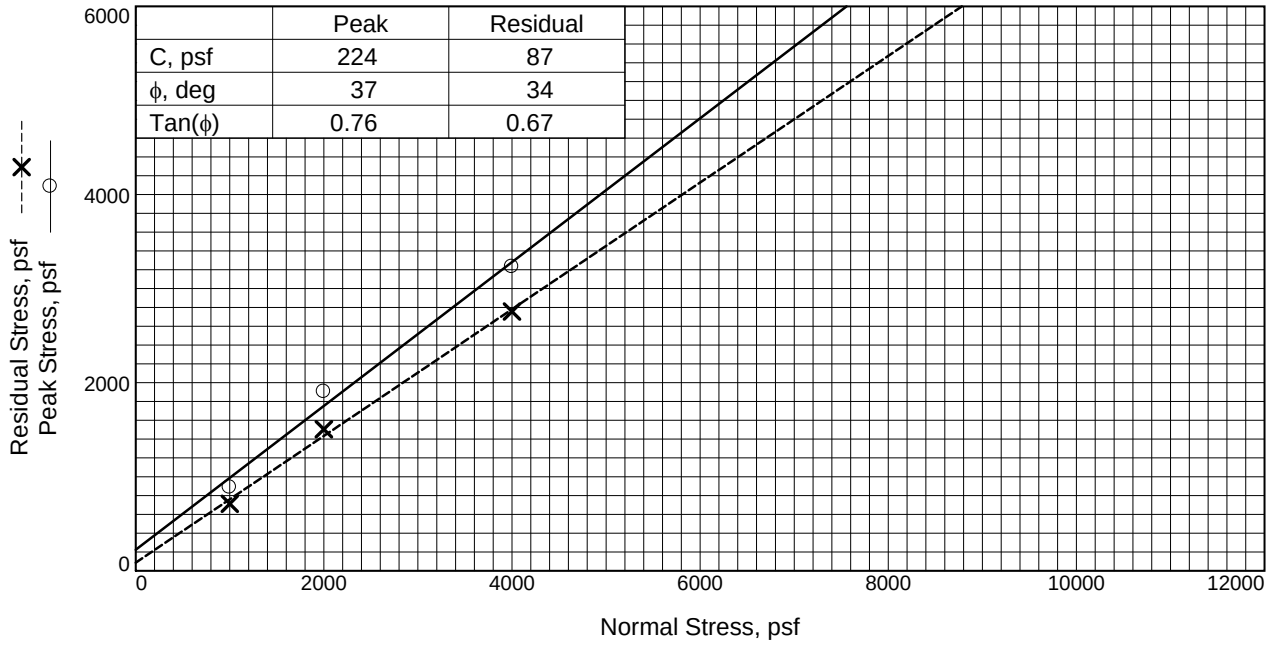
Project: Bradley Gardens Skilled Nursing Facility

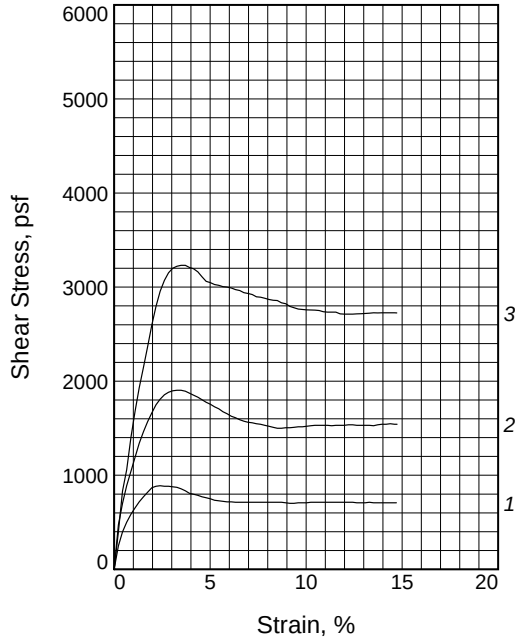
Source of Sample: B-1 **Depth:** 7.5ft
Sample Number: B-1
Proj. No.: 9071-A-IE

GeoSoils, Inc.

Tested By: TR **Checked By:** TR

Plate D-2





Sample No.		1	2	3
Initial	Water Content, %	11.7	11.7	11.7
	Dry Density, pcf	113.5	111.6	113.7
	Saturation, %	67.7	64.2	68.2
	Void Ratio	0.4579	0.4830	0.4549
	Diameter, in.	2.38	2.38	2.38
	Height, in.	1.00	1.00	1.00
At Test	Water Content, %	12.7	16.4	14.8
	Dry Density, pcf	114.5	112.8	116.4
	Saturation, %	75.5	93.2	93.1
	Void Ratio	0.4448	0.4667	0.4215
	Diameter, in.	2.38	2.38	2.38
	Height, in.	0.99	0.99	0.98
Normal Stress, psf		1000	2000	4000
Peak Stress, psf		888	1904	3232
Strain, %		2.4	3.3	3.5
Residual Stress, psf		713	1505	2756
Strain, %		6.3	8.9	10.2
Strain rate, in./min.		0.003	0.003	0.003

Sample Type: In-Situ
Description: Dark Gray Silty Sand

Specific Gravity= 2.65
Remarks:

Figure _____

Client: Corcoran Construction, Inc.

Project: Bradley Gardens Skilled Nursing Facility

Source of Sample: B-4 **Depth:** 15.0ft
Sample Number: B-4
Proj. No.: 9071-A-IE

GeoSoils, Inc.

Tested By: TR **Checked By:** TR

Plate D-3

GeoSoils, Inc.

1817 Aston Ave., Suite 104, Carlsbad CA 92008
Phone (760) 438-3155

CORROSION REPORT SUMMARY

Project No: **9071-A-IE**
Project Name: **Corcoran Construction, Inc.**
Report Date: **December 9, 2025**

SAMPLE ID	pH (H+)	Minimum Resistivity (ohm/cm)	Sulfate Content (wt%)	Chloride Content (mg/kg)
B-1, 0-5ft	8.0	3500	0.005	21

Sample testing in accordance with: pH - CTM 643, Resistivity - CTM 643
Sulfate - CTM 417, Chloride - CTM 422

Remarks: _____

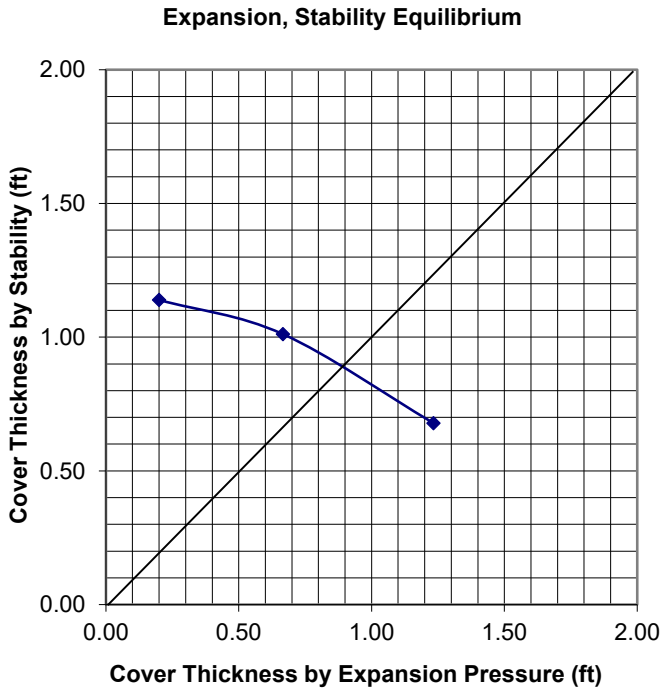
TEST SPECIMEN		A	B	C	D
Compactor air pressure	PSI	330	200	110	
Water added	%	3.3	5.6	7.9	
Moisture at compaction	%	15.6	17.9	20.2	
Height of sample	IN	2.42	2.52	2.55	
Dry density	PCF	112.6	107.0	103.8	
R-Value by exudation		47	21	11	
R-Value by exudation, corrected		44	21	11	
Exudation pressure	PSI	390	213	107	
Stability thickness	FT	0.68	1.01	1.14	
Expansion pressure thickness	FT	1.23	0.67	0.20	

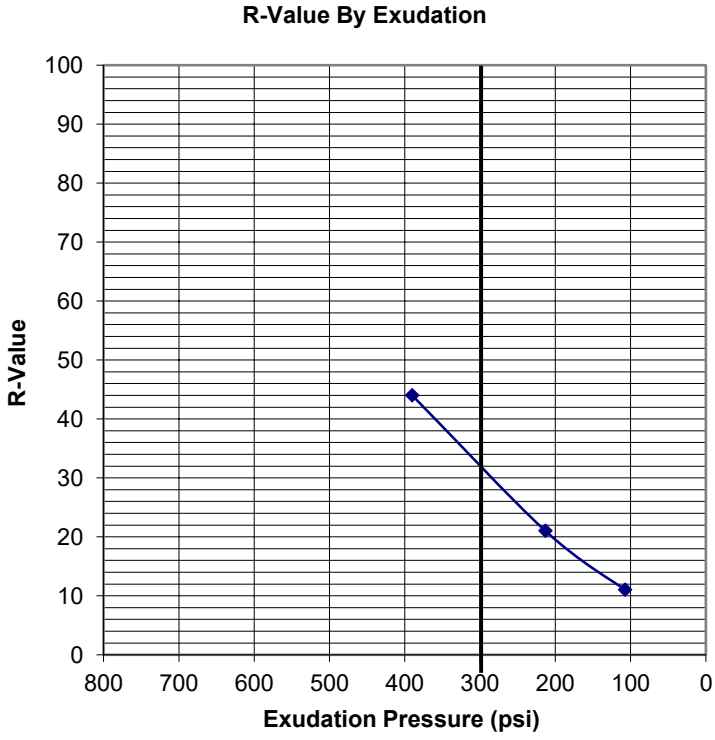
DESIGN CALCULATION DATA

Traffic index, assumed	5.0
Gravel equivalent factor, assumed	1.25
Expansion, stability equilibrium	0.88
R-Value by expansion	31
R-Value by exudation	32
R-Value at equilibrium	**31**

SAMPLE INFORMATION

Sample Location:	B-1, 0-5ft
Sample Description:	Gray Silty Sand
Notes:	-
	0% Retained on 3/4 inch sieve
Test Method:	Cal-Trans Test 301





GeoSoils, Inc.
1817 Aston Avenue, Suite 104
Carlsbad, CA 92008
Telephone: (760) 438-3155
Fax: (760) 931-0915

9/2/2010

R - VALUE TEST RESULTS

Project: Corcoran Construction

Number: 9071-A-IE

Date: December 2025 Plate: D-5

APPENDIX E

SEISMIC SETTLEMENT ANALYSIS

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Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

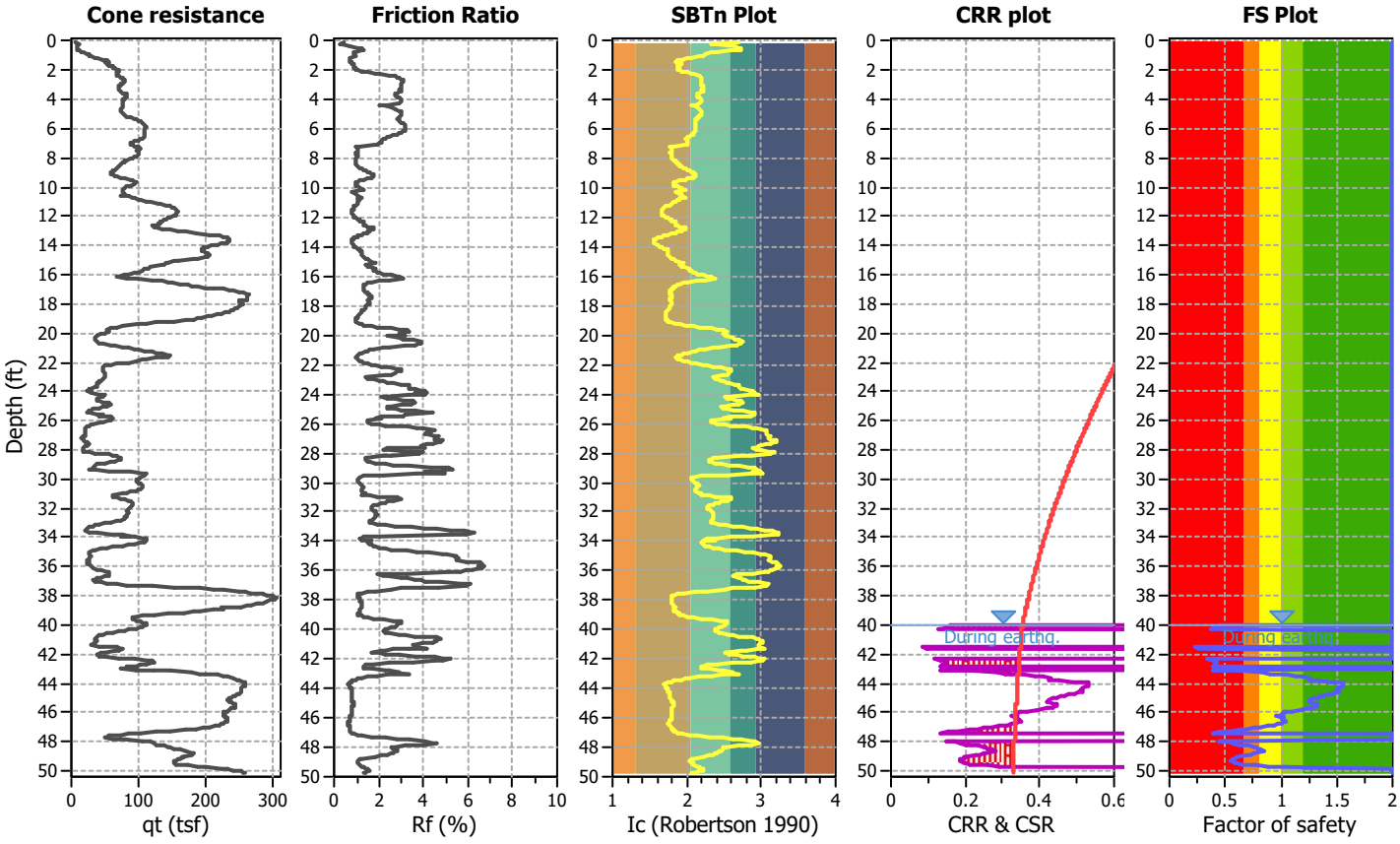
LIQUEFACTION ANALYSIS REPORT

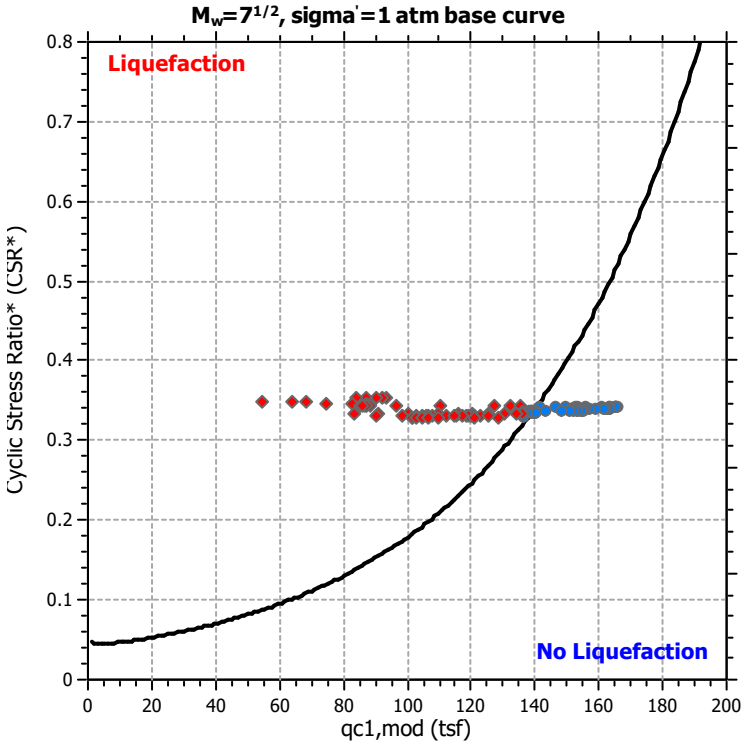
Project title : GeoSoils / Bradley Gardens **Location : 980 W. 7th St, San Jacinto, CA**

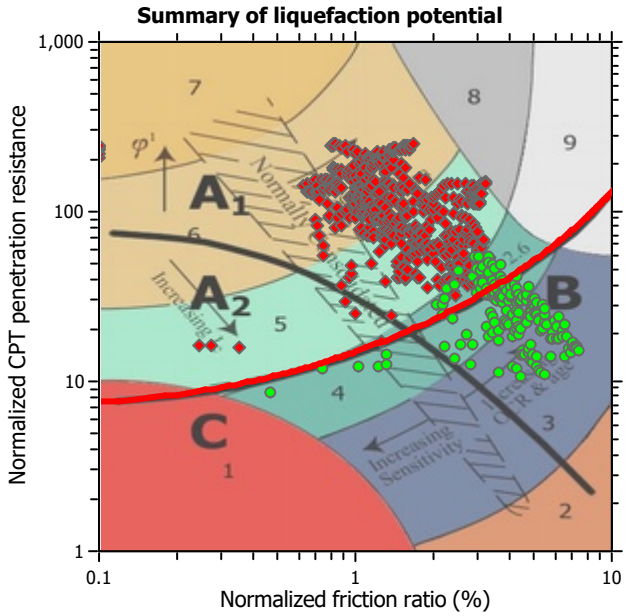
CPT file : CPT-1

Input parameters and analysis data

Analysis method:	Moss et al. (2006)	G.W.T. (in-situ):	100.00 ft	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	Moss et al. (2006)	G.W.T. (earthq.):	40.00 ft	Fill height:	N/A	Limit depth applied:	Yes
Points to test:	Based on Ic value	Average results interval:	1	Fill weight:	N/A	Limit depth:	50.00 ft
Earthquake magnitude M_w:	8.10	Ic cut-off value:	2.60	Trans. detect. applied:	No	MSF method:	Method based
Peak ground acceleration:	1.07	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		

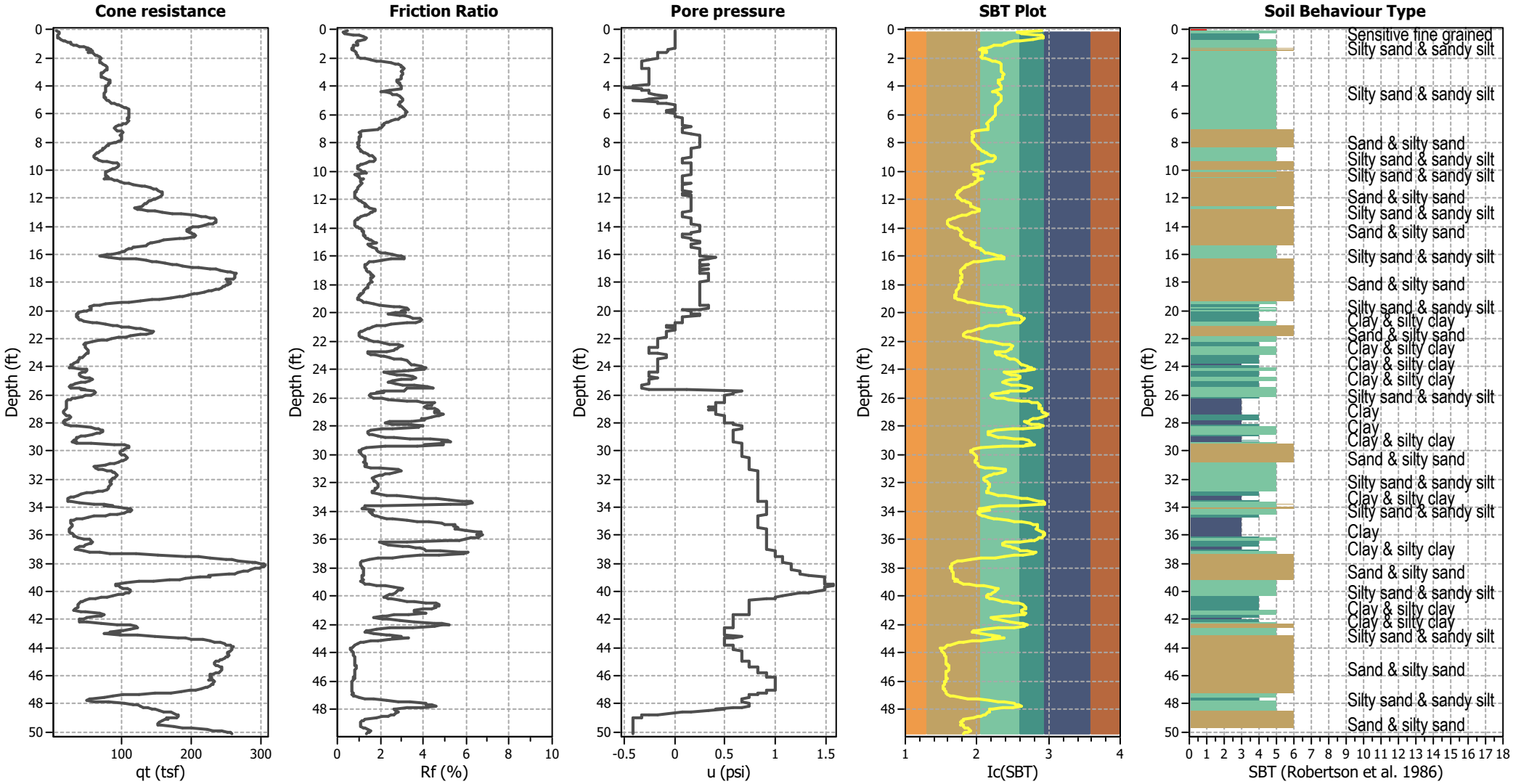






Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

CPT basic interpretation plots



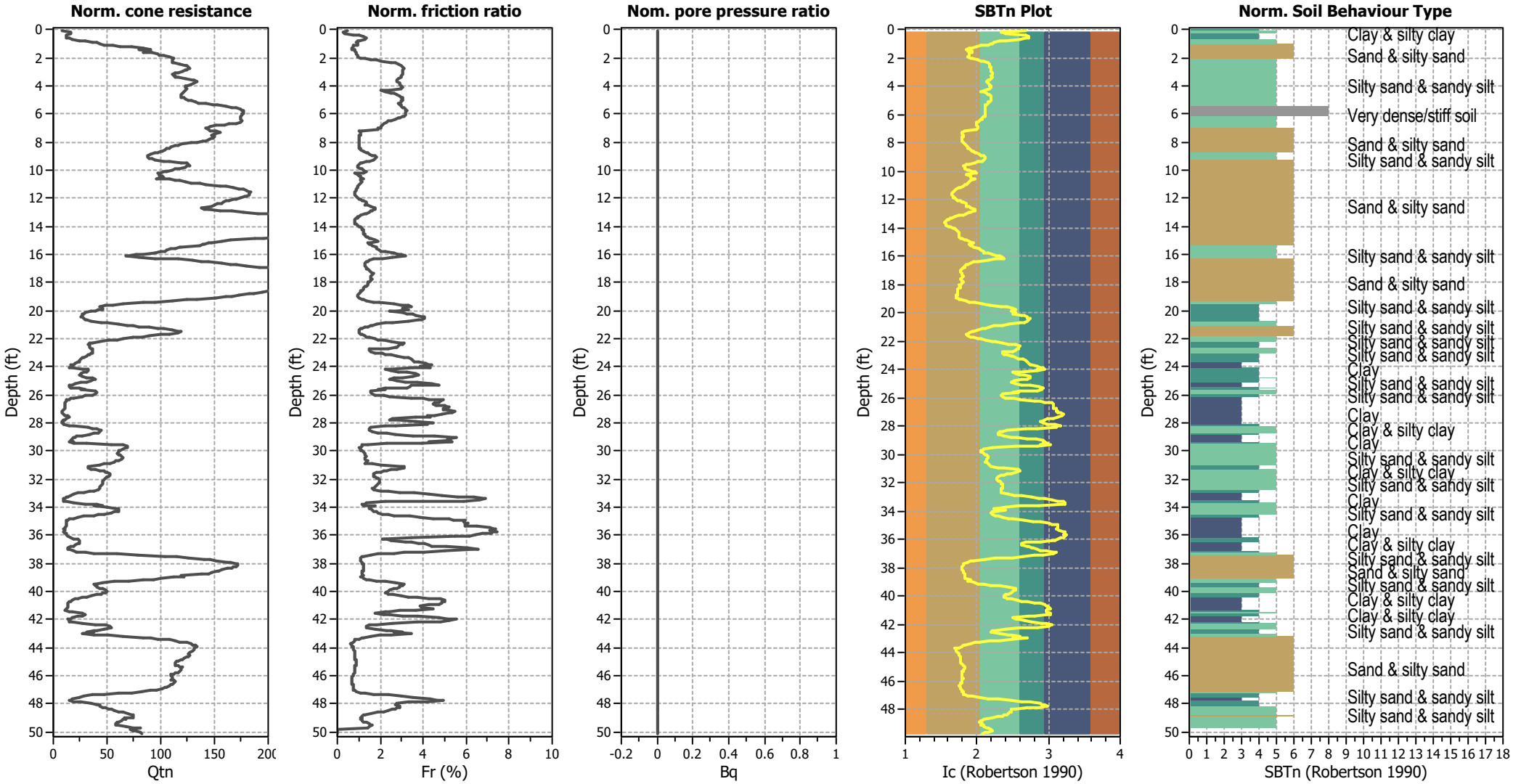
Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CPT basic interpretation plots (normalized)



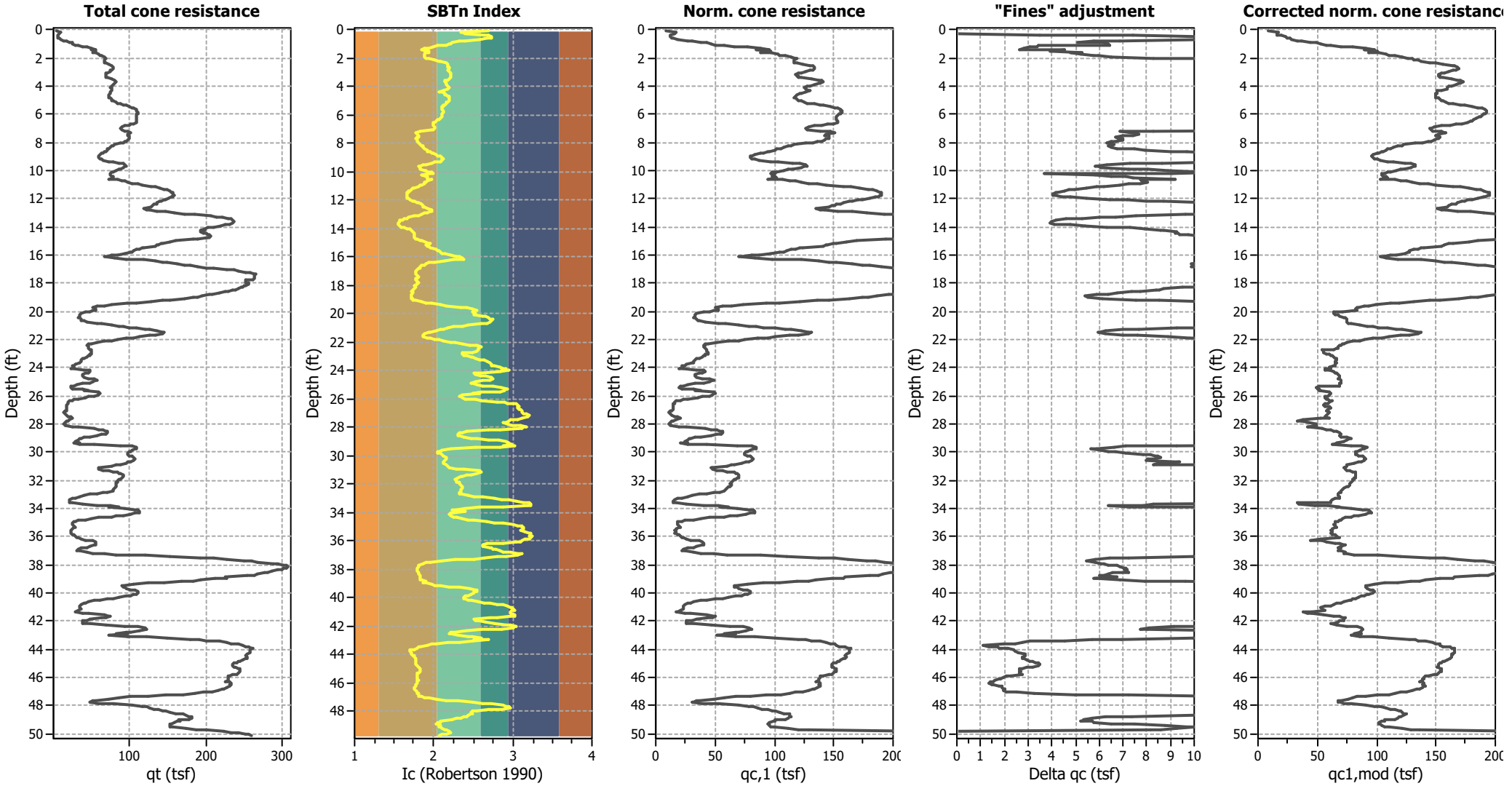
Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

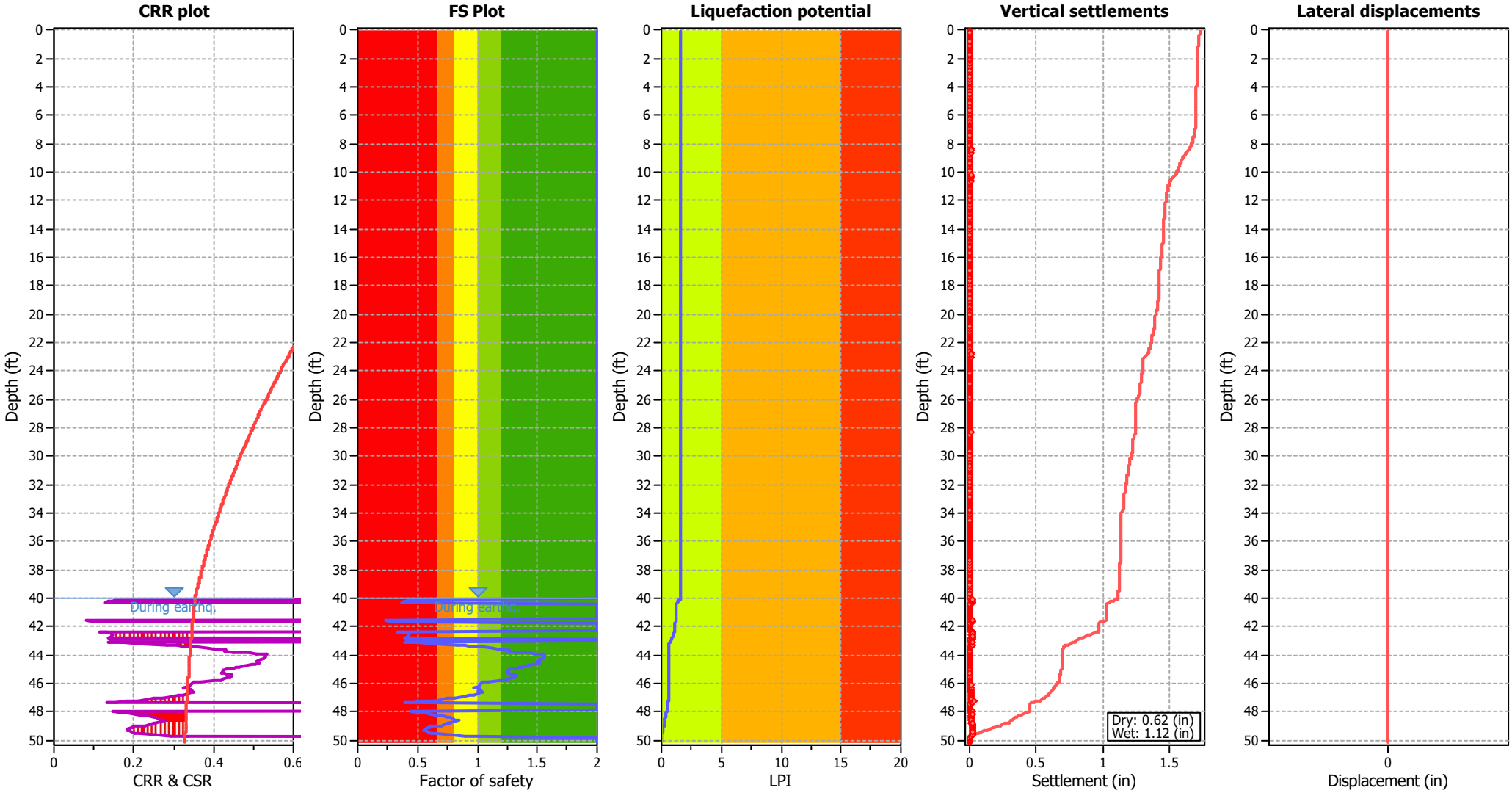
Liquefaction analysis overall plots (intermediate results)



Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

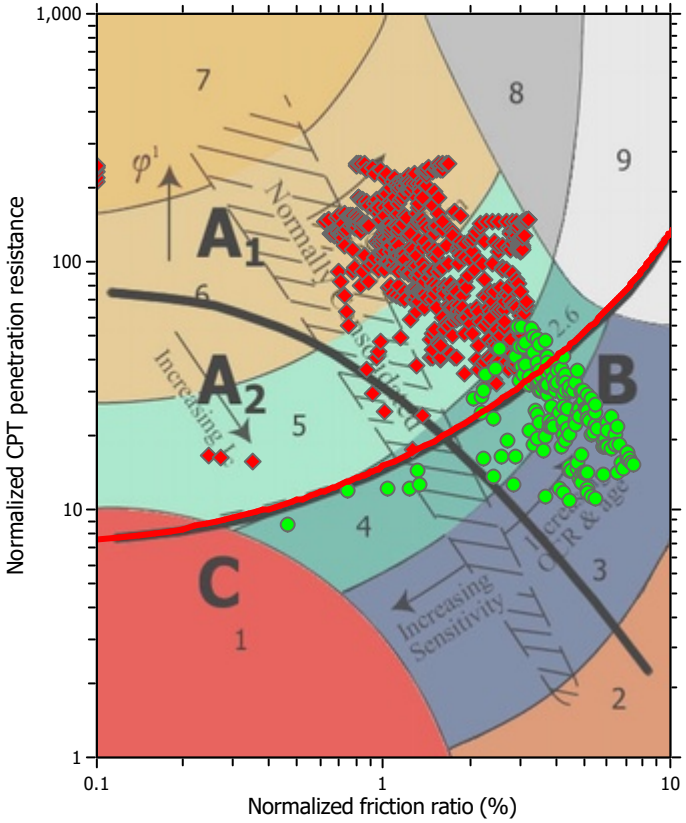
F.S. color scheme

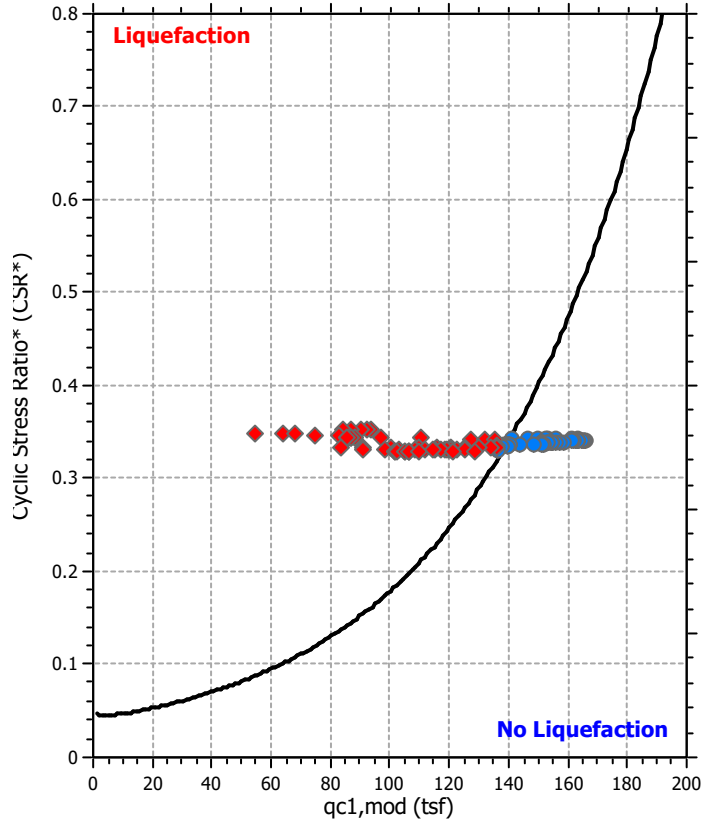
- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

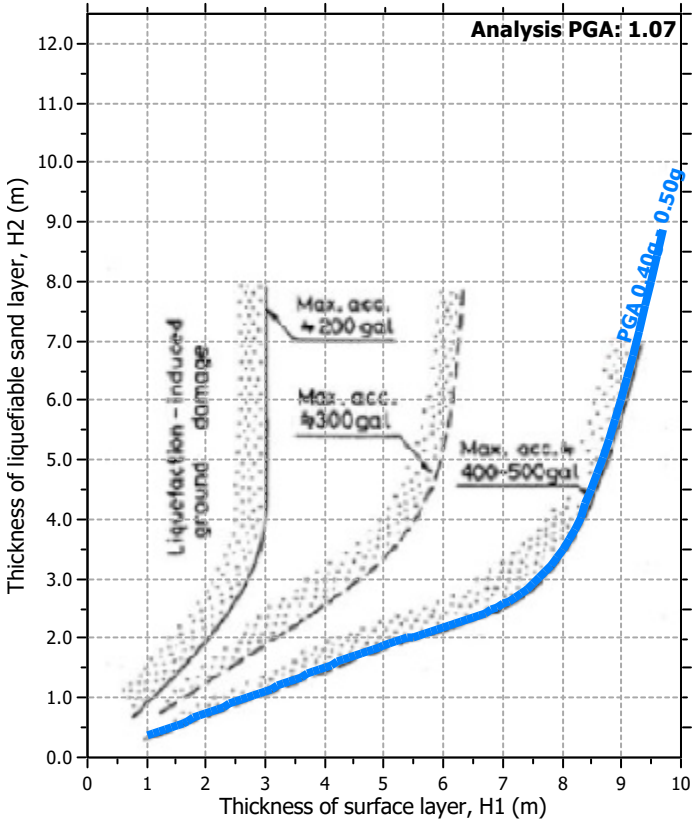
LPI color scheme

- Very high risk
- High risk
- Low risk

Liquefaction analysis summary plots



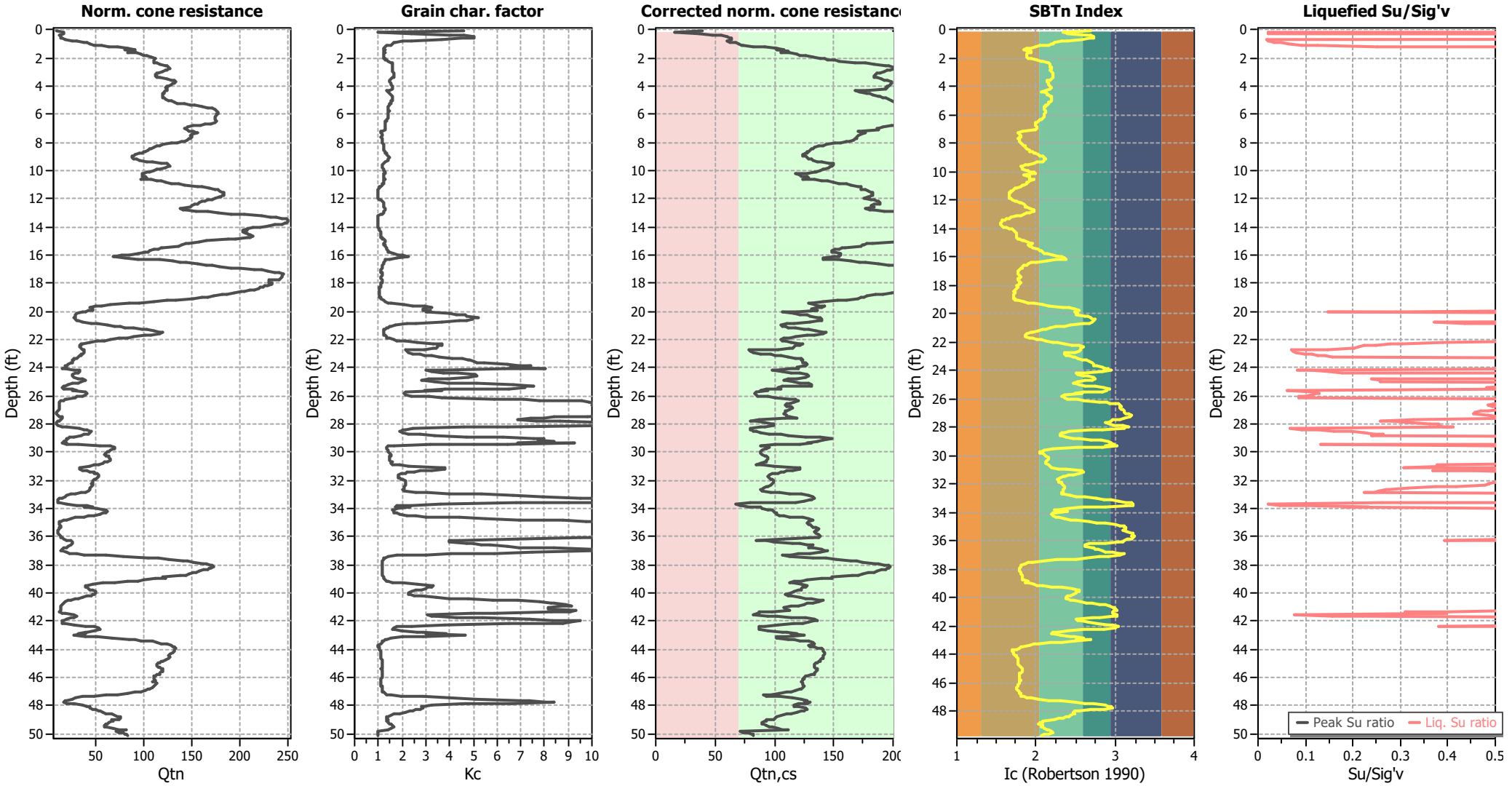




Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

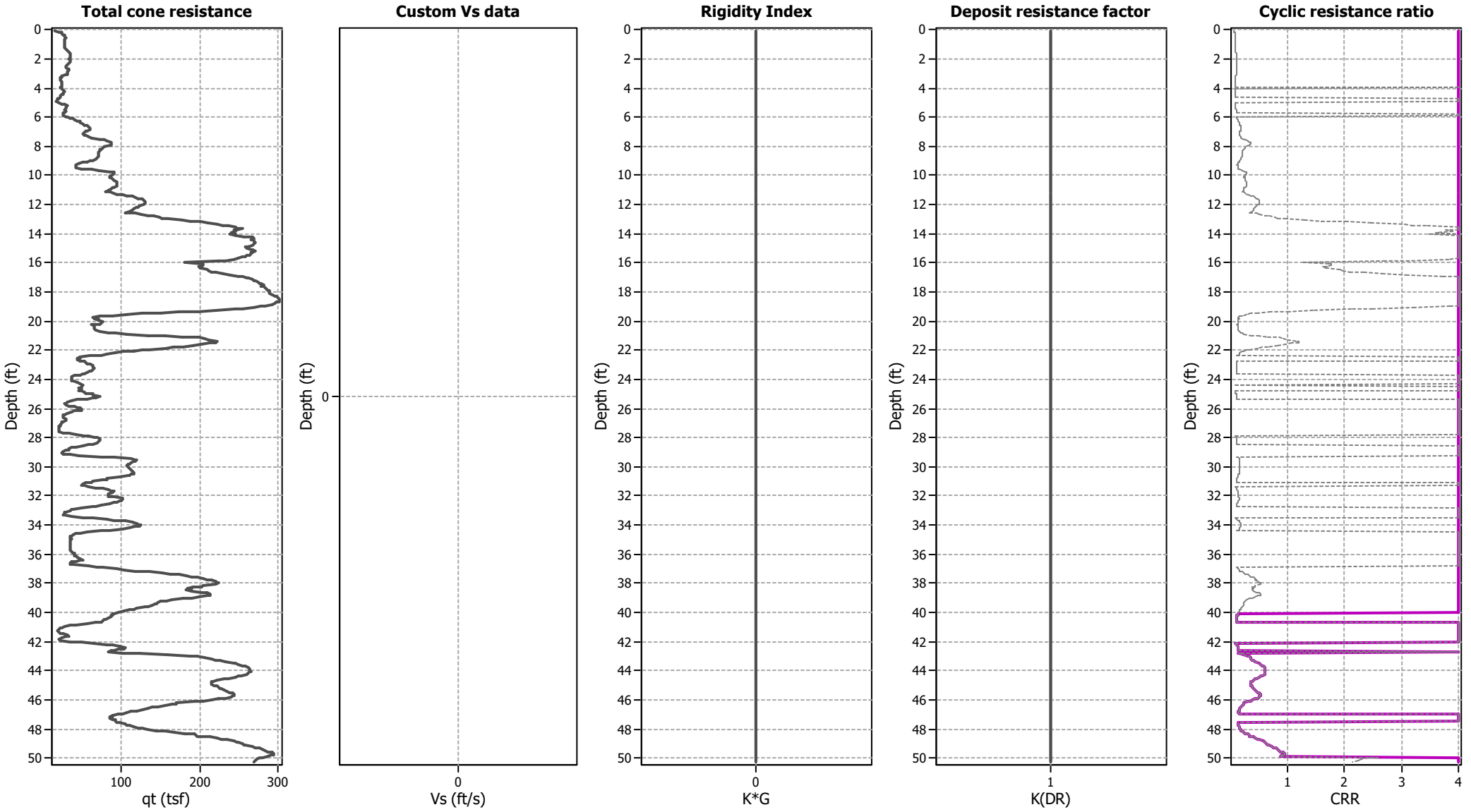
Check for strength loss plots (Robertson (2010))



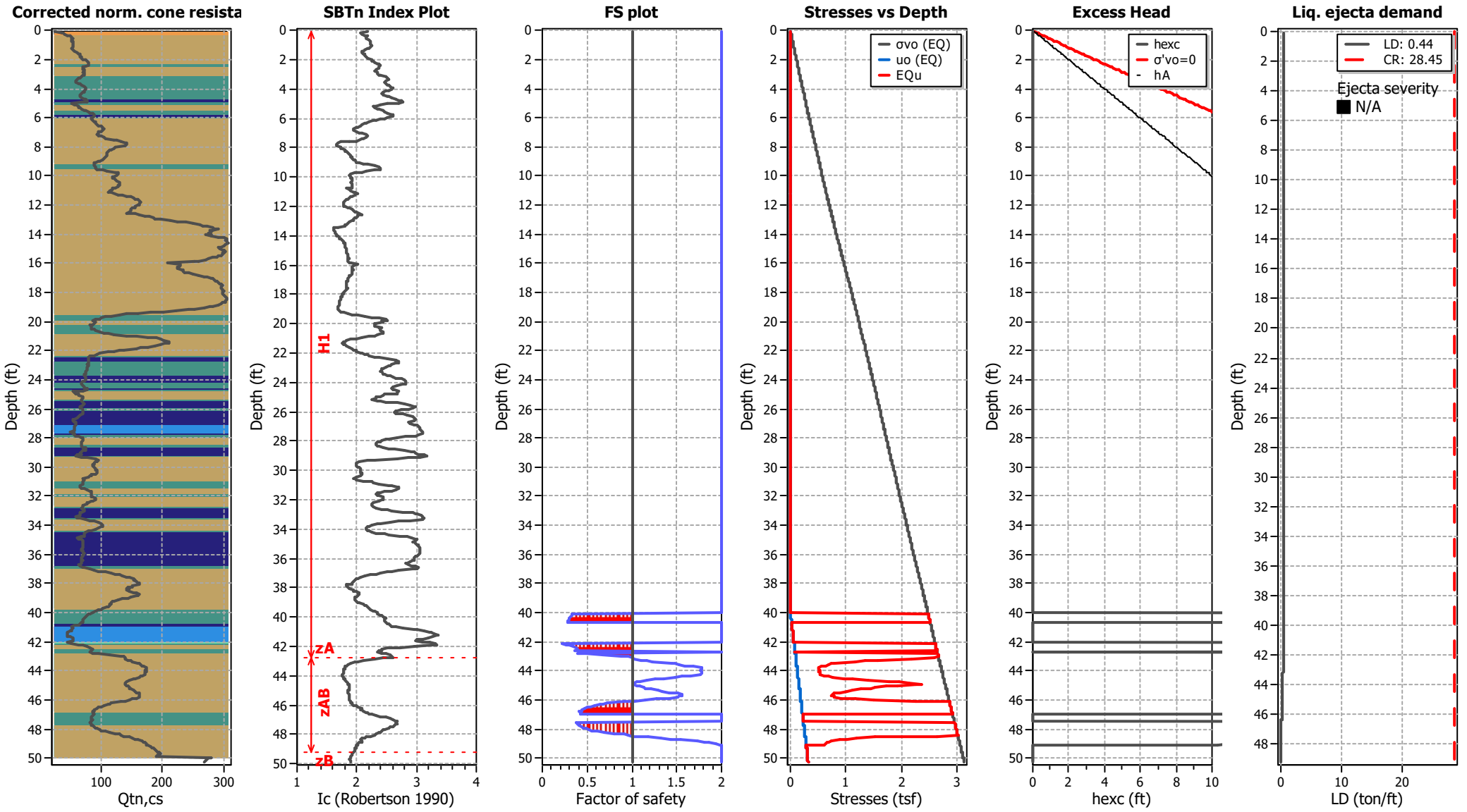
Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

Aging Calculation Estimation



Ejecta Severity Estimation



Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

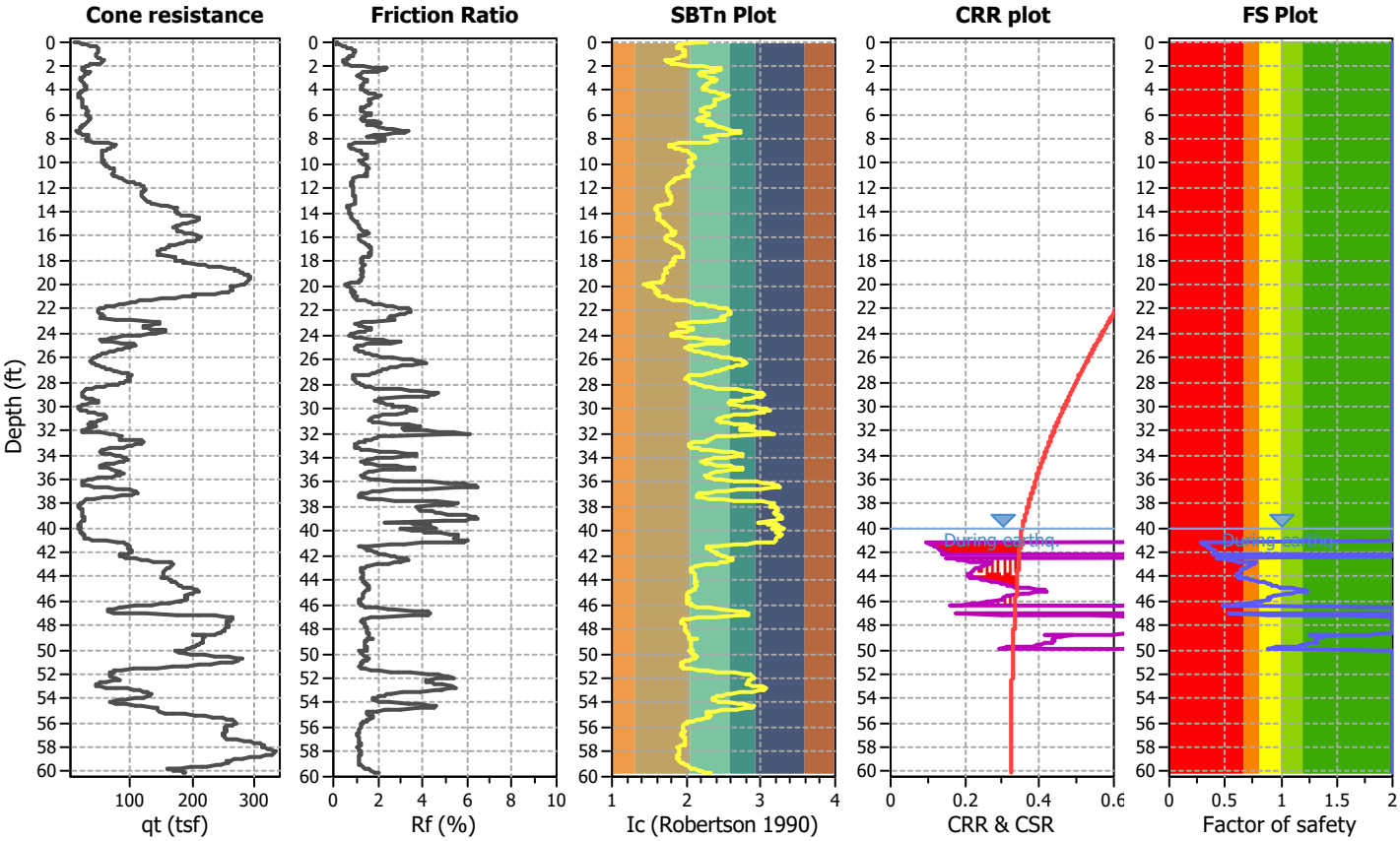
LIQUEFACTION ANALYSIS REPORT

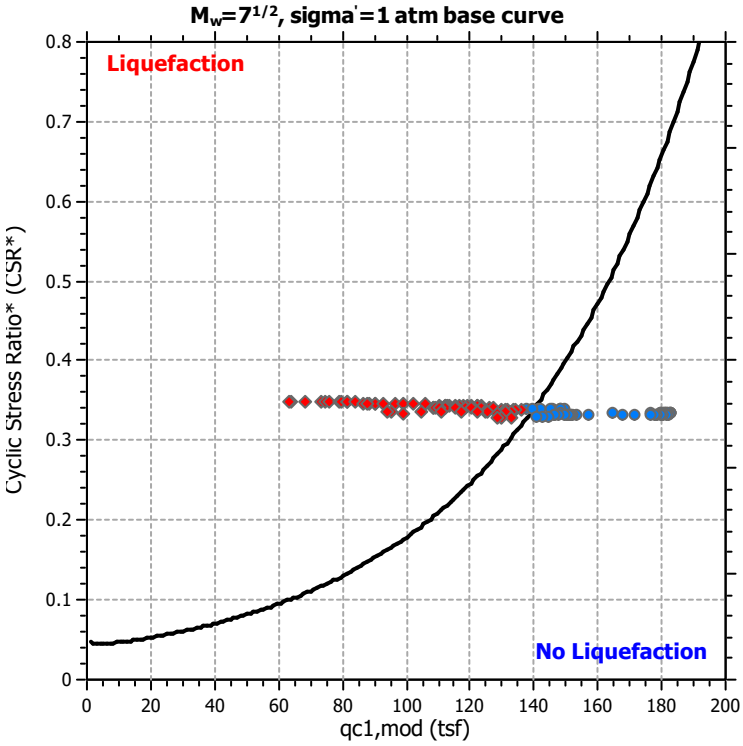
Project title : GeoSoils / Bradley Gardens **Location : 980 W. 7th St, San Jacinto, CA**

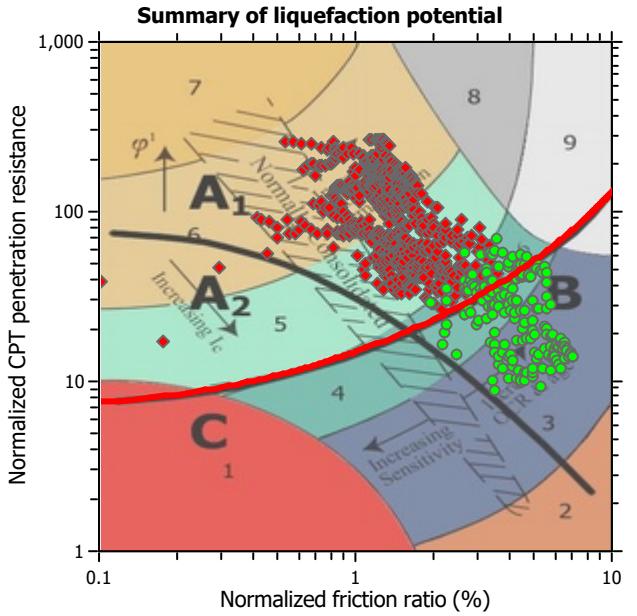
CPT file : CPT-3

Input parameters and analysis data

Analysis method:	Moss et al. (2006)	G.W.T. (in-situ):	100.00 ft	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	Moss et al. (2006)	G.W.T. (earthq.):	40.00 ft	Fill height:	N/A	Limit depth applied:	Yes
Points to test:	Based on Ic value	Average results interval:	1	Fill weight:	N/A	Limit depth:	50.00 ft
Earthquake magnitude M_w:	8.10	Ic cut-off value:	2.60	Trans. detect. applied:	No	MSF method:	Method based
Peak ground acceleration:	1.07	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		

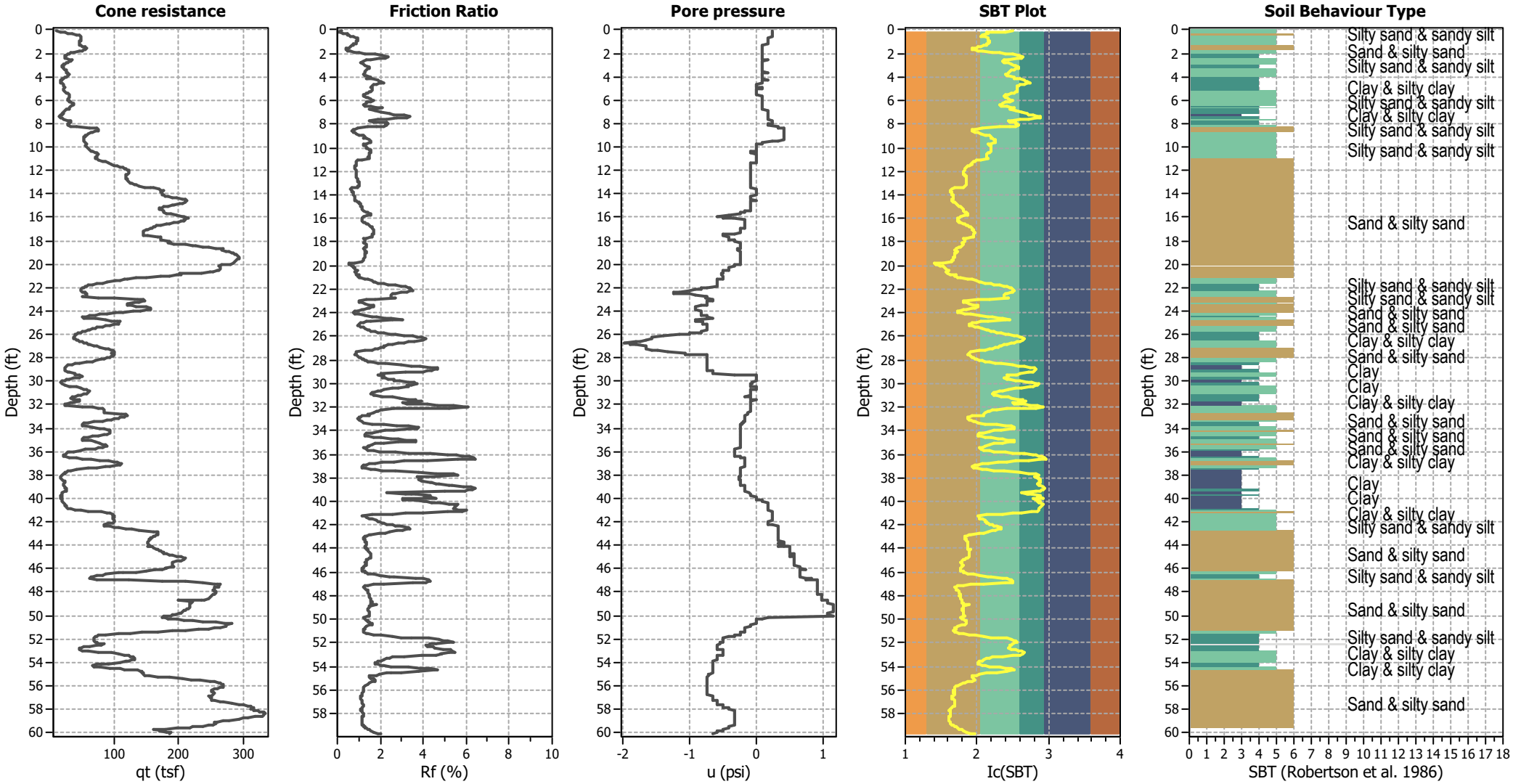






Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

CPT basic interpretation plots



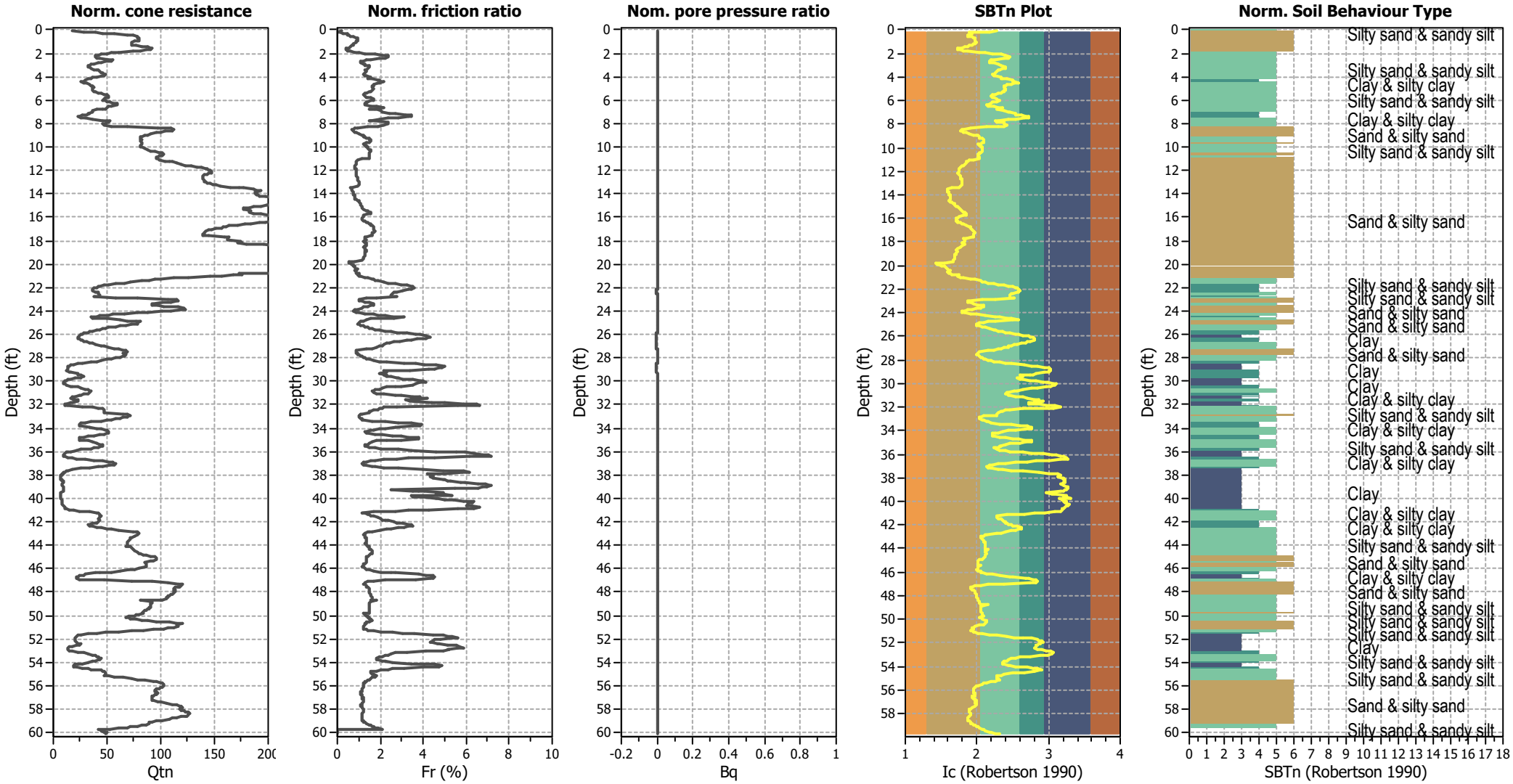
Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CPT basic interpretation plots (normalized)



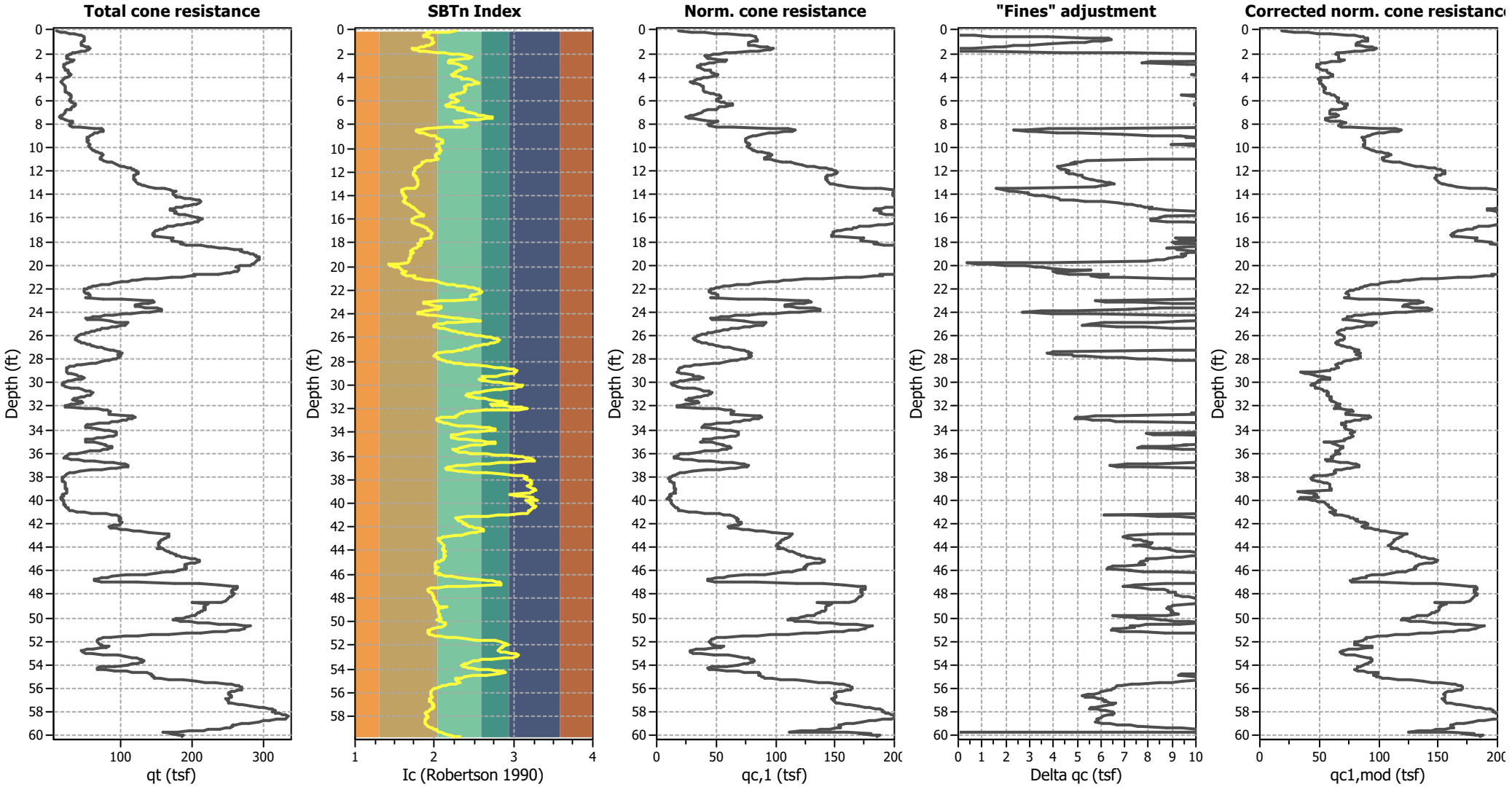
Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

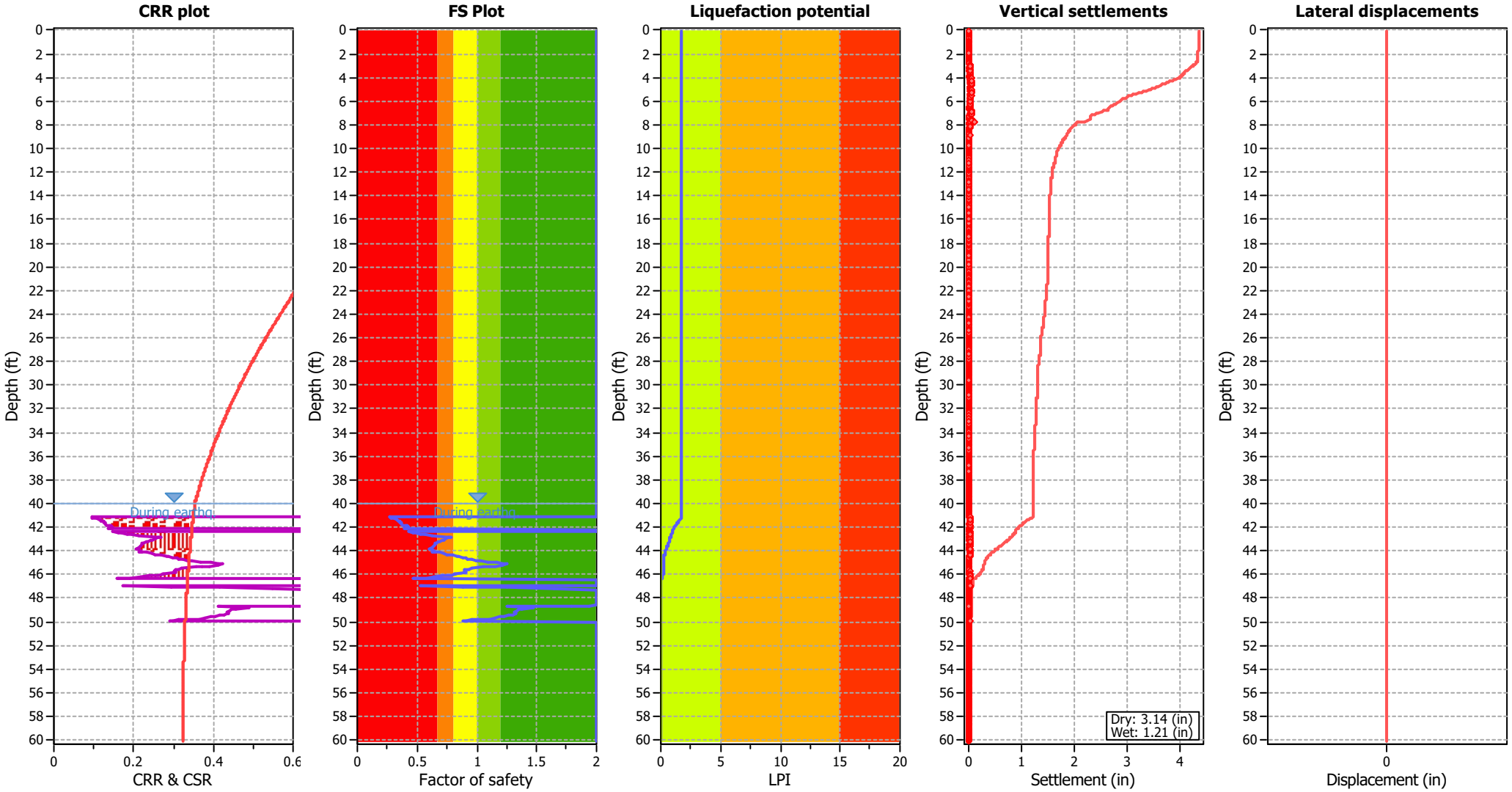
Liquefaction analysis overall plots (intermediate results)



Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

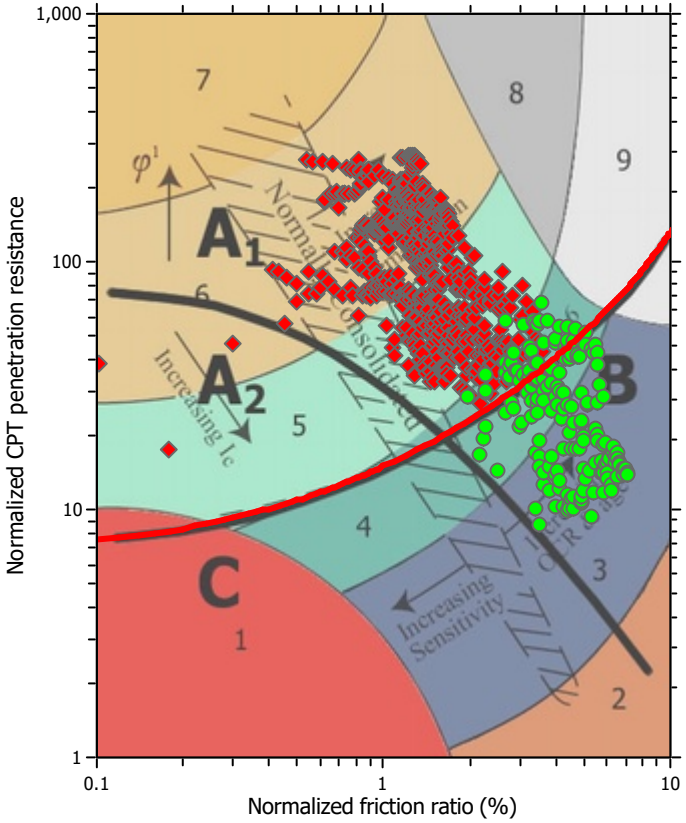
F.S. color scheme

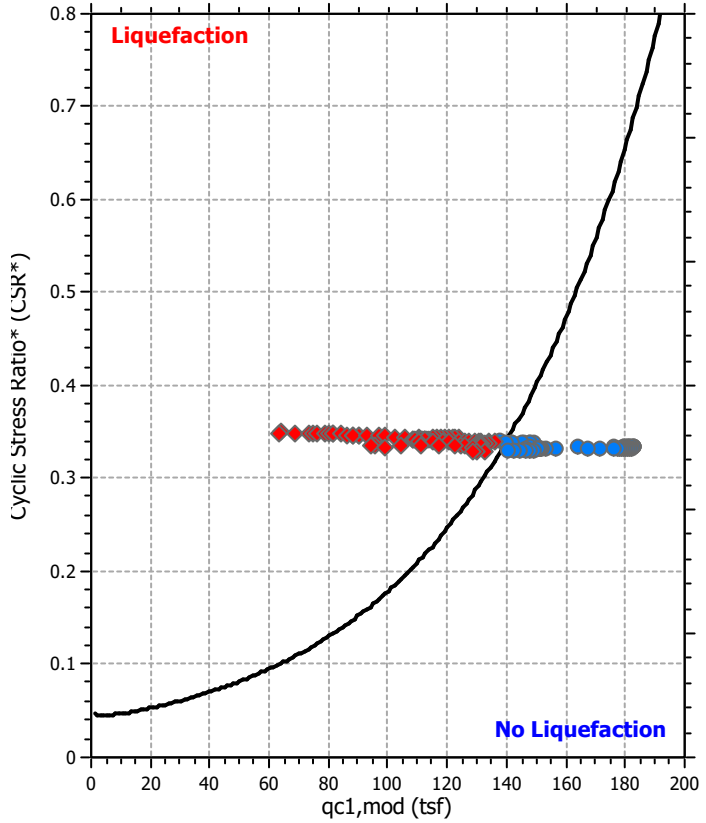
- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

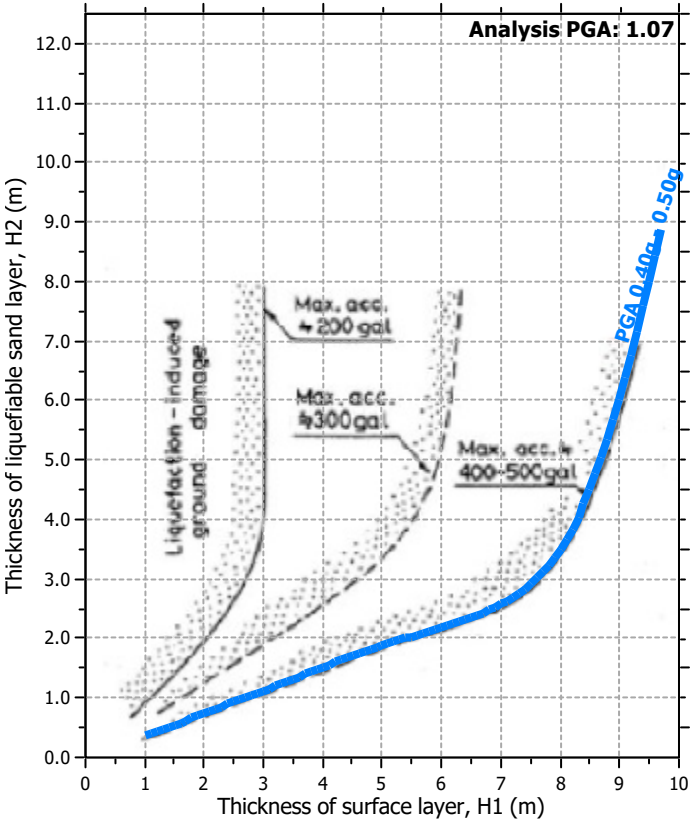
LPI color scheme

- Very high risk
- High risk
- Low risk

Liquefaction analysis summary plots



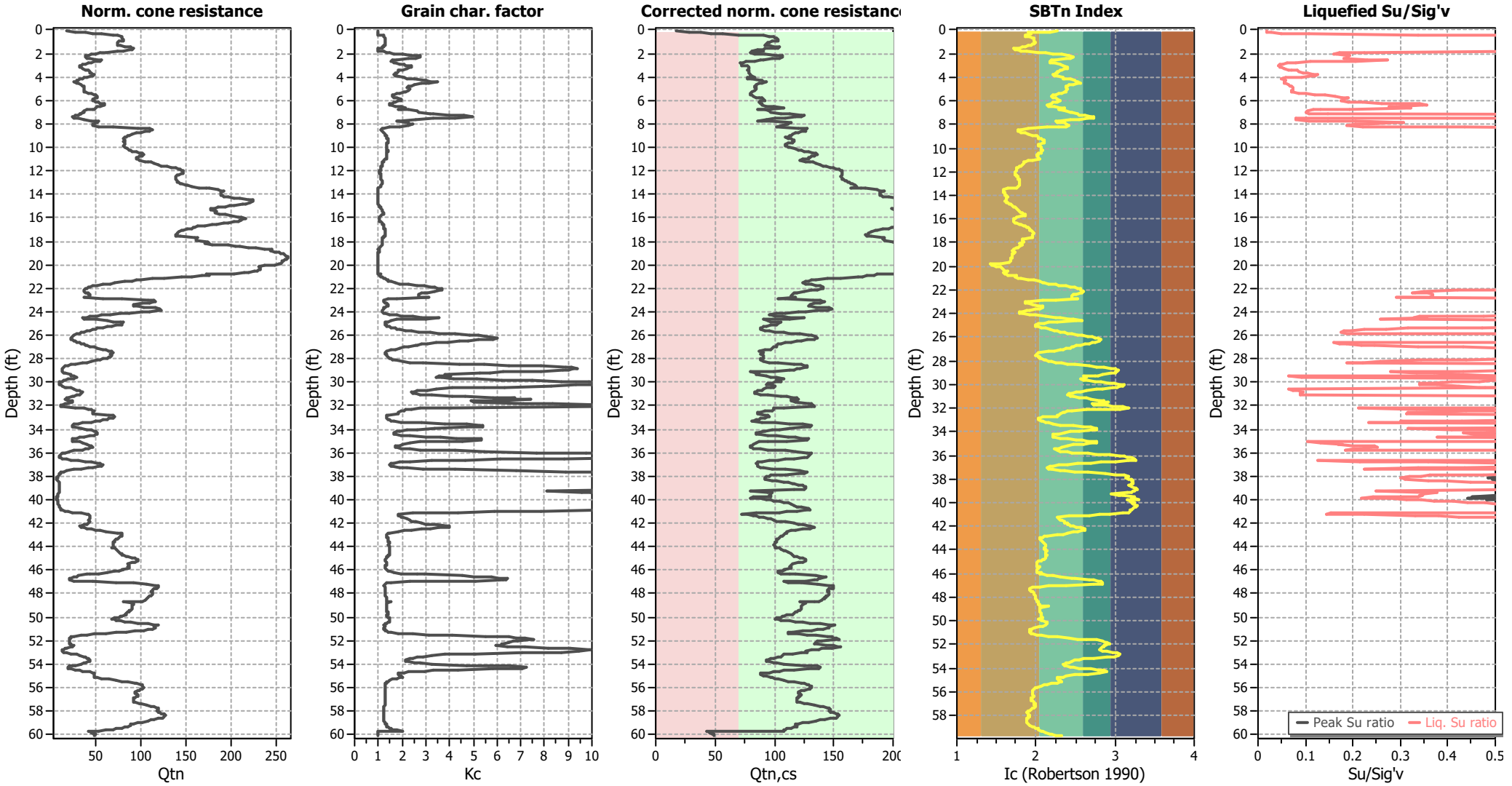




Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

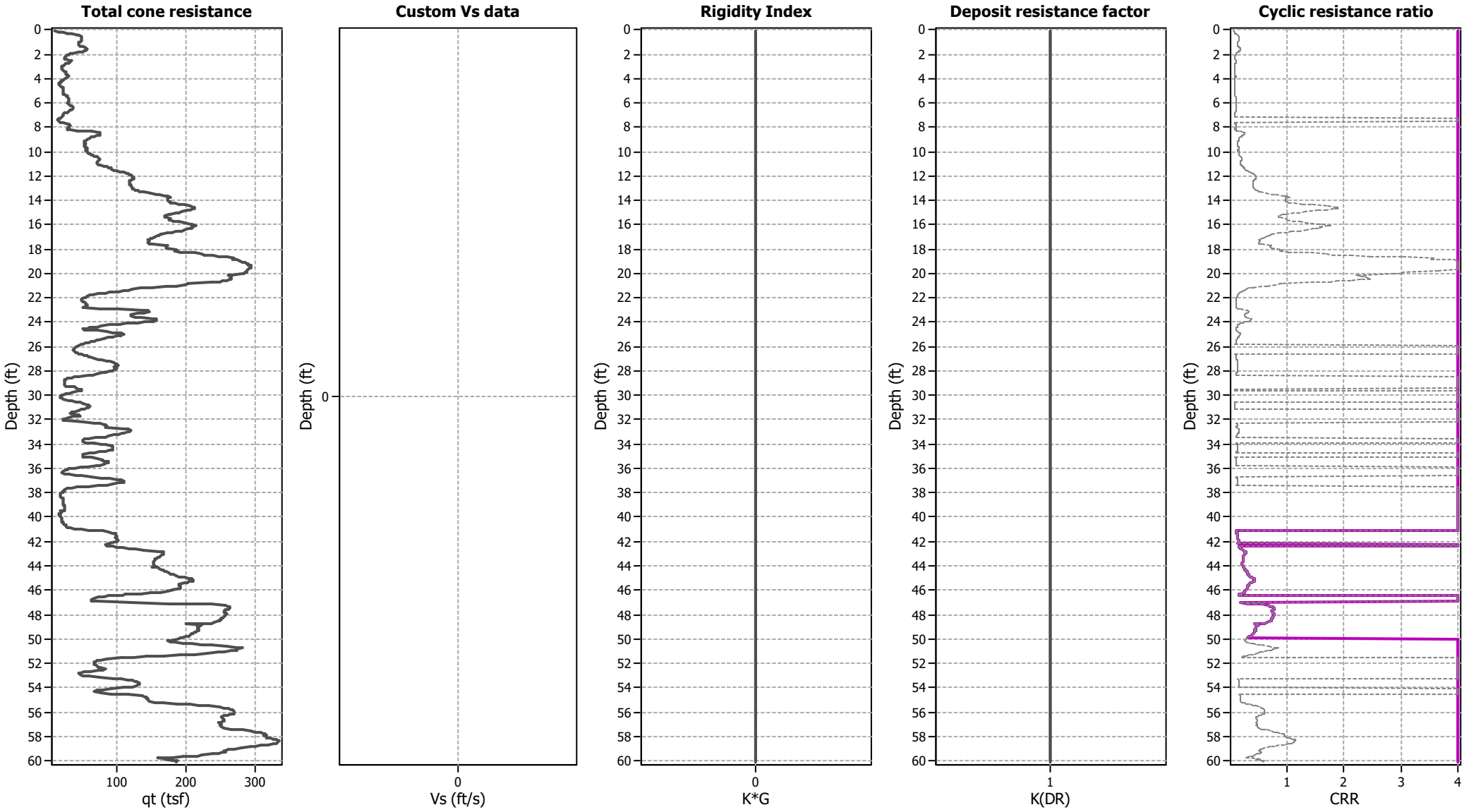
Check for strength loss plots (Robertson (2010))



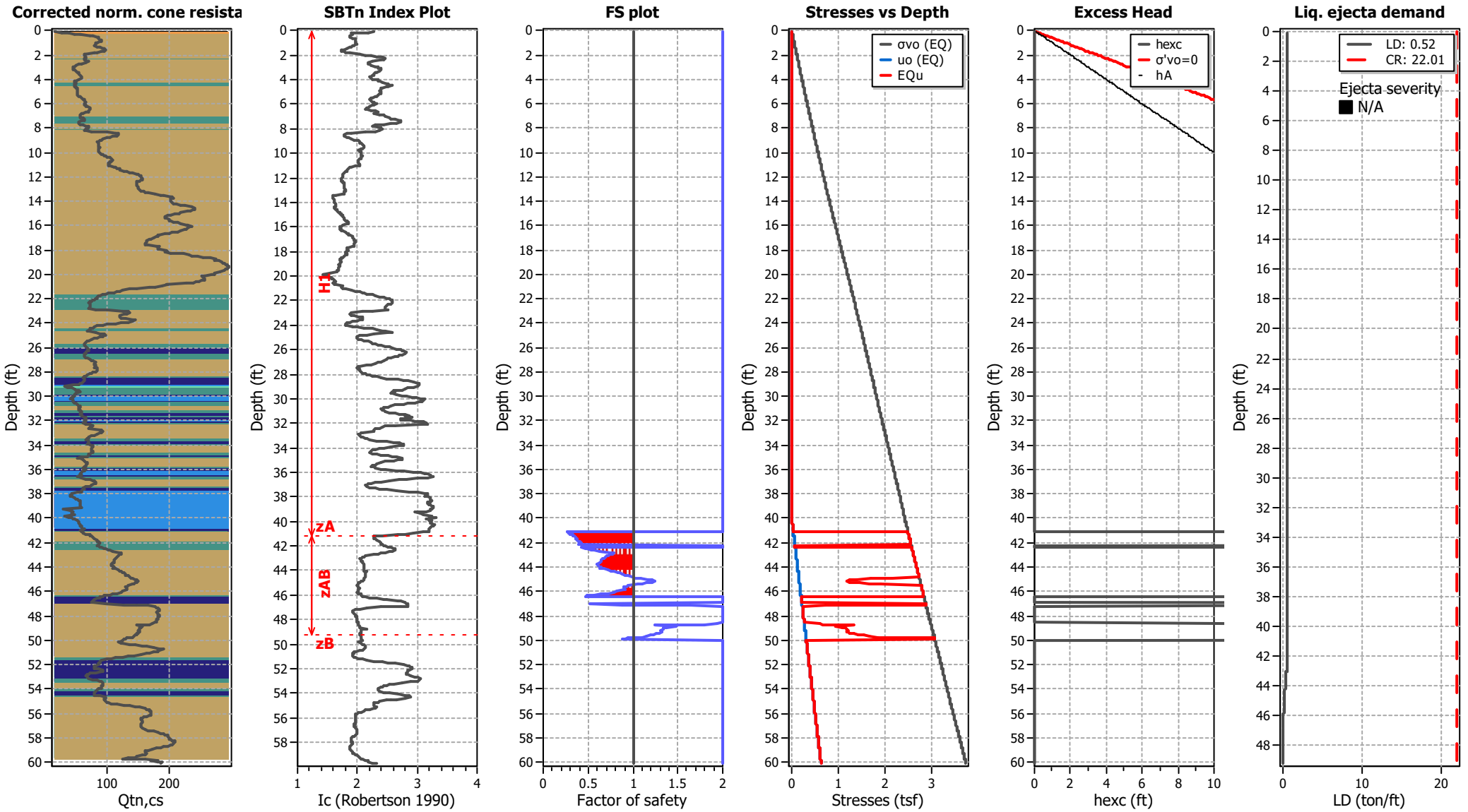
Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

Aging Calculation Estimation



Ejecta Severity Estimation



Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

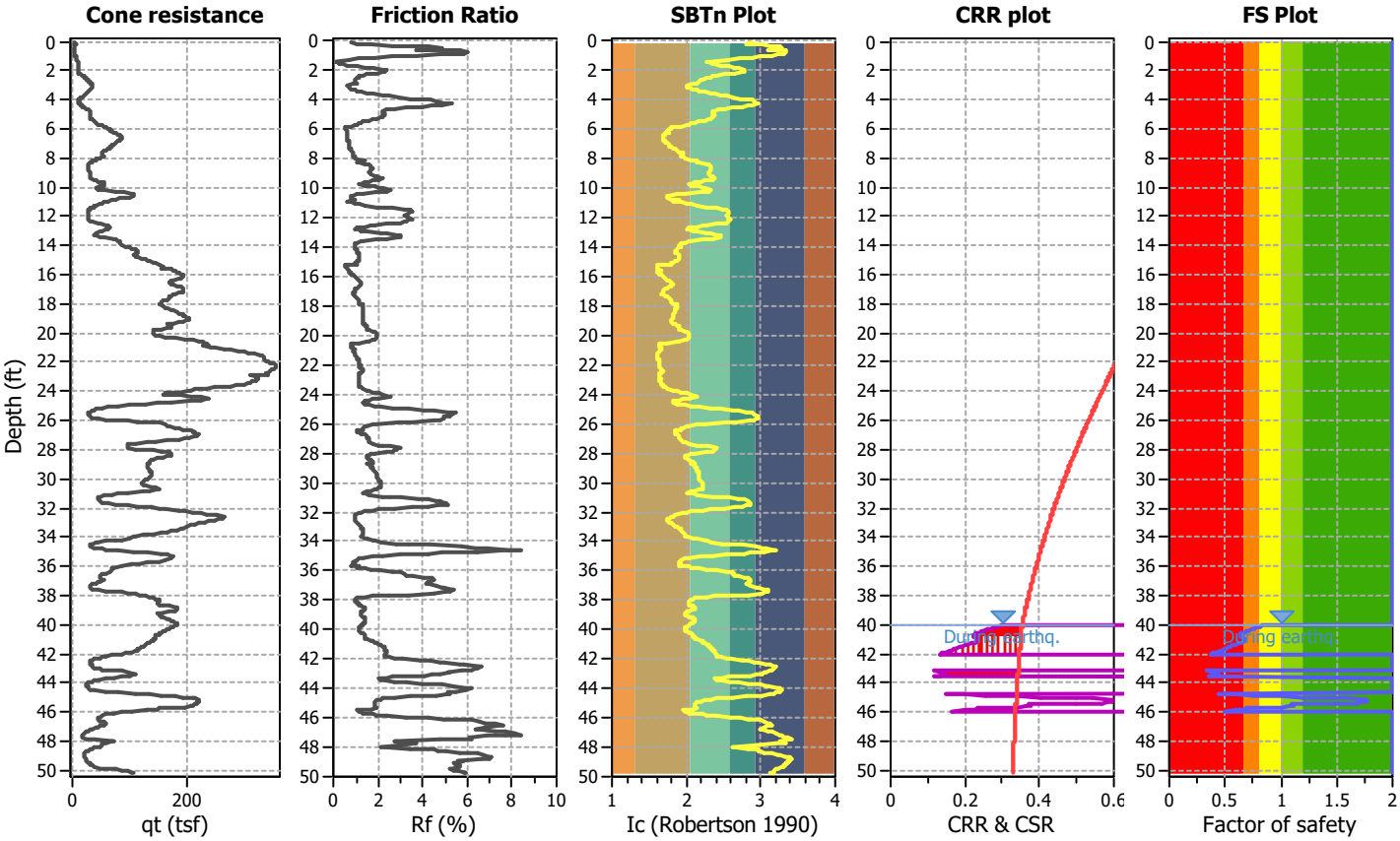
LIQUEFACTION ANALYSIS REPORT

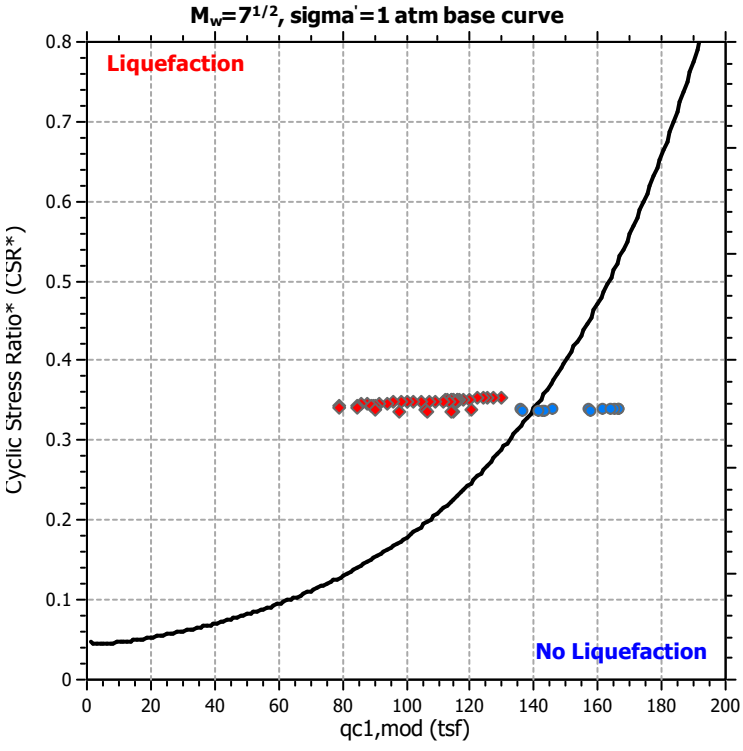
Project title : GeoSoils / Bradley Gardens **Location : 980 W. 7th St, San Jacinto, CA**

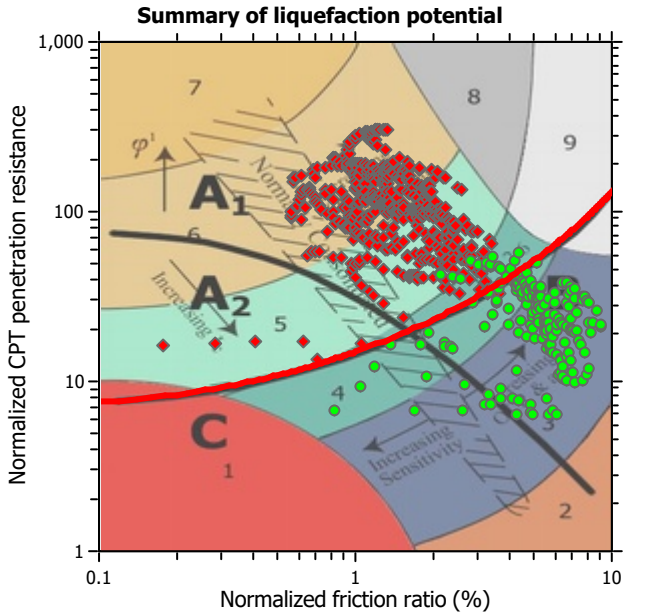
CPT file : CPT-4

Input parameters and analysis data

Analysis method:	Moss et al. (2006)	G.W.T. (in-situ):	100.00 ft	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	Moss et al. (2006)	G.W.T. (earthq.):	40.00 ft	Fill height:	N/A	Limit depth applied:	Yes
Points to test:	Based on Ic value	Average results interval:	1	Fill weight:	N/A	Limit depth:	50.00 ft
Earthquake magnitude M_w:	8.10	Ic cut-off value:	2.60	Trans. detect. applied:	No	MSF method:	Method based
Peak ground acceleration:	1.07	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		

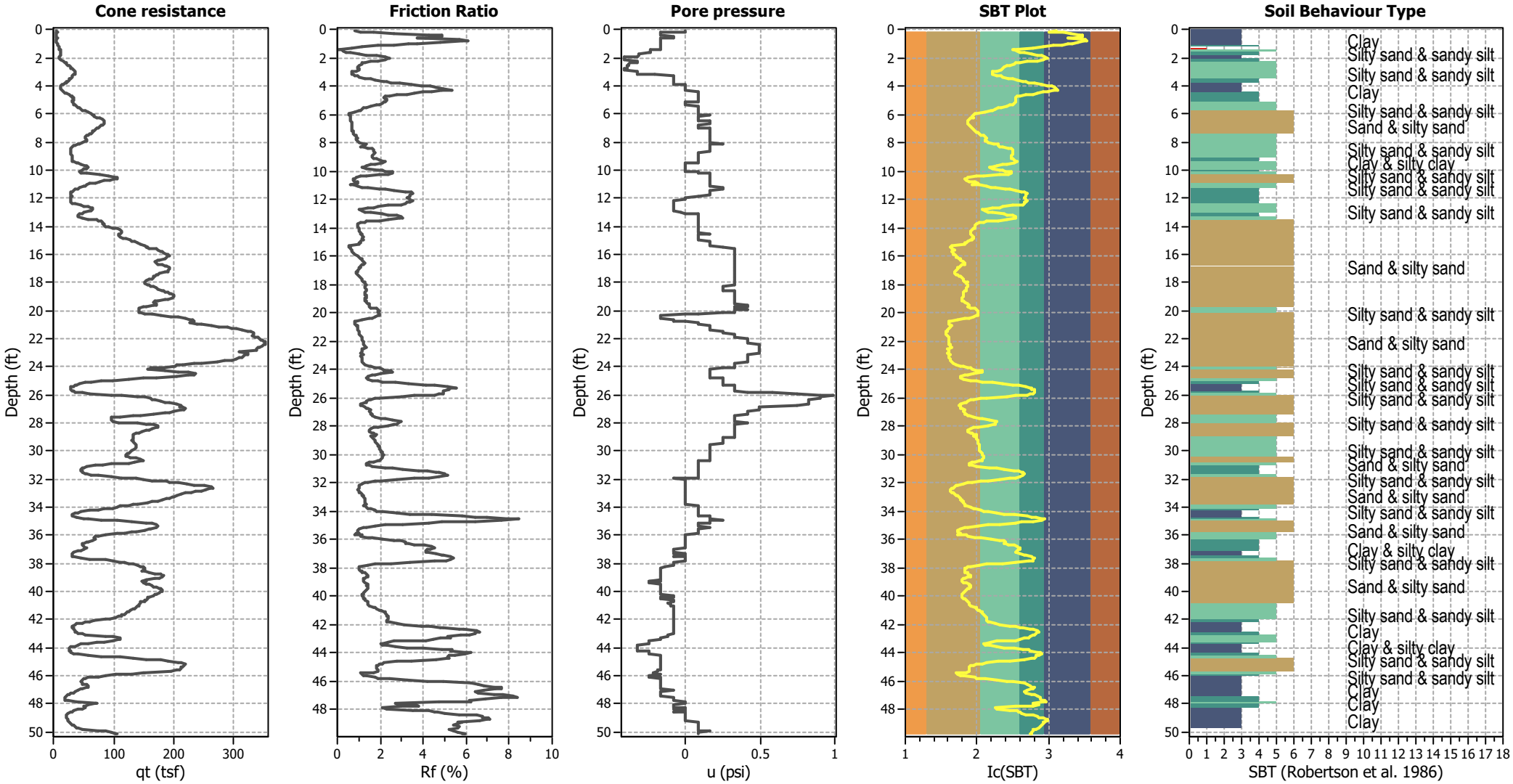






Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

CPT basic interpretation plots



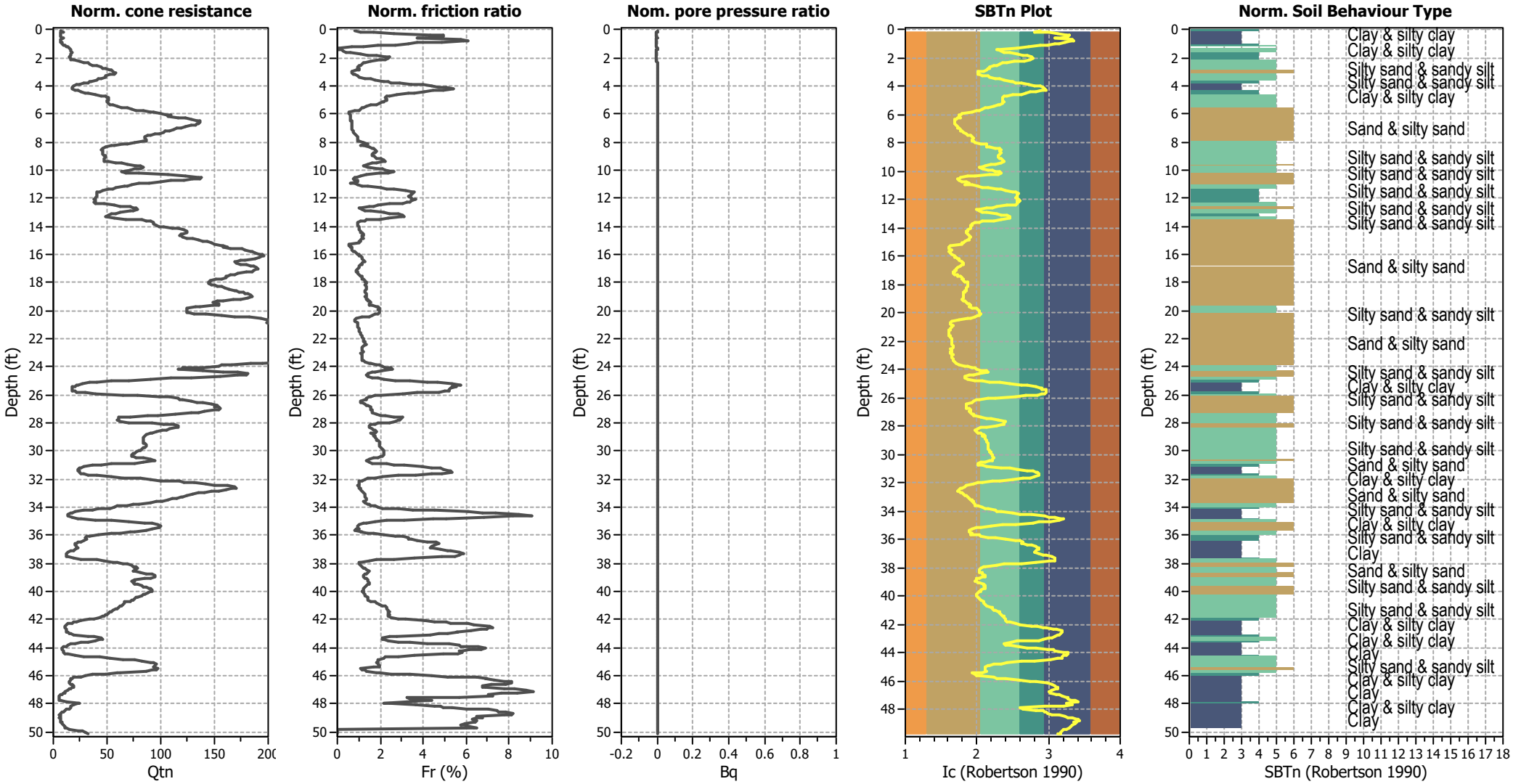
Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CPT basic interpretation plots (normalized)



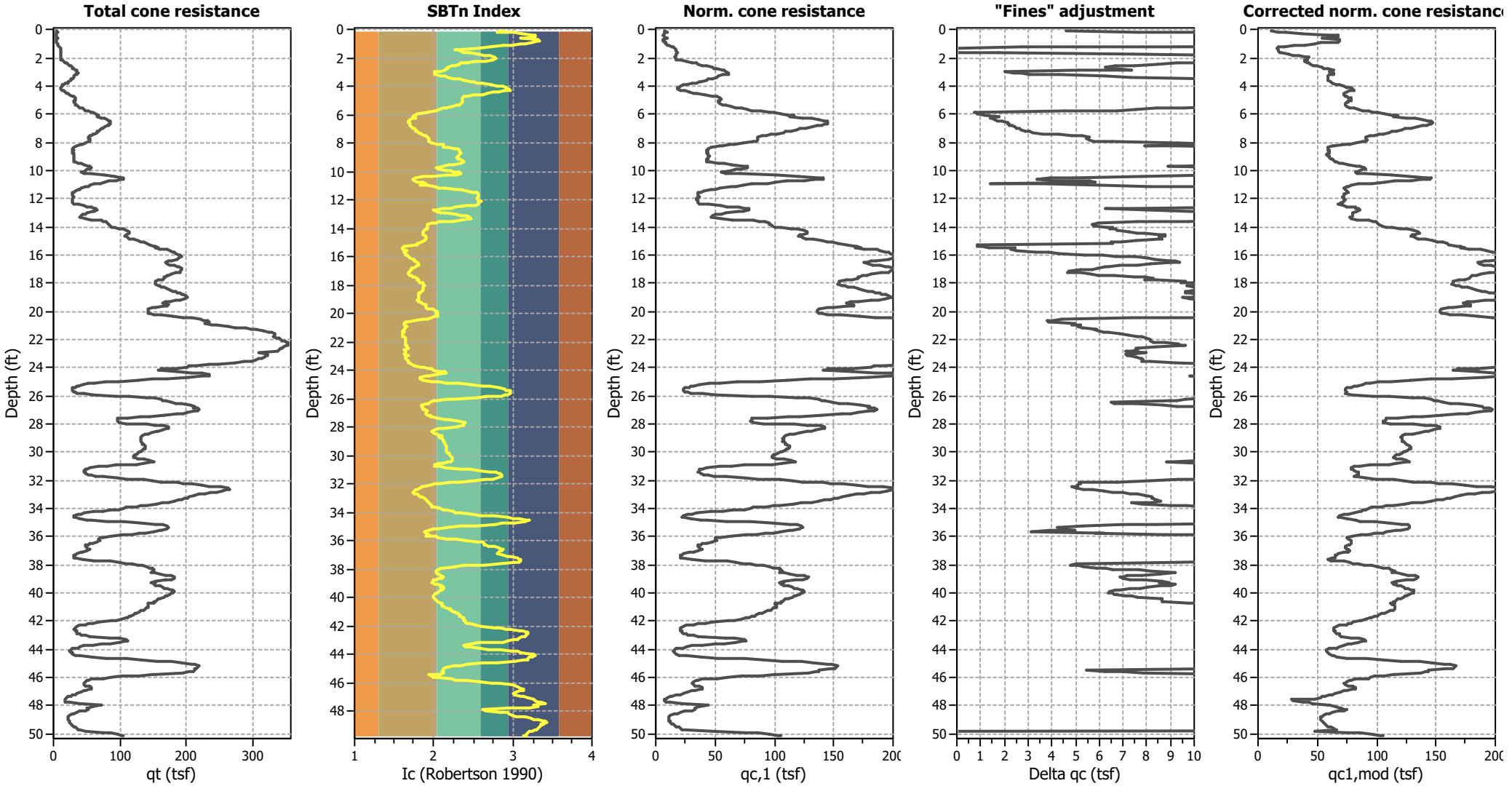
Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

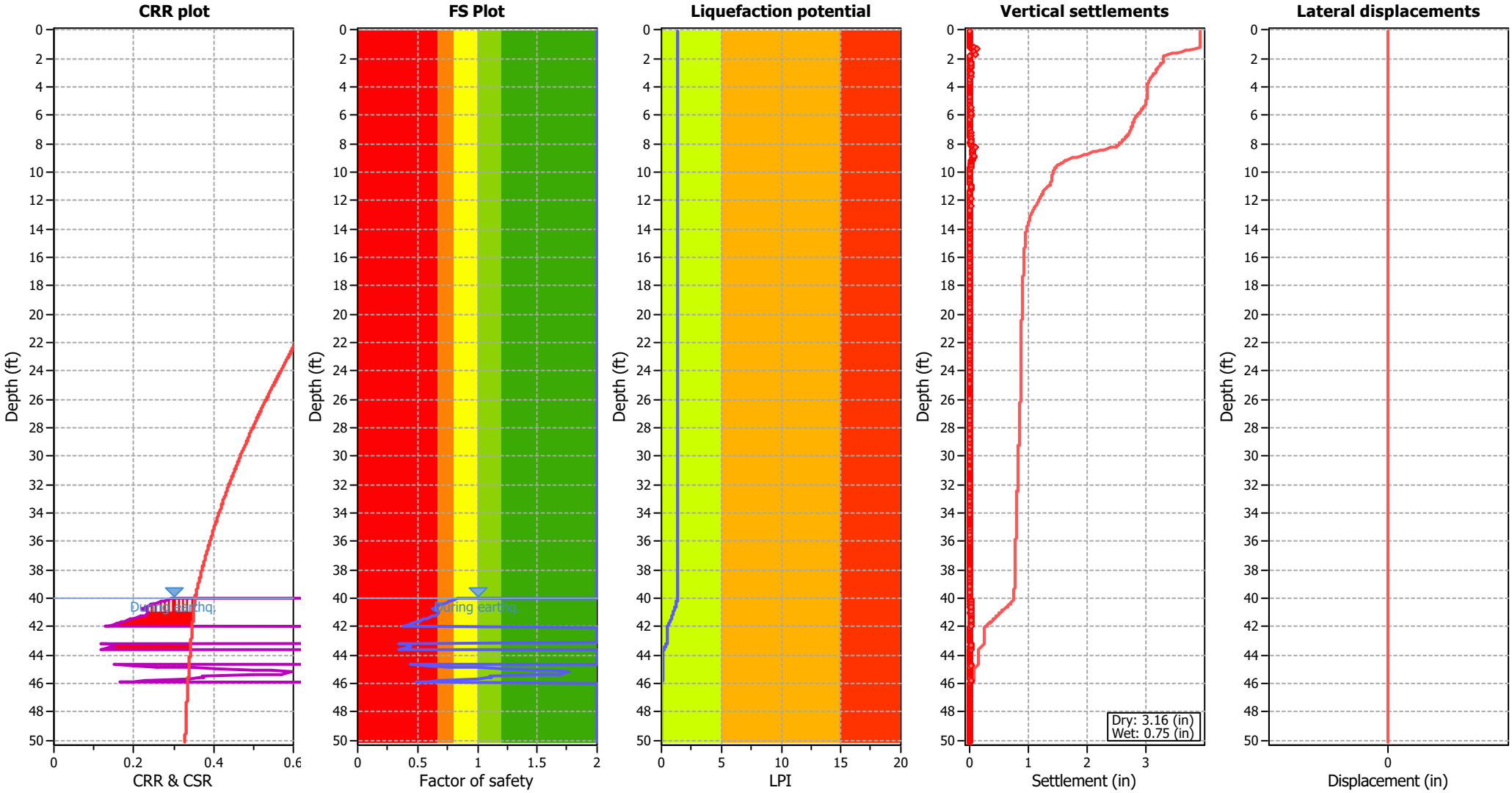
Liquefaction analysis overall plots (intermediate results)



Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

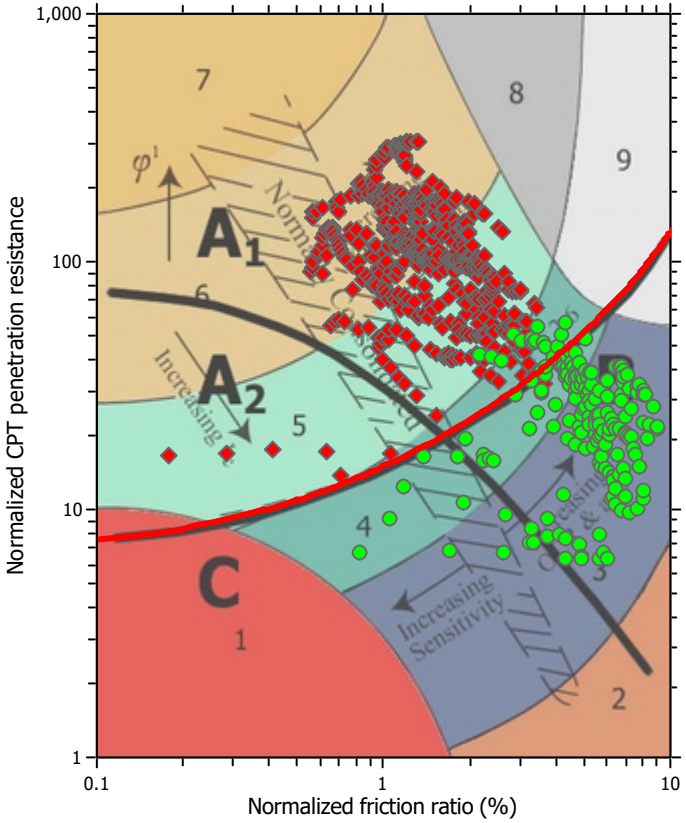
F.S. color scheme

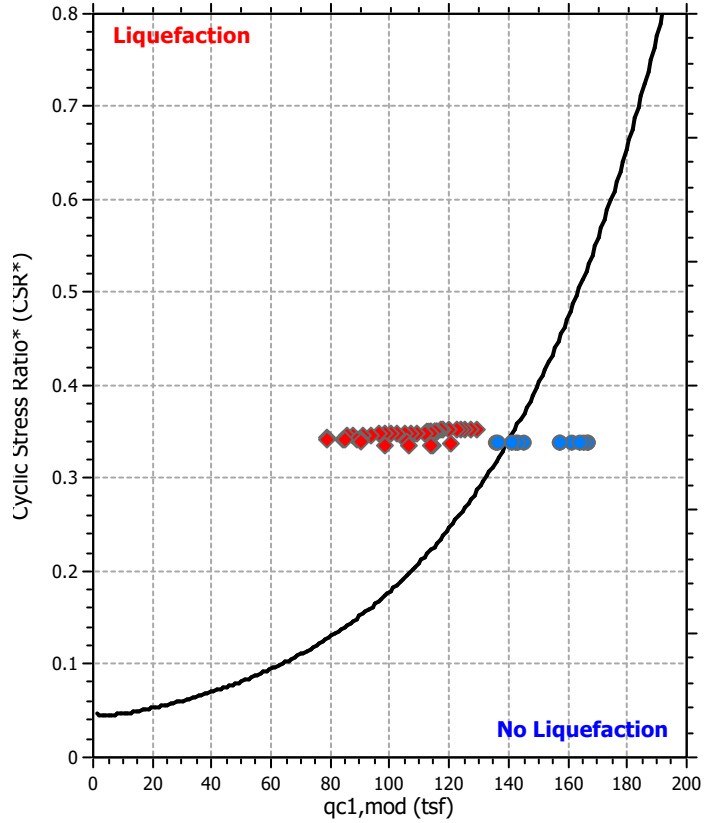
- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

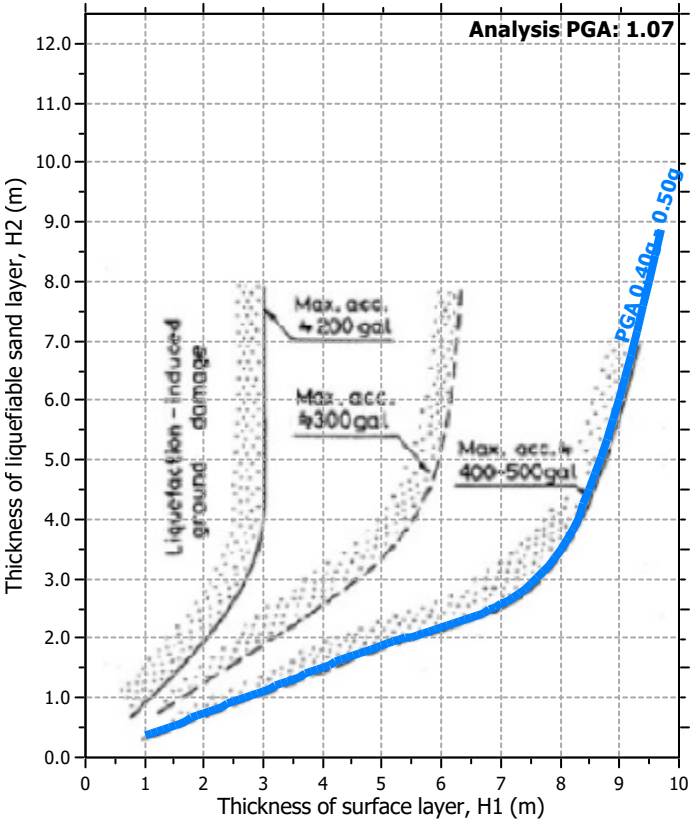
LPI color scheme

- Very high risk
- High risk
- Low risk

Liquefaction analysis summary plots



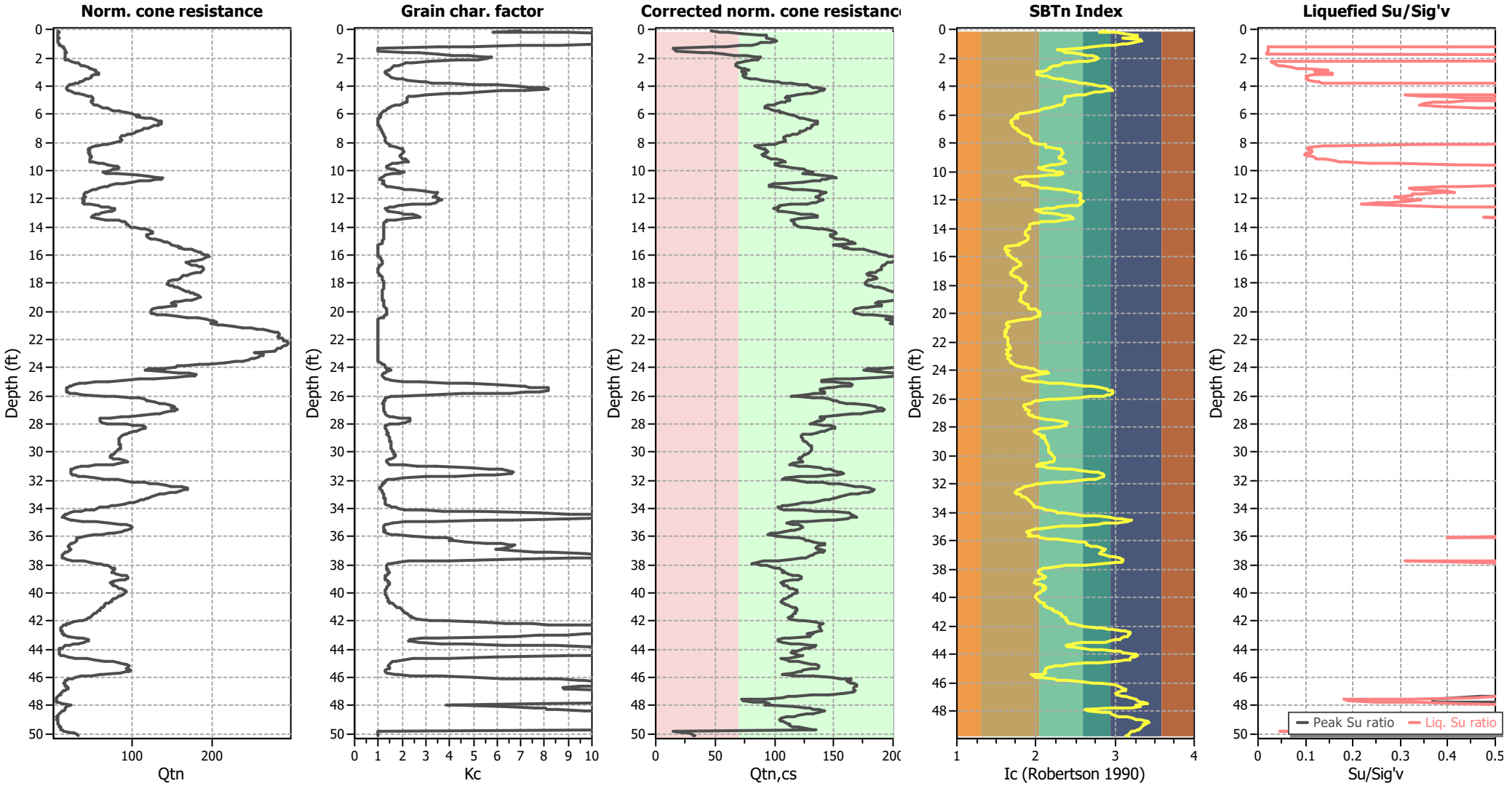




Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

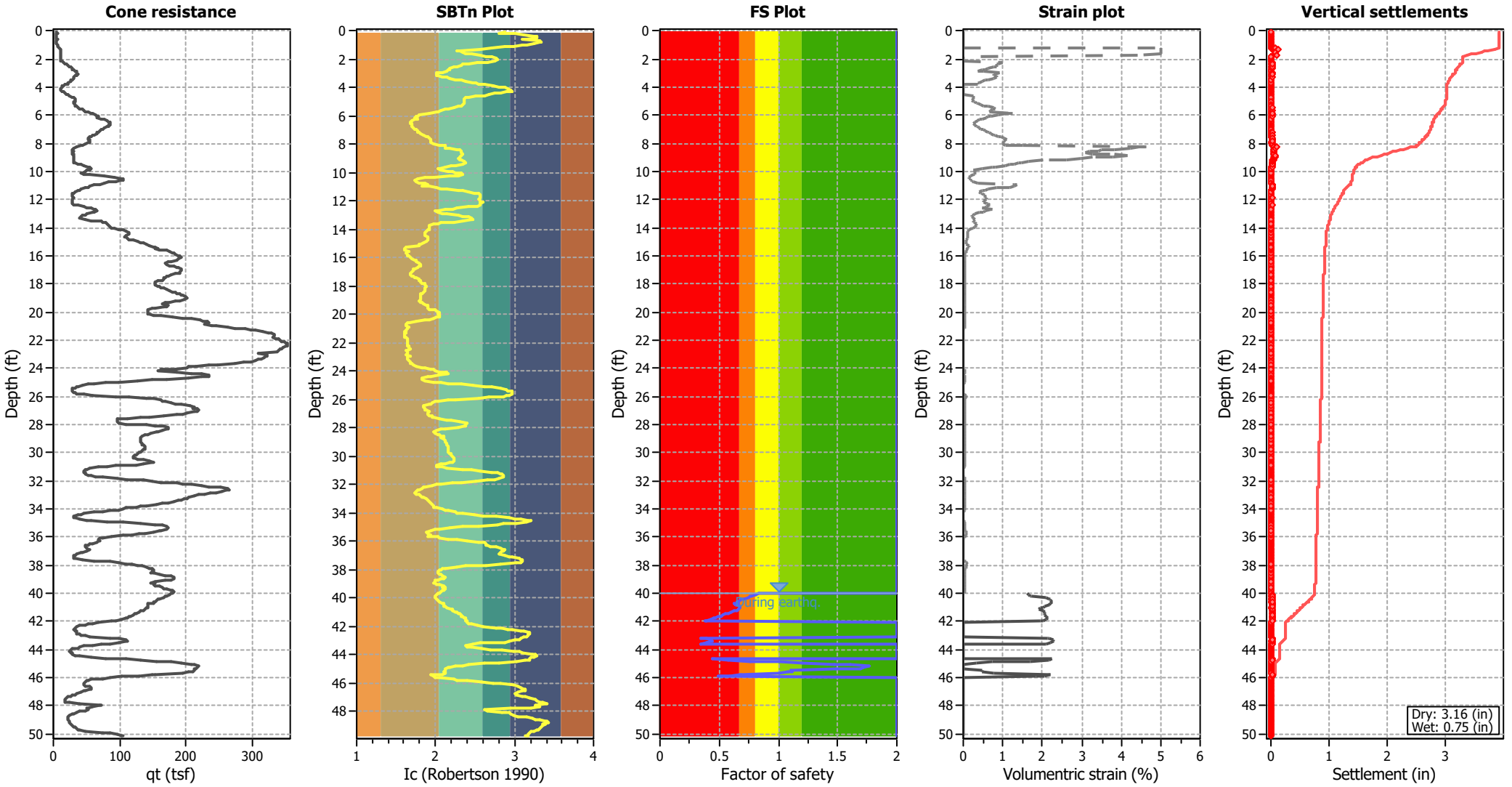
Check for strength loss plots (Robertson (2010))



Input parameters and analysis data

Analysis method:	Moss et al. (2006)	Depth to water table (erthq.):	40.00 ft	Fill weight:	N/A
Fines correction method:	Moss et al. (2006)	Average results interval:	1	Transition detect. applied:	No
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	8.10	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	1.07	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	100.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

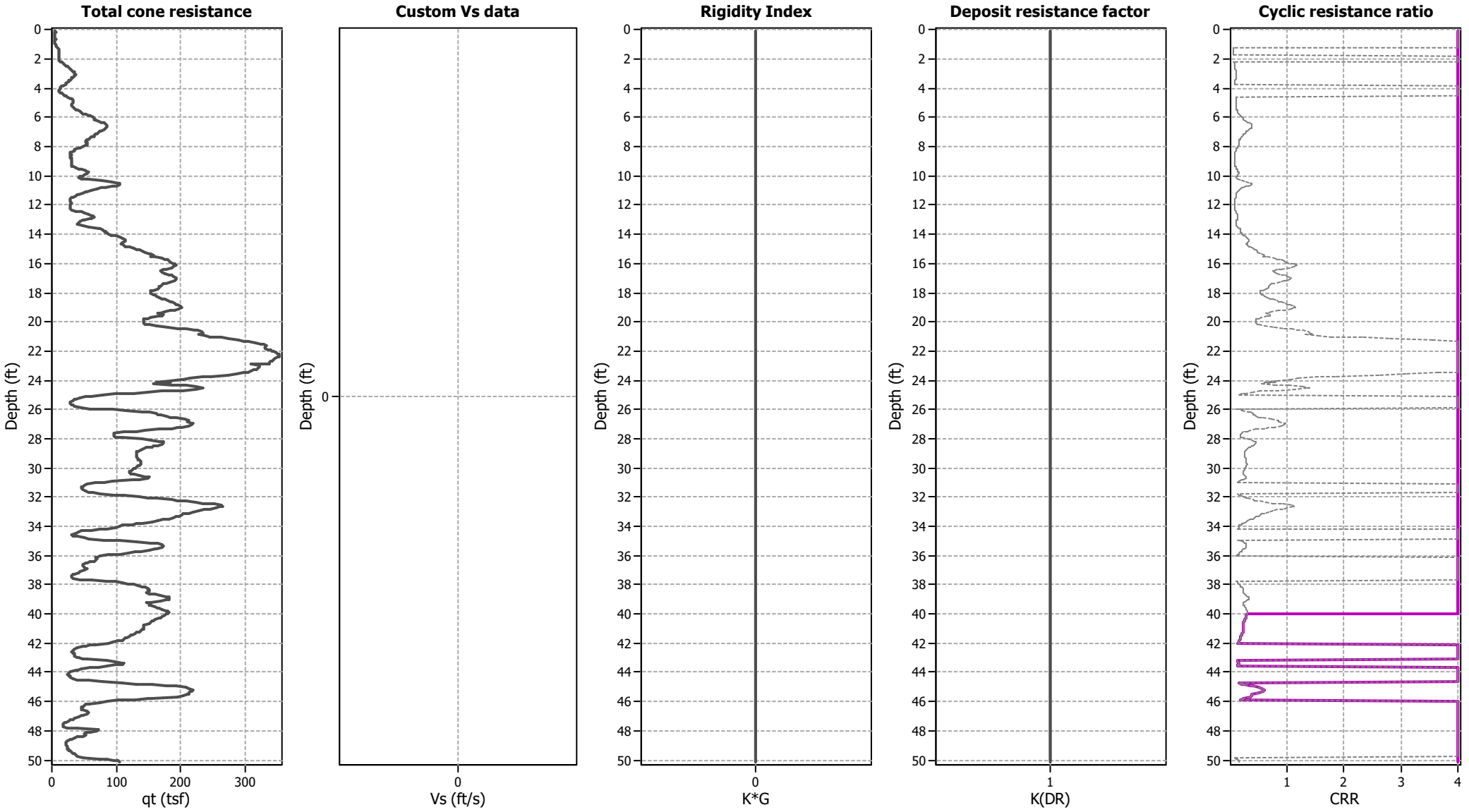
Estimation of post-earthquake settlements



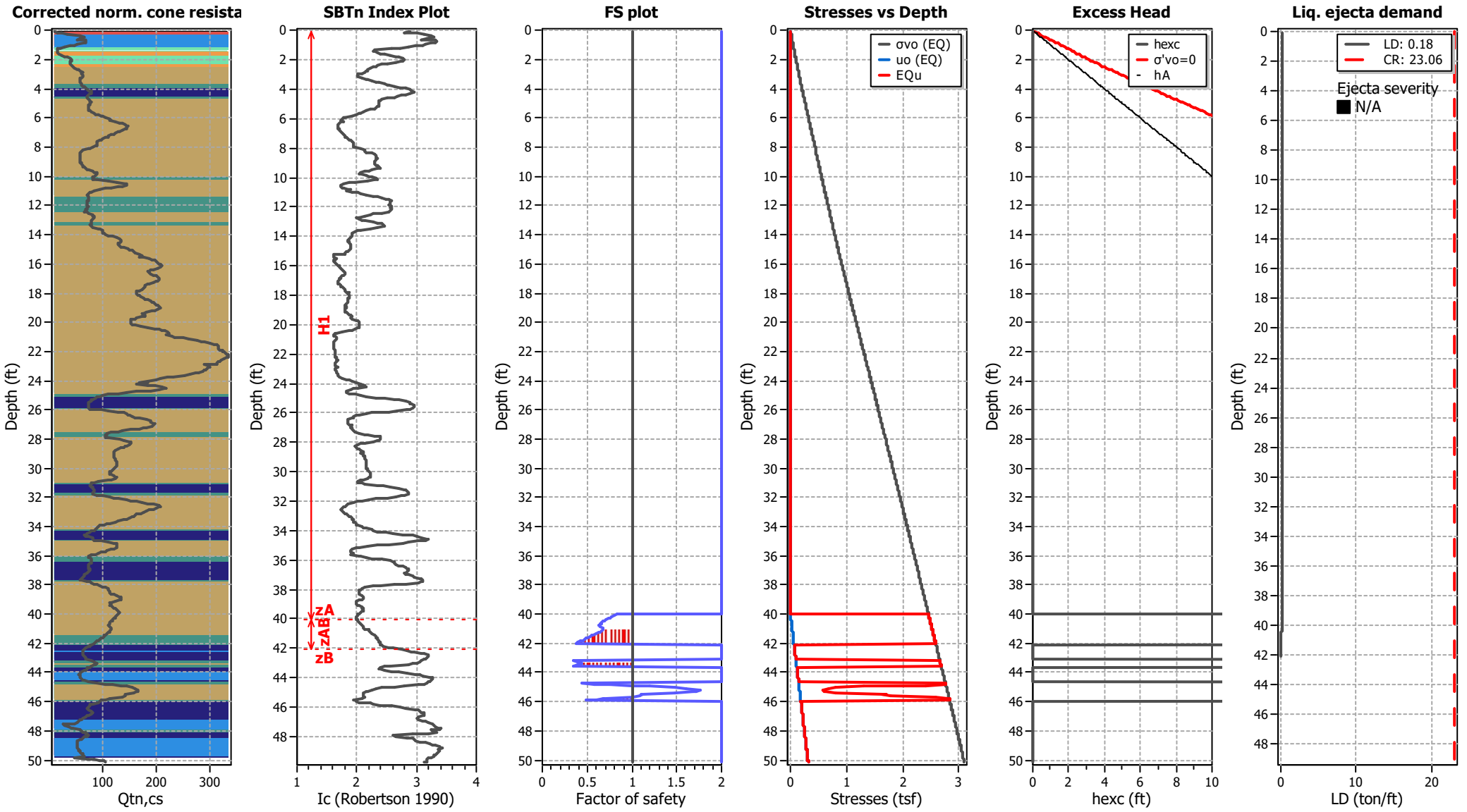
Abbreviations

q_t:	Total cone resistance (cone resistance q_c corrected for pore water effects)
I_c:	Soil Behaviour Type Index
FS:	Calculated Factor of Safety against liquefaction
Volumentric strain:	Post-liquefaction volumentric strain

Aging Calculation Estimation

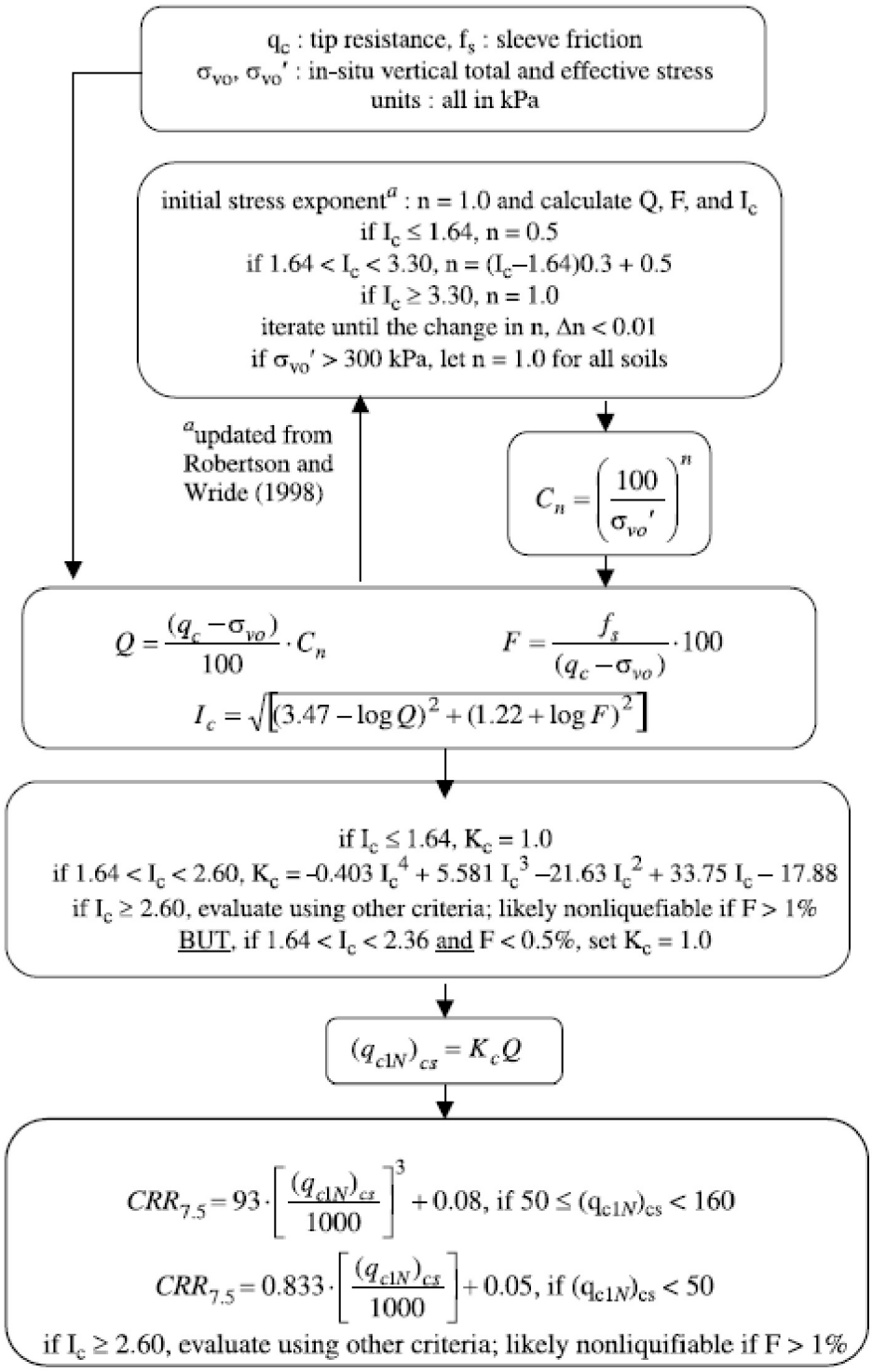


Ejecta Severity Estimation



Procedure for the evaluation of soil liquefaction resistance, NCEER (1998)

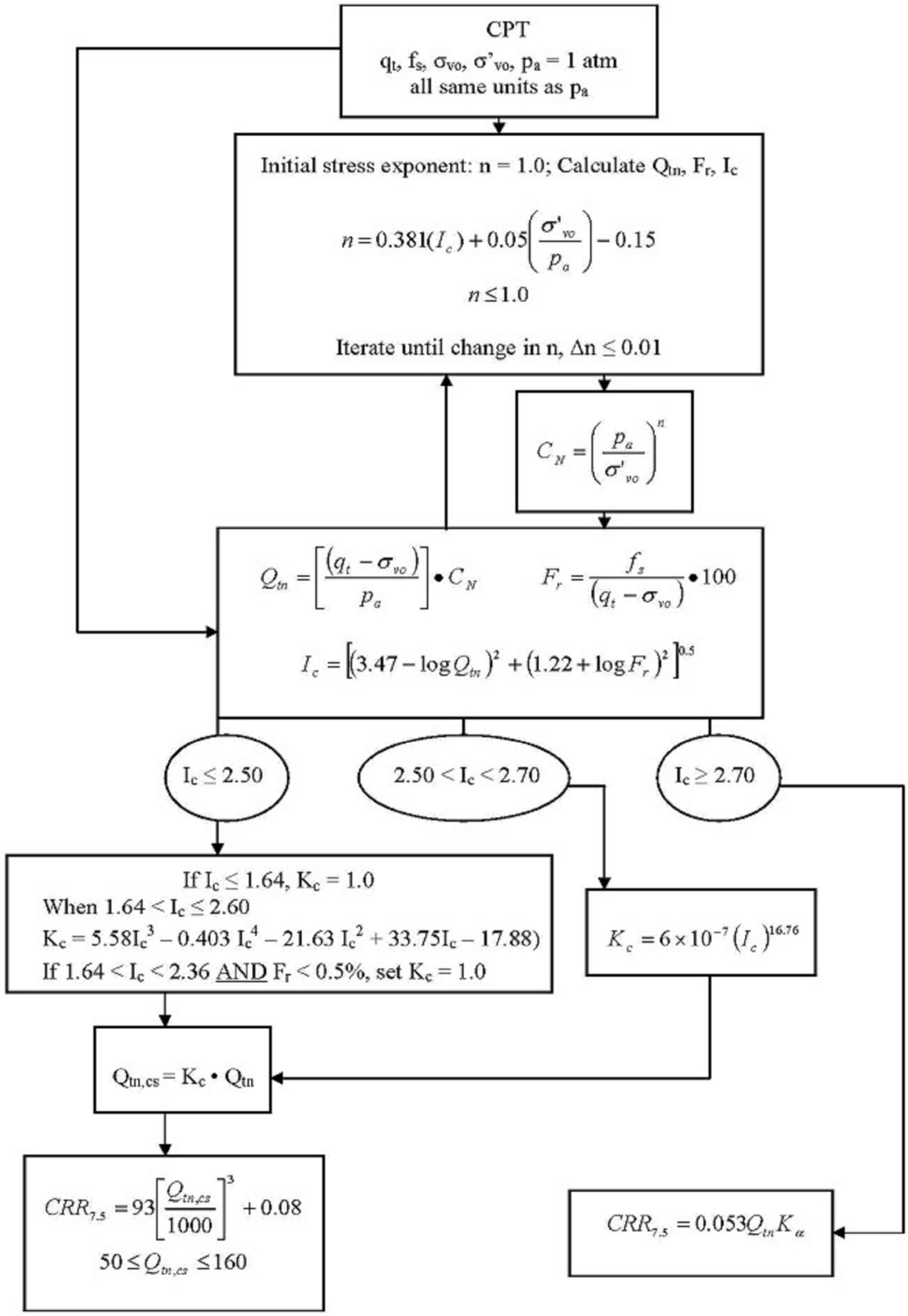
Calculation of soil resistance against liquefaction is performed according to the Robertson & Wride (1998) procedure. The procedure used in the software, slightly differs from the one originally published in NCEER-97-0022 (Proceedings of the NCEER Workshop on Evaluation of Liquefaction Resistance of Soils). The revised procedure is presented below in the form of a flowchart[1]:



[1] "Estimating liquefaction-induced ground settlements from CPT for level ground", G. Zhang, P.K. Robertson, and R.W.I. Brachman

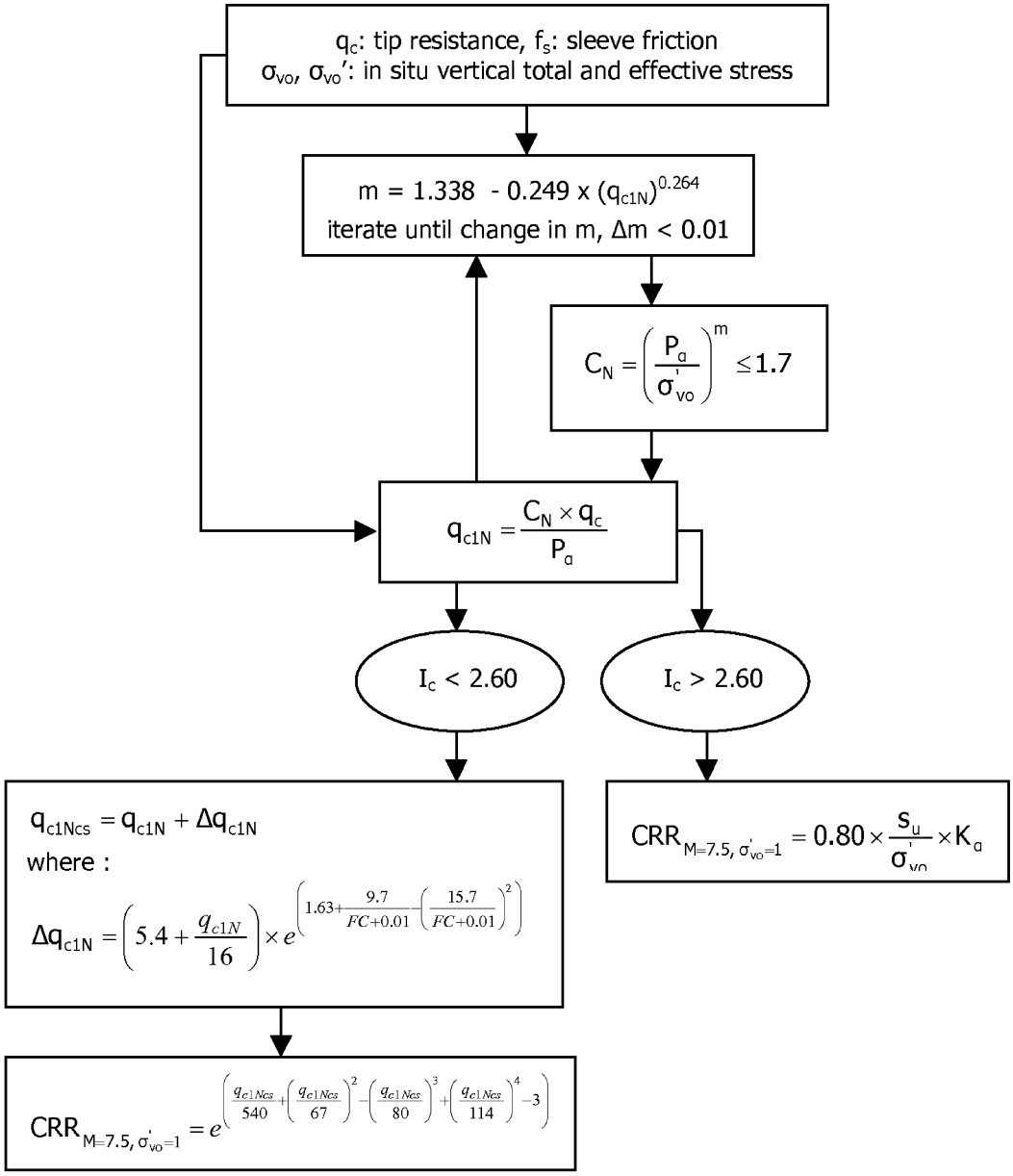
Procedure for the evaluation of soil liquefaction resistance (all soils), Robertson (2010)

Calculation of soil resistance against liquefaction is performed according to the Robertson & Wride (1998) procedure. This procedure used in the software, slightly differs from the one originally published in NCEER-97-0022 (Proceedings of the NCEER Workshop on Evaluation of Liquefaction Resistance of Soils). The revised procedure is presented below in the form of a flowchart[1]:

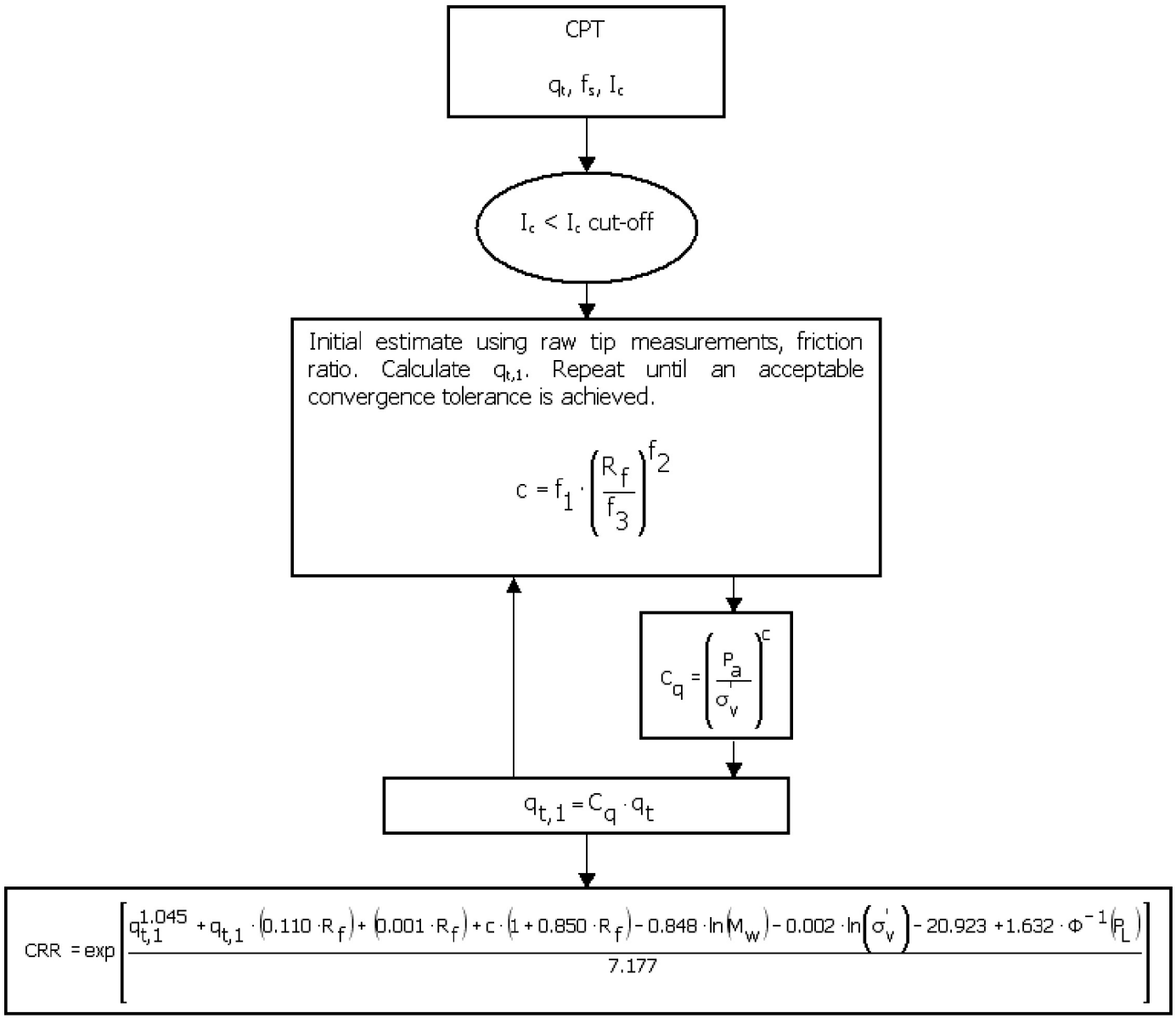


[1] P.K. Robertson, 2009. "Performance based earthquake design using the CPT", Keynote Lecture, International Conference on Performance-based Design in Earthquake Geotechnical Engineering – from case history to practice, IS-Tokyo, June 2009

Procedure for the evaluation of soil liquefaction resistance, Idriss & Boulanger (2008)



Procedure for the evaluation of soil liquefaction resistance (sandy soils), Moss et al. (2006)



Procedure for the evaluation of soil liquefaction resistance, Boulanger & Idriss(2014)

$$FS_{liq} = \frac{CRR_{M=7.5,\sigma'_v=1atm}}{CSR_{M=7.5,\sigma'_v=1atm}}$$

$$CSR_{M=7.5,\sigma'_v=1atm} = 0.65 \frac{\sigma_v}{\sigma'_v} \frac{a_{max}}{g} r_d \frac{1}{MSF} \frac{1}{K_\sigma}$$

$$r_d = \exp\left[\alpha(z) + \beta(z) \cdot M\right]$$

$$\alpha(z) = -1.012 - 1.126 \sin\left(\frac{z}{11.73} + 5.133\right)$$

$$\beta(z) = 0.106 + 0.118 \sin\left(\frac{z}{11.28} + 5.142\right)$$

$$K_\sigma = 1 - C_\sigma \ln\left(\frac{\sigma'_v}{P_a}\right) \leq 1.1$$

$$C_\sigma = \frac{1}{37.3 - 8.27\left(q_{c1Ncs}\right)^{0.264}} \leq 0.3$$

$$MSF = 1 + \left(MSF_{max} - 1\right)\left(8.64 \exp\left(\frac{-M}{4}\right) - 1.325\right)$$

$$MSF_{max} = 1.09 + \left(\frac{q_{c1Ncs}}{180}\right)^3 \leq 2.2$$

σ'_v *and* σ_v *at start of earthquake shaking*

$$CRR_{M=7.5,\sigma'_v=1atm} = \exp\left(\frac{q_{c1Ncs}}{113} + \left(\frac{q_{c1Ncs}}{1000}\right)^2 - \left(\frac{q_{c1Ncs}}{140}\right)^3 + \left(\frac{q_{c1Ncs}}{137}\right)^4 - 2.80\right)$$

$$q_{c1Ncs} = q_{c1N} + \Delta q_{c1N}$$

$$\Delta q_{c1N} = \left(11.9 + \frac{q_{c1N}}{14.6}\right) \exp\left(1.63 - \frac{9.7}{FC+2} - \left(\frac{15.7}{FC+2}\right)^2\right)$$

$$q_{c1N} = C_{Ne} \frac{q_c}{P_a}$$

$$C_{Ne} = \left(\frac{P_a}{\sigma'_v}\right)^m \leq 1.7$$

$$m = 1.338 - 0.249\left(q_{c1Ncs}\right)^{0.264} \quad with \quad 0.264 \leq m \leq 0.782$$

$$FC = 80\left(I_C + C_{FC}\right) - 137 \quad with \quad 0\% \leq FC \leq 100\%$$

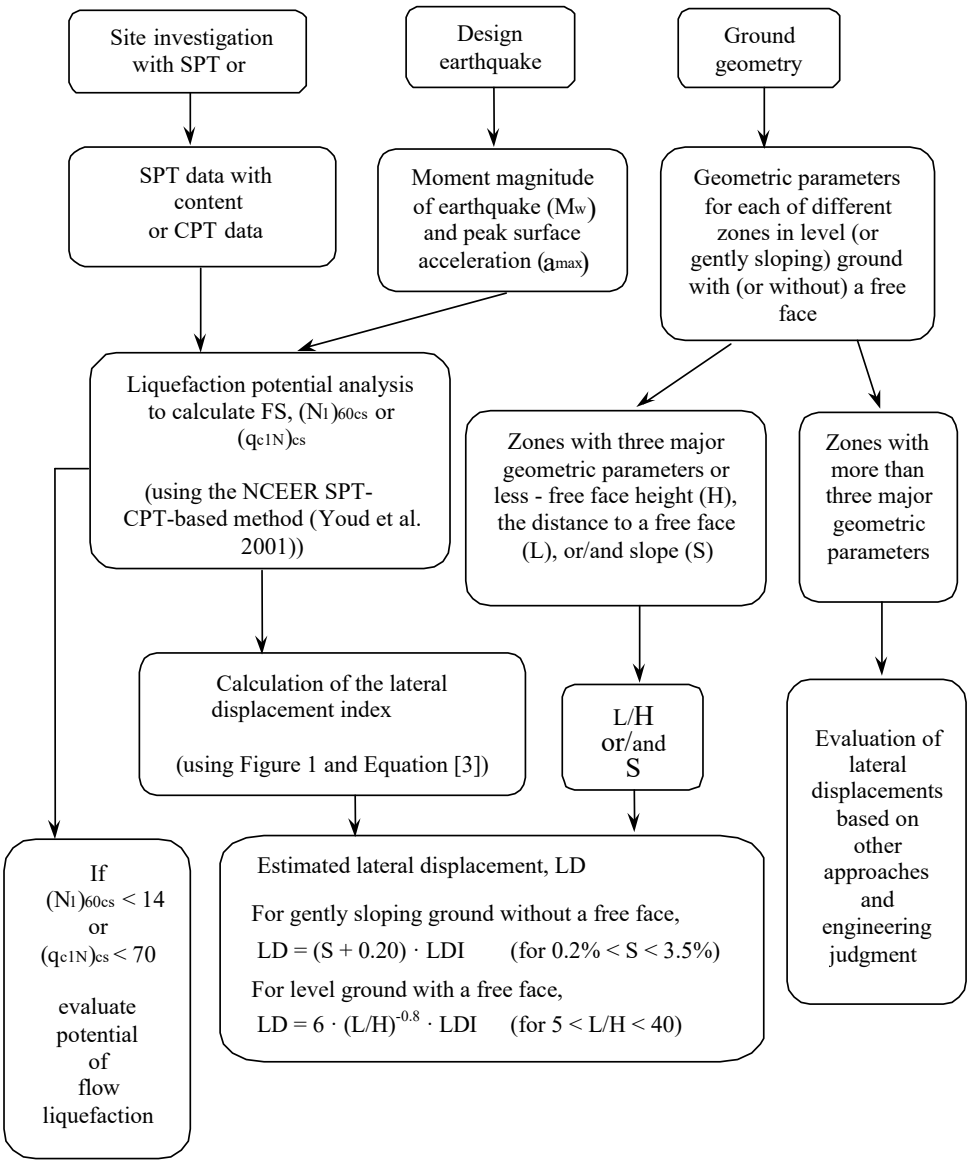
$$I_c = \left[\left(3.47 - \log\left(Q\right)\right)^2 + \left(1.22 + \log\left(F\right)\right)^2\right]^{0.5}$$

$$Q = \left(\frac{q_c - \sigma_{vc}}{P_a}\right)\left(\frac{P_a}{\sigma'_{vc}}\right)^n \; with \; 0.5 \leq n \leq 1.0 \; per \; Robertson \; \& \; Wride \; (1998)$$

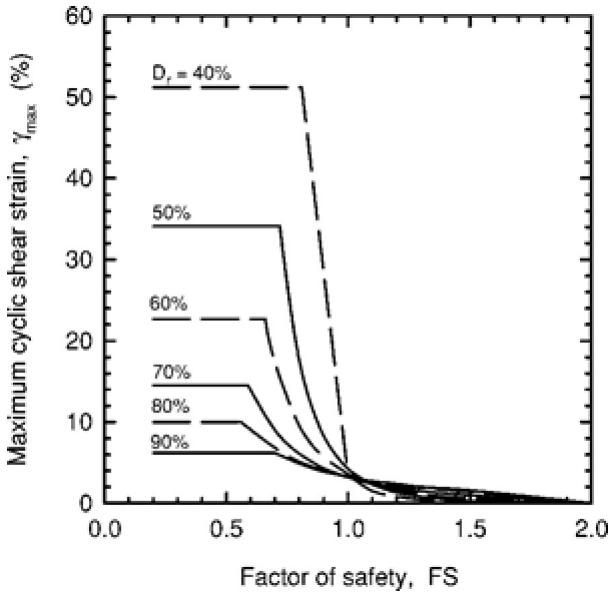
$$F = \left(\frac{f_s}{q_c - \sigma_{vc}}\right) \cdot 100\%$$

σ'_v *at time of CPT sounding*

Procedure for the evaluation of liquefaction-induced lateral spreading displacements



[1] Flow chart illustrating major steps in estimating liquefaction-induced lateral spreading displacements using the proposed approach



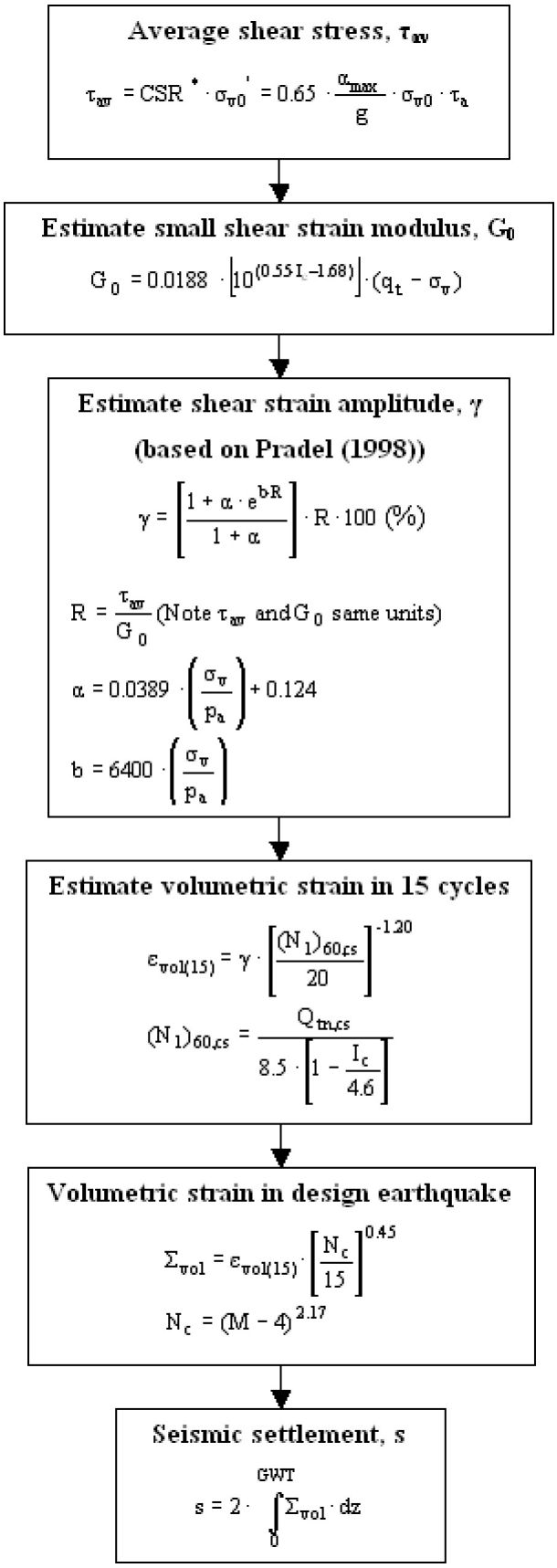
[1] Figure 1

$$LDI = \int_0^{z_{max}} \gamma_{max} dz$$

[1] Equation [3]

[1] "Estimating liquefaction-induced ground settlements from CPT for level ground", G. Zhang, P.K. Robertson, and R.W.I. Brachman

Procedure for the estimation of seismic induced settlements in dry sands



Robertson, P.K. and Lisheng, S., 2010, "Estimation of seismic compression in dry soils using the CPT" FIFTH INTERNATIONAL CONFERENCE ON RECENT ADVANCES IN GEOTECHNICAL EARTHQUAKE ENGINEERING AND SOIL DYNAMICS, Symposium in honor of professor I. M. Idriss, San Diego, CA

Liquefaction Potential Index (LPI) calculation procedure

Calculation of the Liquefaction Potential Index (LPI) is used to interpret the liquefaction assessment calculations in terms of severity over depth. The calculation procedure is based on the methology developed by Iwasaki (1982) and is adopted by AFPS.

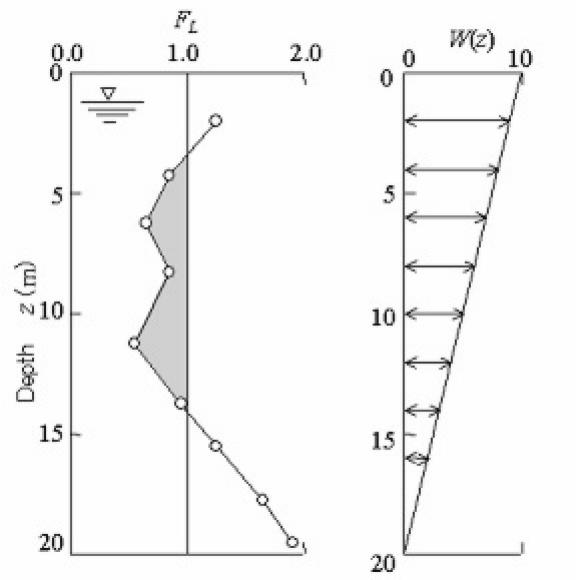
To estimate the severity of liquefaction extent at a given site, LPI is calculated based on the following equation:

$$\mathbf{LPI} = \int_0^{20} (10 - 0{,}5z) \times F_L \times dz$$

where:
F_L = 1 - F.S. when F.S. less than 1
F_L = 0 when F.S. greater than 1
z depth of measurment in meters

Values of LPI range between zero (0) when no test point is characterized as liquefiable and 100 when all points are characterized as susceptible to liquefaction. Iwasaki proposed four (4) discrete categories based on the numeric value of LPI:

- LPI = 0 : Liquefaction risk is very low
- 0 < LPI <= 5 : Liquefaction risk is low
- 5 < LPI <= 15 : Liquefaction risk is high
- LPI > 15 : Liquefaction risk is very high



Graphical presentation of the LPI calculation procedure

Shear-Induced Building Settlement (Ds) calculation procedure

The shear-induced building settlement (Ds) due to liquefaction below the building can be estimated using the relationship developed by Bray and Macedo (2017):

$$Ln(Ds) = c1 + c2 * LBS + 0.58 * Ln\left(Tanh\left(\frac{HL}{6}\right)\right) + 4.59 * Ln(Q) - 0.42 * Ln(Q)^2 - 0.02 * B + 0.84 * Ln(CAVdp) + 0.41 * Ln(Sa1) + \varepsilon$$

where Ds is in the units of mm, c1= -8.35 and c2= 0.072 for LBS ≤ 16, and c1= -7.48 and c2= 0.014 otherwise. Q is the building contact pressure in units of kPa, HL is the cumulative thickness of the liquefiable layers in the units of m, B is the building width in the units of m, CAVdp is a standardized version of the cumulative absolute velocity in the units of g-s, Sa1 is 5%-damped pseudo-acceleration response spectral value at a period of 1 s in the units of g, and ε is a normal random variable with zero mean and 0.50 standard deviation in Ln units. The liquefaction-induced building settlement index (LBS) is:

$$LBS = \sum W * \frac{\varepsilon_{shear}}{z} dz$$

where z (m) is the depth measured from the ground surface > 0, W is a foundation-weighting factor wherein W = 0.0 for z less than Df, which is the embedment depth of the foundation, and W = 1.0 otherwise. The shear strain parameter (ε_shear) is the liquefaction-induced free-field shear strain (in %) estimated using Zhang et al. (2004). It is calculated based on the estimated Dr of the liquefied soil layer and the calculated safety factor against liquefaction triggering (FSL).

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APPENDIX F

GENERAL EARTHWORK AND GRADING GUIDELINES AND PRELIMINARY CRITERIA

GENERAL EARTHWORK, GRADING GUIDELINES, AND PRELIMINARY CRITERIA

General

These guidelines present general procedures and requirements for earthwork and grading as shown on the approved grading plans, including preparation of areas to be filled, placement of fill, installation of subdrains, excavations, and appurtenant structures or flatwork. The recommendations contained in the geotechnical report are part of these earthwork and grading guidelines and would supersede the provisions contained hereafter in the case of conflict. Evaluations performed by the consultant during the course of grading may result in new or revised recommendations which could supersede these guidelines or the recommendations contained in the geotechnical report. Generalized details follow this text.

The contractor is responsible for the satisfactory completion of all earthwork in accordance with provisions of the project plans and specifications and latest adopted Code. In the case of conflict, the most onerous provisions shall prevail. The project geotechnical engineer and engineering geologist (geotechnical consultant), or their representatives, should provide observation and testing services, and geotechnical consultation during the duration of the project.

EARTHWORK OBSERVATIONS AND TESTING

Geotechnical Consultant

Prior to the commencement of grading, a qualified geotechnical consultant (soil engineer and engineering geologist) should be employed for the purpose of observing earthwork procedures and testing the fills for general conformance with the recommendations of the geotechnical report(s), the approved grading plans, and applicable grading codes and ordinances.

The geotechnical consultant should provide testing and observation so that an evaluation may be made that the work is being accomplished as specified. It is the responsibility of the contractor to assist the consultants and keep them apprised of anticipated work schedules and changes, so that they may schedule their personnel accordingly.

All remedial removals, clean-outs, prepared ground to receive fill, key excavations, and subdrain installation should be observed and documented by the geotechnical consultant prior to placing any fill. It is the contractor's responsibility to notify the geotechnical consultant when such areas are ready for observation.

Laboratory and Field Tests

Maximum dry density tests to determine the degree of compaction should be performed in accordance with American Standard Testing Materials test method ASTM designation D-1557. Random or representative field compaction tests should be performed in accordance with test methods ASTM designation D-1556, D-2937 or D-2922, and D-3017, at intervals of approximately ±2 feet of fill height or approximately every 1,000 cubic yards placed. These criteria would vary depending on the soil conditions and the size of the project. The location and frequency of testing would be at the discretion of the geotechnical consultant.

Contractor's Responsibility

All clearing, site preparation, and earthwork performed on the project should be conducted by the contractor, with observation by a geotechnical consultant, and staged approval by the governing agencies, as applicable. It is the contractor's responsibility to prepare the ground surface to receive the fill, to the satisfaction of the geotechnical consultant, and to place, spread, moisture condition, mix, and compact the fill in accordance with the recommendations of the geotechnical consultant. The contractor should also remove all non-earth material considered unsatisfactory by the geotechnical consultant.

Notwithstanding the services provided by the geotechnical consultant, it is the sole responsibility of the contractor to provide adequate equipment and methods to accomplish the earthwork in strict accordance with applicable grading guidelines, latest adopted Code or agency ordinances, geotechnical report(s), and approved grading plans. Sufficient watering apparatus and compaction equipment should be provided by the contractor with due consideration for the fill material, rate of placement, and climatic conditions. If, in the opinion of the geotechnical consultant, unsatisfactory conditions such as questionable weather, excessive oversized rock or deleterious material, insufficient support equipment, etc., are resulting in a quality of work that is not acceptable, the consultant will inform the contractor, and the contractor is expected to rectify the conditions, and if necessary, stop work until conditions are satisfactory.

During construction, the contractor shall properly grade all surfaces to maintain good drainage and prevent ponding of water. The contractor shall take remedial measures to control surface water and to prevent erosion of graded areas until such time as permanent drainage and erosion control measures have been installed.

SITE PREPARATION

All major vegetation, including brush, trees, thick grasses, organic debris, and other deleterious material, should be removed and disposed of off-site. These removals must be concluded prior to placing fill. In-place existing fill, soil, alluvium, colluvium, or rock materials, as evaluated by the geotechnical consultant as being unsuitable, should be removed prior to any fill placement. Depending upon the soil conditions, these materials may be reused as

compacted fills. Any materials incorporated as part of the compacted fills should be approved by the geotechnical consultant.

Any underground structures such as cesspools, cisterns, mining shafts, tunnels, septic tanks, wells, pipelines, or other structures not located prior to grading, are to be removed or treated in a manner recommended by the geotechnical consultant. Soft, dry, spongy, highly fractured, or otherwise unsuitable ground, extending to such a depth that surface processing cannot adequately improve the condition, should be overexcavated down to firm ground and approved by the geotechnical consultant before compaction and filling operations continue. Overexcavated and processed soils, which have been properly mixed and moisture conditioned, should be re-compacted to the minimum relative compaction as specified in these guidelines.

Existing ground, which is determined to be satisfactory for support of the fills, should be scarified (ripped) to a minimum depth of 6 to 8 inches, or as directed by the geotechnical consultant. After the scarified ground is brought to optimum moisture content, or greater and mixed, the materials should be compacted as specified herein. If the scarified zone is greater than 6 to 8 inches in depth, it may be necessary to remove the excess and place the material in lifts restricted to about 6 to 8 inches in compacted thickness.

Existing ground which is not satisfactory to support compacted fill should be overexcavated as required in the geotechnical report, or by the on-site geotechnical consultant. Scarification, disc harrowing, or other acceptable forms of mixing should continue until the soils are broken down and free of large lumps or clods, until the working surface is reasonably uniform and free from ruts, hollows, hummocks, mounds, or other uneven features, which would inhibit compaction as described previously.

Where fills are to be placed on ground with slopes steeper than 5:1 (horizontal to vertical [h:v]), the ground should be stepped or benched. The lowest bench, which will act as a key, should be a minimum of 15 feet wide and should be at least 2 feet deep into firm material, and approved by the geotechnical consultant. In fill-over-cut slope conditions, the recommended minimum width of the lowest bench or key is also 15 feet, with the key founded on firm material, as designated by the geotechnical consultant. As a general rule, unless specifically recommended otherwise by the geotechnical consultant, the minimum width of fill keys should be equal to ½ the height of the slope.

Standard benching is generally 4 feet (minimum) vertically, exposing firm, acceptable material. Benching may be used to remove unsuitable materials, although it is understood that the vertical height of the bench may exceed 4 feet. Pre-stripping may be considered for unsuitable materials in excess of 4 feet in thickness.

All areas to receive fill, including processed areas, removal areas, and the toes of fill benches, should be observed and approved by the geotechnical consultant prior to placement of fill. Fills may then be properly placed and compacted until design grades (elevations) are attained.

COMPACTED FILLS

Any earth materials imported or excavated on the property may be utilized in the fill provided that each material has been evaluated to be suitable by the geotechnical consultant. These materials should be free of roots, tree branches, other organic matter, or other deleterious materials. All unsuitable materials should be removed from the fill as directed by the geotechnical consultant. Soils of poor gradation, undesirable expansion potential, or substandard strength characteristics may be designated by the consultant as unsuitable and may require blending with other soils to serve as a satisfactory fill material.

Fill materials derived from benching operations should be dispersed throughout the fill area and blended with other approved material. Benching operations should not result in the benched material being placed only within a single equipment width away from the fill/bedrock contact.

Oversized materials defined as rock, or other irreducible materials, with a maximum dimension greater than 12 inches, should not be buried or placed in fills unless the location of materials and disposal methods are specifically approved by the geotechnical consultant. Oversized material should be taken offsite, or placed in accordance with recommendations of the geotechnical consultant in areas designated as suitable for rock disposal. GSI anticipates that soils to be utilized as fill material for the subject project may contain some rock. Appropriately, the need for rock disposal may be necessary during grading operations on the site. From a geotechnical standpoint, the depth of any rocks, rock fills, or rock blankets, should be a sufficient distance from finish grade. This depth is generally the same as any overexcavation due to cut-fill transitions in hard rock areas, and generally facilitates the excavation of structural footings and substructures. Should deeper excavations be proposed (i.e., deepened footings, utility trenching, swimming pools, spas, etc.), the developer may consider increasing the hold-down depth of any rocky fills to be placed, as appropriate. In addition, some agencies/jurisdictions mandate a specific hold-down depth for oversize materials placed in fills. The hold-down depth, and potential to encounter oversize rock, both within fills, and occurring in cut or natural areas, would need to be disclosed to all interested/affected parties. Once approved by the governing agency, the hold-down depth for oversized rock (i.e., greater than 12 inches) in fills on this project is provided as 10 feet, unless specified differently in the text of this report. The governing agency may require that these materials need to be deeper, crushed, or reduced to less than 12 inches in maximum dimension, at their discretion.

To facilitate future trenching, rock (or oversized material), should not be placed within the hold-down depth feet from finish grade, the range of foundation excavations, future utilities, or underground construction unless specifically approved by the governing agency, the geotechnical consultant, or the developer's representative.

If import material is required for grading, representative samples of the materials to be utilized as compacted fill should be analyzed in the laboratory by the geotechnical consultant to evaluate it's physical properties and suitability for use onsite. Such testing should be performed three (3) days prior to importation. If any material other than that previously tested is encountered during grading, an appropriate analysis of this material should be conducted by the geotechnical consultant as soon as possible.

Approved fill material should be placed in areas prepared to receive fill in near horizontal layers, that when compacted, should not exceed about 6 to 8 inches in thickness. The geotechnical consultant may approve thick lifts if testing indicates the grading procedures are such that adequate compaction is being achieved with lifts of greater thickness. Each layer should be spread evenly and blended to attain uniformity of material and moisture suitable for compaction.

Fill layers at a moisture content less than optimum should be watered and mixed, and wet fill layers should be aerated by scarification, or should be blended with drier material. Moisture conditioning, blending, and mixing of the fill layer should continue until the fill materials have a uniform moisture content at, or above, optimum moisture.

After each layer has been evenly spread, moisture conditioned, and mixed, it should be uniformly compacted to a minimum of 90 percent of the maximum density as evaluated by ASTM test designation D 1557, or as otherwise recommended by the geotechnical consultant. Compaction equipment should be adequately sized and should be specifically designed for soil compaction, or of proven reliability to efficiently achieve the specified degree of compaction.

Where tests indicate that the density of any layer of fill, or portion thereof, is below the required relative compaction, or improper moisture is in evidence, the particular layer or portion shall be re-worked until the required density and moisture content has been attained. No additional fill shall be placed in an area until the last placed lift of fill has been tested and found to meet the density and moisture requirements, and is approved by the geotechnical consultant.

In general, per the latest adopted Code, fill slopes should be designed and constructed at a gradient of 2:1 (h:v), or flatter. Compaction of slopes should be accomplished by over-building a minimum of 3 feet horizontally, and subsequently trimming back to the design slope configuration. Testing shall be performed as the fill is elevated to evaluate compaction as the fill core is being developed. Special efforts may be necessary to attain the specified compaction in the fill slope zone. Final slope shaping should be performed by trimming and removing loose materials with appropriate equipment. A final evaluation of fill slope compaction should be based on observation or testing of the finished slope face. Where compacted fill slopes are designed steeper than 2:1 (h:v), prior approval from the governing agency, specific material types, a higher minimum relative compaction, special reinforcement, and special grading procedures will be recommended.

If an alternative to over-building and cutting back the compacted fill slopes is selected, then special effort should be made to achieve the required compaction in the outer 10 feet of each lift of fill by undertaking the following:

1. An extra piece of equipment consisting of a heavy, short-shanked sheepsfoot should be used to roll (horizontal) parallel to the slopes continuously as fill is placed. The sheepsfoot roller should also be used to roll perpendicular to the slopes, and extend out over the slope to provide adequate compaction to the face of the slope.

2. Loose fill should not be spilled out over the face of the slope as each lift is compacted. Any loose fill spilled over a previously completed slope face should be trimmed off or be subject to re-rolling.

3. Field compaction tests will be made in the outer (horizontal) ±2 to ±8 feet of the slope at appropriate vertical intervals, subsequent to compaction operations.

4. After completion of the slope, the slope face should be shaped with a small tractor and then re-rolled with a sheepsfoot to achieve compaction to near the slope face. Subsequent to testing to evaluate compaction, the slopes should be grid-rolled to achieve compaction to the slope face. Final testing should be used to evaluate compaction after grid rolling.

5. Where testing indicates less than adequate compaction, the contractor will be responsible to rip, water, mix, and recompact the slope material as necessary to achieve compaction. Additional testing should be performed to evaluate compaction.

SUBDRAIN INSTALLATION

Subdrains should be installed in approved ground in accordance with the approximate alignment and details indicated by the geotechnical consultant. Subdrain locations or materials should not be changed or modified without approval of the geotechnical consultant. The geotechnical consultant may recommend and direct changes in subdrain line, grade, and drain material in the field, pending exposed conditions. The location of constructed subdrains, especially the outlets, should be recorded/surveyed by the project civil engineer. Drainage at the subdrain outlets should be provided by the project civil engineer.

EXCAVATIONS

Excavations and cut slopes should be examined during grading by the geotechnical consultant. If directed by the geotechnical consultant, further excavations or overexcavation and refilling of cut areas should be performed, or remedial grading of cut slopes should be performed. When fill-over-cut slopes are to be graded, unless otherwise approved, the cut portion of the slope should be observed by the geotechnical consultant prior to placement of materials for construction of the fill portion of the slope. The geotechnical consultant should observe all cut slopes, and should be notified by the contractor when excavation of cut slopes commences.

If, during the course of grading, unforeseen adverse or potentially adverse geologic conditions are encountered, the geotechnical consultant should investigate, evaluate, and make appropriate recommendations for mitigation of these conditions. The need for cut slope buttressing or stabilizing should be based on in-grading evaluation by the geotechnical consultant, whether anticipated or not.

Unless otherwise specified in geotechnical and geological report(s), no cut slopes should be excavated higher or steeper than that allowed by the ordinances of controlling governmental agencies. Additionally, short-term stability of temporary cut slopes is the contractor's responsibility.

Erosion control and drainage devices should be designed by the project civil engineer and should be constructed in compliance with the ordinances of the controlling governmental agencies, or in accordance with the recommendations of the geotechnical consultant.

COMPLETION

Observation, testing, and consultation by the geotechnical consultant should be conducted during the grading operations in order to state an opinion that all cut and fill areas are graded in accordance with the approved project specifications. After completion of grading, and after the geotechnical consultant has finished observations of the work, final reports should be submitted, and may be subject to review by the controlling governmental agencies. No further excavation or filling should be undertaken without prior notification of the geotechnical consultant or approved plans.

All finished cut and fill slopes should be protected from erosion and be planted in accordance with the project specifications or as recommended by a landscape architect. Such protection and planning should be undertaken as soon as practical after completion of grading.

JOB SAFETY

General

At GSI, getting the job done safely is of primary concern. The following is the company's safety considerations for use by all employees on multi-employer construction sites. On-ground personnel are at highest risk of injury, and possible fatality, on grading and construction projects. GSI recognizes that construction activities will vary on each site, and that site safety is the prime responsibility of the contractor; however, everyone must be safety conscious and responsible at all times. To achieve our goal of avoiding accidents, cooperation between the client, the contractor, and GSI personnel must be maintained.

In an effort to minimize risks associated with geotechnical testing and observation, the following precautions are to be implemented for the safety of field personnel on grading and construction projects:

Safety Meetings: GSI field personnel are directed to attend contractor's regularly scheduled and documented safety meetings.

Safety Vests: Safety vests are provided for, and are to be worn by GSI personnel, at all times, when they are working in the field.

Safety Flags: Two safety flags are provided to GSI field technicians; one is to be affixed to the vehicle when on site, the other is to be placed atop the spoil pile on all test pits.

Flashing Lights: All vehicles stationary in the grading area shall use rotating or flashing amber beacons, or strobe lights, on the vehicle during all field testing. While operating a vehicle in the grading area, the emergency flasher on the vehicle shall be activated.

If the contractor's representative observes any of our personnel who do not follow the above, we request that it be brought to the attention of our office.

Test Pits Location, Orientation, and Clearance

The technician is responsible for selecting test pit locations. A primary concern should be the technician's safety. Efforts will be made to coordinate locations with the grading contractor's authorized representative, and to select locations following or behind the established traffic pattern, preferably outside of current traffic. The contractor's authorized representative (supervisor, grade checker, dump man, operator, etc.) should direct excavation of the pit and safety during the test period. Of paramount concern should be the soil technician's safety, and obtaining enough tests to represent the fill.

Test pits should be excavated so that the spoil pile is placed away from oncoming traffic, whenever possible. The technician's vehicle is to be placed next to the test pit, opposite the spoil pile. This necessitates the fill be maintained in a drivable condition. Alternatively, the contractor may wish to park a piece of equipment in front of the test holes, particularly in small fill areas or those with limited access.

A zone of non-encroachment should be established for all test pits. No grading equipment should enter this zone during the testing procedure. The zone should extend approximately 50 feet outward from the center of the test pit. This zone is established for safety and to avoid excessive ground vibration, which typically decreases test results.

When taking slope tests, the technician should park the vehicle directly above or below the test location. If this is not possible, a prominent flag should be placed at the top of the slope. The contractor's representative should effectively keep all equipment at a safe operational distance (e.g., 50 feet) away from the slope during this testing.

The technician is directed to withdraw from the active portion of the fill as soon as possible following testing. The technician's vehicle should be parked at the perimeter of the fill in a highly visible location, well away from the equipment traffic pattern. The contractor should inform our personnel of all changes to haul roads, cut and fill areas or other factors that may affect site access and site safety.

If the technician's safety is jeopardized or compromised because of the contractor's failure to comply with any of the above, the technician is required, by company policy, to immediately withdraw and notify his/her supervisor. The grading contractor's representative will be

contacted to affect a solution. However, in the interim, no further testing will be performed until the situation is rectified. Any fill placed can be considered unacceptable and subject to reprocessing, recompaction, or removal.

If the soil technician does not comply with the above or other established safety guidelines, we request that the contractor bring this to the technician's attention and notify this office. Effective communication and coordination between the contractor's representative and the soil technician is strongly encouraged to implement the above safety plan.

Trench and Vertical Excavation

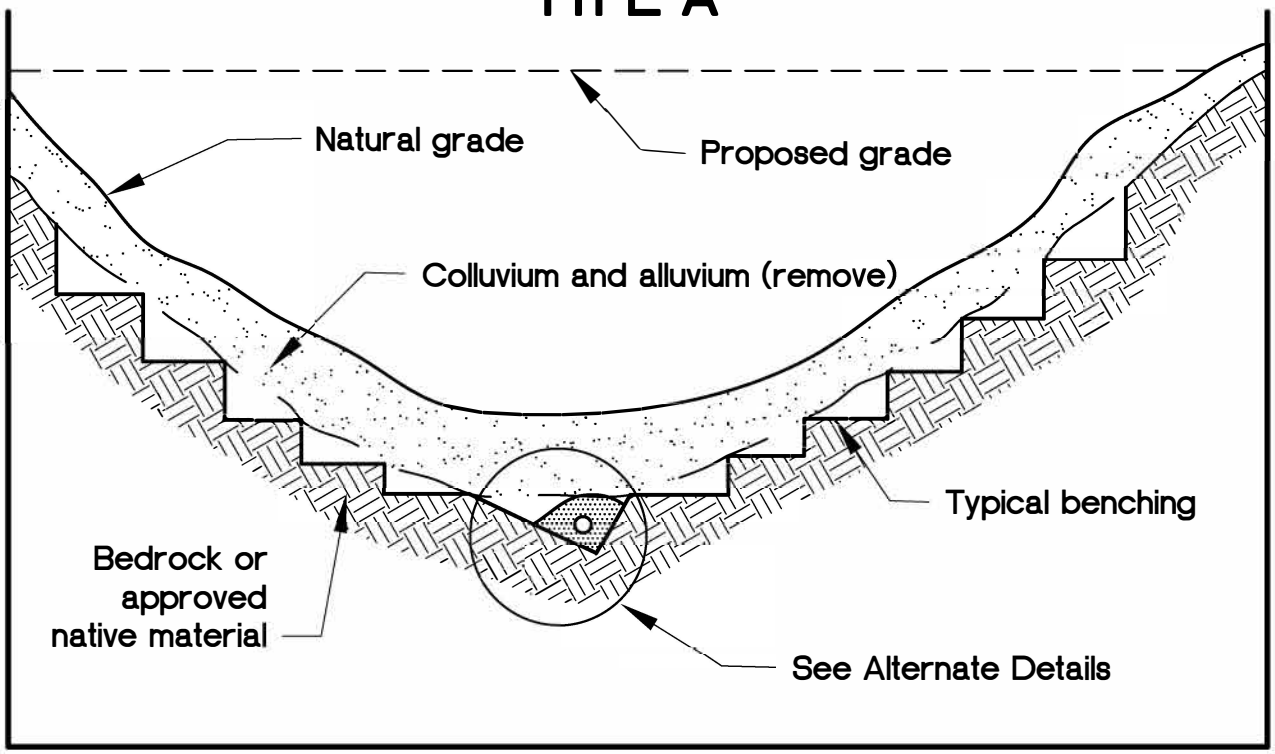
It is the contractor's responsibility to provide safe access into trenches where compaction testing is needed. Our personnel are directed not to enter any excavation or vertical cut which: 1) is 5 feet or deeper unless shored or laid back; 2) displays any evidence of instability, has any loose rock or other debris which could fall into the trench; or 3) displays any other evidence of any unsafe conditions regardless of depth.

All trench excavations or vertical cuts more than 5 feet deep, which any person enters, should be shored or laid back. Trench access should be provided in accordance with Cal/OSHA and/or state and local standards. Our personnel are directed not to enter any trench by being lowered or "riding down" on the equipment.

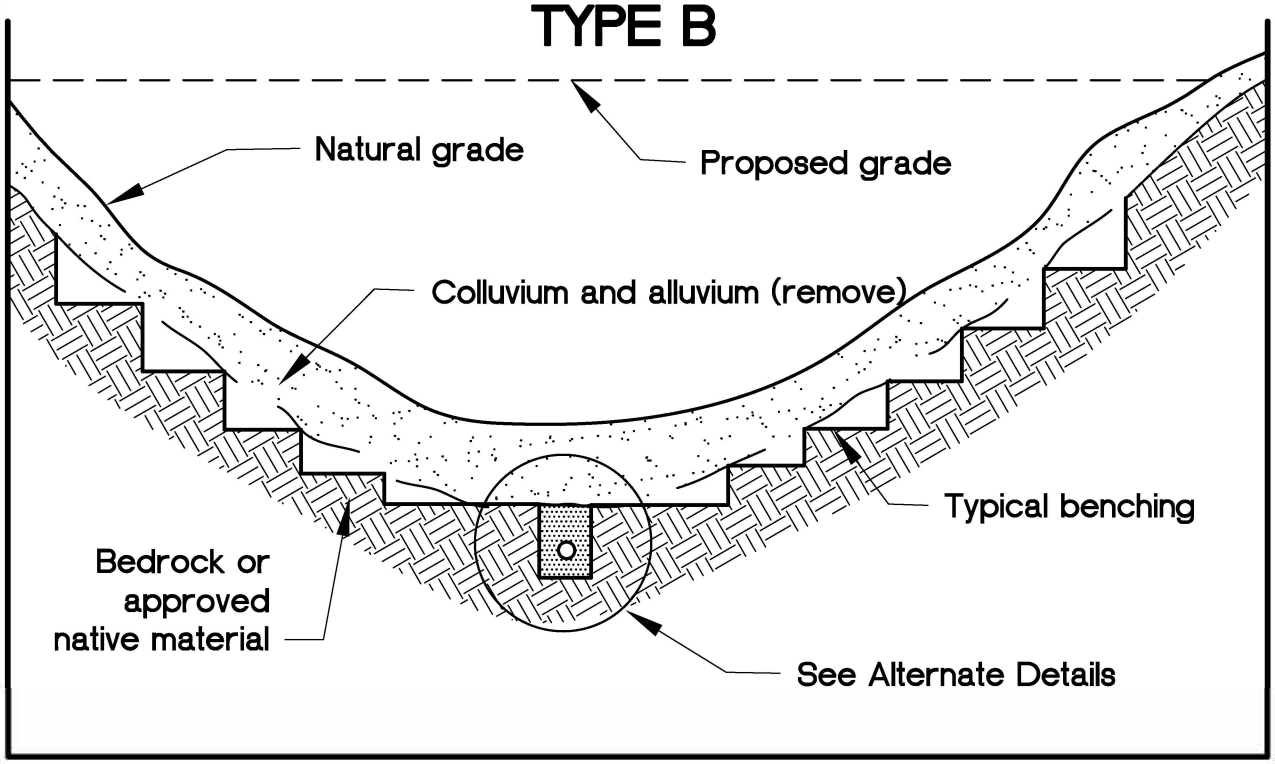
If the contractor fails to provide safe access to trenches for compaction testing, our company policy requires that the soil technician withdraw and notify his/her supervisor. The contractor's representative will be contacted to affect a solution. All backfill not tested due to safety concerns or other reasons could be subject to reprocessing and/or removal.

If GSI personnel become aware of anyone working beneath an unsafe trench wall or vertical excavation, we have a legal obligation to put the contractor and owner/developer on notice to immediately correct the situation. If corrective steps are not taken, GSI then has an obligation to notify Cal/OSHA and/or the proper controlling authorities.

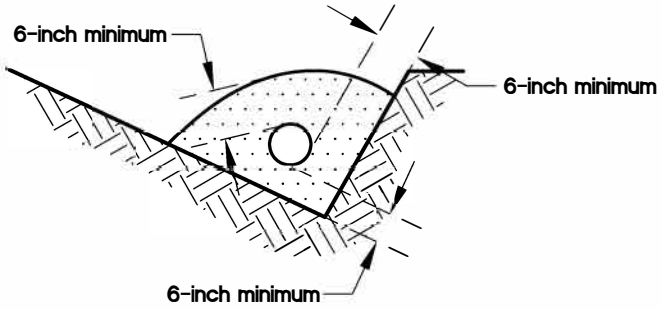
TYPE A



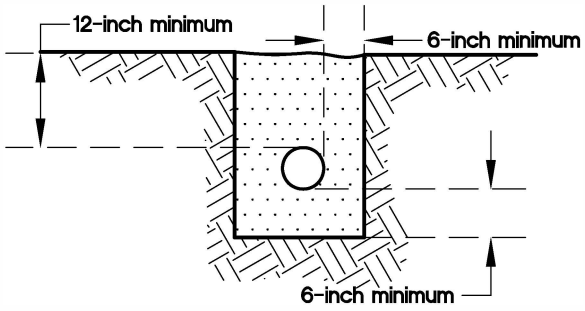
TYPE B



Selection of alternate subdrain details, location, and extent of subdrains should be evaluated by the geotechnical consultant during grading.



A-1



B-1

Filter material: Minimum volume of 9 cubic feet per lineal foot of pipe.

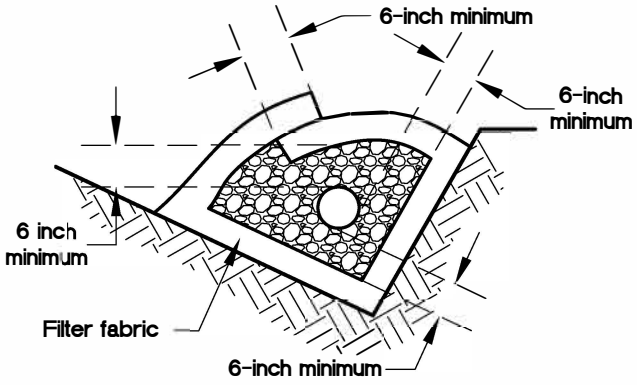
Perforated pipe: 6-inch-diameter ABS or PVC pipe or approved substitute with minimum 8 perforations (¼-inch diameter) per lineal foot in bottom half of pipe (ASTM D-2751, SDR-35, or ASTM D-1527, Schd. 40).

For continuous run in excess of 500 feet, use 8-inch-diameter pipe (ASTM D-3034, SDR-35, or ASTM D-1785, Schd. 40).

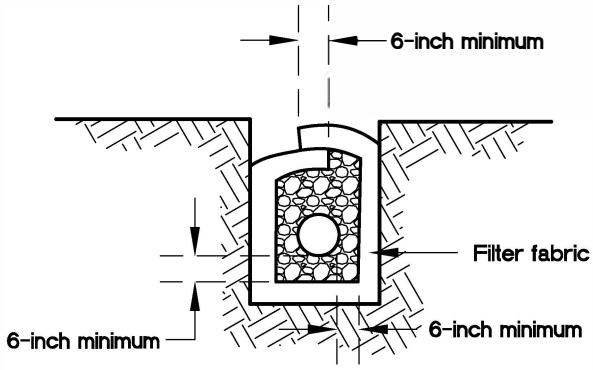
FILTER MATERIAL

Sieve Size	Percent Passing
1 inch	100
¾ inch	90-100
⅜ inch	40-100
No. 4	25-40
No. 8	18-33
No. 30	5-15
No. 50	0-7
No. 200	0-3

ALTERNATE 1: PERFORATED PIPE AND FILTER MATERIAL



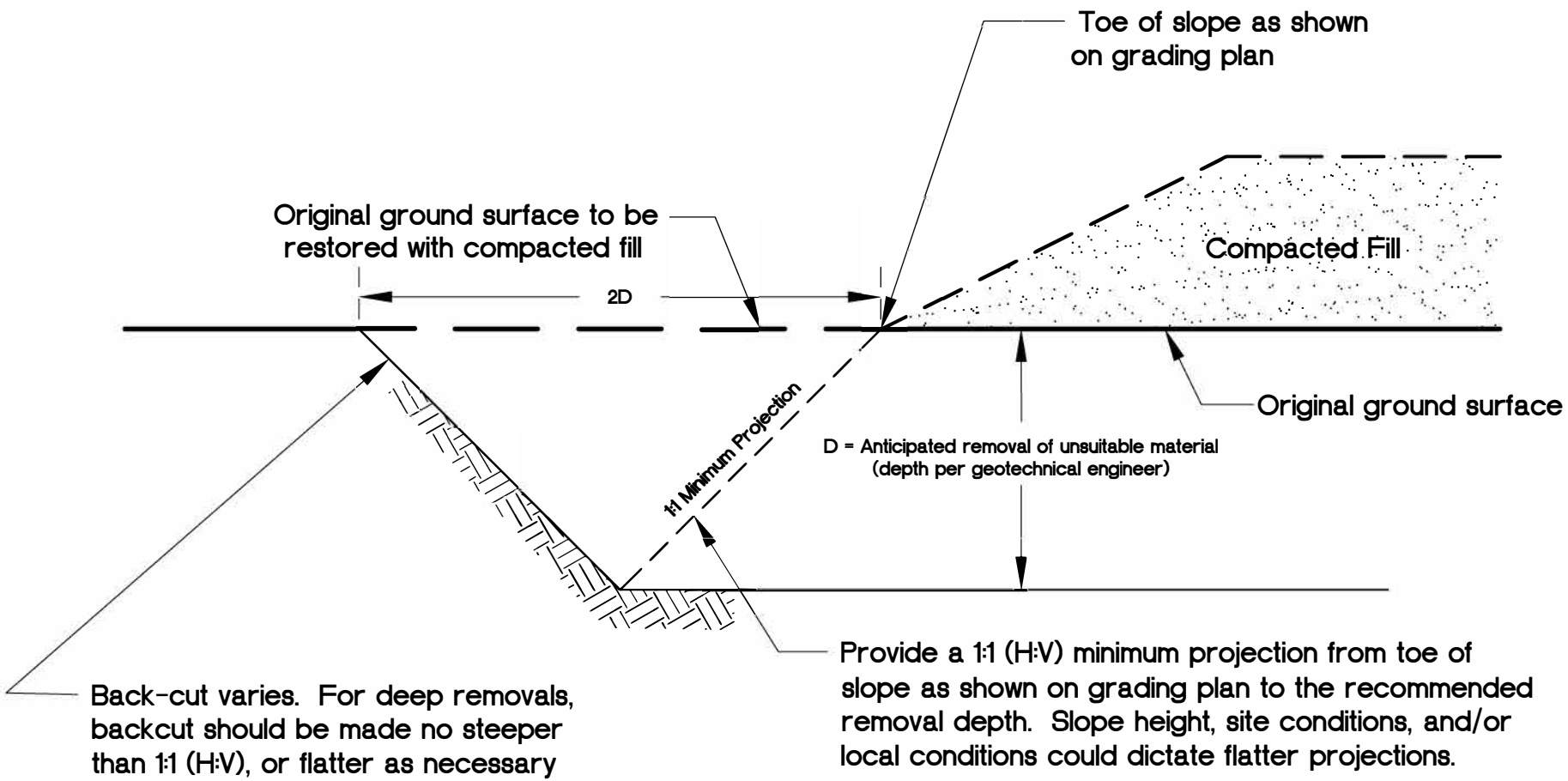
A-2



B-2

Gravel Material: 9 cubic feet per lineal foot.
Perforated Pipe: See Alternate 1
Gravel: Clean ¾-inch rock or approved substitute.
Filter Fabric: Mirafi 140 or approved substitute.

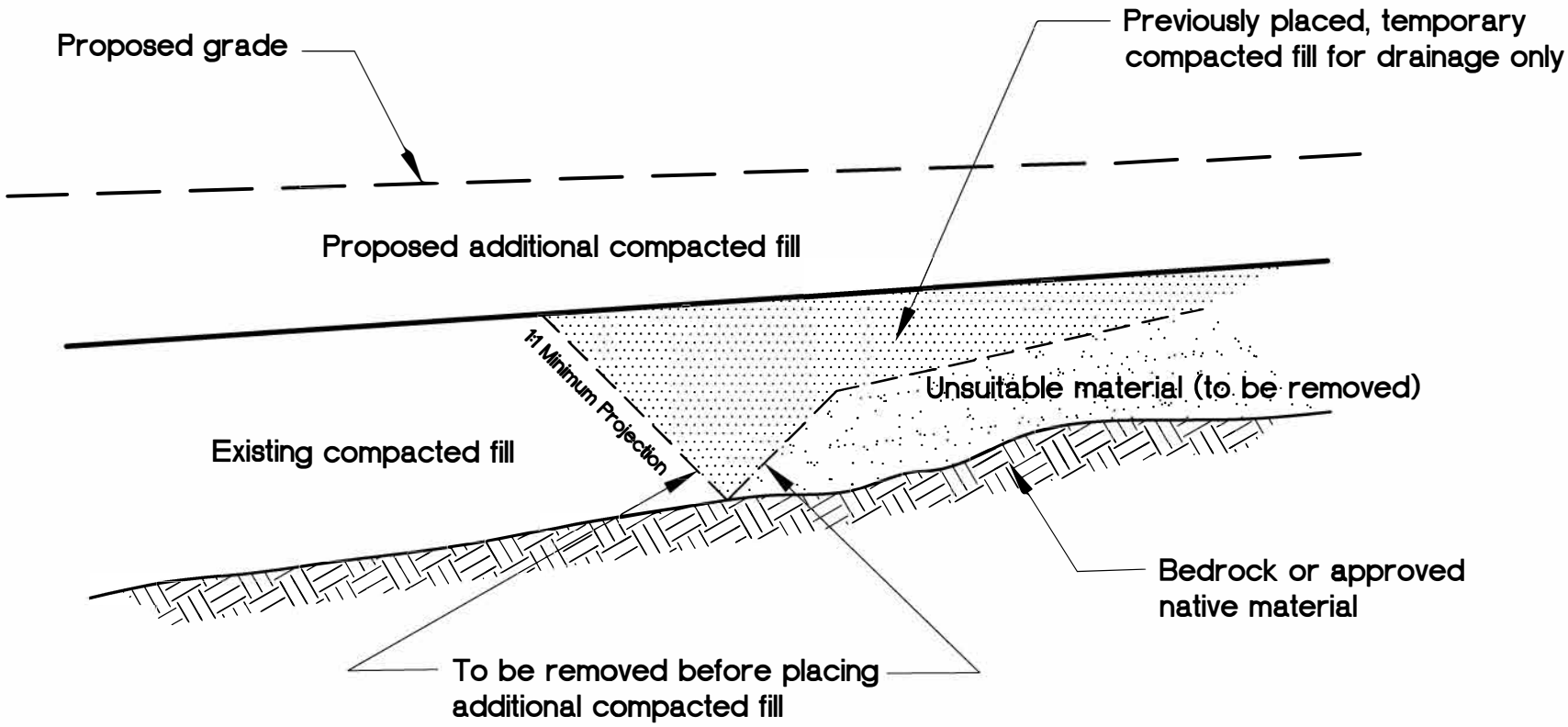
ALTERNATE 2: PERFORATED PIPE, GRAVEL, AND FILTER FABRIC



GSI GeoSoils, Inc.

FILL SLOPE TOEING OUT ON FLAT ALLUVIATED CANYON DETAIL

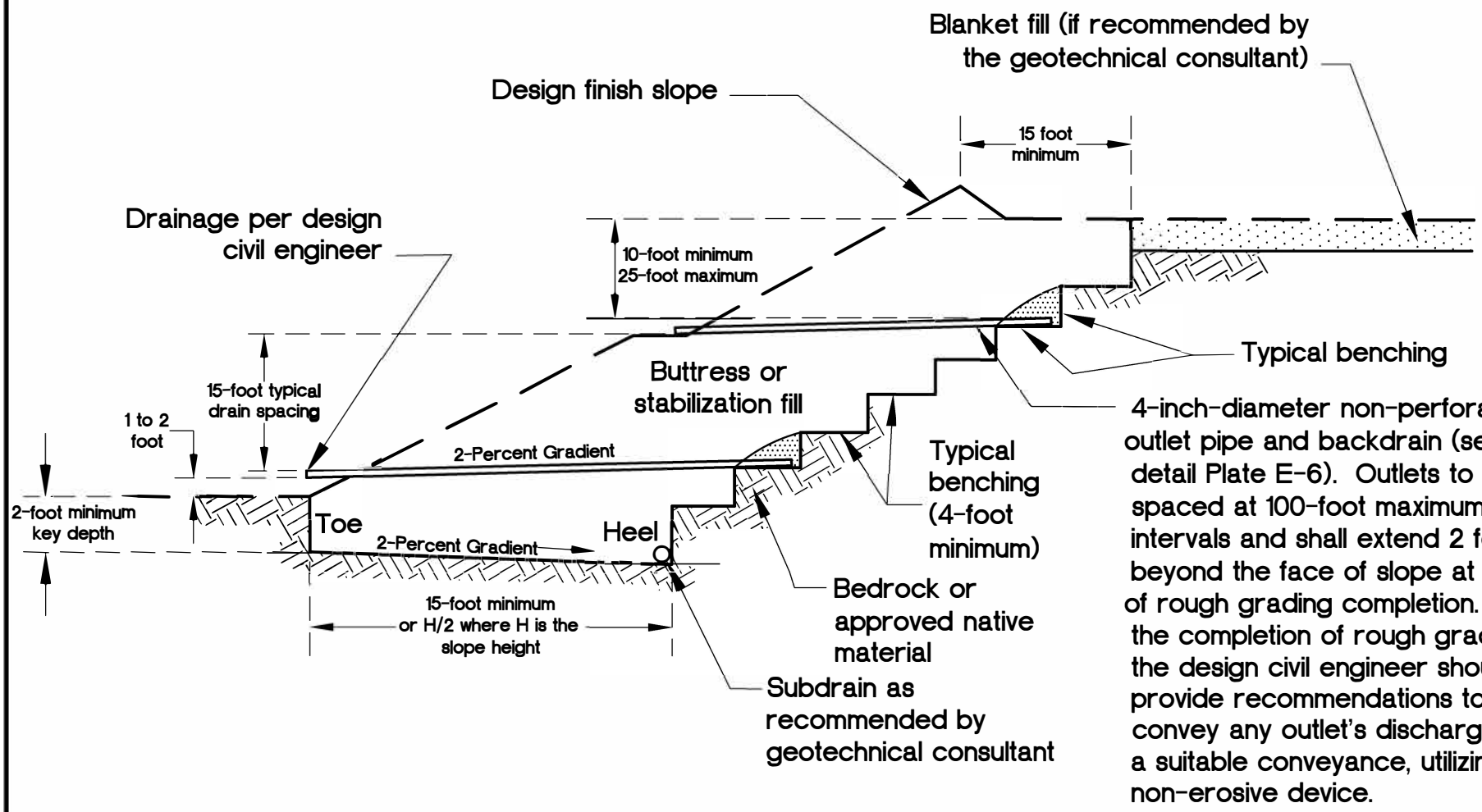
Plate F-3



GeoSoils, Inc.

REMOVAL ADJACENT TO EXISTING FILL ADJOINING CANYON FILL DETAIL

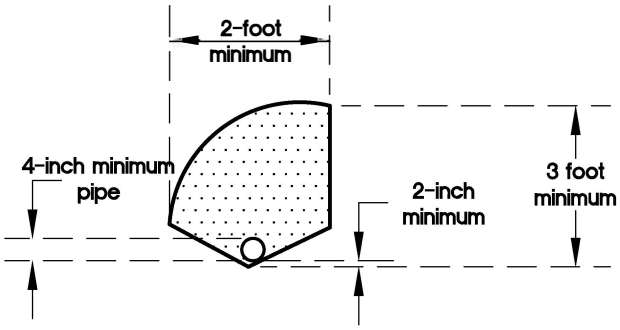
Plate F-4

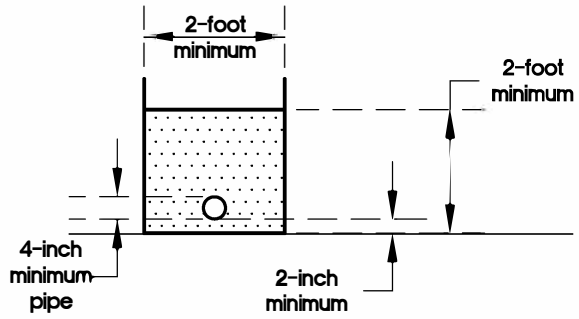


GeoSoils, Inc.

TYPICAL STABILIZATION / BUTTRESS FILL DETAIL

Plate F-5





Filter Material: Minimum of 5 cubic feet per lineal foot of pipe or 4 cubic feet per lineal feet of pipe when placed in square cut trench.

Alternative in Lieu of Filter Material: Gravel may be encased in approved filter fabric. Filter fabric shall be Mirafi 140 or equivalent. Filter fabric shall be lapped a minimum of 12 inches in all joints.

Minimum 4-Inch-Diameter Pipe: ABS-ASTM D-2751, SDR 35; or ASTM D-1527 Schedule 40, PVC-ASTM D-3034, SDR 35; or ASTM D-1785 Schedule 40 with a crushing strength of 1,000 pounds minimum, and a minimum of 8 uniformly-spaced perforations per foot of pipe. Must be installed with perforations down at bottom of pipe. Provide cap at upstream end of pipe. Slope at 2 percent to outlet pipe. Outlet pipe to be connected to subdrain pipe with tee or elbow.

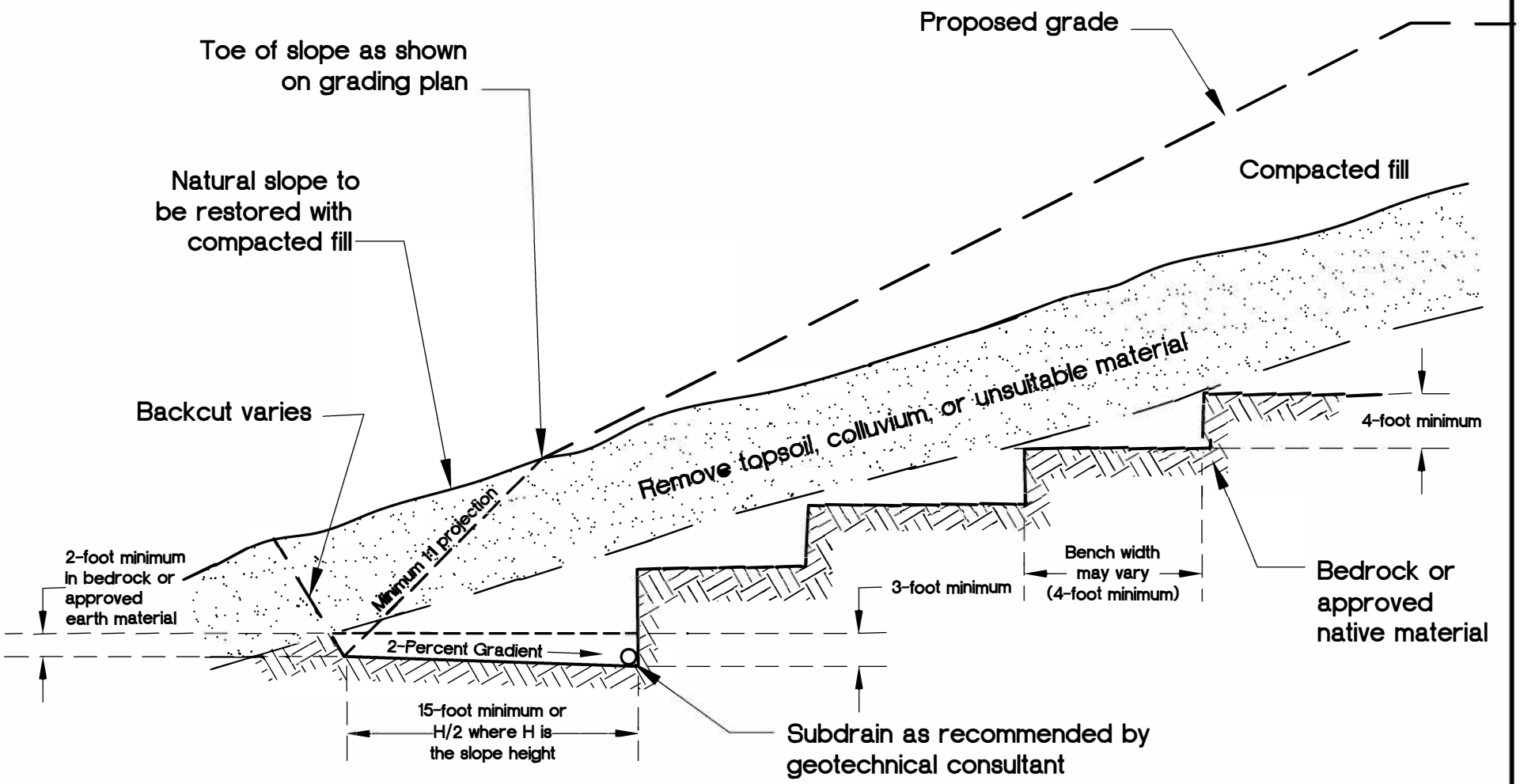
Notes:
1. Trench for outlet pipes to be backfilled and compacted with onsite soil.
2. Backdrains and lateral drains shall be located at elevation of every bench drain. First drain located at elevation just above lower lot grade. Additional drains may be required at the discretion of the geotechnical consultant.

Filter Material shall be of the following specification or an approved equivalent.

Sieve Size	Percent Passing
1 inch	100
¾ inch	90-100
⅜ inch	40-100
No. 4	25-40
No. 8	18-33
No. 30	5-15
No. 50	0-7
No. 200	0-3

Gravel shall be of the following specification or an approved equivalent.

Sieve Size	Percent Passing
1½ inch	100
No. 4	50
No. 200	8



NOTES:

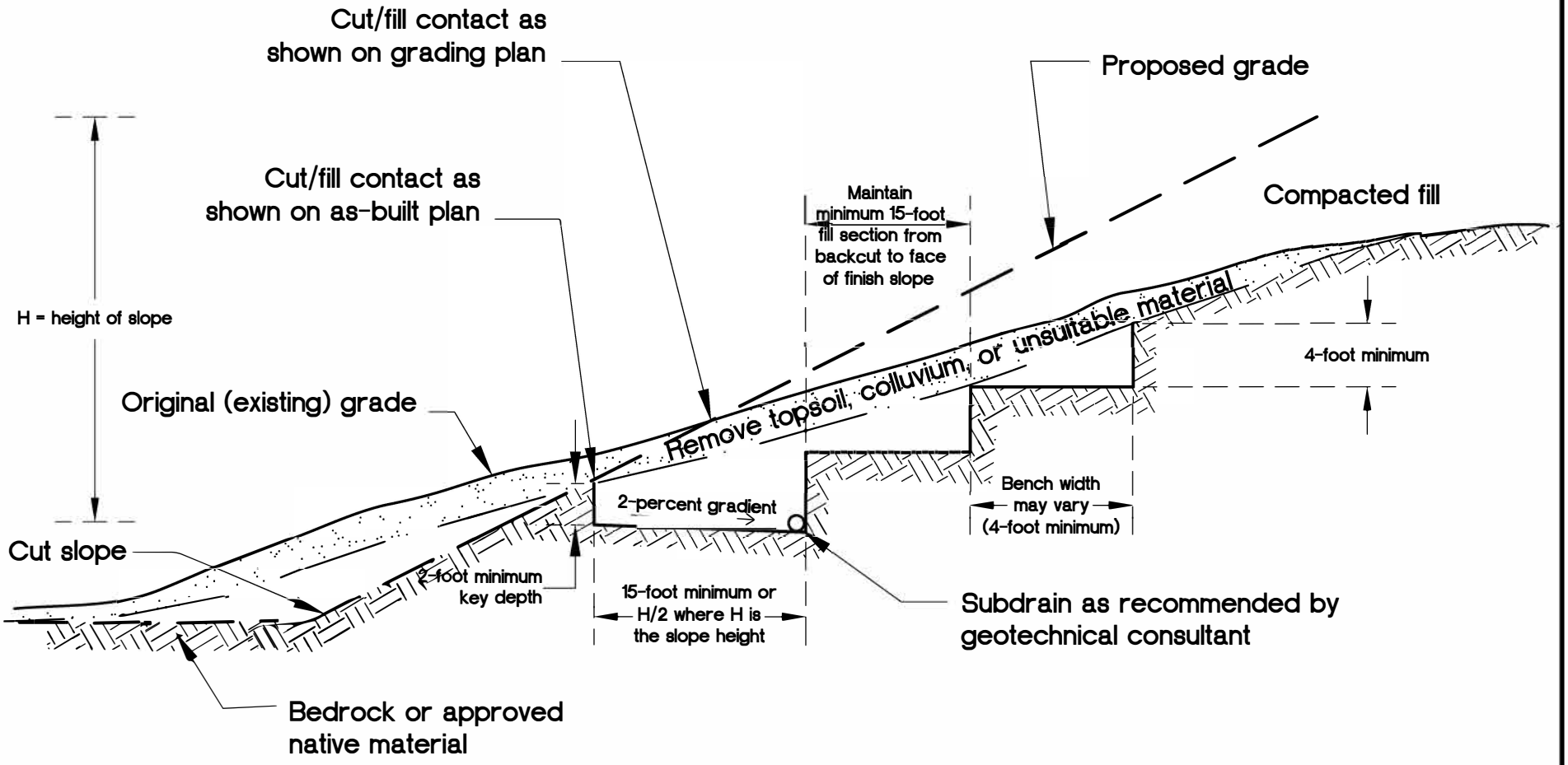
1. Where the natural slope approaches or exceeds the design slope ratio, special recommendations would be provided by the geotechnical consultant.

2. The need for and disposition of drains should be evaluated by the geotechnical consultant, based upon exposed conditions.

GeoSoils, Inc.

FILL OVER NATURAL (SIDEHILL FILL) DETAIL

Plate F-7

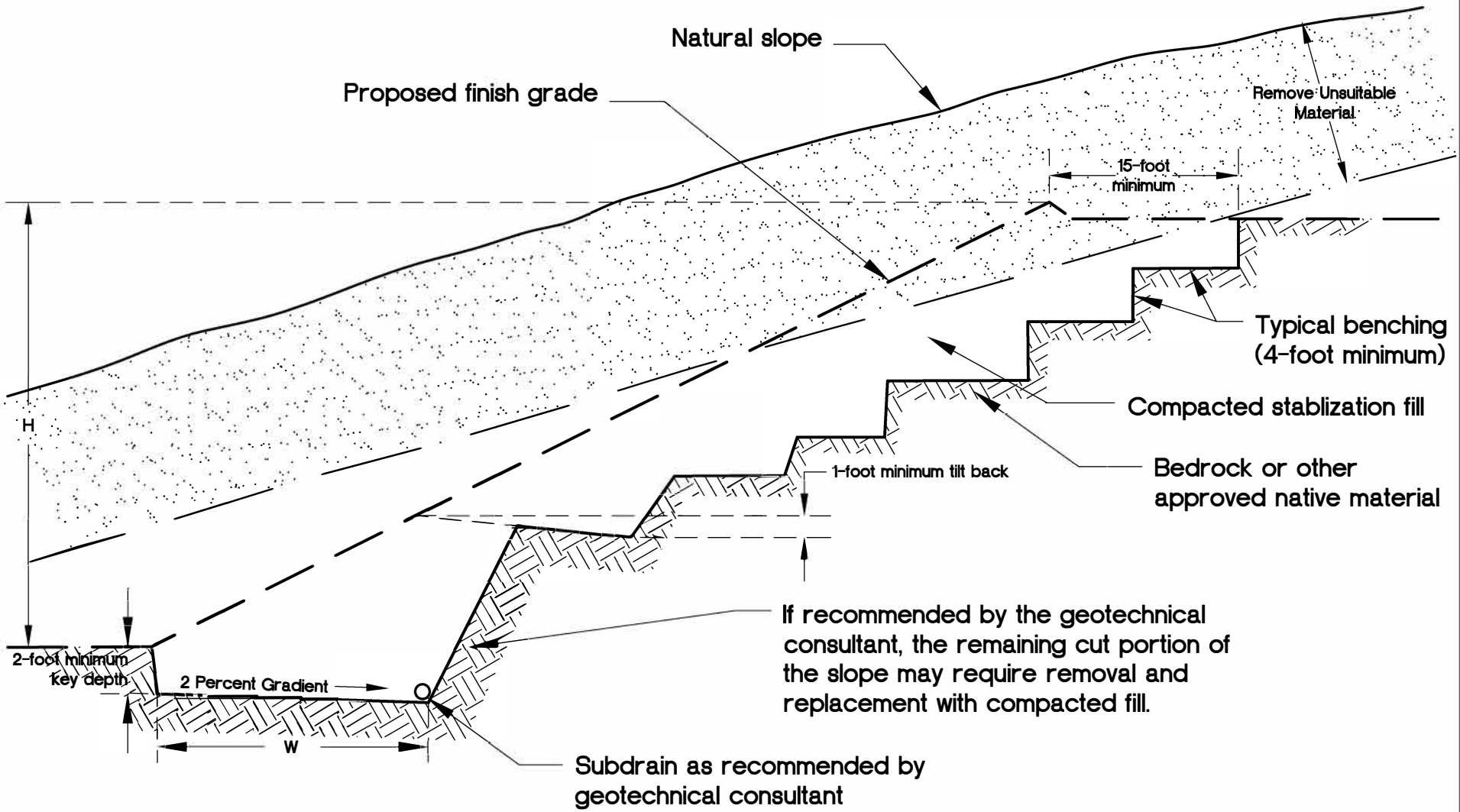


NOTE: The cut portion of the slope should be excavated and evaluated by the geotechnical consultant prior to construction of the fill portion.

GSI GeoSoils, Inc.

FILL OVER CUT DETAIL

Plate F-8

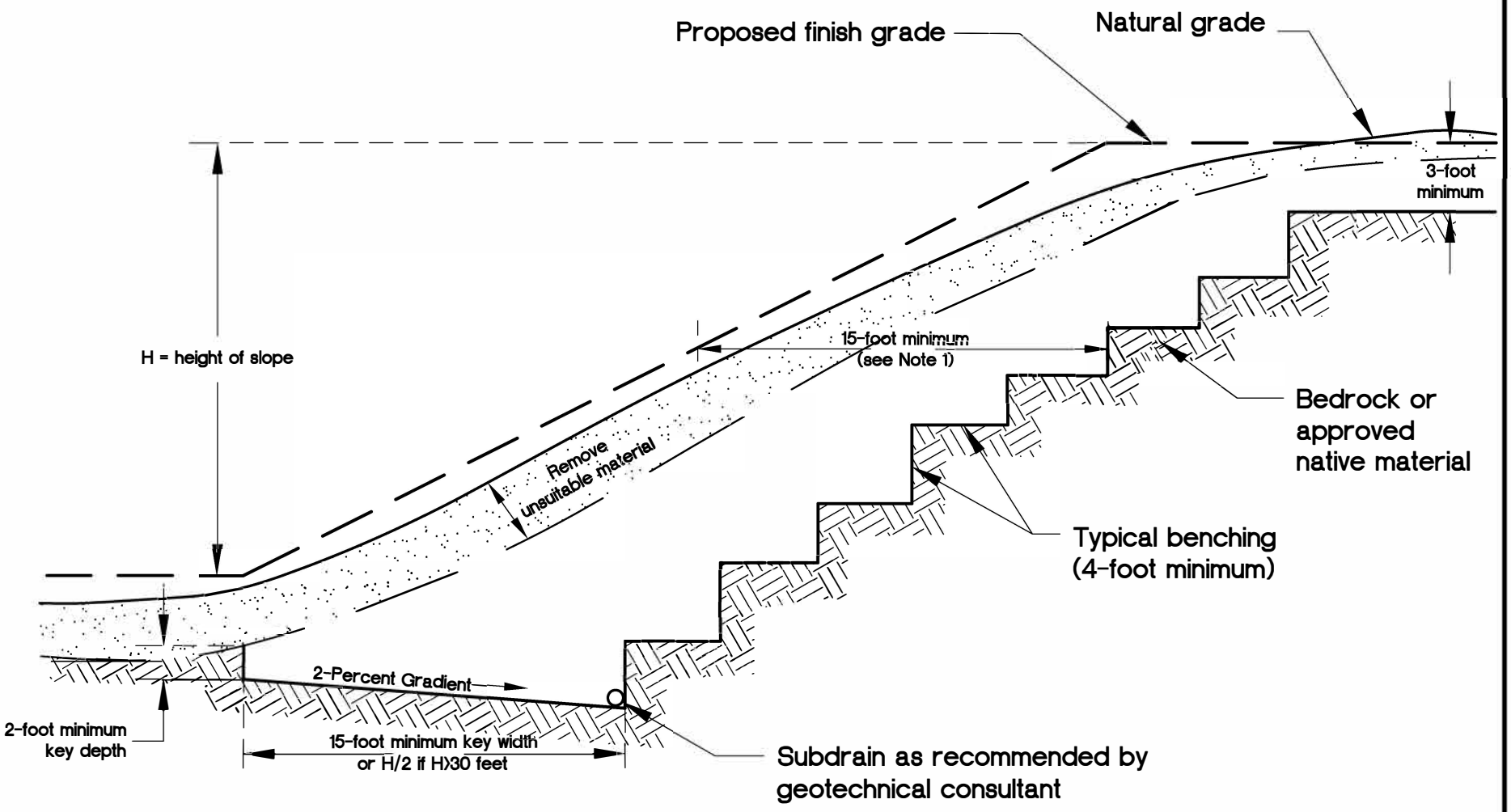


NOTES:

1. Subdrains may be required as specified by the geotechnical consultant.

2 W shall be equipment width (15 feet) for slope heights less than 25 feet. For slopes greater than 25 feet, W shall be evaluated by the geotechnical consultant. At no time, shall W be less than H/2, where H is the height of the slope.

GeoSoils, Inc.	STABLIZATION FILL FOR UNSTABLE MATERIAL EXPOSED IN CUT SLOPE DETAIL	Plate F-9



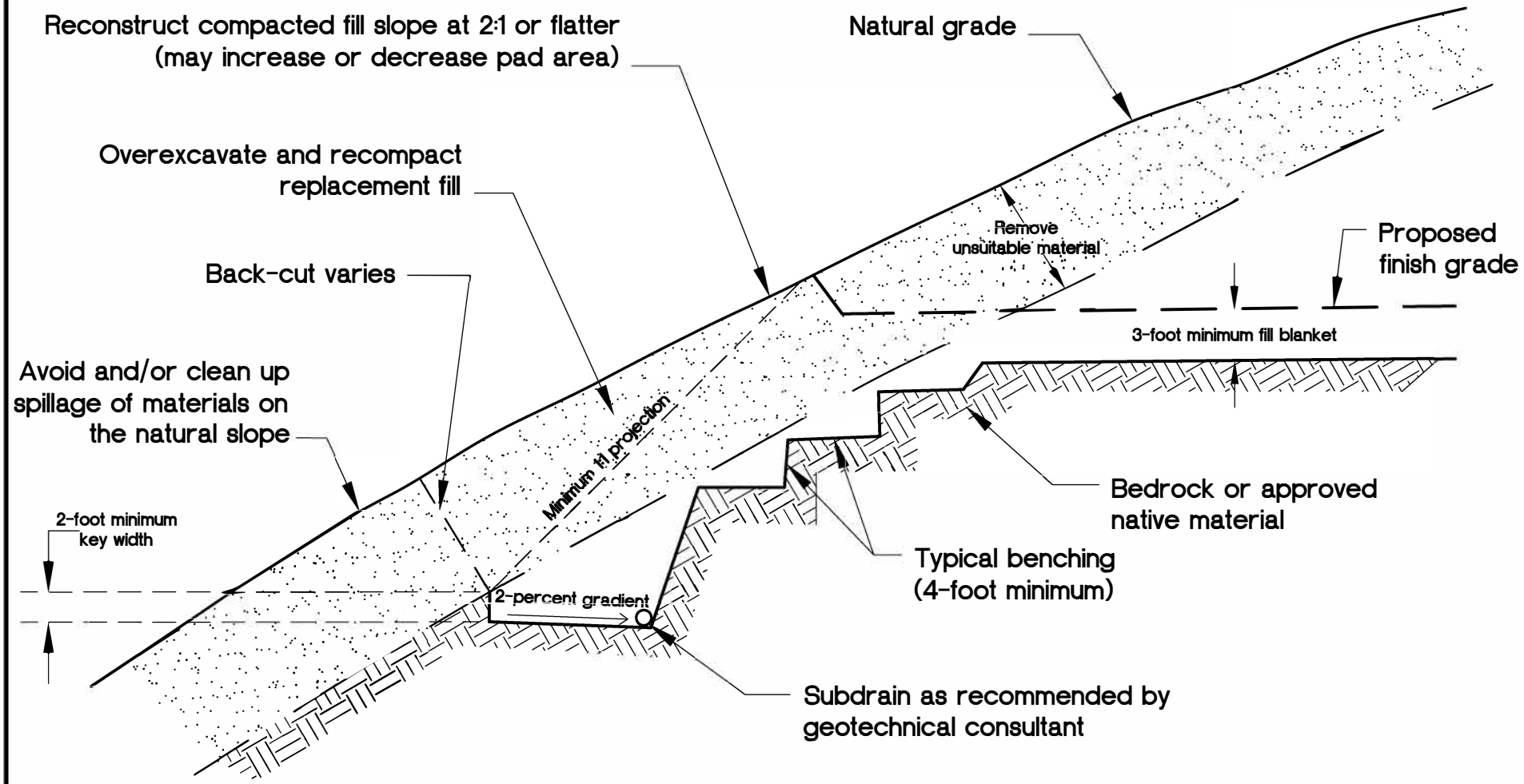
NOTES:

1. 15-foot minimum to be maintained from proposed finish slope face to backcut.
2. The need and disposition of drains will be evaluated by the geotechnical consultant based on field conditions.
3. Pad overexcavation and recompaction should be performed if evaluated to be necessary by the geotechnical consultant.

GSI GeoSoils, Inc.

SKIN FILL OF NATURAL GROUND DETAIL

Plate F-10



NOTES:

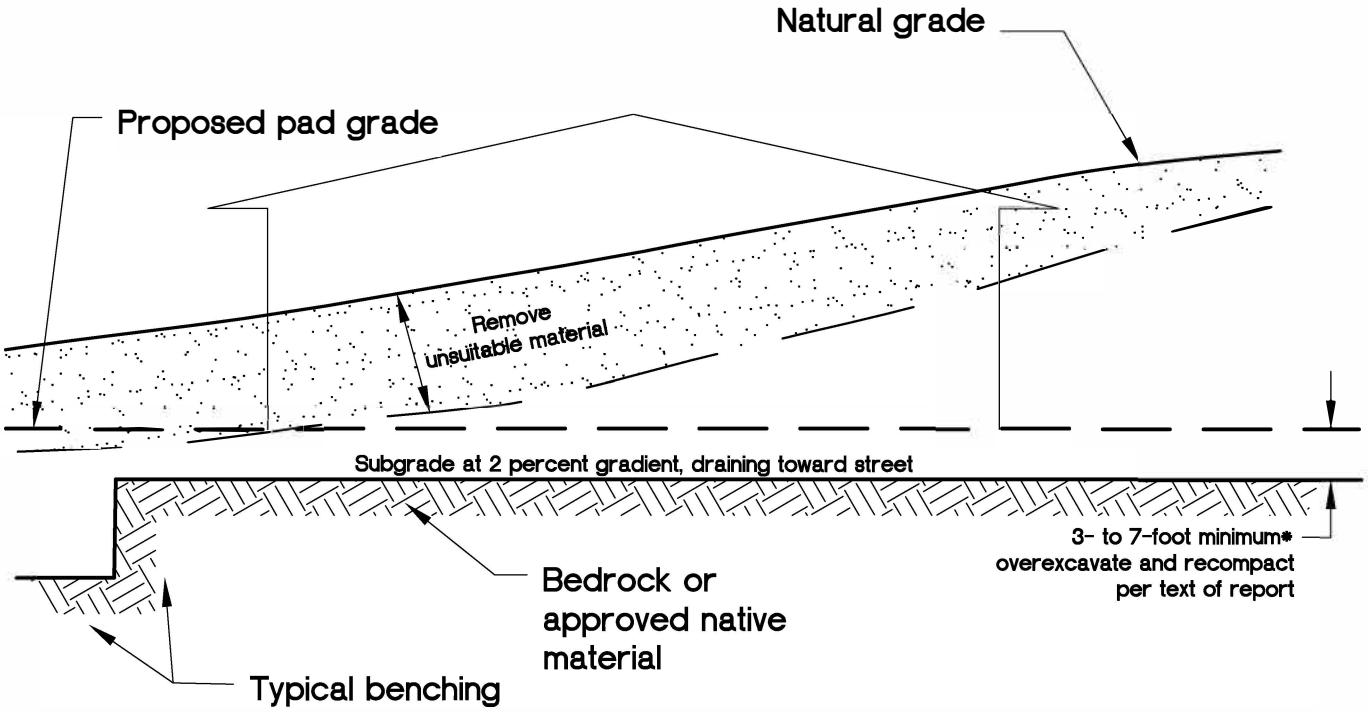
1. Subdrain and key width requirements will be evaluated based on exposed subsurface conditions and thickness of overburden.

2. Pad overexcavation and recompaction should be performed if evaluated necessary by the geotechnical consultant.

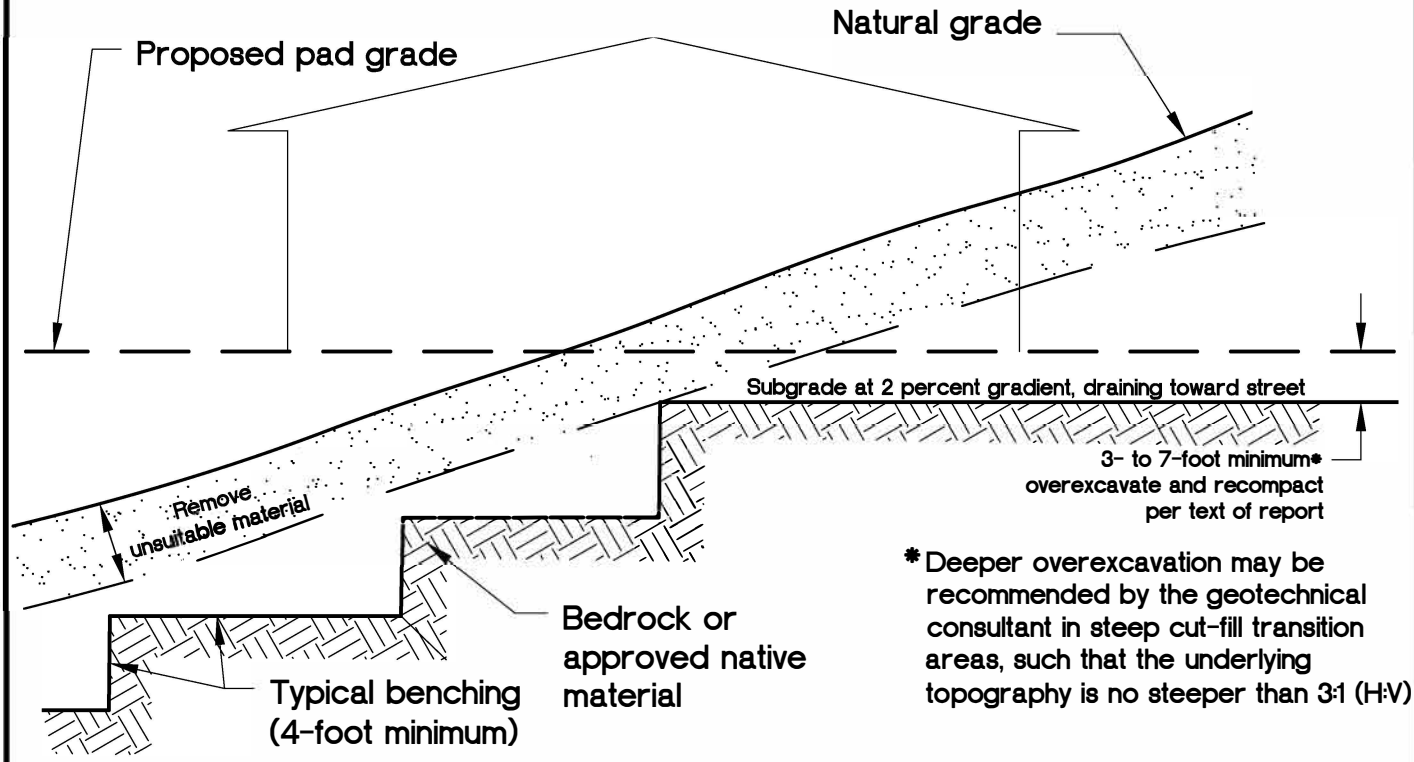
GSI GeoSoils, Inc.

DAYLIGHT CUT LOT DETAIL

Plate F-11



CUT LOT OR MATERIAL-TYPE TRANSITION

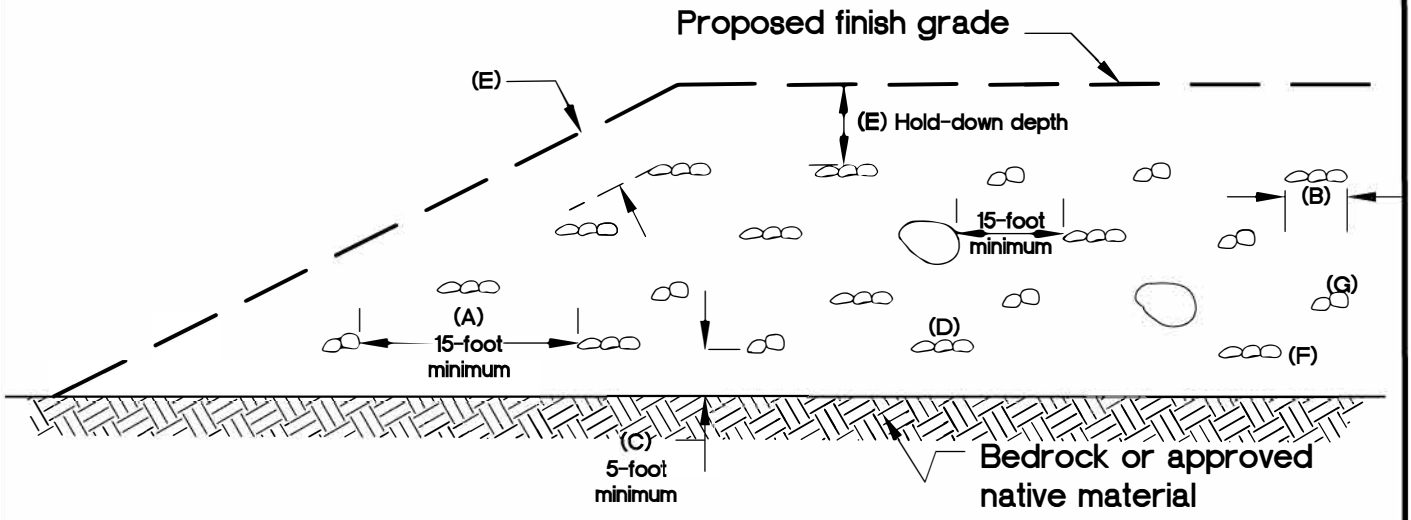


*Deeper overexcavation may be recommended by the geotechnical consultant in steep cut-fill transition areas, such that the underlying topography is no steeper than 3:1 (H:V)

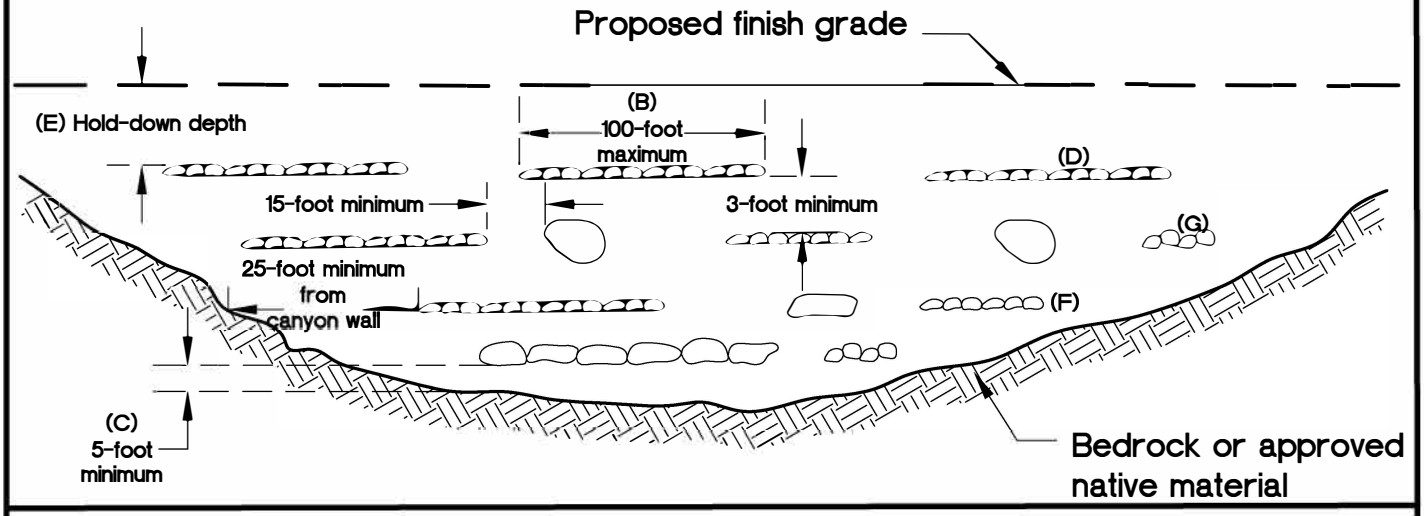
CUT-FILL LOT (DAYLIGHT TRANSITION)

GeoSoils, Inc.	TRANSITION LOT DETAILS	Plate F-12

VIEW NORMAL TO SLOPE FACE



VIEW PARALLEL TO SLOPE FACE



NOTES:

A. One equipment width or a minimum of 15 feet between rows (or windrows).
B. Height and width may vary depending on rock size and type of equipment. Length of windrow shall be no greater than 100 feet.
C. If approved by the geotechnical consultant, windrows may be placed direclty on competent material or bedrock, provided adequate space is available for compaction.
D. Orientation of windrows may vary but should be as recommended by the geotechnical engineer and/or engineering geologist. Staggering of windrows is not necessary unless recommended.
E. Clear area for utility trenches, foundations, and swimming pools; Hold-down depth as specified in text of report, subject to governing agency approval.
F. All fill over and around rock windrow shall be compacted to at least 90 percent relative compaction or as recommended.
G. After fill between windrows is placed and compacted, with the lift of fill covering windrow, windrow should be proof rolled with a D-9 dozer or equivalent.

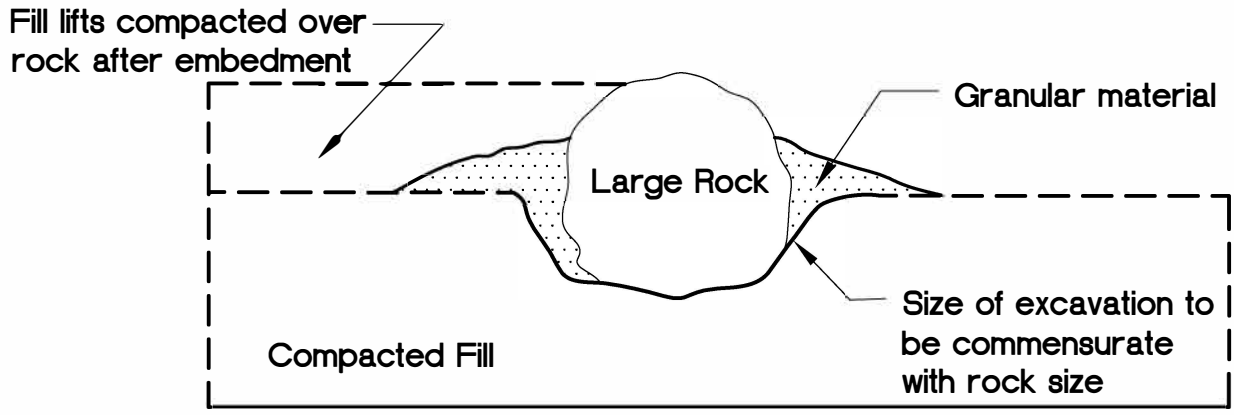
VIEWS ARE DIAGRAMMATIC ONLY AND MAY BE SUPERSEDED BY REPORT RECOMMENDATIONS OR CODE
ROCK SHOULD NOT TOUCH AND VOIDS SHOULD BE COMPLETELY FILLED

GeoSoils, Inc.

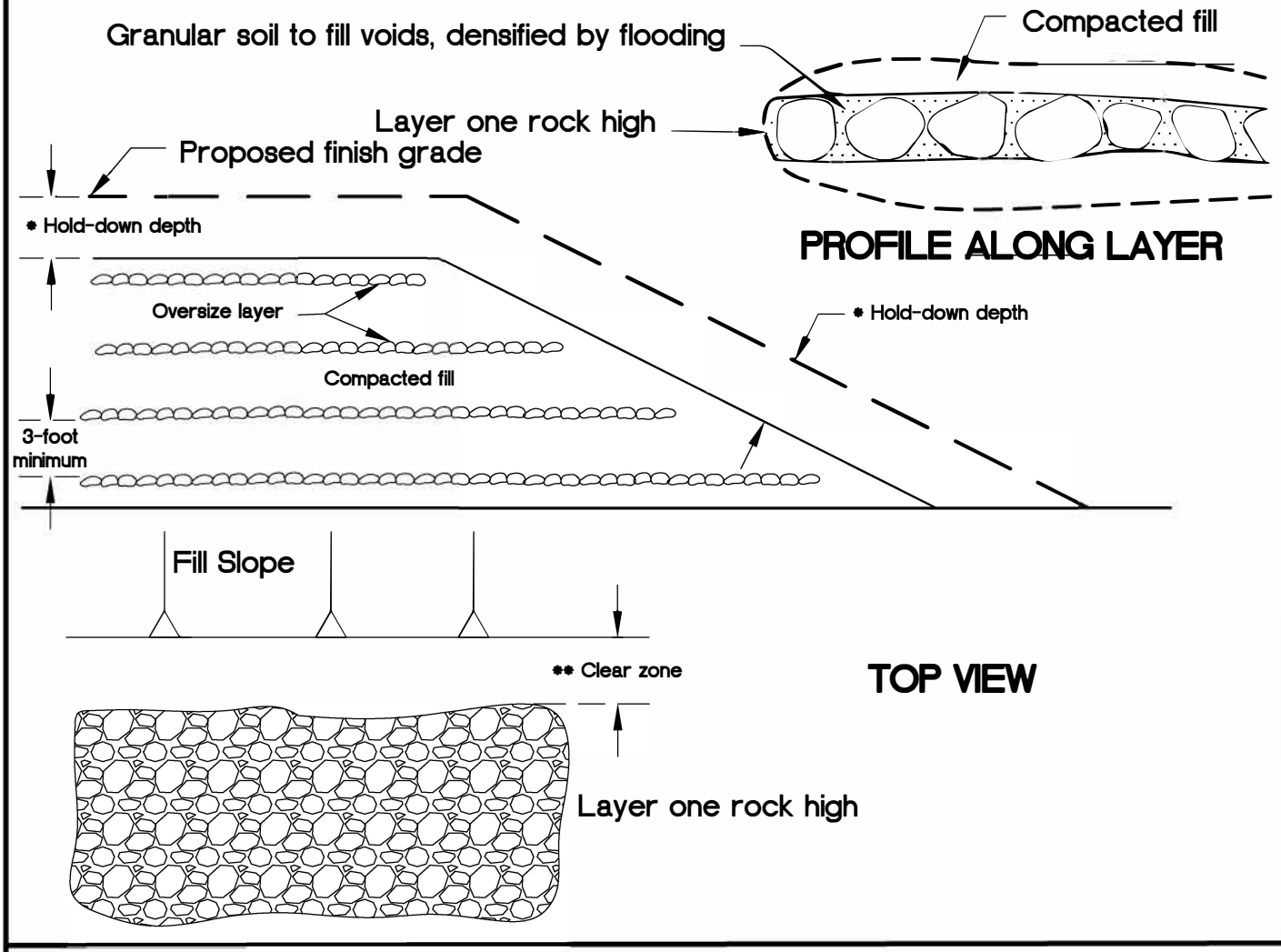
OVERSIZE ROCK DISPOSAL DETAIL

Plate F-13

ROCK DISPOSAL PITS



ROCK DISPOSAL LAYERS



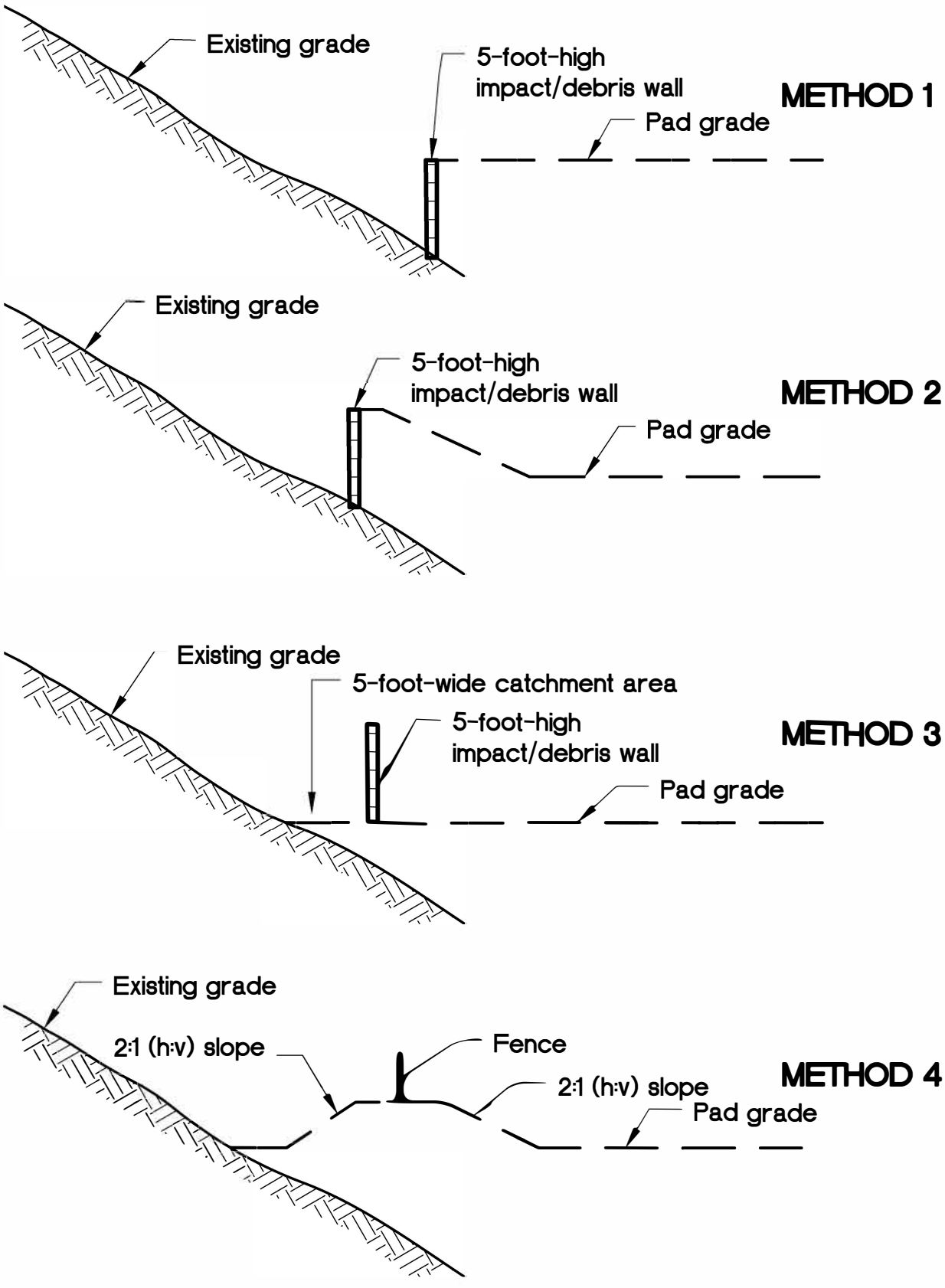
* Hold-down depth or below lowest utility as specified in text of report, subject to governing agency approval.

** Clear zone for utility trenches, foundations, and swimming pools, as specified in text of report.

VIEWS ARE DIAGRAMMATIC ONLY AND MAY BE SUPERSEDED BY REPORT RECOMMENDATIONS OR CODE

ROCK SHOULD NOT TOUCH AND VOIDS SHOULD BE COMPLETELY FILLED IN

GeoSoils,Inc.	ROCK DISPOSAL DETAIL	Plate F-14

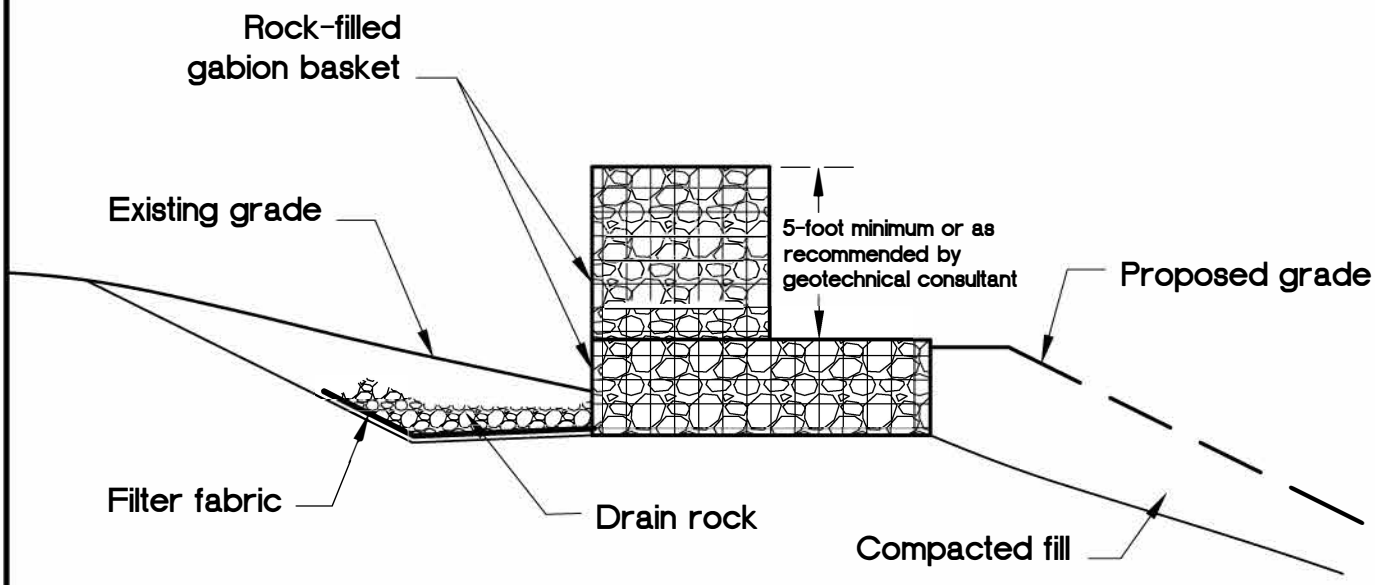


NOT TO SCALE

GSI GeoSoils,Inc.

DEBRIS DEVICE CONTROL METHODS DETAIL

Plate F-15



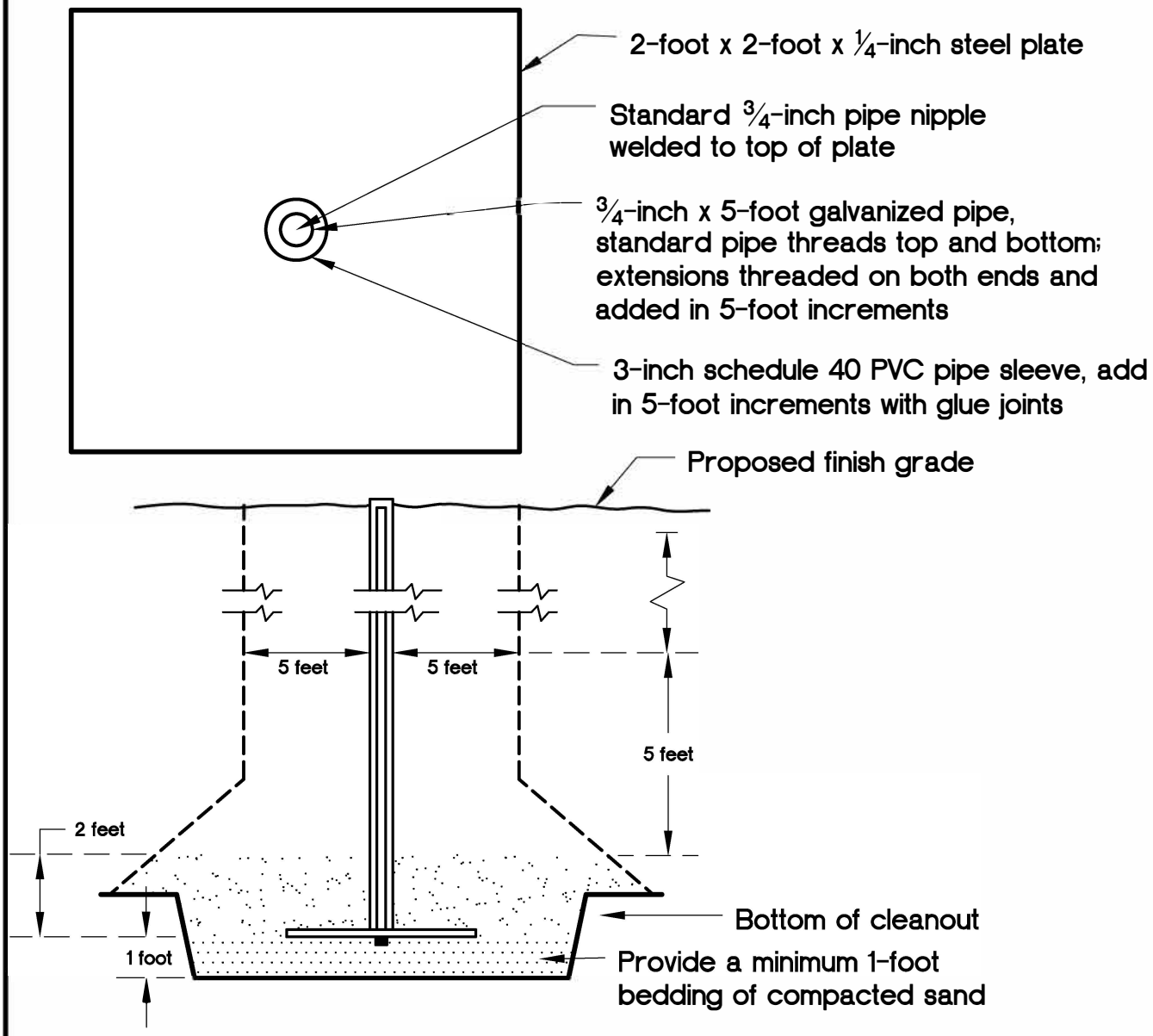
Gabion impact or diversion wall should be constructed at the base of the ascending slope subject to rock fall. Walls need to be constructed with high segments that sustain impact and mitigate potential for overtopping, and low segment that provides channelization of sediments and debris to desired depositional area for subsequent clean-out. Additional subdrain may be recommended by geotechnical consultant.

From GSA, 1987

GeoSoils,Inc.

ROCK FALL MITIGATION DETAIL

Plate F-16



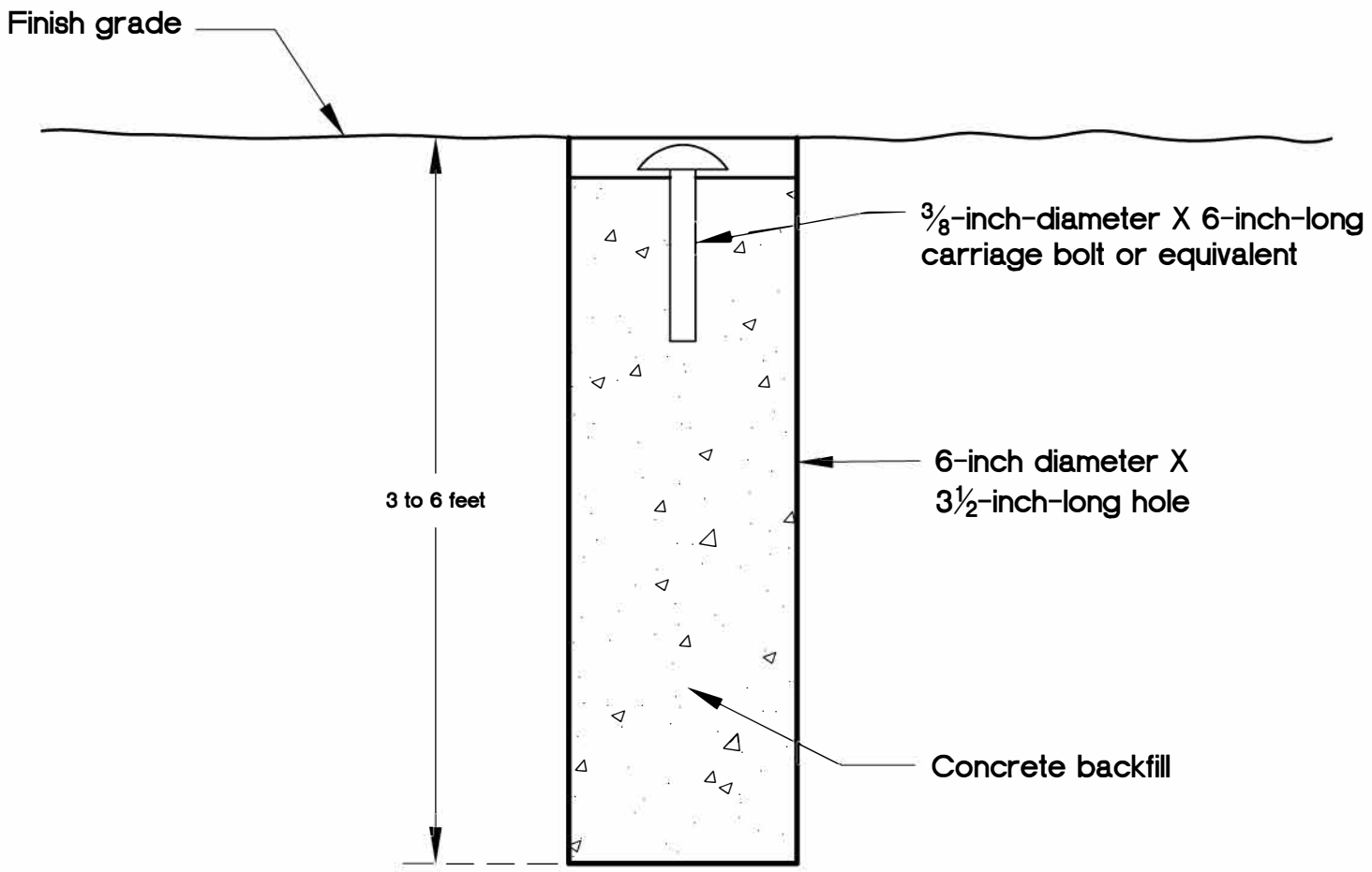
NOTES:

1. Locations of settlement plates should be clearly marked and readily visible (red flagged) to equipment operators.
2. Contractor should maintain clearance of a 5-foot radius of plate base and withiin 5 feet (vertical) for heavy equipment. Fill within clearance area should be hand compacted to project specifications or compacted by alternative approved method by the geotechnical consultant (in writing, prior to construction).
3. After 5 feet (vertical) of fill is in place, contractor should maintain a 5-foot radius equipment clearance from riser.
4. Place and mechanically hand compact initial 2 feet of fill prior to establishing the initial reading.
5. In the event of damage to the settlement plate or extension resulting from equipment operating within the specified clearance area, contractor should immediately notify the geotechnical consultant and should be responsible for restoring the settlement plates to working order.
6. An alternate design and method of installation may be provided at the discretion of the geotechnical consultant.

GeoSoils,Inc.

SETTLEMENT PLATE AND RISER DETAIL

Plate F-17

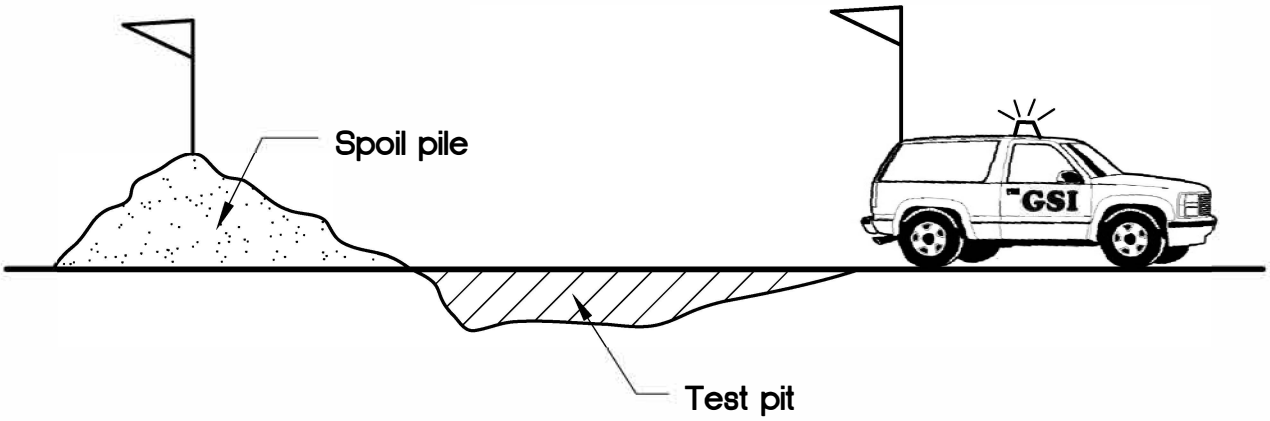


GSI GeoSoils, Inc.

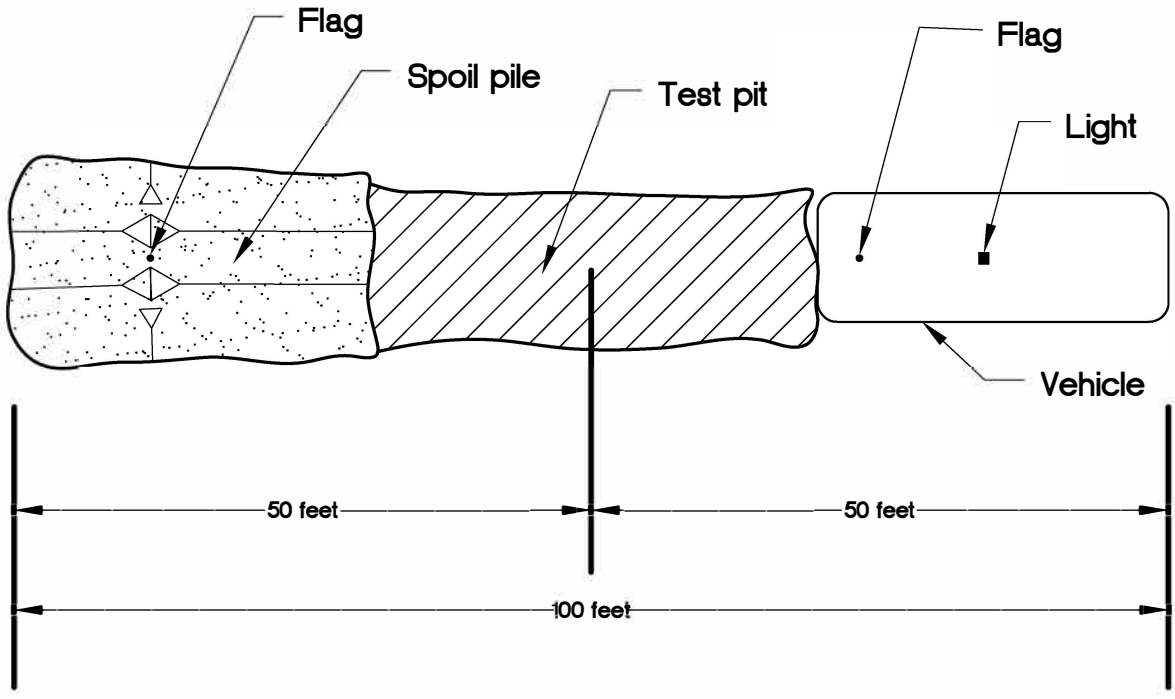
TYPICAL SURFACE SETTLEMENT MONUMENT

Plate F–18

SIDE VIEW



TOP VIEW



GeoSoils, Inc.

TEST PIT SAFETY DIAGRAM

Plate F-19

SUPPLEMENTAL INFILTRATION FEASIBILITY TESTING
PROPOSED BRADLEY GARDENS SKILLED NURSING FACILITY
BUILDING ADDITION, 980 W. 7TH STREET
CITY OF SAN JACINTO, RIVERSIDE COUNTY
CALIFORNIA 92582 (APN 435-330-003)

FOR

CORCORAN CONSTRUCTION, INC.
26590 MADISON AVENUE
MURRIETA, CALIFORNIA 92562

W.O. 9071-A1-IE AUGUST 14, 2026

GeoSoils, Inc.

GeoSoils, Inc.
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August 14, 2026

W.O. 9071-A1-IE

Corcoran Construction, Inc.
26590 Madison Avenue
Murrieta, California 92562

Attention: Ms. Kim Corcoran

Subject: Supplemental Infiltration Feasibility Testing, Proposed Bradley Gardens Skilled Nursing Facility Building Addition, 980 W. 7th Street, City of San Jacinto, Riverside County, California 92582 (APN 435-330-003)

Dear Ms. Corcoran:

In accordance with the City of San Jacinto review comments received, and your request and authorization, GeoSoils, Inc. (GSI) is presenting the results of our supplemental infiltration feasibility testing for the proposed Bradley Gardens skilled nursing facility in the City of San Jacinto, Riverside County, California. The purpose of this study was to further evaluate the onsite soils and geologic conditions and conduct feasibility infiltration testing within the areas of the proposed pervious paver access driveway onsite, for use in water quality Best Management Practice (BMP) design by the water quality engineer of record for the project.

The scope of our services has included a review of the referenced reports and documents (see Appendix A), the advancement of four (4) hand-excavated exploratory borings onsite, which were excavated to a depth of 2 feet below the existing surface (bgs), geologic logging (Appendix B), field infiltration testing (Appendix C), analysis of field test data obtained, and preparation of this summary infiltration feasibility testing report.

SITE DESCRIPTION AND CURRENT SITE CONDITIONS

The overall site consists of an approximately 2.98-acre, rectangular-shaped area of developed land. The site is located on the southeast corner of the intersection of W 7th Street and S. Grand Avenue, in the City of San Jacinto, Riverside County, California. The property is bounded by undeveloped land on the south, east and west, by residential development to the southwest, and commercial development to the north, across W 7th Street. In general, the site is flat-lying to very gently sloping in a southeasterly direction. According to Google Earth Pro (GEP, 2026), site elevations vary between approximately 1,527 and 1,525 feet Mean Sea Level (MSL), for an overall relief of about 2 feet. The site is sparsely vegetated and has localized shrubs and trees within and surrounding the existing facility.

PROPOSED DEVELOPMENT

Based on our review of the overall site plan, dated September 18, 2025, prepared by Gregg Maedo & Associates (GMA, 2025), we understand that continued development of the property would consist of the construction of a 43-bed skilled nursing facility (Building A1), as well as the installation of underground utility and roadway infrastructure. The newly provided storm water quality control plan by Guide Engineering (GE, 2026) indicates the development of a pervious paver access roadway on the east and south side of the project site. It is our understanding the pervious paver access roadway will be used as a relatively shallow water quality Best Management Practice (BMP) feature onsite.

SITE GEOLOGY

Based on our previous onsite preliminary geotechnical investigation (GSI, 2025) and published geologic mapping by Dibblee (2003), the site is underlain by Holocene- to late Pleistocene-age alluvial sand and clay of valley areas (Qa), although no significant clay layers were encountered during this, or our previous subsurface investigation (GSI, 2025). As encountered during our previous subsurface investigation the site soils were mostly sandy (e.g., silty sands) with minor silt layers encountered at depth. The observed alluvial deposits extend to depths beyond 60 feet, and are estimated to be hundreds of feet in thickness based on the data reviewed (GSI, 2025).

The near surface alluvial deposits encountered during this study generally consist of light brown silty sands that were generally loose to medium dense with depth, with the exception of hand auger P-4, near the dumpster area, which was medium dense to very dense with depth. The near surface soils were also found to be dry to damp, very fine to coarse grained sands, and somewhat to locally friable near the surface.

GROUNDWATER

Regional or perched groundwater was not encountered during this study or within the subsurface excavations (Borings and Cone Penetration Testing [CPT]), up to approximately 60 feet in depth, advanced during our previous field work (GSI, 2025). Likewise, seeps, springs, or other indications of a high groundwater level were not noted on the subject property during the time of this or our previous field investigation (GSI, 2025).

Based on our review of the California Department of Water Resources (CDWR) Water Data Library (2026), nearby well measurements reviewed appear to be regional groundwater measurements at depths of approximately 170 and 155 feet (State Well No. 04S01W27P005S [March 7, 1991], and Site Code No. 337748N1169760W001 [December 6, 2011], respectively) at sites with similar ground surface elevations. However,

our review of historic groundwater measurements in the San Jacinto and Temecula basins (U.S. Geological Survey, 1919, Water Supply Paper 429) indicates groundwater near the center of the basin may have been as shallow as 40 feet bgs. However, in California, the legislature passed the Sustainable Groundwater Management Act (SGMA), creating a statewide framework for groundwater regulation. The Eastern Municipal Water District (EMWD), and several other water purveyors, have been actively managing the San Jacinto basin as part of a voluntary Assembly Bill 3030 effort passed in 1992. As such, it is unlikely the groundwater will reach historic levels as the basin is now adjudicated. These observations reflect site conditions at the time of our field work and do not prevent future changes in local groundwater conditions from excessive irrigation, precipitation, or that were not evident at the time of this, or our original preliminary investigation (GSI, 2025).

INFILTRATION FEASIBILITY TESTING

In accordance with Riverside County Flood Control - Low Impact Development (LID) BMP Design Handbook (RCFC, 2011) guidelines for infiltration testing, four (4) tests were conducted within the proposed location of the pervious paver access driveway, as requested by the design engineer. The approximate locations of the infiltration tests for this study are provided on Figure 1 (Percolation-Infiltration Test Location Map). The infiltration testing was performed to further evaluate site conditions with respect to the proposed pervious paver BMP system that would retain and filter onsite storm water. The infiltration testing was performed in conformance with the RCFC (2011) design handbook for such testing. The infiltration testing was performed by a senior field technician under the direct supervision of a principal geologist from GSI. Logs of the borings advanced for this study are presented in Appendix B, and the Field Infiltration Data Sheets are presented in Appendix C. Procedures for testing are outlined briefly below:

Percolation Test Procedures

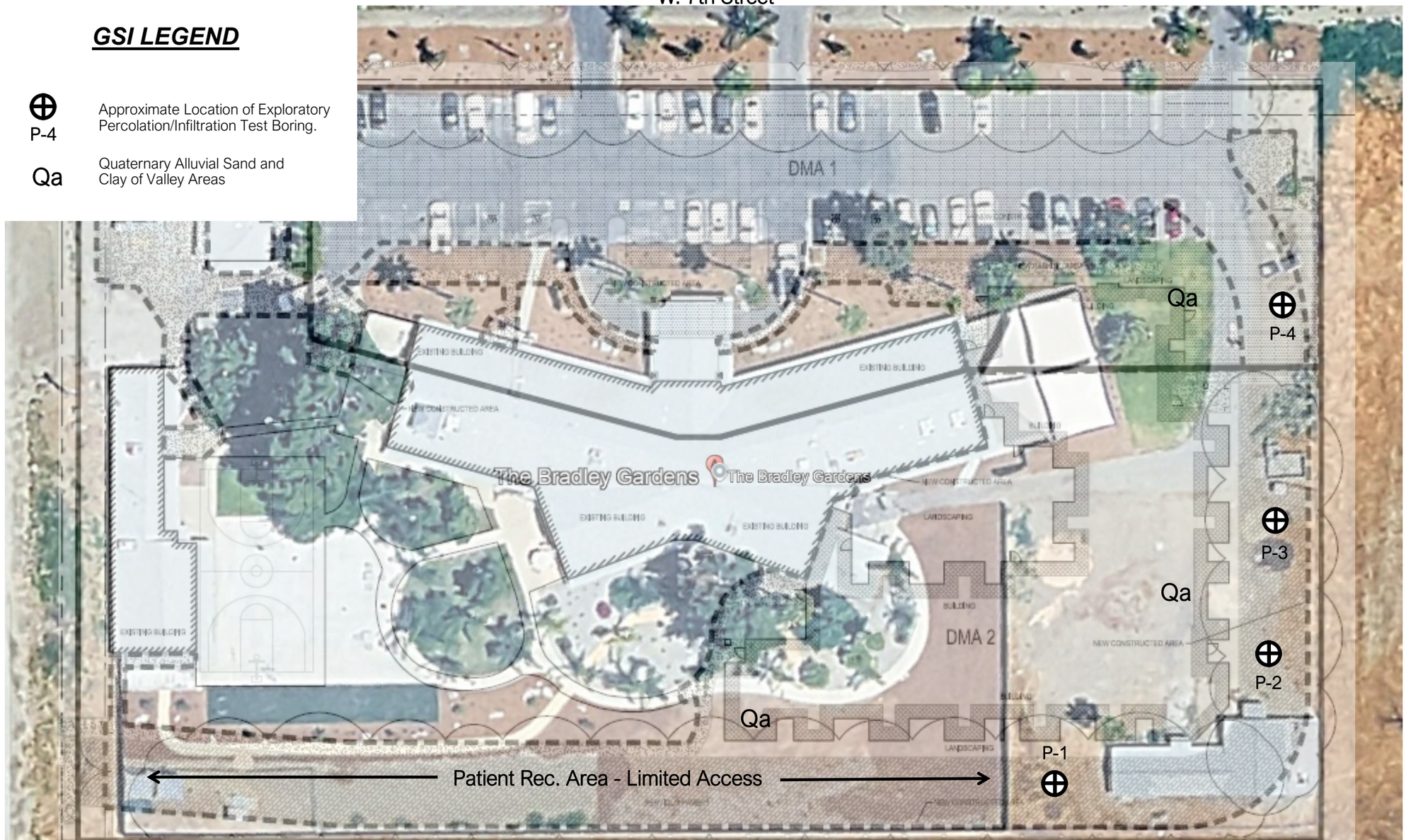
Test Borings:

1. Hand excavated to a depth of approximately 2 feet
2. Diameter - 8 inches.
3. After the removal of loose materials, 2 inches of gravel was placed on the bottom of each test boring.
4. A perforated pipe was then installed within each test boring to facilitate accurate field measurements and prevent caving during the pre-soak period and infiltration testing.

GSI LEGEND

⊕ P-4 — Approximate Location of Exploratory Percolation/Infiltration Test Boring.

Qa — Quaternary Alluvial Sand and Clay of Valley Areas



ALL LOCATIONS ARE APPROXIMATE

This document or e-file is not part of the Construction Documents and should not be relied upon as being an accurate depiction of design.

Figure adapted from the Storm Water Quality Control Plan by Guide Engineering (GE, 2026) and Google Earth Pro Aerial Imagery (GEP, 2026).

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LAND ENGINEERING AND PLANNING
5930 GRANITE LAKE DR, #150
GRANITE BAY, CA 95746
PHONE: 916-787-0248
projects@guide-engineering

GSI GeoSoils, Inc.

Figure 1

PERCOLATION/INFILTRATION TEST LOCATION MAP

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Pre-Soaking: After the installation of the perforated pipes, the boring was filled with a minimum of 5-gallons of clear water. The test period for the percolation testing commenced immediately, as all the water seeped away while the tester was present and sandy soils were known to exist onsite.

Sandy Soil Test: Following the pre-soak period, sandy soil criteria testing was conducted. Two (2) consecutive measurements were made at each test location at intervals of approximately 25 minutes. Greater than 6 inches of water seeped away during each of the two (2) test measurements at each location, therefore the testing began using the criteria for "sandy soils" testing at all locations.

Testing: After required pre-soak period and sandy soil test periods, infiltration testing started at all locations. A column of clear water was re-established within each of the test locations. The drop in water level was measured from a fixed reference point, refilling after each test measurement. Within the test locations, a series of test measurements were taken for an additional hour, at time intervals of 10 minutes.

Precision: All test measurements were read to the nearest ¼-inch.

Test Results: Calculations from our field testing indicate percolation rates between approximately 0.97 and 0.42 minutes/inch. Per the RCFC (2011) guidelines, the percolation rates obtained were then converted to infiltration rates using the "Porchet Method," to be used by the design engineer for appropriate sizing of the BMP systems (RCFC, 2011). The converted infiltration rates obtained varied between approximately 5.9 inches/hour and 11.1 inches/hour. Typically, the lowest infiltration rate obtained is applied to the design; therefore, an unfactored (no factor of safety applied) infiltration rate (UIR) of 5.9 inches/hour was obtained. Using an appropriate Factor of Safety (FOS) of 3, per the RCFC (2011) guidelines, a Design Infiltration Rate of 1.97 inches/hour may be used for design. The converted infiltration rates, along with the formulas used are presented in Figure 2 (Percolation Rate to Infiltration Rate Conversion).

USDA Site Soil Group, Soil Units, and Ksat Values

Our review of the United States Department of Agriculture (USDA, 2026) Web Soil Survey (https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm), indicates that two (2) major soil units underlie the site. The Grangeville sandy loam, 0 to 5 percent slopes (GrB) and the Grangeville fine sandy loam, 0 to 5 percent slopes (GvB) are mapped onsite (USDA, 2026). The USDA (2026) indicates that the capacity of the most limiting layer to transmit water

Percolation Rate to Infiltration Rate Conversion

* $$\text{Infiltration Rate } (I_t) = \frac{\Delta H\ \pi r^2\ 60}{t(\pi r^2 + 2\pi r H_{av}} = \frac{\Delta H\ 60\ r}{\Delta t(r+2H_{avg})}$$

Where:
- I_t = tested infiltration rate, inches/hour
- ΔH = change in head over the time interval, inches
- Δt = time interval, minutes
- r = effective radius of test hole
- H_{avg} = average head over the time interval, inches

		Δt	Init Level	Fnl Level	ΔH	H_{avg}	I_t	
Infiltration Test Numbers	P-1	10	24	24	24	24	11.08	
	P-2	10	24	9	15	16 1/2	9.73	High = 12.70
	P-3	10	24	6	18	15	12.71	Low = 5.90
	P-4	10	24	13 3/4	10 1/4	18 7/8	5.89	Average = 9.85
								**UIR = 5.90

* Conversion per the "Porchet Method" (RCFC, 2011)

**UIR = Unfactored Infiltration Rate (Inches/Hour)

Factor of Safety (FOS) = 3.0 = 5.9/3.0 = **1.97** = DIR**

**DIR = Design Infiltration Rate (Inches/Hour)

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Figure 2

(Ksat) within the Grangeville sandy loam, is high (1.98 to 5.95 inches per hour [in/hr]) and falls into hydrologic soil groups (HSGs) "A/D." The USDA (2026) also indicates that capacity of most limiting layer to transmit water (Ksat) within the Grangeville fine sandy loam is moderately high to high (0.57 to 1.98 in/hr) and falls into hydrologic soil groups (HSGs) "B/D." Based on our review, the results of our onsite infiltration feasibility testing appear to correlate well with the USDA (2026) Ksat values for the major soil units mapped onsite.

Infiltration Siting Requirements

Our review of the general infiltration siting requirements and limitations provided by the California Stormwater Quality Association (CASQA, 2003), indicates sites characterized as belonging to Hydrologic Soil Group "A," "B," and "C" may be suitable for infiltration, requiring a minimum soil infiltration rate of 0.5 inches/hour. However, the County of Riverside water pollution prevention Water Quality Management Plan (WQMP, 2012), guidance document for the Santa Ana Region states: "the minimum long-term post-development infiltration rate must be at least 0.83 inches per hour." Furthermore, based on our review of historic regional groundwater levels and our previous onsite subsurface investigation (GSI, 2025), a minimum 10-foot vertical separation from the bottom of the BMP systems to the top of historic high groundwater levels will be maintained.

The design engineer will need to review BMP requirements by the RCFC (2011) and the converted infiltration rates obtained during this study with respect to the proposed water quality BMP systems. An appropriate factor of safety (FOS), per the RCFC (2011) technical guidance document, has been applied herein. The design infiltration rates, general BMP design parameters, and recommendations provided herein are based on our experience with earth materials within the City of San Jacinto, RCFC (2011) and State criteria (CASQA, 2003), and our experience on adjacent sites with similar geologic conditions. Based on our review of the USDA data and our subsurface explorations, similar soil conditions prevail throughout the site, including sandy fine-grained surficial soils.

CONCLUSIONS AND RECOMMENDATIONS

Based on the onsite infiltration testing conducted, it is our opinion that the proposed commercial development and BMP development onsite is feasible from a geologic and geotechnical viewpoint, provided the recommendations presented herein, and within the previous report by GSI (2025) are properly implemented during project planning, design, and construction, as warranted. General recommendations for storm water quality BMP systems are presented in GSI (2025); however, for convenience are reiterated below.

Onsite Storm Water Quality Best Management Practice (BMP) Systems

Should onsite infiltration-systems be planned for Best Management Practices (BMP's) or Low Impact Development (LID) principles for the project, certain guidelines must be followed in the planning, design, and construction of such systems. Such systems, if improperly designed or implemented without consideration of the geotechnical aspects of site conditions, can contribute to flooding, saturation of bearing materials beneath site improvements, slope instability, and possible concentration and contribution of pollutants into the groundwater or storm drain or utility trench systems.

A key factor in these systems is the infiltration rate (often referred to as the percolation rate) which can be ascribed to, or determined for, the earth materials within which these systems are installed. Additionally, the infiltration rate of the designed system (which may include gravel, sand, mulch and topsoil, or other amendments) will need to be considered. Locally, relatively impermeable formations include: clayey surficial soils, igneous and metamorphic bedrock, as well as future fine grained fill soils.

Some of the methods which are used for onsite infiltration include percolation basins, dry wells, bio-swale or bio-retention, permeable pavers and pavement, infiltration trenches, filter boxes and subsurface infiltration galleries or chambers. Some of these systems are constructed using native and import soils, perforated piping, and filter fabrics while others employ structural components such as stormwater infiltration chambers and filters or separators. Every site will have characteristics which should lend themselves to one or more of these methods, but not every site is suitable for BMPs. In practice, BMPs are usually initially designed by the project design civil engineer. Applicable governing agency requirements should be reviewed and included in design considerations.

The following geotechnical guidelines should be considered when designing onsite BMP systems:

- It is not good engineering practice to allow water to saturate soils, especially near slopes or improvements; however, the controlling agency may now require the use of stormwater BMPs.

- Areas adjacent to, or within, the BMP that are subject to inundation should be properly protected against scouring, undermining, and erosion, in accordance with the recommendations of the design engineer.

- Where infiltration BMP systems are located near buildings or improvements, impermeable liners and subdrains should be used along the bottom or sides of bioretention swales or basins located within the influence of structures. Impermeable liners used in conjunction with BMP basins should consist of a 30-mil polyvinyl chloride (PVC) membrane that is covered by a minimum of 12 inches of clean soil, free from rocks and debris, with a maximum 4:1 (h:v) slope inclination, or flatter, and meets the following minimum specifications:

Solid Soils Specific Gravity (ASTM D792): 1.2 (g/cc, min.); Tensile (ASTM D 882): 73 (lb/in-width, min); Elongation at Break (ASTM D882): 380 (%, min); Modulus (ASTM D882): 32 (lb/in-width, min.); and Tear Strength (ASTM D1004): 8 (lb/in, min); Seam Shear Strength (ASTM D882) 58.4 (lb/in, min); Seam Peel Strength (ASTM D882) 15 (lb/in, min).

- Subdrains should consist of at least 4-inch diameter Schedule 40 or SDR 35 drain pipe with perforations oriented down. The drain pipe should be sleeved with a filter sock.

- Storm drain, standpipes, and utilities that cross BMPs should be slurried with a 3-sack slurry mix, to 5 feet outside the structure.

- Infiltrations systems should not be installed within approximately 8 feet of building foundations utility trenches, and walls, or a 1:1 (horizontal to vertical [h:v]) slope (down and away) from the bottom elements of these improvements. Alternatively, deepened foundations may be used.

- Infiltration systems should not be installed adjacent to rigid pavements or hardscape improvements. Alternatively, deepened or thickened edges and curbs or impermeable liners may be used in areas adjoining the BMP.

- As with any infiltration BMP, localized ponding and groundwater seepage should be anticipated. The potential for seepage or perched groundwater to occur after site development should be disclosed to all interested or affected parties.

- Installation of infiltration BMP systems should avoid expansive soils (Expansion Index [E.I.] ≥51) or soils with a relatively high plasticity index (P.I. > 20).

- Infiltration BMP systems should not be installed where the vertical separation of the groundwater level is less than approximately 10 feet from the base of the system.

- Infiltration BMP systems should be designed using a suitable factor of safety (FOS) to account for uncertainties in the known infiltration rates (as generally required by the controlling authorities), and reduction in performance over time.

- As with any infiltration system, proper care will need to be provided. Best management practices should be followed at all times, especially during inclement weather. Provisions for the management of any siltation, debris within the BMP, or overgrown vegetation (including root systems) should be considered. An appropriate inspection schedule will need to adopted and provided to all interested or affected parties.

- Any designed system will require regular and periodic maintenance, which may include rehabilitation or complete replacement of the filter media (e.g., sand, gravel, filter fabrics, topsoil, or mulch) or other components used in construction, so that the design life exceeds 15 years. Due to the potential for piping and adverse seepage conditions, a burrowing rodent control program should also be implemented onsite.

- Newly established vegetation or landscaping (including phreatophytes) may have root systems that will influence the performance of the BMP or nearby LID systems.

- The potential for surface flooding, in the case of system blockage, should be evaluated by the design civil engineer.

- Any proposed utility backfill materials (e.g., inlet or outlet piping or other subsurface utilities) located within or near the proposed area of the BMP may become saturated. This is due to the potential for piping, water migration, and seepage along the utility trench line backfill. If utility trenches cross or are proposed near the BMP, cut-off walls or other water barriers will need to be installed to mitigate the potential for piping and excess water entering the utility backfill materials. Planned or existing utilities may also be subject to piping of fines into open-graded gravel backfill layers unless separated from overlying or adjoining BMP by geotextiles or slurry backfill.

LIMITATIONS

The materials encountered on the project site and used for our analysis are believed representative of the area; however, soil and bedrock materials vary in character between excavations and natural outcrops or conditions exposed during mass grading. Site conditions may vary due to seasonal changes or other factors.

Inasmuch as our study is based upon our review and engineering analyses and field test data, the conclusions and recommendations are professional opinions. These opinions have been derived in accordance with current standards of practice, and no warranty, either express or implied, is given. Standards of practice are subject to change with time. GSI assumes no responsibility or liability for work or testing performed by others, or their inaction; or work performed when GSI is not requested to be onsite, to evaluate if our recommendations have been properly implemented. Use of this report constitutes an agreement and consent by the user to all the limitations outlined above, notwithstanding any other agreements that may be in place. In addition, this report may be subject to review by the controlling authorities. Thus, this report brings to completion our scope of services for this portion of the project.

The opportunity to be of service is sincerely appreciated. If you should have any questions, please do not hesitate to contact our office.

Respectfully submitted,

GeoSoils, Inc.





Todd A. Greer
Engineering Geologist, CEG 2377

Jorge F. Meneses, PhD, PE, GE, BC. GE, F.ASCE
Geotechnical Engineer, GE 3041

TAG/JFM/ek

Enclosures: Appendix A - References
Appendix B - Hand Auger Boring Logs
Appendix C - Field Infiltration Data Sheets

Distribution: (1) Addressee (via email pdf)

APPENDIX A

REFERENCES

APPENDIX A

REFERENCES

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APPENDIX B

HAND AUGER BORING LOGS

UNIFIED SOIL CLASSIFICATION SYSTEM

Major Divisions			Group Symbols	Typical Names
Coarse-Grained Soils More than 50% retained on No. 200 sieve	Gravels 50% or more of coarse fraction retained on No. 4 sieve	Clean Gravels	GW	Well-graded gravels and gravel-sand mixtures, little or no fines
			GP	Poorly graded gravels and gravel-sand mixtures, little or no fines
		Gravel with	GM	Silty gravels gravel-sand-silt mixtures
			GC	Clayey gravels, gravel-sand-clay mixtures
	Sands more than 50% of coarse fraction passes No. 4 sieve	Clean Sands	SW	Well-graded sands and gravelly sands, little or no fines
			SP	Poorly graded sands and gravelly sands, little or no fines
		Sands with Fines	SM	Silty sands, sand-silt mixtures
			SC	Clayey sands, sand-clay mixtures
Fine-Grained Soils 50% or more passes No. 200 sieve	Silts and Clays Liquid limit 50% or less		ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL	Organic silts and organic silty clays of low plasticity
	Silts and Clays Liquid limit greater than 50%		MH	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts
			CH	Inorganic clays of high plasticity, fat clays
			OH	Organic clays of medium to high plasticity
Highly Organic Soils			PT	Peat, mucic, and other highly organic soils

CONSISTENCY OR RELATIVE DENSITY

CRITERIA

Standard Penetration Test

Penetration Resistance N (blows/ft)	Relative Density
0 - 4	Very loose
4 - 10	Loose
10 - 30	Medium
30 - 50	Dense
> 50	Very dense

Standard Penetration Test

Penetration Resistance N (blows/ft)	Consistency	Unconfined Compressive Strength (tons/ft^2)
<2	Very Soft	<0.25
2 - 4	Soft	0.25 - .050
4 - 8	Medium	0.50 - 1.00
8 - 15	Stiff	1.00 - 2.00
15 - 30	Very Stiff	2.00 - 4.00
>30	Hard	>4.00

3" 3/4" #4 #10 #40 #200 U.S. Standard Sieve

Unified Soil Classification	Cobbles	Gravel		Sand			Silt or Clay
		coarse	fine	coarse	medium	fine	

MOISTURE CONDITIONS

Dry	Absence of moisture: dusty, dry to the touch
Slightly Moist	Below optimum moisture content for compaction
Moist	Near optimum moisture content
Very Moist	Above optimum moisture content
Wet	Visible free water; below water table

MATERIAL QUANTITY

trace	0 - 5 %
few	5 - 10 %
little	10 - 25 %
some	25 - 45 %

OTHER SYMBOLS

C Core Sample
S SPT Sample
B Bulk Sample
__ Groundwater
Qp Pocket Penetrometer

BASIC LOG FORMAT:
Group name, Group symbol, (grain size), color, moisture, consistency or relative density. Additional comments: odor, presence of roots, mica, gypsum, coarse grained particles, etc.

EXAMPLE:
Sand (SP), fine to medium grained, brown, moist, loose, trace silt, little fine gravel, few cobbles up to 4" in size, some hair roots and rootlets.

GeoSoils,Inc.

W.O. 9071-A1-IE
Corcoran Construction, Inc.
Bradley Gardens, San Jacinto
Logged by: TAG
August 5, 2026

LOG OF EXPLORATORY HAND AUGER BORINGS

TEST PIT NO.	ELEV. (ft.)	DEPTH (ft.)	GROUP SYMBOL	SAMPLE DEPTH (ft.)	MOISTURE (%)	FIELD DRY DENSITY (pcf)	DESCRIPTION
P-1	1,527	0-2	SM				<u>QUATERNARY-AGE ALLUVIAL SAND OF VALLEY AREAS (Qa):</u> Silty SAND, light brown, dry to damp, loose to medium dense at depth; very fine to coarse grained sands.
							Total Depth = 2', no caving, no seepage. Backfilled on August 5th, 2026 after infiltration testing.
P-2	1,526	0-2	SM				<u>QUATERNARY-AGE ALLUVIAL SAND OF VALLEY AREAS (Qa):</u> Silty SAND, light brown, damp, loose to medium dense with depth; few rootlets, very fine to coarse grained sands; somewhat friable.
							Total Depth = 2', no caving, no seepage. Backfilled on August 5th, 2026 after infiltration testing.
P-3	1,526	0-2	SM				<u>QUATERNARY-AGE ALLUVIAL SAND OF VALLEY AREAS (Qa):</u> Silty SAND, very light brown, dry to damp, loose to medium dense at depth; friable near surface, few rodent burrows.
							Total Depth = 2', no caving, no seepage. Backfilled on August 5th, 2026 after infiltration testing.
P-4	1,526	0-2	SM				<u>QUATERNARY-AGE ALLUVIAL SAND OF VALLEY AREAS (Qa):</u> Silty SAND, light brown, damp, medium dense to very dense at depth (near dumpster); fine to coarse grained sands.
							Total Depth = 2', no caving, no seepage. Backfilled on August 5th, 2026 after infiltration testing.

APPENDIX C

FIELD INFILTRATION DATA SHEETS

P1

Leach Line Percolation Data Sheet

Project: Bradley Gardens, San Jacinto		W.O. Number: 9071-A1-IE	
Test Hole No.: P1		Date Excavated: Aug 5, 2026	
Depth of Test Hole: 2'		Soil Classification: SM	
Check for Sandy Soil Criteria Tested by: TAG/JVM		Date: Aug 5	Presoak: 8:49 aug5
Actual Percolation Tested by: JVM		Date: Aug. 5, 2026	

>5 gal used

Sandy Soil Criteria Test

Trial No.	Time	Time Interval (Min.)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ in Water Level (Inches)
1	9:47	25	24"	0"	24" JVM
	10:12				
2	10:32	25	24"	0"	24" JVM
	10:57				

Use: Normal/Sandy (Circle One) Soil Criteria

Time	Time Interval (min)	Total Elapsed Time (Min.)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ in Water Level (Inches)	Percolation Rate (min/inch)
12:54	10	10	24"	0	24	0.416
01:04						
01:06	10	10	24"	0	24	
01:16						
01:18	10	10	24"	0	24	
01:28						
1:30	10	10	24"	0	24	
1:40						
1:45	10	10	24"	0	24	
1:55						
1:58	10	10	24"	0	24	
2:08						

Plate No. C-1

Leach Line Percolation Data Sheet

P2

Project:	Bradley Gardens, San Jacinto	W.O. Number:	9071-A1-IE
Test Hole No.:	P2	Date Excavated:	Aug 5, 2026
Depth of Test Hole:	2'	Soil Classification:	SM
Check for Sandy Soil Criteria Tested by:	TAG / JVM	Date: Aug 5	Presoak: 8:43 Aug 5
Actual Percolation Tested by:	JVM	Date:	Aug. 5, 2025

>5 gal used

Sandy Soil Criteria Test

Trial No.	Time	Time Interval (Min.)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ in Water Level (Inches)
1	9:38 10:03	25	24"	0"	24"
2	10:42 10:42	25	24	0"	24

Use: Normal Sandy (Circle One) Soil Criteria

Time	Time Interval (min)	Total Elapsed Time (Min.)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ in Water Level (Inches)	Percolation Rate (min/inch)
JVM 10:14 JVM 10:24	10	10	24"	10"	14	0.71
JVM 10:28 JVM 10:38	10	10	24"	9"	15	0.67
11:42 11:52	10	10	24"	9.75"	14.25	0.70
11:55 12:05	10	10	24"	9.25"	14.75	0.68
12:09 12:19	10	10	24"	9.50"	14.5	0.69
12:22 12:32	10	10	24"	10.25"	13.75	0.73

Plate No. C-2

Leach Line Percolation Data Sheet

P3

Project:	Bradley Gardens, San Jacinto	W.O. Number:	9071-A6-SF
Test Hole No.:	P3	Date Excavated:	AUG 5, 2026
Depth of Test Hole:	2'	Soil Classification:	SM
Check for Sandy Soil Criteria Tested by:	25mm penetrometer	Date: Aug 5	Presoak: 8:17 Aug 5
Actual Percolation Tested by:	JVM TAG/JVM	Date: Aug. 5, 2026	

Sandy Soil Criteria Test

Trial No.	Time	Time Interval (Min.)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ in Water Level (Inches)
1	9:33 9:58	25	24"	0"	24"
2	10:16 10:41	25	24"	0"	24"

Use: Normal Sandy (Circle One) Soil Criteria

Time	Time Interval (min)	Total Elapsed Time (Min.)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ in Water Level (Inches)	Percolation Rate (min/inch)
JVM 10:16 JVM 10:26	10	10	24"	10	14	0.71
JVM 10:33 JVM 10:43	10	10	24"	5.25	18.75	0.53
JVM 11:55 12:05	10	10	24"	6.0	18	0.56
12:08 12:18	10	10	24"	6.75	17.25	0.58
12:20 12:30	10	10	24"	6.50	17.5	0.57
12:32 12:42	10	10	24	6.75	17.25	0.58

Plate No. C-3

P4

Leach Line Percolation Data Sheet

Project: Bradley Gardens, San Jacinto		W.O. Number: 9071-A1-IE	
Test Hole No.: P4		Date Excavated: AUG 5, 2026	
Depth of Test Hole: 2'		Soil Classification: SM	
Check for Sandy Soil Criteria Tested by: TAG/JVM		Date: Aug 5	Presoak: 9:28
Actual Percolation Tested by: JVM		Date: Aug. 5, 2026	

>5 gal used

Sandy Soil Criteria Test

Trial No.	Time	Time Interval (Min.)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ in Water Level (Inches)
1	9:53 10:18	25	24"	0"	24"
2	10:20 10:53	25	24"	0"	24"

Use: Normal Sandy (Circle One) Soil Criteria

Time	Time Interval (min)	Total Elapsed Time (Min.)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ in Water Level (Inches)	Percolation Rate (min/inch)
12:49 12:59	10	10	24"	10"	10	1
1:00 1:10	10	10	24"	11.5"	12.5	0.8
1:12 1:22	10	10	24"	12.0	12	0.83
1:25 1:35	10	10	24"	12.25	11.75	0.85
1:38 1:48	10	10	24"	13.25	10.75	0.93
1:51 2:01	10	10	24"	13.75	10.25	0.976

Plate No. C-4

Appendix 4: Historical Site Conditions

Phase I Environmental Site Assessment or Other Information on Past Site Use

Appendix 5: LID Infeasibility

LID Technical Infeasibility Analysis

Appendix 6: BMP Design Details

BMP Sizing, Design Details and other Supporting Documentation

Santa Ana Watershed

V_{BMP} and Q_{BMP} worksheets

These worksheets are to be used to determine the required

Design Capture Volume (V_{BMP})
or the
Design Flow Rate (Q_{BMP})

for BMPs in the Santa Ana Watershed

To verify which watershed your project is located within, visit

www.rcflood.org/npdes

and use the 'Locate my Watershed' tool

If your project is not located in the Santa Ana Watershed,

Do not use these worksheets! Instead visit

www.rcflood.org/npdes/developers.aspx

To access worksheets applicable to your watershed

Use the tabs across the bottom
to access the worksheets for the Santa Ana Watershed

Permeable Pavement - Design Procedure	BMP ID	Legend:	Required Entries
	DMA 1		Calculated Cells

Company Name: Guide Engineering — Date: 8/19/2026

Designed by: Jared Brown — County/City Case No.:

Design Volume

Enter the area tributary to this feature — A_T= 41010 acres

Enter V_{BMP} determines from Section 2.1 of this Handbook — V_{BMP}= 609 ft^3

Permeable Pavement Surface Area

Reservoir Layer Depth, b_{TH} — b_{TH}= 12 inches

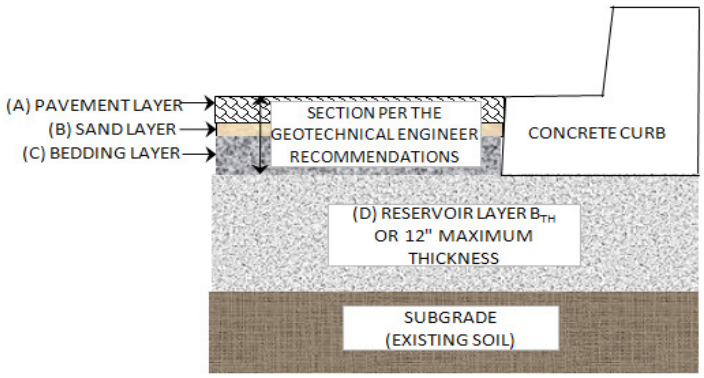
Minimum Surface Area Required, A_S

$$A_{S\,(ft)} = \frac{V_{BMP}\,(ft^3)}{(0.4 \times b_{TH}\,(in)) / 12(in/ft)}$$

A_S= 1,523 ft^2

Proposed Surface Area = 1,525 ft^2

Permeable Pavement Cross Section



Per the Geotechnical	(A)	4	in
Engineer's	(B)	4	in
Recommendations	(C)	4	in
Reservoir Layer	(D)	12	in
Total Permeable Pavement Section		24	in
Slope of Permeable Pavement		2	%

Sediment Control Provided? (Use pulldown) — Yes

Geotechnical report attached? (Use pulldown) — Yes

Describe Surrounding Vegetation: Grass in open areas and bush's and trees north area along frontage road 7th Street.

Notes:

If the permeable pavement has been designed correctly, there should be no error messages on the spreadsheet.

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name: Guide Engineering — Date: 8/19/2026

Designed by: Jared Brown — Case No: 1

Company Project Number/Name: 2026.015.032

BMP Identification

BMP NAME / ID: Pearmeable Pavement

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.70 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
		Natural (A Soil)						
DMA-1	*2,235*	*Roofs*	*1*	*0.89*	*1993.6*			
DMA-1	*9,370*	*Concrete or Asphalt*	*1*	*0.89*	*8358*			
DMA-1	*1,525*	*Pervious Concrete / Porous Asphalt*	*0.1*	*0.11*	*168.4*			
DMA-1	*647*	*Ornamental Landscaping*	*0.1*	*0.11*	*71.5*			
	13777	***Total***			**10591.5**	**0.70**	***617.8***	***1525***

Notes:

Santa Ana Watershed - BMP Design Flow Rate, Q_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name	Guide Engineering	Date	8/19/2026
Designed by	Jared Brown	Case No	1
Company Project Number/Name	2026.015.032		

BMP Identification

BMP NAME / ID: Permeable Pavement

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

Design Rainfall Intensity: I = 0.70 in/hr

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMAs

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type (use pull-down menu)	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	Design Rainfall Intensity (in/hr)	Design Flow Rate (cfs)	Proposed Flow Rate (cfs)
		Natural (A Soil)						
DMA-1	2,235	Roofs	1	0.892	1993.6			
DMA-1	9,370	Concrete or Asphalt	1	0.892	8358			
DMA-1	1,525	Pervious Concrete / Porous Asphalt	0.1	0.110458	168.4			
DMA-1	647	Ornamental Landscaping	0.1	0.110458	71.5			
	13777	Total			10591.5	0.70	0.2	0.2

Notes:

Permeable Pavement - Design Procedure	BMP ID	Legend:	Required Entries
	DMA 2		Calculated Cells

Company Name:	Guide Engineering	Date:	8/19/2026
Designed by:	Jared Brown	County/City Case No.:	

Design Volume

Enter the area tributary to this feature — A_T= 85512 acres

Enter V_{BMP} determines from Section 2.1 of this Handbook — V_{BMP}= 1,541 ft^3

Permeable Pavement Surface Area

Reservoir Layer Depth, b_{TH} — b_{TH}= 12 inches

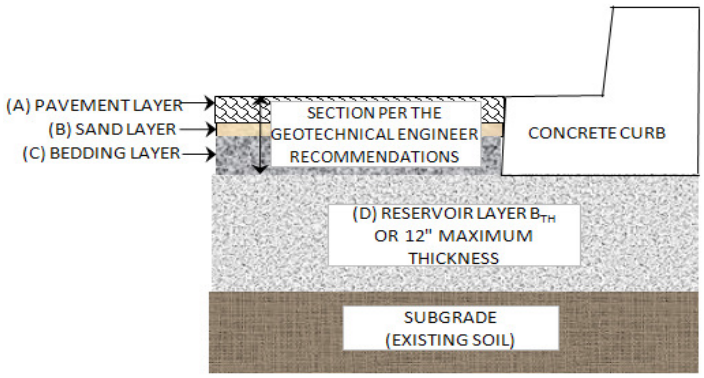
Minimum Surface Area Required, A_S

$$A_{S\,(ft)} = \frac{V_{BMP}\,(ft^3)}{(0.4 \times b_{TH}\,(in)) / 12(in/ft)}$$

A_S= 3,853 ft^2

Proposed Surface Area = 3,854 ft^2

Permeable Pavement Cross Section



Per the Geotechnical	(A)	4	in
Engineer's	(B)	4	in
Recommendations	(C)	4	in
Reservoir Layer	(D)	12	in
Total Permeable Pavement Section		24	in
Slope of Permeable Pavement		2	%

Sediment Control Provided? (Use pulldown) — Yes

Geotechnical report attached? (Use pulldown) — Yes

Describe Surrounding Vegetation: Grass in open areas and bush's and trees along property line and surounding and surrounding property lines.

Notes:

If the permeable pavement has been designed correctly, there should be no error messages on the spreadsheet.

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name: Guide Engineering — Date: 8/19/2026

Designed by: Jared Brown — Case No: 1

Company Project Number/Name: 2026.015.032

BMP Identification

BMP NAME / ID: Pearmeable Pavement

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.70 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
		Natural (A Soil)						
DMA-2	*15,129*	*Roofs*	*1*	*0.89*	*13495.1*			
DMA-2	*14,228*	*Concrete or Asphalt*	*1*	*0.89*	*12691.4*			
DMA-2	*3,854*	*Pervious Concrete / Porous Asphalt*	*0.1*	*0.11*	*425.7*			
DMA-2	*6,624*	*Ornamental Landscaping*	*0.1*	*0.11*	*731.7*			

Santa Ana Watershed - BMP Design Flow Rate, Q_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name	Guide Engineering	Date	8/19/2026
Designed by	Jared Brown	Case No	1
Company Project Number/Name	2026.015.032		

BMP Identification

BMP NAME / ID: Permeable Pavement

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

Design Rainfall Intensity: I = 0.70 in/hr

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMAs

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type (use pull-down menu)	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Rainfall Intensity (in/hr)*	*Design Flow Rate (cfs)*	*Proposed Flow Rate (cfs)*
		Natural (A Soil)						
DMA-2	*15,129*	*Roofs*	*1*	*0.892*	*13495.1*			
DMA-2	*14,228*	*Concrete or Asphalt*	*1*	*0.892*	*12691.4*			
DMA-2	*3,854*	*Pervious Concrete / Porous Asphalt*	*0.1*	*0.110458*	*425.7*			
DMA-2	*6,624*	*Ornamental Landscaping*	*0.1*	*0.110458*	*731.7*			
	39835	***Total***			***27343.9***	***0.70***	***0.4***	***0.4***

Notes:

Appendix 7: Hydromodification

Supporting Detail Relating to Hydrologic Conditions of Concern


Riverside County SWCT²
Stormwater & Water Conservation Tracking Tool
ONLY RAIN DOWN THE STORM DRAIN
Leaflet | Original Feature Class was created by the Riverside County Transportation Department (RCDT). State of California

Appendix 8: Source Control

Pollutant Sources/Source Control Checklist

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

How to use this worksheet (also see instructions in Section G of the WQMP Template):

1. Review Column 1 and identify which of these potential sources of stormwater pollutants apply to your site. Check each box that applies.
2. Review Column 2 and incorporate all of the corresponding applicable BMPs in your WQMP Exhibit.
3. Review Columns 3 and 4 and incorporate all of the corresponding applicable permanent controls and operational BMPs in your WQMP. Use the format shown in Table G.1on page 23 of this WQMP Template. Describe your specific BMPs in an accompanying narrative, and explain any special conditions or situations that required omitting BMPs or substituting alternative BMPs for those shown here.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
☒ A. **On-site storm drain inlets**	☑ **Locations of inlets.**	☒ **Mark all inlets with the words "Only Rain Down the Storm Drain" or similar. Catch Basin Markers may be available from the Riverside County Flood Control and Water Conservation District, call 951.955.1200 to verify.**	☑ **Maintain and periodically repaint or replace inlet markings.** ☒ **Provide stormwater pollution prevention information to new site owners, lessees, or operators.** ☒ **See applicable operational BMPs in Fact Sheet SC-44, "Drainage System Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com** ☒ **Include the following in lease agreements: "Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains."**
☐ B. **Interior floor drains and elevator shaft sump pumps**		☐ **State that interior floor drains and elevator shaft sump pumps will be plumbed to sanitary sewer.**	☐ **Inspect and maintain drains to prevent blockages and overflow.**
☐ C. **Interior parking garages**		☐ **State that parking garage floor drains will be plumbed to the sanitary sewer.**	☐ **Inspect and maintain drains to prevent blockages and overflow.**

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
☒ D1. **Need for future indoor & structural pest control**		☒ **Note building design features that discourage entry of pests.**	☒ **Provide Integrated Pest Management information to owners, lessees, and operators.**
☒ D2. **Landscape/ Outdoor Pesticide Use**	☐ **Show locations of native trees or areas of shrubs and ground cover to be undisturbed and retained.** ☒ **Show self-retaining landscape areas, if any.** ☐ **Show stormwater treatment and hydrograph modification management BMPs. (See instructions in Chapter 3, Step 5 and guidance in Chapter 5.)**	**State that final landscape plans will accomplish all of the following.** ☒ **Preserve existing native trees, shrubs, and ground cover to the maximum extent possible.** ☒ **Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution.** ☐ **Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions.** ☒ **Consider using pest-resistant plants, especially adjacent to hardscape.** ☒ **To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.**	☒ **Maintain landscaping using minimum or no pesticides.** ☐ **See applicable operational BMPs in "What you should know for…..Landscape and Gardening"** at http://rcflood.org/stormwater/**Error! Hyperlink reference not valid.** ☐ **Provide IPM information to new owners, lessees and operators.**

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
☐ E. **Pools, spas, ponds, decorative fountains, and other water features.**	☐ **Show location of water feature and a sanitary sewer cleanout in an accessible area within 10 feet. (Exception: Public pools must be plumbed according to County Department of Environmental Health Guidelines.)**	**If the Co-Permittee requires pools to be plumbed to the sanitary sewer, place a note on the plans and state in the narrative that this connection will be made according to local requirements.**	☐ **See applicable operational BMPs in** "Guidelines for Maintaining Your Swimming Pool, Jacuzzi and Garden Fountain" at http://rcflood.org/stormwater/
☒ F. **Food service**	☐ **For restaurants, grocery stores, and other food service operations, show location (indoors or in a covered area outdoors) of a floor sink or other area for cleaning floor mats, containers, and equipment.** ☒ **On the drawing, show a note that this drain will be connected to a grease interceptor before discharging to the sanitary sewer.**	☒ **Describe the location and features of the designated cleaning area.** ☒ **Describe the items to be cleaned in this facility and how it has been sized to insure that the largest items can be accommodated.**	☒ **See the brochure, "**The Food Service Industry Best Management Practices for: Restaurants, Grocery Stores, Delicatessens and Bakeries" at http://rcflood.org/stormwater/ **Provide this brochure to new site owners, lessees, and operators.**
☒ G. **Refuse areas**	☒ **Show where site refuse and recycled materials will be handled and stored for pickup. See local municipal requirements for sizes and other details of refuse areas.** ☒ **If dumpsters or other receptacles are outdoors, show how the designated area will be covered, graded, and paved to prevent run-on and show locations of berms to prevent runoff from the area.** ☐ **Any drains from dumpsters, compactors, and tallow bin areas shall be connected to a grease removal device before discharge to sanitary sewer.**	☒ **State how site refuse will be handled and provide supporting detail to what is shown on plans.** ☐ **State that signs will be posted on or near dumpsters with the words "Do not dump hazardous materials here" or similar.**	☒ **State how the following will be implemented:** **Provide adequate number of receptacles. Inspect receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post "no hazardous materials" signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on-site. See Fact Sheet SC-34, "Waste Handling and Disposal" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com**

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
❑ H. **Industrial processes.**	❑ **Show process area.**	❑ **If industrial processes are to be located on site, state: "All process activities to be performed indoors. No processes to drain to exterior or to storm drain system."**	❑ **See Fact Sheet SC-10, "Non-Stormwater Discharges" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com** See the brochure "Industrial & Commercial Facilities Best Management Practices for: Industrial, Commercial Facilities" at http://rcflood.org/stormwater/

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
❑ I. **Outdoor storage of equipment or materials. (See rows J and K for source control measures for vehicle cleaning, repair, and maintenance.)**	❑ **Show any outdoor storage areas, including how materials will be covered. Show how areas will be graded and bermed to prevent run-on or run-off from area.** ❑ **Storage of non-hazardous liquids shall be covered by a roof and/or drain to the sanitary sewer system, and be contained by berms, dikes, liners, or vaults.** ❑ **Storage of hazardous materials and wastes must be in compliance with the local hazardous materials ordinance and a Hazardous Materials Management Plan for the site.**	**Include a detailed description of materials to be stored, storage areas, and structural features to prevent pollutants from entering storm drains.** **Where appropriate, reference documentation of compliance with the requirements of Hazardous Materials Programs for:** ▪ **Hazardous Waste Generation** ▪ **Hazardous Materials Release Response and Inventory** ▪ **California Accidental Release (CalARP)** ▪ **Aboveground Storage Tank** ▪ **Uniform Fire Code Article 80 Section 103(b) & (c) 1991** ▪ **Underground Storage Tank** **www.cchealth.org/groups/hazmat/**	❑ **See the Fact Sheets SC-31, "Outdoor Liquid Container Storage" and SC-33, "Outdoor Storage of Raw Materials " in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com**

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
❑ J. **Vehicle and Equipment Cleaning**	❑ **Show on drawings as appropriate:** **(1) Commercial/industrial facilities having vehicle/equipment cleaning needs shall either provide a covered, bermed area for washing activities or discourage vehicle/equipment washing by removing hose bibs and installing signs prohibiting such uses.** **(2) Multi-dwelling complexes shall have a paved, bermed, and covered car wash area (unless car washing is prohibited on-site and hoses are provided with an automatic shut-off to discourage such use).** **(3) Washing areas for cars, vehicles, and equipment shall be paved, designed to prevent run-on to or runoff from the area, and plumbed to drain to the sanitary sewer.** **(4) Commercial car wash facilities shall be designed such that no runoff from the facility is discharged to the storm drain system. Wastewater from the facility shall discharge to the sanitary sewer, or a wastewater reclamation system shall be installed.**	❑ **If a car wash area is not provided, describe any measures taken to discourage on-site car washing and explain how these will be enforced.**	**Describe operational measures to implement the following (if applicable):** ❑ **Washwater from vehicle and equipment washing operations shall not be discharged to the storm drain system.** Refer to "Outdoor Cleaning Activities and Professional Mobile Service Providers" for many of the Potential Sources of Runoff Pollutants categories below. Brochure can be found at http://rcflood.org/stormwater/ ❑ **Car dealerships and similar may rinse cars with water only.**

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
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❑ K. **Vehicle/Equipment Repair and Maintenance**	❑ **Accommodate all vehicle equipment repair and maintenance indoors. Or designate an outdoor work area and design the area to prevent run-on and runoff of stormwater.** ❑ **Show secondary containment for exterior work areas where motor oil, brake fluid, gasoline, diesel fuel, radiator fluid, acid-containing batteries or other hazardous materials or hazardous wastes are used or stored. Drains shall not be installed within the secondary containment areas.** ❑ **Add a note on the plans that states either (1) there are no floor drains, or (2) floor drains are connected to wastewater pretreatment systems prior to discharge to the sanitary sewer and an industrial waste discharge permit will be obtained.**	❑ **State that no vehicle repair or maintenance will be done outdoors, or else describe the required features of the outdoor work area.** ❑ **State that there are no floor drains or if there are floor drains, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements.** ❑ **State that there are no tanks, containers or sinks to be used for parts cleaning or rinsing or, if there are, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements.**	**In the Stormwater Control Plan, note that all of the following restrictions apply to use the site:** ❑ **No person shall dispose of, nor permit the disposal, directly or indirectly of vehicle fluids, hazardous materials, or rinsewater from parts cleaning into storm drains.** ❑ **No vehicle fluid removal shall be performed outside a building, nor on asphalt or ground surfaces, whether inside or outside a building, except in such a manner as to ensure that any spilled fluid will be in an area of secondary containment. Leaking vehicle fluids shall be contained or drained from the vehicle immediately.** ❑ **No person shall leave unattended drip parts or other open containers containing vehicle fluid, unless such containers are in use or in an area of secondary containment.** Refer to "Automotive Maintenance & Car Care Best Management Practices for Auto Body Shops, Auto Repair Shops, Car Dealerships, Gas Stations and Fleet Service Operations". Brochure can be found at http://rcflood.org/stormwater/ Refer to Outdoor Cleaning Activities and Professional Mobile Service Providers for many of the Potential Sources of Runoff Pollutants categories below. Brochure can be found at http://rcflood.org/stormwater/

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
❑ L. **Fuel Dispensing Areas**	❑ **Fueling areas[6] shall have impermeable floors (i.e., portland cement concrete or equivalent smooth impervious surface) that are: a) graded at the minimum slope necessary to prevent ponding; and b) separated from the rest of the site by a grade break that prevents run-on of stormwater to the maximum extent practicable.** ❑ **Fueling areas shall be covered by a canopy that extends a minimum of ten feet in each direction from each pump. [Alternative: The fueling area must be covered and the cover's minimum dimensions must be equal to or greater than the area within the grade break or fuel dispensing area[1].] The canopy [or cover] shall not drain onto the fueling area.**		❑ **The property owner shall dry sweep the fueling area routinely.** ❑ **See the Fact Sheet SD-30 , "Fueling Areas" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com**

[6] **The fueling area shall be defined as the area extending a minimum of 6.5 feet from the corner of each fuel dispenser or the length at which the hose and nozzle assembly may be operated plus a minimum of one foot, whichever is greater.**

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
❑ M. **Loading Docks**	❑ **Show a preliminary design for the loading dock area, including roofing and drainage. Loading docks shall be covered and/or graded to minimize run-on to and runoff from the loading area. Roof downspouts shall be positioned to direct stormwater away from the loading area. Water from loading dock areas shall be drained to the sanitary sewer, or diverted and collected for ultimate discharge to the sanitary sewer.** ❑ **Loading dock areas draining directly to the sanitary sewer shall be equipped with a spill control valve or equivalent device, which shall be kept closed during periods of operation.** ❑ **Provide a roof overhang over the loading area or install door skirts (cowling) at each bay that enclose the end of the trailer.**		❑ **Move loaded and unloaded items indoors as soon as possible.** ❑ **See Fact Sheet SC-30, "Outdoor Loading and Unloading," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com**

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
☒ N. **Fire Sprinkler Test Water**		☒ **Provide a means to drain fire sprinkler test water to the sanitary sewer.**	☒ **See the note in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com**
O. **Miscellaneous Drain or Wash Water or Other Sources** ☐ **Boiler drain lines** ☐ **Condensate drain lines** ☒ **Rooftop equipment** ☐ **Drainage sumps** ☒ **Roofing, gutters, and trim.** ☐ **Other sources**		☐ **Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain system.** ☐ **Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur. Condensate drain lines may not discharge to the storm drain system.** ☐ **Rooftop equipment with potential to produce pollutants shall be roofed and/or have secondary containment.** ☐ **Any drainage sumps on-site shall feature a sediment sump to reduce the quantity of sediment in pumped water.** ☒ **Avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff.** **Include controls for other sources as specified by local reviewer.**	

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
☑ P. **Plazas, sidewalks, and parking lots.**			☑ **Sweep plazas, sidewalks, and parking lots regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system. Collect washwater containing any cleaning agent or degreaser and discharge to the sanitary sewer not to a storm drain.**

Appendix 9: O&M

Operation and Maintenance Plan and Documentation of Finance, Maintenance and Recording Mechanisms

Appendix 10: Educational Materials

BMP Fact Sheets, Maintenance Guidelines and Other End-User BMP Information

Hydrology and Hydraulic Analysis Report

980 W. 7th Street Development

Jurisdiction:

San Jacinto, Riverside County, California

Prepared for: Generation Healthcare

Date: August 2026

Prepared By: Jared T. Brown P.E.

Guide Engineering

6011 Rose Ct.

Granite Bay, CA. 95746

HYDROLOGY AND HYDRAULIC ANALYSIS REPORT

980 W. 7th Street Development

City of San Jacinto, Riverside County, California

Prepared for: Generation Healthcare

Prepared by: Jared T. Brown, P.E. | Guide Engineering

6011 Rose Ct., Granite Bay, CA 95746

Original Date: March 2026 | Revised: August 31, 2026

1. Introduction and Project Description

This report presents the hydrologic and hydraulic analysis for the proposed development at 980 W. 7th Street in San Jacinto, Riverside County, California. The analysis evaluates pre-development (undeveloped site) and post-development conditions for the 10-year and 100-year storm events in accordance with the Riverside County Flood Control and Water Conservation District (RCFC&WCD) Hydrology Manual (2018) and Hydraulic Design Manual (March 2024).

The project involves redevelopment of approximately 18.7 acres, including existing buildings and additions, with new impervious surfaces, grading, and stormwater conveyance improvements. On-site drainage is collected by catch basins CB#1 through CB#7 and an upstream INLET, then conveyed in the Main Street storm sewer to the existing outfall (OUTFALL). The revised post-development model routes the 24-inch mainline as Link-15 (INLET to CB#4), Link-16 (CB#4 to CB#6), Link-17 (CB#6 to MH#3), and Link-09 (MH#3 to OUTFALL).

Post-development peak flow at the downstream outfall remains comparable to pre-development in the 10-year event and is reduced in the 100-year event. Hydraulic grade line (HGL) remains below all manhole and inlet rims in both revised post-development storms. No mainline surcharge is reported.

2. Regulatory and Design Standards

Hydrology. SCS TR-55 methods in Autodesk Storm and Sanitary Analysis are used for watersheds well under the District 300–500 acre threshold. Pre- and post-development peaks are compared at the common downstream outfall to confirm no adverse increase in runoff.

Hydraulics. The storm sewer is sized for the 10-year event and checked for the 100-year event. HGL must remain below rim elevations. Minimum pipe velocity of approximately 3 ft/s is the self-cleaning target; maximum velocities are limited to prevent erosion. Freeboard and no-rise criteria apply to adjacent properties.

Design storms. SCS Type II 24-hour distribution with rainfall depths of 1.80 inches (10-year) and 3.00 inches (100-year), Riverside County (Desert Center) gage as modeled. Routing method is hydrodynamic with overflow ponding enabled and a 30-second routing time step.

3. Pre-Development (Undeveloped Site) Conditions

The site consists of largely pervious and open areas with scattered existing buildings. Watersheds drain through junction boxes and open channels into the Main Street storm sewer and discharge at Out-01. Total tributary area is approximately 18.73 acres. Pre-development calculations are unchanged and are included as Exhibit E.

Pre-development peak flows at Out-01:

- 10-year storm: **4.77 cfs** (max velocity 2.23 ft/s; max depth 1.28 ft)
- 100-year storm: **7.67 cfs** (max velocity 2.44 ft/s; max depth 2.00 ft)

HGL remains below all rims with adequate freeboard. Pipes flow partially full with no surcharge. Pre-development frontage profiles are Exhibit C.

4. Post-Development (Developed Site) Conditions —

The revised Developed site.SPF model includes eight subbasins totaling 18.72 acres (SHED-A 0.81 ac, SHED-C 0.41 ac, SHED-E 0.19 ac, SHED-F 0.15 ac, SHED-G 0.96 ac, SHED-H 0.80 ac, SUB-D 0.40 ac, and UPSHED 15.00 ac). Curve numbers are 94 to 98 on developed commercial cover and 80 on UPSHED and SHED-H.

Site runoff is intercepted by sag inlets (CB#1–CB#7 and INLET) and conveyed in 12-inch laterals to the 24-inch Main Street mainline. The mainline alignment used in the revised model is:

- Link-15: INLET → CB#4 162 ft, 24-inch, slope 0.10%
- Link-16: CB#4 → CB#6 141 ft, 24-inch, slope 0.10%
- Link-17: CB#6 → MH#3 177 ft, 24-inch, slope 0.08%
- Link-09: MH#3 → OUTFALL 97 ft, 24-inch, slope 0.15%

Post-development peak flows at OUTFALL (revised):

- 10-year storm: **5.42 cfs** (max velocity 2.54 ft/s; max depth 1.26 ft; max HGL 23.94 ft)
- 100-year storm: **6.83 cfs** (max velocity 2.66 ft/s; max depth 1.49 ft; max HGL 24.17 ft)

10-year profile. HGL is below every rim. Maximum HGL values along the mainline are INLET 24.34 ft (rim 25.50), CB#4 24.35 ft (rim 25.32), CB#6 24.28 ft (rim 25.27), MH#3 24.19 ft (rim 25.35), and OUTFALL 23.94 ft. Freeboard at MH#3 is 1.16 ft. Peak inflow at MH#3 is 5.53 cfs. All 24-inch mainline pipes flow partly full (peak depth 1.11 to 1.28 ft in a 2.00-ft pipe). No surcharge is reported.

100-year profile. HGL remains below every rim. Maximum HGL values are INLET 24.99 ft (rim 25.50), CB#4 24.80 ft, CB#6 24.56 ft, MH#3 24.43 ft (0.92 ft freeboard), and OUTFALL 24.17 ft. Peak inflow at MH#3 is 6.92 cfs. Mainline peak depths are 1.49 to 1.66 ft. No mainline surcharge is reported. Link-09 peak flow is 6.83 cfs versus a design capacity of 7.71 cfs (Q/Qfull = 0.89).

The prior model version reported an isolated 10-year HGL spike at MH#2. That node is not on the revised mainline profile. The current 24-inch alignment (Link-15 / 16 / 17 / 09) produces a monotonically decreasing HGL from INLET to OUTFALL, with the 100-year HGL higher than the 10-year HGL at every station, as expected.

5. Comparison of Pre- versus Post-Development Flows

Storm Event	Pre-Development Outfall (cfs)	Post-Development Outfall (cfs)	Change (cfs)	Impact Assessment
10-Year	4.77	5.42	+0.65	Small increase; HGL below rims; mainline within capacity
100-Year	7.67	6.83	–0.84	Decrease; no surcharge; beneficial downstream

The 10-year increase of 0.65 cfs is small relative to the 24-inch mainline capacity (7.71 cfs on Link-09). The 100-year peak decreases 0.84 cfs because developed on-site routing and the upgraded pipe network move site flow to the outfall

more efficiently and do not increase the coincident peak from the 15-acre UPSHED.

6. Hydraulic Capacity and Compliance

Node	Rim (ft)	10-Yr Max HGL (ft)	10-Yr Freeboard (ft)	100-Yr Max HGL (ft)	100-Yr Freeboard (ft)
INLET	25.50	24.34	1.16	24.99	0.51
CB#4	25.32	24.35	0.97	24.80	0.52
CB#6	25.27	24.28	0.99	24.56	0.71
MH#3	25.35	24.19	1.16	24.43	0.92
OUTFALL	—	23.94	—	24.17	—

Link	From → To	Dia. (in)	10-Yr Q (cfs)	100-Yr Q (cfs)	Capacity (cfs)	100-Yr Q/Qfull
Link-15	INLET → CB#4	24	1.94	5.93	5.55	1.07
Link-16	CB#4 → CB#6	24	2.42	6.09	5.95	1.02
Link-17	CB#6 → MH#3	24	3.49	5.99	6.42	0.93
Link-09	MH#3 → OUTFALL	24	5.42	6.83	7.71	0.89

Link-15 and Link-16 show 100-year peak flow slightly above the tabulated full-flow capacity (Q/Qfull 1.07 and 1.02). Depth remains below the 24-inch soffit on the profile (max depth 1.66 ft and 1.59 ft), and HGL stays below the rims, so the pipes are flowing full or nearly full under a mild pressure grade that does not surcharge structures. Link-09, the outfall reach, remains at Q/Qfull = 0.89.

Inlets are modeled as FHWA HEC-22 generic sag inlets. Reported peak inlet flows range from 0.34 to 2.19 cfs (10-year) and 0.57 to 5.70 cfs (100-year). No hazardous street ponding is indicated in the SSA results.

7. Conclusion and Recommendations

The post-development SSA model for 980 W. 7th Street complies with RCFC&WCD 10-year capacity and 100-year no-rise / no-adverse-impact intent. Outfall peak flow increases 0.65 cfs in the 10-year storm and decreases 0.84 cfs in the 100-year storm. HGL is below all rims in both events. The previous localized 10-year surcharge at MH#2 does not appear in the current mainline geometry.

No detention basin is required based on the outfall comparison. Easements and maintenance access should be provided along the Main Street storm sewer per District standards. This revised report, the current SSA output, and the updated profile plots are submitted for review.

8. Exhibits

Exhibit A — Pre-Development Watershed Map

Exhibit B — Post-Development Watershed Map

Exhibit C — Pre-Development Frontage Profiles (10-year and 100-year)

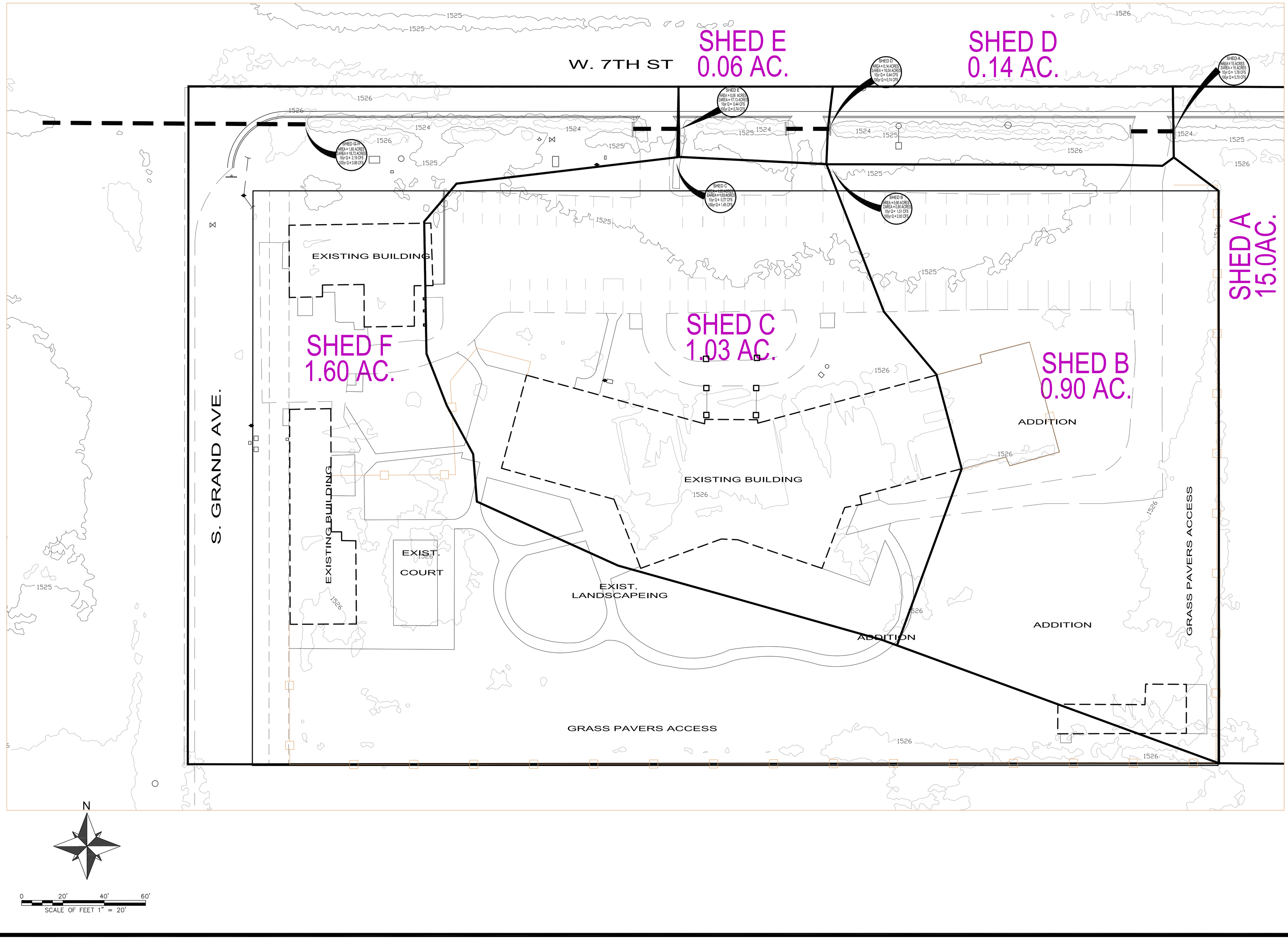
Exhibit C (revised) — Post-Development Frontage Profiles (10-year and 100-year)

Exhibit E — Pre-Development SSA Calculations

Exhibit F — Post-Development SSA Calculations (revised 10-year and 100-year)

EXHIBIT A

PRE-SHED MAP



N

0 20' 40' 60'

SCALE OF FEET 1" = 20'

DATE:	FEB. 2026
SCALE:	1" = 20'
DRAWN BY:	S.A. & R.S.
DESIGNED BY:	J.B. & R.S.
CHECKED BY:	J.B. & R.S.

NO.	REVISION	APPROVED BY	DATE

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LAND ENGINEERING AND PLANNING
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GRANITE BAY, CA 95746
PHONE: 916-787-0248
projects@guide-engineering

DESIGN DEVELOPMENT PLANS
980 W. 7TH ST
PRE SHED MAP
SAN JACINTO, RIVERSIDE COUNTY, CALIFORNIA

PREPARED UNDER THE DIRECTION OF:

REGISTERED PROFESSIONAL ENGINEER
JARED BROWN
LIC. No. C65430
Exp. 09/30/27
CIVIL
STATE OF CALIFORNIA

NOT APPROVED FOR CONSTRUCTION UNLESS SIGNED BY THE ENGINEER

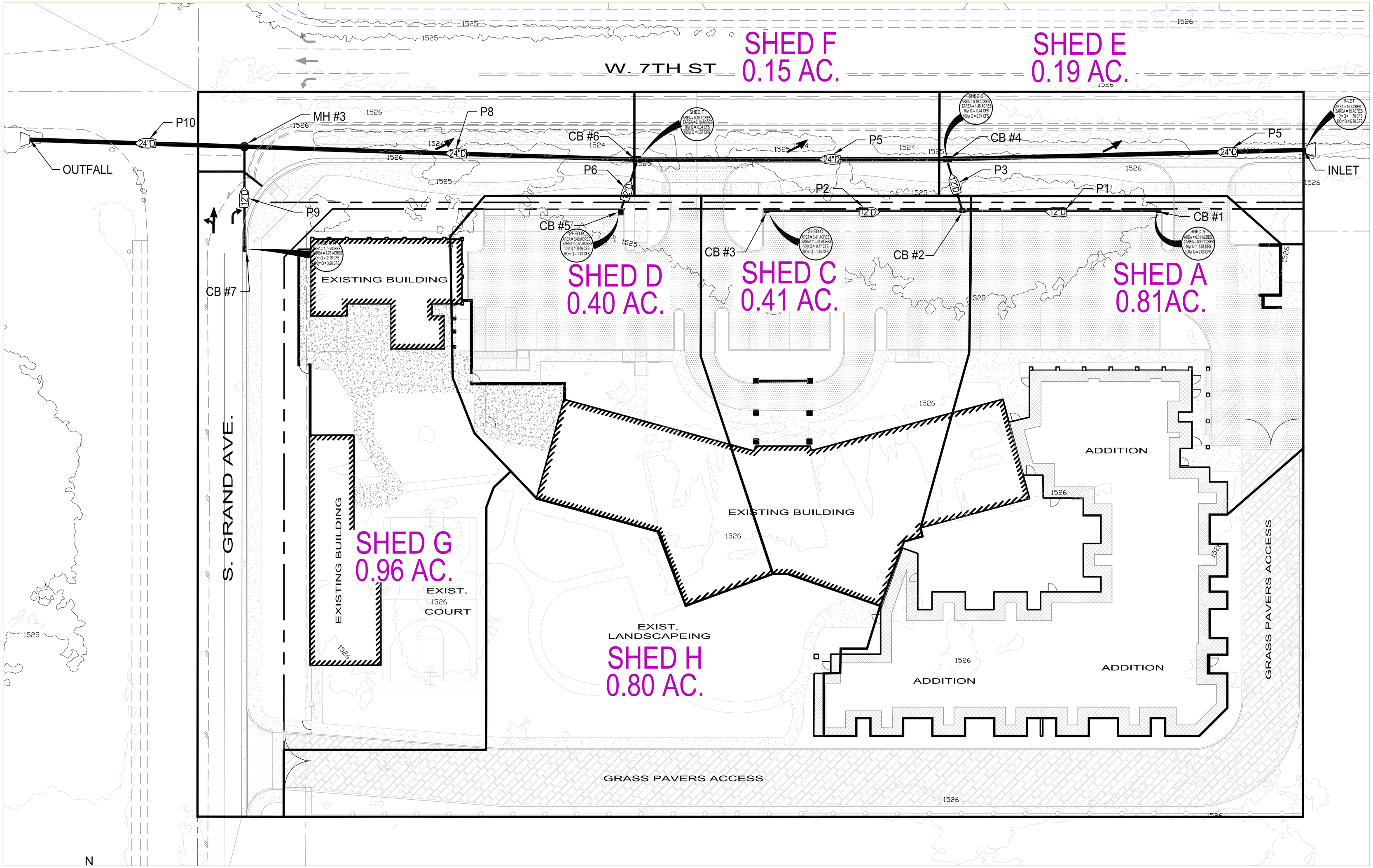
PROJECT NUMBER:

SHEET OF

Guide ENGINEERING

EXHIBIT B

POST-SHED MAP



N

0 20' 40' 60'

SCALE OF FEET 1" = 20'

DESIGN DEVELOPMENT PLANS
980 W. 7TH ST
POST SHED MAP
SAN JACINTO, RIVERSIDE COUNTY, CALIFORNIA

NO.	REVISION	APPROVED BY	DATE

DATE: MAY 2026
SCALE: 1" = 20'
DRAWN BY: S.A. & R.S.
DESIGNED BY: J.B. & R.S.
CHECKED BY: J.B. & R.S.

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PREPARED UNDER THE DIRECTION OF:

REGISTERED PROFESSIONAL ENGINEER
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Exp. 09/30/27
CIVIL
STATE OF CALIFORNIA

NOT APPROVED FOR CONSTRUCTION UNLESS SIGNED BY THE ENGINEER

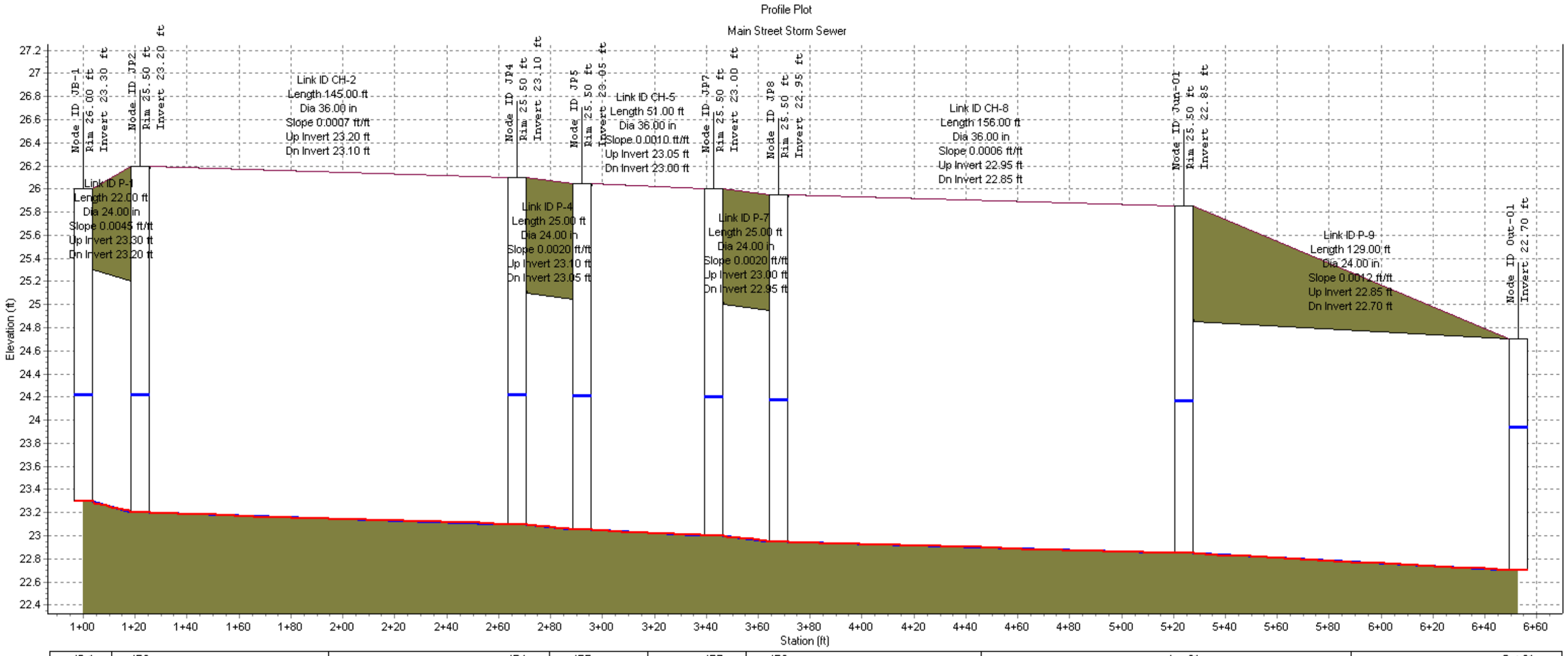
PROJECT NUMBER:

SHEET OF

GUIDE ENGINEERING

EXHIBIT C

PRE DEVELOPMENT FRONTAGE PROFILE

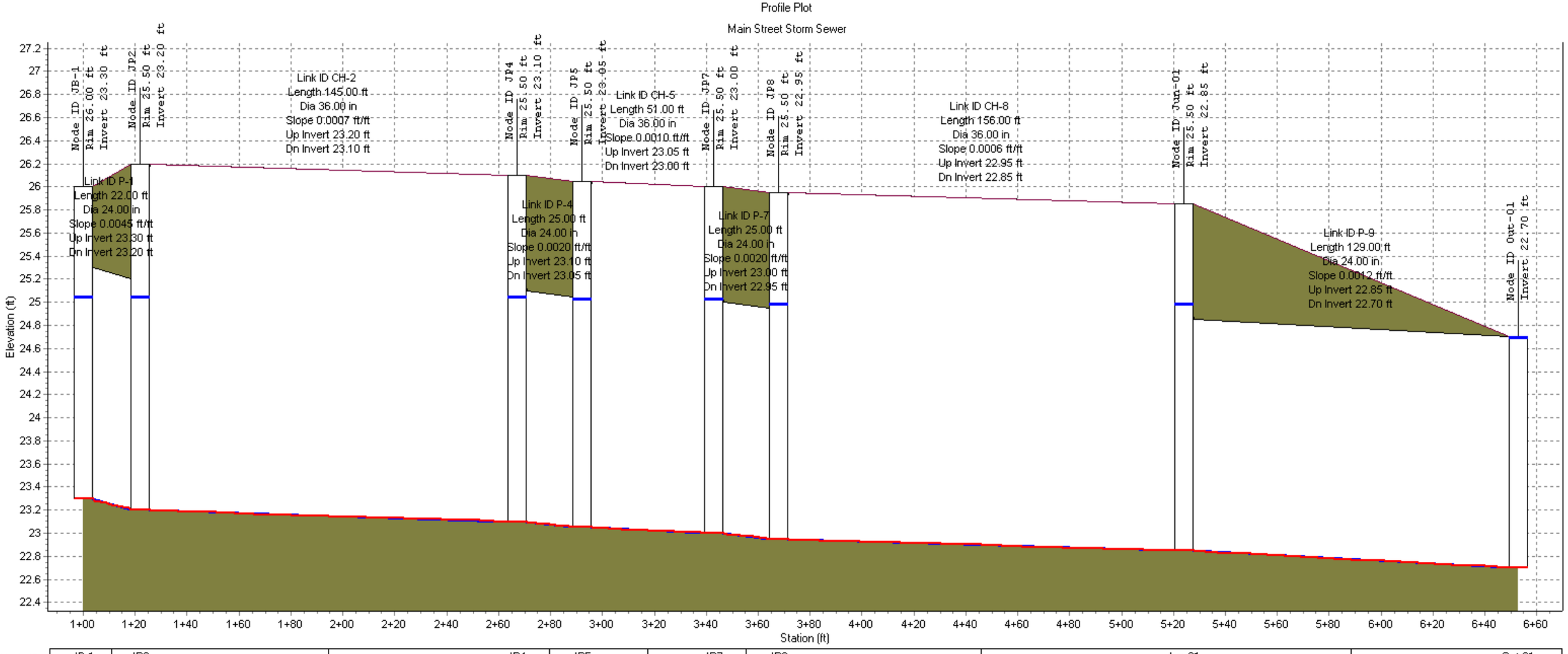


Node ID:	JB-1	JP2	JP4	JP5	JP7	JP8	Jun-01	Out-01
Rim (ft):	26.00	25.50	25.50	25.50	25.50	25.50	25.50	
Invert (ft):	23.30	23.20	23.10	23.05	23.00	22.95	22.85	22.70
Min Pipe Cover (ft):	0.70	0.00	0.00	0.00	0.00	0.00	0.00	
Max HGL (ft):	24.23	24.23	24.23	24.22	24.22	24.18	24.17	23.95

Link ID:	P-1	CH-2	P-4	CH-5	P-7	CH-8	P-9
Length (ft):	22.00	145.00	25.00	51.00	25.00	156.00	129.00
Dia (in):	24.00	36.00	24.00	36.00	24.00	36.00	24.00
Slope (ft/ft):	0.0045	0.0007	0.0020	0.0010	0.0020	0.0006	0.0012
Up Invert (ft):	23.30	23.20	23.10	23.05	23.00	22.95	22.85
Dn Invert (ft):	23.20	23.10	23.05	23.00	22.95	22.85	22.70
Max Q (cfs):	1.77	1.76	1.85	1.85	2.69	2.61	4.77
Max Vel (ft/s):	1.82	0.53	1.71	0.46	1.77	0.47	2.23
Max Depth (ft):	0.97	1.07	1.14	1.18	1.22	1.27	1.28

Profile Plot

Main Street Storm Sewer



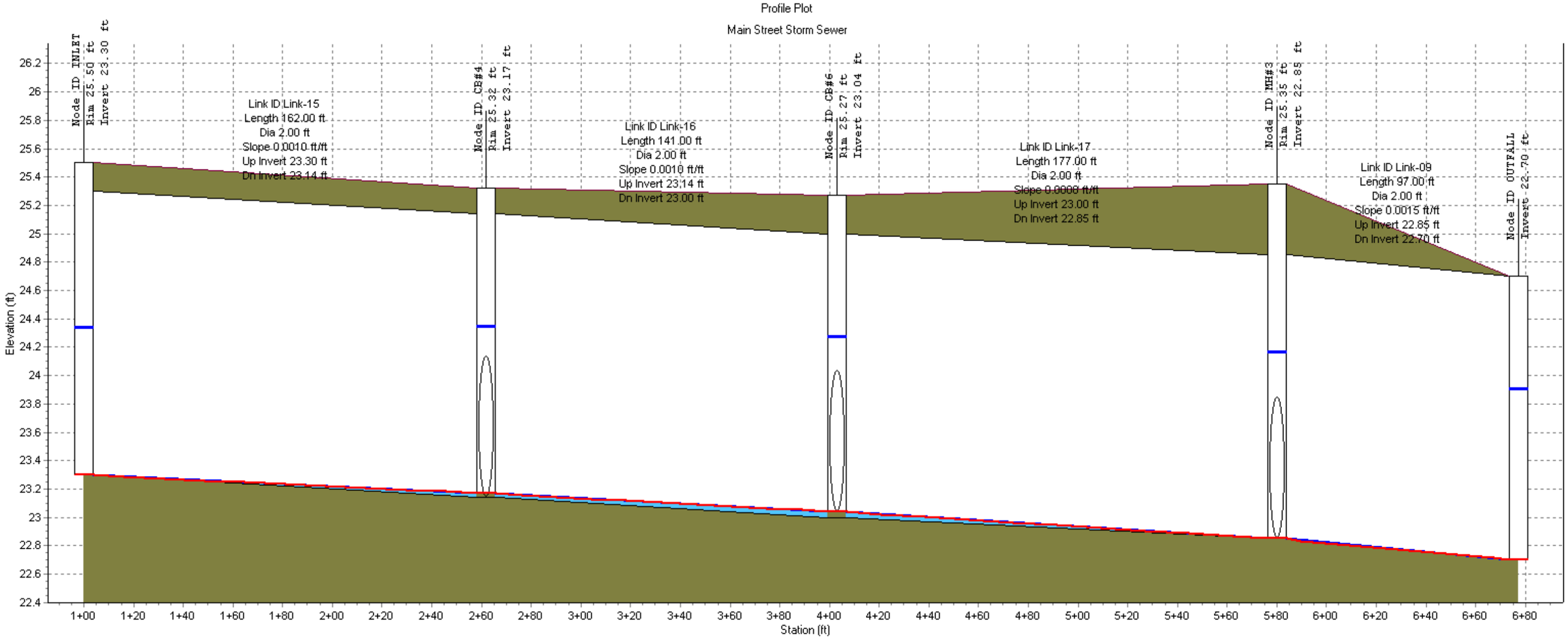
Node ID:	JB-1	JP2	JP4	JP5	JP7	JP8	Jun-01	Out-01
Rim (ft):	26.00	25.50	25.50	25.50	25.50	25.50	25.50	
Invert (ft):	23.30	23.20	23.10	23.05	23.00	22.95	22.85	22.70
Min Pipe Cover (ft):	0.70	0.00	0.00	0.00	0.00	0.00	0.00	
Max HGL (ft):	25.05	25.05	25.05	25.03	25.03	24.99	24.99	24.70

Link ID:	P-1	CH-2	P-4	CH-5	P-7	CH-8	P-9
Length (ft):	22.00	145.00	25.00	51.00	25.00	156.00	129.00
Dia (in):	24.00	36.00	24.00	36.00	24.00	36.00	24.00
Slope (ft/ft):	0.0045	0.0007	0.0020	0.0010	0.0020	0.0006	0.0012
Up Invert (ft):	23.30	23.20	23.10	23.05	23.00	22.95	22.85
Dn Invert (ft):	23.20	23.10	23.05	23.00	22.95	22.85	22.70
Max Q (cfs):	5.67	5.62	5.75	5.74	5.89	5.87	7.67
Max Vel (ft/s):	2.28	0.63	2.22	0.51	2.30	0.52	2.44
Max Depth (ft):	1.80	1.90	1.97	2.01	2.00	2.09	2.00

EXHIBIT C

POST-DEVELOPMENT FRONTAGE PROFILE

Revised August 2026 — 10-Year and 100-Year

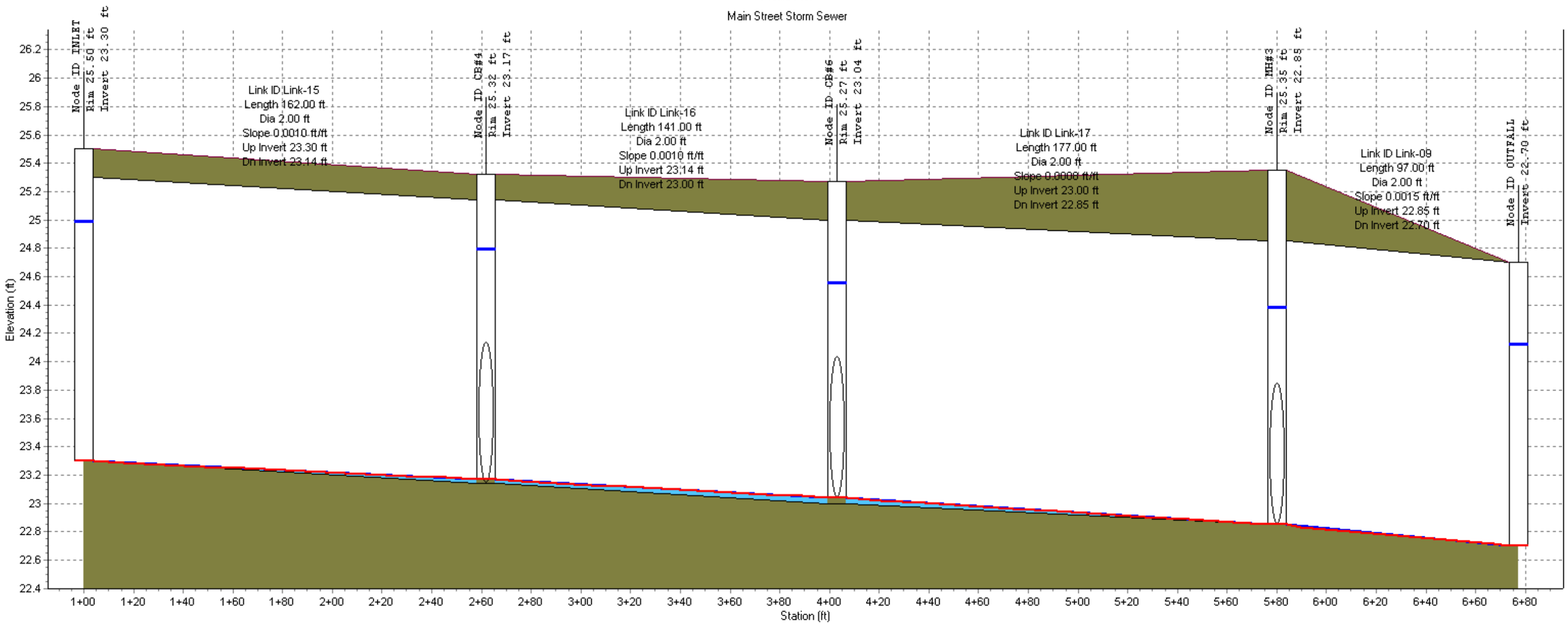


Node ID:	INLET	CB#4	CB#6	MH#3	OUTFALL
Rim (ft):	25.50	25.32	25.27	25.35	
Invert (ft):	23.30	23.17	23.04	22.85	22.70
Min Pipe Cover (ft):				0.50	
Max HGL (ft):	24.34	24.35	24.28	24.19	23.94

Link ID:	Link-15	Link-16	Link-17	Link-09
Length (ft):	162.00	141.00	177.00	97.00
Dia (ft):	2.00	2.00	2.00	2.00
Slope (ft/ft):	0.0010	0.0010	0.0008	0.0015
Up Invert (ft):	23.30	23.14	23.00	22.85
Dn Invert (ft):	23.14	23.00	22.85	22.70
Max Q (cfs):	1.94	2.42	3.49	5.42
Max Vel (ft/s):	1.55	1.62	1.73	2.54
Max Depth (ft):	1.11	1.21	1.28	1.26

Profile Plot

Main Street Storm Sewer



Node ID:	INLET	CB#4	CB#6	MH#3	OUTFALL
Rim (ft):	25.50	25.32	25.27	25.35	
Invert (ft):	23.30	23.17	23.04	22.85	22.70
Min Pipe Cover (ft):				0.50	
Max HGL (ft):	24.99	24.80	24.56	24.43	24.17

Link ID:	Link-15	Link-16	Link-17	Link-09
Length (ft):	162.00	141.00	177.00	97.00
Dia (ft):	2.00	2.00	2.00	2.00
Slope (ft/ft):	0.0010	0.0010	0.0008	0.0015
Up Invert (ft):	23.30	23.14	23.00	22.85
Dn Invert (ft):	23.14	23.00	22.85	22.70
Max Q (cfs):	5.93	6.09	5.99	6.83
Max Vel (ft/s):	2.16	2.28	2.37	2.66
Max Depth (ft):	1.66	1.59	1.53	1.49

EXHIBIT E

PRE DEVELOPMENT CALCULATIONS

Project Description

File Name ..... UNDEVELOPED SITE.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	Mar 10, 2026	00:00:00
End Analysis On	Mar 11, 2026	00:00:00
Start Reporting On	Mar 10, 2026	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	30	seconds

Number of Elements

	Qty
Rain Gages	2
Subbasins	6
Nodes	10
Junctions	9
Outfalls	1
Flow Diversions	0
Inlets	0
Storage Nodes	0
Links	9
Channels	5
Pipes	4
Pumps	0
Orifices	0
Weirs	0
Outlets	0
Pollutants	0
Land Uses	0

Rainfall Details

SN	Rain Gage ID	Data Source	Data Source ID	Rainfall Type	Rain Units	State	County	Return Period (years)	Rainfa Depth (inche
1		Time Series	10-YEAR	Cumulative	inches	California	Riverside (Desert Center)	10	1.80

Subbasin Summary

SN	Subbasin ID	Area (ac)	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	SHED-A	15.00	80.00	1.80	0.45	6.68	1.77	0 02:08:16
2	SHED-B	0.90	95.00	1.80	1.29	1.16	1.68	0 00:07:31
3	SHED-C	1.03	95.00	1.80	1.29	1.33	2.00	0 00:06:09
4	SHED-D	0.14	95.00	1.80	1.29	0.18	0.28	0 00:05:00
5	SHED-E	0.06	95.00	1.80	1.27	0.08	0.12	0 00:05:00
6	SHED-F	1.60	95.00	1.80	1.29	2.07	2.84	0 00:09:18

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft^2)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)
1	JB-1	Junction	23.30	26.00	0.00	6.00	0.00	1.77	24.23	0.00	1.77
2	JP2	Junction	23.20	25.50	0.00	6.00	0.00	1.77	24.23	0.00	1.97
3	JP3	Junction	25.00	25.50	0.00	6.00	0.00	1.60	25.18	0.00	0.82
4	JP4	Junction	23.10	25.50	0.00	6.00	0.00	1.88	24.23	0.00	1.87
5	JP5	Junction	23.05	25.50	0.00	6.00	0.00	1.85	24.22	0.00	1.83
6	JP6	Junction	25.00	25.50	0.00	6.00	0.00	1.97	25.20	0.00	0.80
7	JP7	Junction	23.00	25.50	0.00	6.00	0.00	2.88	24.22	0.00	1.78
8	JP8	Junction	22.95	25.50	0.00	6.00	0.00	2.69	24.18	0.00	1.77
9	Jun-01	Junction	22.85	25.50	0.00	6.00	0.00	5.01	24.17	0.00	1.68
10	Out-01	Outfall	22.70					4.77	23.95		

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Average Slope	Diameter or Height	Manning's Roughness	Peak Flow	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Peak
					(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	
1	P-1	Pipe	JB-1	JP2	22.00	23.30	23.20	0.4500	24.000	0.0150	1.77	13.22	0.13	1.82	
2	P-4	Pipe	JP4	JP5	25.00	23.10	23.05	0.2000	24.000	0.0150	1.85	8.77	0.21	1.71	
3	P-7	Pipe	JP7	JP8	25.00	23.00	22.95	0.2000	24.000	0.0150	2.69	8.77	0.31	1.77	
4	P-9	Pipe	Jun-01	Out-01	129.00	22.85	22.70	0.1200	24.000	0.0150	4.77	6.69	0.71	2.23	
5	CH-2	Channel	JP2	JP4	145.00	23.20	23.10	0.0700	36.000	0.0320	1.76	45.88	0.04	0.53	
6	CH-3	Channel	JP3	JP4	25.00	25.00	23.10	7.6000	12.000	0.0320	1.60	45.57	0.04	0.86	
7	CH-5	Channel	JP5	JP7	51.00	23.05	23.00	0.1000	36.000	0.0320	1.85	72.75	0.03	0.46	
8	CH-6	Channel	JP6	JP7	25.00	25.00	23.00	8.0000	12.000	0.0320	1.97	46.75	0.04	0.91	
9	CH-8	Channel	JP8	Jun-01	156.00	22.95	22.85	0.0600	36.000	0.0320	2.61	58.82	0.04	0.47	

Subbasin Hydrology

Subbasin : SHED-A

Input Data

Area (ac) 15.00
Weighted Curve Number 80.00
Rain Gage ID 10YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
> 75% grass cover, Good	15.00	D	80.00
Composite Area & Weighted CN	15.00		80.00

Time of Concentration

TOC Method : SCS TR-55

Sheet Flow Equation :

Tc = (0.007 * ((n * Lf)^0.8)) / ((P^0.5) * (Sf^0.4))

Where :

Tc = Time of Concentration (hr)
n = Manning's roughness
Lf = Flow Length (ft)
P = 2 yr, 24 hr Rainfall (inches)
Sf = Slope (ft/ft)

Shallow Concentrated Flow Equation :

V = 16.1345 * (Sf^0.5) (unpaved surface)
V = 20.3282 * (Sf^0.5) (paved surface)
V = 15.0 * (Sf^0.5) (grassed waterway surface)
V = 10.0 * (Sf^0.5) (nearly bare & untilled surface)
V = 9.0 * (Sf^0.5) (cultivated straight rows surface)
V = 7.0 * (Sf^0.5) (short grass pasture surface)
V = 5.0 * (Sf^0.5) (woodland surface)
V = 2.5 * (Sf^0.5) (forest w/heavy litter surface)
Tc = (Lf / V) / (3600 sec/hr)

Where:

Tc = Time of Concentration (hr)
Lf = Flow Length (ft)
V = Velocity (ft/sec)
Sf = Slope (ft/ft)

Channel Flow Equation :

V = (1.49 * (R^(2/3)) * (Sf^0.5)) / n
R = Aq / Wp
Tc = (Lf / V) / (3600 sec/hr)

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.4	0.00	0.00
Flow Length (ft) :	300	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.04	0.00	0.00
Computed Flow Time (min) :	122.07	0.00	0.00

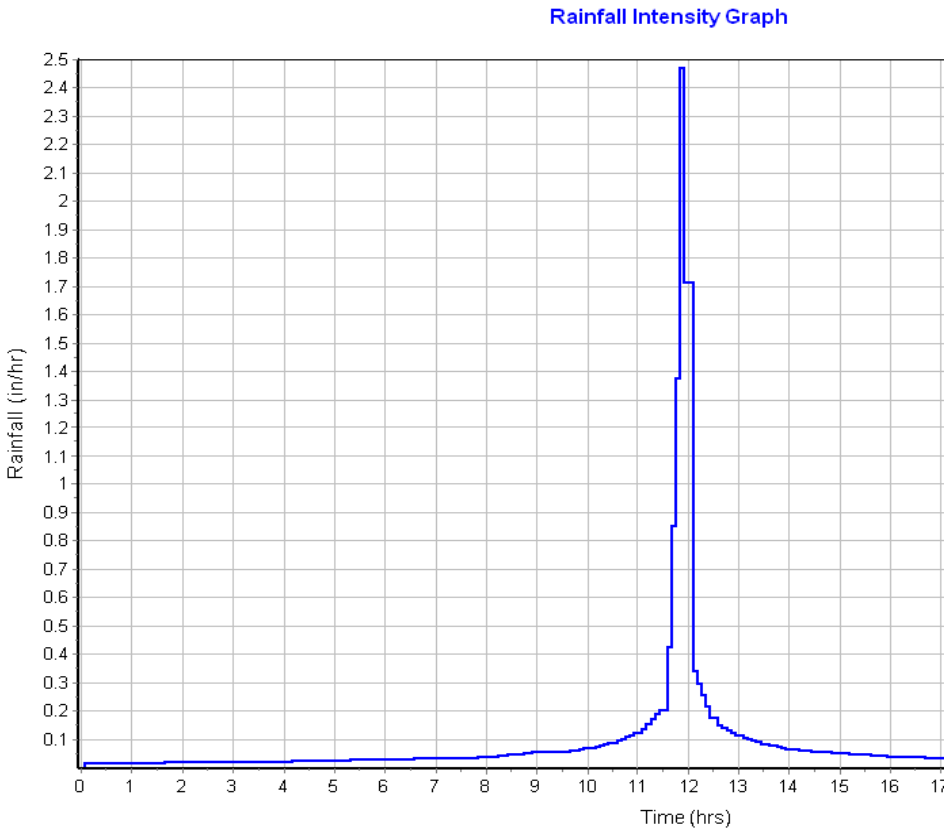
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	600	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Unpaved	Unpaved	Unpaved
Velocity (ft/sec) :	1.61	0.00	0.00
Computed Flow Time (min) :	6.21	0.00	0.00

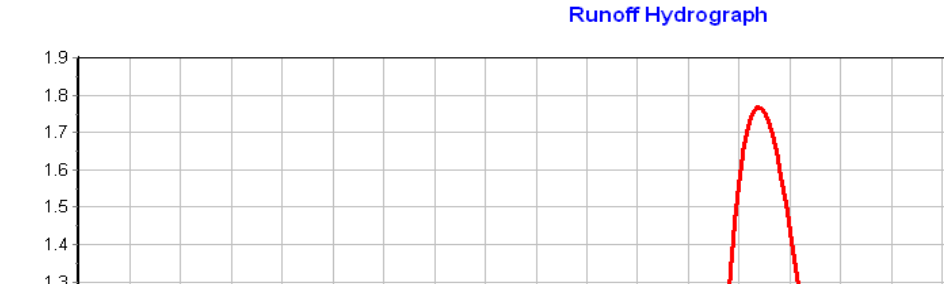
Total TOC (min) 128.28

Subbasin Runoff Results

Total Rainfall (in)	1.80
Total Runoff (in)	0.45
Peak Runoff (cfs)	1.77
Weighted Curve Number	80.00
Time of Concentration (days hh:mm:ss)	0 02:08:17

Subbasin : SHED-A





Subbasin : SHED-B

Input Data

Area (ac) 0.90
Weighted Curve Number 95.00
Rain Gage ID 10YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Urban commercial, 85% imp	0.90	D	95.00
Composite Area & Weighted CN	0.90		95.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.015	0.00	0.00
Flow Length (ft) :	135	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.48	0.00	0.00
Computed Flow Time (min) :	4.66	0.00	0.00

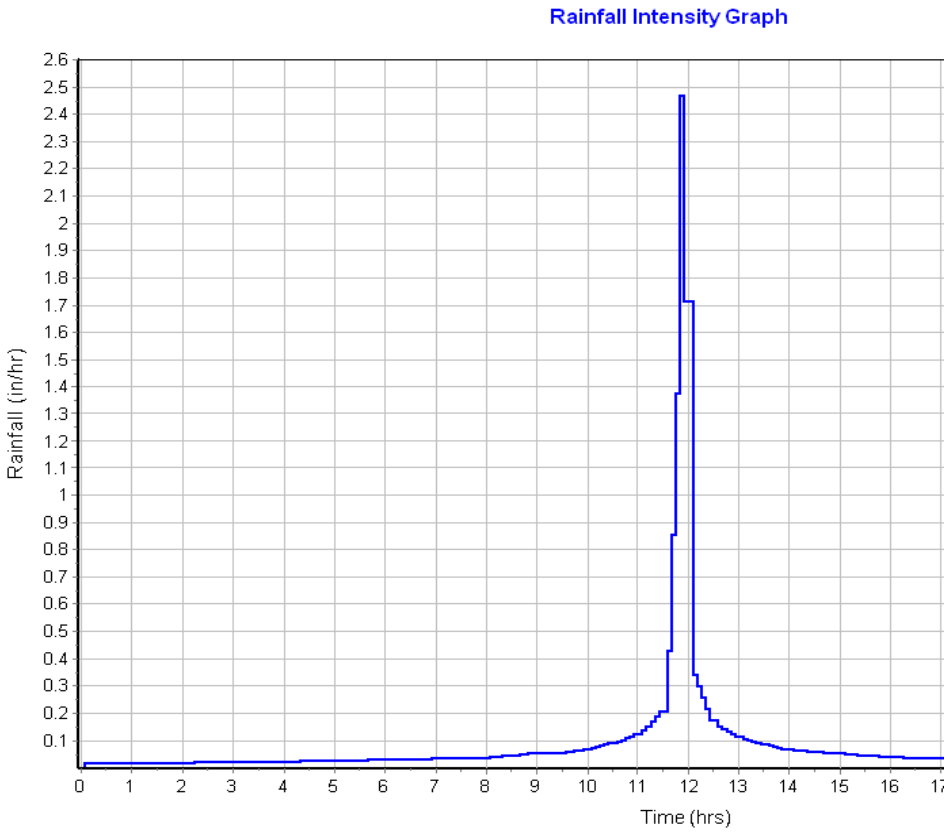
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	350	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Paved	Unpaved	Unpaved
Velocity (ft/sec) :	2.03	0.00	0.00
Computed Flow Time (min) :	2.87	0.00	0.00

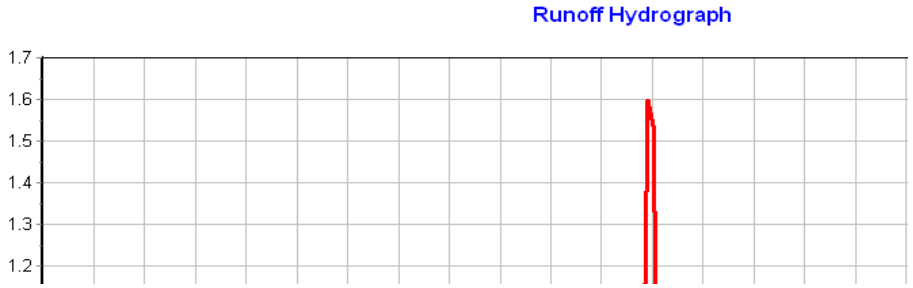
Total TOC (min) 7.53

Subbasin Runoff Results

Total Rainfall (in) 1.80
Total Runoff (in) 1.29
Peak Runoff (cfs) 1.68
Weighted Curve Number 95.00
Time of Concentration (days hh:mm:ss) 0 00:07:32

Subbasin : SHED-B





Subbasin : SHED-C

Input Data

Area (ac) 1.03
Weighted Curve Number 95.00
Rain Gage ID 10YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Urban commercial, 85% imp	1.03	D	95.00
Composite Area & Weighted CN	1.03		95.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.015	0.00	0.00
Flow Length (ft) :	115	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.47	0.00	0.00
Computed Flow Time (min) :	4.10	0.00	0.00

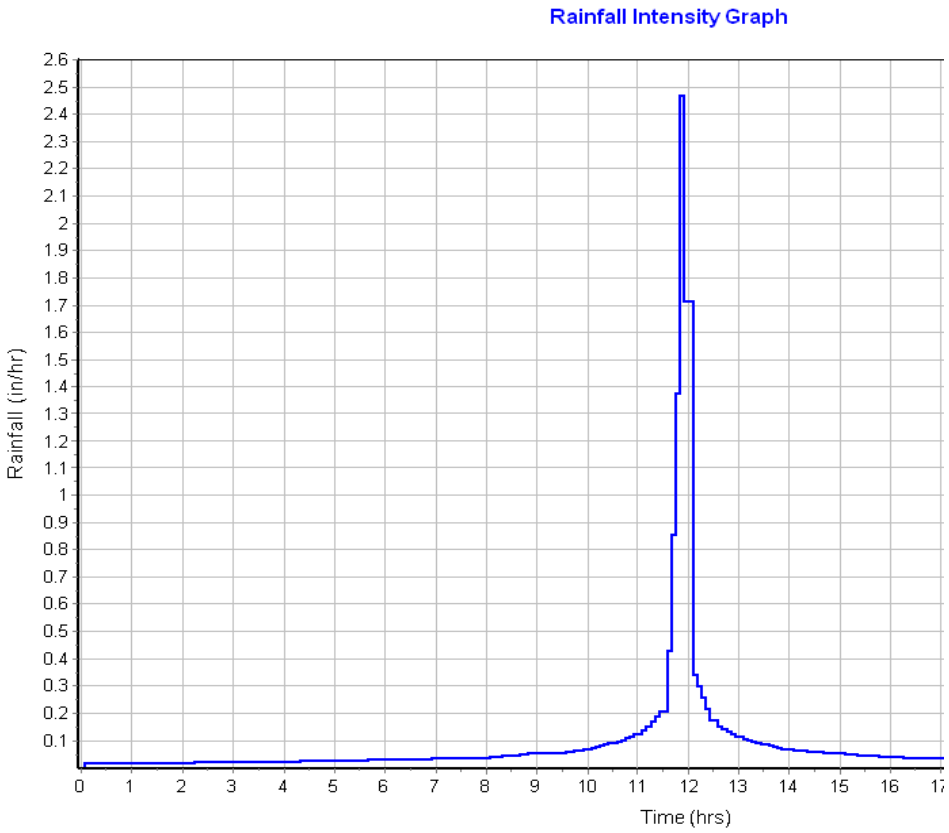
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	250	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Paved	Unpaved	Unpaved
Velocity (ft/sec) :	2.03	0.00	0.00
Computed Flow Time (min) :	2.05	0.00	0.00

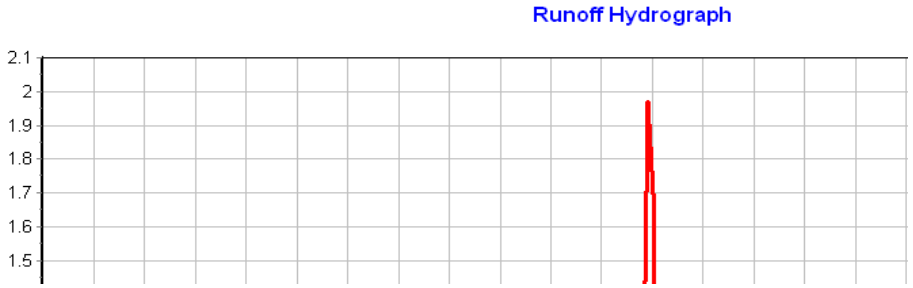
Total TOC (min) 6.15

Subbasin Runoff Results

Total Rainfall (in) 1.80
Total Runoff (in) 1.29
Peak Runoff (cfs) 2.00
Weighted Curve Number 95.00
Time of Concentration (days hh:mm:ss) 0 00:06:09

Subbasin : SHED-C





Subbasin : SHED-D

Input Data

Area (ac) 0.14
Weighted Curve Number 95.00
Rain Gage ID 10YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Urban commercial, 85% imp	0.14	D	95.00
Composite Area & Weighted CN	0.14		95.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.015	0.00	0.00
Flow Length (ft) :	25	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.34	0.00	0.00
Computed Flow Time (min) :	1.21	0.00	0.00

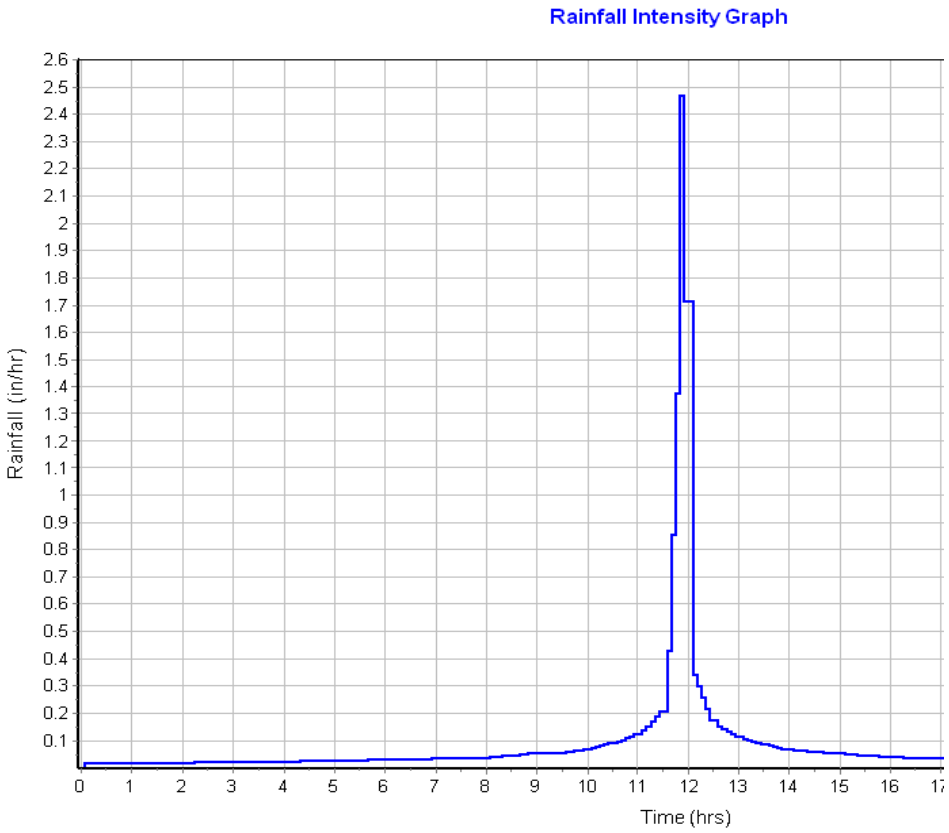
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	162	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Paved	Unpaved	Unpaved
Velocity (ft/sec) :	2.03	0.00	0.00
Computed Flow Time (min) :	1.33	0.00	0.00

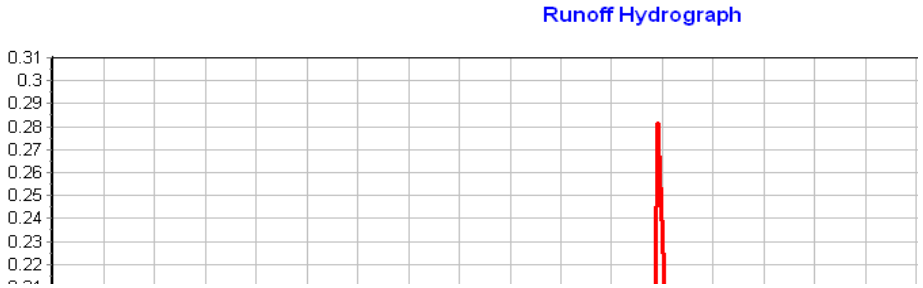
Total TOC (min) 2.54

Subbasin Runoff Results

Total Rainfall (in) 1.80
Total Runoff (in) 1.29
Peak Runoff (cfs) 0.28
Weighted Curve Number 95.00
Time of Concentration (days hh:mm:ss) 0 00:02:32

Subbasin : SHED-D





Subbasin : SHED-E

Input Data

Area (ac) 0.06
Weighted Curve Number 95.00
Rain Gage ID 10YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Urban commercial, 85% imp	0.06	D	95.00
Composite Area & Weighted CN	0.06		95.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.015	0.00	0.00
Flow Length (ft) :	25	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.34	0.00	0.00
Computed Flow Time (min) :	1.21	0.00	0.00

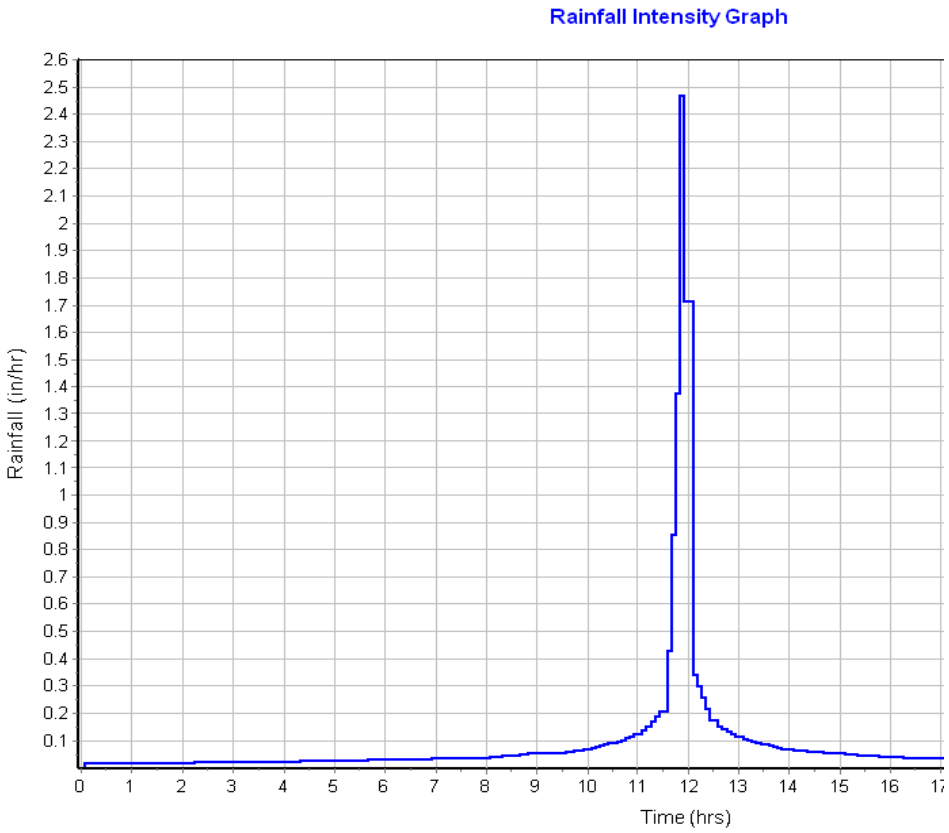
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	60	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Paved	Unpaved	Unpaved
Velocity (ft/sec) :	2.03	0.00	0.00
Computed Flow Time (min) :	0.49	0.00	0.00

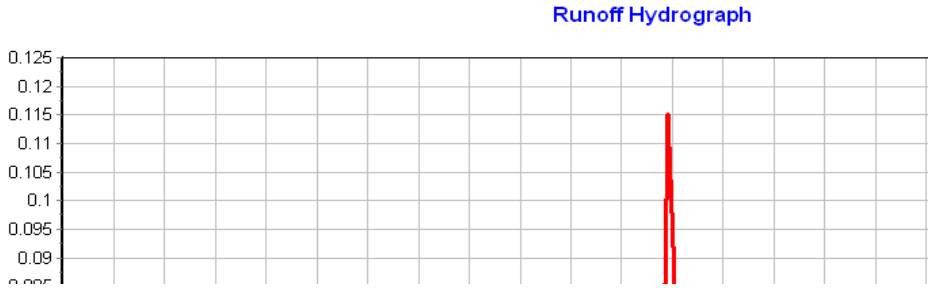
Total TOC (min) 1.70

Subbasin Runoff Results

Total Rainfall (in) 1.80
Total Runoff (in) 1.27
Peak Runoff (cfs) 0.12
Weighted Curve Number 95.00
Time of Concentration (days hh:mm:ss) 0 00:01:42

Subbasin : SHED-E





Subbasin : SHED-F

Input Data

Area (ac) 1.60
Weighted Curve Number 95.00
Rain Gage ID 10YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Urban commercial, 85% imp	1.60	D	95.00
Composite Area & Weighted CN	1.60		95.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.015	0.00	0.00
Flow Length (ft) :	125	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.48	0.00	0.00
Computed Flow Time (min) :	4.38	0.00	0.00

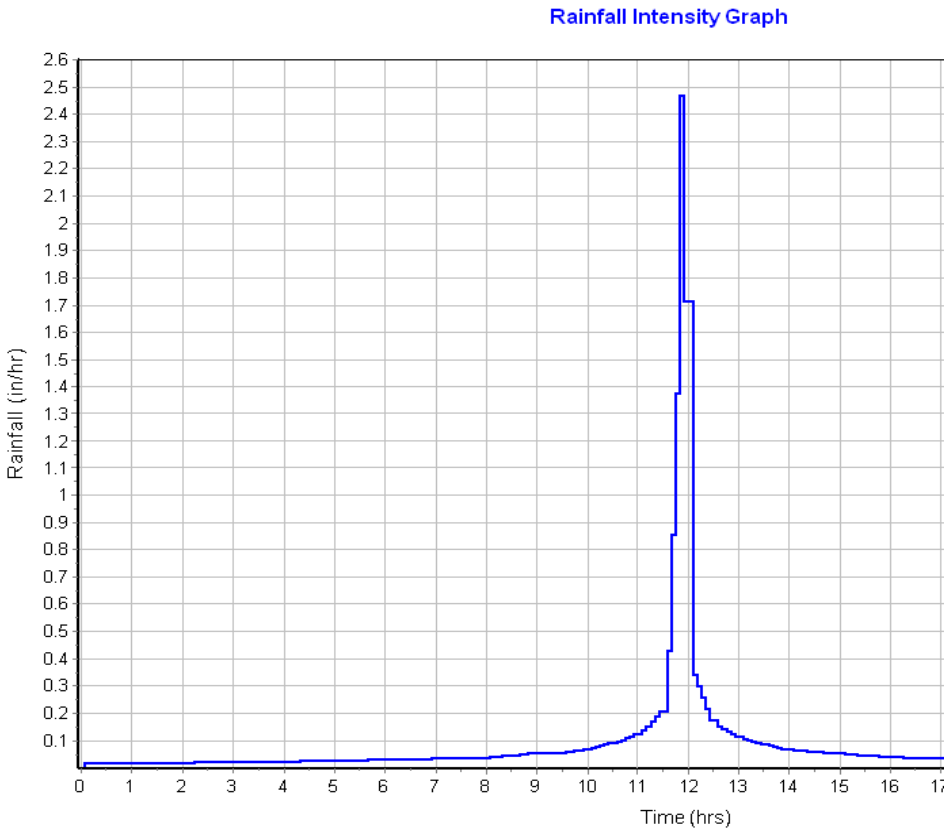
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	600	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Paved	Unpaved	Unpaved
Velocity (ft/sec) :	2.03	0.00	0.00
Computed Flow Time (min) :	4.93	0.00	0.00

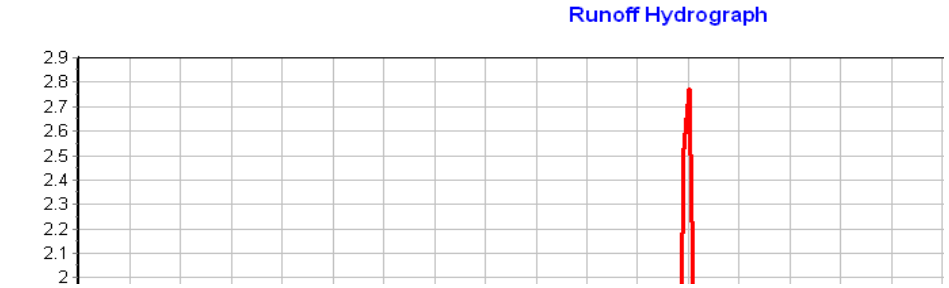
Total TOC (min) 9.31

Subbasin Runoff Results

Total Rainfall (in) 1.80
Total Runoff (in) 1.29
Peak Runoff (cfs) 2.84
Weighted Curve Number 95.00
Time of Concentration (days hh:mm:ss) 0 00:09:19

Subbasin : SHED-F





Junction Input

SN	Element ID	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Ground/Rim (Max) Offset (ft)	Initial Water Elevation (ft)	Initial Water Depth (ft)	Surcharge Elevation (ft)	Surcharge Depth (ft)	Ponded Area (ft^2)	Minimum Pipe Cover (in)
1	JB-1	23.30	26.00	2.70	0.00	-23.30	6.00	-20.00	0.00	0.00
2	JP2	23.20	25.50	2.30	0.00	-23.20	6.00	-19.50	0.00	0.00
3	JP3	25.00	25.50	0.50	0.00	-25.00	6.00	-19.50	0.00	0.00
4	JP4	23.10	25.50	2.40	0.00	-23.10	6.00	-19.50	0.00	0.00
5	JP5	23.05	25.50	2.45	0.00	-23.05	6.00	-19.50	0.00	0.00
6	JP6	25.00	25.50	0.50	0.00	-25.00	6.00	-19.50	0.00	0.00
7	JP7	23.00	25.50	2.50	0.00	-23.00	6.00	-19.50	0.00	0.00
8	JP8	22.95	25.50	2.55	0.00	-22.95	6.00	-19.50	0.00	0.00
9	Jun-01	22.85	25.50	2.65	0.00	-22.85	6.00	-19.50	0.00	0.00

Junction Results

SN	Element ID	Peak Inflow (cfs)	Peak Lateral Inflow (cfs)	Max HGL Elevation Attained (ft)	Max HGL Depth Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Average HGL Elevation Attained (ft)	Average HGL Depth Attained (ft)	Time of Max HGL Occurrence (days hh:mm)
1	JB-1	1.77	1.77	24.23	0.93	0.00	1.77	23.68	0.38	0 12:08
2	JP2	1.77	0.00	24.23	1.03	0.00	1.97	23.61	0.41	0 12:08
3	JP3	1.60	1.60	25.18	0.18	0.00	0.82	25.03	0.03	0 12:00
4	JP4	1.88	0.28	24.23	1.13	0.00	1.87	23.56	0.46	0 12:08
5	JP5	1.85	0.00	24.22	1.17	0.00	1.83	23.51	0.46	0 12:08
6	JP6	1.97	1.97	25.20	0.20	0.00	0.80	25.03	0.03	0 12:00
7	JP7	2.88	0.11	24.22	1.22	0.00	1.78	23.49	0.49	0 12:08
8	JP8	2.69	0.00	24.18	1.23	0.00	1.77	23.43	0.48	0 12:08
9	Jun-01	5.01	2.77	24.17	1.32	0.00	1.68	23.38	0.53	0 12:08

Channel Input

SN	Element ID	Length (ft)	Inlet Invert Elevation (ft)	Inlet Invert Offset (ft)	Outlet Invert Elevation (ft)	Outlet Invert Offset (ft)	Total Drop (ft)	Average Slope (%)	Shape	Height (ft)	Width (ft)	Manning's Roughness	Entr Lo
1	CH-2	145.00	23.20	0.00	23.10	0.00	0.10	0.0700	Trapezoidal	3.000	15.000	0.0320	0.
2	CH-3	25.00	25.00	0.00	23.10	0.00	1.90	7.6000	Trapezoidal	1.000	8.000	0.0320	0.
3	CH-5	51.00	23.05	0.00	23.00	0.00	0.05	0.1000	Trapezoidal	3.000	21.000	0.0320	0.
4	CH-6	25.00	25.00	0.00	23.00	0.00	2.00	8.0000	Trapezoidal	1.000	8.000	0.0320	0.
5	CH-8	156.00	22.95	0.00	22.85	0.00	0.10	0.0600	Trapezoidal	3.000	21.000	0.0320	0.

Channel Results

SN	Element ID	Peak Flow (cfs)	Time of Peak Flow Occurrence (days hh:mm)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Travel Time (min)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)
1	CH-2	1.76	0 13:30	45.88	0.04	0.53	4.56	1.07	0.36	0.00
2	CH-3	1.60	0 12:00	45.57	0.04	0.86	0.48	0.59	0.59	0.00
3	CH-5	1.85	0 13:31	72.75	0.03	0.46	1.85	1.18	0.40	0.00
4	CH-6	1.97	0 12:00	46.75	0.04	0.91	0.46	0.59	0.60	0.00
5	CH-8	2.61	0 12:13	58.82	0.04	0.47	5.53	1.27	0.43	0.00

Pipe Input

SN	Element ID	Length (ft)	Inlet Invert Elevation (ft)	Inlet Invert Offset (ft)	Outlet Invert Elevation (ft)	Outlet Invert Offset (ft)	Total Drop (ft)	Average Slope (%)	Pipe Shape	Pipe Diameter or Height (in)	Pipe Width (in)	Manning's Roughness
1	P-1	22.00	23.30	0.00	23.20	0.00	0.10	0.4500	CIRCULAR	24.000	24.000	0.0150
2	P-4	25.00	23.10	0.00	23.05	0.00	0.05	0.2000	CIRCULAR	24.000	24.000	0.0150
3	P-7	25.00	23.00	0.00	22.95	0.00	0.05	0.2000	CIRCULAR	24.000	24.000	0.0150
4	P-9	129.00	22.85	0.00	22.70	0.00	0.15	0.1200	CIRCULAR	24.000	24.000	0.0150

Pipe Results

SN	Element ID	Peak Flow (cfs)	Time of Peak Flow Occurrence (days hh:mm)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Travel Time (min)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)
1	P-1	1.77	0 13:25	13.22	0.13	1.82	0.20	0.97	0.49	0.00
2	P-4	1.85	0 13:30	8.77	0.21	1.71	0.24	1.14	0.57	0.00
3	P-7	2.69	0 12:05	8.77	0.31	1.77	0.24	1.22	0.61	0.00
4	P-9	4.77	0 12:08	6.69	0.71	2.23	0.96	1.28	0.64	0.00

Project Description

File Name ..... UNDEVELOPED SITE.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	Mar 10, 2026	00:00:00
End Analysis On	Mar 11, 2026	00:00:00
Start Reporting On	Mar 10, 2026	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	30	seconds

Number of Elements

	Qty
Rain Gages	2
Subbasins	6
Nodes	10
Junctions	9
Outfalls	1
Flow Diversions	0
Inlets	0
Storage Nodes	0
Links	9
Channels	5
Pipes	4
Pumps	0
Orifices	0
Weirs	0
Outlets	0
Pollutants	0
Land Uses	0

Rainfall Details

SN	Rain Gage ID	Data Source	Data Source ID	Rainfall Type	Rain Units	State	County	Return Period (years)	Rainfa Depth (inche
1		Time Series	100 YEAR	Cumulative	inches	California	Riverside (Desert Center)	100	3.00

Subbasin Summary

SN	Subbasin ID	Area (ac)	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	SHED-A	15.00	80.00	3.00	1.25	18.75	5.68	0 02:08:16
2	SHED-B	0.90	95.00	3.00	2.45	2.20	3.08	0 00:07:31
3	SHED-C	1.03	95.00	3.00	2.45	2.52	3.65	0 00:06:09
4	SHED-D	0.14	95.00	3.00	2.45	0.34	0.52	0 00:05:00
5	SHED-E	0.06	95.00	3.00	2.43	0.15	0.21	0 00:05:00
6	SHED-F	1.60	95.00	3.00	2.45	3.92	5.21	0 00:09:18

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft^2)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)
1	JB-1	Junction	23.30	26.00	0.00	6.00	0.00	5.67	25.05	0.00	0.95
2	JP2	Junction	23.20	25.50	0.00	6.00	0.00	5.67	25.05	0.00	1.15
3	JP3	Junction	25.00	25.50	0.00	6.00	0.00	2.95	25.25	0.00	0.75
4	JP4	Junction	23.10	25.50	0.00	6.00	0.00	5.79	25.05	0.00	1.05
5	JP5	Junction	23.05	25.50	0.00	6.00	0.00	5.75	25.03	0.00	1.02
6	JP6	Junction	25.00	25.50	0.00	6.00	0.00	3.62	25.28	0.00	0.72
7	JP7	Junction	23.00	25.50	0.00	6.00	0.00	5.91	25.03	0.00	0.97
8	JP8	Junction	22.95	25.50	0.00	6.00	0.00	5.89	24.99	0.00	0.96
9	Jun-01	Junction	22.85	25.50	0.00	6.00	0.00	8.20	24.99	0.00	0.86
10	Out-01	Outfall	22.70					7.67	24.70		

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Average Slope	Diameter or Height	Manning's Roughness	Peak Flow	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Peak
					(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	
1	P-1	Pipe	JB-1	JP2	22.00	23.30	23.20	0.4500	24.000	0.0150	5.67	13.22	0.43	2.28	
2	P-4	Pipe	JP4	JP5	25.00	23.10	23.05	0.2000	24.000	0.0150	5.75	8.77	0.66	2.22	
3	P-7	Pipe	JP7	JP8	25.00	23.00	22.95	0.2000	24.000	0.0150	5.89	8.77	0.67	2.30	
4	P-9	Pipe	Jun-01	Out-01	129.00	22.85	22.70	0.1200	24.000	0.0150	7.67	6.69	1.15	2.44	
5	CH-2	Channel	JP2	JP4	145.00	23.20	23.10	0.0700	36.000	0.0320	5.62	45.88	0.12	0.63	
6	CH-3	Channel	JP3	JP4	25.00	25.00	23.10	7.6000	12.000	0.0320	2.95	45.57	0.06	1.22	
7	CH-5	Channel	JP5	JP7	51.00	23.05	23.00	0.1000	36.000	0.0320	5.74	72.75	0.08	0.51	
8	CH-6	Channel	JP6	JP7	25.00	25.00	23.00	8.0000	12.000	0.0320	3.62	46.75	0.08	1.45	
9	CH-8	Channel	JP8	Jun-01	156.00	22.95	22.85	0.0600	36.000	0.0320	5.87	58.82	0.10	0.52	

Subbasin Hydrology

Subbasin : SHED-A

Input Data

Area (ac) 15.00
Weighted Curve Number 80.00
Rain Gage ID 100YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
> 75% grass cover, Good	15.00	D	80.00
Composite Area & Weighted CN	15.00		80.00

Time of Concentration

TOC Method : SCS TR-55

Sheet Flow Equation :

Tc = (0.007 * ((n * Lf)^0.8)) / ((P^0.5) * (Sf^0.4))

Where :

Tc = Time of Concentration (hr)
n = Manning's roughness
Lf = Flow Length (ft)
P = 2 yr, 24 hr Rainfall (inches)
Sf = Slope (ft/ft)

Shallow Concentrated Flow Equation :

V = 16.1345 * (Sf^0.5) (unpaved surface)
V = 20.3282 * (Sf^0.5) (paved surface)
V = 15.0 * (Sf^0.5) (grassed waterway surface)
V = 10.0 * (Sf^0.5) (nearly bare & untilled surface)
V = 9.0 * (Sf^0.5) (cultivated straight rows surface)
V = 7.0 * (Sf^0.5) (short grass pasture surface)
V = 5.0 * (Sf^0.5) (woodland surface)
V = 2.5 * (Sf^0.5) (forest w/heavy litter surface)
Tc = (Lf / V) / (3600 sec/hr)

Where:

Tc = Time of Concentration (hr)
Lf = Flow Length (ft)
V = Velocity (ft/sec)
Sf = Slope (ft/ft)

Channel Flow Equation :

V = (1.49 * (R^(2/3)) * (Sf^0.5)) / n
R = Aq / Wp
Tc = (Lf / V) / (3600 sec/hr)

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.4	0.00	0.00
Flow Length (ft) :	300	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.04	0.00	0.00
Computed Flow Time (min) :	122.07	0.00	0.00

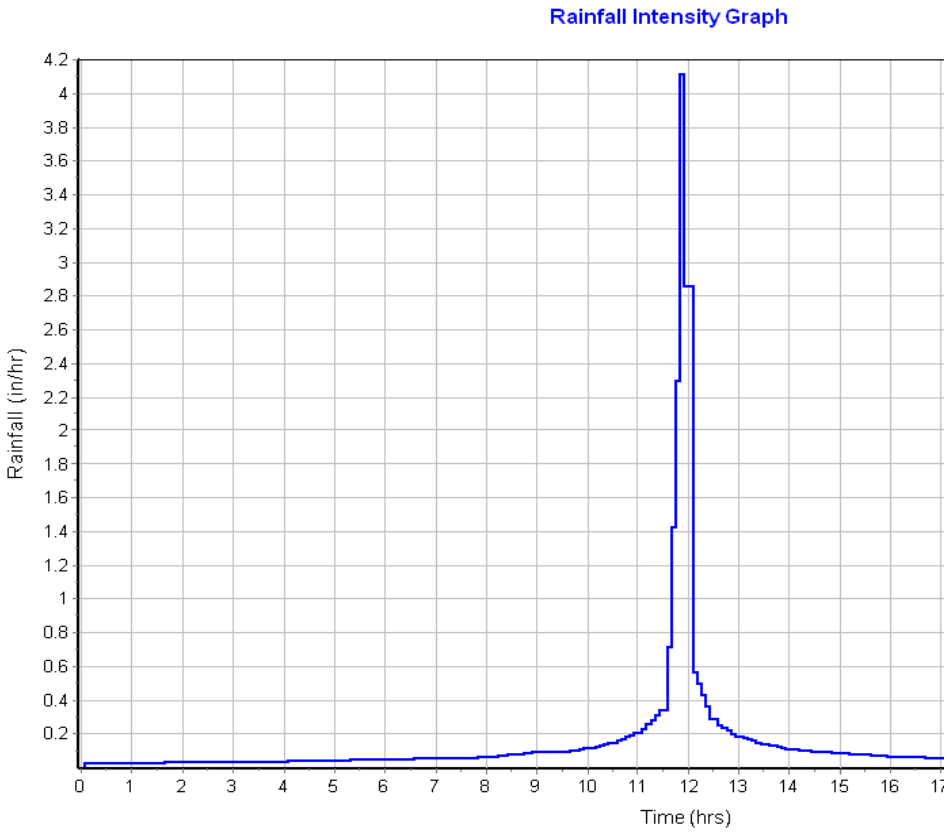
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	600	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Unpaved	Unpaved	Unpaved
Velocity (ft/sec) :	1.61	0.00	0.00
Computed Flow Time (min) :	6.21	0.00	0.00

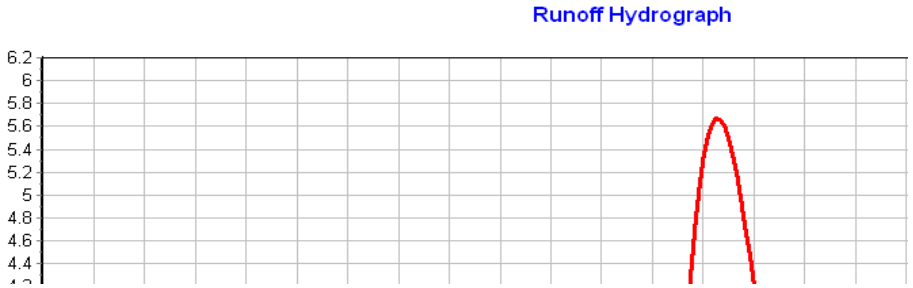
Total TOC (min) 128.28

Subbasin Runoff Results

Total Rainfall (in)	3.00
Total Runoff (in)	1.25
Peak Runoff (cfs)	5.68
Weighted Curve Number	80.00
Time of Concentration (days hh:mm:ss)	0 02:08:17

Subbasin : SHED-A





Subbasin : SHED-B

Input Data

Area (ac) 0.90
Weighted Curve Number 95.00
Rain Gage ID 100YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Urban commercial, 85% imp	0.90	D	95.00
Composite Area & Weighted CN	0.90		95.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.015	0.00	0.00
Flow Length (ft) :	135	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.48	0.00	0.00
Computed Flow Time (min) :	4.66	0.00	0.00

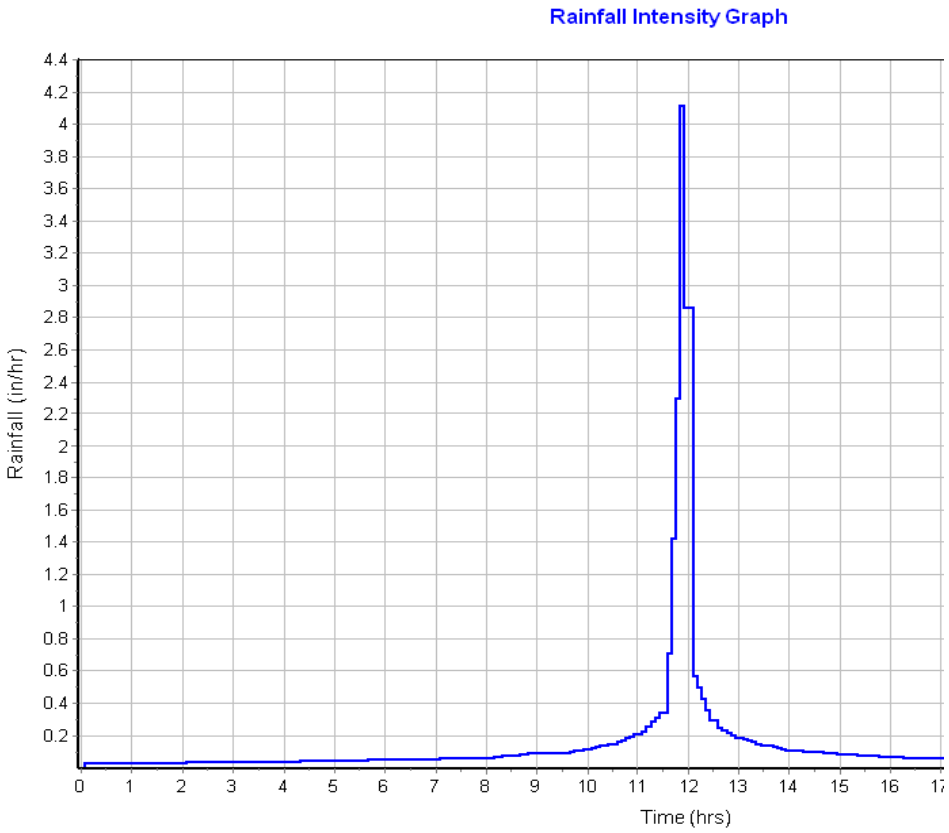
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	350	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Paved	Unpaved	Unpaved
Velocity (ft/sec) :	2.03	0.00	0.00
Computed Flow Time (min) :	2.87	0.00	0.00

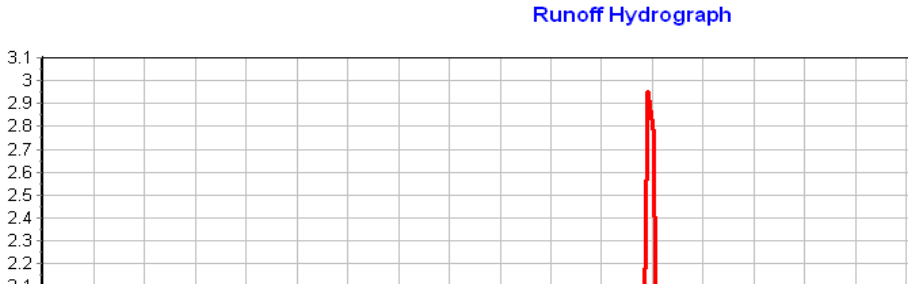
Total TOC (min) 7.53

Subbasin Runoff Results

Total Rainfall (in) 3.00
Total Runoff (in) 2.45
Peak Runoff (cfs) 3.08
Weighted Curve Number 95.00
Time of Concentration (days hh:mm:ss) 0 00:07:32

Subbasin : SHED-B





Subbasin : SHED-C

Input Data

Area (ac) 1.03
Weighted Curve Number 95.00
Rain Gage ID 100YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Urban commercial, 85% imp	1.03	D	95.00
Composite Area & Weighted CN	1.03		95.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.015	0.00	0.00
Flow Length (ft) :	115	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.47	0.00	0.00
Computed Flow Time (min) :	4.10	0.00	0.00

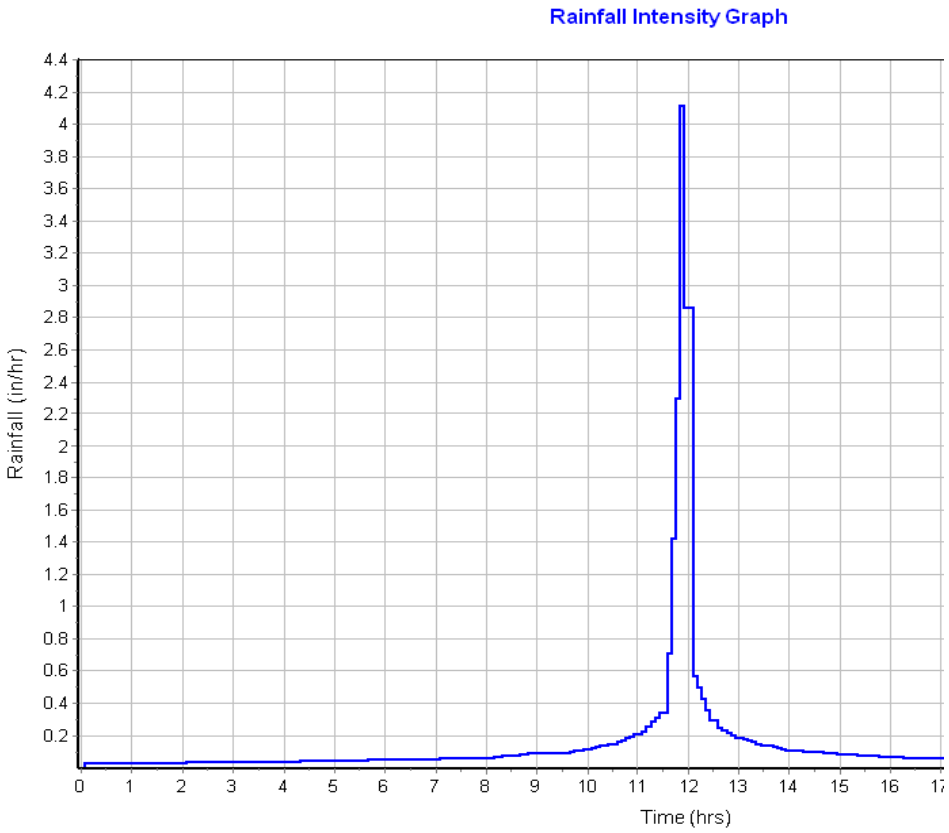
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	250	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Paved	Unpaved	Unpaved
Velocity (ft/sec) :	2.03	0.00	0.00
Computed Flow Time (min) :	2.05	0.00	0.00

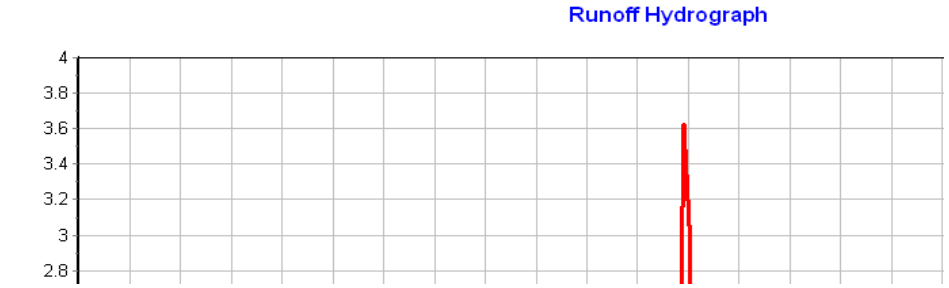
Total TOC (min) 6.15

Subbasin Runoff Results

Total Rainfall (in) 3.00
Total Runoff (in) 2.45
Peak Runoff (cfs) 3.65
Weighted Curve Number 95.00
Time of Concentration (days hh:mm:ss) 0 00:06:09

Subbasin : SHED-C





Subbasin : SHED-D

Input Data

Area (ac) 0.14
Weighted Curve Number 95.00
Rain Gage ID 100YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Urban commercial, 85% imp	0.14	D	95.00
Composite Area & Weighted CN	0.14		95.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.015	0.00	0.00
Flow Length (ft) :	25	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.34	0.00	0.00
Computed Flow Time (min) :	1.21	0.00	0.00

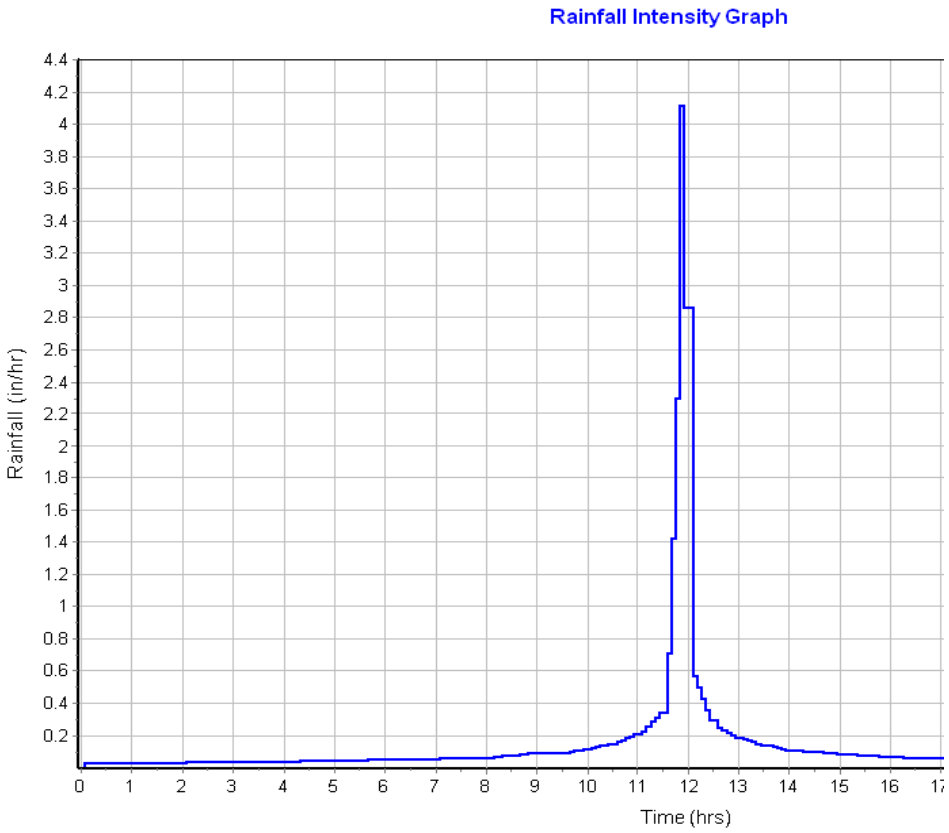
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	162	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Paved	Unpaved	Unpaved
Velocity (ft/sec) :	2.03	0.00	0.00
Computed Flow Time (min) :	1.33	0.00	0.00

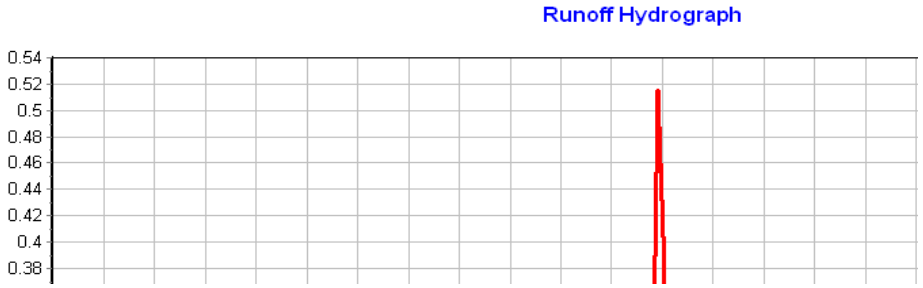
Total TOC (min) 2.54

Subbasin Runoff Results

Total Rainfall (in) 3.00
Total Runoff (in) 2.45
Peak Runoff (cfs) 0.52
Weighted Curve Number 95.00
Time of Concentration (days hh:mm:ss) 0 00:02:32

Subbasin : SHED-D





Subbasin : SHED-E

Input Data

Area (ac) 0.06
Weighted Curve Number 95.00
Rain Gage ID 100YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Urban commercial, 85% imp	0.06	D	95.00
Composite Area & Weighted CN	0.06		95.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.015	0.00	0.00
Flow Length (ft) :	25	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.34	0.00	0.00
Computed Flow Time (min) :	1.21	0.00	0.00

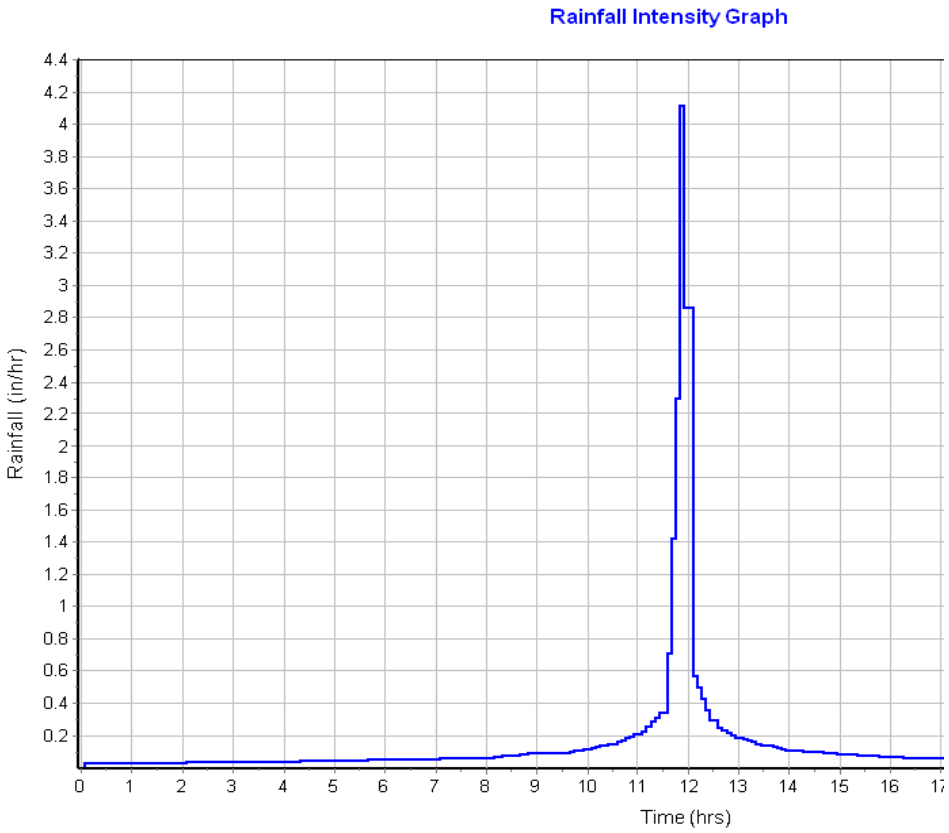
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	60	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Paved	Unpaved	Unpaved
Velocity (ft/sec) :	2.03	0.00	0.00
Computed Flow Time (min) :	0.49	0.00	0.00

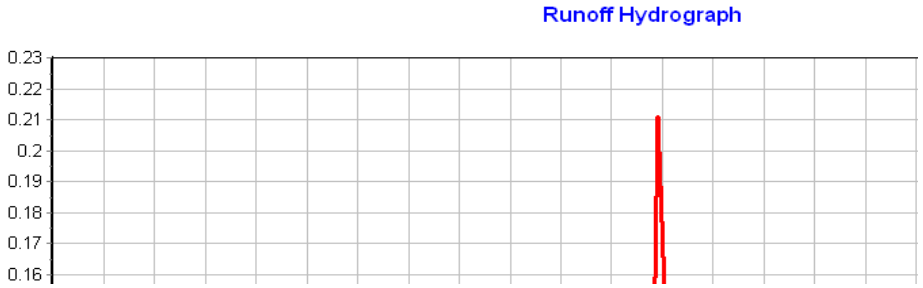
Total TOC (min) 1.70

Subbasin Runoff Results

Total Rainfall (in) 3.00
Total Runoff (in) 2.43
Peak Runoff (cfs) 0.21
Weighted Curve Number 95.00
Time of Concentration (days hh:mm:ss) 0 00:01:42

Subbasin : SHED-E





Subbasin : SHED-F

Input Data

Area (ac) 1.60
Weighted Curve Number 95.00
Rain Gage ID 100YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Urban commercial, 85% imp	1.60	D	95.00
Composite Area & Weighted CN	1.60		95.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.015	0.00	0.00
Flow Length (ft) :	125	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.48	0.00	0.00
Computed Flow Time (min) :	4.38	0.00	0.00

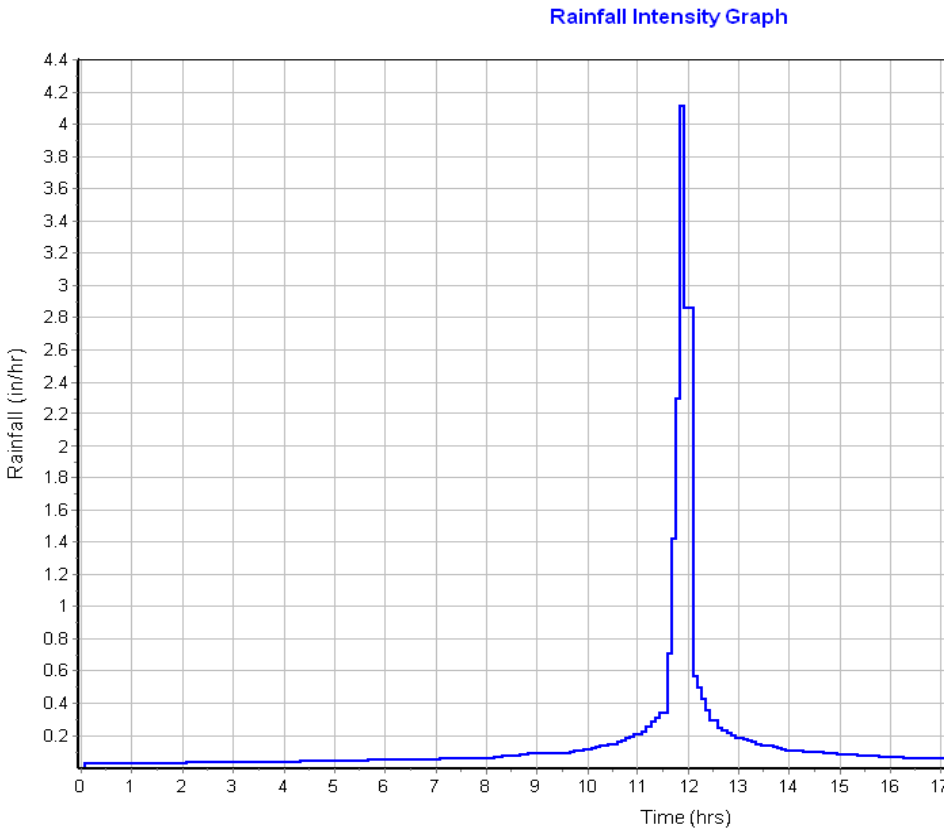
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	600	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Paved	Unpaved	Unpaved
Velocity (ft/sec) :	2.03	0.00	0.00
Computed Flow Time (min) :	4.93	0.00	0.00

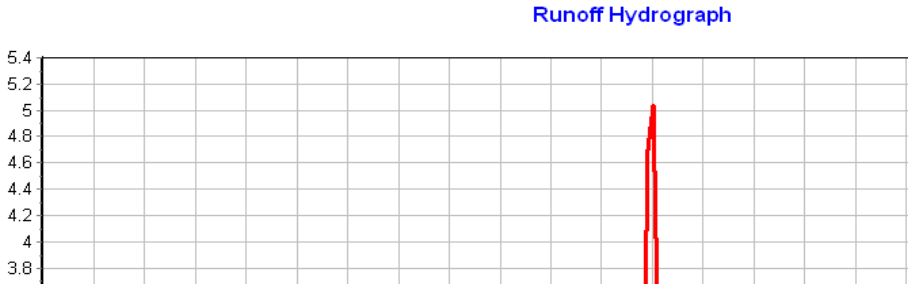
Total TOC (min) 9.31

Subbasin Runoff Results

Total Rainfall (in) 3.00
Total Runoff (in) 2.45
Peak Runoff (cfs) 5.21
Weighted Curve Number 95.00
Time of Concentration (days hh:mm:ss) 0 00:09:19

Subbasin : SHED-F





Junction Input

SN	Element ID	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Ground/Rim (Max) Offset (ft)	Initial Water Elevation (ft)	Initial Water Depth (ft)	Surcharge Elevation (ft)	Surcharge Depth (ft)	Ponded Area (ft^2)	Minimum Pipe Cover (in)
1	JB-1	23.30	26.00	2.70	0.00	-23.30	6.00	-20.00	0.00	0.00
2	JP2	23.20	25.50	2.30	0.00	-23.20	6.00	-19.50	0.00	0.00
3	JP3	25.00	25.50	0.50	0.00	-25.00	6.00	-19.50	0.00	0.00
4	JP4	23.10	25.50	2.40	0.00	-23.10	6.00	-19.50	0.00	0.00
5	JP5	23.05	25.50	2.45	0.00	-23.05	6.00	-19.50	0.00	0.00
6	JP6	25.00	25.50	0.50	0.00	-25.00	6.00	-19.50	0.00	0.00
7	JP7	23.00	25.50	2.50	0.00	-23.00	6.00	-19.50	0.00	0.00
8	JP8	22.95	25.50	2.55	0.00	-22.95	6.00	-19.50	0.00	0.00
9	Jun-01	22.85	25.50	2.65	0.00	-22.85	6.00	-19.50	0.00	0.00

Junction Results

SN	Element ID	Peak Inflow (cfs)	Peak Lateral Inflow (cfs)	Max HGL Elevation Attained (ft)	Max HGL Depth Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Average HGL Elevation Attained (ft)	Average HGL Depth Attained (ft)	Time of Max HGL Occurrence (days hh:mm)
1	JB-1	5.67	5.67	25.05	1.75	0.00	0.95	24.00	0.70	0 12:10
2	JP2	5.67	0.00	25.05	1.85	0.00	1.15	23.93	0.73	0 12:10
3	JP3	2.95	2.95	25.25	0.25	0.00	0.75	25.04	0.04	0 12:00
4	JP4	5.79	0.52	25.05	1.95	0.00	1.05	23.89	0.79	0 12:10
5	JP5	5.75	0.00	25.03	1.98	0.00	1.02	23.82	0.77	0 12:09
6	JP6	3.62	3.62	25.28	0.28	0.00	0.72	25.04	0.04	0 12:00
7	JP7	5.91	0.21	25.03	2.03	0.00	0.97	23.81	0.81	0 12:09
8	JP8	5.89	0.00	24.99	2.04	0.00	0.96	23.74	0.79	0 12:10
9	Jun-01	8.20	5.03	24.99	2.14	0.00	0.86	23.70	0.85	0 12:10

Channel Input

SN	Element ID	Length (ft)	Inlet Invert Elevation (ft)	Inlet Invert Offset (ft)	Outlet Invert Elevation (ft)	Outlet Invert Offset (ft)	Total Drop (ft)	Average Slope (%)	Shape	Height (ft)	Width (ft)	Manning's Roughness	Entr Lo
1	CH-2	145.00	23.20	0.00	23.10	0.00	0.10	0.0700	Trapezoidal	3.000	15.000	0.0320	0.
2	CH-3	25.00	25.00	0.00	23.10	0.00	1.90	7.6000	Trapezoidal	1.000	8.000	0.0320	0.
3	CH-5	51.00	23.05	0.00	23.00	0.00	0.05	0.1000	Trapezoidal	3.000	21.000	0.0320	0.
4	CH-6	25.00	25.00	0.00	23.00	0.00	2.00	8.0000	Trapezoidal	1.000	8.000	0.0320	0.
5	CH-8	156.00	22.95	0.00	22.85	0.00	0.10	0.0600	Trapezoidal	3.000	21.000	0.0320	0.

Channel Results

SN	Element ID	Peak Flow (cfs)	Time of Peak Flow Occurrence (days hh:mm)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Travel Time (min)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)
1	CH-2	5.62	0 13:21	45.88	0.12	0.63	3.84	1.90	0.63	0.00
2	CH-3	2.95	0 12:00	45.57	0.06	1.22	0.34	0.63	0.63	0.00
3	CH-5	5.74	0 13:26	72.75	0.08	0.51	1.67	2.01	0.67	0.00
4	CH-6	3.62	0 12:00	46.75	0.08	1.45	0.29	0.64	0.64	0.00
5	CH-8	5.87	0 13:31	58.82	0.10	0.52	5.00	2.09	0.70	0.00

Pipe Input

SN	Element ID	Length (ft)	Inlet Invert Elevation (ft)	Inlet Invert Offset (ft)	Outlet Invert Elevation (ft)	Outlet Invert Offset (ft)	Total Drop (ft)	Average Slope (%)	Pipe Shape	Pipe Diameter or Height (in)	Pipe Width (in)	Manning's Roughness
1	P-1	22.00	23.30	0.00	23.20	0.00	0.10	0.4500	CIRCULAR	24.000	24.000	0.0150
2	P-4	25.00	23.10	0.00	23.05	0.00	0.05	0.2000	CIRCULAR	24.000	24.000	0.0150
3	P-7	25.00	23.00	0.00	22.95	0.00	0.05	0.2000	CIRCULAR	24.000	24.000	0.0150
4	P-9	129.00	22.85	0.00	22.70	0.00	0.15	0.1200	CIRCULAR	24.000	24.000	0.0150

Pipe Results

SN	Element ID	Peak Flow (cfs)	Time of Peak Flow Occurrence (days hh:mm)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Travel Time (min)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)
1	P-1	5.67	0 13:20	13.22	0.43	2.28	0.16	1.80	0.90	0.00
2	P-4	5.75	0 13:25	8.77	0.66	2.22	0.19	1.97	0.98	0.00
3	P-7	5.89	0 13:26	8.77	0.67	2.30	0.18	2.00	1.00	5.00
4	P-9	7.67	0 12:10	6.69	1.15	2.44	0.88	2.00	1.00	10.00

EXHIBIT F

POST-DEVELOPMENT CALCULATIONS

Revised Autodesk SSA Output

EXHIBIT F-1

10-YEAR POST-DEVELOPMENT CALCULATIONS

Developed site.SPF | 1.80-inch SCS Type II

Project Description

File Name ..... Developed site.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	Mar 09, 2026	00:00:00
End Analysis On	Mar 10, 2026	00:00:00
Start Reporting On	Mar 09, 2026	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	30	seconds

Number of Elements

	Qty
Rain Gages	3
Subbasins	8
Nodes	10
Junctions	1
Outfalls	1
Flow Diversions	0
Inlets	8
Storage Nodes	0
Links	9
Channels	0
Pipes	9
Pumps	0
Orifices	0
Weirs	0
Outlets	0
Pollutants	0
Land Uses	0

Rainfall Details

SN	Rain Gage ID	Data Source	Data Source ID	Rainfall Type	Rain Units	State	County	Return Period (years)	Rainfa Depth (inche
1		Time Series	10-YEAR	Cumulative	inches	California	Riverside (Desert Center)	10	1.80

Subbasin Summary

SN	Subbasin ID	Area (ac)	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	SHED-A	0.81	94.00	1.80	1.21	0.98	1.52	0 00:05:28
2	SHED-C	0.41	94.00	1.80	1.21	0.50	0.78	0 00:05:00
3	SHED-E	0.19	98.00	1.80	1.57	0.30	0.44	0 00:05:00
4	SHED-F	0.15	98.00	1.80	1.57	0.24	0.34	0 00:05:00
5	SHED-G	0.96	98.00	1.80	1.58	1.51	2.13	0 00:06:05
6	SHED-H	0.80	80.00	1.80	0.45	0.36	0.30	0 00:25:21
7	SUB-D	0.40	94.00	1.80	1.21	0.48	0.76	0 00:05:00
8	UPSHED	15.00	80.00	1.80	0.45	6.68	1.78	0 02:07:14

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft^2)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Mi Freeboar Attaine (f
1	MH#3	Junction	22.85	25.35	0.00	0.00	10.00	5.53	24.19	0.00	1.1
2	OUTFALL	Outfall	22.70					5.42	23.94		

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Average Slope	Diameter or Height	Manning's Roughness	Peak Flow	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Peak D
					(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	
1	Link-01	Pipe	CB#7	MH#3	46.00	23.15	22.85	0.6500	12.000	0.0150	2.39	2.49	0.96	3.05	
2	Link-02	Pipe	CB#5	CB#6	25.00	23.17	23.04	0.5200	12.000	0.0150	1.90	2.23	0.85	2.42	
3	Link-03	Pipe	CB#3	CB#2	89.00	23.38	23.30	0.0900	12.000	0.0150	1.58	0.93	1.71	2.02	
4	Link-04	Pipe	CB#1	CB#2	88.00	23.38	23.30	0.0900	12.000	0.0150	1.51	0.93	1.62	1.92	
5	Link-05	Pipe	CB#2	CB#4	25.00	23.30	23.14	0.6400	12.000	0.0150	2.89	2.23	1.30	3.67	
6	Link-09	Pipe	MH#3	OUTFALL	97.00	22.85	22.70	0.1500	24.000	0.0150	5.42	7.71	0.70	2.54	
7	Link-15	Pipe	INLET	CB#4	162.00	23.30	23.14	0.1000	24.000	0.0150	1.94	5.55	0.35	1.55	
8	Link-16	Pipe	CB#4	CB#6	141.00	23.14	23.00	0.1000	24.000	0.0150	2.42	5.95	0.41	1.62	
9	Link-17	Pipe	CB#6	MH#3	177.00	23.00	22.85	0.0800	24.000	0.0150	3.49	6.42	0.54	1.73	

Inlet Summary

SN	Element ID	Inlet Manufacturer	Manufacturer Part Number	Inlet Location	Number of Inlets	Catchbasin Invert Elevation (ft)	Max (Rim) Elevation (ft)	Initial Water Elevation (ft)	Ponded Area (ft^2)	Peak Flow (cfs)	Peak Flow Intercepted by Inlet (cfs)	Peak Flow Bypassing Inlet (cfs)	Effi during
1	CB#1	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.38	24.75	0.00	10.00	1.51	N/A	N/A	
2	CB#2	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.30	25.50	0.00	10.00	0.00	N/A	N/A	
3	CB#3	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.38	25.25	0.00	10.00	0.77	N/A	N/A	
4	CB#4	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.17	25.32	0.00	10.00	0.44	N/A	N/A	
5	CB#5	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.17	24.75	0.00	10.00	0.76	N/A	N/A	
6	CB#6	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.04	25.27	0.00	10.00	0.34	N/A	N/A	
7	CB#7	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.15	24.75	0.00	10.00	2.19	N/A	N/A	
8	INLET	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.30	25.50	0.00	10.00	1.78	N/A	N/A	

Subbasin Hydrology

Subbasin : SHED-A

Input Data

Area (ac) 0.81
Weighted Curve Number 94.00
Rain Gage ID 10-YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Urban commercial, 85% imp	0.81	C	94.00
Composite Area & Weighted CN	0.81		94.00

Time of Concentration

TOC Method : SCS TR-55

Sheet Flow Equation :

Tc = (0.007 * ((n * Lf)^0.8)) / ((P^0.5) * (Sf^0.4))

Where :

Tc = Time of Concentration (hr)
n = Manning's roughness
Lf = Flow Length (ft)
P = 2 yr, 24 hr Rainfall (inches)
Sf = Slope (ft/ft)

Shallow Concentrated Flow Equation :

V = 16.1345 * (Sf^0.5) (unpaved surface)
V = 20.3282 * (Sf^0.5) (paved surface)
V = 15.0 * (Sf^0.5) (grassed waterway surface)
V = 10.0 * (Sf^0.5) (nearly bare & untilled surface)
V = 9.0 * (Sf^0.5) (cultivated straight rows surface)
V = 7.0 * (Sf^0.5) (short grass pasture surface)
V = 5.0 * (Sf^0.5) (woodland surface)
V = 2.5 * (Sf^0.5) (forest w/heavy litter surface)
Tc = (Lf / V) / (3600 sec/hr)

Where:

Tc = Time of Concentration (hr)
Lf = Flow Length (ft)
V = Velocity (ft/sec)
Sf = Slope (ft/ft)

Channel Flow Equation :

V = (1.49 * (R^(2/3)) * (Sf^0.5)) / n
R = Aq / Wp
Tc = (Lf / V) / (3600 sec/hr)

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.015	0.00	0.00
Flow Length (ft) :	100	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.45	0.00	0.00
Computed Flow Time (min) :	3.67	0.00	0.00

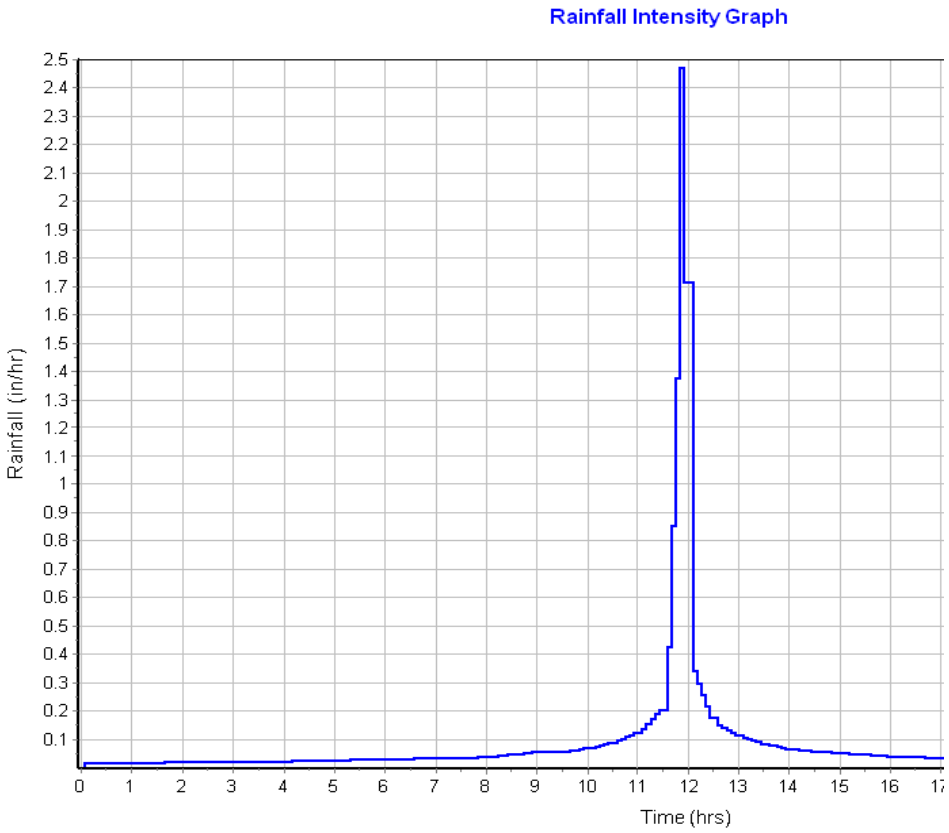
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	221	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Paved	Unpaved	Unpaved
Velocity (ft/sec) :	2.03	0.00	0.00
Computed Flow Time (min) :	1.81	0.00	0.00

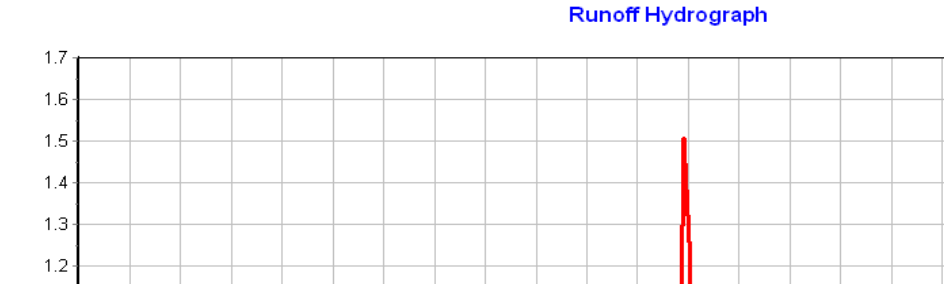
Total TOC (min) 5.48

Subbasin Runoff Results

Total Rainfall (in)	1.80
Total Runoff (in)	1.21
Peak Runoff (cfs)	1.52
Weighted Curve Number	94.00
Time of Concentration (days hh:mm:ss)	0 00:05:29

Subbasin : SHED-A





Subbasin : SHED-C

Input Data

Area (ac) 0.41
Weighted Curve Number 94.00
Rain Gage ID 10-YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Urban commercial, 85% imp	0.41	C	94.00
Composite Area & Weighted CN	0.41		94.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.015	0.00	0.00
Flow Length (ft) :	45	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.39	0.00	0.00
Computed Flow Time (min) :	1.94	0.00	0.00

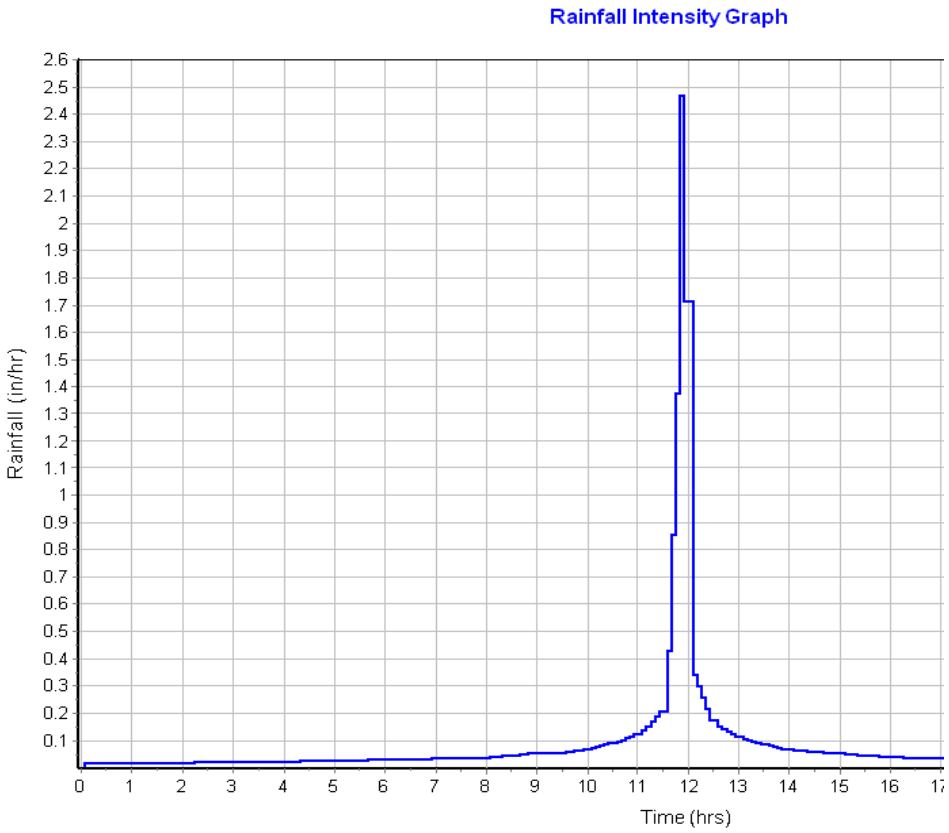
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	175	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Paved	Unpaved	Unpaved
Velocity (ft/sec) :	2.03	0.00	0.00
Computed Flow Time (min) :	1.44	0.00	0.00

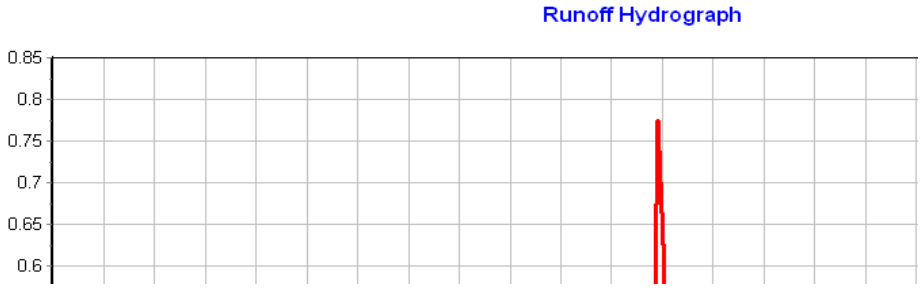
Total TOC (min) 3.37

Subbasin Runoff Results

Total Rainfall (in) 1.80
Total Runoff (in) 1.21
Peak Runoff (cfs) 0.78
Weighted Curve Number 94.00
Time of Concentration (days hh:mm:ss) 0 00:03:22

Subbasin : SHED-C





Subbasin : SHED-E

Input Data

Area (ac) 0.19
Weighted Curve Number 98.00
Rain Gage ID 10-YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.19	D	98.00
Composite Area & Weighted CN	0.19		98.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.015	0.00	0.00
Flow Length (ft) :	25	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.34	0.00	0.00
Computed Flow Time (min) :	1.21	0.00	0.00

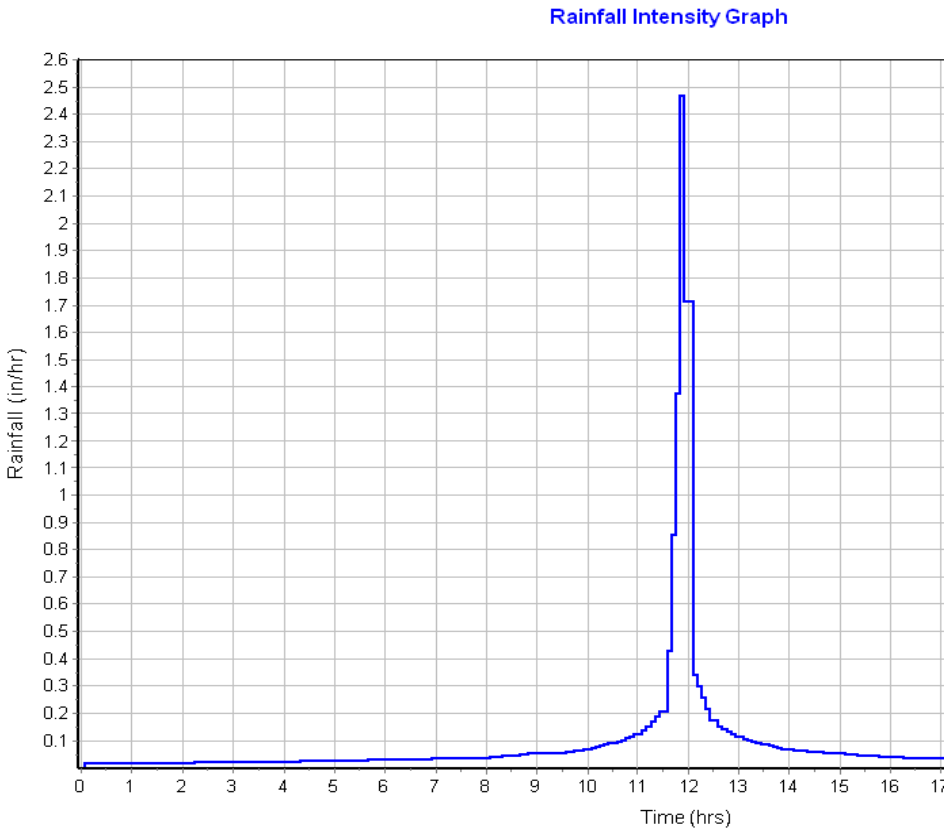
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	160	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Paved	Unpaved	Unpaved
Velocity (ft/sec) :	2.03	0.00	0.00
Computed Flow Time (min) :	1.31	0.00	0.00

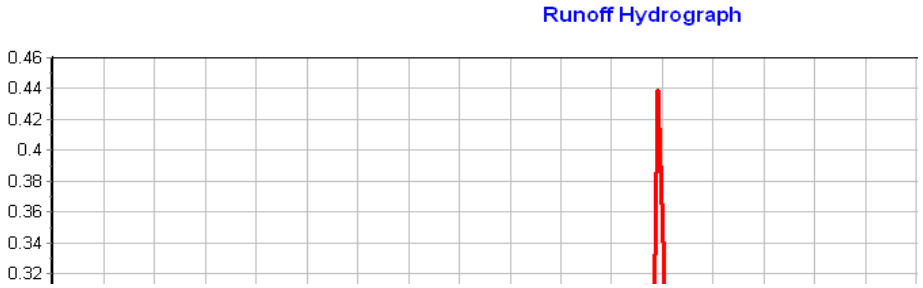
Total TOC (min) 2.52

Subbasin Runoff Results

Total Rainfall (in) 1.80
Total Runoff (in) 1.57
Peak Runoff (cfs) 0.44
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:02:31

Subbasin : SHED-E





Subbasin : SHED-F

Input Data

Area (ac) 0.15
Weighted Curve Number 98.00
Rain Gage ID 10-YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.15	D	98.00
Composite Area & Weighted CN	0.15		98.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.015	0.00	0.00
Flow Length (ft) :	25	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.34	0.00	0.00
Computed Flow Time (min) :	1.21	0.00	0.00

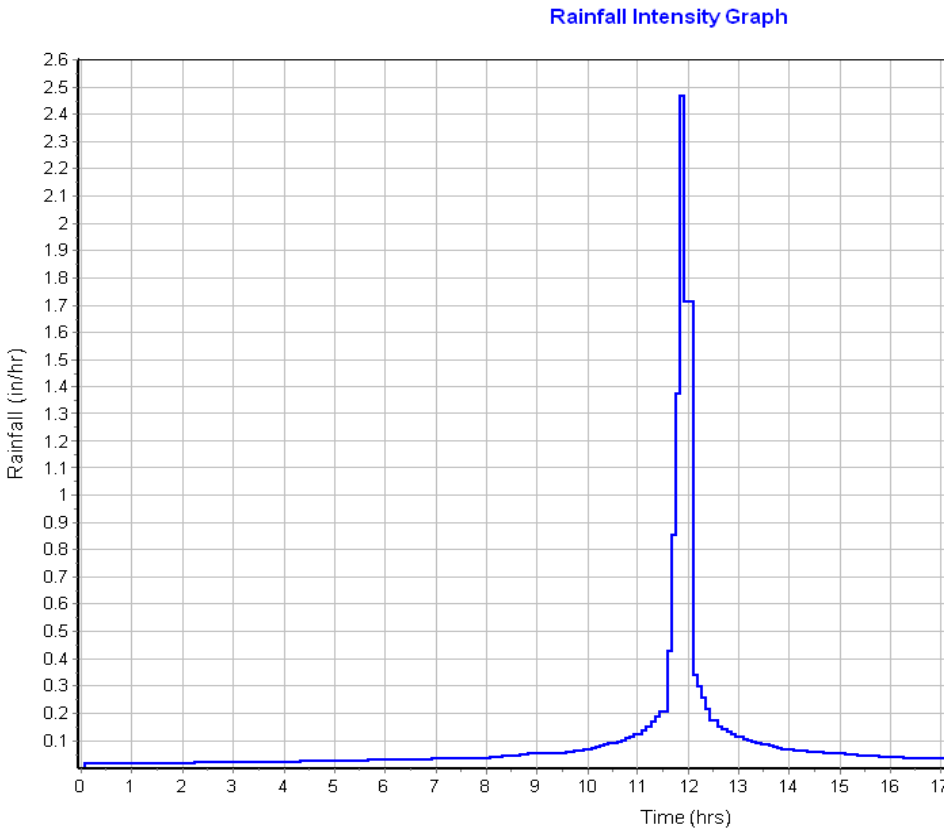
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	140	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Paved	Unpaved	Unpaved
Velocity (ft/sec) :	2.03	0.00	0.00
Computed Flow Time (min) :	1.15	0.00	0.00

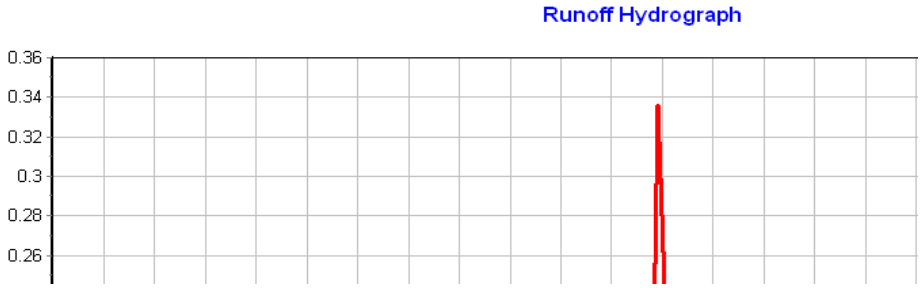
Total TOC (min) 2.36

Subbasin Runoff Results

Total Rainfall (in) 1.80
Total Runoff (in) 1.57
Peak Runoff (cfs) 0.34
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:02:22

Subbasin : SHED-F





Subbasin : SHED-G

Input Data

Area (ac) 0.96
Weighted Curve Number 98.00
Rain Gage ID 10-YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.96	D	98.00
Composite Area & Weighted CN	0.96		98.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.015	0.00	0.00
Flow Length (ft) :	110	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.46	0.00	0.00
Computed Flow Time (min) :	3.96	0.00	0.00

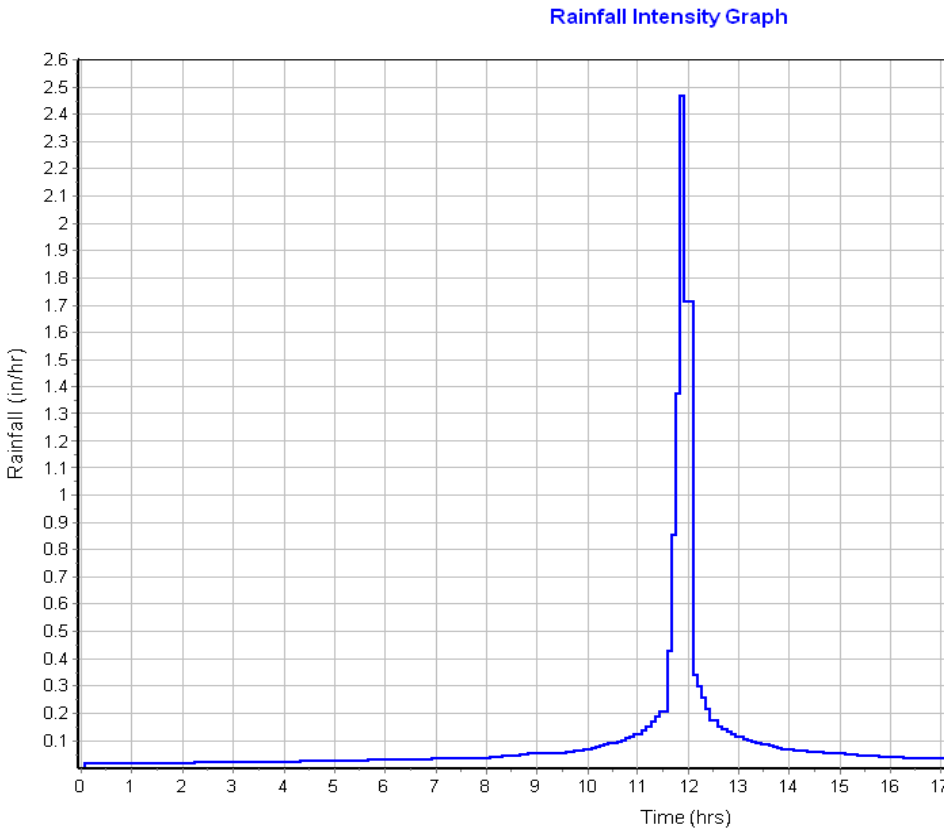
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	260	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Paved	Unpaved	Unpaved
Velocity (ft/sec) :	2.03	0.00	0.00
Computed Flow Time (min) :	2.13	0.00	0.00

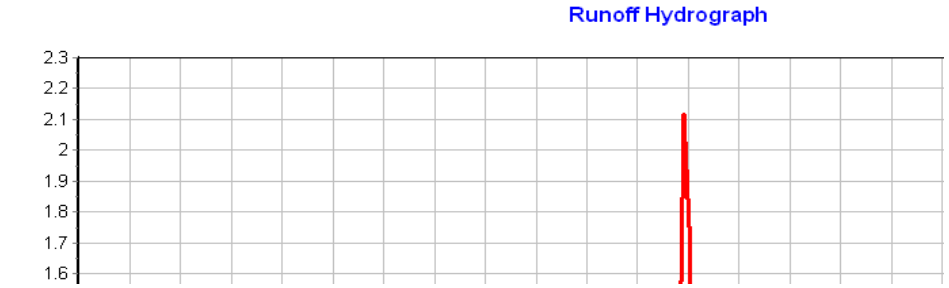
Total TOC (min) 6.09

Subbasin Runoff Results

Total Rainfall (in) 1.80
Total Runoff (in) 1.58
Peak Runoff (cfs) 2.13
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:05

Subbasin : SHED-G





Subbasin : SHED-H

Input Data

Area (ac) 0.80
Weighted Curve Number 80.00
Rain Gage ID 10-YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
> 75% grass cover, Good	0.80	D	80.00
Composite Area & Weighted CN	0.80		80.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.4	0.00	0.00
Flow Length (ft) :	30	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.03	0.00	0.00
Computed Flow Time (min) :	19.35	0.00	0.00

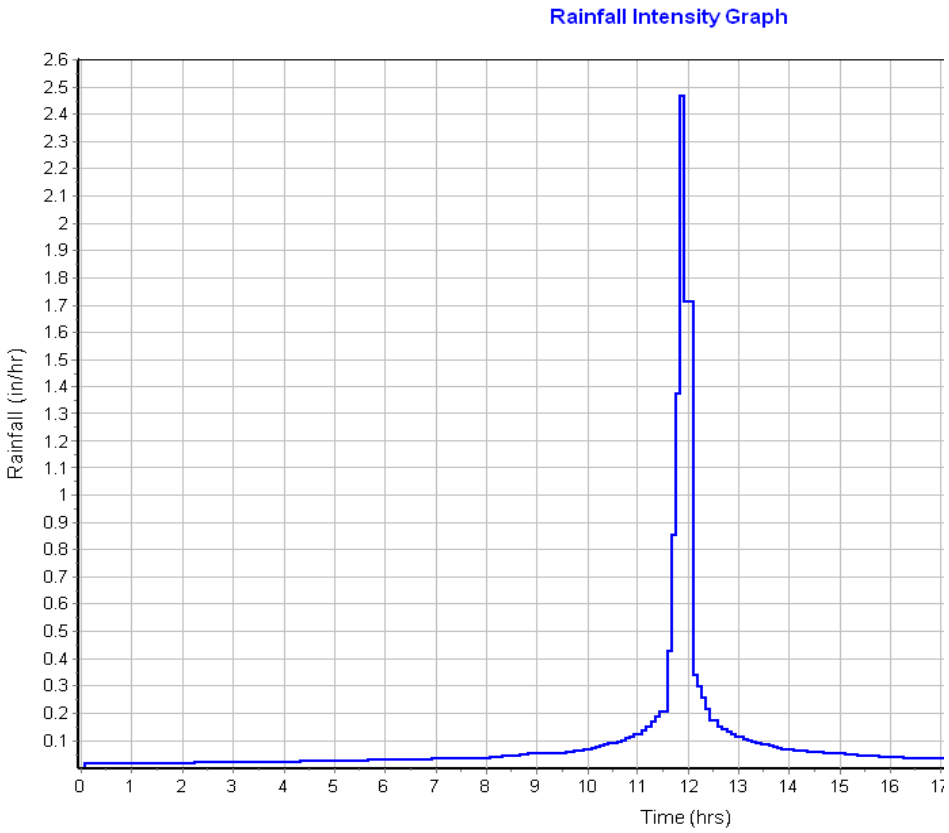
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	580	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Unpaved	Unpaved	Unpaved
Velocity (ft/sec) :	1.61	0.00	0.00
Computed Flow Time (min) :	6.00	0.00	0.00

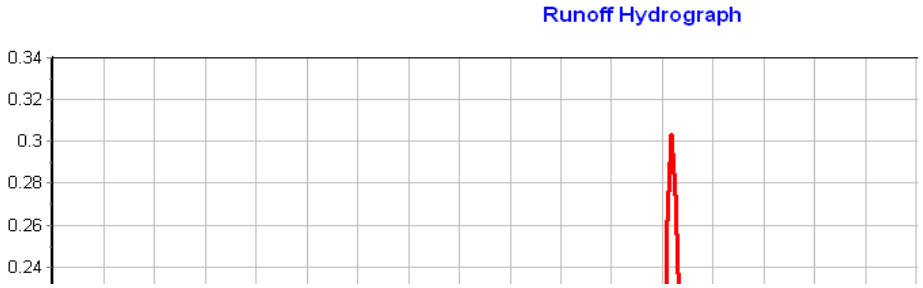
Total TOC (min) 25.35

Subbasin Runoff Results

Total Rainfall (in) 1.80
Total Runoff (in) 0.45
Peak Runoff (cfs) 0.30
Weighted Curve Number 80.00
Time of Concentration (days hh:mm:ss) 0 00:25:21

Subbasin : SHED-H





Subbasin : SUB-D

Input Data

Area (ac) 0.40
Weighted Curve Number 94.00
Rain Gage ID 10-YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Urban commercial, 85% imp	0.40	C	94.00
Composite Area & Weighted CN	0.40		94.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.015	0.00	0.00
Flow Length (ft) :	80	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.43	0.00	0.00
Computed Flow Time (min) :	3.07	0.00	0.00

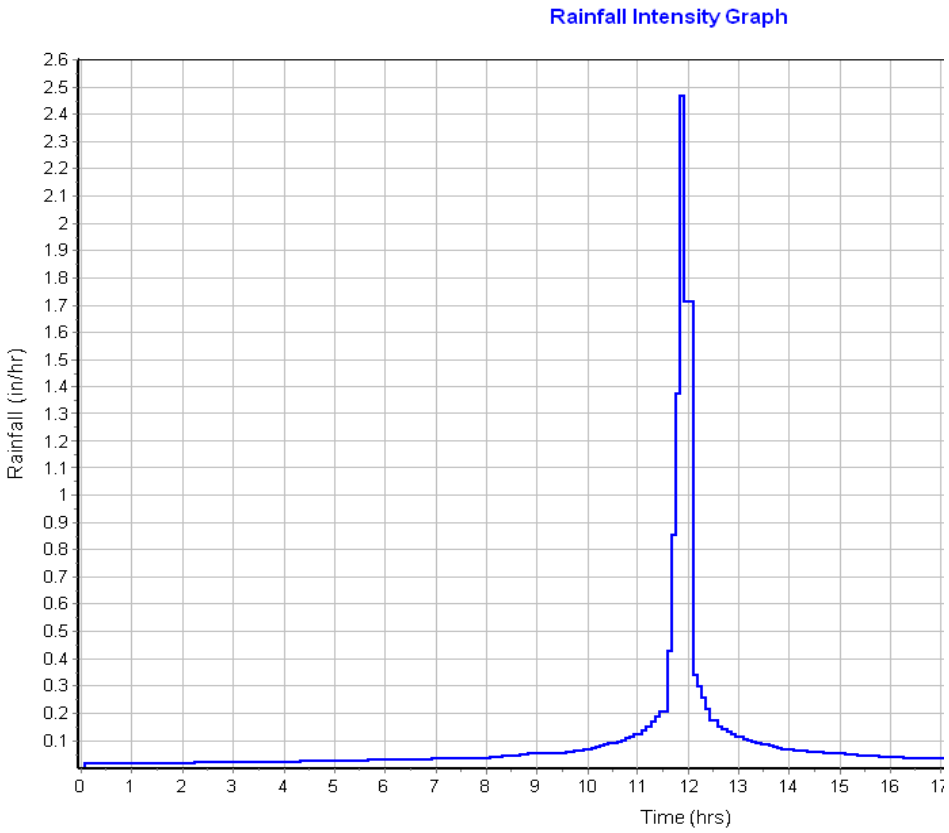
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	175	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Paved	Unpaved	Unpaved
Velocity (ft/sec) :	2.03	0.00	0.00
Computed Flow Time (min) :	1.44	0.00	0.00

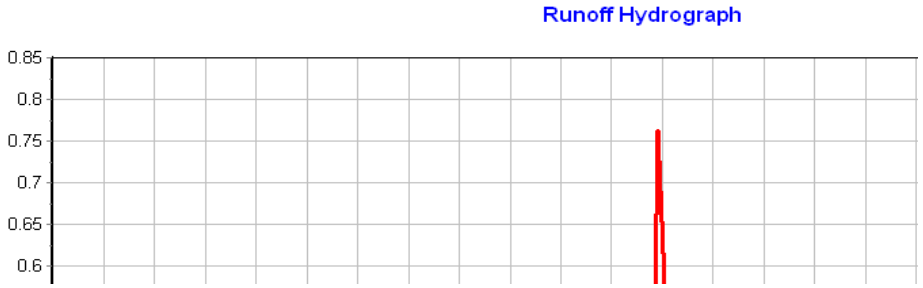
Total TOC (min) 4.50

Subbasin Runoff Results

Total Rainfall (in) 1.80
Total Runoff (in) 1.21
Peak Runoff (cfs) 0.76
Weighted Curve Number 94.00
Time of Concentration (days hh:mm:ss) 0 00:04:30

Subbasin : SUB-D





Subbasin : UPSHED

Input Data

Area (ac) 15.00
Weighted Curve Number 80.00
Rain Gage ID 10-YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
> 75% grass cover, Good	15.00	D	80.00
Composite Area & Weighted CN	15.00		80.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.4	0.00	0.00
Flow Length (ft) :	300	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.04	0.00	0.00
Computed Flow Time (min) :	122.07	0.00	0.00

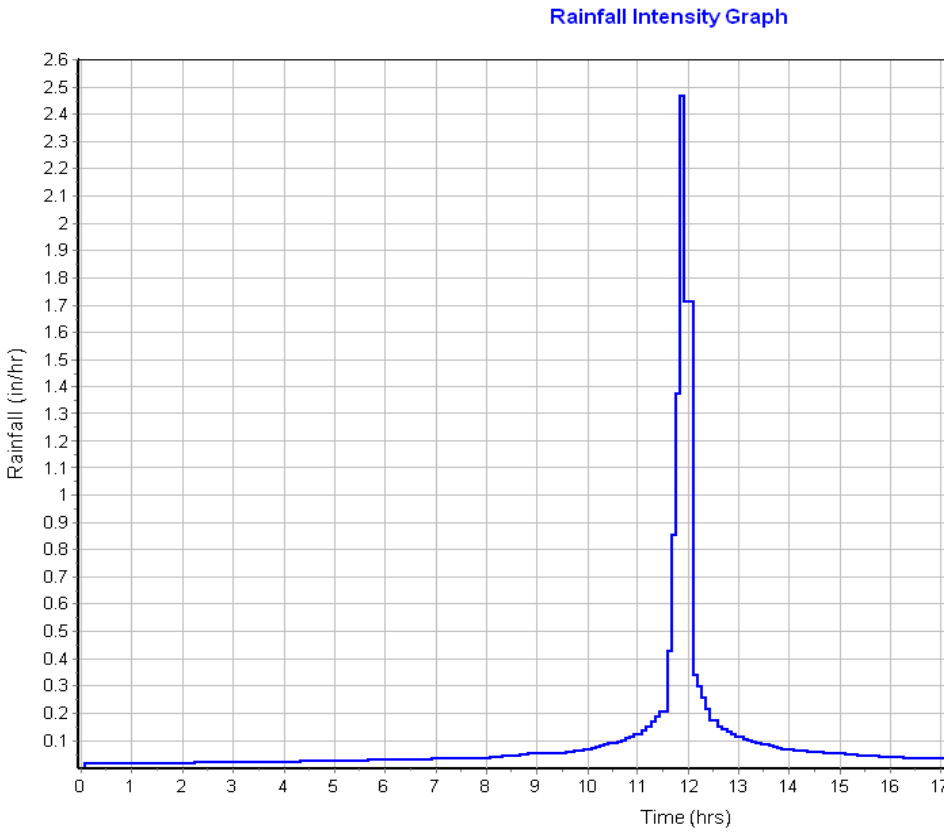
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	500	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Unpaved	Unpaved	Unpaved
Velocity (ft/sec) :	1.61	0.00	0.00
Computed Flow Time (min) :	5.18	0.00	0.00

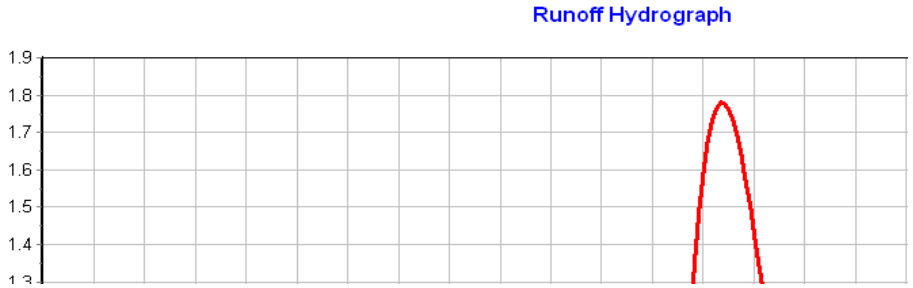
Total TOC (min) 127.24

Subbasin Runoff Results

Total Rainfall (in) 1.80
Total Runoff (in) 0.45
Peak Runoff (cfs) 1.78
Weighted Curve Number 80.00
Time of Concentration (days hh:mm:ss) 0 02:07:14

Subbasin : UPSHED





Junction Input

SN	Element ID	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Ground/Rim (Max) Offset (ft)	Initial Water Elevation (ft)	Initial Water Depth (ft)	Surcharge Elevation (ft)	Surcharge Depth (ft)	Ponded Area (ft^2)	Minimum Pipe Cover (in)
1	MH#3	22.85	25.35	2.50	0.00	-22.85	0.00	-25.35	10.00	6.00

Junction Results

SN	Element ID	Peak Inflow (cfs)	Peak Lateral Inflow (cfs)	Max HGL Elevation Attained (ft)	Max HGL Depth Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Average HGL Elevation Attained (ft)	Average HGL Depth Attained (ft)	Time of Max HGL Occurrence (days hh:mm)
1	MH#3	5.53	0.00	24.19	1.34	0.00	1.16	23.29	0.44	0 12:04

Pipe Input

SN	Element ID	Length (ft)	Inlet Invert Elevation (ft)	Inlet Invert Offset (ft)	Outlet Invert Elevation (ft)	Outlet Invert Offset (ft)	Total Drop (ft)	Average Slope (%)	Pipe Shape	Pipe Diameter or Height (in)	Pipe Width (in)	Manning's Roughness
1	Link-01	46.00	23.15	0.00	22.85	0.00	0.30	0.6500	CIRCULAR	12.000	12.000	0.0150
2	Link-02	25.00	23.17	0.00	23.04	0.00	0.13	0.5200	CIRCULAR	12.000	12.000	0.0150
3	Link-03	89.00	23.38	0.00	23.30	0.00	0.08	0.0900	CIRCULAR	12.000	12.000	0.0150
4	Link-04	88.00	23.38	0.00	23.30	0.00	0.08	0.0900	CIRCULAR	12.000	12.000	0.0150
5	Link-05	25.00	23.30	0.00	23.14	-0.03	0.16	0.6400	CIRCULAR	12.000	12.000	0.0150
6	Link-09	97.00	22.85	0.00	22.70	0.00	0.15	0.1500	CIRCULAR	24.000	24.000	0.0150
7	Link-15	162.00	23.30	0.00	23.14	-0.03	0.16	0.1000	CIRCULAR	24.000	24.000	0.0150
8	Link-16	141.00	23.14	-0.03	23.00	-0.04	0.14	0.1000	CIRCULAR	24.000	24.000	0.0150
9	Link-17	177.00	23.00	-0.04	22.85	0.00	0.15	0.0800	CIRCULAR	24.000	24.000	0.0150

Pipe Results

SN	Element ID	Peak Flow (cfs)	Time of Peak Flow Occurrence (days hh:mm)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Travel Time (min)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)
1	Link-01	2.39	0 12:00	2.49	0.96	3.05	0.25	1.00	1.00	10.00
2	Link-02	1.90	0 12:03	2.23	0.85	2.42	0.17	1.00	1.00	8.00
3	Link-03	1.58	0 12:04	0.93	1.71	2.02	0.73	1.00	1.00	8.00
4	Link-04	1.51	0 12:00	0.93	1.62	1.92	0.76	1.00	1.00	9.00
5	Link-05	2.89	0 12:03	2.23	1.30	3.67	0.11	1.00	1.00	9.00
6	Link-09	5.42	0 12:04	7.71	0.70	2.54	0.64	1.26	0.64	0.00
7	Link-15	1.94	0 13:40	5.55	0.35	1.55	1.74	1.11	0.57	0.00
8	Link-16	2.42	0 12:05	5.95	0.41	1.62	1.45	1.21	0.62	0.00
9	Link-17	3.49	0 12:04	6.42	0.54	1.73	1.71	1.28	0.66	0.00

Inlet Input

SN	Element ID	Inlet Manufacturer	Manufacturer Part Number	Inlet Location	Number of Inlets	Catchbasin Invert Elevation (ft)	Max (Rim) Elevation (ft)	Inlet Depth (ft)	Initial Water Elevation (ft)
1	CB#1	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.38	24.75	1.37	0.00
2	CB#2	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.30	25.50	2.20	0.00
3	CB#3	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.38	25.25	1.87	0.00
4	CB#4	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.17	25.32	2.15	0.00
5	CB#5	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.17	24.75	1.58	0.00
6	CB#6	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.04	25.27	2.23	0.00
7	CB#7	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.15	24.75	1.60	0.00
8	INLET	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.30	25.50	2.20	0.00

Roadway & Gutter Input

SN	Element ID	Roadway Longitudinal Slope (ft/ft)	Roadway Cross Slope (ft/ft)	Roadway Manning's Roughness	Gutter Cross Slope (ft/ft)	Gutter Width (ft)	Gutter Depression (in)	Allowable Spread (ft)
1	CB#1	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
2	CB#2	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
3	CB#3	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
4	CB#4	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
5	CB#5	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
6	CB#6	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
7	CB#7	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
8	INLET	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00

Inlet Results

SN	Element ID	Peak Flow (cfs)	Peak Lateral Inflow (cfs)	Peak Flow Intercepted by Inlet (cfs)	Peak Flow Bypassing Inlet (cfs)	Inlet Efficiency during Peak Flow (%)	Max Gutter Spread during Peak Flow (ft)	Max Gutter Water Elev. during Peak Flow (ft)	Max Gutter Water Depth during Peak Flow (ft)	Time Max De Occurre (days hh:m
1	CB#1	1.51	1.51	N/A	N/A	N/A	8.51	25.17	0.42	0 11
2	CB#2	0.00	0.00	N/A	N/A	N/A	0.00	25.50	0.00	0 12
3	CB#3	0.77	0.77	N/A	N/A	N/A	5.08	25.54	0.29	0 12
4	CB#4	0.44	0.44	N/A	N/A	N/A	2.88	25.49	0.17	0 12
5	CB#5	0.76	0.76	N/A	N/A	N/A	5.00	25.04	0.29	0 12
6	CB#6	0.34	0.34	N/A	N/A	N/A	1.83	25.39	0.12	0 12
7	CB#7	2.19	2.19	N/A	N/A	N/A	11.05	25.22	0.47	0 12
8	INLET	1.78	1.78	N/A	N/A	N/A	8.48	26.60	1.10	0 12

EXHIBIT F-2

100-YEAR POST-DEVELOPMENT CALCULATIONS

Developed site.SPF | 3.00-inch SCS Type II

Project Description

File Name ..... Developed site.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	Mar 09, 2026	00:00:00
End Analysis On	Mar 10, 2026	00:00:00
Start Reporting On	Mar 09, 2026	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	30	seconds

Number of Elements

	Qty
Rain Gages	3
Subbasins	8
Nodes	10
Junctions	1
Outfalls	1
Flow Diversions	0
Inlets	8
Storage Nodes	0
Links	9
Channels	0
Pipes	9
Pumps	0
Orifices	0
Weirs	0
Outlets	0
Pollutants	0
Land Uses	0

Rainfall Details

SN	Rain Gage ID	Data Source	Data Source ID	Rainfall Type	Rain Units	State	County	Return Period (years)	Rainfa Depth (inche
1		Time Series	100-YEAR	Cumulative	inches	California	Riverside (Desert Center)	100	3.00

Subbasin Summary

SN	Subbasin ID	Area (ac)	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	SHED-A	0.81	94.00	3.00	2.35	1.90	2.86	0 00:05:28
2	SHED-C	0.41	94.00	3.00	2.35	0.96	1.46	0 00:05:00
3	SHED-E	0.19	98.00	3.00	2.77	0.53	0.75	0 00:05:00
4	SHED-F	0.15	98.00	3.00	2.77	0.41	0.57	0 00:05:00
5	SHED-G	0.96	98.00	3.00	2.77	2.66	3.63	0 00:06:05
6	SHED-H	0.80	80.00	3.00	1.25	1.00	0.96	0 00:25:21
7	SUB-D	0.40	94.00	3.00	2.35	0.94	1.44	0 00:05:00
8	UPSHED	15.00	80.00	3.00	1.25	18.75	5.70	0 02:07:14

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft^2)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Mi Freeboar Attaine (f
1	MH#3	Junction	22.85	25.35	0.00	0.00	10.00	6.92	24.43	0.00	0.9
2	OUTFALL	Outfall	22.70					6.83	24.17		

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Average Slope	Diameter or Height	Manning's Roughness	Peak Flow	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Peak D
					(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	
1	Link-01	Pipe	CB#7	MH#3	46.00	23.15	22.85	0.6500	12.000	0.0150	2.59	2.49	1.04	3.30	
2	Link-02	Pipe	CB#5	CB#6	25.00	23.17	23.04	0.5200	12.000	0.0150	1.62	2.23	0.73	2.06	
3	Link-03	Pipe	CB#3	CB#2	89.00	23.38	23.30	0.0900	12.000	0.0150	1.98	0.93	2.14	2.52	
4	Link-04	Pipe	CB#1	CB#2	88.00	23.38	23.30	0.0900	12.000	0.0150	1.53	0.93	1.65	1.95	
5	Link-05	Pipe	CB#2	CB#4	25.00	23.30	23.14	0.6400	12.000	0.0150	4.27	2.23	1.92	5.43	
6	Link-09	Pipe	MH#3	OUTFALL	97.00	22.85	22.70	0.1500	24.000	0.0150	6.83	7.71	0.89	2.66	
7	Link-15	Pipe	INLET	CB#4	162.00	23.30	23.14	0.1000	24.000	0.0150	5.93	5.55	1.07	2.16	
8	Link-16	Pipe	CB#4	CB#6	141.00	23.14	23.00	0.1000	24.000	0.0150	6.09	5.95	1.02	2.28	
9	Link-17	Pipe	CB#6	MH#3	177.00	23.00	22.85	0.0800	24.000	0.0150	5.99	6.42	0.93	2.37	

Inlet Summary

SN	Element ID	Inlet Manufacturer	Manufacturer Part Number	Inlet Location	Number of Inlets	Catchbasin Invert Elevation (ft)	Max (Rim) Elevation (ft)	Initial Water Elevation (ft)	Ponded Area (ft^2)	Peak Flow (cfs)	Peak Flow Intercepted by Inlet (cfs)	Peak Flow Bypassing Inlet (cfs)	Effi during
1	CB#1	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.38	24.75	0.00	10.00	2.84	N/A	N/A	
2	CB#2	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.30	25.50	0.00	10.00	0.00	N/A	N/A	
3	CB#3	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.38	25.25	0.00	10.00	1.45	N/A	N/A	
4	CB#4	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.17	25.32	0.00	10.00	0.75	N/A	N/A	
5	CB#5	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.17	24.75	0.00	10.00	1.43	N/A	N/A	
6	CB#6	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.04	25.27	0.00	10.00	0.57	N/A	N/A	
7	CB#7	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.15	24.75	0.00	10.00	3.98	N/A	N/A	
8	INLET	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.30	25.50	0.00	10.00	5.70	N/A	N/A	

Subbasin Hydrology

Subbasin : SHED-A

Input Data

Area (ac) 0.81
Weighted Curve Number 94.00
Rain Gage ID 100-YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Urban commercial, 85% imp	0.81	C	94.00
Composite Area & Weighted CN	0.81		94.00

Time of Concentration

TOC Method : SCS TR-55

Sheet Flow Equation :

Tc = (0.007 * ((n * Lf)^0.8)) / ((P^0.5) * (Sf^0.4))

Where :

Tc = Time of Concentration (hr)
n = Manning's roughness
Lf = Flow Length (ft)
P = 2 yr, 24 hr Rainfall (inches)
Sf = Slope (ft/ft)

Shallow Concentrated Flow Equation :

V = 16.1345 * (Sf^0.5) (unpaved surface)
V = 20.3282 * (Sf^0.5) (paved surface)
V = 15.0 * (Sf^0.5) (grassed waterway surface)
V = 10.0 * (Sf^0.5) (nearly bare & untilled surface)
V = 9.0 * (Sf^0.5) (cultivated straight rows surface)
V = 7.0 * (Sf^0.5) (short grass pasture surface)
V = 5.0 * (Sf^0.5) (woodland surface)
V = 2.5 * (Sf^0.5) (forest w/heavy litter surface)
Tc = (Lf / V) / (3600 sec/hr)

Where:

Tc = Time of Concentration (hr)
Lf = Flow Length (ft)
V = Velocity (ft/sec)
Sf = Slope (ft/ft)

Channel Flow Equation :

V = (1.49 * (R^(2/3)) * (Sf^0.5)) / n
R = Aq / Wp
Tc = (Lf / V) / (3600 sec/hr)

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.015	0.00	0.00
Flow Length (ft) :	100	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.45	0.00	0.00
Computed Flow Time (min) :	3.67	0.00	0.00

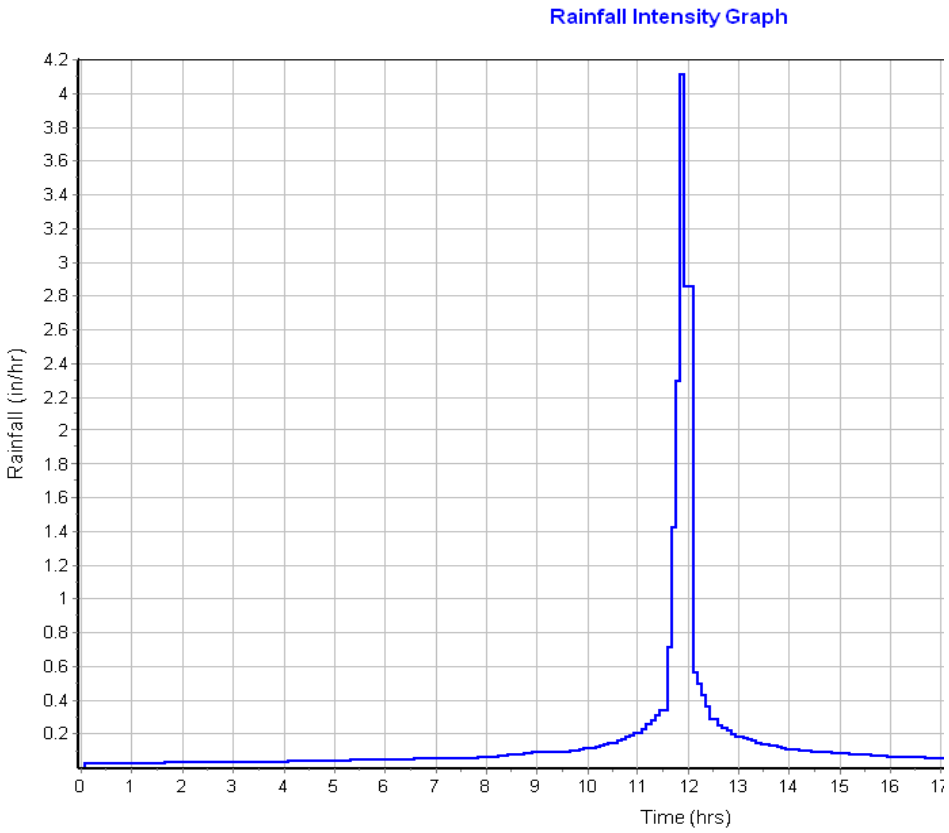
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	221	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Paved	Unpaved	Unpaved
Velocity (ft/sec) :	2.03	0.00	0.00
Computed Flow Time (min) :	1.81	0.00	0.00

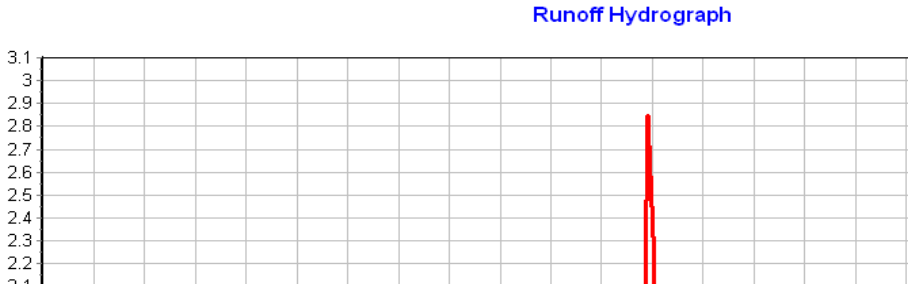
Total TOC (min) 5.48

Subbasin Runoff Results

Total Rainfall (in)	3.00
Total Runoff (in)	2.35
Peak Runoff (cfs)	2.86
Weighted Curve Number	94.00
Time of Concentration (days hh:mm:ss)	0 00:05:29

Subbasin : SHED-A





Subbasin : SHED-C

Input Data

Area (ac) 0.41
Weighted Curve Number 94.00
Rain Gage ID 100-YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Urban commercial, 85% imp	0.41	C	94.00
Composite Area & Weighted CN	0.41		94.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.015	0.00	0.00
Flow Length (ft) :	45	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.39	0.00	0.00
Computed Flow Time (min) :	1.94	0.00	0.00

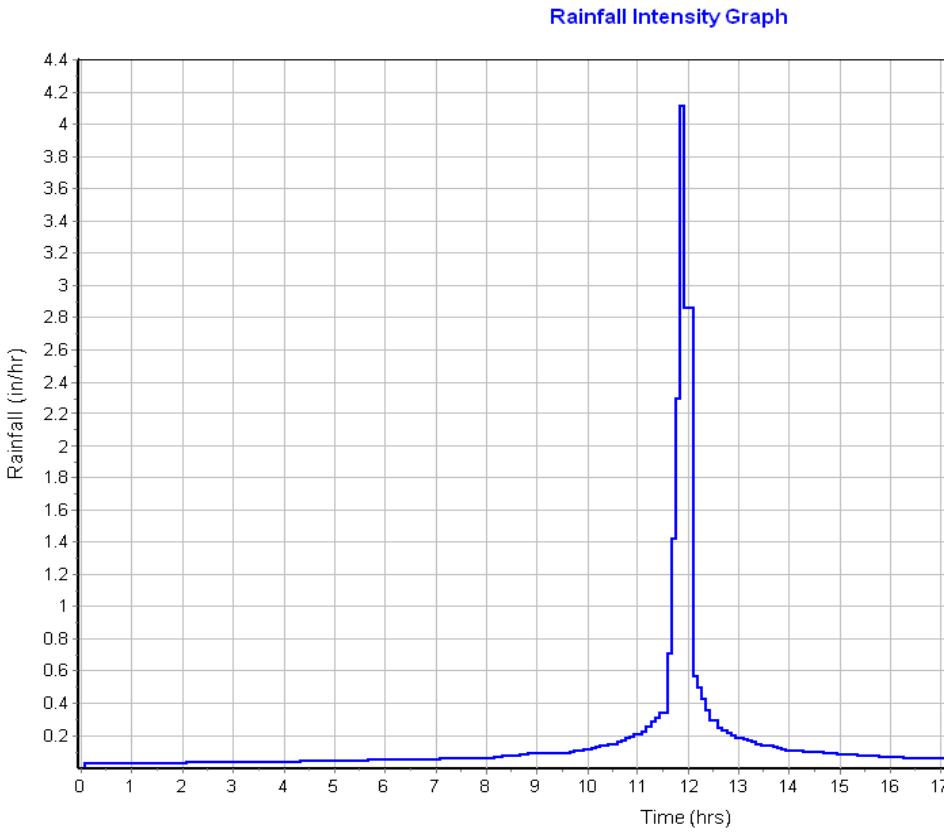
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	175	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Paved	Unpaved	Unpaved
Velocity (ft/sec) :	2.03	0.00	0.00
Computed Flow Time (min) :	1.44	0.00	0.00

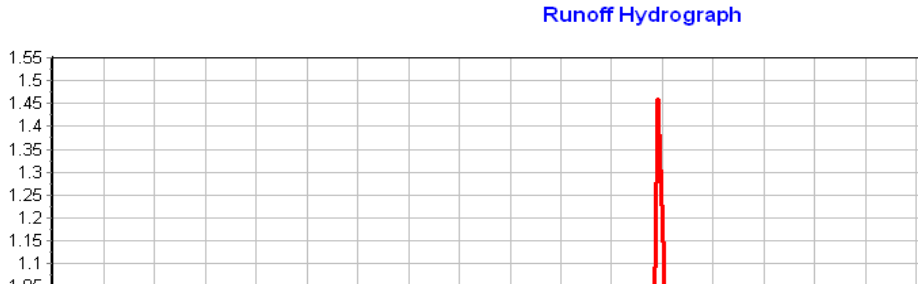
Total TOC (min) 3.37

Subbasin Runoff Results

Total Rainfall (in) 3.00
Total Runoff (in) 2.35
Peak Runoff (cfs) 1.46
Weighted Curve Number 94.00
Time of Concentration (days hh:mm:ss) 0 00:03:22

Subbasin : SHED-C





Subbasin : SHED-E

Input Data

Area (ac) 0.19
Weighted Curve Number 98.00
Rain Gage ID 100-YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.19	D	98.00
Composite Area & Weighted CN	0.19		98.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.015	0.00	0.00
Flow Length (ft) :	25	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.34	0.00	0.00
Computed Flow Time (min) :	1.21	0.00	0.00

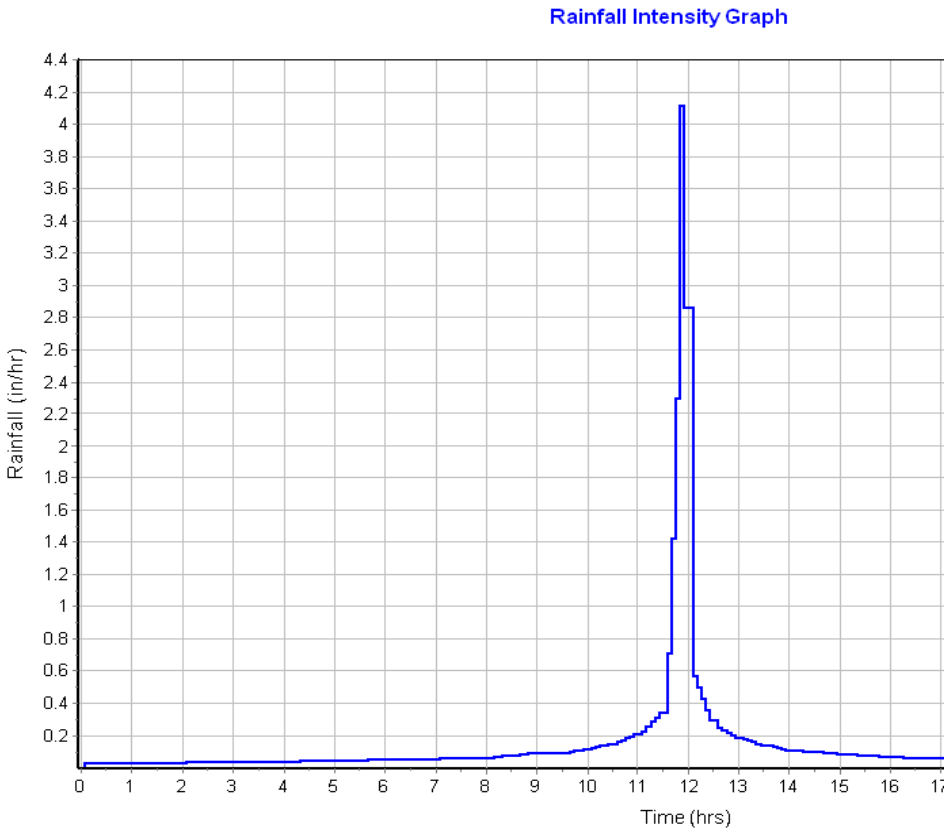
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	160	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Paved	Unpaved	Unpaved
Velocity (ft/sec) :	2.03	0.00	0.00
Computed Flow Time (min) :	1.31	0.00	0.00

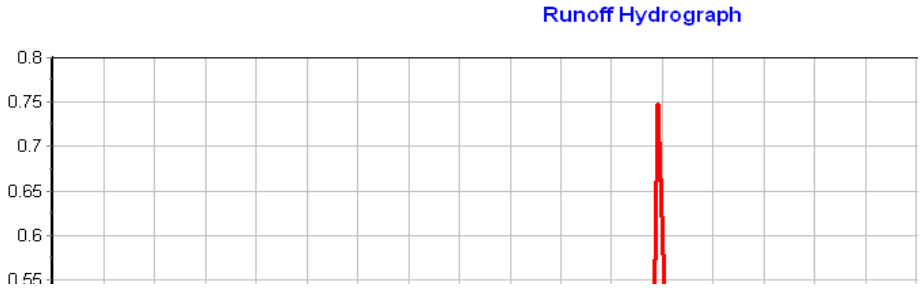
Total TOC (min) 2.52

Subbasin Runoff Results

Total Rainfall (in) 3.00
Total Runoff (in) 2.77
Peak Runoff (cfs) 0.75
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:02:31

Subbasin : SHED-E





Subbasin : SHED-F

Input Data

Area (ac) 0.15
Weighted Curve Number 98.00
Rain Gage ID 100-YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.15	D	98.00
Composite Area & Weighted CN	0.15		98.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.015	0.00	0.00
Flow Length (ft) :	25	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.34	0.00	0.00
Computed Flow Time (min) :	1.21	0.00	0.00

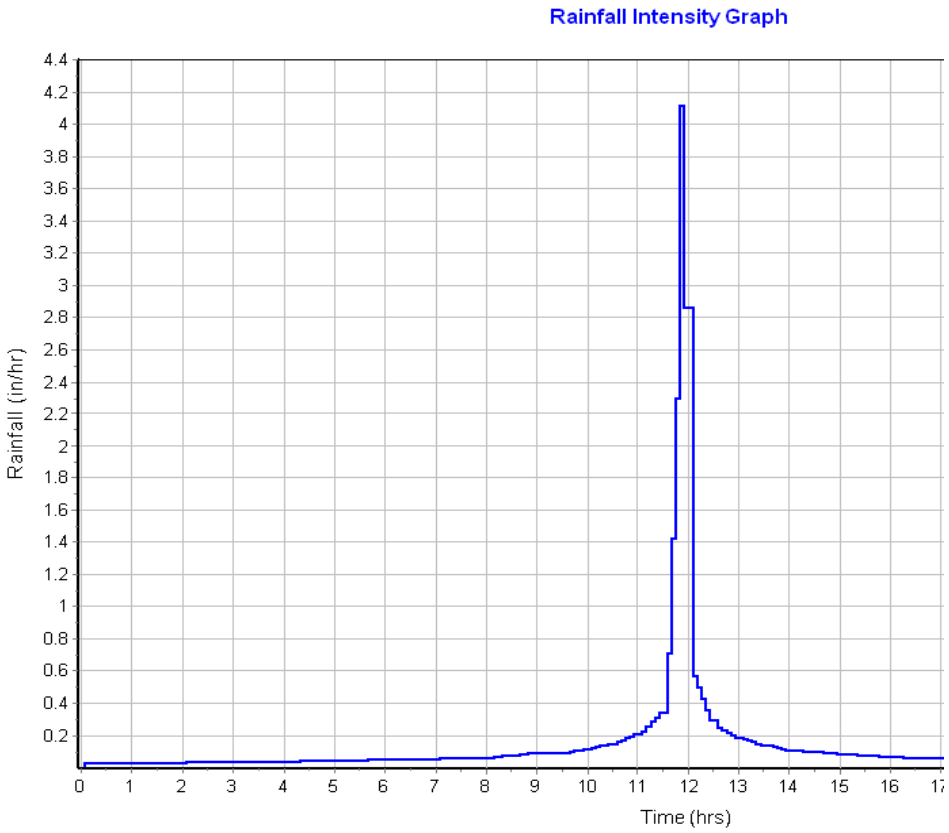
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	140	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Paved	Unpaved	Unpaved
Velocity (ft/sec) :	2.03	0.00	0.00
Computed Flow Time (min) :	1.15	0.00	0.00

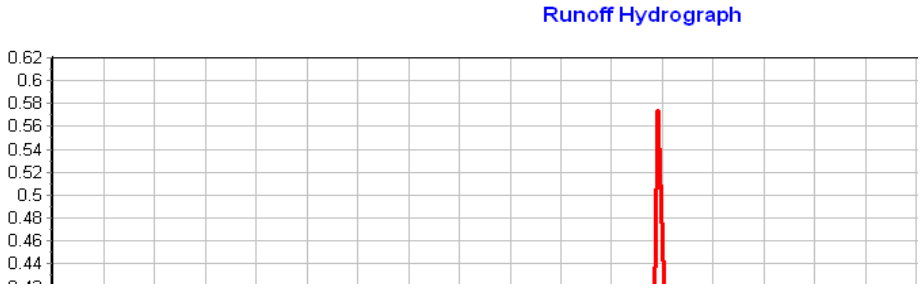
Total TOC (min) 2.36

Subbasin Runoff Results

Total Rainfall (in) 3.00
Total Runoff (in) 2.77
Peak Runoff (cfs) 0.57
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:02:22

Subbasin : SHED-F





Subbasin : SHED-G

Input Data

Area (ac) 0.96
Weighted Curve Number 98.00
Rain Gage ID 100-YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.96	D	98.00
Composite Area & Weighted CN	0.96		98.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.015	0.00	0.00
Flow Length (ft) :	110	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.46	0.00	0.00
Computed Flow Time (min) :	3.96	0.00	0.00

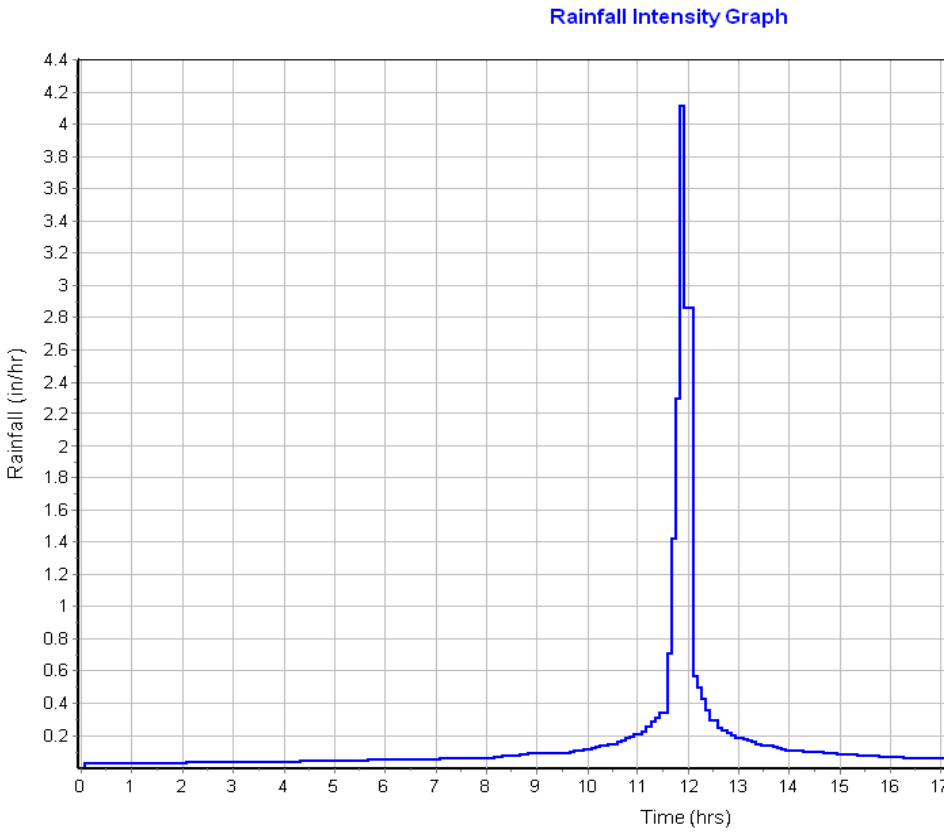
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	260	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Paved	Unpaved	Unpaved
Velocity (ft/sec) :	2.03	0.00	0.00
Computed Flow Time (min) :	2.13	0.00	0.00

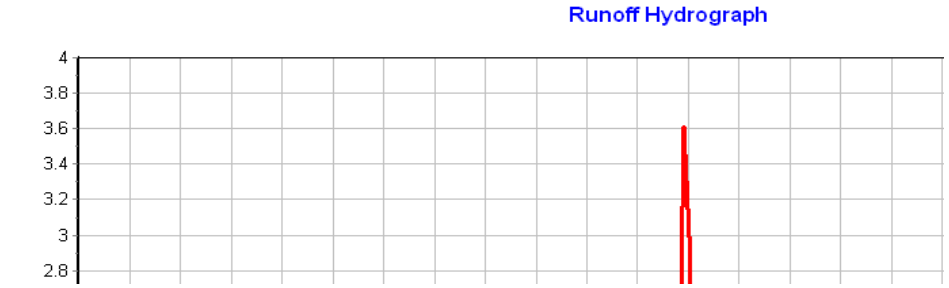
Total TOC (min) 6.09

Subbasin Runoff Results

Total Rainfall (in) 3.00
Total Runoff (in) 2.77
Peak Runoff (cfs) 3.63
Weighted Curve Number 98.00
Time of Concentration (days hh:mm:ss) 0 00:06:05

Subbasin : SHED-G





Subbasin : SHED-H

Input Data

Area (ac) 0.80
Weighted Curve Number 80.00
Rain Gage ID 100-YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
> 75% grass cover, Good	0.80	D	80.00
Composite Area & Weighted CN	0.80		80.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.4	0.00	0.00
Flow Length (ft) :	30	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.03	0.00	0.00
Computed Flow Time (min) :	19.35	0.00	0.00

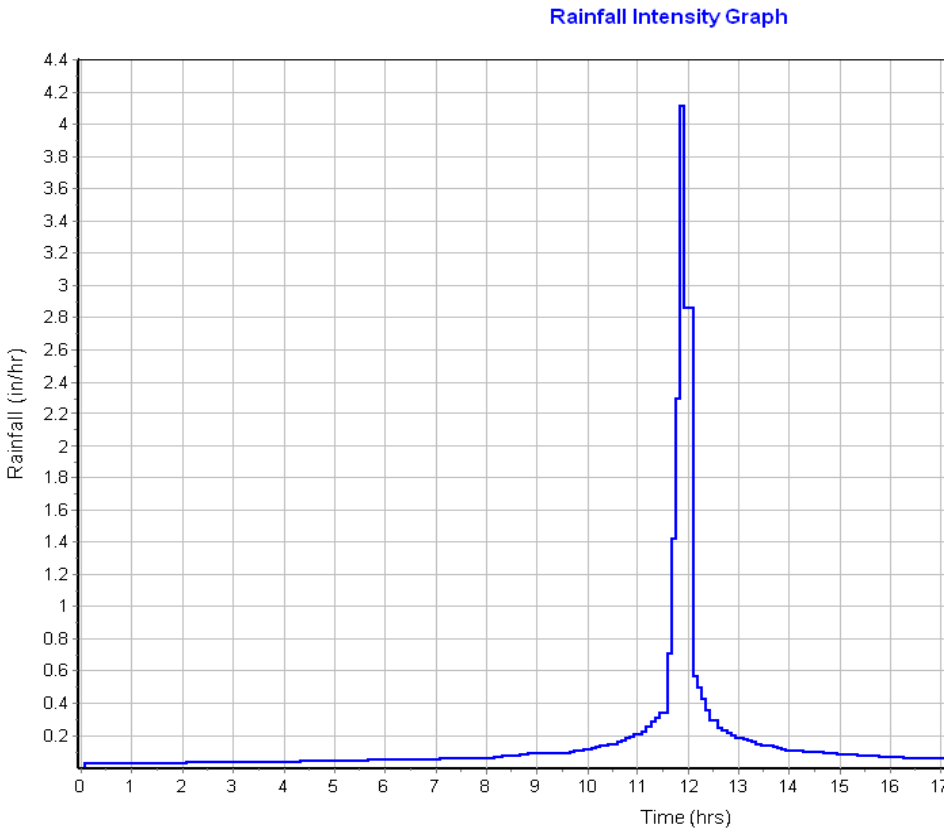
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	580	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Unpaved	Unpaved	Unpaved
Velocity (ft/sec) :	1.61	0.00	0.00
Computed Flow Time (min) :	6.00	0.00	0.00

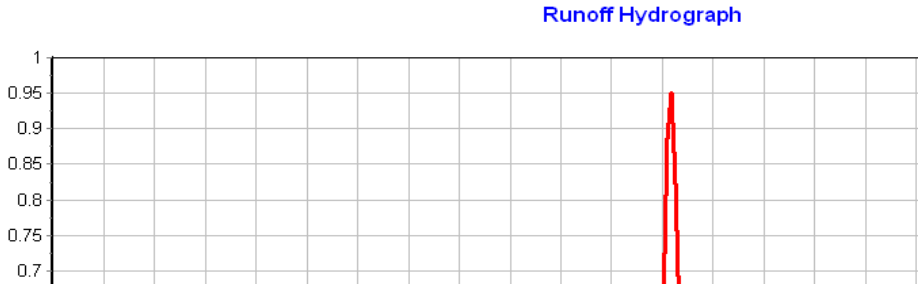
Total TOC (min) 25.35

Subbasin Runoff Results

Total Rainfall (in) 3.00
Total Runoff (in) 1.25
Peak Runoff (cfs) 0.96
Weighted Curve Number 80.00
Time of Concentration (days hh:mm:ss) 0 00:25:21

Subbasin : SHED-H





Subbasin : SUB-D

Input Data

Area (ac) 0.40
Weighted Curve Number 94.00
Rain Gage ID 100-YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Urban commercial, 85% imp	0.40	C	94.00
Composite Area & Weighted CN	0.40		94.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.015	0.00	0.00
Flow Length (ft) :	80	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.43	0.00	0.00
Computed Flow Time (min) :	3.07	0.00	0.00

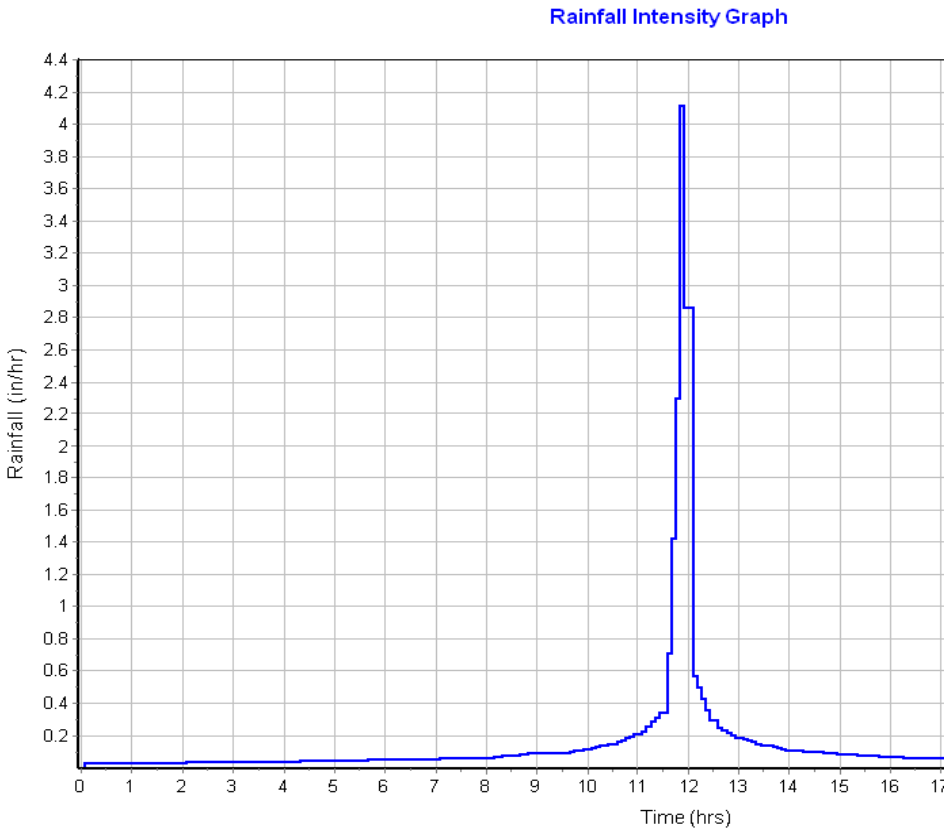
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	175	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Paved	Unpaved	Unpaved
Velocity (ft/sec) :	2.03	0.00	0.00
Computed Flow Time (min) :	1.44	0.00	0.00

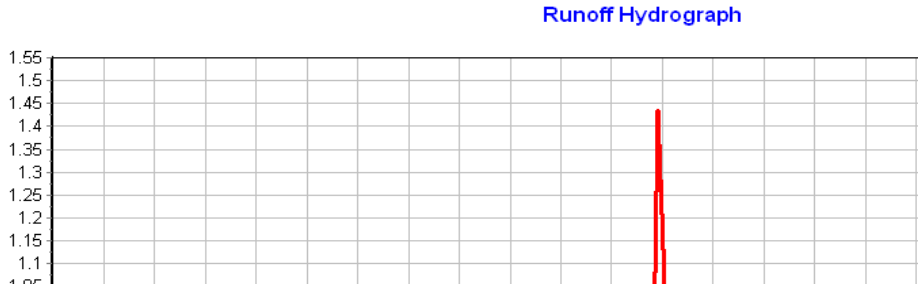
Total TOC (min) 4.50

Subbasin Runoff Results

Total Rainfall (in) 3.00
Total Runoff (in) 2.35
Peak Runoff (cfs) 1.44
Weighted Curve Number 94.00
Time of Concentration (days hh:mm:ss) 0 00:04:30

Subbasin : SUB-D





Subbasin : UPSHED

Input Data

Area (ac) 15.00
Weighted Curve Number 80.00
Rain Gage ID 100-YEAR

Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
> 75% grass cover, Good	15.00	D	80.00
Composite Area & Weighted CN	15.00		80.00

Time of Concentration

Sheet Flow Computations	Subarea A	Subarea B	Subarea C
Manning's Roughness :	.4	0.00	0.00
Flow Length (ft) :	300	0.00	0.00
Slope (%) :	1	0.00	0.00
2 yr, 24 hr Rainfall (in) :	1.00	0.00	0.00
Velocity (ft/sec) :	0.04	0.00	0.00
Computed Flow Time (min) :	122.07	0.00	0.00

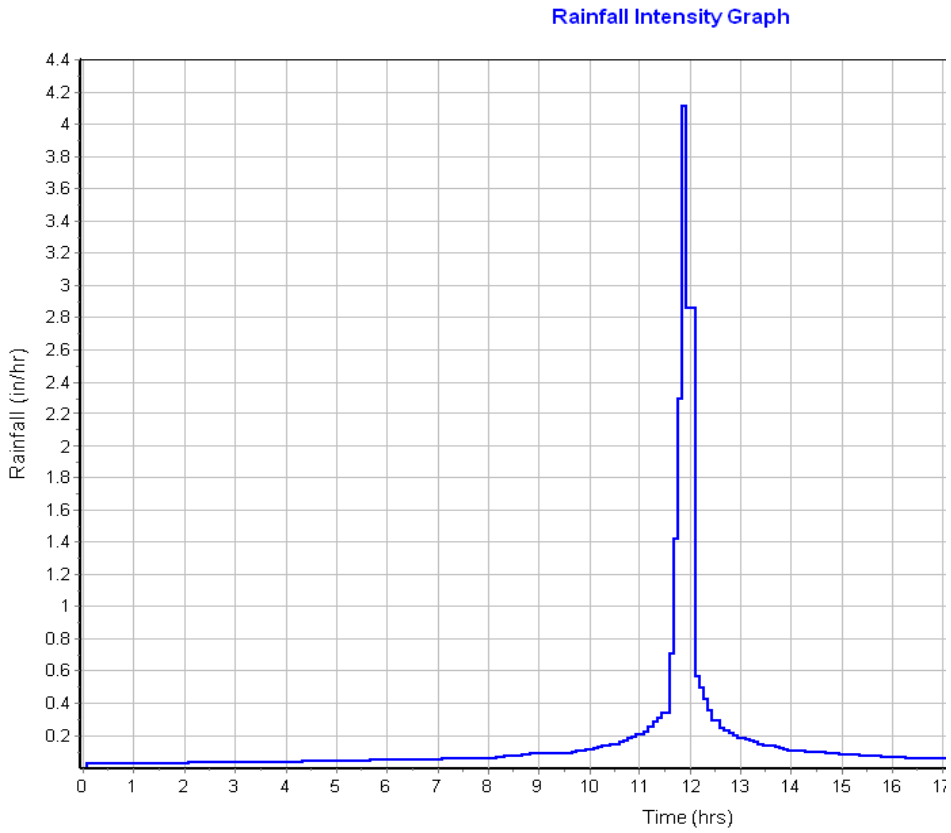
Shallow Concentrated Flow Computations	Subarea A	Subarea B	Subarea C
Flow Length (ft) :	500	0.00	0.00
Slope (%) :	1	0.00	0.00
Surface Type :	Unpaved	Unpaved	Unpaved
Velocity (ft/sec) :	1.61	0.00	0.00
Computed Flow Time (min) :	5.18	0.00	0.00

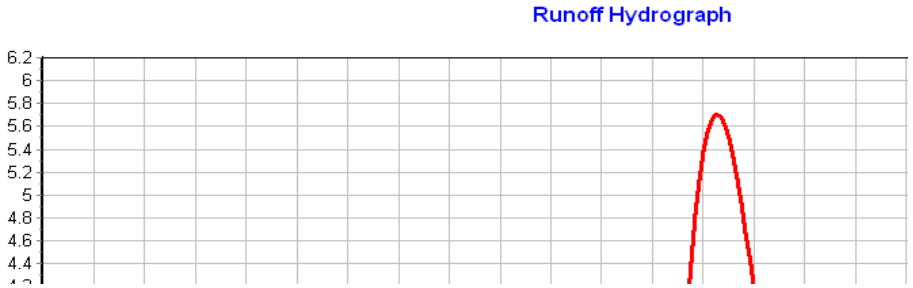
Total TOC (min) 127.24

Subbasin Runoff Results

Total Rainfall (in) 3.00
Total Runoff (in) 1.25
Peak Runoff (cfs) 5.70
Weighted Curve Number 80.00
Time of Concentration (days hh:mm:ss) 0 02:07:14

Subbasin : UPSHED





Junction Input

SN	Element ID	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Ground/Rim (Max) Offset (ft)	Initial Water Elevation (ft)	Initial Water Depth (ft)	Surcharge Elevation (ft)	Surcharge Depth (ft)	Ponded Area (ft^2)	Minimum Pipe Cover (in)
1	MH#3	22.85	25.35	2.50	0.00	-22.85	0.00	-25.35	10.00	6.00

Junction Results

SN	Element ID	Peak Inflow (cfs)	Peak Lateral Inflow (cfs)	Max HGL Elevation Attained (ft)	Max HGL Depth Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Average HGL Elevation Attained (ft)	Average HGL Depth Attained (ft)	Time of Max HGL Occurrence (days hh:mm)
1	MH#3	6.92	0.00	24.43	1.58	0.00	0.92	23.56	0.71	0 12:02

Pipe Input

SN	Element ID	Length (ft)	Inlet Invert Elevation (ft)	Inlet Invert Offset (ft)	Outlet Invert Elevation (ft)	Outlet Invert Offset (ft)	Total Drop (ft)	Average Slope (%)	Pipe Shape	Pipe Diameter or Height (in)	Pipe Width (in)	Manning's Roughness
1	Link-01	46.00	23.15	0.00	22.85	0.00	0.30	0.6500	CIRCULAR	12.000	12.000	0.0150
2	Link-02	25.00	23.17	0.00	23.04	0.00	0.13	0.5200	CIRCULAR	12.000	12.000	0.0150
3	Link-03	89.00	23.38	0.00	23.30	0.00	0.08	0.0900	CIRCULAR	12.000	12.000	0.0150
4	Link-04	88.00	23.38	0.00	23.30	0.00	0.08	0.0900	CIRCULAR	12.000	12.000	0.0150
5	Link-05	25.00	23.30	0.00	23.14	-0.03	0.16	0.6400	CIRCULAR	12.000	12.000	0.0150
6	Link-09	97.00	22.85	0.00	22.70	0.00	0.15	0.1500	CIRCULAR	24.000	24.000	0.0150
7	Link-15	162.00	23.30	0.00	23.14	-0.03	0.16	0.1000	CIRCULAR	24.000	24.000	0.0150
8	Link-16	141.00	23.14	-0.03	23.00	-0.04	0.14	0.1000	CIRCULAR	24.000	24.000	0.0150
9	Link-17	177.00	23.00	-0.04	22.85	0.00	0.15	0.0800	CIRCULAR	24.000	24.000	0.0150

Pipe Results

SN	Element ID	Peak Flow (cfs)	Time of Peak Flow Occurrence (days hh:mm)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Travel Time (min)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)
1	Link-01	2.59	0 11:55	2.49	1.04	3.30	0.23	1.00	1.00	97.0(
2	Link-02	1.62	0 11:59	2.23	0.73	2.06	0.20	1.00	1.00	129.0(
3	Link-03	1.98	0 12:00	0.93	2.14	2.52	0.59	1.00	1.00	103.0(
4	Link-04	1.53	0 11:54	0.93	1.65	1.95	0.75	1.00	1.00	113.0(
5	Link-05	4.27	0 14:04	2.23	1.92	5.43	0.08	1.00	1.00	130.0(
6	Link-09	6.83	0 12:02	7.71	0.89	2.66	0.61	1.49	0.76	0.0(
7	Link-15	5.93	0 13:19	5.55	1.07	2.16	1.25	1.66	0.84	0.0(
8	Link-16	6.09	0 13:31	5.95	1.02	2.28	1.03	1.59	0.80	0.0(
9	Link-17	5.99	0 13:32	6.42	0.93	2.37	1.24	1.53	0.78	0.0(

Inlet Input

SN	Element ID	Inlet Manufacturer	Manufacturer Part Number	Inlet Location	Number of Inlets	Catchbasin Invert Elevation (ft)	Max (Rim) Elevation (ft)	Inlet Depth (ft)	Initial Water Elevation (ft)
1	CB#1	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.38	24.75	1.37	0.00
2	CB#2	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.30	25.50	2.20	0.00
3	CB#3	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.38	25.25	1.87	0.00
4	CB#4	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.17	25.32	2.15	0.00
5	CB#5	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.17	24.75	1.58	0.00
6	CB#6	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.04	25.27	2.23	0.00
7	CB#7	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.15	24.75	1.60	0.00
8	INLET	FHWA HEC-22 GENERIC	N/A	On Sag	1	23.30	25.50	2.20	0.00

Roadway & Gutter Input

SN	Element ID	Roadway Longitudinal Slope (ft/ft)	Roadway Cross Slope (ft/ft)	Roadway Manning's Roughness	Gutter Cross Slope (ft/ft)	Gutter Width (ft)	Gutter Depression (in)	Allowable Spread (ft)
1	CB#1	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
2	CB#2	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
3	CB#3	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
4	CB#4	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
5	CB#5	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
6	CB#6	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
7	CB#7	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00
8	INLET	N/A	0.0200	0.0160	0.0620	2.00	0.0656	7.00

Inlet Results

SN	Element ID	Peak Flow (cfs)	Peak Lateral Inflow (cfs)	Peak Flow Intercepted by Inlet (cfs)	Peak Flow Bypassing Inlet (cfs)	Inlet Efficiency during Peak Flow (%)	Max Gutter Spread during Peak Flow (ft)	Max Gutter Water Elev. during Peak Flow (ft)	Max Gutter Water Depth during Peak Flow (ft)	Time Max De Occurre (days hh:m
1	CB#1	2.84	2.84	N/A	N/A	N/A	13.14	25.26	0.51	0 11
2	CB#2	0.00	0.00	N/A	N/A	N/A	0.00	25.50	0.00	0 11
3	CB#3	1.45	1.45	N/A	N/A	N/A	8.32	25.67	0.42	0 11
4	CB#4	0.75	0.75	N/A	N/A	N/A	4.89	25.61	0.29	0 13
5	CB#5	1.43	1.43	N/A	N/A	N/A	8.23	25.17	0.42	0 11
6	CB#6	0.57	0.57	N/A	N/A	N/A	3.13	25.48	0.21	0 12
7	CB#7	3.98	3.98	N/A	N/A	N/A	16.50	25.55	0.80	0 11
8	INLET	5.70	5.70	N/A	N/A	N/A	12.40	26.05	1.05	0 13

Noise and Vibration Impact Analysis

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Bradley Gardens Skilled Nursing Facility Expansion Project

Noise and Vibration Impact Analysis

Prepared For

City of San Jacinto

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Appendix A – Noise Measurement Data
Appendix B – Noise Modeling Data

1 INTRODUCTION

This Noise and Vibration Impact Analysis evaluates the potential noise impacts of the proposed Bradley Gardens Skilled Nursing Facility Expansion Project ("Project" or "proposed Project"). The Project is located within the City of San Jacinto within Riverside County.

1.1 Project Description

The Project site is located at 980 West 7th Street, at the southeast corner of the intersection of West 7th Street and South Grand Avenue. Regional access to the Project site is provided by State Route (SR) 79 and SR 74. Local access to the site is provided by West 7th Street and South Grand Avenue. The Project site consists of one parcel encompassing approximately 2.98 acres. The site is identified as Assessor's Parcel Number (APN) 435-330-003. The Project site is developed and currently operates as the Bradley Gardens facility, which offers a variety of psychiatric-focused care to patients with varying health needs. The Project site and the surrounding area are shown in Figure 1-1, *Local Vicinity*.

The Project proposes the expansion of the existing Bradley Gardens Nursing Facility on the 2.98-acre site. The Project includes demolition of the existing 1,074-square-foot (SF) maintenance and storage building for the construction of an 18,000 SF building in addition to the existing 44-bed, 12,132 SF Skilled Nursing Facility (SNF) building that would provide 43 additional SNF and Short-term Psychiatric (STP) beds, resulting in a total capacity of 87 beds. The Project also proposes the conversion of the existing 2,596 SF vacant office building into a 16-bed Psychiatric Health Facility (PHF). Refer to Figure 1-2, *Conceptual Site Map*, for the details. Additional improvements would include landscaping, utility connections, implementation of stormwater facilities, lighting, and pavement of parking areas and driveways. The proposed Project would also include a 236-horsepower diesel emergency generator in order to provide backup power for the expanded facility.

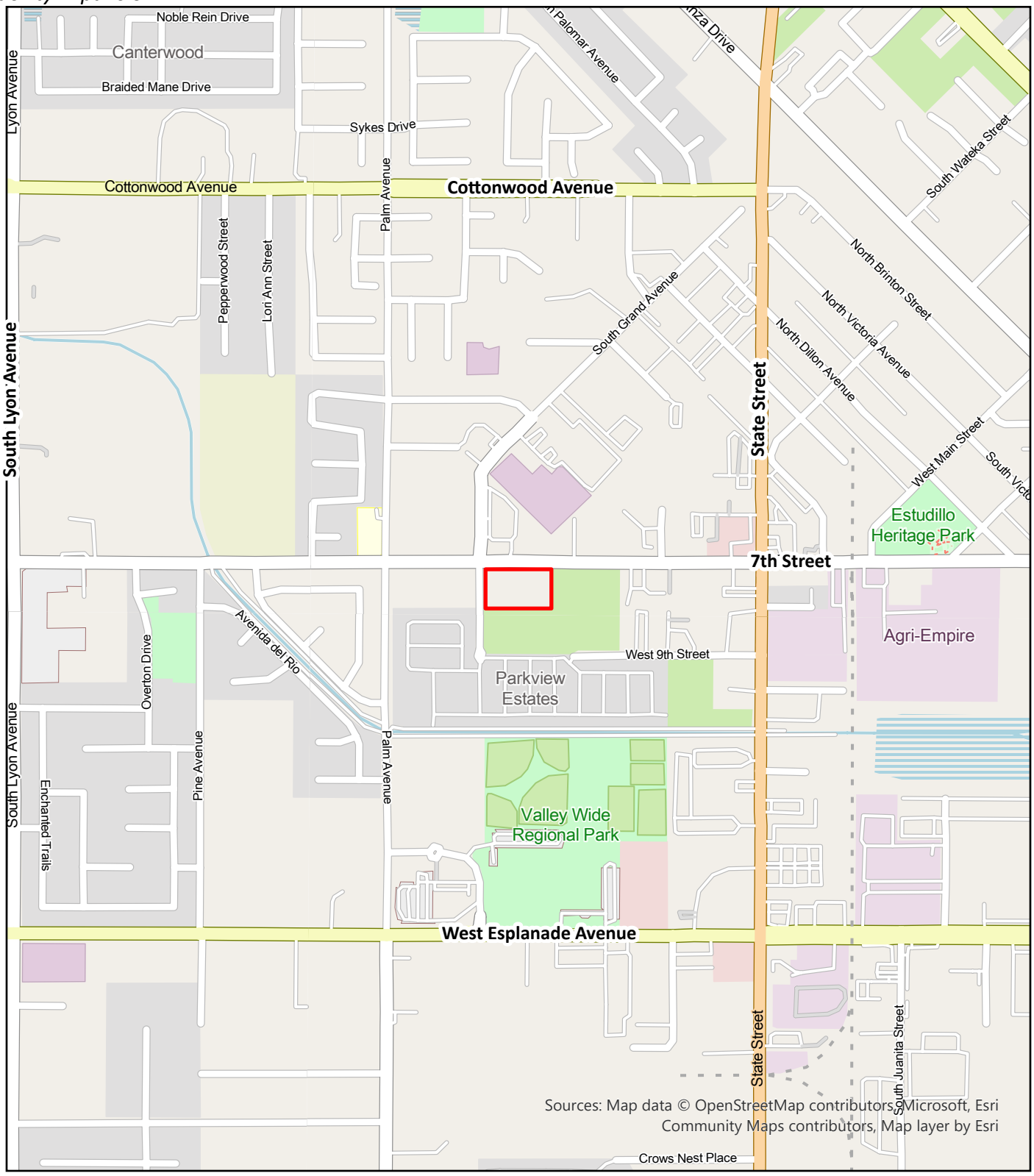
The Project site has an existing General Plan land use designation of Industrial (I) and is zoned as Industrial Light (IL). Refer to Table 1-1, *Land Use and Zoning Designations of Project Site and Surrounding Area*, for a description of the land use and zoning designations of the Project site and surrounding area.

Table 1-1: Land Use and Zoning Designations of Project Site and Surrounding Area

Direction	General Plan Land Use	Zoning
Proposed Project Site	Industrial (I)	Industrial Light (IL)
North	Industrial (I)	Industrial Light (IL)
East	Industrial (I)	Industrial Light (IL)
South	Industrial (I)	Industrial Light (IL)
West	Industrial (I)	Industrial Light (IL)

Source:
City of San Jacinto. (2022a). City of San Jacinto General Plan Land Use.
City of San Jacinto. (2022b). City of San Jacinto Zoning Map.

Figure 1-1: Local Vicinity



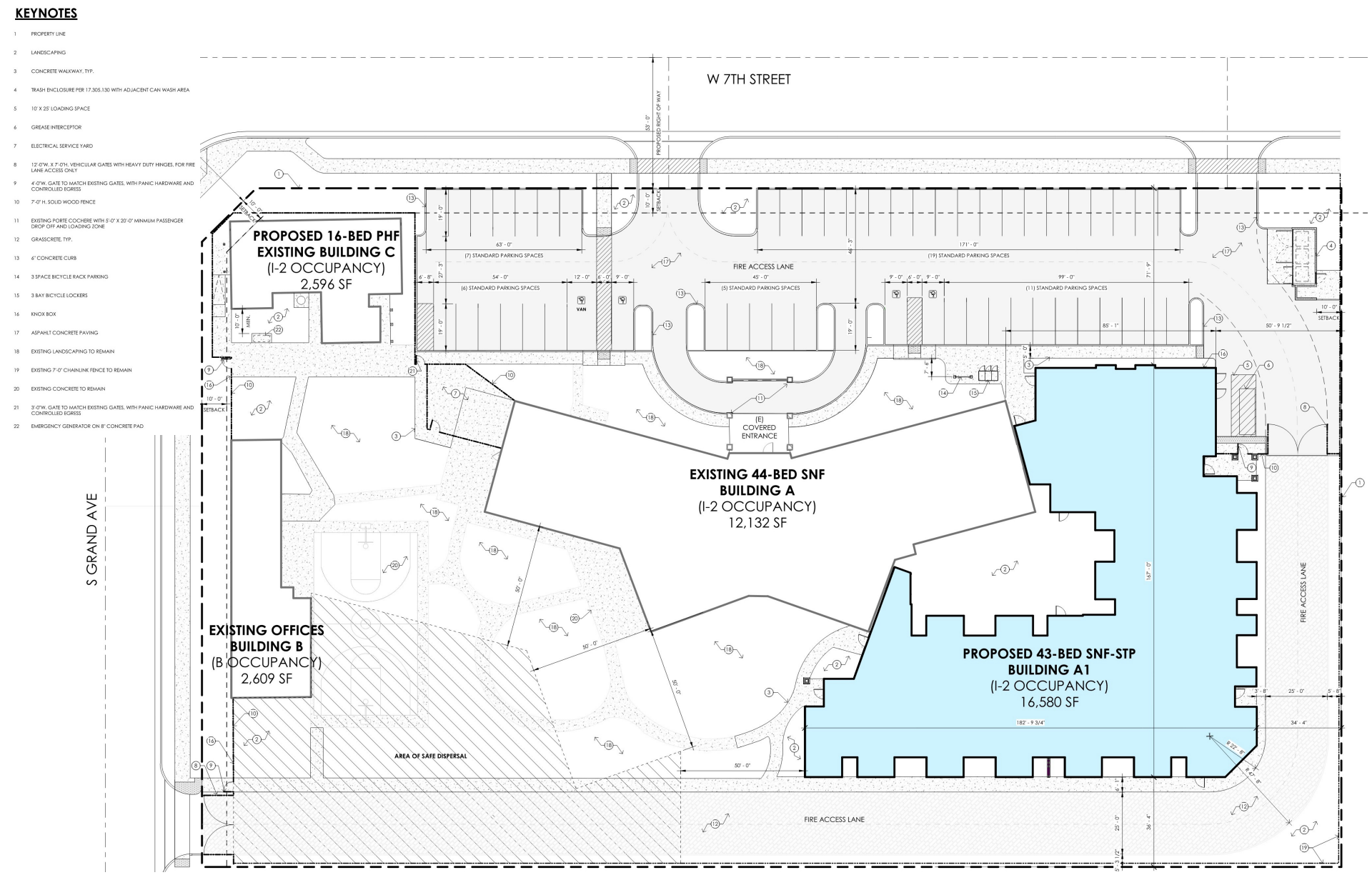
Legend

Project Boundary

0 0.15 0.3 Miles

N

Figure 1-2: Conceptual Site Plan



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1.2 Purpose of the Report

To support the California Environmental Quality Act (CEQA) document for the proposed Project, this report evaluates potential noise-related impacts to surrounding land uses as a result of implementation of the Project. This report begins with an overview of the study area, the Project site, and the key components of the proposed development. It then provides a foundational explanation of noise and vibration concepts to help frame the analysis.

To ensure consistency with local requirements, this report outlines relevant noise guidelines and regulatory standards that apply to the Project. It also describes the existing noise environment in and around the Project site to establish a baseline for comparison. From there, the analysis addresses potential short-term noise and vibration impacts that could occur during construction activities. Finally, the report examines long-term operational impacts once the Project is built and active.

1.3 Summary of Findings

The conclusions of this analysis are shown in Table 1-2, *Summary of Findings*. The Project would not result in significant impacts related to noise and vibration.

Table 1-2: Summary of Findings

Topics	Significance Findings	Mitigation Measures Proposed
Construction Noise	Less than significant	NA
Operation Noise	Less than significant	NA
Construction Vibration	Less than significant	NA
Operation Vibration	Less than significant	NA
Airport Noise	Less than significant	NA

Notes: NA = not applicable

2 NOISE SCALES AND DEFINITIONS

Sound is energy transferred through air that our ears detect as small changes in air pressures. Noise is defined as any sound that is unwanted or excessive. Noise is considered undesirable when it disrupts everyday activities, poses a risk of physical harm, or negatively impacts health. Its effects on people can include irritation, difficulty communicating, sleep disruption, and in severe cases, hearing loss. These impacts can stem from either the pitch or the loudness of the sound. Pitch refers to the frequency of a sound wave, how many vibrations occur per second, which determines whether a sound is high or low in tone. Humans generally perceive higher-pitched sounds as louder. Loudness, on the other hand, relates to the intensity or amplitude of the sound.

Typically, noise is measured or predicted by a sound pressure level, reported in decibels (dB). The dB is a logarithmic unit used to represent the ratio between a measured sound pressure level and a standard reference level. A sound level of 0 dB corresponds to the quietest sound that a healthy, unimpaired human ear can hear. The human ear does not hear all frequencies equally. To better approximate the sensitivity of human hearing, the A-weighted decibel scale (dBA) has been developed. On this scale, the human range of hearing extends from approximately 3 dBA to approximately 140 dBA. Figure 2-1, *Common Noise Levels*, shows typical sound levels and human response for everyday sounds and noises.

Sound and vibration are intimately related. Sound is produced by the vibration of sound pressure waves in the air. Vibrating surfaces and structures can radiate sound, so measures taken to reduce vibration will often lead to a reduction in noise level.

2.1 Terminology

Sound: Sound is a vibratory disturbance produced by a vibrating object that travels through a medium, such as air, in the form of pressure waves. It can be detected by a receiver, such as the human ear or a microphone.

Noise: Sound that is loud, unpleasant, unexpected, or otherwise undesirable.

Ambient noise: The combined noise from all nearby and distant sources present in a specific environment.

Decibel (dB): Unit used to measure the intensity of a sound.

A-weighted decibel (dBA): Unit of sound pressure level in decibels on the “A-weighted” scale.

Sound exposure level (SEL): Represents all the acoustic energy (sound pressure) of an individual noise event as if that event had occurred within a one-second time period.

Equivalent sound level (L_{eq}): L_{eq} is the equivalent steady-state level which within a stated period of time contains the same acoustic energy as the time-varying sound level during the same time period.

Maximum sound level (L_{max}): The highest values measured by the sound meter over a given time period.

Figure 2-1: Noise Measurement Locations

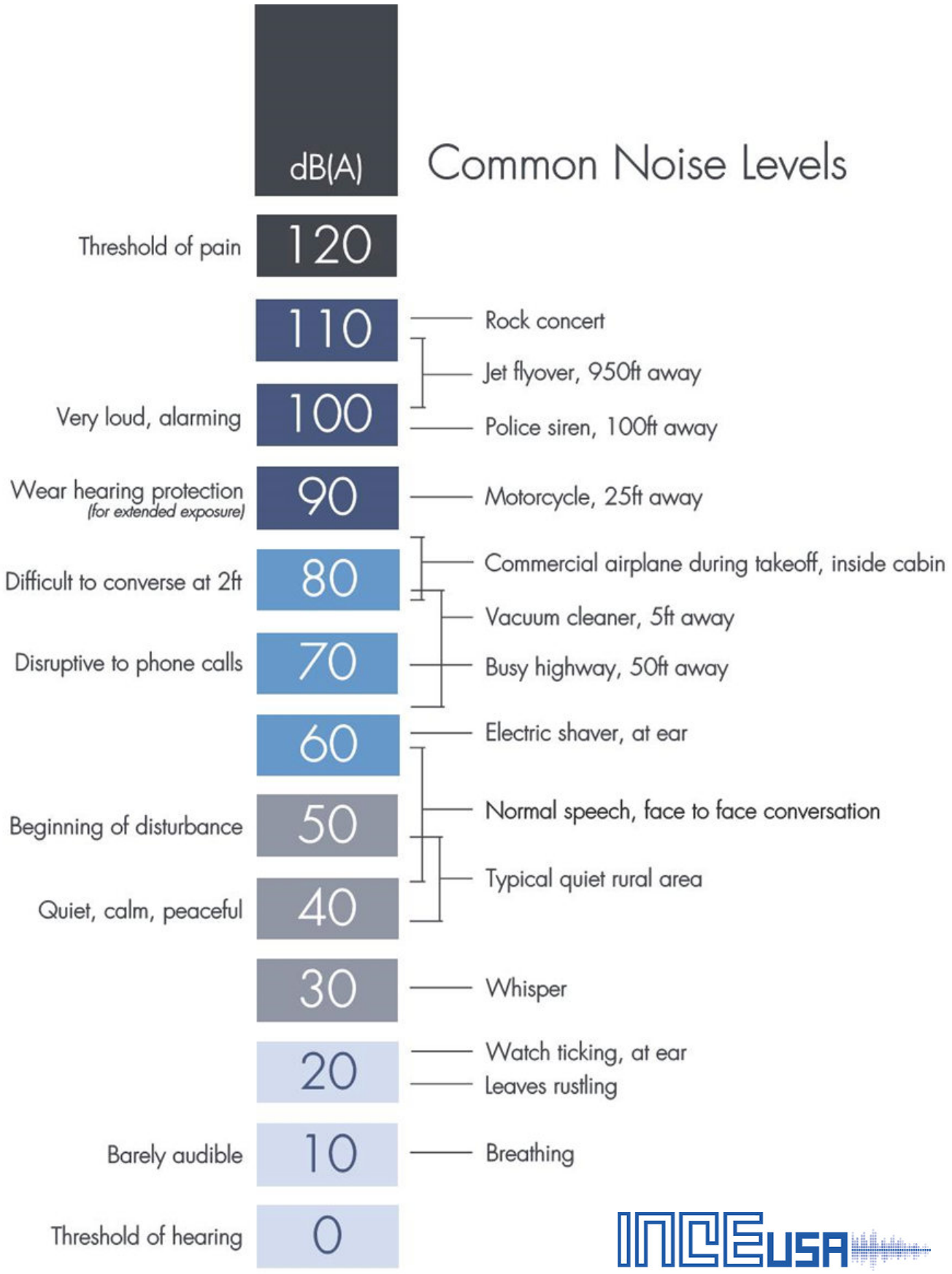


Figure 2-1: Common Noise Levels

Minimum sound level (L_{min}): The lowest values measured by the sound meter over a given time period.

Day-night average sound level (L_{dn}): A noise metric used to reflect a person's cumulative exposure to sound over a 24-hour period, expressed as the noise level for the average day of the year on the basis of annual operation.

Community noise equivalent level (CNEL): CNEL represents a composite 24-hour noise level. The CNEL is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time-of-day corrections require the addition of 5 decibels to dBA L_{eq} sound levels in the evening from 7:00 p.m. to 10:00 p.m., and the addition of 10 decibels to dBA L_{eq} sound levels at night between 10:00 p.m. and 7:00 a.m. These additions are to account for the noise-sensitive time periods during the evening and night hours when quiet is most desirable and sound appears louder. CNEL does not represent the actual sound level heard at any time, but rather represents the total sound exposure.

Root mean square (RMS): RMS is the average vibration amplitude. The RMS amplitude is defined as the average of the squared amplitude of the signal and is most frequently used to describe the effect of vibration on the human body (FTA, 2018).

Peak Particle Velocity (PPV): PPV is the maximum instantaneous peak of the vibration signal (FTA, 2018). The PPV is most frequently used to describe vibration impacts on buildings.

Vibration Decibel (VdB): VdB is a unit used to measure ground motion caused by vibrations, specifically particle velocity in inches per second.

2.2 Sound Propagation

Sound propagates uniformly outward in a spherical pattern. Sound can propagate through air, water, and solids. During propagation, waves can be reflected, refracted, or attenuated by the medium. The reduction of sound (acoustic) waves is known as attenuation. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance in air from a point source. Sound attenuation can occur in numerous ways, including:

- Dissipating through the air when absorbed by another medium.
- Reflected against a barrier.
- Via interference from ambient noise.

2.3 Stationary Noise

A stationary noise source refers to any fixed-location activity or equipment that generates noise. Examples include engines, machinery, energy generation systems, and other powered equipment, as well as activities such as loading and unloading and parking lot activity. Although noise from motor vehicles on public roads is generally exempt from local regulation, these vehicles are considered stationary noise

sources when used on private property, such as at construction sites, truck terminals, or warehouse facilities.

The impact of stationary noise depends on several factors, including the type and operation of the equipment, the distance and path between the noise source and the receiver, and environmental conditions such as weather. Regulation of stationary noise can occur at the point of manufacture (for example, limits on engine noise), through restrictions on hours of operation, location of installation, or by requiring noise mitigation features such as barriers, structures, or other project features.

Construction activities are a frequent and often temporary source of stationary noise. Although construction-related noise is typically higher than existing background levels, it is limited to the duration of the work. Construction occurs in phases, each involving different equipment and operations, resulting in varied noise levels and characteristics throughout the project. Despite differences in equipment type and size, the primary sources and patterns of noise during construction are consistent enough to categorize noise levels by construction phase.

2.4 Mobile Noise

Traffic noise levels are primarily influenced by three factors: the volume of traffic, the speed of vehicles, and the proportion of trucks within the traffic flow. In general, traffic noise becomes louder with increased vehicle volume, higher speeds, and a greater number of heavy trucks. Vehicle noise comes from a combination of sources, including the engine, exhaust system, and tires.

Because noise levels are measured on a logarithmic scale, doubling the volume of traffic (while speed and truck percentage remain the same) results in an increase of about 3 dBA. According to the Federal Highway Administration (FHWA), a change of 3 dBA is considered "barely perceptible" and a change of 5 dBA is considered readily perceptible. A 10 dBA increase is typically required to produce a doubling in perceived loudness. The mix of vehicles also affects noise levels; as the number of heavy trucks rises and makes up a larger share of the traffic, nearby noise levels increase (FTA, 2018).

2.5 Noise From Multiple Sources

Because sound pressure levels in decibels are measured on a logarithmic scale, they cannot be added or subtracted using standard arithmetic. Instead, these levels are combined using energy-based summation. This means that adding a new noise source with the same sound level as an existing one does not result in a doubling of the overall noise level.

When two noise sources differ by 10 dBA or more, the louder source determines the overall level, and the combined noise level will be equal to that louder source. If the difference is between 0 and 1 dBA, the resulting level will be 3 dBA higher than the louder source or both sources if they are equal. A difference of 2 to 3 dBA results in a combined level 2 dBA above the louder source. When the difference is between 4 and 10 dBA, the resulting level will be 1 dBA higher than the louder source (FTA, 2018).

2.6 Vibration

The FTA *Transit Noise and Vibration Impact Assessment Manual* describes that vibration is the periodic oscillation of a medium or object. Sources of ground-borne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Unlike airborne noise, ground-borne vibration is generally not perceptible outdoors and is primarily an indoor annoyance. Vibration effects should therefore be evaluated at the structure, considering building characteristics. Light structures such as wood-framed homes are more susceptible to vibration than heavy buildings with deep or spread foundations. In general, heavier buildings respond less to ground vibration due to soil-structure coupling.

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts on buildings. The root mean square (RMS) vibration is the average of the squared amplitude of the signal and is most frequently used to describe the effect of vibration on the human body. Also, vibration decibel notation (VdB) is another vibration notation used by the FTA to describe vibration levels, provide a background of common vibration levels, and set vibration limits. Typical sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, heavy trucks and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. For construction-related activities, PPV-based threshold, such as those established by California Department of Transportation (Caltrans), are generally more appropriate for evaluating potential impacts on both structures and human receptors.

3 REGULATORY SETTING

3.1 Federal

Federal Transit Administration Noise and Vibration Guidance

The noise and vibration assessment in this report is based on criteria from the FTA's 2018 *Transit Noise and Vibration Impact Assessment Manual* (FTA Manual) for a detailed construction noise assessment. Table 3-1, *Construction Noise Thresholds*, lists the FTA's recommended noise thresholds for a detailed construction noise assessment based on adjacent land uses.

Table 3-1: Construction Noise Thresholds

Land Use	$L_{eq.equip(8hr)}$, dBA	
	Day	Night
Residential	80	70
Commercial	85	85
Industrial	90	90

Source: Federal Transit Administration. (2018). *Federal Transit Administration Transit Noise and Vibration Guidance.*

Construction activity can result in varying degrees of ground vibration, depending on the equipment and method employed. Operation of the construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings founded on the soil near the construction site respond to these vibrations with varying results, ranging from no perceptible effects at the lowest levels, low rumbling sounds and perceptible vibration at moderate levels, and slight damage at the highest levels. While ground vibrations from construction activities do not often reach levels that can damage structures, fragile buildings must receive special consideration.

Federal Interagency Committee on Noise

The Federal Interagency Committee on Noise made the following recommendations when reviewing noise levels for land use planning. If screening analysis shows that noise sensitive areas will be at or above 65 dB and will have an increase of 1.5 dB L_{dn} or more, further analysis should be conducted of noise-sensitive areas between 60-65 dB L_{dn} having an increase of 3 dB L_{dn} or more due to the proposed project noise exposure. If the 65 dB L_{dn} screening test calls for further analysis between 60-65 dB L_{dn}, agency mitigation options may include noise sensitive areas between 60-65 dB L_{dn} that are projected to have an increase of 3 dB or more as a result of the proposed project noise exposure. When the ambient noise level is less than 60 dB L_{dn}, a margin of safety of 5 dB is applied to the identified outdoor level to account for other adverse effects on activity interference and annoyance as well as for the most sensitive fraction of the population.

3.2 State

Noise Element Requirements

California Government Code Section 65302(f) mandates that the legislative body of each county and city adopt a Noise Element within the General Plan. The Element must identify and evaluate noise problems within the community, focusing on noise sources such as transportation, industrial plants, and airports, and presenting noise contours using CNEL or Ldn.

The Governor's Office of Land Use and Climate Innovation (previously known as the Governor's Office of Planning and Research) Noise Element Guidelines include recommended exterior and interior noise level standards for local jurisdictions to identify and prevent creation of incompatible land uses due to noise. The Noise Element Guidelines contain a land use compatibility table that describes the compatibility of various land uses with a range of environmental noise levels in terms of community noise equivalent level (CNEL). A noise environment of 50 CNEL to 60 CNEL is considered to be "normally acceptable" for residential uses.

Title 24 – California Building Standards Code

The California Building Code (CBC) (California Code of Regulations Title 24, Part 2) contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. Section 1206.4, *Allowable Interior Noise Levels*, of the CBC requires that interior noise levels attributable to exterior sources shall not exceed 45 dB in any habitable room.

California Department of Transportation

Caltrans published updates to the *Traffic Noise Analysis Protocol* and *Transportation and Construction Vibration Guidance Manual* in April 2020. It contains the recommended thresholds to evaluate vibration impacts during construction. The construction vibration criteria include consideration of building conditions, as shown in Table 3-2, *Construction Vibration Damage Thresholds*.

Table 3-2: Construction Vibration Damage Thresholds

Structure and Condition	Maximum PPV, inches/second	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial structures	2.0	0.5

PPV=peak particle velocity
Notes: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.
Source: Caltrans. (2020). *Transportation and Construction Vibration Guidance Manual*.

3.3 Local

City of San Jacinto General Healthy Community Element

The City of San Jacinto General Plan (Envision San Jacinto 2040) is a policy document adopted by the City Council to guide long-term growth and development within the City. The General Plan includes goals and policies used by the City to evaluate land use and development decisions. Noise policies are contained in the Public Safety Element and provide guidance for managing noise exposure and land use compatibility throughout the City. The following policies are applicable to the proposed Project.

Goal PS-6: A comfortable community environmental that is free from excessive noise pollution.

Policies

PS-6.1 Noise Exposure. Consider the noise compatibility of existing and future development when making land use planning decisions.

PS-6.2 Noise Mitigation. Require new development to mitigate excessive noise to the standards indicated in Tables PS-1 [included below as Table 3-3], PS-2 [included below as Table 3-4], PS-3 [included below as Table 3-5], and PS-4 to the extent feasible through best practices, including building location and orientation, building design features, placement of noise-generating equipment away from sensitive receptors, shielding of noise-generating equipment, placement of noise-tolerant features between noise sources and sensitive receptors, and use of noise-minimizing materials.

Table 3-3: Land Use Compatibility for Community Noise Exposure

Land Use Categories	Community Noise Equivalent Level (CNEL)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential	<60	55-70	70-75	75-80
Hospitals, Nursing Homes, Assisted Living	A	C	C	C
Hotel, Motel, Mixed Use	A	A	B	B
Churches	A	A	A	A
Schools, Libraries, Museums	A	A	A	B
Sports Arenas, Outdoor Spectator Sports	B	B	C	C
Playgrounds, Neighborhood Parks	A	A	A	A
Golf Courses, Riding Stables, Water Recreation, Cemeteries	A	A	A	A
Office Buildings, Businesses	A	A	B	C
Industrial, Manufacturing, Utilities, Agriculture	A	A	A	B

Zone A (Normally Acceptable): Specified Land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
Zone B (Conditionally Acceptable): New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
Zone C (Normally Unacceptable): New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
Zone D (Clearly Unacceptable): New construction or development should generally not be undertaken.
Source: City of San Jacinto, (2024), General Plan Chapter Five: Public Safety | Envision San Jacinto.

Table 3-4: Maximum Allowable Noise Exposure From Mobile Noise Sources

Land Use Categories	Community Noise Equivalent Level (CNEL) Energy Average CNEL[1]	
	Interior	Exterior
Residential – single-family, multi-family, duplex, and mobile home	65 dB(A)	45 dB(A)
Residential – transient lodging, hotels, motels, nursing homes, hospitals, assisted care facilities	65 dB(A)	45 dB(A)
Private offices, churches, libraries, theaters, concert halls, meeting halls, schools	65 dB(A)	45 dB(A)
General commercial, office, retail, reception, restaurant	65 dB(A)	45 dB(A)
Light industrial[2]	--	--
Parks and playgrounds[3]	65 dB(A)	50 dB(A)
Golf courses, outdoor spectator sports	70 dB(A)	--

Notes:
1. In Community Noise Equivalent Level (CNEL)
2. Noise standards do not apply to Light Industrial areas.
3. Outdoor environment limited to playground areas, picnic areas, and other areas of frequent human use.

Table 3-5: Allowable Exterior/Interior Noise Level Due to Stationary Noise Source

Land Use Categories	Allowed Equivalent Noise Level, dBA L_{eq}^2 (Exterior)		Allowed Equivalent Noise Level, dBA L_{eq}^2 (Interior)	
	7:00 a.m. to 10:00 p.m.	10:00 p.m. to 7:00 a.m.	7:00 a.m. to 10:00 p.m.	10:00 p.m. to 7:00 a.m.
All single-family residential properties	65	45	45	40
All multifamily residential properties and mobile home parks	65	50	45	40
All commercial property	65	60	45	40
The residential portion of mixed-use properties	70	70	45	40
All manufacturing or industrial properties and all other uses	70	70	-	-

Notes:

1. If the ambient noise level exceeds the resulting standard, the ambient noise level shall be the standard.
2. Measurements for compliance are made on the affected property pursuant to Municipal Code Section 8.40.160.
3. It is unlawful for any person at any location within the incorporated area of the city to create noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, which noise causes the noise level, when measured at any location on any other property, to exceed either of the following:
   a. The noise standard for the applicable zone for any fifteen (15) minute period;
   b. A maximum instantaneous (single instance) noise level equal to the value of the noise standard plus twenty (20) dBA for any period time (measured using A-weighted slow response).
4. In the event the ambient noise level exceeds the noise standard, the maximum allowable noise level under such category shall be increased to reflect the maximum ambient noise level.
5. The residential portion of mixed-use properties standard shall apply to that portion of the residential property falling within one hundred (100) feet of a commercial property or use if the noise originates from that commercial property or use.
6. If the measurement location on a boundary between two different types of land uses, the lower noise level standard applicable to types of land uses shall apply.

PS-6.3 Acoustical Studies. Require acoustical studies for new discretionary developments and transportation improvements that have the potential to affect existing noise-sensitive uses such as schools, hospitals, libraries, care facilities, and residential areas, and for projects that would introduce new noise-sensitive uses into an area where existing noise levels may exceed the thresholds identified in this element. For projects that are required to prepare an acoustical study, the following mobile and stationary noise source criteria shall be used to determine the significance of those impacts.

Mobile Noise Sources:

a. Where existing traffic noise levels are within or below the "normally acceptable" noise criteria at the affected land use (see Table PS-1), a readily perceptible 5 dBA CNEL or greater increase in roadway noise will be considered significant;
b. Where existing traffic noise levels falls within the "conditionally acceptable" noise criteria at the sensitive land use, a +3 dBA CNEL or greater increase in roadway noise levels will be considered significant; and
c. Where existing traffic noise levels exceed the "conditionally acceptable" noise criteria at the sensitive land use, a +1.5 dBA CNEL or greater increase in roadway noise levels will be considered significant.

PS-6.5 Vehicular Traffic. Monitor and enforce existing speed limits and motor vehicle codes requiring adequate mufflers on all types of vehicles traveling through the city.

PS-6.6 Commercial Noise. Require the use of noise attenuation measures, including screening and buffering techniques, for all new commercial development expected to produce excessive noise; in existing cases where the City's noise standards are exceeded, work with Code Enforcement to require compliance.

PS-6.7 Construction Noise. Require construction activities to reduce noise impacts on adjacent uses to the criteria identified in Tables PS-3, or, if the criteria cannot be met, to the maximum extent feasible, complying with Chapter 8.40 of the San Jacinto Municipal Code (Noise Control) and use best practices. Construction activities outside of the permitted construction hours identified in the San Jacinto Municipal Code may be approved on a case-by-case basis by the Community Development Director.

Actions

PS-6a Review Chapter 8.40 of the San Jacinto Municipal Code and update as necessary to ensure that the noise standards are consistent with this General Plan, including Tables 3-3, 3-4, PS 3-5, and PS 3-6 and to require new residential, mixed-use with a residential component, and other noise-sensitive development to be designed to minimize noise exposure to noise sensitive uses through incorporation of site planning and architectural techniques.

PS-6e Require all construction activity to comply with the limits (maximum noise levels, hours and days of allowed activity) established in the City noise regulations (Title 24 California Code of Regulations, Noise Ordinance) in order to reduce impacts associated with temporary construction noise to the extent feasible. Trucks associated with construction activities shall follow the designated truck routes described in the Mobility Element.

PS-6i During subsequent updates to Section 8.40 of the Muni Code, review and update Section 8.40.090, Construction Activity Noise Regulations, as needed in order to allow provisions for emergency repairs, exceptional circumstances, and reasonable Sunday construction and maintenance activities, while continuing to achieve the objectives of providing a nuisance-free noise environment.

City of San Jacinto Municipal Code

The City of San Jacinto regulates noise through Title 8 of the Municipal Code (Health and Safety), specifically Chapter 8.40, *Noise Control*.

Section 8.40.030, *Land Use Compatibility Standard.* This section includes the same land use compatibility standards that are listed in Table PS-1 of the General Plan, which is included as Table 3-3 of this report. The standards listed in Table 3-3, *Land Use Compatibility for Community Noise Exposure*, shall apply to all development and infrastructure projects.

Section 8.040.040, *Mobile noise source standards*. This section includes the same maximum allowable noise exposure from mobile sources that are listed in Table PS-2 of the General Plan, which is included as Table 3-4 of this report. The noise standards listed in Table 3-4, *Maximum Allowable Noise Exposure from Mobile Noise Sources*, shall apply to all development and infrastructure projects, unless otherwise specifically indicated.

Section 8.040, *Stationary noise source standards, exterior and exterior*. This section lists the allowable exterior/interior noise levels that are listed in Table PS-3 of the General Plan, which is included as Table 3-5, *Allowable Exterior/Interior Noise Level Due to Stationary Noise Source*, of this report.

Section 8.40.090, *Construction activity noise regulations.*

A. The erection (including excavation), demolition, alteration or repair of any building shall occur between the hours of seven a.m. and seven p.m. on weekdays and Saturdays, and between nine a.m. and six p.m. on Sundays and holidays, except when such work complies with the terms of a temporary use permit which may be issued by the community development director or his or her designee, upon a showing of sufficient need due to hot or inclement weather, or the use of an unusually long process material, or other circumstances of unusual and compelling nature.
B. No landowner, construction company owner, contractor, subcontractor or employer shall permit or allow any person or persons working under their direction and control to operate any tool, equipment or machine in violation of the provisions of this section.

C. Exceptions.

1. The provisions of this section shall not apply to emergency construction work performed by a private party when authorized by the city manager or his or her designee;
2. The maintenance, repair or improvement of any public work or facility by public employees, by any person or persons acting pursuant to a public works contract, or by any person or persons performing such work or pursuant to the direction of, or on behalf of, any public agency; provided, however, this exception shall not apply to the city of San Jacinto, or its employees, contractors or agents, unless:
    a. The city manager or a department head determines that the maintenance, repair or improvement is immediately necessary to maintain public services; or
    b. The maintenance, repair or improvement is of a nature that cannot feasibly be conducted during normal business hours; or
    c. The city council has approved project specifications, contract provisions, or an environmental document that specifically authorizes construction during hours of the day that would otherwise be prohibited pursuant to this section;
3. Any construction that complies with the noise limits specified in Section 8.40.050.

4 EXISTING CONDITIONS

4.1 Existing Noise Levels

To assess existing ambient noise levels in the Project area, EPD conducted short-term noise measurements on April 8, 2026, at three locations in the vicinity of the proposed Project. These measurement locations are shown in Figure 4-1, *Noise Measurement Locations*, and are representative of typical noise exposure levels experienced at the nearest sensitive receptors. Each measurement consisted of a 15-minute recording taken between 12:00 p.m. and 1:30 p.m. These short-term L_{eq} measurements are considered indicative of general noise conditions throughout the day.

The measurements were conducted during "off-peak" traffic hours (9:00 a.m. to 3:00 p.m.) to establish a more conservative baseline. During traditional peak hours, traffic congestion often results in lower vehicle and heavy truck volumes. In contrast, free-flowing traffic conditions immediately before or after peak periods can produce higher noise levels. The recorded noise levels at the measurement sites and at the nearest sensitive receptors are summarized in Table 4-1, *Ambient Noise Measurements*.

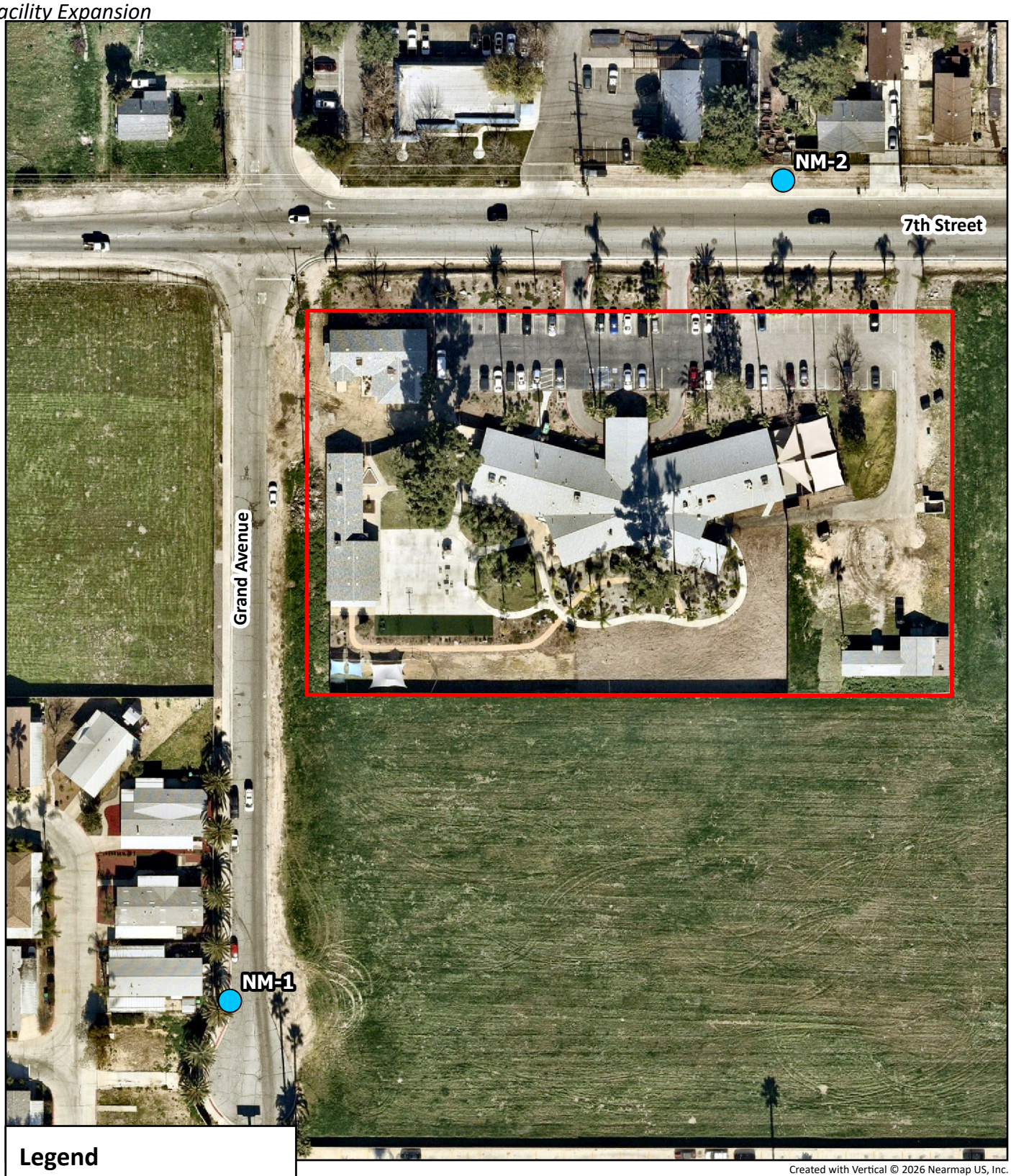
Table 4-1: Ambient Noise Measurements

Location	Description	L_{eq} (dBA)	L_{max} (dBA)	L_{min} (dBA)
NM-1	South of 943 West 7th St, San Jacinto, CA 92582	69.8	86.8	45.7
NM-2	Along South Grand Avenue, east of 913 South Grand Avenue, San Jacinto, CA 92582	58.3	79.2	37.8

Notes: dBA=A-weighted decibels; L_{eq}=Equivalent Sound Level; L_{min}=Minimum Sound Level; L_{max}=Maximum Sound Level
Source: Refer to Appendix A, *Noise Measurement Data*.

The background ambient noise levels in the Project area are dominated by transportation-related noise associated with West 7th Street. The meteorological conditions during the measurement of ambient noise levels included clear conditions and warm temperatures with light windspeeds (4 miles per hour). Noise monitoring equipment used for the ambient noise survey consisted of a PCE-430, which is a Class 1 sound level meter with a half-inch measurement microphone. The monitoring equipment complies with applicable requirements of the American National Standards Institute (ANSI) for sound level meters. The results of the field measurements are included in Appendix A.

Figure 4-1: Noise Measurement Locations



4.2 Sensitive Receptors

Noise-sensitive receptors are locations or individuals that may be adversely affected by elevated noise levels due to their nature, function, or occupancy. Land uses considered sensitive by the State of California includes schools, playgrounds, athletic facilities, hospitals, rest homes, rehabilitation centers, long-term care and mental care facilities. Generally, a sensitive receptor is identified as a location where human populations (especially children, senior citizens, and sick people) are present.

The sensitive receptors closest to the Project site boundary are the property lines of the single-family residences approximately 80 feet north of the Project site across W. 7th Street and 90 feet west of the Project site across S. Grand Avenue. Due to the setback to the property line, the nearest structure with sensitive receptors is the single-family residence located 90 feet north of the Project site. Other noise sensitive land uses near the Project site are located at greater distances than those listed above and would experience lower noise levels than those detailed in this report due to the additional attenuation from distance and the shielding of intervening structures.

4.3 Aircraft Noise

Aircraft-related noise levels are primarily associated with aircraft engine noise made during takeoff, landing, or idling on the tarmac. The nearest airport is the Hemet Ryan Airport, which is located 3.9 miles southeast of the Project site.

4.4 Stationary Sources

Land uses in the Project area are industrial and residential. The primary sources of stationary noise in the Project vicinity are urban-related activities (e.g., mechanical equipment, and parking areas). The noise associated with residential may represent a single-event noise occurrence, short-term noise, or long-term/continuous noise. However, industrial noise is generally continuous, sustained, and higher in intensity, often persisting for long durations and sometimes operating around the clock.

4.5 Existing Traffic Noise

Traffic conditions in the Project vicinity are characterized by steady vehicular flow along primary arterials, with periodic congestion occurring during morning and evening peak hours. Roadway segments adjacent to the study area experience moderate to high traffic volumes, including a mix of passenger vehicles and commercial trucks in and out from the nearby existing residential and industrial land uses along W. 7th Street. Intersections within the vicinity operate with intermittent delays, particularly during peak commuting periods. Overall, traffic activity reflects typical urban conditions and serves as a primary contributor to the existing ambient noise environment.

5 THRESHOLDS OF SIGNIFICANCE

5.1 CEQA Thresholds

Appendix G, *Environmental Checklist Form*, of the CEQA Guidelines contains the following significance criteria. A project could have potential significant impacts regarding noise and vibration if it were to:

- Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of the other agencies;
- Generate excessive ground vibration or ground borne noise levels; or
- For a project located within the vicinity of a private airstrip or an airport land use plan, or where such a plan has not been adopted, within 2 miles of a public or public use airport, expose people residing or working in the project area to excessive noise levels.

Based on these standards/criteria, the effects of the Project have been categorized as having "no impact," a "less-than-significant impact," or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less-than-significant level through the application of existing regulations and mitigation, it is categorized as a significant and unavoidable impact.

5.2 Methodology

Construction Noise

Since the City's Municipal Code does not establish quantified thresholds for increases in noise or vibration, this analysis applies the thresholds from the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual. Construction noise levels were estimated using typical equipment noise levels published by the FTA and the Federal Highway Administration (FHWA), in conjunction with the FHWA's Roadway Construction Noise Model (RCNM), which incorporates a national database of reference noise levels for construction equipment.

The equipment list used in this analysis was developed based on project land use and location using the California Emissions Estimator Model (CalEEMod). Because the specific equipment to be used on-site is not yet confirmed, and because equipment would move throughout the site rather than remain stationary for extended periods, this evaluation considers the combined noise levels of the two loudest equipment operating simultaneously during each construction phase using the Computer Aided Noise Abatement (CadnaA) program. CadnaA can analyze multiple types of noise sources using the spatially accurate project site plan and OpenStreetMap data in its calculations to predict outdoor noise levels. Using the ISO 9613-2 protocol, CadnaA calculates the distance from each noise source to the noise receptor locations and

applies ground absorption, distance attenuation, and barrier/building attenuation inputs to provide a summary of the noise level at each receptor, as well as the partial noise level contributions from each source.

Construction noise is expressed in terms of A-weighted equivalent sound levels (dBA L_{eq}). The FTA manual identifies a daytime noise threshold of 80 dBA L_{eq} for residential land uses, which is considered conservative. Accordingly, this analysis uses the 80 dBA L_{eq} threshold to evaluate potential construction noise impacts. It is important to note that the 80 dBA construction threshold applies to the time-averaged L_{eq}, not the momentary L_{max} value.

Operational Noise

Operational noise would include noise from off-site mobile sources and on-site noise sources such as heating, ventilation, air conditioning (HVAC) units, parking lot activities, and on-site vehicles including automobiles, garbage, and delivery trucks traveling on internal roads. Operational noise sources were compared to the exterior thresholds set in the City of San Jacinto Municipal Code to evaluate the significance of impact. The operational noise on-site is analyzed using the CadnaA program.

Consistent with the ISO 9613-2 protocol, the CadnaA noise prediction model relies on reference sound power levels (PWL) to describe individual noise sources. While sound pressure levels (SPL) quantify in decibels the intensity of a given sound at a reference distance, SPLs vary with distance from the source and are influenced by intervening obstacles and barriers, air absorption, wind, and other factors. In contrast, sound power represents the total acoustic energy emitted by a source and is an absolute value that is not affected by the surrounding environment.

The operational noise level calculations presented in this study account for distance attenuation due to geometric spreading, which occurs when sound from a localized stationary source (i.e., a point source) propagates uniformly outward in a spherical pattern. A default ground attenuation factor of 0.5 was used in the analysis to represent mixed ground conditions, reflecting a combination of hard and soft surfaces. This approach provides a reasonable approximation for environments where both surface types are present and aligns with typical real-world conditions.

The FHWA Highway Traffic Prediction Model (FHWA-RD-77-108) was used to evaluate traffic-related noise conditions along local roadway segments in the Project vicinity. Since the ambient noise level ranges from 58.3 to 69.8 dBA (see Table 4-1, *Ambient Noise Measurements*), the mobile noise increase due to implementation of the Project was compared to the lowest threshold of 1.5 dBA to evaluate the significance.

Emergency Generator

The proposed Project would have one 236 horsepower (hp) emergency generator on-site. Emergency generators operate only during power outages or other emergencies, which are infrequent and temporary events, and are not a routine operational noise source. Periodic maintenance and testing would be brief, infrequent, limited to daytime hours, and restricted in annual duration by air district requirements, so it

would not substantially affect ambient noise levels or contribute to the Project's long-term noise level. Therefore, further analysis regarding the emergency generator is not warranted.

Construction and Operation Vibration

Vibration levels were calculated based on the structure damage assessment method provided in the Caltrans' *Transportation and Construction Vibration Guidance Manual*. As the nearest sensitive receptor structures are residential uses, the construction damage threshold of 0.3 inches per second is applied.

Distance to the Surrounding Sensitive Receptors

As discussed above, there are sensitive receptors located in the Project vicinity. The nearest sensitive receptors are the residences located to the north of the Project site. Other noise sensitive land uses near the Project site are located at greater distances than those listed above and would experience lower noise levels than those detailed in this report due to the additional attenuation from distance and the shielding of intervening structures. The construction vibration impacts are evaluated from the construction activities to the nearest residential structures. Please refer to Table 5-1, *Distances Used for Construction Noise Analysis*, for details of distances.

Table 5-1: Distances Used for Construction Noise Analysis

Sensitive Receptor	Distance Between Project Boundary to Surrounding Land Uses (feet)	Distance from Construction Activities to the Nearest Structure (feet)
Residential to the North	80	90
Residential to the West	90	100

Airport Noise

The distance between the Project site and the nearest airport was evaluated to determine whether the Project is located within an airport land use plan area or within the vicinity of a public or private airstrip. Aircraft flyovers may occasionally be audible at the project site due to air traffic in the surrounding area. The nearest airport is the Hemet Ryan Airport, which is located 3.9 miles southeast of the Project site. The Project is not located within the Airport Influence Area of Hemet Ryan Airport (County of Riverside, 2023). Therefore, further analysis is not warranted.

5.3 Significance Criteria

The following significance criteria are based on the analysis identified within Appendix G of the CEQA Guidelines. The City's General Plan guidelines and Municipal Code regulations identify noise compatibility and establish noise standards that are implemented as thresholds. However, the existing City regulations do not identify thresholds that are considered substantial or vibration criteria during construction. Thus,

information gathered from the FTA Manual, and Caltrans *Transportation and Construction Vibration Manual* were utilized to evaluate construction thresholds, and vibration thresholds, respectively.

Construction

The threshold of 80 dBA L_{eq} set in the FTA's *Transit Noise and Vibration Impact Assessment Manual* was used to evaluate noise impacts.

Vibration

Vibration-generating activities were evaluated using the Caltrans *Transportation and Construction Vibrational Manual* vibration damage thresholds to assess potential construction-related impacts at nearby buildings. The threshold for older residential structures was used, which is 0.3 PPV (in/sec), as listed previously in Table 3-2, *Construction Vibration Damage Thresholds*.

Summary

Table 5-2, *Significance Criteria Summary*, provides a summary of thresholds established by the City of San Jacinto and used in this report.

Table 5-2: Significance Criteria Summary

Analysis	Conditions	Significant Criteria	
		Daytime	Nighttime
Operational Mobile Noise[1]	If ambient is within or below the "normally acceptable" noise criteria at the affected land use	≥ 5 dBA CNEL Project Increase	
	If ambient is within or below the "conditionally acceptable" noise criteria at the affected land use	≥ 3 dBA CNEL Project Increase	
	If ambient exceeds the "conditionally acceptable" noise criteria at the affected land use	≥ 1.5 dBA CNEL Project Increase	
Operational Stationary Source[1,2]	Exterior Noise Level Standards	65 dBA	45 dBA
Construction	The erection (including excavation), demolition, alteration or repair of any building shall occur between the hours of seven a.m. and seven p.m. on weekdays and Saturdays, and between nine a.m. and six p.m. on Sundays and holidays, except when such work complies with the terms of a temporary use permit which may be issued by the community development director or his or her designee, upon a showing of sufficient need due to hot or inclement weather, or the use of an unusually long process material, or other circumstances of unusual and compelling nature.[4]		
	Noise Level at Residential Property[5]	80 dBA	Not Allowed
	Construction Off-site Traffic Noise	3.0 dBA	
	Vibration Damage Criteria[6]	0.3 PPV (inches/second)	

1. City of San Jacinto. (2022a). *City of San Jacinto General Plan.*
2. City of San Jacinto. (*2026*). *City of San Jacinto Municipal Code, Section 8.40.040. Mobile noise source standards.*
3. City of San Jacinto. (*2026*). *City of San Jacinto Municipal Code. Construction activity noise regulations.*

Analysis	Conditions	Significant Criteria	
		Daytime	Nighttime

4. FTA. (2018). *Transit Noise and Vibration Impact Assessment Manual*.
5. Caltrans. (2020). *Transportation and Construction Vibration Guidance Manual*. For older residential structures.

6 PROJECT IMPACTS

6.1 Construction Noise

On-Site Construction Noise

Construction is accomplished in different phases with a specific equipment mix, depending on the work to be performed during that phase. As a result of the different equipment mix for each phase, each phase has its own noise characteristics; some phases have higher continuous noise levels, while others have higher impact noise levels. The Project construction activities are expected to occur in the following phases:

1. Demolition
2. Site preparation;
3. Grading;
4. Building construction;
5. Paving; and
6. Architectural coating.

Construction activities frequently shift from one location to another. For example, during site preparation and grading, noise-generating activities may concentrate in an area for a short period to remove existing structures, while the majority of the grading involves the equipment moving back and forth in a predictable pattern throughout the site. The building construction and foundation work generally concentrates near the building location, while paving involves a pattern of movement throughout the site over a short term. Therefore, the FTA recommends that construction activities are best evaluated as multiple moving point sources because equipment changes position in terms of its distance and direction relative to the receivers (FTA, 2018). Due to the size and location of the expansion, only the sound power level from the two loudest equipment operating concurrently on-site was used. The noise levels of the potential construction equipment are listed in Table 6-1, *Construction Equipment Noise Levels*.

Table 6-1: Construction Equipment Noise Levels

Activity	Equipment[1]	Quantities[1]	Maximum Noise Level @ 50 Feet[2,3]	Two Loudest Noise Levels @ 50 Feet[2,3]	Sound Power Level at Source
			dBA L_{max}	dBA L_{eq}	dB (PWL)
Demolition	Concrete/Industrial Saws	1	**89.6**	84.5	**114.7**
	Rubber Tired Dozers	1	81.7		
	Tractors/Loaders/Backhoes	1	**84.0**		
Site Preparation	Graders	1	**85.0**	82.7	112.8
	Rubber Tired Dozers	1	**84.0**		
	Crawler Tractors	1	81.7		
Grading	Graders	1	**85.0**	82.7	112.8
	Rubber Tired Dozers	1	**84.0**		
	Crawler Tractors	1	81.7		
Paving	Pavers	1	77.2	84.5	**114.7**
	Roller	1	80.0		
	Cement and Mortar Mixer	1	80.0		
	Tractors/Loaders/Backhoes	1	**84.0**		
	Paving Equipment	1	**89.5**		
Building Construction	Cranes	1	**80.6**	80.7	110.9
	Forklift	1	74.7		
	Generator Sets	1	72.8		
	Tractors/Loaders/Backhoes	1	**84.0**		
	Welders	3	74.0		
Architectural Coating	Air Compressors	1	77.7	77.7	107.8

Notes: **bold** = Selected equipment with the two highest noise levels. PWL=Sound Power Level.
Sources:

1. The equipment list at each construction phase is based on the California Emissions Estimator Model and questionnaire filled by the applicant.
2. Federal Highway Administration. (2006). *Construction Noise Handbook*.
3. The noise levels are based on Table 9.1 of the Construction Noise Handbook. If the exact equipment listed is not available, a default noise level of 85 dBA, representative of typical construction equipment, is used. Specifically, the Forklift is modeled using this default value. Additionally, for the category of Tractors/Loaders/Backhoes, the noise level of a Tractor (84 dBA) is used, as it represents the loudest among the three.

The nearest off-site noise sensitive receptors are the single-family residences located 80 feet to the north and 90 feet to the west of the Project site. The nearest on-site noise sensitive receptors are the employees and patients from the existing uses on-site. Project construction would be allowed only between the hours of 7:00 a.m. and 7:00 p.m. on weekdays and Saturdays, and between 9:00 a.m. and 6:00 p.m. on Sundays and holidays, in compliance with the City's Municipal Code. Further, the noise levels of construction equipment are listed in Table 6-1, *Construction Equipment Noise Levels*, above. As discussed above, as a conservative analysis, this analysis assumes the two loudest equipment are operating on-site concurrently. As shown in Table 6-1, the estimated temporary noise levels from the loudest Project construction activities, paving, at the nearest sensitive receptors would be 71.9 dBA on-site and 62.8 dBA off-site, which would not exceed the FTA threshold of 80 dBA L_{eq} for residential properties, refer to Appendix B, *Noise Modeling Details.* As such, impacts from Project construction noise would be less than significant.

Construction Noise from Off-Site Traffic

Project construction would result in additional traffic on adjacent roadways over the period that construction occurs. According to the California Emissions Estimator Model (CalEEMod), which is used to predict the number of construction-related automotive trips, the maximum number of Project construction trips traveling to and from the Project site during a single construction phase is estimated to be 8 worker trips and 25 hauling trips per day. Using a reference from the State of Illinois Department of Transportation, noise generated by one truck at 55 miles per hour generates a noise level equivalent to approximately 28 automobiles (State of Illinois, 2015). Therefore, during the demolition phase, the Project is expected to result in the equivalent of approximately 708 automobile trips (8 + [25 x 28] =708). According to the *Caltrans Traffic Noise Analysis Protocol*, a doubling of traffic on a roadway results in an increase of 3 dB (Caltrans, 2020a). A 3 dBA change is considered a just perceptible difference. The Project site would be accessible via West 7th Street during construction. There are 8,686 daily vehicle trips on West 7th Street (Streetlight Data, 2026). Therefore, the Project's construction trips (708 trips) would not result in a doubling of traffic on the transportation network; thus, noise from the addition of construction trips would not be perceptible. Additionally, construction is temporary, and construction trips would cease upon completion of the Project. As such, impacts related to off-site construction noise would be less than significant.

6.2 Operational Noise

Long-term operational noise would be generated from the day-to-day operational activities including:

- Off-site mobile sources: automobiles traveling to and from the Project site.
- On-site noise sources:
    - Stationary sources including HVAC units and parking activities.
    - Mobile sources including passenger vehicles, daily delivery trucks, and weekly garbage trucks moving on-site.

Off-Site Mobile Noise

Roadway segment noise levels for the "Existing" and "Existing with Project" scenarios were compared to evaluate Project-related operational noise impacts. According to the *Bradley Gardens Vehicle Miles Traveled Screening Analysis* (VMT Analysis) prepared for the Project, the Project would generate an estimated 181 net new daily trips (EPD Solutions, Inc., 2026). The existing daily trips along West 7th Street is 8,686. According to the *Caltrans Traffic Noise Analysis Protocol*, a doubling of traffic on a roadway results in an increase of 3 dB (Caltrans, 2020a). A 3 dBA change is considered a just perceptible difference. However, as a conservative analysis, this report uses the 1.5 dBA threshold to evaluate the operational off-site traffic noise. The increase due to the Project would be 0.09 dBA based on the following formula:

$$Change\ in\ Noise = 10 * Log\ (\frac{Volumn_{Existing+project}}{Volumn_{Existing}})$$

Therefore, the traffic noise increase from implementation of the proposed Project would be less than significant.

On-Site Noise

Heating, Ventilation, and Air Conditioning

The Project proposes construction of a new building and renovation of an existing building. Typically, mechanical equipment such as heating, ventilation, and air conditioning (HVAC) units would be located on the rooftop of the structure. It is assumed that one ton of HVAC capacity is required for every 300 to 500 SF. Based on this assumption, and as a conservative analysis, the renovated building would require one 8-ton HVAC unit, while the new building would require seven 8-ton HVAC units. For this analysis, it is assumed that the new structures would utilize a commonly available HVAC unit with standard sound performance (or similar), such as an 8.5-ton commercial packaged air conditioner manufactured by Daikin (Klondike AC & Heating, 2026). According to the manufacturer's specifications, this unit generates a sound pressure level of 82.65 dBA at the source. As a conservative assumption, all HVAC units were modeled as operating continuously (24 hours per day) at a steady-state sound pressure level of 82.7 dBA. In addition, no noise attenuation from walls or other on-site structures was assumed, further ensuring a conservative analysis.

Based on modeling results from CadnaA (refer to Attachment B, *Noise Modeling Data*), the noise generated from HVAC units would be 40.7 dBA and 36.1 dBA during the daytime and nighttime at the nearest sensitive receptors to the north and west, respectively, which would not exceed the City's exterior thresholds of 65 dBA for daytime and 45 dBA for nighttime.

On-Site Mobile Noise

There are two components of on-site mobile noise: vehicles traveling on internal roads, including regular automobile vehicles, occasional delivery trucks, and weekly garbage trucks, and parking activities. As a

conservative analysis, it was assumed there would be 10 auto vehicle trips per hour during the day on-site, which is the highest peak hour trips based on the VMT Analysis prepared for the Project (EPD Solutions, Inc., 2026). It was assumed that one percent of the vehicles on-site every hour would be attributed to truck activities to account for occasional delivery trucks and weekly garbage trucks. During the night, the traffic volume would decrease to 50 percent and there would be no heavy trucks. Based on the *Noise Navigator Sound Level Database with Over 1700 Measurement Values*, light traffic generates 50.8 dBA at 50 feet, which is within the normally acceptable noise range for single-family community noise standards (Berger, E. H. et al, 2015). As such, traffic associated within the proposed Project would not be of sufficient volume to exceed community noise standards, which are based on a time-averaged scale such as the CNEL scale.

Project Operational Noise Increase in Ambient Noise

To evaluate potential operational noise impacts, Project-generated noise levels from stationary sources and on-site vehicle activities were combined with existing ambient noise measurements to determine any incremental increase above baseline conditions. The difference between the combined noise levels and ambient conditions represents the Project's contribution to overall noise. Based on modeling results prepared using CadnaA (see Appendix B, *Noise Modeling Data*), predicted noise levels would reach 53.8 dBA at the residences to the north, and 41.4 dBA at the residences to the east. Existing ambient noise levels in the Project vicinity range from 58.3 to 69.8 dBA L_{eq}, as shown in Table 4-1. As demonstrated in Table 6-2, *Project Operational Noise Levels*, the increase over ambient would be less than the incremental thresholds based on the ambient noise level measured. Therefore, operational noise associated with the proposed Project would not substantially elevate ambient noise levels beyond established thresholds, and impacts would be considered less than significant.

Table 6-2: Project Operational Noise Levels

Land Use	Project Noise Level (dBA)[1]	Ambient Noise Level (dBA)[2]	Cumulative Noise Level (dBA)[3]	Increase over Ambient(dBA)[4]	Incremental increase (dBA)[5]	Exceed Threshold?
Residential to the North	53.8	69.8	69.9	0.1	1.5	No
Residential to the East	41.4	58.3	58.4	0.1	3.0	No

1. Refer to Appendix B, Noise *Modeling Data*, for outputs.
2. Ambient Noise Level is based on the noise measurement in Table 4-1. The ambient noise for the residential to the north was based on data collected at NM-1, and for the residential to east was based on NM-2.
3. Calculation is based on Logarithmic Addition of Sound Level, $SPL_{total}=10*Log(10^{SP1/10}+10^{SPL2/10})$.
4. Difference between Cumulative Noise Level and Ambient Noise Level.
5. Thresholds are based on the noise measurement in Table 4-1.

6.3 Vibration

Construction Vibration

Construction activities can generate varying levels of ground vibration depending on the equipment used and the methods employed. These vibrations propagate through the ground and decrease in intensity with distance. Table 6-3, *Construction Equipment Vibration Levels*, presents typical vibration levels associated with various types of construction equipment.

Table 6-3: Construction Equipment Vibration Levels

Equipment	Reference Vibration Level at 25 feet (PPV [inches/second])[1]	Vibration Level at 80 feet (PPV [inches/second])[1]	Vibration Level at 90 feet (PPV [inches/second])[1]
Loaded Trucks	0.076	0.013	0.011
Small Bulldozer	0.003	0.001	<0.001

Source:
1. FTA. (2018). *Transit Noise and Vibration Impact Assessment Manual*.
2. $PPV_{equip} = PPV_{ref} \times \left(\frac{25}{D}\right)^{1.5}$, D=distance between the equipment to the sensitive receptors.

Based on the equipment list in Table 6-1, *Construction Equipment Noise Levels*, the Project construction would use vibration-heavy equipment on-site including small rubber-tired dozers and loaded trucks. The Project would not use any equipment over 80,000 pounds or heavy-vibration equipment. The nearest off-site residential structure is located as close as 80 feet from the construction activities. At this distance, Project construction would generate a vibration level of 0.013 from a loaded truck, which would be the most vibrating piece of equipment used. As shown in Table 6-3, *Construction Equipment Vibration Levels*, the vibration level at the nearest off-site residential structure would range from 0.013 to less than 0.001 PPV (inches per second), which would not exceed the threshold of 0.3 inches per second established by Caltrans. As such, vibration impacts during construction would be less than significant.

As an extension project, the Project would also construct a new building attached to the existing building. The small bulldozer should be located more than one foot from the existing building and loaded trucks should be located more than 10 feet from the existing building to avoid vibration impacts to the existing structures. Table 6-4, *Buffer Distance for Potential Construction Equipment*, contains the recommended buffer distance to make sure that the vibration level at the existing structures from construction equipment will not exceed the established building damage criteria.

Table 6-4: Buffer Distance for Potential Construction Equipment

Equipment	Reference Vibration Level at 25 Feet (PPV [inches/second])[1]	Buffer Distance for 0.3 PPV [inches/second][2]
Loaded Trucks	0.076	10
Small Bulldozer	0.003	1

Source:

3. FTA. (2018). *Transit Noise and Vibration Impact Assessment Manual*.
4. $PPV_{equip} = PPV_{ref} \times \left(\frac{25}{D}\right)^{1.5}$, D=distance between the equipment to the sensitive receptors.

Operational Vibration

The Project proposes an extension of existing medical facilities by renovating an existing building and constructing a new building, which would not involve railroads or substantial heavy truck operations that are typically associated with significant operational vibration. Operation of the Project would include passenger vehicles for commuting and garbage trucks for solid waste disposal, which would not be frequent daily activities. Truck vibration levels are dependent on vehicle characteristics, load, speed, and pavement conditions. Daily garbage trucks and occasional delivery trucks on-site would be travelling at very low speeds, so it is expected that vibration from these trucks at nearby sensitive receptors would not be noticeable. It is important these trucks already exist on-site. Therefore, operational vibration impacts from the proposed project would be less than significant.

7 CONCLUSION

During construction, the Project would be required to comply with the rules and regulations set forth in the City's Noise Element and Municipal Code. Construction noise from the Project would not exceed the 80 dBA threshold. In addition, construction vibration would not exceed the threshold of 0.3 inches per second. As such, the Project would not result in a significant impact related to noise and vibration from construction.

Noise modeling shows that HVAC units and on-site mobile sources would generate about 40.7 dBA during the day and 36.1 dBA at night at nearby sensitive receptors, which are below the City's thresholds. When combined with existing ambient noise, total levels would remain within typical background ranges, adding only minimal increases. Overall, the Project's operational noise would not significantly impact surrounding areas and is considered less than significant. Finally, the healthcare facility would only involve passenger vehicles, and occasional delivery and garbage trucks on-site, which would not cause significant vibration to the on-site or nearby structures. As an institutional-expansion project, the Project operation would be expected to generate pure-tone or impulsive noise. As such, the Project would not result in a significant impact related to noise and vibration from operation.

Additionally, the nearest airport is the Hemet Ryan Airport, which is located 3.9 miles southeast of the Project site, and the Project is not located within the Airport Influence Area of the Hemet Ryan Airport. Thus, impacts related to aircraft noise would be less than significant.

Overall, impacts related to noise and vibration from the proposed Project would be less than significant.

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APPENDIX A – NOISE MEASUREMENT DATA

Noise Measurement Field Data

Project Number:	26-017		
Site Number:	NM-1		
Investigator(s):	Tina Yuan		
Date:	4/8/2026		
Time:	10:53 a.m. – 11:02 a.m.		
Measurement Location:	943 W 7th St, San Jacinto, CA 92582		
Peak Noise:	Traffic along West 7th Street		
Noise Meter Model:	PCE-430	Microphone Model:	PCE 1/2''
Calibration Date:	3/3/2025		
Weather Conditions:	Sky	Temperature	Wind Speed
	Clear	79 degree F	6

Measurements Data		
L_{eq} (dB)	LAF_{max} (dB)	LAF_{min} (dB)
69.8	45.7	86.6

Site Photo



Site Number:	NM-2		
Investigator(s):	Tina Yuan		
Date:	4/8/2026		
Time:	11:14 a.m. – 11:29 a.m.		
Measurement Location:	East of 913 S Grand Avenue, along the Grand Avenue		
Peak Noise:	Traffic Noise		
Noise Meter Model:	PCE-430	Microphone Model:	PCE 1/2''
Calibration Date:	3/3/2025		
Weather Conditions:	Sky	Temperature	Wind Speed
	Clear	79 Degree F	6

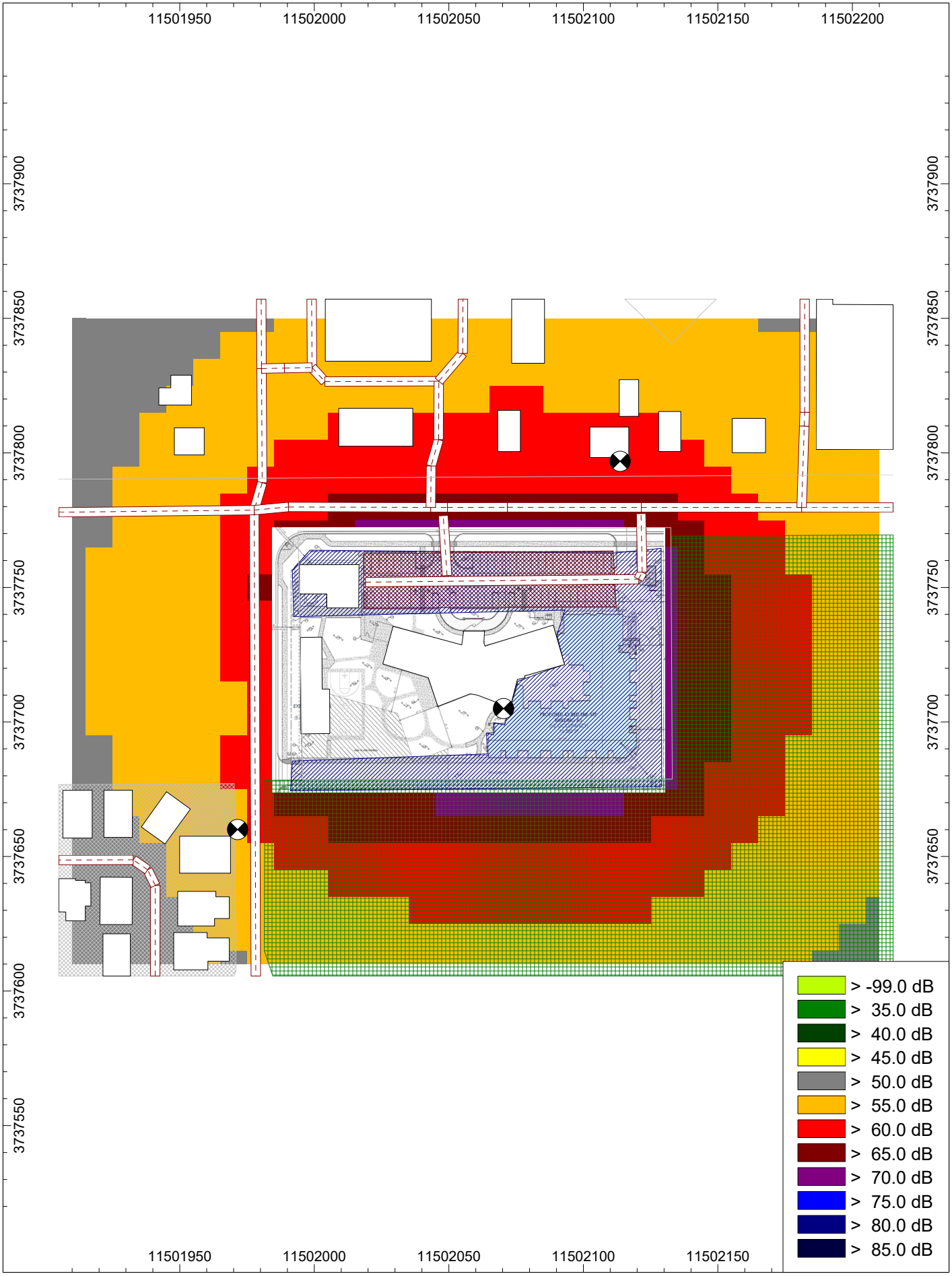
Measurements Data		
L_{eq} (dB)	LAF_{max} (dB)	LAF_{min} (dB)
58.3	37.8	79.2

Site Photos



APPENDIX B – NOISE MODELING DATA

APPENDIX B.1 – CONSTRUCTION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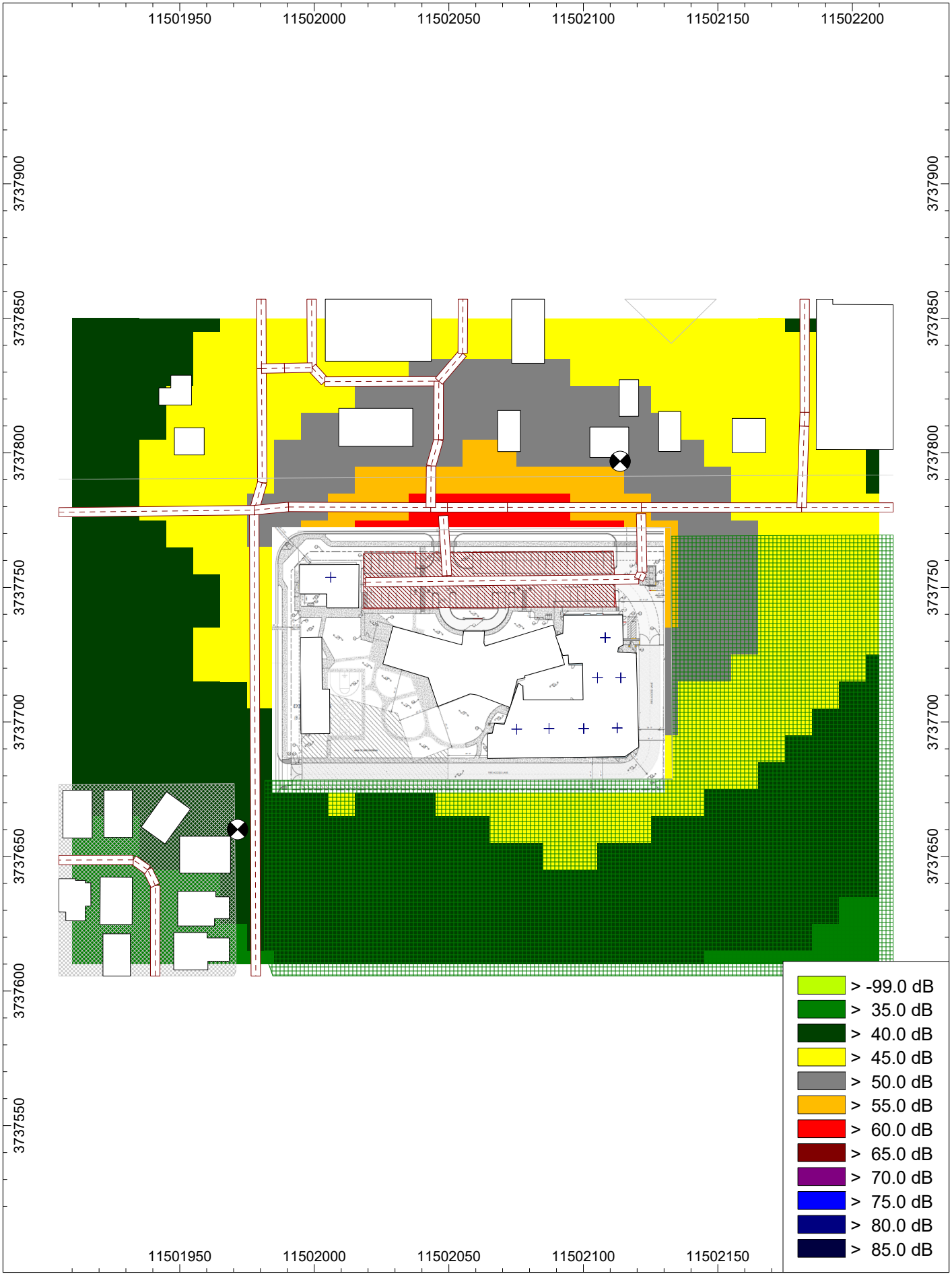
> 50.0 dB
> 55.0 dB
> 60.0 dB
> 65.0 dB
> 70.0 dB
> 75.0 dB
> 80.0 dB
> 85.0 dB

Receiver		Land Use	Limiting Value		rel. Axis			Lr w/o Noise Control		dL req.		Lr w/ Noise Control		Exceeding		passive NC
Name	ID		Day	Night	Station	Distance	Height	Day	Night	Day	Night	Day	Night	Day	Night	
			dB(A)	dB(A)	m	m	m	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
SR to West			0	0	119	6.59	4.00	59.2	59.2	59.2	59.2	0.0	0.0	-	-	-
SR to the North			0	0	136	17.13	4.00	62.8	62.8	62.8	62.8	0.0	0.0	-	-	-
On-Site			0	0	51	47.52	4.00	71.9	71.9	71.9	71.9	0.0	0.0	-	-	-

APPENDIX B.2 – STATIONARY ONLY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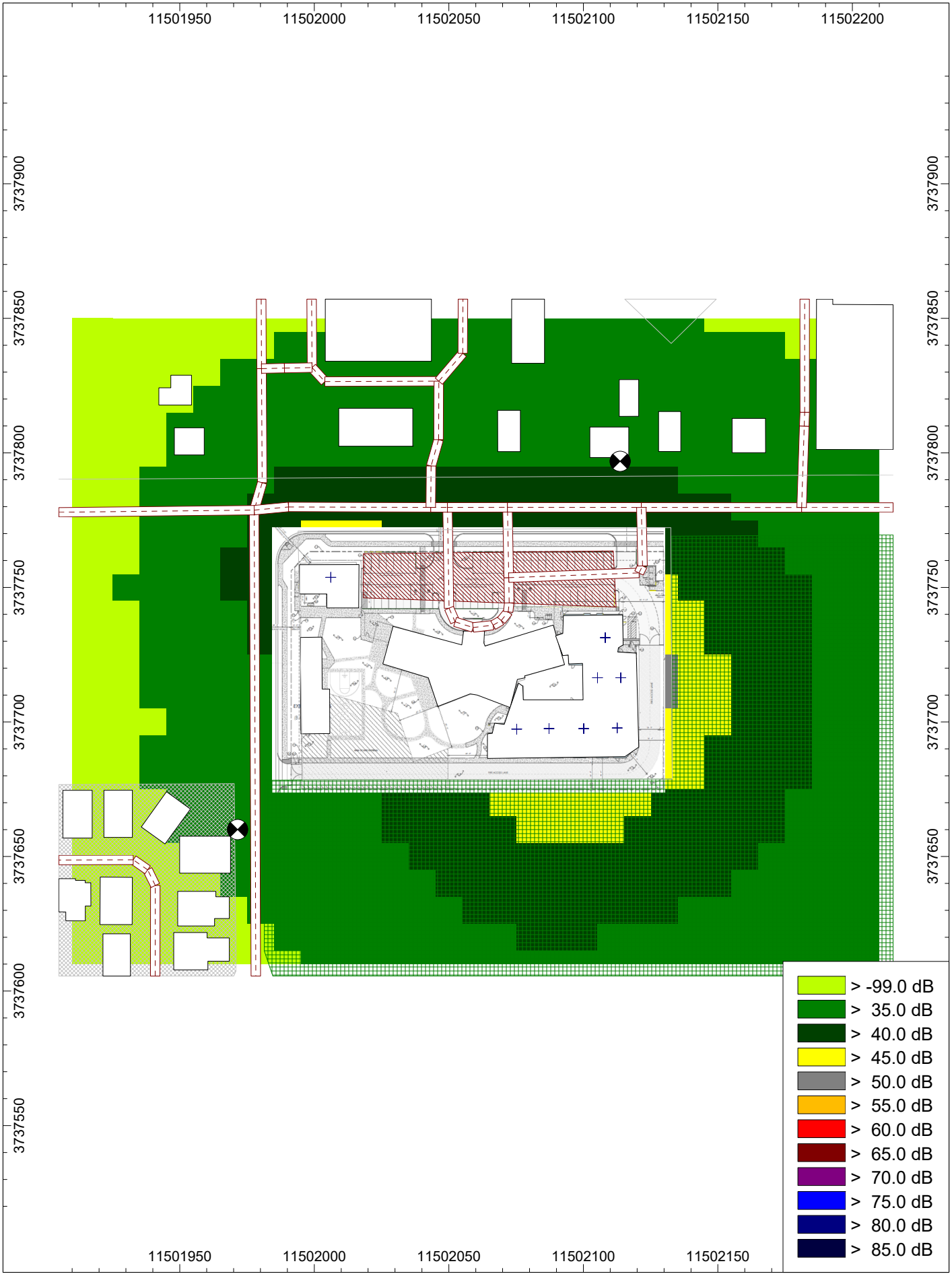
Receiver		Land Use	Limiting Value		rel. Axis			Lr w/o Noise Control		dL req.		Lr w/ Noise Control		Exceeding		passive NC
Name	ID		Day	Night	Station	Distance	Height	Day	Night	Day	Night	Day	Night	Day	Night	
			dB(A)	dB(A)	m	m	m	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
SR to West			0	0	119	6.59	4.00	41.4	41.4	41.4	41.4	0.0	0.0	-	-	-
SR to the North			0	0	136	17.13	4.00	53.8	53.8	53.8	53.8	0.0	0.0	-	-	-

APPENDIX B.3 CUMULATIVE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Receiver		Land Use	Limiting Value		rel. Axis			Lr w/o Noise Control		dL req.		Lr w/ Noise Control		Exceeding		passive NC
Name	ID		Day	Night	Station	Distance	Height	Day	Night	Day	Night	Day	Night	Day	Night	
			dB(A)	dB(A)	m	m	m	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
SR to West			0	0	119	6.59	4.00	36.1	36.1	36.1	36.1	0.0	0.0	-	-	-
SR to the North			0	0	136	17.13	4.00	40.7	40.7	40.7	40.7	0.0	0.0	-	-	-

To:	City of San Jacinto
From:	Jordan Mower, Alex Garber; EPD Solutions, Inc.
Date:	June 24, 2026
Site:	980 West 7th Street, San Jacinto, CA
Subject:	Vehicle Miles Traveled (VMT) Screening Analysis Bradley Gardens – EPD Project No. 26-017

This technical memorandum evaluates the proposed Project located at 980 West 7th Street in the City of San Jacinto. The purpose of this analysis is to determine whether a vehicle miles traveled (VMT) analysis would be required for the Project. This memo evaluates the Project using the City of San Jacinto's *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment* (June 2020).

Project Description

The Project site is within the southwestern portion of the City of San Jacinto in Riverside County, California. The Project site is located at 980 West (W.) 7th Street, at the southeast corner of the intersection of W. 7th Street and South (S.) Grand Avenue. Regional access to the Project site is provided by State Route (SR) 79 and SR 74. Local access to the site is provided by W. 7th Street and S. Grand Avenue. The Project site consists of one parcel encompassing approximately 2.98 acres. The site is identified as Assessor's Parcel Number (APN) 435-330-003. The Project site is developed and currently operates as the Bradley Gardens facility, which offers a variety of psychiatric-focused care to patients with varying health needs, including supervised Psychiatric Health Facility (PHF) care beds, Skilled Nursing Facility (SNF) and Short-Term Psychiatric (STP) care beds, and rehabilitation and therapy programs.

The Project proposes the expansion of the existing Bradley Gardens Nursing Facility on the 2.98-acre site. The Project includes demolition of the existing 1,074-square-foot (SF) maintenance and storage building for the construction of a 18,000 SF building addition to the existing 44-bed SNF building that would provide 43 additional SNF and STP beds, resulting in a total capacity of 87 beds. The Project also proposes the conversion of the existing 2,596 SF vacant office building into a 16-bed PHF. The proposed Project would result in a floor area ratio (FAR) of 0.27. Additional improvements would include landscaping, utility connections, implementation of stormwater facilities, lighting, and pavement of parking areas and driveways. With the completion of the proposed Project, there would be a total of 103 beds (SNF, STP, and PHF beds) on the Project site. The Project site has an existing General Plan land use designation of Industrial (I) and is zoned as Industrial Light (IL).

The proposed Project site plan is shown in Figure 1. It should be noted that the Project site plan shows 17,372 SF for the 43-bed addition; this analysis utilized 18,000 SF for the 43-bed addition, presenting a conservative analysis.

Project Trip Generation

A trip generation analysis was prepared to determine the estimated change in site trip generation that would result from the proposed Project. The analysis used trip rates from the Institute of Transportation

Engineers (ITE) *Trip Generation Manual, 12th Edition*. The proposed Project was analyzed using ITE Land Use Code 620 – Nursing Home. As shown in Table 1, the existing 44- bed skilled nursing facility generates 135 daily trips, with 6 trips occurring during the AM peak hour and 10 trips occurring in the PM peak hour. The proposed Project's total trip generation with 103 total beds would be 315 daily trips, with 14 trips occurring during the AM peak hour and 23 trips occurring during the PM peak hour. The proposed Project would therefore generate 180 net daily trips, 8 net AM peak hour trips, and 13 net PM peak hour trips.

Figure 1: Proposed Project Site Plan

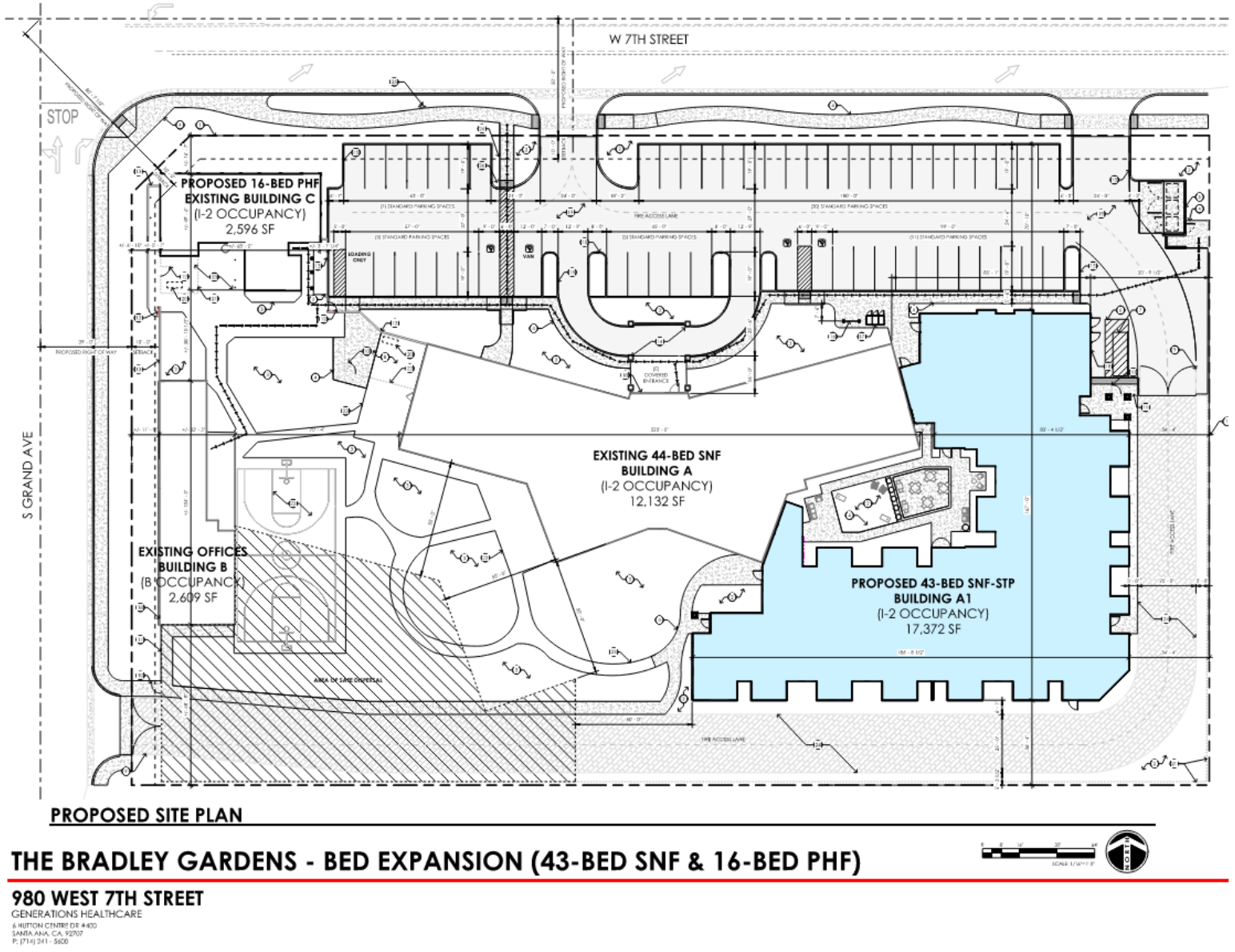


Table 1: Project Trip Generation

				AM Peak Hour			PM Peak Hour		
Land Use		**Units**	**Daily**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Trip Rates									
620 Nursing Home[1]		Beds	3.06	0.1	0.04	0.14	0.07	0.15	0.22
Existing Trip Generation									
Nursing Home[1]	44	Beds	135	4	2	6	3	7	10
Proposed Project Total Trip Generation									
Nursing Home[1]	103	Beds	315	10	4	14	7	15	23
Total Project Trip Generation			**315**	**10**	**4**	**14**	**7**	**15**	**23**
Net Project Trip Generation			**180**	**6**	**2**	**8**	**4**	**8**	**13**

[1]Institute of Transportation Engineers, Trip Generation Manual, 12th Edition, 2025. Land Use Code 620 - Nursing Home (Average Rate)

Vehicle Miles Traveled (VMT) Background

Senate Bill (SB) 743 was signed by Governor Brown in 2013 and required the Governor's Office of Planning and Research (OPR; now the Governor's Office of Land Use and Climate Innovation) to amend the California Environmental Quality Act (CEQA) Guidelines to provide an alternative to level of service (LOS) for evaluating transportation impacts, aiming to promote the reduction of greenhouse gas (GHG) emissions, the development of multimodal transportation networks, and a diversity of land uses. In response, Section 15064.3, *Determining the Significance of Transportation Impacts*, was added to the CEQA Guidelines, which states that VMT is the most appropriate measure of transportation impacts and shall apply statewide beginning on July 1, 2020.

City of San Jacinto VMT Screening

The City of San Jacinto's *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment* provides the following three screening criteria for which projects can be presumed to have a less-than-significant impact related to VMT.

Transit Priority Area (TPA) Screening: Projects located within a TPA[1] may be presumed to have a less-than-significant impact absent substantial evidence to the contrary. This presumption may NOT be appropriate if the project:

- Has a floor area ratio (FAR) of less than 0.75;
- Includes 5 percent or more parking for use by residents, customers, or employees of the project than required by the City;
- Is inconsistent with the applicable Sustainable Communities Strategy; or
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

Low VMT Area Screening: The City's guidelines include a screening threshold for projects located in a low-VMT generating area, which is defined as traffic analysis zones (TAZs) with a total daily VMT/SP that is less than the baseline level for the Western Riverside Council of Governments (WRCOG) subregion. For projects that are inconsistent with the land use assumptions coded into the projects' TAZ, this screening criteria would not be appropriate, and the project would not satisfy the requirements of this screening criteria.

Project Type Screening: Local serving retail projects less than 150,000 square feet may be presumed to have a less-than-significant impact absent substantial evidence to the contrary. Local serving retail generally improves the convenience of shopping close to home and has the effect of reducing vehicle travel.

[1] A Transit Priority Area (TPA) is defined as a half-mile radius around an existing major transit stop or an existing stop along a high-quality transit corridor per the definitions below.
Pub. Resources Code, § 21064.3 - 'Major transit stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 20 minutes or less during the morning and afternoon peak commute periods.
Pub. Resources Code, § 21155 - For purposes of this section, a 'high-quality transit corridor' means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

In addition to local serving retail, the following uses can also be presumed to have a less-than-significant impact absent substantial evidence to the contrary as their uses are local serving in nature:

- Projects located in a Transit Priority Areas (TPA)
- Projects located in a low-VMT generating area
- Local-serving K-12 schools
- Local parks
- Day care centers
- Local-serving gas stations
- Local-serving banks
- Local-serving hotels (e.g. non-destination hotels)
- Student housing projects
- Local serving community colleges that are consistent with the assumptions noted in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)
- Projects generating less than 500 daily vehicle trips. This generally corresponds to the following "typical" development potentials:
    - 53 single family housing units
    - 68 multi-family, condominiums, or townhouse housing units
    - 150,000 square feet of local serving commercial
    - 100,000 square feet of office
    - 100,000 square feet of light industrial
    - 300,000 square feet of warehousing
    - 300,000 square feet of high cube transload and short-term storage warehouse

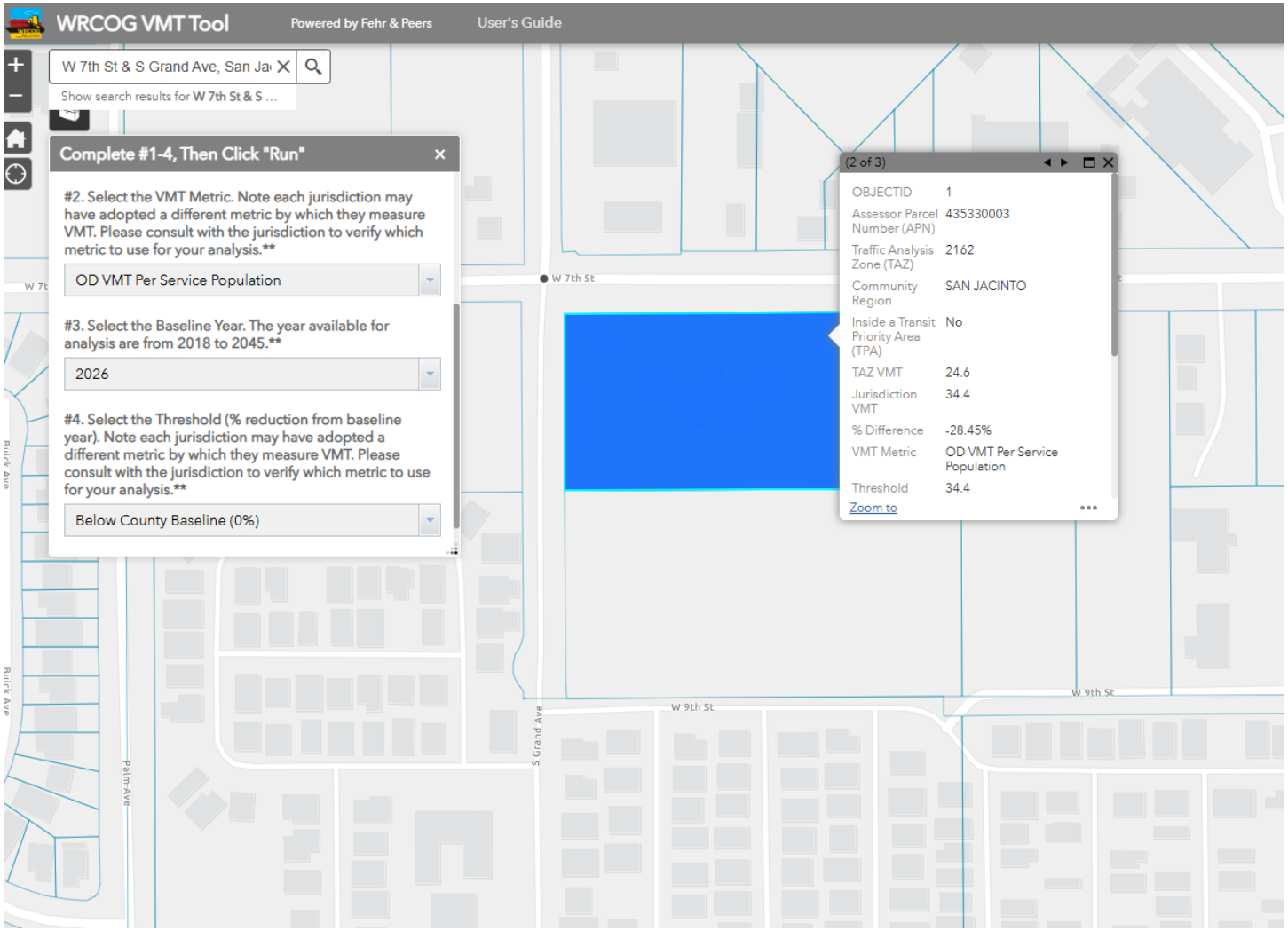
The applicability of each criterion to the Project is discussed below.

Screening Criterion 1 - Transit Priority Area (TPA) Screening: Per the City's VMT screening criteria, projects located within an existing TPA may be presumed to result in a less-than-significant VMT impact. As shown in Figure 2, *WRCOG VMT Tool Screening Results,* based on the WRCOG VMT Tool, the proposed Project is not located within an existing TPA. Therefore, the Project does not satisfy Screening Criterion 1.

Screening Criterion 2 – Low VMT Area Screening: Per the City's VMT screening criteria, projects that are consistent with the existing land use and are located within a low VMT area may be presumed to have a less-than-significant impact on VMT. The Project's proposed land use is not consistent with the General Plan; therefore, Screening Criterion 2 – Low VMT Area Screening is not applicable to the Project.

Screening Criterion 3 – Project Type Screening: According to the City's Guidelines, local serving projects and land uses may be presumed to have a less-than-significant VMT impact. Additionally, projects that are expected to generate 500 or fewer daily vehicle trips are presumed to have a less-than-significant VMT impact. The Project does not propose any local serving land uses. However, as shown in Table 1, the proposed Project is expected to generate 315 total daily vehicle trips, which is fewer than the 500 daily vehicle trip threshold provided in the City's Guidelines. Therefore, the Project satisfies Screening Criterion 3.

Figure 2: WRCOG VMT Tool Screening Results



Summary

The proposed Project satisfies Screening Criterion 3 (Project Type Screening) as the Project is expected to generate fewer than the 500 daily vehicle trip threshold provided in the City's Guidelines. Therefore, the Project is presumed to have a less-than-significant VMT impact, and no further analysis is required.

If you have any questions about this analysis, please contact us at (949) 796-1180 or techservices@epdsolutions.com

Bradley Gardens Skilled Nursing Facility Expansion

Final Initial Study/Mitigated Negative Declaration

Lead Agency:

City of San Jacinto Planning Division
595 S. San Jacinto Ave
San Jacinto, CA 92583

Project Applicant:

Corcoran Construction
25690 Madison Avenue
Murrieta, California 92562

CEQA Consultant:

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Irvine, CA 92612

October 2026

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Appendix B Revised Construction and Operational Health Risk Assessment
Appendix C Biological Resources Assessment
Appendix D Cultural Resources Study
Appendix E Preliminary Geotechnical Investigation
Appendix F Paleontological Assessment
Appendix G Phase I Environmental Site Assessment
Appendix H WQMP
Appendix I Hydrology Report
Appendix J Revised Noise and Vibration Impact Analysis
Appendix K VMT Screening Analysis

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Bradley Gardens Skilled Nursing Facility Expansion

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September 2026

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Acronym List

AB	Assembly Bill
ADA	Americans with Disabilities Act
AQMP	Air Quality Management Plan
AB	Assembly Bill
APN	Assessor's Parcel Numbers
BMPs	Best Management Practices
BER	Business Environmental Risk
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards Code
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
CPTED	Crime Prevention Through Environmental Design
CRHR	California Register of Historical Resources
dBA	A-weighted decibel
DCV	Design Capture Volume
DPM	Diesel Particulate Matter
EIR	Environmental Impact Report
ESA	Environmental Site Assessment
FAR	Floor Area Ratio
FEMA	Federal Emergency Management Agency
FTA	Federal Transit Administration
GHG	Greenhouse Gas
GPU	General Plan Update
HI	Hazard Index
HPLV	High Pressure Low Volume
HRA	Health Risk Assessment
HVAC	Heating, Ventilation, and Air-Conditioning
I	Industrial
IL	Industrial Light
IS	Initial Study
ITE	Institute of Transportation Engineers
LDV	Light-Duty Vehicle
Leq	Equivalent Continuous Level
LID	Low Impact Development
Lmax	Maximum Sound Level

LOS	Level of Service
LST	Localized Significance Threshold
MND	Mitigated Negative Declaration
MRZ	Mineral Resource Zone
MSHCP	Multiple Species Habitat Conservation Plan
MTCO2e	Metric Tons of Carbon Dioxide Equivalent
NAAQS	National Ambient Air Quality Standards
NPDES	National Pollutant Discharge Elimination System
NAHC	Native American Heritage Commission
NOx	Nitrous Oxides
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Office of Planning and Research
PHF	Psychiatric Health Facility
PM	Particulate Matter
PPV	Peak Particle Velocity
PRC	Public Resources Code
PRIMP	Paleontological Resources Impact Mitigation Program
PWL	Sound Power Level
QSD	Qualified SWPPP Developer
RCFD	Riverside County Fire Department
RCSD	Riverside County Sheriff's Department
REL	Reference Exposure Level
ROG	Reactive Organic Gases
ROW	Right-of-Way
RTA	Riverside Transit Agency
RTP/SCS	Regional Transportation Plan/ Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
RWRF	Regional Water Reclamation Facility
SB	Senate Bill
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SCAG	Southern California Association of Governments
SCCIC	South Central Coastal Information Center
SJDC	San Jacinto Development Code
SJMC	San Jacinto Municipal Code
SLF	Sacred Land Files
SNF	Skilled Nursing Facility
SO2	Sulfur Dioxide
SP	Service Population
SR	State Route
SRA	Source Receptor Area
SRA	State Responsibility Area
STP	Short\Term Psychiatric
SWPPP	Stormwater Pollution Prevention Plan

TAC	Toxic Air Contaminant
TDM	Transportation Demand Management
TPA	Transit Priority Area
TPZ	Timberland Production Zone
UWMP	Urban Water Management Plan
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
WQMP	Water Quality Management Plan
WRCOG	Western Riverside Council of Governments
ZEV	Zero-Emission Vehicle

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1. INTRODUCTION

1.1. PURPOSE OF THE INITIAL STUDY

This Initial Study has been prepared in accordance with the following:

- California Environmental Quality Act (CEQA) of 1970 (Public Resources Code Sections 21000 et seq.); and
- Guidelines for Implementation of the California Environmental Quality Act (State CEQA Guidelines) (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000 et seq.) as amended and approved on December 28, 2018.

Pursuant to CEQA, this Initial Study has been prepared to analyze the potential for significant impacts on the environment resulting from implementation of the proposed Project, described in greater detail in Section 3.0, *Project Description*. As required by State CEQA Guidelines Section 15063, this Initial Study is a preliminary analysis prepared by the Lead Agency, the City of San Jacinto, to determine if a Mitigated Negative Declaration or an Environmental Impact Report is required to evaluate the potential environmental impacts associated with the Project.

This Initial Study informs the City of San Jacinto decision-makers, affected agencies, and the public of potentially significant environmental impacts associated with the implementation of the Project. A "significant effect" or "significant impact" on the environment means *"a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project"* (State CEQA Guidelines Section 15382).

Given the Project's broad scope and level of detail, combined with previous analyses and current information about the site and environs, the City's intent is to adhere to the following CEQA principles:

- Provide meaningful early evaluation of site planning constraints, service and infrastructure requirements, and other local and regional environmental considerations. (Public Resources Code Section 21003.1)
- Encourage the applicant to incorporate environmental considerations into project conceptualization, design, and planning at the earliest feasible time. (State CEQA Guidelines Section 15004[b][3])
- Specify mitigation measures for reasonably foreseeable significant environmental effects and commit the City and applicant to future measures containing performance standards to ensure their adequacy when detailed development plans and applications are submitted. (State CEQA Guidelines Section 15126.4)

1.2. DOCUMENT ORGANIZATION

This Initial Study includes the following sections:

Section 1. Introduction

Provides information about CEQA and its requirements for environmental review and explains that an Initial Study was prepared to evaluate the proposed Project's potential impact to the physical environment, and to determine if an Environmental Impact Report (EIR) is required.

Section 2. Environmental Setting

Provides information about the proposed Project's location.

Section 3. Project Description

Includes a description of the proposed Project's physical features and characteristics.

Section 4. Environmental Checklist

Includes the summarized results for the Environmental Checklist from Appendix G of the State CEQA Guidelines and evaluates the proposed Project's potential to result in significant adverse effects to the physical environment. Identifies if an EIR is required, and if one is, what environmental topics need to be analyzed in the EIR.

Section 5. Environmental Analysis

Includes the information and data that was analyzed leading to the results of the Environmental Checklist.

2. ENVIRONMENTAL SETTING

2.1. PROJECT LOCATION

The Project site is within the southwestern portion of the City of San Jacinto in Riverside County, California. The Project site is located at 980 West (W.) 7th Street, at the southeast corner of the intersection of W. 7th Street and South (S.) Grand Avenue. Regional access to the Project site is provided by State Route (SR) 79 and SR 74. Local access to the site is provided by W. 7th Street and S. Grand Avenue. The Project site and surrounding area are shown on Figure 2-1, *Regional Location*, and Figure 2-2, *Local Vicinity*.

2.2. EXISTING PROJECT SITE

The Project site consists of one parcel encompassing approximately 2.98 acres. The site is identified as Assessor's Parcel Number (APN) 435-330-003. The Project site is developed and currently operates as the Bradley Gardens facility, which offers a variety of psychiatric-focused care to patients with varying health needs, including supervised Psychiatric Health Facility (PHF) care beds, Skilled Nursing Facility (SNF) and Short-Term Psychiatric (STP) care beds, and rehabilitation and therapy programs. The Bradley Gardens facility currently operates 24 hours a day, seven days a week. The Project site is currently comprised of four buildings totaling 18,411 square feet (SF). The existing buildings consist of a one-story 44-bed SNF building totaling 12,132 SF, a one-story vacant office building totaling 2,596 SF, a one-story administrative office building totaling 2,609 SF, and a one-story maintenance and storage building totaling 1,074 SF. In addition to the existing structures, the Project site is also improved with asphalt-paved parking areas, an outdoor courtyard, walkways, associated landscaping, and perimeter fencing.

The Project site is relatively flat with a gentle slope towards the southeast. The site is sparsely vegetated and has shrubs and trees surrounding the existing SNF building. Existing access to the site is provided via three driveways located on W. 7th Street. The Project site's existing conditions are shown on Figure 2-3, *Aerial View*, and Figure 2-4, *Existing Site Photos*.

2.3. EXISTING LAND USE AND ZONING DESIGNATION OF THE PROJECT SITE

The Project site has a City of San Jacinto General Plan land use designation of Industrial (I). The Industrial (I) land use designation allows for a variety of industrial and manufacturing activities that do not generate significant amounts of pollution, including limited regional and sub-regional commercial activities that are non- or low-polluting and which can co-exist compatibly with surrounding land uses. Other uses that are determined to be compatible with primary uses may also be allowed. The maximum intensity of development under this land use designation is a floor area ratio (FAR) of 0.50.

The Project site has a zoning designation of Industrial Light (IL). The IL zoning designation allows for general manufacturing uses, auto repair services, pest control services, pool maintenance services, and woodworking shops. This zone allows a maximum FAR of 0.50.

The Project site's existing land use designation is shown on Figure 2-5, *Existing General Plan Designation*, and the existing zoning designation is shown on Figure 2-6, *Existing Zoning Designation*.

2.4. SURROUNDING LAND USES

The existing land use, General Plan designation, and zoning designation for surrounding parcels are described in Table 2-1.

Table 2-1: Surrounding Existing Land Use, General Plan Designations, and Zoning Designation

	Existing Land Use	General Plan Designation	Zoning Designation
North	W. 7th Street followed by a metal fabrication plant	Industrial (I)	Industrial Light (IL)
South	Vacant land	Industrial (I)	Industrial Light (IL)
East	Vacant land	Industrial (I)	Industrial Light (IL)
West	S. Grand Avenue followed by Vacant land	Industrial (I)	Industrial Light (IL)
Southwest	S. Grand Avenue followed by residences	High Density Residential (HDR)	Residential, High Density (RH)

Figure 2-1: Regional Location

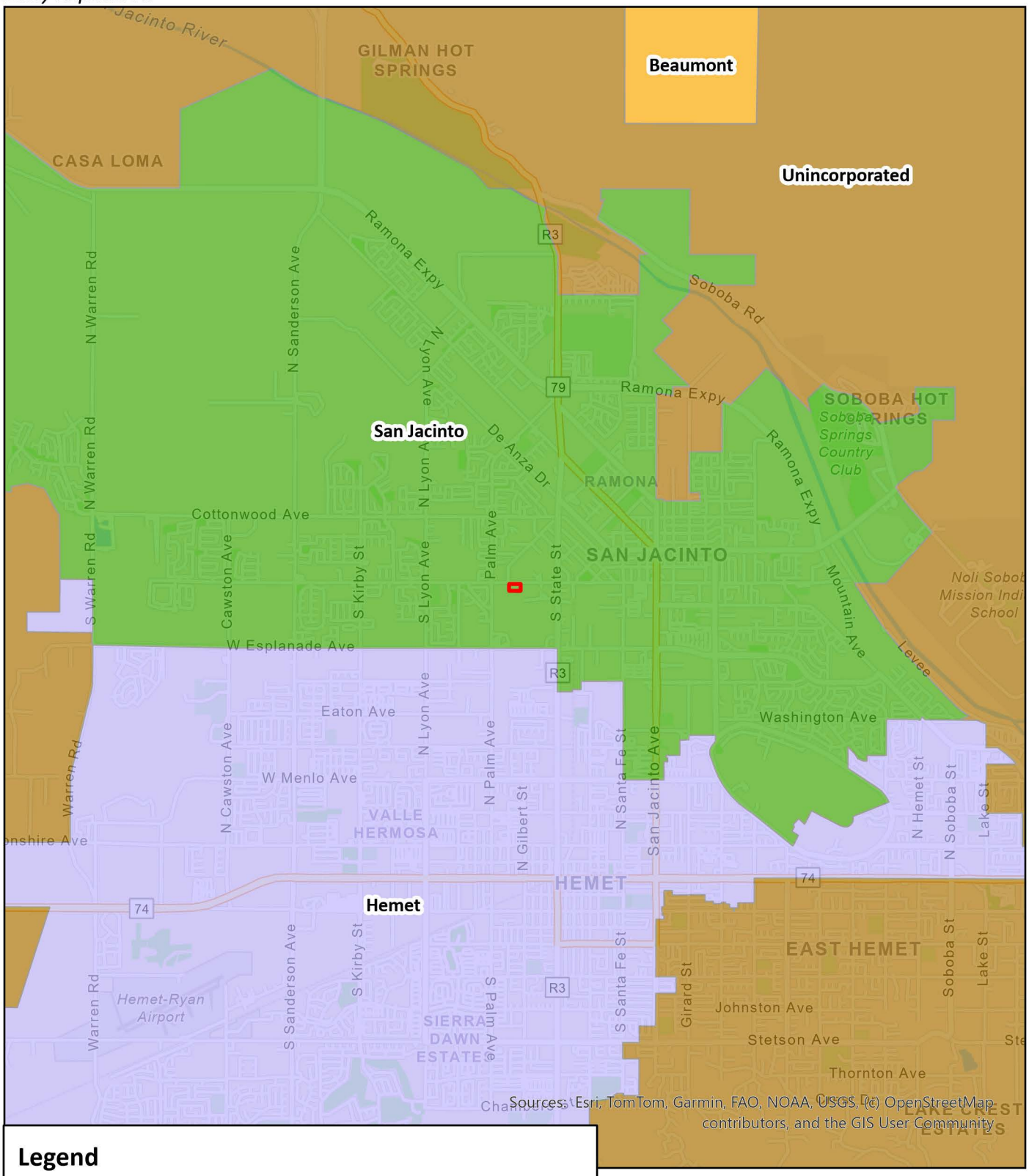

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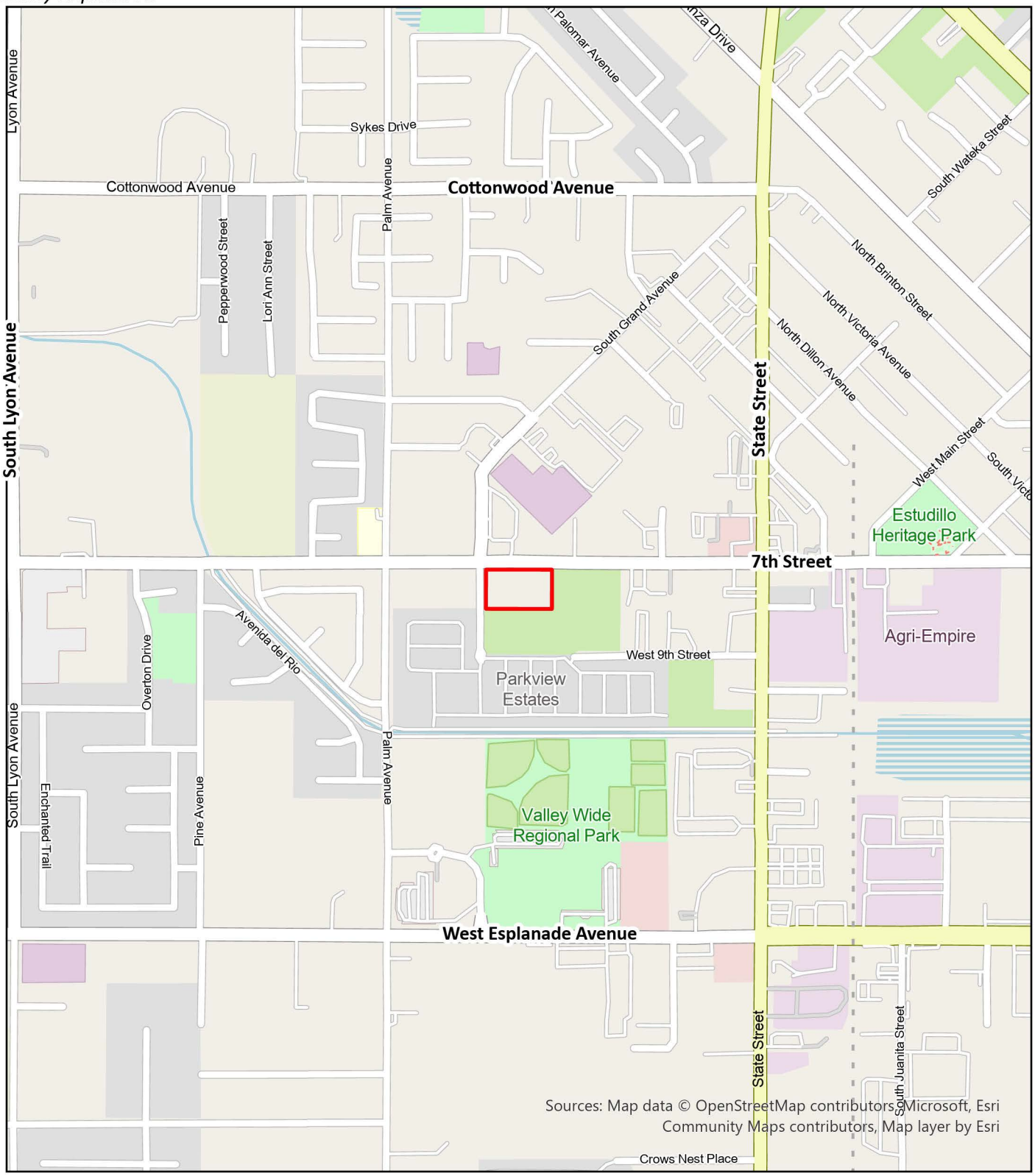
Figure 2-2: Local Vicinity



Legend

Project Boundary

0 0.15 0.3 Miles

N

E | P | D SOLUTIONS, INC

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Figure 2-3: Aerial View



Created with Vertical © 2026 Nearmap US, Inc.

Legend

Project Boundary

0 100 200
US Feet

N

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Figure 2-4: Existing Site Photos



Photo 1: View of the Skilled Nursing Facility Building from east side of the parking lot.



Photo 2: View of the administrative office building from the outdoor courtyard west of the skilled nursing building.



Photo 3: View of the vacant office building in the northwest corner of the site from W. 7th Street.



Photo 4: View of the maintenance and storage building in the southeast corner of the site.

Original Photos Taken by Partner Engineering and Science, Inc.

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Figure 2-5: Existing General Plan Land Use Designations

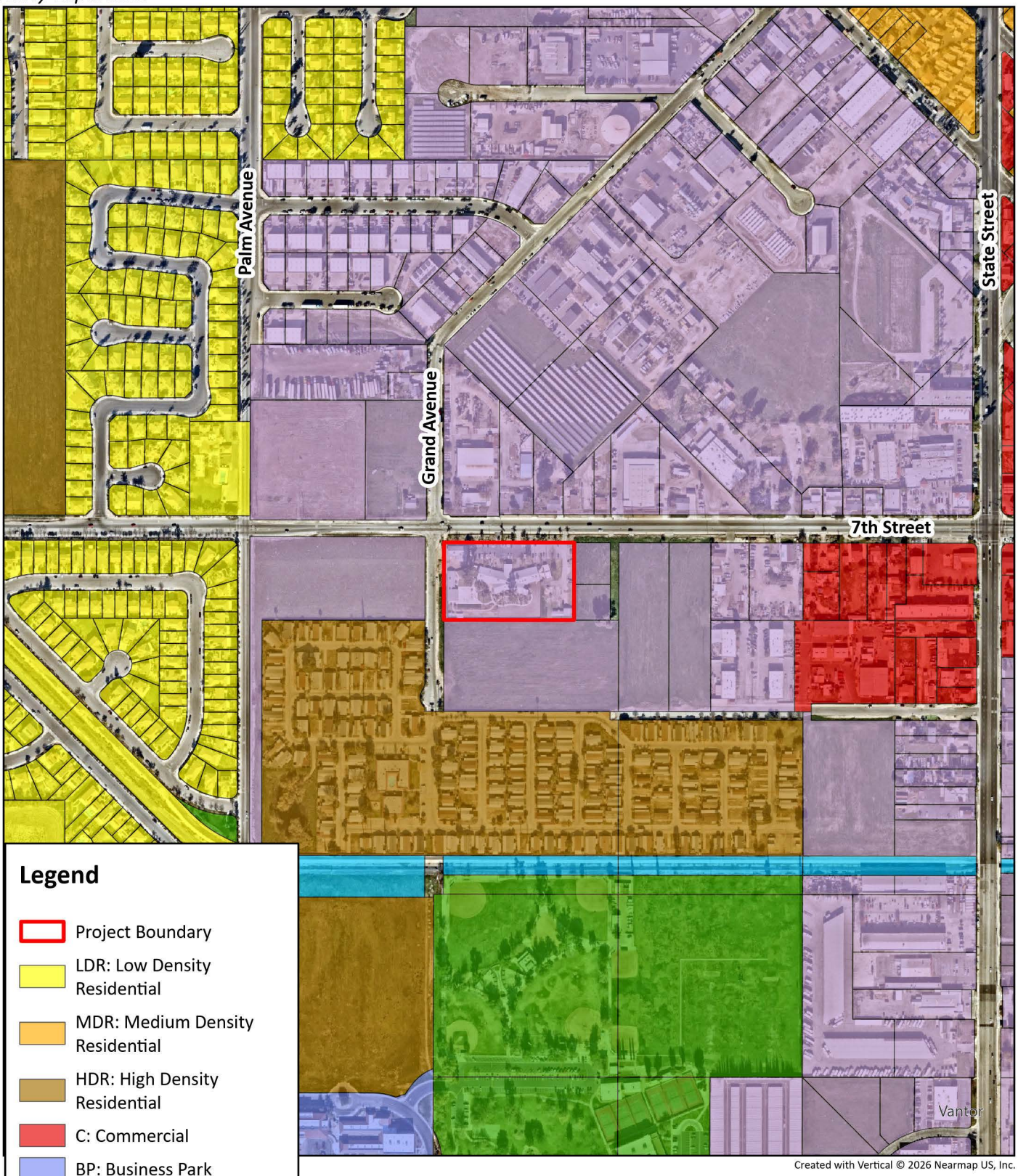

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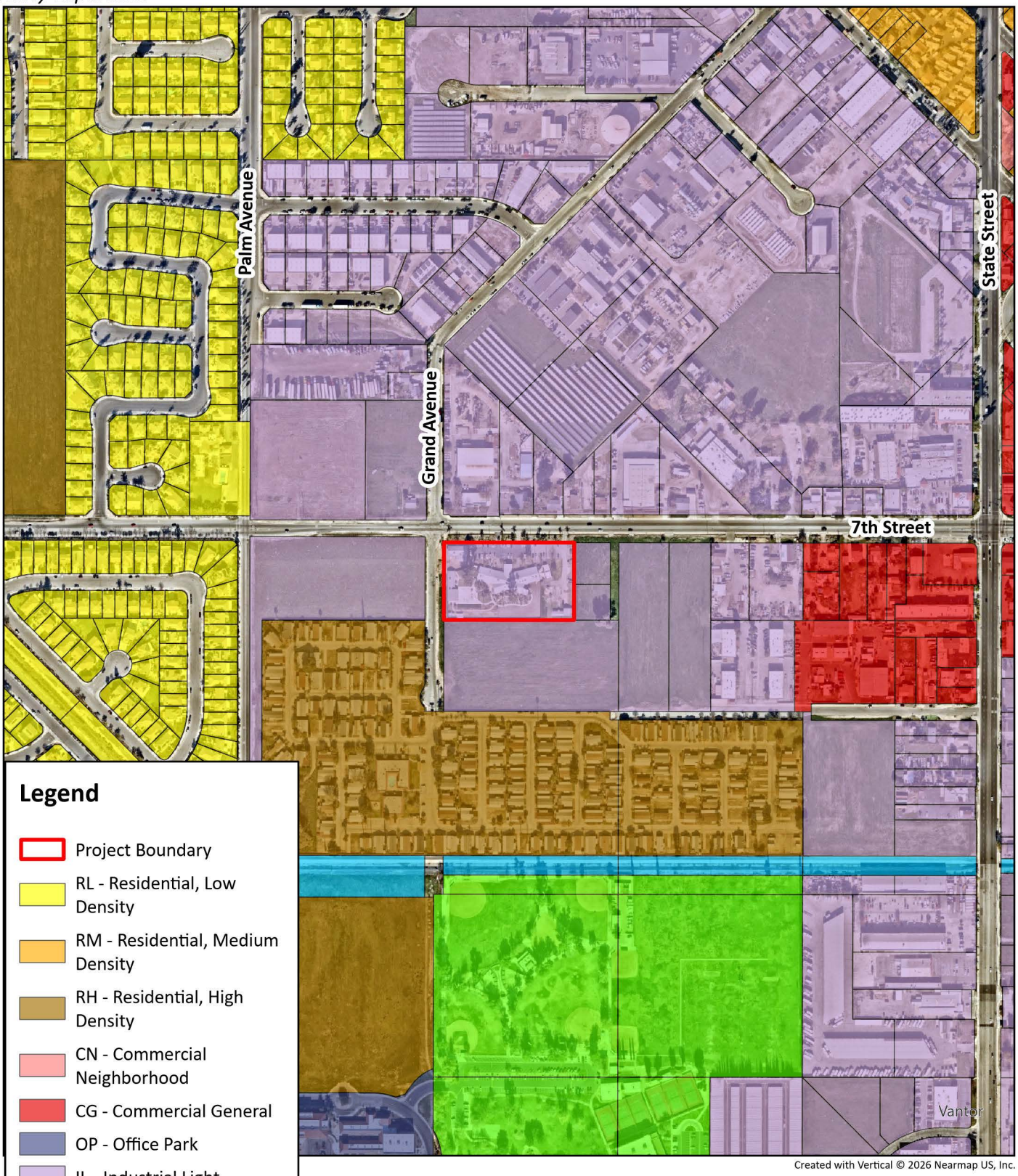
Figure 2-6: Existing Zoning Designations



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3. PROJECT DESCRIPTION

3.1. PROJECT OVERVIEW

The Project proposes the expansion of the existing 44-bed Bradley Gardens facility to a total of 103 beds. The Project includes demolition of the existing 1,074 SF maintenance and storage building located in the southeastern corner of the site for construction of an expansion to the existing 44-bed SNF building. The proposed building addition would total approximately 17,372 SF and would provide 43 additional SNF and STP beds. The Project also proposes the conversion of the existing 2,596 SF vacant office building located in the northwestern corner of the site into a 16-bed PHF. The Project would not modify the existing 2,609 SF administrative office building along the western boundary of the site. The proposed Project would result in an FAR of 0.27. Additional improvements would include landscaping, utility connections, implementation of stormwater facilities, lighting, parking lot, and driveways. Figure 3-1, *Conceptual Site Plan*, illustrates the proposed site plan.

For purposes of this MND, the proposed addition to the SNF building is conservatively analyzed as an 18,000 SF building.

3.2. PROJECT FEATURES

Building Summary and Architecture

The Project includes expansion of the existing Bradley Gardens facility, including an addition to the existing SNF building and conversion of the existing vacant office building into a PHF. Each Project component is discussed below.

Skilled Nursing Facility Expansion

The proposed SNF-STP building expansion would be single story and approximately 22 feet in height. The proposed SNF-STP building would be setback approximately 34.3 feet from the eastern boundary of the site, approximately 36.3 feet from the southern boundary of the site, and approximately 71.75 feet from the site's northern boundary. The new 18,000 SF building addition would accommodate 43 additional SNF and STP beds, resulting in a total SNF building size of 30,132 SF. The proposed building would also include a kitchen area, dining/recreation rooms, patient rooms, offices, a nurse station, a rehabilitation room, storage rooms, showers, and restrooms. Additionally, an internal corridor is featured as part of the facility's layout. As shown in Figure 3-2, *Skilled Nursing Facility Elevations*, the proposed SNF building would establish an architectural presence through emphasis on building finish materials and consistent material usage and color scheme. The proposed SNF building would have a color scheme of brown, beige, and grey with various building finish materials, including stucco, stone veneer, asphalt shingle roof, and aluminum windows.

Psychiatric Health Facility

The converted PHF building would be single-story and approximately 14 feet in height. The proposed PHF building would be setback approximately 10 feet from the western boundary of the site and approximately 10 feet from the site's northern boundary. The 16-bed PHF would total approximately

2,596 SF and would include patient rooms, nurse station, office, dining room, rehabilitation/activity room, showers, and storage rooms. Additionally, an internal corridor is featured as part of the facility's layout. As shown in Figure 3-3, *Psychiatric Health Facility Elevations*, the proposed PHF building would establish an architectural presence through emphasis on building finish materials and consistent material usage and color scheme. The proposed PHF building would be beige and grey with various building finish materials, including stucco, stone veneer, asphalt shingle roof, and aluminum windows.

Parking

Upon implementation of the proposed Project, the expanded Bradley Gardens facility would include a total of 52 passenger vehicle parking spaces, including 4 accessible spaces. The proposed parking spaces would be provided in a surface lot along the northern boundary of the Project site for employees, patients, and visitors. A portion of the parking area would be surfaced with pervious concrete to provide stormwater infiltration, as described under Drainage Improvements below. In addition, up to 3 short-term bicycle parking spaces and 3 long-term bicycle parking spaces would be provided near the entrance to the existing SNF-STP building for a total of 6 bicycle parking spaces.

Landscaping and Fencing

Currently, the Project site includes approximately 36,347 SF of landscaping, which covers approximately 28 percent of the site. The Project proposes an additional 4,015 SF of ornamental landscaping for a total of 40,362 SF of landscaping. With the proposed Project, landscaping would cover approximately 31 percent of the site, as shown in Figures 3-4, *Conceptual Landscape Plan*. Proposed landscaping would include 24-inch box trees, 1-gallon and 5-gallon trees, various shrubs, and succulents in the southeastern corner of the site near the proposed SNF-STP addition. Landscaped areas adjacent to the building would receive rood runoff from disconnected downspouts, as described under Drainage Improvements below.

A 7-foot-tall block wall is proposed along the western boundary of the site, extending from the south of the proposed PHF building to the southern boundary of the site. A 7-foot-tall gate is proposed in the southwestern corner of the Project site to access the fire lane from S. Grand Avenue. The Project would not modify the existing 7-foot-tall chain link fence along the perimeter of the site. Knox padlocks would be provided for all gates.

Recreation and Open Space

Currently, the Project site includes recreation/open space in the form of an outdoor courtyard that is located southwest of the existing SNF building. The Project would feature a common open space between the existing SNF building and the proposed SNF-STP building addition. Recreational amenities would include a concrete walkway, seating areas with chairs and tables, artificial turf, and decorative plants, as shown in Figure 3-4. With the implementation of the proposed Project, recreation/open space would cover approximately 15 percent of the site.

Access and Circulation

Access to the proposed Project would be provided via three driveways. The Project would consolidate the two existing driveways on W. 7th Street that are located along the center of the site’s northern boundary into one 24-foot-wide driveway. The existing driveway on W. 7th Street in the northeastern corner of the

site would be widened to a width of 24 feet. Both these driveways would provide unrestricted ingress and egress for automobiles. In addition, a gated 25-foot-wide driveway is proposed from S. Grand Avenue in the southwest corner of the site to provide emergency vehicle access to the site. A 27.3-foot-wide drive aisle would be constructed in the surface parking lot. A fire access lane would be provided along the southern and eastern sides of the proposed SNF-STP building addition.

Infrastructure Improvements

Water and Sewer Improvements

The Project would install new on-site connections to the existing 12-inch diameter water line in W. 7th Street. The Project would also install new on-site connections to the existing 8-inch diameter sewer line in W. 7th Street.

Drainage Improvements

Stormwater would be collected via a new series of catch basins, inlets, and storm drain lines. The Project site would be divided into two drainage management areas: DMA-1, encompassing the northern parking area and a portion of the building, and DMA-2, encompassing the southern building expansion, fire access lane, and associated landscaping (Appendix H). The Project includes a parking lot with pervious concrete and a fire access lane surfaced with approximately 3,000 square feet of pervious concrete, which would allow for stormwater infiltration. The pervious concrete within the fire access lane would be designed to support an 80,000-pound fire apparatus load. The Project would also incorporate disconnected roof downspouts that would discharge roof runoff to adjacent landscaped areas for infiltration. Site-specific infiltration testing establishes a design infiltration rate of 1.97 inches per hour, inclusive of a factor of safety of 3.0 (Appendix H). Stormwater would be ultimately conveyed to the existing 24-inch storm drain line in W. 7th Street, on the northern boundary of the Project site.

Roadway Improvements

The proposed Project would dedicate 3 feet along the W. 7th Street frontage to widen the right-of-way (ROW) from 50 feet to 53 feet. The Project would also dedicate 6 feet along the S. Grand Avenue frontage to widen the ROW from 33 feet to 39 feet. Additionally, the proposed Project would install 5-foot-wide sidewalks along the Project's frontage on W. 7th Street and S. Grand Avenue.

3.3. CONSTRUCTION

Construction activities would occur over one phase and include demolition, site preparation, grading, building construction, paving, and architectural coatings. Demolition activities are expected to generate approximately five tons of debris. The Project is expected to result in the export of approximately 1,000 cubic yards of soil during the grading phase. No soil import is anticipated to occur during construction. Construction is expected to occur over 12 months, as shown in Table 3-1. Construction would occur within the hours allowed by the City of San Jacinto Municipal Code (SJMC) Section 8.40, which states that construction shall occur only between the hours of 7:00 a.m. and 7:00 p.m. on weekdays and Saturdays, and between the hours of 9:00 a.m. and 6:00 p.m. on Sundays and holidays.

Table 3-1: Construction Schedule

Activity	Start Date	End Date	Total Working Days
Demolition	12/1/2026	12/9/2026	7
Site Preparation	12/10/2026	12/16/2026	5
Grading	12/17/2026	12/23/2026	5
Building Construction	12/24/2026	12/8/2027	250
Paving	12/24/2026	12/30/2026	5
Architectural Coating	11/24/2027	11/30/2027	5

Source: Appendix A

3.4. OPERATIONAL CHARACTERISTICS

The Project is analyzed as a healthcare facility. Typical operational characteristics include employees, patients, and visitors traveling to and from the site. The proposed Project would not change the existing operations of the Bradley Gardens facility, which operates 24 hours a day, seven days a week. The proposed Project would add 100 new employees across all shifts to the existing facility, which currently includes 150 employees, resulting in a total employee count of 250. The existing facility currently has the capacity to serve 44 beds/patients. Implementation of the proposed Project would increase capacity by 59 beds/patients, resulting in a total capacity of 103 beds/patients at the facility.

3.5. DISCRETIONARY APPROVALS AND PERMITS

The City is processing the proposed Project under the legal nonconforming provisions of SJMC Section 17.705.120 (Nonconforming Adjustment). Implementation of the proposed Project would require the following discretionary approvals and permits from the City of San Jacinto and other applicable agencies.

City of San Jacinto (Lead Agency):

- Conditional Use Permit
- Site Plan and Design Review
- Ministerial approvals and permits necessary to implement the proposed Project, including but not limited to, grading permit, building permit, etc.

Responsible Agency:

- State Department of Health Care Access and Information (HCAI): Review and issuance of building permits for the expansion of the SNF.

KEYNOTES

1 PROPERTY LINE
2 LANDSCAPING
3 EXISTING LANDSCAPING TO REMAIN
4 CONCRETE WALKWAY, TYP.
5 TRASH ENCLOSURE PER 17.305.130 WITH ADJACENT CAN WASH AREA
6 10' X 25' LOADING SPACE
7 GREASE INTERCEPTOR
8 ELECTRICAL SERVICE YARD
9 12'-0"W. X 7'-0"H. VEHICULAR GATES WITH HEAVY DUTY HINGES, FOR FIRE LANE ACCESS ONLY
10 4'-0"W. GATE TO MATCH EXISTING GATES, WITH PANIC HARDWARE AND CONTROLLED EGRESS
11 EXISTING 7'-0"H. VINYL FENCE WITH STEEL FRAMES AT VEHICULAR GATES
12 EXISTING 4'-0" W. GATE TO REMAIN
13 EXISTING 7'-0" H. CMU WALL TO REMAIN
14 EXISTING PORTE COCHERE WITH 5'-0" X 20'-0" MINMUM PASSENGER DROP OFF AND LOADING ZONE
15 6" CONCRETE CURB
16 3 SPACE BICYCLE RACK PARKING
17 3 BAY BICYCLE LOCKERS
18 KNOX BOX
19 ASPHALT CONCRETE PAVING
20 EMERGENCY GENERATOR ON 8" CONCRETE PAD
21 EXISTING 7'-0" CHAINLINK FENCE TO REMAIN
22 7'-0" CHAINLNK FENCE
23 EXISTING CONCRETE FLATWORK TO REMAIN
24 GRASSCRETE, TYP.
25 FIRE HYDRANT
26 FIRE P.I.V.

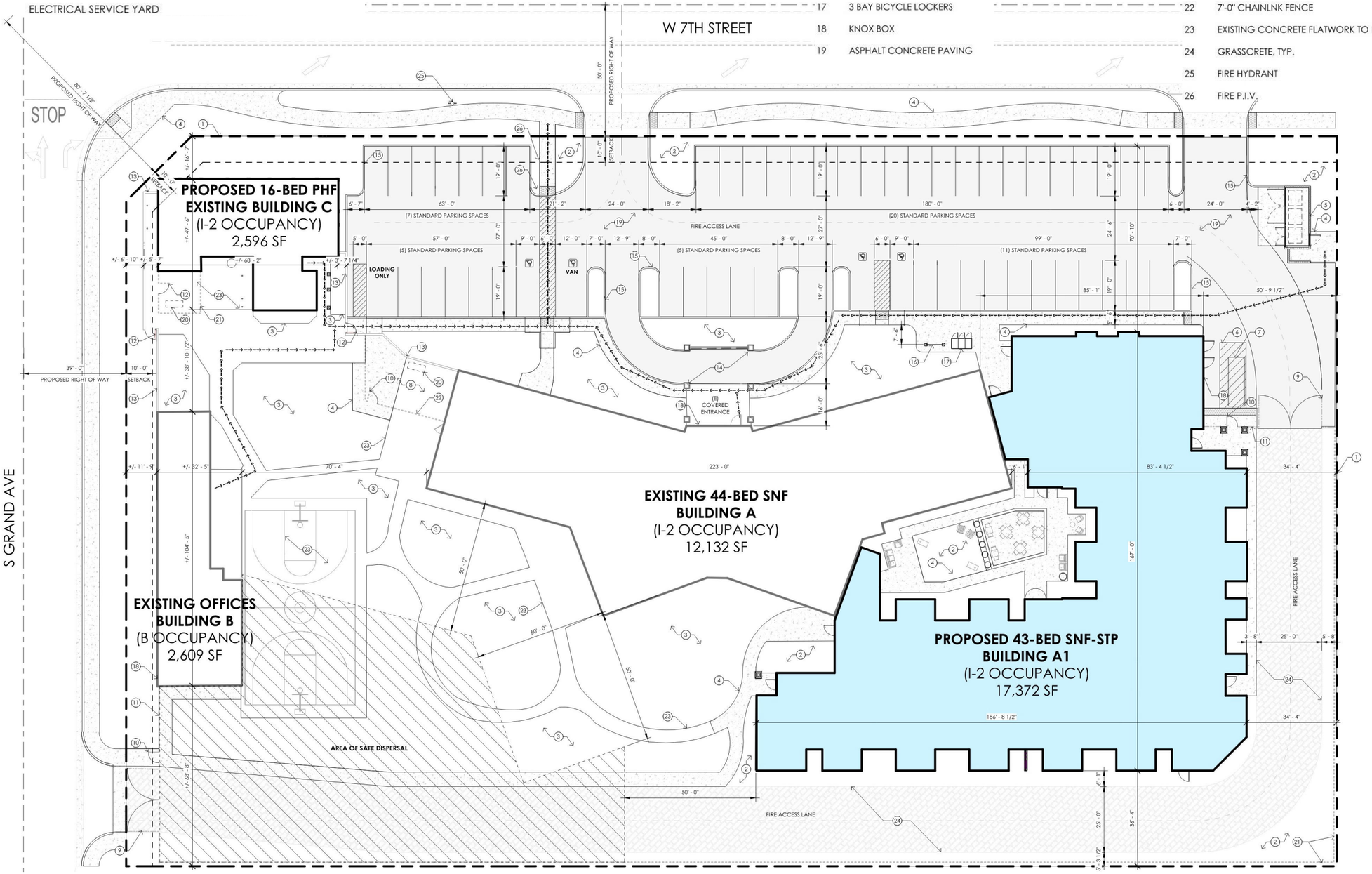

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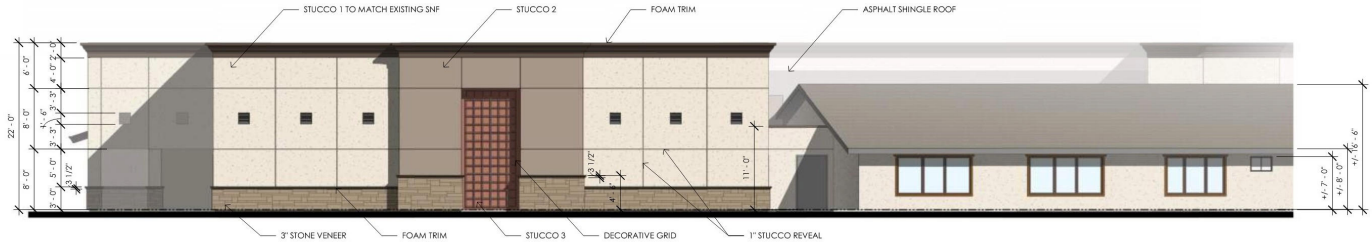
Figure 3-2: Skilled Nursing Facility Elevations



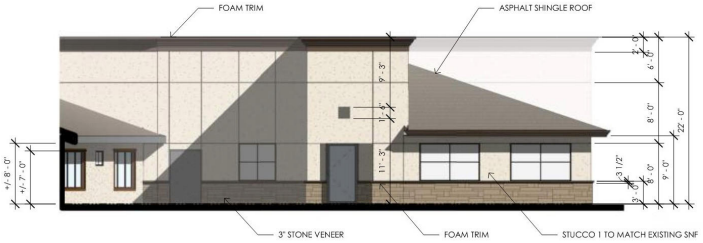
SNF EXTERIOR ELEVATION - NORTH



SNF EXTERIOR ELEVATION - EAST



SNF EXTERIOR ELEVATION - SOUTH



SNF EXTERIOR ELEVATION - WEST

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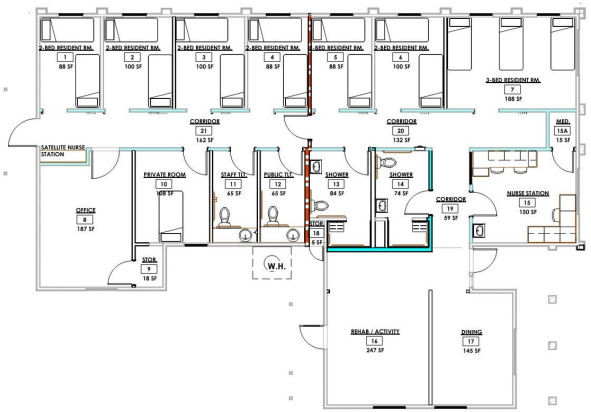
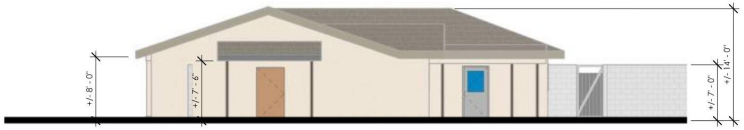
Figure 3-3: Psychiatric Health Facility Elevations



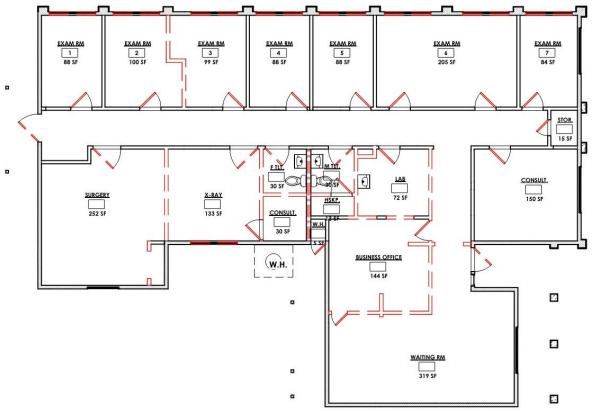
PROPOSED PHF OVERALL FLOOR PLAN



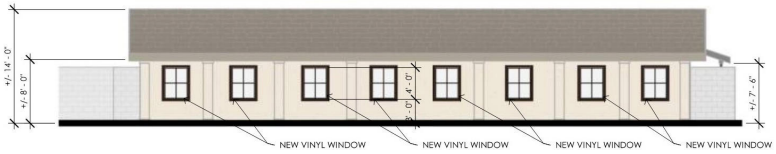
PROPOSED PHF - NORTH ELEVATION



PROPOSED PHF - EAST ELEVATION



EXISTING PHF OVERALL FLOOR PLAN



PROPOSED PHF - SOUTH ELEVATION



PROPOSED PHF - WEST ELEVATION

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Figure 3-4: Conceptual Landscape Plan

LANDSCAPE CONCEPT NOTE:

THIS LANDSCAPE WILL CONSIST OF CALIFORNIA-FRIENDLY, LOW AND MEDIUM WATER USE PLANT MATERIAL. ALL PLANTS HAVE BEEN CHOSEN FROM THE LOW OR MEDIUM WATER USE CATEGORY ACCORDING TO WUCOLS. PLANTS HAVE BEEN CHOSEN TO CREATE A UNIFORM THEME ACROSS THE SITE CONSISTING OF MEDITERRANEAN AND CALIFORNIA FRIENDLY PLANT MATERIAL. MAINTENANCE AND LONGEVITY OF PLANT MATERIAL HAS BEEN TAKEN INTO CONSIDERATION. ROOT PANELS AND BARRIERS WILL BE UTILIZED ON ALL TREES NECESSARY, CONSISTENT WITH ALL STANDARDS AND SPECIFICATIONS. A 3" LAYER OF BARK MULCH WILL BE USED IN ALL LANDSCAPE AREAS. ALL LANDSCAPE AREAS WILL CONFORM TO ALL CURRENT LANDSCAPE GUIDELINES.

IRRIGATION CONCEPT NOTE:

THE IRRIGATION DESIGN WILL INCORPORATE THE LATEST IN SMART IRRIGATION TECHNOLOGIES. ALL NEW LANDSCAPE AREAS WILL INCLUDE HIGH EFFICIENCY, LOW WATER USE IRRIGATION EQUIPMENT AND METHODS. A SMART IRRIGATION CONTROLLER WITH A RAIN SHUT OFF DEVICE WILL ALSO BE INCORPORATED. BARK MULCH WILL BE USED TO RETAIN MOISTURE AND REDUCE EVAPORATION AND AN IRRIGATION SCHEDULE WILL BE PROVIDED TO PROGRAM THE CONTROLLER. TWO IRRIGATION SCHEDULES SHALL BE PREPARED, ONE FOR PLANT ESTABLISHMENT AND ONE FOR MAINTENANCE. ALL NEW IRRIGATION SYSTEMS WILL COMPLY WITH ALL CURRENT LANDSCAPE GUIDELINES.

ALL STREET LANDSCAPE WITHIN THE CITY OF SAN JACINTO RIGHT-OF-WAY, LMD/CFD, PARKS, OPEN SPACE AREAS, AND ALL OTHER PUBLIC LANDSCAPE IRRIGATION SYSTEMS SHALL BE INSTALLED WITH CAL-SENSE CONTROLLERS. THE CAL-SENSE CONTROLLER INSTALLATION SHALL INCLUDE THE CONTROLLER ASSEMBLY, FLOW SENSOR, ET GAUGE, AND TIPPING RAIN-BUCKET. CONTROLLER INSTALLATIONS SHALL BE CERTIFIED BY CAL-SENSE.

PROPOSED PARKWAY

PROPOSED PARKING ISLANDS

PROPOSED LANDSCAPE DEVELOPMENT

N.A.P.

SQUARE FOOTAGE OF LANDSCAPE:

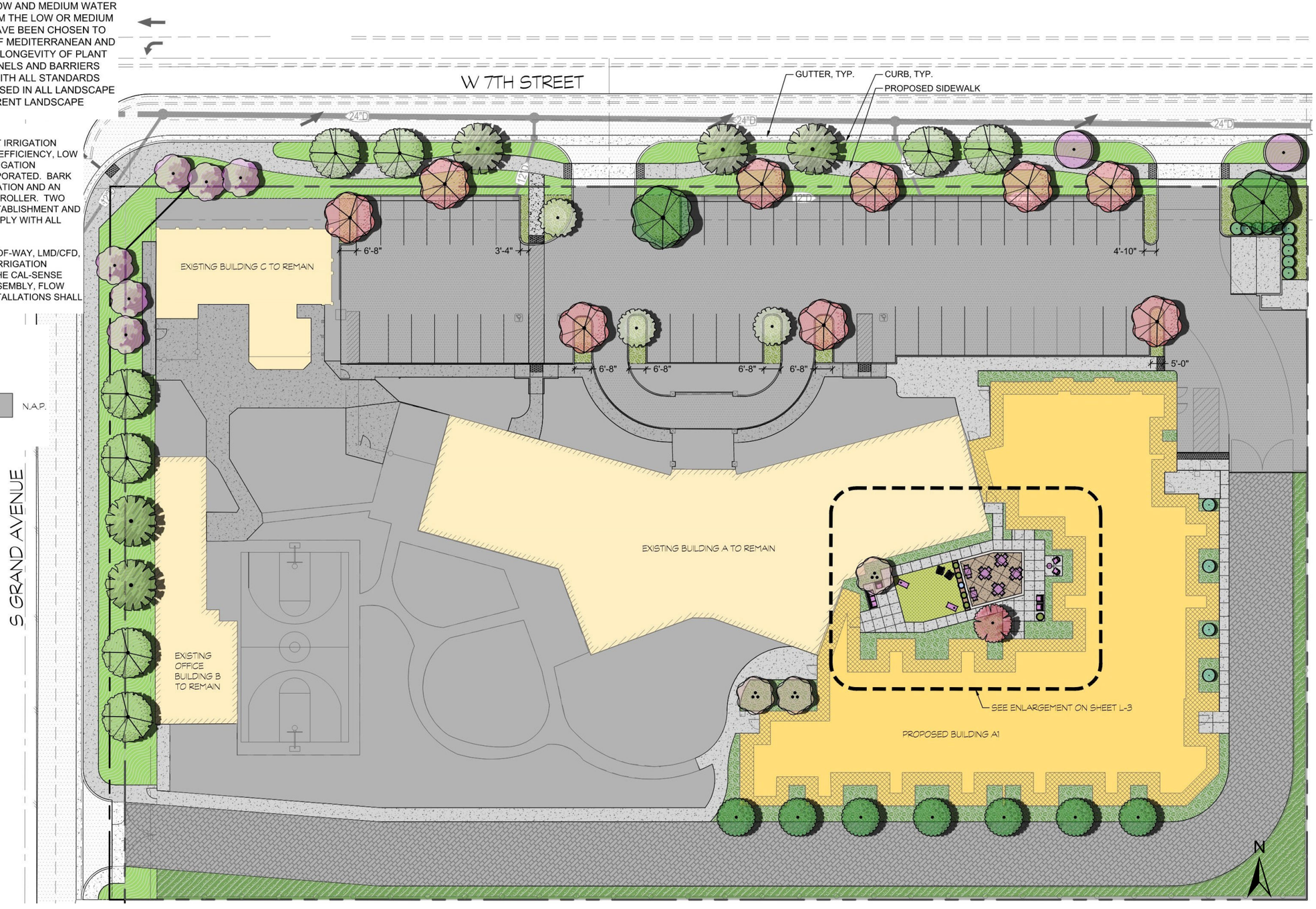
- OVERALL: 4,015 SF

UTILITY LEGEND

STORM DRAIN PIPE

STORM DRAIN

STORM DRAIN MAN HOLE



bmla LANDSCAPE ARCHITECTURE

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4. ENVIRONMENTAL CHECKLIST

4.1. BACKGROUND

Project Title: Bradley Gardens Skilled Nursing Facility Expansion Project
Lead Agency: San Jacinto
Lead Agency Contact: Frank Chen, Associate Planner fchen@sanjacintoca.gov (951) 487-7330
Responsible Agency: State Department of Health Care Access and Information (HCAI)
Project Location: The Project site is located at 980 W. 7th Street in the City of San Jacinto, at the southeast corner of the intersection of W. 7th Street and S. Grand Avenue.
Project Sponsor's Name and Address: Corcoran Construction 25690 Madison Avenue Murrieta, California 92562
General Plan and Zoning Designation: The Project site has a General Plan land use designation of Industrial (I) and a zoning designation of light Industrial (IL).
Project Description: The Project is proposing a CUP the expansion of the existing 44-bed Bradley Gardens facility to a total of 103 beds. The Project includes demolition of the existing 1,074 SF maintenance and storage building located in the southeastern corner of the site for construction of an expansion to the existing 44-bed SNF building. The proposed building addition would total approximately 17,372 SF and would provide 43 additional SNF and STP beds. The Project also proposes the conversion of the existing 2,596 SF vacant office building located in the northwestern corner of the site into a 16-bed PHF. The Project would not modify the existing 2,609 SF administrative office building along the western boundary of the site. The proposed Project would result in an FAR of 0.27. Additional improvements would include landscaping, utility connections, implementation of stormwater facilities, lighting, parking lot, and driveways.
Surrounding Land Uses and Setting: North: W. 7th Street followed by a metal fabrication plant West: S. Grand Avenue followed by Vacant land South: Vacant land East: Vacant land

Southwest: S. Grand Avenue followed by residences
Other Public Agencies Whose Approval is Required: None

4.2. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The subject areas checked below were determined to be new significant environmental effects or to be previously identified effects that have a substantial increase in severity either due to a change in project, change in circumstances or new information of substantial importance, as indicated by the checklist and discussion on the following pages.

☐	Aesthetics	☐	Agriculture/Forestry Resources	☐	Air Quality
☒	Biological Resources	☒	Cultural Resources	☐	Energy
☒	Geology/Soils	☐	Greenhouse Gas Emissions	☐	Hazards/Hazardous Materials
☐	Hydrology/Water Quality	☐	Land Use/Planning	☐	Mineral Resources
☐	Noise	☐	Population/Housing	☐	Public Services
☐	Recreation	☐	Transportation	☐	Tribal Cultural Resources
☐	Utilities and Service Systems	☐	Wildfire	☒	Mandatory Findings of Significances

4.3. DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARACTION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a “potentially significant” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier analysis pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	9/14/2026 Date
Frank Chen Associate planner Name and Title	City of San Jacinto Lead Agency

4.4. EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including offsite as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Potentially Significant Unless Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analysis," as described in (5) below, may be cross-referenced).
5. Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Guidelines Section 15063 (c)(3)(d). In this case, a brief discussion should identify the following:

Earlier Analysis Used. Identify and state where they are available for review.

Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The analysis of each issue should identify: (a) the significance criteria or threshold used to evaluate each question; and (b) the mitigation measure identified, if any, to reduce the impact to less than significance.

5. ENVIRONMENTAL ANALYSIS

This section provides evidence to substantiate the conclusions in the environmental checklist.

5.1. AESTHETICS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

a) Have a substantial adverse effect on a scenic vista?

Less Than Significant Impact.

Scenic vistas consist of expansive, panoramic views of important, unique, or highly valued visual features that are seen from public viewing areas. This definition combines visual quality with information about view exposure to describe the level of interest or concern that viewers may have for the quality of a particular view or visual setting. The City of San Jacinto General Plan Update Environmental Impact Report (GPU EIR) identifies that scenic resources in the City of San Jacinto include the Lakeview Mountains to the west, the San Jacinto Mountain foothills to the northeast, and the San Timoteo badlands to the northwest (City of San Jacinto, 2022b).

The Project site is developed and currently operates as the Bradley Gardens facility. Distant views of the Lakeview Mountains and San Jacinto Mountains are available from public vantage points on W 7th Street and S Grand Avenue. The proposed Project includes demolition of the existing 1,074 SF maintenance and storage building located in the southeastern corner of the site for constructing an expansion to the existing 44-bed SNF building. The proposed building addition would total approximately 18,000 SF and would provide 43 additional SNF and STP beds, resulting in a total capacity of 87 beds. The Project also proposes the conversion of the existing 2,596 SF vacant office building located in the northwestern corner of the site into a 16-bed PHF. The proposed SNF-STP building would be single-story and have a maximum

height of 22 feet, measured from finish grade to top of highest roof ridges. The converted PHF building would be single-story and approximately 14 feet in height.

While development of the proposed Project would alter existing foreground views of the developed Project site, the Project would remain within an existing healthcare campus and would not encroach into or obstruct existing long-distance public views available from surrounding roadways. The proposed SNF-STP building would be setback approximately 34.3 feet from the eastern boundary of the site, approximately 36.3 feet from the southern boundary of the site, and approximately 71.75 feet from the site's northern boundary. The proposed PHF building would be setback approximately 10 feet from the western boundary of the site and approximately 10 feet from the site's northern boundary.

Although the Project would increase building massing and site coverage, the new one-story structures would be consistent with the existing low-rise institutional development pattern on-site. Thus, the Project would not encroach upon public views of the mountains of pedestrians and motorists along these roadways. The proposed Project is consistent with the City's development standards for the existing land use and zoning designation of the Project site, and therefore, the Project would result in less than significant impacts on scenic vistas (distant mountain views).

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact.

The proposed Project would not damage any scenic resources or historic buildings within a state scenic highway. The Project site is currently developed and surrounded by vacant land, industrial development, and residential development. The GPU EIR details that there are no officially designated State Scenic Highways in the City of San Jacinto (City of San Jacinto, 2022b). The nearest officially designated State Scenic Highway is SR 243, located approximately 8.12 miles southeast of the Project site (Caltrans, 2018). The nearest Eligible State Route Scenic Highway is SR 74, located approximately 2.21 miles south of the Project site (Caltrans, 2018).

The Project site is not visible from either SR 243 or SR 74; therefore, the Project would not substantially damage scenic resources, including trees, rock outcroppings, and historic buildings within a State Scenic Highway. Therefore, no impacts to scenic resources within a state scenic highway would occur.

c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant Impact.

The Project is located in an urbanized area within the City of San Jacinto. As described previously in Section 2, *Environmental Setting*, the Project site has an existing land use designation of Industrial (I) and a zoning designation of IL. Table AES-1 below compares the Project's consistency with San Jacinto Development Code (SJDC) standards for industrial development within the IL zone.

Table AES-1: Consistency with San Jacinto Development Code Standards

Development Features	Development Standard for IL	Proposed Project
Maximum FAR	0.50	0.27
Maximum Building Height	45 feet	Less than 30 feet
Minimum Front Setback Adjacent to Residential	50 feet	68 feet
Minimum Interior Side Setback Abutting Non-residential	10 feet	10 feet
Minimum Side Street Setback Abutting nonresidential	10 feet	10 feet*
Minimum Rear Setback Abutting nonresidential	none	36 feet
Minimum Parking Spaces Congregate Care Facility (15 or more): 1 space for each on duty employee and 1 space for each 10 beds	52	52
Maximum Impervious Surface Coverage	80%	76%

* There are no abutting residential, however side setback is a minimum of 10 feet along the west property line and 34 feet along the east property line

As shown in Table AES-1, the Project would be consistent with the SJDC development standards for the IL zone and would not conflict with an applicable zoning regulation related to scenic quality. In addition, the Project would install an additional 4,015 SF of ornamental landscaping including 24-inch box trees, 1-gallon and 5-gallon trees, various shrubs, and succulents in the southeastern corner of the site near the proposed SNF-STP addition. Therefore, impacts related to conflict with applicable zoning and other regulations governing scenic quality would be less than significant.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact.

Spill light occurs when lighting fixtures such as streetlights, parking lot lighting, exterior building lighting, and landscape lighting are not properly aimed or shielded to direct light to the desired location and light escapes and partially illuminates a surrounding location. Sensitive uses (e.g., residential uses) surrounding the Project site to the southwest could be impacted by the light from development within the boundaries of the Project site if light spill occurs.

Glare is the result of improperly aimed or blocked lighting sources that are visible against a dark background such as the night sky. Glare may also refer to the sensation experienced looking into an excessively bright light source that causes a reduction in the ability to see or causes discomfort. Glare generally does not result in illumination of off-site locations but results in a visible source of light viewable from a distance. Glare could also occur from building materials of the new structures, including glass and other reflective materials.

As described above, the Project site is currently developed and is surrounded by existing sources of nighttime lighting including illumination from vehicle headlights along W. 7th Street and S. Grand Avenue, security lighting from adjacent uses, and from interior illumination from nearby residential homes passing through windows. Sensitive receptors relative to lighting and glare include residents, motorists, and pedestrians.

The Project would introduce new sources of light from new building lighting, exterior lighting, interior lights shining through building windows, and headlights from nighttime vehicular trips generated from the Project. However, consistent with SJDC Section 17.300.080, *Outdoor Light and Glare*, all Project lighting would be directed downward and shielded so as not to spill over onto neighboring properties. Compliance with the SJDC would be implemented through the construction permitting and plan check process. Therefore, with compliance with the SJDC lighting provisions, impacts related to increased sources of light would be less than significant.

Glare in the Project vicinity is generated by building and vehicle windows reflecting light. However, there are no substantial buildings or structures near the Project site that presently generate substantial glare since most of the buildings are one or two-story structures that are constructed of non-reflective materials and are not surfaced with a substantial number of windows adjacent to one another that would create a large reflective area.

The proposed building materials do not consist of highly reflective materials. Additionally, lights installed at the site would be shielded consistent with SJDC requirements. The proposed Project would create limited new sources of light or glare from security and site lighting but would not adversely affect day or nighttime views in the area given the similarity of the existing lighting in the surrounding urbanized environment. With implementation of the regulatory requirements per SJDC Section 17.300.080, included as PPP AES-1, impacts related to light and glare would be less than significant.

Existing Plans, Programs, or Policies

PPP AES-1: Glare and Outdoor Lighting Standards. The Project is required to comply with San Jacinto Development Code Section 17.300.080 which requires all exterior lighting to be shielded or modified and located so as to eliminate spillover illumination or glare beyond the property line or upward into the sky.

Mitigation Measures

None.

5.2. AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact.

The State of California Department of Conservation's Farmland Mapping and Monitoring Program is charged with producing maps for analyzing impacts on the state's agricultural resources. California's agricultural lands are rated based on soil quality and irrigation status. For CEQA purposes, the following categories qualify as "agricultural land": Prime Farmland, Farmland of Statewide Importance, Unique

Farmland, Farmland of Local Importance, and Grazing Land. Per Section 21060.1 of the State CEQA Guidelines, Farmland of Local Importance and Grazing Land are not considered Farmland.

The State of California Farmland Mapping and Monitoring Program and Figure 5.2-1, *Important Farmlands Map*, of the GPU EIR indicate that there is no Prime Farmland, Unique Farmland or Farmland of Statewide Importance on the Project site (California Department of Conservation, 2022; City of San Jacinto, 2022b). The Project site is designated as "Urban and Built-Up Land" (California Department of Conservation, 2022). Additionally, the Project site is already developed and is not currently used for agricultural purposes. The site is designated for industrial development under the General Plan and is surrounded by existing roadways, vacant land, industrial development, and residential development. Given that the Project site is not being used for agricultural use, and that no Prime Farmland, Unique Farmland or Farmland of Statewide Importance has been identified within the Project site, implementation of the proposed Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. Therefore, the Project would result in no impacts on conversion of important farmland to non-agricultural use.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact.

As identified previously, the Project site has an existing General Plan land use designation of Industrial (I) and a zoning designation of Industrial Light (IL). Additionally, as shown in Figure 5.2-2, *Agriculture Preserve Lands,* of the GPU EIR, the Project site is not agriculturally preserved or subject to a Williamson Act contract (City of San Jacinto, 2022b). Therefore, the Project would not result in a conflict with existing zoning for agricultural use or a Williamson Act contract. Thus, the proposed Project would not result in impacts related to conflict with an existing agricultural zoning or Williamson Act contract, and impacts would not occur.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact.

"Forest land" is defined as "land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits." "Timberland" is defined as "land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees." "Timberland Production Zone" (TPZ) is defined as "an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision (h)."

The Project site consists of developed land occupied by the existing Bradley Gardens facility. No forest land exists on or adjacent to the Project site. The Project site has an existing zoning designation of IL; as such, it is not zoned for forest land or timberland uses. Therefore, the Project would result in no impacts related to conflicts with existing forest land or timberland zoning.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact.

The Project site consists of developed land occupied by the existing Bradley Gardens facility. No forest land exists on or adjacent to the Project site. Therefore, the proposed Project would result in no new impacts related to the conversion of forest land to non-forest use.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No Impact.

As identified above, the Projects site is not classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the California Department of Conservation's California Important Farmland Finder Map. The Project site is developed and not currently used for agricultural purposes, is not adjacent to agricultural uses, and is designated Industrial under the City's General Plan with an IL zoning designation. The site, and the surrounding area, do not contain forest lands and are not currently designated or zoned for forest land. The Project site and the surrounding vacant lands are designated for urban and industrial uses. Additionally, the proposed Project would not convert farmland to a nonagricultural use or convert forest land to a non-forest use. Therefore, no impacts would occur, and the Project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

5.3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
g) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
h) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
i) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact.

The Project site is located in the South Coast Air Basin (SCAB) and is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD and the Southern California Association of Governments (SCAG) are responsible for preparing the Air Quality Management Plan (AQMP), which addresses federal and state Clean Air Act (CAA) requirements. The AQMP details goals, policies, and programs for improving air quality in the SCAB. In preparation of the AQMP, SCAQMD and SCAG uses regional growth projections to forecast, inventory, and allocate regional emissions from land use and development-related sources. For purposes of analyzing consistency with the AQMP, if a proposed Project would result in growth that is substantially greater than what was anticipated, then the proposed Project would conflict with the AQMP. On the other hand, if a project's density is within the anticipated growth of a jurisdiction, its emissions would be consistent with the assumptions in the AQMP, and the Project would not conflict with SCAQMD's attainment plans (Consistency Criterion 1). In addition, the SCAQMD considers a project consistent with the AQMP if the project would not result in an increase in the frequency or severity of existing air quality violations or cause a new violation (Consistency Criterion 2).

Furthermore, the SCAB is in a non-attainment status for federal ozone standards, and state and federal particulate matter standards. The SCAB has a maintenance status for federal PM_{10} standards. Any development in the SCAB, including the proposed Project, could cumulatively contribute to these pollutant violations. Should construction or operation of the proposed Project exceed these thresholds, a significant impact could occur; however, if estimated emissions are less than the thresholds, impacts would be considered less than significant.

The Project site has a General Plan Land Use designation of Industrial (I) and a zoning designation of Industrial Light (IL). The proposed Project includes demolition of the existing 1,074 SF maintenance and storage building for construction of a new 18,000 SF building addition to the existing SNF. In addition, the

Project proposes the conversion of the existing 2,596 SF vacant office building into a 16-bed PHF. The proposed Project represents the expansion of an existing health care facility. Given that it does not propose the development of housing, the Project would not directly generate a permanent residential population. The existing Bradley Gardens facility has a total of 150 employees, and the proposed Project would add 100 new employees, resulting in a total of 250 employees. The employees that would fill these roles are anticipated to come from within the City or the region.

Further, the proposed Project would result in a FAR of 0.27, which is within the maximum allowable FAR of 0.50 in the IL zone. Thus, the proposed Project would not induce population growth or growth in the area. Thus, implementation of the Project would not exceed the growth assumptions for the Project site. As a result, the proposed Project would be consistent with Consistency Criterion No. 1.

As discussed below, the emissions generated by the construction and operation of the proposed Project would not exceed applicable SCAQMD regional thresholds, and the Project would not result in an increase in the frequency or severity of existing air quality violations or cause a new violation. As such, the proposed Project would be consistent with Consistency Criterion No. 2. Therefore, impacts related to conflict with the AQMP from the proposed Project would be less than significant.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less than Significant Impact.

The SCAB is in non-attainment status for federal ozone standards, and state and federal particulate matter standards. The SCAB is designated as a maintenance area for federal PM_{10} standards. Any development in the SCAB, including the proposed Project, could cumulatively contribute to these pollutant violations. Evaluation of the cumulative air quality impacts of the proposed Project has been completed pursuant to SCAQMD's cumulative air quality impact methodology. SCAQMD states that if an individual project results in air emissions of criteria pollutants (ROG, CO, NOx, SOx, PM_{10}, and $PM_{2.5}$) that exceed the SCAQMD's recommended daily thresholds for project-specific impacts, then it would also result in a cumulatively considerable net increase of the criteria pollutant(s) for which the Project region is in non-attainment under an applicable federal or state ambient air quality standard. SCAQMD has established daily mass thresholds for regional pollutant emissions, which are shown in Table AQ-1.

Table AQ-1: SCAQMD Regional Daily Emissions Thresholds

Air Pollutant	Maximum Daily Emissions (pounds/day)	
	Construction	Operation
ROGs	75	55
NOx	100	55
CO	550	550
SO_2	150	150
PM_{10}	150	150
$PM_{2.5}$	55	55

ROG = reactive organic gases; NOx = nitrogen oxides; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = particulate matter, 10 microns in diameter; $PM_{2.5}$ = particulate matter, 2.5 microns in diameter
Source: Air Quality, Energy, and Greenhouse Gas Assessment (Appendix A)

Construction

Construction activities associated with the proposed Project are expected to take place over 12 months and would generate pollutant emissions from the following: (1) demolition, (2) site preparation, (3) grading, (4) building construction, (5) paving, and (6) architectural coating. The amount of emissions generated on a daily basis would vary, depending on the intensity and types of construction activities occurring.

It is mandatory for all construction projects to comply with several SCAQMD Rules, including Rule 403 for controlling fugitive dust, PM_{10}, and $PM_{2.5}$ emissions from construction activities. Rule 403 requirements include, but are not limited to, applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the Project site, covering all trucks hauling soil with a fabric cover and maintaining a freeboard height of 12 inches, and maintaining effective cover over exposed areas.

Compliance with SCAQMD Rule 403, included as PPP AQ-1, was accounted for in the construction emissions modeling. In addition, implementation of SCAQMD Rule 1113, included as PPP AQ-2, which governs the VOC content in architectural coating, paint, thinners, and solvents was accounted for in construction emissions modeling. As shown in Table AQ-2, the California Emissions Estimator Model (CalEEMod) Version 2022.1 results indicate that construction emissions generated by the proposed Project would not exceed SCAQMD regional thresholds. Therefore, construction activities would result in a less than significant impact.

Table AQ-2: Regional Construction Emission Estimates

Emissions	Maximum Daily Regional Emissions (pounds/day)					
	ROG	**NOx**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Maximum Daily Emissions (2026)	2.3	15.6	23.5	<0.01	3.2	1.7
Maximum Daily Emissions (2027)	52.7	11.3	17.5	<0.01	1.6	0.6
Maximum Daily Emission (2026-2027)	**52.7**	**15.6**	**23.5**	**<0.01**	**3.2**	**1.7**
SCAQMD Significance Thresholds	75	100	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: ROG = reactive organic gases; NOx = nitrogen oxides; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = particulate matter, 10 microns in diameter; $PM_{2.5}$ = particulate matter, 2.5 microns in diameter
Source: Air Quality, Energy, and Greenhouse Gas Assessment (Appendix A)

Operation

Implementation of the proposed Project would result in long-term regional emissions of criteria air pollutants and ozone precursors associated with area sources, such as natural gas consumption, landscaping, applications of architectural coatings, and consumer products. Operation of the proposed Project would include emissions from vehicles traveling to the Project site and from vehicles in the parking lots and loading areas. The proposed Project would generate an additional 181 daily trips including 8 trips during the AM peak hour and 13 trips during the PM peak hour according to the Vehicle Miles Traveled (VMT) Screening Analysis (Appendix K). Area source emissions would occur from operation of the expanded SNF.

Operational emissions associated with the existing facility and proposed Project were modeled using CalEEMod Version 2022.1 land use emission model. Operational emissions for the existing facility, the proposed Project, and the resulting net Project emissions are presented in Table AQ-3, *Regional Operational Emission Estimates*. Net Project emissions represent the increase in emissions attributable to the proposed Project and were calculated by subtracting the existing operational operations from the proposed Project operational emissions. The net project emissions were compared to the SCAQMD regional operational significance thresholds to evaluate project impacts. As shown, the net Project emissions would result in long-term regional emissions below the SCAQMD's applicable thresholds. Therefore, operation of the proposed Project would not exceed the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS), would not result in a cumulatively considerable net increase of any criteria pollutant, and impacts would be less than significant.

Table AQ-3: Regional Operational Emission Estimates

Operational Activity	Maximum Daily Regional Emissions (pounds/day)					
	ROG	**NOx**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Mobile	1.2	1.3	12.3	<0.01	3.1	0.8
Area	1.4	0.1	6.0	<0.01	<0.01	<0.01
Energy	<0.01	0.4	0.2	<0.01	<0.01	<0.01
Total Proposed Project Operational Emissions	**2.6**	**1.8**	**18.5**	**<0.01**	**3.1**	**0.8**
Existing Operational Emissions	1.1	0.8	7.9	<0.01	1.3	0.4
Net Project Operational Emissions	**1.5**	**1.0**	**10.6**	**<0.01**	**1.8**	**0.4**
SCAQMD Significance Thresholds	55	55	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: ROG = reactive organic gases; NOx = nitrogen oxides; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = particulate matter, 10 microns in diameter; $PM_{2.5}$ = particulate matter, 2.5 microns in diameter
Source: Air Quality, Energy, and Greenhouse Gas Assessment (Appendix A)

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact.

The SCAQMD's *Final Localized Significance Threshold Methodology* (SCAQMD, 2008) recommends the evaluation of localized NOx, CO, PM_{10}, and $PM_{2.5}$ construction-related impacts to sensitive receptors in

the immediate vicinity of the Project site. Such an evaluation is referred to as a localized significance threshold (LST) analysis. According to the SCAQMD's *Final Localized Significance Threshold Methodology*, "off-site mobile emissions from the Project should not be included in the emissions compared to the LSTs" (SCAQMD, 2008). The SCAQMD has developed LSTs that represent the maximum emissions from a Project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards, and thus would not cause or contribute to localized air quality impacts. LSTs are developed based on the ambient concentrations of NOx, CO, PM_{10}, and $PM_{2.5}$ pollutants for each of the 38 source receptor areas (SRAs) in the Basin. The Project site is located within SRA 28 (Hemet/ San Jacinto Valley).

Sensitive receptors can include residences, schools, playgrounds, childcare centers, athletic facilities. The nearest sensitive receptor is a single-family residence located approximately 90 feet (27 meters) north of the Project site across W. 7th Street. As the nearest sensitive receptor is located approximately 27 meters (90 feet) from the Project site, the minimum (most stringent) 25-meter receptor distance is used for evaluation of localized impacts to provide a conservative analysis.

Construction

Construction of the proposed Project may expose nearby sensitive receptors to airborne particulates as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). However, construction contractors would be required to implement measures to reduce or eliminate emissions by following SCAQMD's standard construction practices. SCAQMD Rule 402 (included as PPP AQ-3) requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. SCQMD Rule 403 (PPP AQ-1) requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. As shown in Table AQ-4, *Localized Construction Emission Estimates*, Project construction-source emissions would not exceed SCAQMD LSTs and impacts would be less than significant.

Table AQ-4: Localized Construction Emission Estimates

Construction Activity	Maximum Daily Localized Emissions (pounds/day)			
	NOx	CO	PM_{10}	$PM_{2.5}$
2026				
Demolition	10.9	10.8	0.4	0.4
Site Preparation	13.4	13.2	2.7	1.5
Grading	13.4	13.2	2.7	1.5
Building Construction	9.9	11.5	0.3	0.3
Building Construction and Paving	14.9	18.7	0.6	0.5
Maximum On-site Emission (2026)	***14.9***	***18.7***	***2.7***	***1.5***
2027				
Building Construction	9.5	11.4	0.3	0.3
Paving	10.6	12.9	0.3	0.3
Architectural Coating	1.1	1.5	<0.01	<0.01

Construction Activity	Maximum Daily Localized Emissions (pounds/day)			
	NOx	CO	PM_{10}	$PM_{2.5}$
Maximum On-site Emission (2027)	***10.6***	***12.9***	***0.3***	***0.3***
Maximum On-site Emissions (2026-2027)	**14.9**	**18.7**	**2.7**	**1.5**
SCAQMD Screening Thresholds	198.0	925.0	5.5	3.5
Threshold Exceeded?	**No**	**No**	**No**	**No**

Notes: NOx = nitrogen oxides; CO = carbon monoxide; PM_{10} = particulate matter, 10 microns in diameter; $PM_{2.5}$ = particulate matter, 2.5 microns in diameter
Source: Air Quality, Energy, and Greenhouse Gas Assessment (Appendix A)

Operation

According to the SCAQMD LST methodology, LSTs apply to Project on-site emissions of stationary and on-site mobile sources. Projects that involve mobile sources that spend extended periods queuing and idling at a site, such as transfer facilities or warehousing and distribution buildings, have the potential to exceed the operational LSTs. The proposed Project would not involve vehicles idling or queueing for extended periods. Therefore, due to the lack of significant stationary source emissions or idling diesel-powered vehicles, impacts related to operational LSTs are presumed to be less than significant.

Construction Health Risk Assessment

In addition to criteria pollutant emissions, construction of the proposed Project would generate diesel particulate matter (DPM) emissions from the exhaust of off-road, heavy-duty diesel construction equipment used during demolition, site preparation, grading, building construction, paving, and architectural coating activities, as well as from on-road haul, vendor, and worker vehicles traveling to and from the Project site. DPM has been identified as a toxic air contaminant (TAC) by the California Air Resources Board (CARB). Because sensitive receptors are located in proximity to the Project site, a Construction Health Risk Assessment was prepared for the proposed Project (included as Appendix B) to evaluate the potential carcinogenic and non-carcinogenic health risks to nearby receptors resulting from exposure to Project construction-source DPM emissions.

The City of San Jacinto has not adopted a numerical significance threshold for cancer risk or non-cancer chronic health risk impacts; therefore, the SCAQMD's significance thresholds were used.

The SCAQMD recommends using a risk level of 10 in one million as the cancer risk threshold. A risk level of 10 in one million implies a likelihood that up to 10 people, out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of toxic air contaminants over a specified duration of time. Non-cancer health risks are conveyed in terms of the Hazard Index (HI). A ratio of the predicted concentration of the facility's reported TAC emissions to a concentration is considered acceptable to public health professionals. A significant risk is defined as an HI of 1 or greater.

The SCAQMD defines a sensitive receptor as any residence, including private homes, condominiums, apartments, and living quarters, schools, preschools, daycare centers, and health facilities such as hospitals or retirement and nursing homes. For purposes of this HRA, sensitive receptors were placed within the air dispersion model at the locations of the closest existing residences and other establishments or residences nearest to the Project site that qualify as sensitive receptors. In addition, a uniform grid

network of receptors was placed over the Project vicinity to complete the receptor network. The nearest off-site sensitive receptor is a single-family residential structure located approximately 90 feet (27 meters) north of the Project site, across W. 7th Street, which was identified as the most impacted sensitive receptor during the construction of the Project. The nearest off-site worker receptor is Talley Metal Fabrication, located at 989 W 7th St, San Jacinto, CA, approximately 107 feet (33 meters) north of the Project site.

As shown in Table AQ-5, *Construction Health Risk Results*, the estimated maximum cancer risk attributable to construction of the proposed Project would be 4.88 in one million at the maximally impacted sensitive/residential receptor and 0.13 in one million at the maximally impacted worker receptor, both of which are below the SCAQMD significance threshold of 10 in one million. The maximum chronic non-cancer HI during construction would be 0.01 for both the maximally impacted sensitive receptor and the maximally impacted worker receptor, which is below the SCAQMD significance threshold of 1.0. Thus, the construction of the Project would have a less-than-significant impact for both cancer risk and chronic non-cancer impacts.

Table AQ-5: Construction Health Risk Results

Receptor	Cancer Risk (per million)		Threshold Exceeded?
	Maximum Lifetime Project Risk	SCAQMD Significance Threshold	
Maximum Impacted Sensitive Receptor - Cancer Risk (Prebirth to 1.02 Years)	4.88 in one million	10 in one million	**No**
Maximum Impacted Sensitive Receptor - Cancer Risk (Adult, 1.02 Years)	0.18 in one million	10 in one million	**No**
Maximum Impacted Worker Receptor - Cancer Risk (1.02 Years)	0.13 in one million	10 in one million	**No**
Receptor	**Chronic Non-Cancer Hazard Index**		**Threshold Exceeded?**
	Maximum Lifetime Project Risk	**SCAQMD Significance Threshold**	
Maximum Impacted Sensitive Receptor	0.01	1.0	**No**
Maximum Impacted Worker Receptor	0.01	1.0	**No**

Source: Construction Health Risk Assessment (Appendix B)

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant Impact.

The proposed Project would not generate any other emissions that were not described previously. The Project site does not contain land uses typically associated with emitting objectionable odors. According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor issues include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting activities,

refineries, landfills, dairies, and fiberglass molding operations. The proposed Project would expand an existing SNF, which would not involve the types of uses that lead to odors.

Potential odor sources associated with the proposed Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed Project's operational uses. The proposed Project would also be required to comply with SCAQMD Rule 402 (included as PPP AQ-3) to prevent occurrences of public nuisance odors. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of construction; thus, impacts would be less than significant.

Existing Plans, Programs, or Policies

PPP AQ-1: SCAQMD Rule 403. The Project is required to comply with the provisions of South Coast Air Quality Management District (SCAQMD) Rule 403, which includes the following:

- All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions.
- The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered, with complete coverage of disturbed areas, at least 3 times daily during dry weather; preferably in the mid-morning, afternoon, and after work is done for the day.
- The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 miles per hour or less.

PPP AQ-2: SCAQMD Rule 1113. The Project is required to comply with the provisions of South Coast Air Quality Management District Rule (SCAQMD) Rule 1113. Only "Low-Volatile Organic Compounds" paints (no more than 50 gram/liter of VOC) and/or High Pressure Low Volume (HPLV) applications shall be used.

PPP AQ-3: SCAQMD Rule 402. The Project is required to comply with the provisions of South Coast Air Quality Management District (SCAQMD) Rule 402. The Project shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

Mitigation Measures

None.

5.4. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant Impact with Mitigation. The Biological Resources Assessment prepared for the Project, included as Appendix C, determined that the Project site is fully developed and does not support native habitat. According to a review of the California Natural Diversity Database (CNDDB) and the California Native Plant Society (CNPS), 12 special-status plant species, 69 special-status wildlife species, and four special-status plant communities with potential to occur within the San Jacinto quadrangle.

However, a field survey conducted on February 6, 2026, did not identify any special-status plant species, wildlife species, or sensitive plant communities onsite.

Special-status species were evaluated based on habitat requirements, known distributions, and the availability of suitable habitat on-site. The Biological Resources Assessment determined that the Project site has moderate potential to support Cooper's Hawk (*Astur cooperii*) (Appendix C). The Project site was determined to have no potential to support any of the other special-status wildfire species.

No species with potential to occur on-site are listed as threatened or endangered under the federal or State Endangered Species Acts. However, nesting birds are protected under the federal Migratory Bird Treaty Act (MBTA) and Sections 3503, 3503.5, 3511, and 3513 of the California Fish and Game Code. Given the potential for special-status avian species to occur on-site, MM BIO-1: Pre-construction Nesting Bird

Survey is included to avoid impacts to nesting birds during construction activities.

Under MM BIO-1, prior to issuance of a grading permit or any ground disturbance permit, the applicant shall submit to, and receive approval from, the City: (1) evidence that a qualified biologist has been retained with a scope of work covering the survey and monitoring requirements of this measure, and (2) the biologist's written confirmation that the protocol below will be implemented. No such permit shall be issued for work occurring between February 1 and August 31 until both items are approved.

A qualified biologist shall conduct a preconstruction nesting bird clearance survey within three days prior to any ground-disturbing or vegetation removal activities occurring between February 1 and August 31. If no active nests are found, the biologist shall prepare a brief letter report documenting the negative findings. If active nests are present, a no-disturbance buffer shall be established, with the distance determined by the biologist based on site-specific conditions including noise levels, visibility, and species sensitivity. Construction activities shall be restricted within the buffer zone until the young have fledged and the nest is no longer active. Buffers shall be clearly marked in the field, and construction personnel will be instructed to avoid those areas. A biological monitor shall oversee compliance with the buffer and monitor nesting behavior to ensure construction activities do not result in adverse impacts. With implementation of this measure, impacts to special-status avian species would be less than significant.

The Project site is located within the San Jacinto Valley Area Plan of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) but is not located within a Criteria Cell, designated conservation area, or MSHCP designated survey areas (Appendix C). Thus, implementation of the Project would not result in a substantial adverse effect on any candidate, sensitive, or special-status species.

Therefore, with implementation of MM BIO-1, impacts would be less than significant.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No Impact.

The Biological Resources Assessment describes that the Project site does not contain any drainage, riparian, or riverine features (Appendix C). There are no California Department of Fish and Wildlife (CDFW), United States Army Corps of Engineers (USACE), or Regional Water Quality Control Board (RWQCB) jurisdictional waters within the Project site boundaries. The Project area does not contain any

wetlands or vernal pools. As previously described, the Project site is fully developed and disturbed. The Project site is not located with federally designated Critical Habitat. The nearest designated Critical Habitat to the site is located approximately 2.5 miles to the east for San Bernardino Merriam's kangaroo rat (*Dipodomys merriami parvus*) and is separated from the Project site by existing development. Therefore, the Project would not result in impacts related to riparian habitat or other sensitive natural community.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact.

No jurisdictional drainage and/or wetland features were observed on the Project site during the field investigation (Appendix C). During field investigation, a roadside ditch was observed along the northern boundary of the site, on the southern shoulder of W. 7th Street. The Biological Assessment found that the roadside ditch was constructed to convey some flows off the road, does not qualify as jurisdictional, and does not fall under the regulatory authority of the CDFW, United States Army Corps of Engineers, or the RWQCB (Appendix C). Therefore, the proposed Project would not affect State or federally protected wetlands. No impact would occur.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant Impact with Mitigation.

Wildlife corridors are linear features that connect areas of open space and provide avenues for the migration of animals and access to additional areas of foraging. The Project site has not been identified as supporting a wildlife migratory corridor or linkage. The nearest Western Riverside County Regional Conservation Authority (RCA)-conserved lands are located approximately 2.5 miles east of the Project site, within the San Jacinto River Soboba area, which provides opportunities for wildlife movement through the region (Appendix C). However, the Project site is separated from the RCA conserved lands by existing development and high traffic roadways. Additionally, areas within the RCA conserved lands are covered under the MSHCP plans for conservation. Further, the Project site contains developed land. Therefore, implementation of the proposed Project would result in no impacts related to wildlife movement corridors or linkages.

However, the Project site contains existing ornamental trees that could be used for nesting by common bird species that are protected by the federal MBTA and the California Fish and Game Code Sections 3503.5, 3511, and 3515 during the avian nesting and breeding season that occurs between February 1 and August 31. The provisions of the MBTA prohibit disturbing or destroying active nests. Therefore, if vegetation is required to be removed during the nesting bird season, MM BIO-1 has been included to require a nesting bird survey within three days prior to any ground-disturbing or vegetation removal activities occurring. With implementation of Mitigation Measure BIO-1, potential impacts to nesting birds would be less than significant.

e) Conflict with any local policies or ordinances protecting biological resources?

No Impact.

The City does not have a tree preservation ordinance; however, SJMC Chapter 12.20 governs tree planting and removal associated with public parks, public grounds, public streets, and public rights-of-way. The Project site contains ornamental trees located on private property, as identified in the Biological Resources Assessment (Appendix C). Because the Project does not involve trees within public rights-of-way or other City-controlled areas regulated by SJMC Chapter 12.20, implementation of the proposed Project would not conflict with applicable local policies or ordinances protecting trees. Therefore, no impact would occur.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Less Than Significant.

The Project site is located within the Western Riverside County MSHCP within the San Jacinto Valley Area Plan. The Project site is not located within any Criteria Cells or designated conservation areas. Additionally, the Project site is not located within any MSHCP designated survey areas (Appendix C).

Regarding MSHCP Section 6.1.2, the Project site does not contain any jurisdictional drainages, riparian/riverine and/or wetland features. Development of the proposed Project will not result in impacts to riparian/riverine habitats. None of the conditions associated with vernal pools (i.e., depressions, ponded water, hydric soils, etc.) were observed on- site. No features are present that would support fairy shrimp. No standing water or other sign of areas that pond water (e.g., mud cracks, tire ruts, drainages) were recorded. Therefore, the Project is consistent with Section 6.1.2 of the MSHCP.

Regarding MSCHP Section 6.1.3, the Project site supports existing development and heavily disturbed land that does not provide suitable habitat for Narrow Endemic Plant Species. As such, the Project is consistent with the requirements outlined in Section 6.1.3 of the MSHCP.

In regards to Section 6.3.2 of the MSHCP, Additional Survey Needs and Procedures, the Project site is not located within any designated species survey area. The Project site supports existing development and heavily disturbed land that does not provide suitable habitat for MSHCP listed species. As such, the Project is consistent with the requirements outlined in Section 6.3.2 of the MSHCP.

Regarding MSHCP Section 6.1.4, *Guidelines Pertaining to the Urban/Wildlands Interface*, the Project site is not located within or adjacent to any Criteria Cells, corridors, or linkages. As a result, the Project is consistent with Section 6.1.4 of the MSHCP.

Additionally, the proposed Project would be required to pay applicable MSHCP fees pursuant to SJMC Chapter 15.50 prior to grading permit approval, included as PPP BIO-1. With the payment of fees pursuant to PPP BIO-1, the Project would not result in any conflicts with the MSHCP, and impacts would be less than significant.

Existing Plans, Programs, or Policies

PPP BIO-1: MSHCP Fees. Prior to issuance of a grading or building permit, the Project Applicant shall pay fees required pursuant to the Western Riverside County Multiple Species Habitat Conservation Plan

(MSHCP) implemented under San Jacinto Municipal Code Chapter 15.50. Western Riverside County MSHCP requires a per-acre local development impact and mitigation fee payment prior to the issuance of a grading or building permit.

Mitigation Measures

MM BIO-1: Pre-Construction Nesting Bird Survey. Vegetation within and surrounding the Project site has the potential to provide refuge cover from predators, perching sites and favorable conditions for avian nesting that could be impacted by construction activities associated with the Project. Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or destruction of birds, their nests or eggs). In order to protect migratory bird species, a nesting bird clearance survey should be conducted prior to any ground disturbance or vegetation removal activities that may disrupt the birds during the nesting season.

To avoid such impacts, a preconstruction nesting bird clearance survey shall be conducted by a qualified biologist within three (3) days prior to the commencement of any vegetation removal or ground-disturbing activities occurring during the nesting season (February 1 through August 31). If no active nests are observed, the biologist shall document the negative findings in a brief letter report and submit it to the Lead Agency.

If an active nest is identified, a no-disturbance buffer shall be established around the nest. The buffer distance shall be determined by the biologist based on species-specific sensitivity, the type and duration of construction activity, ambient noise and human activity levels, line-of-sight between the nest and construction areas, and the presence of topographic or vegetative screening. Buffers shall be established depending on these site-specific factors, and shall remain in place until the biologist determines that the nest is no longer active and the young have successfully fledged.

The limits of the exclusion zone shall be clearly marked in the field with flagging, fencing, or other appropriate barriers, and construction personnel shall be briefed on the location and sensitivity of protected nesting areas. A biological monitor shall oversee the implementation of exclusion zones and monitor nesting behavior to ensure compliance.

Construction activities may resume within the previously established buffer area only after the qualified biologist confirms that the young have successfully fledged and the nest is no longer active.

5.5. CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Less Than Significant Impact.

State CEQA Guidelines Section 15064.5 defines historic resources as resources listed or determined to be eligible for listing by the State Historical Resources Commission, a local register of historical resources, or the lead agency. Generally, a resource is considered "historically significant" if it meets one of the following criteria:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values;
- Has yielded, or may be likely to yield, information important in prehistory or history.

As described previously, the Project site consists of developed land occupied by the existing Bradley Gardens care facility, a surface parking lot, and landscaping. A cultural records search and review of historical photos conducted as part of the cultural assessment performed for the Project (Appendix D) indicated that the Project site was used for agricultural purposes as early as 1953. In 1964, a main care center building and a storage building were constructed as part of the Colonial Nursing Home, and in 1971, two medical office buildings were constructed. Various improvements were made to the property from the mid-1960s to 2026, including building expansions, the construction and infilling of a pool, landscaping, and paved parking. As such, the four existing buildings on-site are over 50 years old and therefore meet the minimum age threshold to require an assessment of potential eligibility to the California Register of Historical Resources (CRHR). As such, an evaluation of the on-site buildings for historical significance was prepared. Results of the evaluation determined that none of the buildings associated with the site are eligible for listing on the National Register of Historic Places (NRHP) or the CRHR. Thus, the on-site buildings are not of historical significance, and the removal of the buildings would not result in an adverse change in the significance of a historical resource pursuant to §15064.5 (Appendix D). Therefore, the Project would result in a less than significant impact on historical resources.

b) **Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?**

Less Than Significant With Mitigation.

The Cultural Resources Study (Appendix D) prepared for the Project included an archeological investigation at the South Central Coastal Information Center (SCCIC), located at California State University, Fullerton. The search identified any previously recorded cultural resources and prior cultural resources investigations within a 1-mile radius of the Project site.

The records search identified 59 previously recorded cultural resources within the 1-mile radius and none within the Project site. The records search results also indicate that 40 cultural resource studies have been conducted within a one-mile radius of the Project, none of which include any portion of the Project boundaries.

An archaeologist conducted the cultural resources survey of the Project area on February 6, 2026. The survey identified four existing buildings and a parking lot associated with the Bradley Gardens care facility (a large main care center building, one storage building in the southeast corner, and two medical office buildings in the northwest and southwest corners) that were constructed between 1964 and 1971 The existing buildings are over 50 years old, and therefore, are considered of historic age. No prehistoric resources were identified within the Project site.

The Cultural Resources Study determined that there is a potential for previously unknown archaeological resources to be located within the Project site. Thus, Mitigation Measure CUL-1 has been included to require that in the event that potential archaeological resources are discovered during excavation, grading, or construction activities, work shall cease within 50 feet of the find until a qualified archaeologist from the City or County List of Qualified Archaeologists has evaluated the find to determine whether the find constitutes a "unique archaeological resource," as defined in Section 21083.2(g) of the California Public Resources Code. If determined to be a unique archaeological resource, the resource would then be treated in accordance with Section 21083.2(b). With implementation of Mitigation Measure CUL-1, impacts to archaeological resources would be less than significant.

c) Disturb any human remains, including those interred outside of formal cemeteries?

No Impact.

The Project site has been previously disturbed, as described above, and has not been previously used as a cemetery. Thus, human remains are not anticipated to be uncovered during project construction. In addition, California Health and Safety Code Section 7050.5, CEQA Section 15064.5, and Public Resources Code Section 5097.98 (included as PPP CUL-1) mandate the process to be followed in the event of an accidental discovery of any human remains. Specifically, California Health and Safety Code Section 7050.5 requires that if human remains are discovered, disturbance of the site shall remain halted until the coroner has conducted an investigation into the circumstances, manner, and cause of death, and made recommendations concerning the treatment and disposition of the human remains to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. If the coroner determines that the remains are not subject to his or her authority and if the coroner has reason to believe the human remains to be those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage

Commission. Compliance with existing law would ensure that significant impacts to human remains would not occur.

Existing Plans, Programs, or Policies

PPP CUL-1: Human Remains. In the event that human remains are encountered on the Project site, work within 50 feet of the discovery shall cease and the County Coroner shall be notified immediately consistent with the requirements of California Code of Regulations (CCR) Section 15064.5(e). State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. Prior to the issuance of grading permits, the City Community and Planning, Building, and Code Enforcement Department Director, or designee, shall verify that all grading plans specify the requirements of CCR Section 15064.5(e), State Health and Safety Code Section 7050.5, and PRC Section 5097.98, as stated above.

Mitigation Measures

MM CUL-1: Inadvertent Discovery. In the event that potential archaeological resources are discovered during excavation, grading, or construction activities, work shall cease within 50 feet of the find until a qualified archaeologist from the City or County List of Qualified Archaeologists has evaluated the find to determine whether the find constitutes a "unique archaeological resource," as defined in Section 21083.2(g) of the California Public Resources Code. Any resources identified shall be treated in accordance with California Public Resources Code Section 21083.2(g). If the discovered resource(s) appears Native American in origin, a Native American Monitor shall be contacted to evaluate any potential tribal cultural resource(s) and shall have the opportunity to consult on appropriate treatment and curation of these resources. The discovery would also be reported to the City and the South Central Coastal Information Center (SCCIC).

Prior to the issuance of any permits for ground-disturbing activities that include the excavation of soils (including as grading, excavation, and trenching), the City of San Jacinto shall ensure that all Project grading and construction plans and specifications include requirement to halt construction activity and contact an archaeologist as specified above.

5.6. ENERGY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact.

Construction

During construction of the proposed Project would consume energy in three general forms:

1. Petroleum-based fuels used to power off-road construction vehicles and equipment on the Project site, construction worker travel to and from the Project site, as well as delivery truck trips; and
2. Electricity associated with providing temporary power for lighting and electric equipment.
3. Natural gas is not anticipated to be needed for construction activities. Any consumption of natural gas would be minor and negligible.

Electricity Usage

Due to the Project size and the fact that construction is temporary, the electricity used during construction of the proposed Project would be substantially less than that required for Project operation and would have a negligible contribution to the Project's overall energy consumption. The electric power used would be for as-necessary lighting and electronic equipment such as computers inside temporary construction trailers.

Petroleum Fuel Usage

Construction activities related to the SNF expansion and the associated infrastructure are not expected to result in demand for fuel greater on a per-development basis than other development projects in Southern California. Table E-1, *Total Construction Fuel Usage*, details the construction fuel usage over the Project's construction period from both construction equipment and construction workers traveling to and from the site, as shown in Table E-1 below. As shown in Table E-1, *Total Construction Fuel Usage*, construction of the proposed Project would require a total of 33,050 gallons of diesel fuel (25,320 gallons of diesel fuel from off-road construction equipment and 7,730 gallons of diesel fuel from construction vehicles) and 25,025 gallons of gasoline fuel from construction vehicles. As shown in Table E-1, this would

result in a 0.07 percent increase over countywide diesel fuel consumption and a <0.01 percent increase over countywide gasoline consumptions. Thus, increased energy consumption from the construction of the proposed Project would be nominal.

Table E-1: Total Construction Fuel Usage

Construction Source	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
Construction Vehicles	7,730	25,025
Off-Road Construction Equipment	25,320	-
Total	**33,050**	**25,025**
Riverside Countywide Consumptions	50,504,775	430,881,899
Percentage Increase (%)	**0.07**	**<0.01**

Source: Air Quality, Energy, and Greenhouse Gas Assessment (Appendix A)

Construction of the Project would result in fuel consumption from the use of construction tools and equipment, vendor and haul truck trips, and vehicle trips generated from construction workers traveling to and from the site. There are no unusual Project characteristics that would cause the use of construction equipment that would be less energy efficient compared with other similar construction sites in other parts of the state. Construction contractors are required to demonstrate compliance with applicable California Air Resources Board (CARB) regulations governing the accelerated retrofitting, repowering, or replacement of heavy-duty diesel on- and off-road equipment. In addition, compliance with existing CARB idling restrictions and the use of newer engines and equipment would reduce fuel combustion and energy consumption. Overall, construction activities would require limited energy consumption, as construction of the Project would only last 12 months, and would comply with all existing regulations, and would therefore not be expected to use large amounts of energy or fuel in a wasteful manner. Thus, impacts related to construction energy usage would be less than significant.

Operation

Once operational, the Project would generate demand for electricity, natural gas, and gasoline. No diesel vehicles were assumed for operations. Operational use of energy includes the heating, cooling, and lighting of the buildings, water heating, operation of electrical systems and plug-in appliances, parking lot and outdoor lighting, and the transport of electricity, and natural gas. This use of energy is typical for urban development, and no operational activities or land uses would occur that would result in extraordinary energy consumption.

The State of California provides a minimum standard for building design and construction standards through Title 24 of the California Code of Regulations (CCR). Compliance with Title 24 is mandatory at the time new building permits are issued by local governments. The County's administration of the Title 24 requirements includes review of design components and energy conservation measures that occurs during the permitting process, which ensures that all requirements are met. Typical Title 24 measures include insulation; use of energy-efficient heating, ventilation, and air conditioning equipment (HVAC); energy-efficient indoor and outdoor lighting systems; reclamation of heat rejection from refrigeration equipment to generate hot water; and incorporation of skylights, etc. Also, as Title 24 has become more progressive in realizing energy reductions and increasing efficiency, it now has requirements for solar installation for non-residential projects. With the new updates. Title 24 now mandates incorporation of

solar photovoltaic systems and battery storage in many non-residential projects, or for non-qualifying projects installation of solar-ready roofs and systems. These requirements serve to offset electricity demand and the Project will be required to adhere to applicable Title 24 requirements. The Project's compliance with Title 24 will be confirmed prior to issuance of building permits. In complying with the Title 24 standards, impacts to peak energy usage periods would be minimized, and impacts on statewide and regional energy needs would be reduced.

As detailed in Table E-2, *Project Net Annual Operational Energy Consumption*, operation of the proposed Project is estimated to result in an annual use of approximately 52,117 gallons of gasoline fuel, approximately 1,399,933 British thermal units (BTU) of natural gas, and approximately 646,337 kilowatt-hours (kWh) of electricity. As shown in Table E-2, compared to the existing facility on-site, the proposed Project would result in a net annual increase of 29,853 gallons of gasoline fuel, 760,676 BTU of natural gas, and 332,746 kWh of electricity. These increases represent less than 0.01 percent of Riverside Countywide electricity, natural gas, and gasoline consumption, respectively. Thus, operation of the Project would not use large amounts of energy or fuel in a wasteful manner, and operational energy impacts would be less than significant.

Table E-2: Project Net Annual Operational Energy Consumption

Operational Source	Energy Usage	Countywide Energy Consumption	Percentage Increase in Countywide Consumption from Project
Electricity (Kilowatt-Hour)			
Proposed Project	646,337	NA	
Existing Conditions	313,592		
Net Electricity Consumption from Project	**332,746**	**16,286,000,000**	**<0.01%**
Natural Gas (Thousands British Thermal Units)			
Proposed Project	1,399,933	NA	
Existing Conditions	639,257		
Net Natural Gas Consumption From Project	**760,676**	**42,670,000,000**	**<0.01%**
Petroleum (Gasoline Fuel) Consumption (Gallons)			
Proposed Project	52,117	NA	
Existing Conditions	22,263		
Net Petroleum (Gasoline) Consumption from Project	**29,853**	**430,881,899**	**<0.01%**

Notes: NA = Not Applicable, as this analysis compares the net increase of the Project with countywide consumption.
Source: Air Quality, Energy, and Greenhouse Gas Assessment (Appendix A)

Overall, construction and operations-related fuel consumption by the Project would not result in inefficient, wasteful, or unnecessary energy use compared with other similar uses in the region, and impacts would be less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact.

The California Title 24 Building Energy Efficiency Standards are designed to ensure new and existing buildings achieve energy efficiency and preserve outdoor and indoor environmental quality. These measures (Title 24, Part 6) are listed in the CCR. The California Energy Commission is responsible for adopting, implementing and updating building energy efficiency. Local city and county enforcement agencies have the authority to verify compliance with applicable building codes, including energy efficiency. The proposed Project would be required to comply with all applicable State and local regulations related to renewable energy and energy efficiency, including the 2025 California Building Energy Efficiency Standards (Title 24) and the California Green Building Standards Code (CALGreen). As required by SJMC Chapter 15.04, *Construction Codes*, prior to issuance of a building permit, the Project Applicant would be required to submit plans showing that the Project would be in compliance with 2025 Title 24 requirements.

In addition, construction equipment and heavy-duty trucks associated with Project construction would be required to comply with applicable California Air Resources Board (CARB) regulations, including idling restrictions and off-road diesel engine standards, which promote fuel efficiency and reduce unnecessary energy consumption during construction activities. Because the proposed SNF facility expansion would comply with applicable energy efficiency regulations and would not conflict with or obstruct any State or local plan for renewable energy or energy efficiency, impacts would be less than significant.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

5.7. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42)	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

No Impact.

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Act requires the State Geologist to establish regulatory zones, known as "Alquist-Priolo Earthquake Fault Zones," around the surface traces of active faults and to issue appropriate maps. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (typically 50 feet).

According to the Geotechnical Investigation, the Project site is not within a state-designated Alquist-Priolo Earthquake Fault Zone. There are no known active faults that cross the site. The closest fault zone is the San Jacinto Fault, located approximately 2 miles northeast of the site (Appendix E). Thus, impacts related to a known earthquake fault would not occur.

ii. Strong seismic ground shaking?

Less than Significant Impact

The Project site is located in a seismically active region, as is all southern California, and could be subject to seismically related strong ground shaking. Ground shaking is a major cause of structural damage from earthquakes. The amount of motion expected at a building site can vary from none to forceful depending upon the distance to the fault, the magnitude of the earthquake, and the local geology. Greater movement can be expected at sites located closer to an earthquake epicenter, that consist of poorly consolidated material such as alluvium located near the source, and in response to an earthquake of great magnitude.

As described above, the Project site is not located within an active fault zone; however, the San Jacinto Fault lies approximately 2 miles northeast of the Project site (Appendix E). Due to the site's close proximity to this fault, the Project site is expected to be subject to strong seismic ground shaking during the life of the Project. The proposed Project would be designed in accordance with the provisions of the California Building Code (CBC) (California Code of Regulations, Title 24, Part 2), included in the SJMC as Section 15.04.020 (PPP GEO-1). Compliance with the CBC would ensure earthquake safety based on factors including occupancy type, the types of soils on-site, and the probable strength of the ground motion. Mandatory compliance with the CBC would include the incorporation of (1) seismic safety features to minimize the potential for significant effects as a result of earthquakes; (2) proper building footings and foundations; and (3) construction of the building structures so that it would withstand the effects of strong ground shaking. Implementation of CBC requirements would be verified by the City as part of the plan check and development review process. Additionally, the City has adopted an Earthquake Hazard Reduction Code under Chapter 15.24 of the SJMC, which includes standards for structural seismic resistance established primarily to reduce the risk of life loss or injury. Compliance with the SJMC as well

as with the requirements of the CBC would reduce hazards from strong seismic ground shaking to a less than significant level.

iii. Seismic-related ground failure, including liquefaction?

Less than Significant Impact.

Liquefaction occurs when vibrations or water pressure causes soil particles to lose their friction properties. As a result, soil behaves like a liquid, has an inability to support weight, and can flow down very gentle slopes. This condition is usually temporary and is most often caused by an earthquake vibrating water-saturated fill or unconsolidated soil. However, effects of liquefaction can include sand boils, settlement, and structural foundation failures. Soils that are most susceptible to liquefaction are clean, loose, saturated, and uniformly graded fine-grained sands in areas where the groundwater table is within approximately 50 feet below ground surface (bgs).

According to a review of the Riverside County Information Technology's Map My County website, the Project site is identified as having moderate liquefaction susceptibility (Appendix E). The Project site contains topsoil and disturbed fill, which generally consists of brown, moist, loose to medium dense silty sands. There is a potential that sandy layers below the groundwater table could be liquefiable. However, groundwater was not encountered in the geotechnical borings conducted on the Project site which reached a maximum depth of 60 bgs (Appendix E). As discussed in the Geotechnical Investigation, removal of undocumented fill during construction is anticipated to reach approximately 5 to 7 feet below existing grade across majority of the site (Appendix E). Thus, groundwater is not anticipated to be reached during grading.

Further, the Project would be designed to meet CBC requirements (adopted in SJMC Chapter 15.04; PPP GEO-1), which include standards for seismic safety, excavation, foundations, retaining walls, and demolition. The CBC would require project-specific geotechnical recommendations to be incorporated into grading plans and building design as a condition of permit approval, helping ensure the structures can withstand seismic ground movement, including liquefaction. Compliance with the CBC and the SJMC would ensure that hazards from seismic-related ground failure, including liquefaction, would be less than significant.

iv. Landslides?

No Impact.

Landslides are downhill movement of masses of earth and rock and are often associated with earthquakes; but other factors, such as the slope, moisture content of soil, composition of the subsurface geology, heavy rains, and improper grading can influence the occurrence of landslides. The Project site is relatively flat and is not located near substantial slopes or hillsides. There are no known landslides near the site, nor is the site in the path of any known or potential landslides. According to the GPU EIR Figure 5.7-5, *Landslide Susceptibility*, the Project site is not within an area mapped for high susceptibility to landslides (City of San Jacinto, 2022b). Therefore, the proposed Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. No impacts related to landslides would occur with implementation of the proposed Project.

b) Result in soil erosion or the loss of topsoil?

Less Than Significant Impact.

Construction of the Project has the potential to contribute to soil erosion and the loss of topsoil. Grading and excavation activities that would be required for the Project would expose and loosen topsoil, which could be eroded by wind or water. However, SJMC Chapter 13.44, *Storm Water Management*, implements the requirements of the Santa Ana Regional Water Quality Control Board (RWQCB) National Pollutant Discharge Elimination System (NPDES) Storm Water Permit Order No. R8-2010-0033 (MS4 Permit) and establishes minimum stormwater management requirements and controls that are required to be implemented for the Project.

To reduce the potential for soil erosion and the loss of topsoil, the preparation of a Stormwater Pollution Prevention Plan (SWPPP) is required by the City and RWQCB regulations. The SWPPP is required to address site-specific conditions related to specific grading and construction activities that could cause erosion and the loss of topsoil and provide erosion control best management practices (BMPs) to reduce or eliminate the erosion and loss of topsoil. Erosion control BMPs include use of silt fencing, fiber rolls, or gravel bags, stabilized construction entrance/exit, hydroseeding, etc. Based on compliance with SJMC Chapter 13.44 stormwater management requirements, RWQCB SWPPP requirements, and installation of BMPs, which would be ensured by the City's project review by the Engineering Division, construction impacts related to erosion and loss of topsoil would be less than significant.

The Project site includes existing landscaping, and the proposed Project includes installation of additional landscaping in the southeastern corner of the site near the proposed SNF building addition. With this landscaping, areas of loose topsoil that could be eroded by wind or water would not exist upon operation of the proposed Project. In addition, as described in Section 5.10, *Hydrology and Water Quality*, the proposed Project has been designed to slow, filter, and retain stormwater within the pervious areas and the proposed landscaping, which would also reduce the potential for stormwater to erode topsoil. Furthermore, implementation of the Project requires City approval of a Water Quality Management Plan (WQMP), which would ensure that RWQCB requirements and appropriate operational BMPs would be implemented to minimize or eliminate the potential for soil erosion or loss of topsoil to occur. As a result, with implementation of existing requirements, impacts related to substantial soil erosion or loss of topsoil would be less than significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant Impact

Landslides and other forms of mass wasting, including mud flows, debris flows, and soil slips, occur as soil moves downslope under the influence of gravity. Landslides are frequently triggered by intense rainfall or seismic shaking. The Project site is relatively flat and is not located adjacent to any substantial slopes or hillside areas. As described previously, the Project site is not within an area mapped for high susceptibility to landslides (City of San Jacinto, 2022b). Therefore, impacts related to landslides would not occur from implementation of the Project.

Lateral spreading is a type of liquefaction-induced ground failure associated with the lateral displacement of surficial blocks of sediment resulting from liquefaction in a subsurface layer. Once liquefaction transforms the subsurface layer into a fluid mass, gravity plus the earthquake inertial forces may cause the mass to move downslope towards a free face (such as a river channel or an embankment). Lateral spreading may cause large horizontal displacements and such movement typically damages pipelines, utilities, bridges, and structures. As described above in response iii, groundwater is estimated to be approximately 60 feet bgs, which is not conducive to effects related to liquefaction and lateral spreading, which require groundwater or liquefied soils to exist within 50 feet bgs. According to the Geotechnical Investigation, the potential for lateral spreading at the Project site is considered low (Appendix E). Therefore, impacts related to liquefaction and lateral spreading would not occur and impacts would be less than significant.

Subsidence is a general lowering of the ground surface over a large area that is generally attributed to lowering of the ground water levels within a groundwater basin. According to the Geotechnical Investigation (Appendix E), there is historical evidence that subsidence of 0.26 feet has occurred within the San Jacinto basin and the Project site area during the period of 1964 to 1973. However, subsidence has eased appreciably, as a result of the groundwater basin being adjudicated. According to the Geotechnical Investigation, the potential for subsidence due to groundwater withdrawal at the Project site is considered low (Appendix E). Therefore, impacts related to subsidence would be less than significant.

Overall, compliance with the requirements of the CBC (PPP GEO-1), as ensured by the City through the permitting process, would ensure potential adverse effects related to lateral spreading, subsidence, liquefaction, or collapse from implementation of the proposed Project would be less than significant.

d) Be located on expansive soil, as defined in in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less Than Significant Impact.

Expansive soils contain clay particles that swell when wet and shrink when dry. Foundations constructed on expansive soils are subjected to forces caused by the swelling and shrinkage of the soils and could result in heaving and cracking of buildings and foundations.

The Geotechnical Investigation Report (included as Appendix E) performed expansion index testing on near-surface bulk soil samples to evaluate the potential for expansive soils at the site. The results of the testing indicated that near surface soils have a “very low” potential for expansion. Compliance with the CBC (included as PPP GEO-1) would require design level geotechnical specifications as a condition of construction permit approval that would be reviewed and approved by the City. Therefore, impacts related to expansive soils would be less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater*?*

No Impact.

There are no septic tanks or alternative wastewater disposal systems currently on the Project site. The Project would install on-site sewer lines that would connect to the existing wastewater infrastructure that

is adjacent to the site and would not require the use of septic tanks or alternative methods of wastewater disposal. Therefore, no impacts related to the use of such facilities would occur from implementation of the Project.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant with Mitigation Incorporated.

According to the Paleontological Assessment prepared for the proposed Project (Appendix F), the Project site is underlain by Holocene and late Pleistocene-aged young alluvial valley deposits. Holocene alluvial deposits at the Project site have a low potential to yield significant paleontological resources. The underlying Pleistocene young alluvial deposits are considered to have a high potential to yield significant paleontological resources (Appendix F).

A paleontological literature review and collections and locality records was completed as part of the Paleontological Assessment using data from the Division of Geological Sciences at the San Bernardino County Museum and the Los Angeles County Museum of Natural History, the San Diego Society of Natural History, and the Western Science Center and data from published and unpublished paleontological literature. The resulting locality records search did not identify any previously recorded fossil localities within the boundaries of the Project site. The closest known fossil localities were found at the Monte Vista Middle School, located approximately 1 mile northeast of the Project site, and consisted of the shells of freshwater snails and the bones of frogs, snakes, lizards, and mammals, as well as the dental remains of rodents, including those of pocket gophers. Additional fossil localities were discovered 3 miles west of the Project site in association with construction of the Eastside Pipeline and 4 miles south of the Project site near the Hemet-Ryan Airport. A field survey of the Project site was conducted in February 2026 that identified no paleontological resources, or evidence indicating the presence of paleontological resources (Appendix F).

The proposed Project consists of demolition activities for construction of a SNF building, conversion of an existing building into a PHF, and associated improvements. As discussed in the Geotechnical Investigation Report, removal of undocumented fill during construction is anticipated to reach up 5 to 7 feet below existing grade across majority of the site (Appendix E). Earthmoving activities, including grading and excavation activities, have the potential to disturb previously unknown paleontological resources if earthmoving activities occur at substantial, undisturbed depths. Therefore, impacts related to paleontological resources during Project construction are potentially significant. As a result, MM GEO-1 has been proposed, which requires the preparation of a Paleontological Resources Impact Mitigation Program (PRIMP) and that ground disturbing activities, beginning at a depth of 3 feet, be monitored to identify and recover any significant fossil remains. With the implementation of MM GEO-1 into the Project, potential impacts to paleontological resources would be less than significant.

Existing Plans, Programs, or Policies

PPP GEO-1: **CBC Compliance**. The Project is required to comply with the California Building Standards Code as included in Section 15.04.020 of the San Jacinto Municipal Code to preclude significant adverse effects associated with seismic and soils hazards. CBC related and geologist and/or civil engineer specifications for the proposed Project are required to be incorporated into grading plans and building specifications as a condition of construction permit approval.

Mitigation Measures

MM GEO-1: Paleontological Monitoring. Prior to the issuance of grading permits, the Project Applicant shall provide a letter to the City, or City designee, from a professional paleontologist, stating that a qualified paleontologist has been retained to provide services for the proposed Project. The paleontologist shall develop a Paleontological Resources Impact Mitigation Plan (PRIMP) to mitigate the potential impacts to unknown buried paleontological resources that may exist onsite. The PRIMP shall be provided to the City for review and approval. The PRIMP shall require that the paleontologist be present at the pre-grading conference to establish procedures for paleontological resource surveillance. Prior to commencement of grading activities, the City of San Jacinto Planning Division, or designee, shall verify that all Project grading and construction plans specify the requirements herein related to the PRIMP and the unanticipated discovery of paleontological resources. Full-time monitoring will be required starting at 3 feet deep below the current surface. In the event paleontological resources are encountered, ground disturbing activity within 50 feet of the area shall cease. The paleontologist shall examine the materials encountered, assess the nature and extent of the find, and recommend a course of action to further investigate and protect or recover and salvage those resources that have been encountered pursuant to the guidelines of the Society of Vertebrate Paleontology.

Criteria for discarding specific fossil specimens shall be made explicit in the PRIMP. If the qualified paleontologist determines that impacts to a sample containing significant paleontological resources cannot be avoided by Project construction, then recovery techniques shall be applied. Actions include recovering a sample of the fossiliferous material prior to construction, monitoring construction activities and halting construction if an important fossil needs to be recovered, and/or cleaning, identifying, and cataloging specimens for curation and research purposes. Recovery, salvage, and treatment shall be done at the Project Applicant's expense. All recovered and salvaged resources shall be prepared to the point of identification and permanent preservation by the paleontologist. Resources shall be identified and curated into an established accredited professional repository. The paleontologist shall have a repository agreement in hand prior to initiating recovery of the resource. A report documenting the results of the monitoring, including any salvage activities and the significance of any fossils, shall be prepared and submitted to the City, or City designee. The report and inventory, when submitted to the City of San Jacinto Planning Division, shall signify completion of the program to mitigate impacts to paleontological resources.

5.8. GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

GHG Thresholds

The analysis methodology from SCAQMD is used in the evaluation of potential impacts related to greenhouse gas (GHG) from implementation of the proposed Project.

SCAQMD: SCAQMD does not have approved thresholds; however, SCAQMD does have draft thresholds that provide a tiered approach to evaluate GHG impacts. The current interim SCAQMD threshold consists of the following:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a GHG reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions.
- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:
    - Option 1: All land use types: 3,000 $MTCO_{2e}$ per year
    - Option 2: Based on land use type: residential: 3,500 $MTCO_{2e}$ per year; commercial: 1,400 $MTCO_{2e}$ per year; or mixed use: 3,000 $MTCO_{2e}$ per year
- Tier 4 has the following options:
    - Option 1: Reduce business as usual emissions by a certain percentage; this percentage is currently undefined.
    - Option 2: Early implementation of applicable AB 32 Scoping Plan measures
    - Option 3, 2020 target for service populations (SP), which includes residents and employee: 4.8 $MTCO_2e$/SP/year for projects and 6.6 $MTCO_2e$/SP/year for plans;
    - Option 3, 2035 target: 3.0 $MTCO_2e$/SP/year for projects and 4.1 $MTCO_2e$/SP/year
- Tier 5 involves mitigation offsets to achieve target significance threshold.

The assessment of the proposed Project applies the Tier 3: Numerical Screening Thresholds approach. In addition, SCAQMD methodology for project construction emissions is to average them over 30 years and then add them to the project's operational emissions to determine if the project would exceed the screening values listed above (Appendix A).

The City of San Jacinto has utilized Option 1 for other projects within the city, thus, Option 1 was utilized for this analysis and the GHG threshold used is 3,000 $MTCO_2e$ per year.

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact

Global climate change is not confined to a particular project area. A typical project does not generate enough GHG emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact. GHGs are produced by both direct and indirect emissions sources. Direct emissions include consumption of natural gas, heating and cooling of buildings, landscaping activities and other equipment used directly by land uses. Indirect emissions include the consumption of fossil fuels for vehicle trips, electricity generation, water usage, and solid waste disposal.

Construction activities produce combustion emissions from various sources, such as site excavation, grading, utility engines, heavy-duty construction vehicles on-site, equipment hauling materials to and from the site, asphalt paving, and motor vehicles transporting the construction crew. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

In addition, operation of the proposed Project would result in area and indirect sources of operational GHG emissions that would primarily result from vehicle trips, electricity and natural gas consumption, water transport (the energy used to pump water), and solid waste generation. GHG emissions from electricity consumed by the building would be generated off-site by fuel combustion at the electricity provider. GHG emissions from water transport are also indirect emissions resulting from the energy required to transport water from its source.

GHG emissions during Project construction and operations were estimated using CalEEMod version 2022.1. In accordance with SCAQMD recommendations, the Project's amortized construction GHG emissions (as shown in Table GHG-1) are added to the operational emissions in order to determine the Project's total annual estimated GHG emissions. The estimated operational GHG emissions that would be generated from implementation of the proposed Project, combined with the construction emissions, are shown in Table GHG-2. As shown in Table GHG-2, net Project GHG emissions would be less than the SCAQMD's Tier 3 threshold of 3,000 $MTCO_2e$. Therefore, based upon SCAQMD's screening threshold, impacts related to GHG emissions would be less than significant.

Table GHG-1: Project Construction GHG Emissions

Construction Year	Annual GHG Emissions ($MTCO_2e$)
2026	33
2027	386
Total Emissions	**419**
Total Emissions Amortized Over 30 Years	14

Notes: Numbers have been rounded. $MTCO_2e$ = metric tons of carbon dioxide equivalent.
Source: Air Quality, Energy, and Greenhouse Gas Assessment (Appendix A)

Table GHG-2: Total Project GHG Emissions

Activity	Annual GHG Emissions ($MTCO_2e$)
Mobile	509
Area	2
Energy	177
Water	12
Waste	96
Refrigeration	0.1
Total Project Operation Emissions	**796**
Amortized Project Construction Emissions	14
Total Project Emissions	**810**
Existing Emissions	349
Net Project Emissions	**460**
SCAQMD Tier III Significance Threshold	3,000
Threshold Exceeded?	**No**

Notes: Numbers have been rounded. $MTCO_2e$ = metric tons of carbon dioxide equivalent.
Source: Air Quality, Energy, and Greenhouse Gas Assessment (Appendix A)

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact.

he Project proposes the expansion of the existing 44-bed Bradley Gardens facility to a total of 103 beds. The Project includes demolition of the existing 1,074 SF maintenance and storage building located in the southeastern corner of the site for construction of an expansion to the existing 44-bed SNF building. The proposed building addition would total approximately 18,000 SF and would provide 43 additional SNF and STP beds. The Project also proposes the conversion of the existing 2,596 SF vacant office building located in the northwestern corner of the site into a 16-bed PHF. The design of the proposed building would comply with State and federal programs that are designed to ensure energy efficiency and reduce GHG emissions.

On December 15, 2022, CARB adopted the 2022 Scoping Plan. The 2022 Scoping Plan set the State's GHG emissions reduction target for 2045 at 85 percent below 1990 levels, which was codified by Senate Bill 32. Table GHG-3 shows the Project's consistency with the 2022 Scoping Plan. As shown in Table GHG-3, 2022 *Scoping Plan Consistency*, the Project is consistent with the 2022 Scoping Plan.

Table GHG-3: 2022 Scoping Plan Consistency Summary

Action	Consistency
GHG Emissions Reductions Relative to the SB 32 Target	
40 percent Below 1990 levels by 2030.	**Consistent.** The proposed Project would comply with applicable Title 24, Part 6 building energy efficiency standards and other State and local requirements supporting statewide greenhouse gas reduction targets consistent with SB 32.
Smart Growth/Vehicle Miles Traveled VMT	
VMT per capita reduced 25 percent below 2019 levels by 2030, and 30 percent below 2019 levels by 2045.	**Consistent.** The Project site has an existing General Plan land use designation of Industrial (I) and is zoned Industrial Light (IL). The Industrial (I) designation supports industrial and employment-generating uses, including light industrial, manufacturing, warehouse, service commercial, and related support uses. The IL zoning district allows for general manufacturing and light industrial activities, including auto repair services, pest control services, pool maintenance services, and woodworking shops, as well as other compatible uses. The proposed Project includes demolition of an existing 1,074-square-foot storage building and construction of a new 18,000-square-foot building addition to the existing skilled nursing facility (SNF), resulting in a total of 87 SNF beds. The Project also includes conversion of an existing 2,596-square-foot administrative office building into a 16-bed Psychiatric Health Facility (PHF), resulting in a total campus capacity of 103 beds. The Project would have a floor area ratio (FAR) of approximately 0.27, which is consistent with the development intensity permitted by the General Plan land use designation. The Project represents the expansion of an existing institutional healthcare facility and does not introduce residential uses. It would not generate substantial population or employment growth beyond that anticipated under the General Plan or regional growth forecasts. As previously evaluated in the air quality analysis, the Project is consistent with the Southern California Association of Governments (SCAG) 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and would not conflict with regional VMT

Action	Consistency
	reduction strategies or statewide greenhouse gas reduction targets.
Light-Duty Vehicle (LDV) Zero-Emission Vehicles (ZEVs)	
100 percent of LDV sales are ZEV by 2035.	**Consistent.** The proposed Project would be designed and constructed in accordance with Title 24, Parts 6 and 11 requirements applicable to healthcare facilities, including provisions for electrical infrastructure to support future electric vehicle charging where required by code.
New Residential and Commercial Buildings	
All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed statewide by 2030.	**Consistent.** The proposed Project would comply with Title 24, Part 6 energy efficiency requirements, including the installation of electrical wiring for built-in appliances. Although the Project would include natural gas use on-site, the Project would incorporate energy-efficient building design features and would not result in inefficient energy consumption.
Construction Equipment	
25 percent of energy demand electrified by 2030 and 75 percent electrified by 2045.	**Consistent.** The proposed Project would be required to use construction equipment that is registered by CARB and meet CARB's standards. CARB sets its standards to be in line to reduce energy demand by 25 percent in 2030 and 75 percent in 2045.
Transportation Electrification	
Create a jurisdiction-specific ZEV ecosystem to support deployment of ZEVs statewide (such as permit streamlining, infrastructure siting, consumer education, or preferential parking policies).	**Consistent.** The proposed Project would be designed and constructed in accordance with the Title 24 Part 6 and Part 11 requirements, which include constructing homes to allow for electric vehicle charging. Therefore, the proposed Project would not interfere with the implementation of a ZEV ecosystem within the City.
VMT Reduction	
Adopt and implement Complete Streets policies and investments, consistent with general plan circulation element requirements.	**Consistent.** The Project includes redevelopment of an existing skilled nursing facility campus and consists of building expansion, conversion of an existing office building, and associated site improvements, including drive aisles, driveways, landscaping, and pedestrian pathways. The Project would provide internal pedestrian circulation improvements through on-site pathways connecting building areas and access points. These improvements are limited to the Project site and do not include modifications to the surrounding public roadway network. The Project would not conflict with the implementation of Complete Streets policies or planned circulation improvements.

Action	Consistency
Increase public access to shared clean mobility options (such as planning for and investing in electric shuttles, bike share, car share, transit).	**Consistent.** The Project includes redevelopment of an existing skilled nursing facility campus and consists of building expansion, conversion of an existing office building, and associated site improvements, including drive aisles, driveways, landscaping, and pedestrian pathways. The Project would not include shared mobility services such as shuttle programs, bike share, or car share systems. However, it would maintain internal pedestrian circulation through on-site pathways connecting building areas and access points. The nearest public transit access is the State and Seventh bus stop (Stop ID: 3214), located approximately 0.28 miles (approximately 1,500 feet) from the Project site. This stop provides access to regional bus transit services. Given the Project's infill location within an existing developed area, it would not conflict with implementation of transit services or regional shared mobility programs and would remain accessible to existing multimodal transportation options in the vicinity.
Amend zoning or development codes to enable mixed-use, walkable, and compact infill development (such as increasing allowable density of the neighborhood).	**Consistent.** The General Plan includes policies that encourage amendments to zoning and development codes to support mixed-use, walkable, and compact infill development. While the Project does not propose zoning amendments or mixed-use development, it represents infill redevelopment of an existing developed healthcare campus through the expansion of a skilled nursing facility and conversion of an existing office building to a psychiatric health facility. The Project site has a zoning designation of Industrial Light (IL). The IL zoning designation allows for general manufacturing uses, auto repair services, pest control services, pool maintenance services, and woodworking shops. The Project does not include a change in land use designation or zoning. The proposed redevelopment would occur within an existing developed urbanized site and reflects efficient use of previously developed land consistent with infill development objectives and compact growth patterns. Therefore, the Project is consistent with the intent of this policy and does not conflict with the General Plan's objectives for compact and efficient land use patterns
Building Decarbonization	
Adopt all-electric new construction reach codes.	**Consistent.** The proposed Project would comply with Title 24 Parts 6 and 11, which include electric heat

Action	Consistency
	pumps installed during construction and electric hookups for all appliances.
Adopt policies and incentive programs to reduce electrical loads from equipment plugged into outlets (such as purchasing Energy Star equipment for municipal buildings, occupancy sensors, smart power strips, equipment controllers, etc.).	**Consistent.** The proposed Project would be constructed in accordance with Title 24 CALGreen requirements, which include the installation of Energy Star equipment and appliances in new buildings.
Facilitate deployment of renewable energy production and distribution and energy storage.	**Consistent.** The proposed Project would be constructed in accordance with the CALGreen Building Energy Efficiency Standards (Title 24 Part 6) and meet all other requirements related to energy efficiency standards.

Source: Air Quality, Energy, and Greenhouse Gas Assessment (Appendix A)

In addition to the CARB 2022 Scoping Plan, the City of San Jacinto is one of 12 Western Riverside Council of Governments (WRCOG) jurisdictions that participated in preparing the 2021 Subregional Climate Action Plan (WRCOG Subregional CAP). The WRCOG Subregional CAP establishes a community-wide emissions reduction target of 15 percent below 2010 levels by 2020, and 49 percent below 2010 levels by 2035, consistent with guidance from CARB and the Governor's Office of Planning and Research. CARB and the California Attorney General have determined that this approach is consistent with the statewide AB 32 goal of reducing emissions to 1990 levels. As shown in Table GHG-4, *WRCOG Subregional CAP Consistency Summary*, the Project is consistent with the WRCOG Subregional CAP.

Table GHG-4: WRCOG Subregional CAP Consistency Summary

Measure	Consistency
Energy	
LE-1: Expand Local Renewable Energy Production. Increase solar PV installations on new and existing buildings.	**Consistent.** The Project would comply with Title 24 Part 6 building energy requirements and applicable California Energy Code provisions for healthcare facilities.
LE-4: Building & Appliance Electrification. Transition energy use away from fossil natural gas to clean electricity and renewable natural gas.	**Consistent.** The Project would comply with Title 24 Part 6 energy efficiency and electrification requirements for nonresidential healthcare facilities, including building systems and equipment electrification to the extent required by code.
LE-6: Shade Trees. Strategically plant trees to reduce the urban heat island effect.	**Consistent.** The Project would provide private open space for each proposed residence, as well as common open space and landscaped areas totaling approximately 4,015 square feet. These landscaped areas would allow for the incorporation of shade trees and vegetation throughout the Project site, including within open space areas and along pedestrian circulation routes, which supports reduction of localized heat island effects consistent with the intent of this policy.
LT-2: Pedestrian Infrastructure Improvements. Expand and improve pedestrian infrastructure, including sidewalks, crosswalks, and pedestrian signals.	**Consistent.** The Project includes internal site improvements consisting of pedestrian pathways, drive aisles, and driveways that provide circulation within the existing campus and connect building areas and site access points. These on-site pedestrian improvements would enhance internal pedestrian connectivity and access to existing public sidewalks in the surrounding area.

	The Project would not modify the public roadway network but would support improved pedestrian access consistent with LT-2.
LT-7: Increase Housing Density. Increase the density of planned housing units within the city.	**Consistent.** The Project does not propose residential development or any increase in housing density. It involves the expansion of an existing healthcare facility on a site designated Industrial (I) and zoned Industrial Light (IL). The Project does not affect housing capacity assumptions under the General Plan or regional growth forecasts.
LT-8: Increase Land Use Diversity. Provide for a variety of development types and uses.	**Consistent.** The Project site is designated Industrial (I) and zoned Industrial Light (IL), which allows for a range of industrial, service commercial, and compatible uses. The Project involves the expansion of an existing skilled nursing facility and conversion of an office building to a psychiatric health facility within an existing developed campus. The Project does not introduce new land use categories or require a change in land use designation or zoning. It represents continued use and expansion of institutional healthcare services within an existing developed industrial setting.
LT-9: Transit-Oriented Development. Place new developments in close proximity to transit services.	**Consistent.** The Project is located approximately 0.28 miles (approximately 1,500 feet) from the nearest transit stop (State Street and Seventh Street, Stop ID: 3214), providing access to regional transit services. The Project supports transit accessibility by locating redevelopment within an existing developed area near transit service.
LT-10: Local ZEV Programs. Provide charging stations and other support for zero emission vehicles (ZEVs).	**Consistent.** The proposed Project would be designed and constructed in accordance with the Title 24 Part 6 and Part 11 requirements, which include EV-ready charging infrastructure to allow for electric vehicle charging in the garages.
Solid Waste	
LS-1: Zero Waste Initiatives. Support the State's mandates and strive for zero waste.	**Consistent.** The proposed Project would be required to comply with applicable City of San Jacinto solid waste and recycling requirements implemented in accordance with statewide regulations, including AB 341 and SB 1383. These regulations require recycling of commercial solid waste and diversion of organic waste from landfills through recycling and organics collection programs, supporting statewide waste reduction and landfill methane reduction goals.

Source: Air Quality, Energy, and Greenhouse Gas Assessment (Appendix A)

In addition to the CARB 2022 Scoping Plan and the WRCOG Subregional CAP, the Project would comply with all applicable State and local regulatory requirements in effect at the time of construction and operation, including the California Building Standards Code (Title 24), which incorporates the California Energy Code and CALGreen requirements. The Project is also consistent with Connect SoCal 2024 (2024–2050 Regional Transportation Plan/Sustainable Communities Strategy), which establishes long-range regional transportation, land use, and emissions reduction strategies for the SCAG region, including transportation investments, programming, and regional growth considerations. These policies are implemented at the regional and local level through agency coordination and planning processes. The

Project would not conflict with Connect SoCal 2024 and would remain consistent with regional growth assumptions, as it involves the expansion and conversion of an existing institutional healthcare facility, does not include residential development, and would not alter regional population or housing growth patterns.

Overall, the Project would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions and impacts would be less than significant.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

5.9. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact.

A hazardous material is defined as any material that, due to its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous wastes, and any material that a business or the local implementing agency has a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

Construction

The proposed construction activities could involve the transport, use, and disposal of hazardous materials such as paints, solvents, oils, grease, and caulking. In addition, hazardous materials could be needed for fueling and servicing construction equipment on the site. These types of materials routinely used during construction are not acutely hazardous, and all storage, handling, use, and disposal of these materials are regulated by existing federal and State requirements that the project is required to strictly adhere to.

The Project involves demolition of an existing building. As part of Project construction, the potentially asbestos-containing materials (ACM) and lead based paint (LBP) materials from building demolition would need to be disposed. Construction contractors would be required to comply with federal, State, and local laws and regulations regarding the transport, use, and storage of hazardous materials. Applicable laws and regulations include CCR, Title 8 Section 1529 (pertaining to ACM) and Section 1532.1 (pertaining to LBP); CFR, Title 40, Part 61, Subpart M (pertaining to ACM); CFR, Title 29, Hazardous Waste Control Act; CFR, Title 49, Chapter I; and Hazardous Materials Transportation Act requirements as imposed by the U.S. Department of Transportation (USDOT), California Division of Occupational Safety and Health (CalOSHA), California Environmental Protection Agency (CalEPA) and California Department of Toxic Substances Control (DTSC). Additionally, construction activities would require a SWPPP, which is mandated by the NPDES General Construction Permit (included as PPP HYD-1 herein) and enforced by the Santa Ana RWQCB. The SWPPP will include strict on-site handling rules and BMPs to minimize potential adverse effects to workers, the public, and the environment during construction.

Mandatory compliance with applicable laws and regulations related to the routine transport, use, and disposal of hazardous materials during construction activities at the Project site would limit potentially significant hazards to construction workers, the public, and the environment. Impacts would be less than significant.

Operation

The proposed Project involves the operation of the proposed 103-bed Bradley Gardens SNF, which would routinely use household hazardous materials including cleaning agents, disinfectants, paints, pesticides, batteries, fertilizers, aerosol cans, and limited medical-related supplies. These hazardous materials are also currently used by the existing SNF uses on the Project site. These types of materials are not acutely hazardous and would continue to be used and stored in limited quantities onsite. The normal routine use of these products pursuant to existing regulations would not result in a significant hazard to people or the environment in the vicinity of the Project. Therefore, operation of the Project would not result in a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or waste, and impacts would be less than significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant Impact.

In February 2026, Partner Engineering and Science, Inc completed a Phase I Environmental Assessment (Phase I ESA) of the Project site (Appendix G). The 2026 Phase I ESA did not identify any Recognized Environmental Conditions (RECs) related to the Project site. The Phase I ESA did identify one Business

Environmental Risk (BER), which is a risk that can have a material environmental impact on the business associated with the current or planned use of commercial real estate.

Construction

Accidental Releases. While the routine use, storage, transport, and disposal of hazardous materials in accordance with applicable regulations during construction activities would not pose health risks or result in significant impacts; improper use, storage, transportation and disposal of hazardous materials and wastes could result in accidental spills or releases, posing health risks to workers, the public, and the environment. The Project site does not have any RECs and was previously used for vacant land, for agricultural uses, and is currently developed with a SNF.

To avoid an impact related to an accidental release, the use of BMPs during construction are implemented as part of a SWPPP as required by the NPDES General Construction Permit (PPP HYD-1). Implementation of an SWPPP would minimize potential adverse effects to workers, the public, and the environment. Construction contract specifications would include strict on-site handling rules and BMPs that include, but are not limited to:

- Establishing a dedicated area for fuel storage and refueling and construction dewatering activities that includes secondary containment protection measures and spill control supplies;
- Following manufacturers' recommendations on the use, storage, and disposal of chemical products used in construction;
- Avoiding overtopping construction equipment fuel tanks;
- Properly containing and removing grease and oils during routine maintenance of equipment; and
- Properly disposing of discarded containers of fuels and other chemicals.

Therefore, Project construction would result in less than significant impacts related to hazards to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Asbestos Containing Materials. The buildings on the Project site were constructed in 1964 and 1971 when many structures were constructed with what are now recognized as hazardous building materials, such as lead and asbestos. Demolition of the existing structure could result in the release of hazardous materials. However, asbestos abatement contractors must follow State regulations contained in California Code of Regulations Sections 1529, and 341.6 through 341.14 as implemented by SCAQMD Rule 1403 to ensure that asbestos removed during demolition or redevelopment of the existing buildings is transported and disposed of at an appropriate facility. The contractor and hauler of the material are required to file a Hazardous Waste Manifest which details the hauling of the material from the site and the disposal of it. Section 19827.5 of the California Health and Safety Code requires that local agencies not issue demolition permits until an applicant has demonstrated compliance with notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos. These requirements are included as PPP HAZ-1 to ensure that the Project applicant submits verification to the City that the appropriate activities related to asbestos have occurred, which would reduce the potential of impacts related to asbestos to a less than significant level.

Lead Based Materials. Lead-based materials may also be located within existing structures on the Project site. The lead exposure guidelines provided by the United States Department of Housing and Urban

Development provide regulations related to the handling and disposal of lead-based products. Federal regulations to manage and control exposure to lead-based paint are described in Code of Federal Regulations Title 29, Section 1926.62, and State regulations related to lead are provided in the California Code of Regulations Title 8 Section 1532.1, as implemented by CalOSHA. These regulations cover the demolition, removal, cleanup, transportation, storage and disposal of lead-containing material. The regulations outline the permissible exposure limit, protective measures, monitoring, and compliance to ensure the safety of construction workers exposed to lead-based materials. CalOSHA's Lead in Construction Standard requires project applicants to develop and implement a lead compliance plan when lead-based paint would be disturbed during construction or demolition activities. The plan must describe activities that could emit lead, methods for complying with the standard, safe work practices, and a plan to protect workers from exposure to lead during construction activities. In addition, CalOSHA requires 24-hour notification if more than 100 SF of lead-based paint would be disturbed. These requirements are included as PPP HAZ-2 to ensure that the Project applicant submits verification to the City that the appropriate activities related to lead have occurred, which would reduce the potential of impacts related to lead-based materials to a less than significant level.

Operation

As described previously, the proposed Project involves operation of the proposed 103-bed Bradley Gardens SNF, which would routinely use household hazardous materials including cleaning agents, disinfectants, paints, pesticides, batteries, fertilizers, aerosol cans, and limited medical-related supplies. These hazardous materials are also currently used by the existing SNF uses on the Project site. These types of materials are not acutely hazardous and would continue to be used and stored in limited quantities onsite. The normal routine use of these products pursuant to existing regulations would not result in a significant hazard to people or the environment in the vicinity of the Project. As a result, operation of the proposed Project would not create a reasonably foreseeable upset and accident condition involving the release of hazardous materials into the environment, and impacts would be less than significant.

c) Emit hazardous emissions or handle hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact.

The closest school to the Project site is San Jacinto Elementary School, which is about 0.95 miles northeast of the Project site. Thus, the proposed Project would not be within one-quarter mile of an existing school. As described previously, construction and operation of the Project would involve the use, storage, and disposal of small amounts of hazardous materials on the Project site. These hazardous materials would be limited and used and disposed of in compliance with federal, State, and local regulations, which would reduce the potential for accidental release into the environment near a school. In addition, emissions that would be generated from construction and operation of the proposed Project were evaluated in the air quality analysis in Section 5.3, *Air Quality*, which determined that emissions generated from the proposed Project would not result in impacts to sensitive receptors, including schools. Thus, the proposed Project would not emit hazardous or handle acutely hazardous materials, substances, or waste within 0.25 mile of school and there would be no impact.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact.

Government Code Section 65962.5 specifies lists of the following types of hazardous materials sites: hazardous waste facilities; hazardous waste discharges for which the State Water Quality Control Board has issued certain types of orders; public drinking water wells containing detectable levels of organic contaminants; underground storage tanks with reported unauthorized releases; and solid waste disposal facilities from which hazardous waste has migrated. As described in the Phase I ESA (Appendix G), the proposed Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and therefore there would be no impact.

e) For a project within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact.

The closest airport to the Project site is Hemet-Ryan Airport, which is located approximately 3.9 miles to the southwest of the Project site (Appendix J). The Project site is not within the Airport Land Use Compatibility Plan for the Hemet-Ryan Airport, as demonstrated in GPU EIR Figure 5.9-1, *Airport Land Use Compatibility Zones* (City of San Jacinto, 2022b). Therefore, the proposed Project would not result in an airport-related safety hazard for people residing or working in the Project area. The Project would have no impact on safety hazards related to airports.

f) Impair implementation of an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact.

Construction

The proposed construction activities, including equipment and supply staging and storage, would occur within the Project site and would not restrict access of emergency vehicles to the Project site or adjacent areas. The installation of driveways and connections to existing infrastructure systems that would be implemented during construction of the proposed Project could require the temporary closure of one side or portions of W. 7th Street and S. Grand Avenue (i.e., hours or a few days). However, the construction activities would be required to ensure emergency access in accordance with Section 503 of the California Fire Code (Title 24, California Code of Regulations, Part 9), which would be ensured through the City's permitting process. Thus, implementation of the Project through the City's permitting process would ensure existing regulations are adhered to and would reduce potential construction related emergency access impacts to a less than significant level. Thus, impacts related to inadequate emergency access during construction activities would not occur.

Operation

Operation of the proposed Project would not result in a physical interference with an emergency response evacuation. Access to the proposed Project would be provided via three driveways. The Project would

consolidate the two existing driveways on W. 7th Street that are located along the center of the site's northern boundary into one 24-foot-wide driveway. The existing driveway on W. 7th Street in the northeastern corner of the site would be widened to a width of 24 feet. In addition, a gated 25-foot-wide driveway is proposed from S. Grand Avenue in the southwest corner of the site to provide emergency vehicle access to the site.

The Project is also required to design and construct internal access and provide fire suppression facilities (e.g., hydrants and sprinklers) in conformance with the SJMC Code and the Riverside County Fire Department (RCFD) prior to approval to ensure adequate emergency access pursuant to the requirements in Section 503 of the California Fire Code (Title 24, California Code of Regulations, Part 9) and the Fire Code included per SJMC Chapter 8.16. As a result, the proposed Project, including the driveway improvements, would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact.

According to the California Department of Forestry and Fire Protection (CAL FIRE) Hazard Severity Zone map and GPU EIR Figure 5.20-1, *Fire Hazard Severity Zones,* the Project site not located within a Very High Fire Hazard Severity Zone (VHFHSZ) (CAL FIRE, 2025; City of San Jacinto, 2022b). Additionally, the Project site is located in an urban area and is not adjacent to wildlands. Implementation of the proposed Project would be required to adhere to the California Fire Code and would be reviewed by the City's Building and Safety Division during the permitting process to ensure that the Project plans meet the general applicable adopted fire protection requirements. The proposed Project would result in no impact to the exposer of people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

Existing Plans, Programs, or Policies

PPP HAZ-1: SCAQMD Rule 1403. Prior to issuance of demolition permits, the Project Applicant shall submit verification to the City Building and Safety Division that an asbestos survey has been conducted at all existing buildings located on the Project site. If asbestos or asbestos containing material is found, the Project Applicant shall follow all procedural requirements and regulations of the South Coast Air Quality Management District (SCAQMD) Rule 1403. Rule 1403 regulations require that the following actions be taken: notification of SCAQMD prior to construction activity, asbestos removal in accordance with prescribed procedures, placement of collected asbestos in leak-tight containers or wrapping, and proper disposal.

PPP HAZ-2: Lead. Prior to issuance of demolition permits, the Project Applicant shall submit verification to the City Building and Safety Division that a lead-based paint survey has been conducted at all existing buildings located on the Project site. If lead-based paint is found, the Project Applicant shall follow all procedural requirements and regulations for proper removal and disposal of the lead-based paint. CalOSHA has established limits of exposure to lead contained in dusts and fumes. Specifically, CCR Title 8, Section 1532.1 provides for exposure limits, exposure monitoring, and respiratory protection, and mandates good working practices by workers exposed to lead.

PPP HYD-1: SWPPP. As discussed below in Section 5.10, *Hydrology and Water Quality*.

Mitigation Measures

None.

5.10. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in a substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?	☐	☐	☒	☐
e) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?	☐	☐	☒	☐
g) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
h) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than Significant Impact.

Construction

Construction of the Project would require demolition of an existing building and grading and excavation of soils, which would loosen sediment, and then have the potential to mix with surface water runoff and degrade water quality. Additionally, construction would require the use of heavy equipment and construction-related chemicals, such as concrete, cement, asphalt, fuels, oils, antifreeze, transmission fluid, grease, solvents, and paints. These potentially harmful materials could be accidentally spilled or improperly disposed of during construction and, if mixed with surface water runoff could wash into and pollute waters.

These types of water quality impacts during construction of the Project would be prevented through implementation of a grading and erosion control plan that is required by the Construction Activities General Permit (State Water Resources Board Order No. 2022-0057-DW, NPDES No. CAS000002), which requires preparation of a SWPPP by a Qualified SWPPP Developer (included as PPP HYD-1). The SWPPP is required for plan check and approval by the City's Building and Safety Division, prior to provision of permits for the Project, and would include construction BMPs such as:

- Silt fencing, fiber rolls, or gravel bags;
- Street sweeping and vacuuming;
- Storm drain inlet protection;
- Stabilized construction entrance/exit;
- Vehicle and equipment maintenance, cleaning, and fueling;
- Hydroseeding;
- Material delivery and storage;
- Stockpile management;
- Spill prevention and control;
- Solid waste management; and/or
- Concrete waste management.

Adherence to the existing requirements and implementation of the appropriate BMPs as ensured through the City's construction permitting process, which would ensure that the Project would not violate any water quality standards or waste discharge requirements, potential water quality degradation associated with construction activities would be minimized, and impacts would be less than significant.

Operation

The proposed Project would operate as a 103-bed SNF, which would introduce potential for pollutants such as chemicals from cleaners, pesticides and sediment from landscaping, trash and debris, and oil and grease from vehicles. These pollutants could potentially discharge into surface waters and result in degradation of water quality. However, the proposed Project would be required to incorporate a WQMP which would incorporate source control and treatment control Best Management Practices (BMPs) to prevent pollutants from entering the storm drain system (PPP HYD-2). The Low Impact Development (LID)

site design would minimize impervious surfaces and provide infiltration of runoff into landscaped/pervious pavement areas.

Operation of the proposed facility would generate typical urban runoff from rooftop surfaces, landscaped areas, drive aisles, and pedestrian walkways. Stormwater would be collected through an on-site catch basin system and conveyed to two LID infiltration BMPs: approximately 1,093 square feet of pervious concrete along the north side of the parking lot (DMA 1) and approximately 3,000 square feet of pervious concrete within the fire access road along the south and east sides of the Project (DMA 2). The proposed Project would also incorporate disconnected roof downspouts that would discharge roof runoff to adjacent landscaped areas for infiltration. These BMPs are designed to satisfy the applicable LID Design Capture Volume (DCV) requirements and to treat runoff through infiltration prior to discharge. The site soils consist of Grangeville sandy loam and Grangeville fine sandy loam with in-situ saturated hydraulic conductivity (Ksat) rates of 1.98 to 5.95 inches per hour (Hydrologic Soil Groups A/B) Site-specific infiltration testing completed for the proposed Project establishes a design infiltration rate of 1.97 inches per hour, inclusive of a factor of safety of 3.0, which confirms that infiltration rates are sufficient to support infiltration-based BMPs (Appendix H).

The Project would implement source control BMPs to minimize the introduction of pollutants that could result in water quality impacts, as well as treatment control BMPs to treat stormwater runoff. Source control measures applicable to the proposed Project are identified in the Pollutant Sources/ Source Control Checklist included in the WQMP and include covered trash and refuse enclosures, storm drain inlet stenciling, and landscape and pest management controls (Appendix H). A series of on-site storm drain facilities incorporating LID features and peak storm flow elements are proposed. Runoff from the proposed building addition and parking areas would be collected through a catch basin system routed to pervious concrete infiltration areas on the Project site. The storm drain system and associated inlets would be sized to accommodate both water quality treatment flow rates and larger storm events. In addition, The proposed Project would introduce approximately 4,093 SF of new pervious pavement to the Project site (Appendix H).

With implementation of the operational source and treatment control BMPs that are outlined in the preliminary WQMP (Appendix H) that would be reviewed and approved by the City during the permitting and approval process, potential pollutants would be reduced to the maximum extent feasible, and implementation of the proposed Project would not substantially degrade water quality. Therefore, impacts would be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than Significant Impact.

As discussed above and within Appendix H, development of the proposed Project would retain and infiltrate stormwater runoff on-site rather directing it off-site, thereby maintaining the site's existing contribution to groundwater recharge.. In addition, the proposed Project would install an on-site storm drain system that would convey runoff to pervious concrete infiltration systems and would discharge roof runoff to adjacent landscaped areas through disconnected downspouts that would capture, filter, and infiltrate runoff on-site. The on-site infiltration BMPs provide a combined capacity of approximately 5,376 cubic feet, exceeding the combined Design Capture Volume (DCV) of approximately 2,150 cubic feet

(Appendix H). Site-specific testing established a design infiltration rate of 1.97 inches per hour, inclusive of a factor of safety of 3.0, confirming that the proposed BMPs would drain within the required drawdown period (Appendix H). As a result, the proposed Project would not decrease groundwater supplies or interfere substantially with groundwater recharge; and the Project would not impede sustainable groundwater management of the basin. Thus, the proposed Project would have a less than significant impact.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in a substantial erosion or siltation on- or off-site?

Less than Significant Impact.

Construction

Construction and demolition activities associated with the Project would expose soil and loosen sediment, which could result in erosion or siltation. However, the Project site does not include any slopes, which reduces the construction erosion potential. As described previously, construction of the proposed Project requires City approval of a SWPPP prepared by a Qualified SWPPP Developer, as included in PPPHYD-1. The SWPPP is required during the City's plan check and permitting process and would include construction BMPs to reduce erosion or siltation. Typical BMPs for erosion or siltation include use of silt fencing, fiber rolls, gravel bags, stabilized construction driveway, and stockpile management (as described in the previous response above). Adherence to the existing requirements and implementation of the required BMPs per the plan check and permitting process would ensure that erosion and siltation associated with construction activities would be minimized, and impacts would be less than significant.

Operation

The Project site consists of an existing skilled nursing facility, associated surface parking, and landscaped areas. Existing site improvements include several single-story buildings, an asphaltic concrete parking lot, drive aisles, sidewalks, and a basketball court, with the remainder of the site consisting of landscaped areas, an exercise yard, and earthen or gravel-covered areas (Appendix H). Development of the proposed Project would result in a total of approximately 91,824 SF of impervious surfaces within the Project limits, or approximately 71 percent of the 2.96-acre site (Appendix H). Of this total, approximately 52,326 SF represents newly developed surface area (Appendix H). The Project would minimize impervious surfaces through the introduction of pervious concrete pavement and disconnected roof downspouts that discharge to landscaped areas, which would allow for infiltration. The Project site does not contain any drainage, riparian, or riverine features. The pervious surfaces on the site would be improved with infiltration pavement and landscaping, and there would be no substantial areas of bare or disturbed soil on-site subject to erosion. In addition, the Project is required to implement LID BMPs, as included in PPP HYD-2, which would provide operational BMPs to ensure that operation of the proposed Project would not result in erosion or siltation. With implementation of these regulations, impacts related to erosion or siltation on-site or off-site would be less than significant.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which

would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

Less than Significant Impact.

As discussed previously, during construction, a SWPPP would be implemented to control drainage and maintain drainage patterns across the proposed Project. As discussed in the Hydrology Report (Appendix I), under existing conditions, stormwater surface flows drain northward and eastward through the Project frontage toward the Main Street Storm Sewer system. Under the proposed Project, flows would be directed toward catch basins and routed through an upgraded on-site storm drain system discharging to the Main Street Storm Sewer. Pre-development peak flows at the downstream outfall were 4.77 cubic feet per second (cfs) for the 10-year storm and 7.67 cfs for the 100-year storm. Post-development flows are 5.42 cfs for the 10-year storm (an increase of 0.65 cfs, within modeling tolerance) and 6.83 cfs for the 100-year storm (a decrease of 0.84 cfs). The proposed condition would result in a small increase in runoff rate for the 10-year storm event and a decrease in the 100-year storm event (Appendix I). Therefore, the Project would not result in a substantial increase in the amount of surface runoff, and impacts would be less than significant.

e) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less than Significant Impact.

As described in the previous responses, the proposed Project would be required to implement a SWPPP (PPP HYD-1) during construction that would implement BMPs, such as the use of silt fencing, fiber rolls, and gravel bags, that would ensure that runoff would not substantially increase during construction, and that pollutants would not discharge from the Project site, which would reduce potential impacts to drainage systems and water quality to a less than significant level.

The proposed Project would introduce approximately 4,093 SF of new pervious pavement to the Project site (Appendix H). Pre-development peak flows at the downstream outfall were 4.77 cubic feet per second (cfs) for the 10-year storm and 7.67 cfs for the 100-year storm. Post-development flows are 5.42 cfs for the 10-year storm (an increase of 0.65 cfs, within modeling tolerance) and 6.83 cfs for the 100-year storm (a decrease of 0.84 cfs). The proposed condition would result in a small increase in runoff rate for the 10-year storm event and a decrease in the 100-year storm event (Appendix I). The proposed stormwater system would remove coarse sediment, trash, and pollutants (i.e., sediments, nutrients, heavy metals, oxygen demanding substances, oil and grease, bacteria, and pesticides) through infiltration via on-site pervious concrete BMPs and disconnected roof downspouts, which would provide sufficient Design Capture Volume (DCV). Development of the proposed Project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems and impacts would be less than significant.

f) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?

Less than Significant Impact.

According to the Federal Emergency Management Agency (FEMA) Map No. 06065C1490H, the Project site is classified as Flood Zone X, outside the 0.2 percent annual chance floodplain (FEMA, 2024). Additionally, a SWPPP and WQMP would be prepared and implemented as part of the Project to ensure pollutants are contained and would not be released from the Project site during construction and operation. Pre-development peak flows at the downstream outfall were 4.77 cubic feet per second (cfs) for the 10-year storm and 7.67 cfs for the 100-year storm. Post-development flows are 5.42 cfs for the 10-year storm (an increase of 0.65 cfs, within modeling tolerance) and 6.83 cfs for the 100-year storm (a decrease of 0.84 cfs). The proposed condition would result in a small increase in runoff rate for the 10-year storm event and a decrease in the 100-year storm event (Appendix I). Post-construction stormwater infrastructure would ensure capture and treatment of storm flows exceeding the DCV based on the water quality design storm. Therefore, implementation of the Project would not impede or redirect flood flows.

g) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact.

According to FEMA Map No. 06065C1490H the Project site is classified as Flood Zone X, outside the 0.2 percent annual chance floodplain (FEMA, 2024). The site is not within a special flood hazard area.

Tsunamis are ocean wave trains generally caused by tectonic displacement of the sea floor associated with shallow earthquakes, sea floor landslides, rock falls, and exploding volcanic islands. The Project site is located approximately 47 miles east of the Pacific Ocean; consequently, there is no potential for the Project site to be inundated by a tsunami that could release pollutants. In addition, the Project site is flat and not located near any steep hillsides; therefore, there is no potential for the site to be adversely affected by mudflow.

Similarly, a seiche is the sloshing of a closed body of water from earthquake shaking. Seiches are of concern relative to water storage facilities because inundation from a seiche can occur if the wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dam, or other artificial body of water. The Project site is not within the vicinity of any impounded bodies of water; therefore, the Project is not at risk of a seiche.

Thus, implementation of the proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow that could release pollutants due to inundation of the Project site. No impact would occur.

h) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than Significant Impact.

As described previously, the Project would be required to have an approved SWPPP (PPP HYD-1), which would include construction BMPs to minimize the potential for construction related sources of pollution.

For operations, the proposed Project would be required to implement source control BMPs to minimize the introduction of pollutants; and treatment control BMPs to treat runoff. Applicable source control measures are documented in the Pollutant Sources/ Source Control Checklist included in the WQMP (Appendix H). With implementation of the operational source and treatment control BMPs that would be required by the City during the permitting and approval process, potential pollutants would be reduced to the maximum extent feasible, and implementation of the proposed Project would not obstruct implementation of a water quality control plan.

As described previously, the Project would be required to implement a WQMP (PPP HYD-2), which would be verified as part of the City's permitting process. The proposed Project would introduce approximately 4,093 SF of new pervious pavement to the Project site through the installation of pervious concrete infiltration BMPs, and would discharge roof runoff to landscaped areas through disconnected downspouts (Appendix H). These BMPs would capture, filter, and infiltrate runoff on-site. As a result, the proposed Project would not decrease groundwater supplies or interfere substantially with groundwater recharge; and the Project would not impede implementation of a sustainable groundwater management plan or water quality control plan. Thus, the proposed Project would have a less than significant impact.

Existing Plans, Programs, or Policies

PPP HYD-1: SWPPP. Prior to grading permit issuance, the Project developer shall have a SWPPP prepared by a Qualified SWPPP Developer (QSD) pursuant to the San Jacinto Municipal Code Chapter 17.600. The SWPPP shall incorporate all necessary BMPs and other City requirements to comply with the NPDES requirements to limit the potential of polluted runoff during construction activities. Project contractors shall be required to ensure compliance with the SWPPP and permit periodic inspection of the construction site by San Jacinto City staff or its designee to confirm compliance.

PPP HYD-2: WQMP. Prior to grading permit issuance, the Project developer shall have a WQMP approved by the City for implementation. The project shall comply with the San Jacinto Municipal Code Chapter 19.600 and the Municipal Separate Storm Sewer System (MS4) permit requirements in effect for the Regional Water Quality Control Board (RWQCB) at the time of grading permit to control discharges of sediments and other pollutants during operations of the Project.

Mitigation Measures

None.

5.11. LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

a) Physically divide an established community?

No Impact.

The physical division of an established community could occur if a major road (expressway or freeway, for example) were built through an existing community or neighborhood, or if a major development was built which was inconsistent with the land uses in the community such that it divided the community. The environmental effects caused by such a facility or land use could include lack of, or disruption of, access to services, schools, or shopping areas. It might also include the creation of blighted buildings or areas due to the division of the community.

The proposed Project site is surrounded by industrial uses, residential uses, parcels of undeveloped land, and existing roadways. The proposed Project would expand the existing use on the Project site; as such, the proposed Project would connect to and integrate with the existing neighborhood and would not change roadways or install any infrastructure that would result in a physical barrier. Therefore, implementation of the proposed Project would not physically divide an established community, and impacts would not occur.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less Than Significant Impact.

The Project site has a General Plan land use designation of Industrial (I) and a zoning designation of Industrial Light (IL). The proposed Project would expand the existing Bradley Gardens facility, which currently operates as a legal nonconforming use on the Project site. The City is processing the proposed Project under the legal nonconforming provisions of SJMC Section 17.705.120 (Nonconforming Adjustment), and the following discretionary approvals are required: a Conditional Use Permit, , and Site Plan and Design Review.

The proposed Project has been evaluated for consistency with all applicable plans, policies, and regulations adopted for the purpose of avoiding or mitigating environmental effects, including the City of San Jacinto General Plan and SJDC development standards. As demonstrated in Table LU-1 below, the

proposed Project is consistent with all applicable City of San Jacinto General Plan policies. The proposed Project would be developed in conformance with the SJDC development standards for the IL zone, including applicable standards for setbacks, building height, floor area ratio, landscaping, and parking, as confirmed in Table AES-1 of this IS/MND.

The proposed Project would not conflict with the City's adopted MSHCP requirements, as the Project site is not located within a Criteria Cell or designated conservation area and MSHCP development impact fees would be paid prior to permit issuance (PPP BIO-1). The proposed Project would comply with all applicable stormwater management requirements under SJMC Chapter 13.44 and the Santa Ana RWQCB NPDES permit, and would implement a SWPPP (PPP HYD-1) and WQMP (PPP HYD-2). The proposed Project would also be designed in conformance with CBC seismic safety requirements (PPP GEO-1) and all applicable California Fire Code and building code standards.

Therefore, the proposed Project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and impacts would be less than significant.

Table LU-1: City of San Jacinto General Plan Consistency Analysis

General Plan Goal	Consistency Analysis
Policy LU 2.1: Plan for New Development. Ensure that new development corresponds to the provision of infrastructure, public services and community facilities, and that new development funds and constructs its fair share of improvement in accordance with City requirements.	**Consistent.** As described in Section 3, *Project Description*, the proposed Project would install new on-site connections to the existing 12-inch diameter water line and the existing 8-inch diameter sewer line in W. 7th Street. Stormwater infrastructure, including a new series of catch basins and storm drain lines, would be constructed to manage runoff from the expanded facility. The proposed Project would be subject to applicable development impact fees for fire services and other public infrastructure, ensuring that the Project funds its fair share of service improvements in accordance with City requirements.
Policy LU 2.2: Infill Development. Encourage new development to occur in infill locations in a balanced and efficient pattern that reduces sprawl, preserves open space, and creates convenient connections to other land uses and activity centers.	**Consistent.** As described in Section 3, *Project Description*, the proposed Project represents infill development that makes productive use of existing developed land and infrastructure, and would not contribute to urban sprawl or the conversion of undeveloped land. The proposed Project would also construct new sidewalks along W. 7th Street and S. Grand Avenue to improve pedestrian connections to the surrounding area.
Policy LU 3.1: Surrounding Uses. Consider as part of the development review process the compatibility of new development with surrounding uses and the ability of new development to enhance the character of the surrounding area.	**Consistent.** As described in Section 3, *Project Descriptio*n, the proposed Project would expand the existing Bradley Gardens facility, which has operated as a SNF on the Project site for decades. The proposed Project would not change the existing use on the site. The surrounding area is characterized by industrial, residential, and vacant land uses, and the proposed one-story building addition at a maximum height of 22

	feet would remain consistent with the existing low-rise development pattern. The proposed Project would also add landscaping, updated architectural finishes, new sidewalks, and improved site access, enhancing the character of the immediate vicinity.
Policy LU 3.4: Environmental Compatibility. Limit development in areas subject to severe natural hazards, such as landslides, ground subsidence, liquefaction, and flooding.	**Consistent.** As described in Section 5.7, *Geology and Soils*, the Project site is relatively flat, is not located within an Alquist-Priolo Earthquake Fault Zone, and is not in the path of any known or potential landslides. While the site has moderate liquefaction susceptibility, groundwater was not encountered in geotechnical borings to 60 feet below ground surface, and the Project would be designed to meet CBC requirements (PPP GEO-1), including project-specific geotechnical recommendations incorporated at permit approval. As described in Section 5.10, *Hydrology and Water Quality*, the Project site is located in FEMA Flood Zone X, outside the 0.2 percent annual chance floodplain. The proposed Project would therefore not place development in an area subject to severe natural hazards.
Policy LU 3.8: Public Utilities. Ensure land uses and development are compatible with existing and proposed utility facilities including the San Jacinto Wastewater Treatment Facility.	**Consistent.** As described in Section 5.19, *Utilities and Service Systems,* the proposed Project would install new on-site connections to the existing 12-inch diameter water line and 8-inch diameter sewer line in W. 7th Street. These on-site connections would not require expansion of off-site utility infrastructure. The existing utility systems have the capacity to accommodate the proposed expansion, and the Project would remain compatible with the existing utility facilities.
Policy LU 5.2: Standards and Guidelines. Develop and enforce development standards and objective design guidelines that provide clear direction for achieving quality community design in new development and redevelopment projects.	**Consistent.** As described in Section 5.1, *Aesthetics*, the proposed Project has been evaluated for consistency with the San Jacinto Development Code (SJDC) development standards applicable to the Industrial Light (IL) zoning designation. The proposed Project's setbacks, height, floor area ratio of 0.27, landscaping coverage, and parking meet applicable SJDC standards, as confirmed in Table AES-1 of the IS/MND. The proposed Project would therefore be developed in conformance with the City's objective design guidelines.
Policy LU 5.4: Gathering Places. Encourage the provision of both formal and informal public gathering spaces through pedestrian-oriented street design; sidewalk furniture and pedestrian-oriented development; well-designed, multi-use public spaces of	**Consistent.** As described in Section 3, *Project Description*, the proposed Project would construct new 5-foot sidewalks along the W. 7th Street and S. Grand Avenue frontages, improving pedestrian connectivity along the site perimeter. On-site, the proposed Project would create a new common open space area for

different sizes including pocket parks, plazas, monuments, and community events.	facility residents between the existing SNF building and the proposed SNF-STP addition, featuring a concrete walkway, seating areas with chairs and tables, artificial turf, and decorative plants. Recreation and open space would cover approximately 15 percent of the site upon Project completion.
Policy LU 5.5: Landscaping. Use landscaping for screening, solar control, parking lot shade, and other beautification purposes throughout the City.	**Consistent.** As described in Section 3, *Project Description*, the proposed Project would add 4,015 SF of ornamental landscaping, increasing total on-site landscaping from approximately 36,347 SF to 40,362 SF, covering approximately 31 percent of the site. Proposed landscaping includes 24-inch box trees, 1-gallon and 5-gallon trees, various shrubs, and succulents near the proposed SNF addition. The landscaping would provide screening, shade, and beautification consistent with this policy.
Policy LU 5.6: Streetscapes. Promote drought tolerant landscaping, tree planting, and tree preservation along City streets as a means of improving aesthetics, making neighborhoods more pedestrian friendly, and providing environmental and economic benefits.	**Consistent.** As described in Section 3, *Project Description*, the proposed Project includes ornamental landscaping with succulents, which are drought-tolerant species, along the southeastern corner of the site near the proposed SNF addition. Existing landscaped areas along the W. 7th Street and S. Grand Avenue frontages would be retained. The proposed Project would also dedicate right-of-way along both street frontages and install new 5-foot sidewalks, enhancing the pedestrian environment along adjacent streets.
Policy LU-5.9: Public and Private Investment. Invest public and private resources in the maintenance and rehabilitation of existing housing to prevent or reverse neighborhood deterioration.	**Consistent.** As described in Section 3, *Project Description*, he proposed Project would revitalize an existing developed site through the demolition of a deteriorated 1,074 SF maintenance and storage building and the construction of a modern 18,000 SF SNF-STP addition. The existing vacant office building would be converted into an active 16-bed PHF, eliminating a dormant structure on the site. New landscaping, updated architectural finishes, improved parking, and new site infrastructure would upgrade the appearance and function of the facility, reversing potential neighborhood deterioration.
Policy ED-2.3: Medical Facilities. Continue to promote the establishment of local and regional serving medical facilities in San Jacinto to diversify economic activity and better serve the healthcare needs of San Jacinto Valley residents and businesses.	**Consistent.** As described in Section 3, *Project Description*, the proposed Project would expand the existing Bradley Gardens facility from a 44-bed SNF to a 103-bed facility that includes SNF, Short-Term Psychiatric (STP), and Psychiatric Health Facility (PHF) beds. The expansion would increase the facility's capacity to serve community members with specialized psychiatric and rehabilitative healthcare needs, add 100 new employees, and strengthen the City's medical

	services base, directly supporting the City's goal of diversifying economic activity through local healthcare investment.
Policy M-1.1: Balanced Circulation System. Provide for a balanced circulation system that promotes the safe and efficient movement of people and goods throughout the City.	**Consistent.** As described in Section 3, *Project Description,* the proposed Project would consolidate two existing driveways on W. 7th Street into one 24-foot-wide driveway and widen the northeastern driveway to 24 feet, improving site access and reducing conflict points. A gated 25-foot-wide emergency access driveway is proposed on S. Grand Avenue. Internal circulation would be served by a 27.3-foot-wide drive aisle within the surface parking lot. The Project would also construct new 5-foot sidewalks along site frontages and provide 6 bicycle parking spaces, supporting multiple modes of travel.
Policy M-1.2: Access and Mobility. Strive to maintain sufficient access and mobility for all modes of travel and users of the roadway network.	**Consistent.** As described in Section 5.17, *Transportation*, the proposed Project would generate a net increase of 181 daily vehicle trips, which is below the 500 daily trip threshold under the City's VMT Guidelines. The Project would not result in any significant impact to the existing roadway network. Site access would be maintained via two unrestricted driveways on W. 7th Street and an emergency access driveway on S. Grand Avenue. New sidewalks, ROW dedications, and bicycle parking would improve multi-modal access to and from the site.
Policy M-1.5: Transportation Improvements for All Users. Encourage roadway, sidewalk, and median improvements that enhance the visual character of the roadway system and promote pedestrian and bicycle safety.	**Consistent.** As described in Section 3, *Project Description,* the proposed Project would install new 5-foot sidewalks along the W. 7th Street and S. Grand Avenue frontages of the Project site. The Project and would dedicate 3 feet along W. 7th Street to widen the ROW from 50 to 53 feet and 6 feet along S. Grand Avenue to widen the ROW from 33 to 39 feet. These improvements would enhance pedestrian safety, improve the visual character of adjacent streetscapes, and support the City's goals for multi-modal transportation.
Policy M-4.5: Support Facilities. Encourage new developments to provide bicycle parking, lockers, and other support facilities for bicyclists.	**Consistent.** As shown in Section 3, *Project Description*, the proposed Project would provide 3 short-term and 3 long-term bicycle parking spaces near the entrance to the existing SNF building, for a total of 6 bicycle parking spaces. The combination of short-term and long-term bicycle parking supports both visiting cyclists and employees who commute by bicycle.
Policy M-5.1: Appropriate Parking Supply. Use the development review process to plan for new	**Consistent.** As shown in Section 3, *Project Description*, the proposed Project would provide a total of 52 passenger vehicle parking spaces, including 4 ADA-

developments to provide appropriate vehicle parking supply to meet demand.	accessible spaces, in a surface lot along the northern boundary of the site. Parking would serve employees, patients, and visitors. The proposed parking supply has been reviewed as part of the City's development review process and is consistent with applicable SJDC development standards.
Policy M-6.1: Vehicle Miles Traveled. Maintain vehicle miles traveled (VMT) thresholds and Transportation Demand Management (TDM) mitigation requirements for the purpose of environmental review under the California Environmental Quality Act (CEQA).	**Consistent.** As shown in Section 5.17, *Transportation*, a VMT Screening Analysis was prepared for the proposed Project. The Project would generate a net increase of 181 daily trips, with a total of 315 daily vehicle trips, which is below the City's 500 daily trip screening threshold. Therefore, the Project qualifies for VMT screening and is presumed to have a less than significant VMT impact, consistent with the City's adopted VMT thresholds under CEQA.
Policy M-6.4: New Development. Work with developers to reduce greenhouse gas emissions and minimize congestion related to new development through improvements to the circulation system and on-site improvements that encourage non-vehicular modes of travel.	**Consistent.** As described in Section 3, *Project Description,* and Section 5.8, *Greenhouse Gas Emissions*, the proposed Project would not result in a significant increase in GHG emissions, with net new operational emissions well below the SCAQMD Tier 3 screening threshold of 3,000 $MTCO_2e$ per year. The proposed Project would construct new sidewalks along both street frontages, provide 6 bicycle parking spaces, and dedicate ROW to support future roadway improvements, all of which encourage non-vehicular modes of travel and reduce vehicle-related emissions.
Policy PS-1.2 Earthquake Protection. Enforce State seismic design guidelines and all relevant building codes to reduce the risk of damage associated with seismic activity.	**Consistent.** As described in Section 5.7, *Geology and Soils,* the Project site is not within an Alquist-Priolo Earthquake Fault Zone; however, the San Jacinto Fault is located approximately 2 miles northeast of the site. The proposed Project would be designed in accordance with the CBC (adopted in SJMC Section 15.04.020; PPP GEO-1), including mandatory seismic safety features, proper building footings and foundations, and structural design to withstand strong ground shaking. Project-specific geotechnical recommendations from the Geotechnical Investigation would be incorporated into grading plans and building design as a condition of permit approval. The City would verify CBC compliance during plan check and development review.
Policy PS-1.5 Development. Require assessment and mitigation of hazards related to liquefaction, landslides, and flooding for new development projects or City improvement projects that are identified by the City as susceptible to these hazards.	**Consistent.** As described in Section 5.7, *Geology and Soils*, the Project site is identified as having moderate liquefaction susceptibility. While the site is classified as having moderate liquefaction susceptibility, groundwater was not encountered in borings to 60 feet below ground surface, and the Project would comply with CBC requirements (PPP GEO-1) incorporating project-specific geotechnical recommendations. The

	site is relatively flat with no known landslide susceptibility per GPU EIR Figure 5.7-5. As described in Section 5.10, *Hydrology and Water Quality*, the site is located in FEMA Flood Zone X, outside the 0.2 percent annual chance floodplain. Therefore, hazards related to liquefaction, landslides, and flooding have been assessed and addressed through applicable regulatory compliance.
Policy PS-1.6 Impact Reduction. Reduce the risk of impacts from geologic and seismic hazards by applying proper and up to date land use planning, development engineering, building construction, and retrofitting requirements.	**Consistent.** As described in Section 5.7, *Geology and Soils*, the proposed Project would be designed and constructed in compliance with the CBC, as adopted in SJMC Section 15.04.020 (PPP GEO-1), which incorporates current standards for seismic safety, structural design, foundations, and retaining walls. The City has also adopted an Earthquake Hazard Reduction Code under SJMC Chapter 15.24 to reduce risk of life loss from seismic events. Project-specific geotechnical recommendations would be incorporated into grading plans and building design as a condition of permit approval, and compliance would be verified by the City during plan check. Collectively, these requirements reduce geologic and seismic hazard risks to a less than significant level.
Policy PS-2.1: Building Fire Codes. Require that all buildings and facilities within San Jacinto comply with local, state, and federal regulatory standards such as the California Building and Fire Codes as well as other applicable fire safety standards.	**Consistent.** As described in Section 5.15, *Public Services*, the proposed Project would be required to comply with the California Fire Code (Title 24, California Code of Regulations, Part 9) and the Fire Code as adopted in SJMC Chapter 8.16. The Project would be designed and constructed to provide fire suppression facilities, including hydrants and sprinklers, in conformance with SJMC standards and Riverside County Fire Department (RCFD) requirements. The City's Building and Safety Division would review Project plans during the permitting process to ensure compliance with all applicable building and fire code requirements prior to construction approval.
Policy PS-2.2: Fire Protection Services. Reduce the risk of fire to the community by coordinating emergency preparedness with the Riverside County Fire Department (RCFD).	**Consistent.** As described in Section 5.15, *Public Services*, fire protection services for the Project site are provided by the RCFD. The nearest station, Riverside County Fire Station 25 (132 S San Jacinto Ave), is approximately 1.4 miles northeast of the Project site. The proposed Project would be required to comply with GPU Action RM-6f, contribute development impact fees to offset fire protection needs, and provide adequate emergency ingress and egress per City standards. The proposed Project's modest scale increase would not substantially increase service

	demands, and the two existing stations would continue to maintain current service levels.
Policy PS-3.1: Regulatory Compliance. Coordinate with local, state, and federal agencies to ensure that the City's regulations related to flood control are in compliance with federal, state, and local standards.	**Consistent.** As described in Section 5.10, *Hydrology and Water Quality*, the proposed Project would implement stormwater Best Management Practices (BMPs) consistent with the Santa Ana Regional Water Quality Control Board NPDES permit requirements. The Project site is classified as Flood Zone X, outside the 0.2 percent annual chance floodplain. The proposed Project would comply with all applicable local, state, and federal flood control standards.
Policy PS-3.5: Municipal Code. Implement the standards and requirements defined in the Municipal Code to reduce flood hazards and address flood-prone areas within San Jacinto.	**Consistent**. As described in Section 5.10, *Hydrology and Water Quality*, the proposed Project would comply with SJMC Chapter 13.44, Storm Water Management, which implements NPDES requirements. A Stormwater Pollution Prevention Plan (SWPPP) (PPP HYD-1) and Water Quality Management Plan (WQMP) (PPP HYD-2) would be prepared and implemented to ensure compliance with applicable stormwater management standards.
Policy PS-3.7: Stormwater Runoff. Encourage new developments that add impervious surfaces to integrate low impact development best management practices to reduce stormwater runoff.	**Consistent.** As described in Section 5.10, *Hydrology and Water Quality*, the proposed Project includes Low Impact Development (LID) features, including 1,093 square feet of pervious concrete in the parking lot and approximately 3,000 square feet of pervious concrete in the fire access lane to allow for stormwater infiltration. The Project is required to implement a WQMP (PPP HYD-2). A WQMP would incorporate source control and treatment control BMPs to prevent pollutants from entering the storm drain system, and the pervious concrete infiltration areas would capture and treat the Design Capture Volume prior to infiltration.
Policy PS-4.6: Proposed Facilities. Require appropriate environmental analysis to be conducted for any proposed hazardous waste materials treatment or transfer, in accordance with environmental review requirement.	**Consistent.** As described in Section 5.9, *Hazards and Hazardous Materials*, the proposed Project would not result in the introduction of new hazardous materials into the environment beyond those typically associated with a healthcare facility. The proposed IS/MND constitutes the required environmental analysis for the proposed Project. Prior to demolition, the Project applicant would be required to conduct asbestos and lead-based paint surveys of existing buildings (PPP HAZ-1 and PPP HAZ-2) and comply with all applicable hazardous materials regulations.

Policy PS-5.10: Crime Prevention Through Environmental Design. Ensure projects include design features that promote public safety and reduce criminal activity.	**Consistent.** As described in Section 3, *Project Description*, the proposed Project would incorporate site design features that promote public safety, including perimeter fencing, controlled access points, exterior lighting, and landscaping improvements. The facility operates with 24-hour supervised staff and controlled visitor access, which further promotes on-site safety and reduces potential criminal activity.
Policy PS-6.1: Noise Exposure. Consider the noise compatibility of existing and future development when making land use planning decisions. Require development and infrastructure projects to be consistent with the land use compatibility standards contained in Tables PS-1, PS-2, PS-3 and PS-4 to ensure acceptable noise exposure levels for existing and future development.	**Consistent.** As described in Section 5.13, *Noise*, the proposed Project would not result in a substantial increase in ambient noise levels beyond those established in the City's General Plan noise standards. The Project site's use as a SNF is consistent with the applicable noise compatibility standards.
Policy PS-6.2: Noise Mitigation. Require new development to mitigate excessive noise to the standards indicated in Tables PS-1, PS-2, PS-3 and PS-4 to the extent feasible through best practices, including building location and orientation, building design features, placement of noise generating equipment away from sensitive receptors, shielding of noise-generating equipment, placement of noise- tolerant features between noise sources and sensitive receptors, and use of noise-minimizing materials.	**Consistent.** As described in Section 5.13, *Noise*, construction noise would be limited to permitted hours under SJMC Section 8.40.090. Operational noise associated with the proposed Project would be consistent with the existing SNF use and would not result in a substantial increase in ambient noise levels. The proposed Project would comply with the City's applicable noise standards.
Policy PS-6.6: Commercial Noise. Require the use of noise attenuation measures, including screening and buffering techniques, for all new commercial development expected to produce excessive noise; in existing cases where the City's noise standards are exceeded, work with Code Enforcement to require compliance.	**Consistent.** As described in Section 5.13, *Noise*, the proposed Project would not produce excessive noise beyond levels associated with the existing SNF. The proposed Project would comply with applicable noise standards and would not require additional noise attenuation measures beyond those already in place.
Policy PS-6.7: Construction Noise. Require construction activities to reduce noise impacts on adjacent uses to the criteria identified in Tables PS-3 and PS-4, or, if the criteria cannot be met, to the maximum extent feasible complying with Chapter 8.40 of the San Jacinto Municipal Code (Noise Control) and use best practices. Construction activities outside of the permitted construction hours identified in the San Jacinto Municipal Code may be approved on a case-by-case basis by the Community Development Director.	**Consistent.** As described in Section 5.13, *Noise*, construction activities for the proposed Project would be limited to the hours of 7:00 a.m. to 7:00 p.m. on weekdays and Saturdays, and 9:00 a.m. to 6:00 p.m. on Sundays and holidays, as required by SJMC Section 8.40.090. Construction activities would comply with Chapter 8.40 of the SJMC and applicable noise standards.
Policy PS-7.12: Extreme Heat Vulnerabilities. Require that new developments, major remodels, and redevelopments address urban heat island issues and reduce urban heat island effects for the proposed project site and adjacent properties.	**Consistent.** As described in Section 3, *Project Description*, the proposed Project includes the addition of 4,015 SF of ornamental landscaping for a total of 40,362 SF of landscaping, covering approximately 31 percent of the site. Landscaping and the use of

	succulents would help reduce the urban heat island effect on and adjacent to the Project site.
Policy RM-1.1: Balanced Open Space System. Support a balanced and integrated open space system that reflects a variety of considerations, including resource conservation, recreation, aesthetics, and community identity.	**Consistent.** As described in Section 3, *Project Description*, the proposed Project would maintain recreation/open space at approximately 15 percent of the site, including a new common outdoor open space area with a concrete walkway, seating areas, artificial turf, and decorative plants for use by facility residents.
Policy RM-1.2: Scenic Resources. Encourage the preservation of San Jacinto's scenic resources, including mature trees, rock outcroppings, hillsides, ridgelines, and other prominent natural landforms, to the extent practical.	**Consistent.** As described in Section 5.1, *Aesthetics*, the proposed Project would not obstruct existing long-distance public views of the Lakeview Mountains and San Jacinto Mountains available from surrounding roadways. The one-story proposed building addition is consistent with the existing low-rise institutional development pattern on-site.
Policy RM-2.4: Natural Conditions. Encourage development that avoids impacts to watershed areas, wetlands, natural drainage channels, riparian areas, and creeks, retaining these resources in their natural condition if feasible	**Consistent.** As described in Section 5.10, *Hydrology and Water Quality*, the Project site is a developed urban site that does not contain drainage, riparian, or riverine features. The proposed Project would not impact watershed areas, wetlands, natural drainage channels, or riparian areas.
Policy RM 3.1: Preservation. Protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code.	**Consistent.** As described in Section 5.7, *Geology and Soils*, the Project has potential to disturb previously unknown paleontological resources. With the implementation of, MM GEO-1, which requires paleontological monitoring, impacts to paleontological resources would be less than significant. Additionally, as described in Section 5.5, *Cultural Resources*, none of the existing buildings on the Project site were determined to be of historical significance. With the implementation of MM CUL-1, which requires archaeological evaluation in the event a resource is inadvertently discovered, impacts to archaeological resources would be less than significant.
Policy RM-3.4: Tribal Consultation. Consult with Native American tribes whose tribal cultural resources may be impacted by proposed development, as necessary, and in accordance with state, local, and tribal intergovernmental consultation requirements, in an effort to mitigate or avoid significant effects to resource(s).	**Consistent.** Prior to issuance of a grading permit, the Project developer shall enter into a Treatment and Disposition Agreement (TDA) with the Soboba Band of Luiseño Indians, included as PPP TCR-1, consistent with SJDC §17.300.055. Evidence of the executed TDA shall be submitted to the City Planning Division prior to permit issuance.
Policy RM-3.6: Historic Preservation. Identify, designate, and protect buildings, districts, eligible	**Consistent.** As described in Section 5.5, *Cultural Resources*, the existing structures on the Project site are not identified as historically significant resources.

properties and sites of historic importance within San Jacinto.	The proposed Project would not demolish or alter any historic structures and would not adversely affect any buildings, districts, or sites of historic importance.
Policy RM-4.5 Walkability. Encourage pedestrian-scale development and pedestrian-friendly design features to reduce vehicle emissions. (See Mobility Element).	**Consistent.** As described in Section 3, *Project Description*, the proposed Project includes the construction of new 5-foot sidewalks along the Project site frontages on W. 7th Street and S. Grand Avenue, improving pedestrian connectivity to and from the site. The Project also provides short-term and long-term bicycle parking facilities.
Policy RM 4.8: Mitigation. Require the implementation of relevant mitigation measures for all future development upon identification of potential air quality impacts.	**Consistent.** As described in Section 5.3, *Air Quality*, the proposed Project's construction and operational emissions would not exceed SCAQMD regional or localized significance thresholds, resulting in a less than significant impact. No mitigation measures related to air quality are required. Additionally, The proposed Project would comply with all applicable SCAQMD rules, including Rule 403 (PPP AQ-1),Rule 1113 (PPP AQ-2), and Rule 402 (PPP AQ-3).
Policy RM 4.9: Local Reduction Targets. The City of San Jacinto establishes the following per capita GHG reduction targets, in order to meet the requirements established by the state under AB 32 and SB 32, consistent with the CARB's 2017 Scoping Plan: 1.83 MTCO2e per service population (SP) by 2030; and 0.62 MTCO2e per service population (SP) by 2050	**Consistent.** As described in Section 5.8, *Greenhouse Gas Emissions*, the proposed Project's greenhouse gas emissions would not exceed the applicable SCAQMD thresholds. Additionally, as demonstrated under Tables GHG-3 and GHG-4, the Project would be consistent with the CARB 2022 Scoping Plan, WRCOG Subregional CAP, and would be consistent with the City's adopted GHG reduction targets and the State's climate goals under AB 32 and SB 32.
Policy RM-6.3: Site Design. Recognize the role of design features in new development to reduce potential for crime and implement best practices into existing plans and new development strategies.	**Consistent.** As described in Section 3, *Project Description*, the proposed Project incorporates site design features to promote safety, including perimeter fencing, controlled access points, site lighting, and landscaping that supports visibility and deters criminal activity consistent with Crime Prevention Through Environmental Design (CPTED) principles.
Policy RM-7.4: Parkland Dedication. Require future private development to incorporate parkland, open space, or green space to expand recreational opportunities in the community in accordance with standards set by the San Jacinto Municipal Code.	**Consistent.** As described in Section 3, *Project Description*, the proposed Project would include a new common outdoor open space area covering approximately 15 percent of the site.
Policy RM-8.2: School Facilities. Work with developers and the school district to ensure the payment of fees, construction, and expansion of school facilities to address expected increases in school-age population.	**Consistent.** As described in Section 5.15, *Public Services*, the proposed Project is an expansion of an existing SNF that would not generate new residential uses or school-aged children. The proposed Project would not require the construction or expansion of

	school facilities and would have no impact on school enrollment.
Policy RM 9.3: Fair Share. Ensure that all new development provides for and funds its fair share of the costs for the expansion of public infrastructure and services, recreational amenities, and facilities.	**Consistent.** As described in Section 5.15, *Public Services*, the proposed Project would be responsible for the payment of applicable development impact fees, including fees for fire services, police services, parks and other services, which would offset future public infrastructure and service needs associated with the proposed expansion.
Policy RM-10.2: Solid Waste Collection. Provide adequate waste disposal, recycling, and refuse services for present and future residents and businesses, including programs that improve public access to solid waste collection and recycling facilities.	**Consistent.** As described in Section 5.19, *Utilities and Service Systems*, the proposed Project would comply with all applicable solid waste disposal and recycling requirements. The expansion of the facility would generate additional solid waste consistent with a SNF use, which would be accommodated by existing waste disposal services.
Policy RM-10.3: Hazardous Waste. Promote the proper disposal of hazardous waste, including paint, tires, medications, medical sharps, infectious waste, asbestos waste, construction waste, and electronic waste, through education, monitoring, and enforcement of proper use, storage, handling, and disposal.	**Consistent.** As described in Section 5.9, *Hazards and Hazardous Materials*, the proposed Project would comply with all applicable regulations governing the handling, storage, and disposal of hazardous waste associated with SNF operations. Compliance with PPP HAZ-1 and PPP HAZ-2 would ensure proper handling of any hazardous materials encountered during demolition.
Policy EJ-1.1: Emission Sources. Encourage existing sources of emissions to use feasible measures to minimize air quality impacts in Environmental Justice Communities and avoid new sources of significant emissions in these communities as feasible.	**Consistent.** As described in Section 5.3, *Air Quality*, the proposed Project's construction and operational emissions would not exceed SCAQMD regional or localized significance thresholds, resulting in a less than significant impact. Additionally, the proposed Project would comply with applicable SCAQMD rules (PPP AQ-1 through PPP AQ-3).
Policy EJ-4.3: Indoor Air Quality. Encourage measures to reduce indoor air quality impacts (e.g., air filtration systems, kitchen range hood exhaust fans, low-VOC paint and carpet) for new developments.	**Consistent.** As described in Section 5.3, *Air Quality*, the proposed Project would comply with SCAQMD Rule 1113 governing VOC content in architectural coatings, paints, and solvents (PPP AQ-2). As a SNF, the Bradley Gardens facility would be required to maintain indoor air quality standards consistent with applicable State health facility regulations.
Policy EJ-5.2: Accessibility. Endeavour to provide parks that are easily accessible to the surrounding neighborhood and beyond, and are as barrier-free as possible, particularly for those with limited mobility.	**Consistent.** As described in Section 3, *Project Description*, the proposed Project would provide on-site open space and recreational amenities accessible to facility residents, including a concrete walkway, seating areas, and artificial turf. The proposed Project would also include 4 ADA-accessible parking spaces, and the new 5-foot sidewalks along site frontages

	would improve accessibility for pedestrians with limited mobility.

Existing Plans, Programs, or Policies

PPP AQ-1: SCAQMD Rule 403. As listed in Section 5.3, *Air Quality.*

PPP AQ-2: SCAQMD Rule 1113. As listed in Section 5.3, *Air Quality.*

PPP AQ-3: SCAQMD Rule 402. As listed in Section 5.3, *Air Quality.*

PPP BIO-1: MSHCP Fees. As listed in Section 5.4, *Biological Resources.*

PPP GEO-1: CBC Compliance. As listed in Section 5.7, *Geology and Soils.*

PPP HAZ-1: SCAQMD Rule 1403. As listed in Section 5.9, *Hazards and Hazardous Materials***.**

PPP HAZ-2: Lead. As listed in Section 5.9, *Hazards and Hazardous Materials***.**

PPP HYD-1: SWPPP. As listed in Section 5.10, *Hydrology and Water Quality.*

PPP HYD-2: WQMP. As listed in Section 5.10, *Hydrology and Water Quality*.

Mitigation Measures

None.

5.12. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact.

The City of San Jacinto GPU Draft EIR Figure 5.12-1 *Mineral Resource Zones* designates the Project site as being located in MRZ-3, which is an area containing mineral deposits, the significance of which cannot be evaluated (City of San Jacinto, 2022b). The Project site was previously used for agricultural uses and is currently developed with a SNF; the Project site was never used for mineral extraction. Additionally, the site is designated Industrial (I) by the City's General Plan and is zoned Industrial Light (IL). Extraction of mineral resources is not permitted under the Project site's land use or zoning designation. As such, the proposed Project would not result in the loss of availability of a known mineral resource and there would be no impact.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on the general plan, specific plan. or other land use plan?

No Impact.

As discussed previously, the Project site is within an MRZ zone-3. However, no mineral extraction activities occur on the Project site currently, or historically. Additionally, no mineral extraction is planned as part of the Project or permitted under the site's land use and zoning designations. As such, the proposed Project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on the general plan, specific plan or other land use plan. Therefore, there would be no impact to the loss of available, locally important, mineral resource recovery sites.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

5.13. NOISE

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

c) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact.

Construction

Noise generated by construction equipment would include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. Construction is expected to occur in the following stages: demolition, site preparation, grading, building construction, architectural coating, and paving. The Project would not include pile driving, which typically results in the highest construction noise volumes.

Construction noise would be temporary in nature and would be limited to permitted hours under the SJMC Section 8.40.090, which allows construction activity between the hours of 7:00 a.m. and 7:00 p.m. on weekdays and Saturdays, and between 9:00 a.m. and 6:00 p.m. on Sundays and holidays.

A Noise and Vibration Impact Analysis prepared for the Project and is included as Appendix J. Table N-1 lists typical construction equipment noise levels by phase. As shown, construction noise levels for the loudest equipment range from approximately 72.8 to 89.6 dBA Lmax at 50 feet.

Table N-1: Typical Construction Equipment Noise Levels

Activity	Equipment[1]	Quantities[1]	Maximum Noise Level @ 50 Feet[2,3]	Two Loudest Noise Levels @ 50 Feet[2,3]	Sound Power Level at Source
			dBA L_{max}	dBA L_{eq}	dB (PWL)
Demolition	Concrete/Industrial Saws	1	**89.6**	84.5	**114.7**
	Rubber Tired Dozers	1	81.7		
	Tractors/Loaders/Backhoes	1	**84.0**		
Site Preparation	Graders	1	**85.0**	82.7	112.8
	Rubber Tired Dozers	1	**84.0**		
	Crawler Tractors	1	81.7		
Grading	Graders	1	**85.0**	82.7	112.8
	Rubber Tired Dozers	1	**84.0**		
	Crawler Tractors	1	81.7		
Paving	Pavers	1	77.2	84.5	**114.7**
	Roller	1	80.0		
	Cement and Mortar Mixer	1	80.0		
	Tractors/Loaders/Backhoes	1	**84.0**		
	Paving Equipment	1	**89.5**		
Building Construction	Cranes	1	**80.6**	80.7	110.9
	Forklift	1	74.7		
	Generator Sets	1	72.8		
	Tractors/Loaders/Backhoes	1	**84.0**		
	Welders	3	74.0		
Architectural Coating	Air Compressors	1	77.7	77.7	107.8

Notes: **bold** = Selected equipment with the two highest noise levels. PWL = Sound Power Level.
Footnotes:
1. The equipment list at each construction phase is based on the California Emissions Estimator Model and questionnaire filled by the applicant.
2. Federal Highway Administration. (2006). *Construction Noise Handbook*.
3. The noise levels are based on Table 9.1 of the Construction Noise Handbook. If the exact equipment listed is not available, a default noise level of 85 dBA, representative of typical construction equipment, is used. Specifically, the Forklift is modeled using this default value. Additionally, for the category of Tractors/Loaders/Backhoes, the noise level of a Tractor (84 dBA) is used, as it represents the loudest among the three.
Source: Noise and Vibration Impact Analysis (Appendix J)

The nearest off-site noise-sensitive receptors are single-family residences located approximately 70 feet to the north and 90 feet to the west of the Project site boundary. As a conservative analysis, the Noise and Vibration Impact Analysis assumed the two loudest pieces of equipment operating simultaneously during each construction phase. As documented in the Noise and Vibration Impact Analysis (Appendix J), the estimated temporary noise levels from Project construction activities at the nearest sensitive receptors would be 71.9 dBA on-site and 62.8 dBA off-site, which would not exceed the Federal Transit Administration (FTA) daytime threshold of 80 dBA Leq for residential land uses. Project construction would

therefore result in a less-than-significant impact with respect to temporary increases in ambient noise levels.

Regarding off-site construction traffic, the Project would generate a maximum of approximately 8 worker trips and 25 hauling trips per day during the most intensive construction phase. The Project site is accessible via W. 7th Street, which carries approximately 8,686 existing daily vehicle trips. The Project's construction trips would not result in a doubling of traffic volumes on W. 7th Street, and therefore, construction-related traffic noise would not increase by a perceptible 3 dBA (Appendix J). Construction is temporary and trips would cease upon Project completion. As such, impacts related to off-site construction noise would be less than significant.

Operation

Stationary Noise Impacts. Long-term operational noise would be generated from on-site stationary sources including heating, ventilation, and air conditioning (HVAC) equipment, and from on-site mobile sources including passenger vehicles, delivery trucks, and garbage trucks. Table N-2, *Operational Noise Level Increase of the Nearest Receptor*, summarizes the Project's operational noise levels and the resulting increase over existing ambient conditions at the nearest sensitive receptors.

Table N-2: Project Operational Noise Levels

Land Use	Project Noise Level (dBA)	Ambient Noise Level (dBA)	Cumulative Noise Level (dBA)	Increase over Ambient (dBA)[1]	Incremental Increase Threshold (dBA)	Exceed Threshold?
Residential to the North	53.8	69.8	69.9	0.1	1.5	**No**
Residential to the East	41.4	58.3	58.4	0.1	3.0	**No**

Notes:
1. Difference between Cumulative Noise Level and Ambient Noise Level.
Source: Noise and Vibration Impact Analysis (Appendix J)

As documented in the Noise and Vibration Impact Analysis (Appendix J), HVAC units and on-site mobile sources would generate approximately 40.7 dBA during the daytime and 36.1 dBA during the nighttime at the nearest sensitive receptors to the north and west, respectively. These levels do not exceed the City of San Jacinto's exterior thresholds of 65 dBA (daytime) and 45 dBA (nighttime) for single-family residential properties. As shown in Table N-2, *Project Operational Noise Levels*, when combined with existing ambient noise levels (ranging from 58.3 to 69.8 dBA Leq), the Project would result in an overall noise increase of only 0.1 dBA over ambient levels, which would not exceed the applicable incremental thresholds. Therefore, operational stationary noise impacts would be less than significant.

Off-Site Traffic Noise. The Project would generate an estimated 181 net new daily trips. The existing daily trip volume on West 7th Street is approximately 8,686 trips. Based on the Caltrans Traffic Noise Analysis Protocol, the Project-related traffic increase would result in a noise level increase of approximately 0.09 dBA CNEL on W. 7th Street. Because existing ambient noise levels in the Project vicinity exceed 65 dBA CNEL, the applicable significance threshold for off-site traffic noise is 1.5 dBA CNEL. The 0.09 dBA increase

is well below this threshold (Appendix J). Therefore, off-site operational traffic noise impacts would be less than significant.

d) Generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact.

Construction

Construction activities can generate varying degrees of ground vibration depending on the equipment used, the distance to receptors, and soil conditions. Vibration impacts were evaluated using the structure damage assessment methodology in the Caltrans Transportation and Construction Vibration Guidance Manual. The applicable damage threshold for older residential structures is 0.3 in/sec PPV.

Based on the anticipated equipment mix, Project construction would utilize small rubber-tired dozers and loaded trucks. The Project would not use any equipment over 80,000 pounds or heavy-vibration equipment. Table N-3, *Construction Equipment Vibration Levels*, presents the vibration levels for construction equipment at the nearest sensitive receptor distances.

Table N-3: Construction Equipment Vibration Levels

Equipment	Reference Vibration Level at 25 feet (PPV [inches/second])	Vibration Level at 80 feet (PPV [inches/second])	Vibration Level at 90 feet (PPV [inches/second])
Loaded Trucks	0.076	0.013	0.011
Small Bulldozer	0.003	0.001	<0.001

Source: Noise and Vibration Impact Analysis (Appendix J)

As shown in Table N-3, *Vibration Source Amplitudes for Construction Equipment*, the vibration level at the nearest off-site residential structure (located 80 feet from construction activities) from loaded trucks — the most vibration-intensive equipment anticipated — would be 0.013 PPV (in/sec), which would not exceed the 0.3 in/sec PPV threshold established by Caltrans for older residential structures. Therefore, construction vibration impacts at off-site sensitive receptors would be less than significant.

As an expansion project, construction activities would occur in proximity to the existing on-site buildings. Table N-4, *Buffer Distance for Potential Construction Equipment*, identifies recommended buffer distances for construction equipment operating near existing structures.

Table N-4: Buffer Distance for Potential Construction Equipment

Equipment	Reference Vibration Level at 25 Feet (PPV [inches/second])	Buffer Distance for 0.3 PPV [inches/second]
Loaded Trucks	0.076	10
Small Bulldozer	0.003	1

Source: Noise and Vibration Impact Analysis (Appendix J)

To minimize building damage criteria at the existing structures due to vibration from construction equipment, loaded trucks would be required to maintain a minimum buffer distance of 10 feet from the existing building and small bulldozers would be required to maintain a minimum buffer distance of 1 foot

from the existing building (included as PPP N-1). Compliance with these buffer distances during construction would ensure vibration levels at the existing on-site structures remain below the applicable damage threshold. Vibration impacts during construction would be less than significant.

Operation

The Project proposes an expansion of an existing SNF. P Operation of the Project would include passenger vehicles for commuting and garbage trucks for solid waste disposal, which would not be frequent daily activities. Truck vibration levels are dependent on vehicle characteristics, load, speed, and pavement conditions. Daily garbage trucks and occasional delivery trucks, which already exist on-site, would be travelling at very low speeds, so it is expected that vibration from these trucks at nearby sensitive receptors would not be noticeable (Appendix J). Therefore, operational vibration impacts from the proposed project would be less than significant.

e) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Less than Significant Impact. The nearest airport to the Project site is the Hemet Ryan Airport, located approximately 3.9 miles southeast of the Project site. The Project is not located within the Airport Influence Area of the Hemet Ryan Airport (Appendix J). The Project site is located well outside of the 65 dBA CNEL noise contours associated with the Hemet Ryan Airport. Therefore, the proposed Project would not expose people residing or working in the Project area to excessive noise levels from aircraft operations. Impacts would be less than significant.

Existing Plans, Programs, or Policies

PPP N-1: Construction Equipment Buffer Distance. To minimize the effects of vibration from construction equipment on existing structures, loaded trucks would be required to maintain a minimum buffer distance of 10 feet from the existing building and small bulldozers would be required to maintain a minimum buffer distance of 1 foot from the existing building.

Mitigation Measures

None.

5.14. POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

a) Induce substantial unplanned population growth in an area, either directly or indirectly?

Less Than Significant Impact.

The proposed Project includes demolition of an existing 1,074 SF maintenance and storage building for development of a 18,000 SF addition to an existing SNF building, resulting in an expanded facility totaling 33,917 SF. Given that the proposed Project does not propose the development of any housing, the Project is not expected to directly generate permanent residential population. The Project also does not propose any infrastructure improvements or extensions that would directly induce population growth.

Based on a FAR of 0.5, the 2.98-acre Project site can accommodate industrial development of up to 64,904 SF. According to the City of San Jacinto Development Code, the employment generation factor for industrial/manufacturing uses is 500 SF per employee (City of San Jacinto, 2024). Thus, the existing General Plan designation would allow up to 130 employees for the Project site. . While the proposed Projects total of 250 employees would exceed this planning-level estimate, employment generation factors are forecasting tools and do not constitute a cap on site employment. Moreover, the exceedance would not result in substantial unplanned population growth. The approximately 100 new positions would consist of nursing, caregiving, and facility supporting staff, which are occupations readily available within the existing local and regional labor force. According to the SCAG Connect SoCal 2024 Demographics and Growth Forecast Technical Report (SCAG, 2024), Riverside County had a resident labor force of approximately 1,135,000 workers in 2019 compared to only 847,000 jobs, or approximately 1.34 resident workers per job. Within the City of San Jacinto, SCAG estimated approximately 9,700 jobs and 14,900 households in 2019, or roughly 0.65 jobs per household, indicating a substantial surplus of resident workers relative to local employment opportunities. New employment opportunities generated by the Project would therefore be expected to be filled primarily by existing residents, improving the local jobs-housing balance rather than attracting new population to the area. Any incremental immigration associated with the Project would represent a nominal fraction of the population and employment growth anticipated in the City's General Plan and SCAG's regional growth forecasts. Accordingly, the proposed Project would not directly or indirectly induce substantial unplanned population growth, and impacts would be less than significant. No mitigation is required.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The Project site is currently developed with a SNF that provides temporary, short-term care for patients and does not contain any housing. The Project would expand the existing SNF facility to allow for additional 44 SNF-STP beds and 16 PHF beds. No people or housing would be displaced by implementation of the proposed Project. Thus, no impact would occur to the displacement of existing people or housing, necessitating the construction of replacement housing elsewhere.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

5.15. PUBLIC SERVICES

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for:

v. Fire Protection and Emergency Services

Less Than Significant Impact

Fire protection and emergency services in the City of San Jacinto are provided by the Riverside County Fire Department (RCFD) and would service the Project site. There are two fire stations in the City of San Jacinto. The nearest fire station is Riverside County Fire Station 25, located at 132 S San Jacinto Ave, which is 1.4 miles northeast of the Project site. Riverside County Fire Station 78, located at 2450 Cottonwood Ave, is 2.5 roadway miles northwest of the Project site.

The proposed Project would result in an increase in total patients and staff. However, the anticipated increase in patients would be limited in scale and would not substantially increase service demands. The proposed Project would be responsible for the payment of development impact fees which would offset future fire protection needs. Additionally, the proposed Project would be required to adhere to the California Fire Code. Further, the Project would comply with GPU Action RM-6f which ensures future developers will contribute funds for fire services through the adopted developer fees.

The two existing fire stations located near the Project site would be able to accommodate the Project's needs while maintaining their current service commitments. Payment of development fees would ensure that there would be adequate fire services to serve the proposed Project. Additionally, the proposed Project would be developed to the latest City standards, which would ensure adequate

ingress and egress. Therefore, with adequate service fees and circulation for emergency personnel, there would be less than significant impacts related to fire services.

vi. Police Protection

Less Than Significant Impact.

The proposed Project would expand the existing Bradley Garden SNF. The proposed expansion would allow for an additional 59 beds. Additional improvements would include landscaping, utility connections, implementation of stormwater facilities, lighting, parking lot, and driveways to accommodate the expansion.

The Riverside County Sheriff's Department (RCSD) would provide police protection services for the Project site. The San Jacinto Station is located at 160 W. 6th Street, which is approximately 1.08 roadway miles northeast of the Project site.

SNFs typically generate limited police service demand because operations are supervised by trained staff on a 24-hour basis and visitor access is controlled and monitored. The proposed Project would introduce approximately 59 new patients and 100 additional staff, generating a corresponding increase in demand for police services. Based on the officer-to-population ratio of 1 sworn officer per 863 residents (1.16 officers per 1,000 residents) (California State Auditor, 2024), the Project would generate a service demand equivalent to approximately 0.05 additional officers (59/1,000 x 1.16 = 0.06844). This represents less than one full-time officer and is not considered a substantial increase in demand and would not require the construction or expansion of the existing policing facilities. Therefore, substantial adverse physical impacts associated with the provision of new or expanded police facilities would be less than significant.

vii. School Services

No Impact. The proposed Project consists of the expansion of an existing SNF. The Project does not include residential development and would not introduce housing that could generate school-aged children. The facility's patient population is expected to consist primarily of adults receiving short- or long-term care, and would not generate direct demand for local K–12 school enrollment.

The expansion may result in a modest increase in employment at the site; however, the associated indirect population growth is expected to be minimal and dispersed within the regional labor pool. As such, any potential increase in school enrollment associated with new employees would be negligible and would not require the construction of new or expanded school facilities.

Therefore, the Project would not result in a substantial increase in demand for school facilities, and impacts related to schools would be less than significant.

viii. Parks

No Impact. The proposed Project consists of the expansion of an existing SNF. The proposed Project does not propose any residential uses and therefore would not increase the use of existing parks and recreational facilities. The Project will have no impact on the deterioration of these facilities. The proposed development will include the existing outdoor courtyard and a new outdoor common space for use by residents of the SNF. This open space will be within the subject site, and thus will not have

environmental impacts beyond those already analyzed for the Project in this document. Given that the Project will not increase the use of parks or recreation facilities, it will not require the construction or expansion of recreational facilities. Therefore, there would be no impact to parks associated with the proposed Project.

ix. Other Public Facilities

No Impact. As discussed above, the proposed Project is an expansion of the existing SNF. The Project does not propose residential uses and thus would not directly generate growth in the permanent population. Therefore, it is not expected to impact the use or provisions of public facilities. There would be no increase in demand for existing facilities, and no resulting impacts.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

5.16. RECREATION

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that physical deterioration of the facility would be accelerated?

No Impact. The proposed Project consists of the expansion of an existing SNF. The proposed Project does not propose any residential uses, and therefore, would not increase the use of existing public parks and recreational facilities in the City. Residents/patients associated with the proposed Project would primarily utilize the indoor and outdoor recreational amenities provided on-site. The proposed SNF building addition and proposed PHF would include recreation/activity rooms. In addition, the proposed Project would provide outdoor recreational amenities, including a concrete walkway, seating areas with chairs and tables, artificial turf, and decorative plants, as shown in Figure 3-4. The recreational amenities will be within the Project site, and thus would not have environmental impacts beyond those already analyzed for the Project in this document. Given that the Project will not increase the use of parks or recreation facilities, it will not require the construction or expansion of recreational facilities. Therefore, there would be no impact to parks associated with the proposed Project.

b) Require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. As mentioned previously, the proposed Project would include indoor and outdoor recreational amenities for use by residents/patients of the proposed Project. The potential adverse effects associated with implementation of the proposed Project have been considered throughout this analysis. Development of the onsite open space would not have any potentially significant impacts outside of those analyzed for the whole of the Project. In addition, operation of the proposed Project would only result in the demand for parks and recreational facilities as articulated in the previous response, which would not require the construction or expansion of recreational facilities. Therefore, the proposed Project would not require the construction or expansion of other recreational facilities that might have an adverse physical effect on the environment. There would be no impact related to recreation.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

5.17. TRANSPORTATION

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	☒	☐
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less than Significant Impact.

Construction

Construction activities associated with the Project would generate vehicular trips from construction workers traveling to and from the Project site, delivery of construction supplies and import materials to, and export of debris from, the Project site. However, these construction activities would be temporary in nature and only occur during the anticipated 12-month construction period. The increase of trips during construction activities would be limited and is not anticipated to exceed the number of operational trips described below. The short-term vehicle trips from construction of the Project would generate less than significant traffic related impacts.

Operation

The Project proposes a building addition which would total approximately 18,000 SF and the conversion of the existing 2,596 SF vacant office building, associated parking, landscaping, and utility improvements to serve the site. Operation of the Project would introduce new vehicular traffic from workers and proposed operations. Vehicular traffic to and from the Project site would utilize the existing network of regional and local roadways that currently serve the Project site.

The trip generation analysis for the Project was prepared using trip rates from the Institute of Transportation Engineers (ITE) Trip Generation, 12th Edition (2025) based on the "Nursing Home" land use. As shown on Table T-1, *Project Trip Generation*, the proposed Project would result in a net increase of 181 daily trips compared to existing conditions, with a net increase of 8 AM peak hour trips and a net increase of 13 PM peak hour trips.

Table T-1: Project Trip Generation

				AM Peak Hour			PM Peak Hour		
Land Use		**Units**	**Daily**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Trip Rates									
620 Nursing Home[1]		Beds	3.06	0.10	0.04	0.14	0.07	0.15	0.22
Existing Project Trip Generation									
Nursing Home[1]	44	Beds	135	4	2	6	3	7	10
Proposed Project Trip Generation									
Nursing Home[1]	103	Beds	315	10	4	14	7	15	23
Proposed Project Total Trip Generation			315	10	4	14	7	15	23
Net Project Trip Generation			**181**	**6**	**2**	**8**	**4**	**9**	**13**

Notes:
[1] Trip rates from the Institute of Transportation Engineers, Trip Generation, 12th Edition, 2025. Land Use Code 620 – Nursing Home (average rate).
Source: VMT Screening Analysis (Appendix K)

The Project has been designed to construct on-site roadway improvements consistent with the City guidelines. As described under Table LU-2, the Project would be consistent with applicable goals and policies from the City's General Plan Mobility Element.

The Project would be located approximately 0.28 miles from bus stop located at the corner of W 7th Street and S. State Street which is served by Riverside Transit Agency (RTA) Bus Route 44. The Project would not disrupt RTA. As discussed previously, the proposed Project would install 5-foot-wide sidewalk along the Project's frontage on W. 7th Street and S. Grand Avenue. Therefore, the Project would not conflict with alternative transportation and Project impacts to transit, bicycle, and pedestrian facilities would be less than significant.

b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

Less than Significant Impact. Senate Bill (SB) 743 was signed by Governor Brown in 2013 and required the Governor's Office of Planning and Research (OPR) to amend the State CEQA Guidelines to provide an alternative to Level of Service (LOS) for evaluating transportation impacts. SB743 specified that the new criteria should promote the reduction of GHGs, the development of multimodal transportation networks and a diversity of land uses. In response, Section 15064.3 was added to the CEQA Guidelines beginning January 1, 2019. Section 15064.3(c) states that the provisions of the section shall apply statewide beginning on July 1, 2020. State CEQA Guidelines Section 15064.3, *Determining the Significance of Transportation Impacts*, states that VMT is the most appropriate measure of transportation impacts and provides lead agencies with the discretion to choose the most appropriate methodology and thresholds for evaluating VMT.

A VMT Screening Analysis (Appendix K) was prepared according to the City of San Jacinto Traffic Impact Analysis Guidelines which identifies screening thresholds to determine if projects would require a full VMT analysis. If a project meets one of the following criteria, then the VMT impact of the project is considered less-than significant and no further analysis of VMT would be required:

4. Transit Priority Area (TPA) Screening
5. Low VMT Area Screening
6. Project Type Screening

The applicability of each criterion to the proposed Project is discussed below:

Screening Criterion 1 - Transit Priority Area (TPA) Screening: Per the City's VMT screening criteria, projects located within an existing TPA may be presumed to result in a less-than-significant VMT impact. As shown in Figure 2, *WRCOG VMT Tool Screening Results,* based on the WRCOG VMT Tool, the proposed Project is not located within an existing TPA. Therefore, the Project does not satisfy Screening Criterion 1.

Screening Criterion 2 – Low VMT Area Screening: Per the City's VMT screening criteria, projects that are consistent with the existing land use and are located within a low VMT area may be presumed to have a less-than-significant impact on VMT. The Project's proposed land use is not consistent with the General Plan; therefore, Screening Criterion 2 – Low VMT Area Screening is not applicable to the Project.

Screening Criterion 3 – Project Type Screening: According to the City's Guidelines, local serving projects and land uses may be presumed to have a less-than-significant VMT impact. Additionally, projects that are expected to generate 500 or fewer daily vehicle trips are presumed to have a less-than-significant VMT impact. The Project does not propose any local serving land uses. However, as shown in Table 1, the proposed Project is expected to generate 315 total daily vehicle trips, which is fewer than the 500 daily vehicle trip threshold provided in the City's Guidelines. Therefore, the Project satisfies Screening Criterion 3.

As the proposed Project would meet Screening Criteria 3, impacts related to VMT are presumed to be less than significant.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than Significant Impact.

Vehicular access to the Project site would be provided via two ingress and egress driveways connecting to W. 7th Street and one gated emergency access ingress and egress driveway connecting to S. Grand Avenue. Vehicular traffic to and from the Project site would utilize the existing network of regional and local roadways that currently serve the Project site. The proposed Project would not introduce any new roadways or introduce a land use that would conflict with existing urban land uses in the surrounding area. The proposed Project includes internal driveways that would provide cars access to the building and parking. Design of the proposed Project, including the internal private roadway, ingress, egress, and other streetscape changes are subject to the City's development standards. For example, the design of Project internal roadways would be reviewed to ensure fire engine accessibility and turnaround area is provided to the fire code standards. As a result, impacts related to vehicular circulation design features would be less than significant.

d) Result in inadequate emergency access?

Less than Significant Impact.

Construction

The proposed construction activities, including equipment and supply staging and storage, would occur within the Project site, and would not restrict access of emergency vehicles to the Project site or adjacent areas. The installation of driveways and connections to existing infrastructure systems that would be implemented during construction of the proposed Project could require the temporary closure of one side or portions of W. 7th Street and S. Grand Avenue for a short period of time (i.e., hours or a few days). However, the construction activities would be required to ensure emergency access in accordance with Section 503 of the California Fire Code (Title 24, California Code of Regulations, Part 9), which would be ensured through the City's permitting process. Thus, implementation of the Project through the City's permitting process would ensure existing regulations are adhered to and would reduce potential construction related emergency access impacts to a less than significant level.

Operation

As described previously, the proposed Project site would be accessed from two unrestricted ingress and egress driveways on W. 7th Street. The proposed Project would also include a gated driveway along S Grand Avenue which would provide emergency vehicle access to the site. The construction permitting process would provide adequate and safe circulation to, from, and through the Project site, and would provide routes for emergency responders to access different portions of the Project site. The Project would provide a 27.3-foot drive aisle throughout the parking area. Because the Project is required to comply with all applicable City codes, as verified by the City potential impacts related to inadequate emergency access would be less than significant.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

5.18. TRIBAL CULTURAL RESOURCES

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	☐	☐	☒	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☐	☒	☐

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

Less Than Significant Impact.

The Project is subject to Assembly Bill (AB) 52 regarding tribal consultation. AB 52 requires that Lead Agencies evaluate a project's potential to impact tribal cultural resources. Such resources include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the California Register or included in a local register of historical resources (PRC Section 21074). AB 52 also gives Lead Agencies the discretion to determine, supported by substantial evidence, whether a resource falling outside the definition stated above nonetheless qualifies as a "tribal cultural resource."

The Project site is fully developed with four buildings associated with the existing Bradley Gardens care facility, a surface parking lot, and landscaping. As described previously in Section 5.5, *Cultural Resources*, the Cultural Resources Study did not identify any previously recorded resources within the Project site (Appendix D). None of the four existing buildings associated with the site are eligible for listing on the NRHP or the CRHR (Appendix D).

Additionally, a Sacred Lands File (SLF) search was requested from the Native American Heritage Commission (NAHC) on February 3, 2026, to identify if any tribal cultural resources are potentially located

within the Project site. The NAHC responded on February 18, 2026, stating that that the SLF search yielded positive results for known tribal cultural resources or sacred lands within a 1-mile radius of the Project area. The NAHC provided the contact information for 34 Native American tribes and individuals to be contacted for further information regarding the Project area and vicinity.

AB 52 was initiated on July 9, 2026, and concluded August 10, 2026. AB 52 notices regarding this Project were emailed to all Native American tribes identified by the NAHC. Additionally, one copy was sent via mail to the Pechanga Band of Indians. One tribe responded during the AB 52 consultation period.

The Agua Caliente Band of Cahuilla Indians (Agua Caliente Band) responded by letter dated July 9, 2026, confirming the Project area lies outside the Agua Caliente Band Reservation but within the Tribe's Traditional Use Area. Agua Caliente Band noted prior surveys in the vicinity identified cultural resources, deferred further consultation to the Soboba Band of Luiseño Indians, and concluded its consultation efforts on the Project. There was no response from any other tribe on the NAHC list. The City of San Jacinto is located within the traditional territory of the Soboba Band of Luiseño Indians (City of San Jacinto, 2022b). During ground disturbing activities associated with the Project, a tribal cultural resource could be inadvertently discovered and damaged if not properly protected. Pursuant to SJDC Section 17.300.055 (included as PPP TCR-1), the proposed Project developer shall enter into Treatment and Disposition Agreement (TDA) with the Soboba Band of Luiseño Indians to address tribal cultural resources that may be uncovered during ground disturbing activities. Compliance with the SJDC would be implemented through the construction permitting and plan check process. With implementation of the regulatory requirements per SJDC Section 17.300.055, included as PPP TCR-1, impacts related to tribal cultural resources would be less than significant.

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less Than Significant Impact.

As discussed above, the Project would require ground disturbing activity in an area that is identified as the traditional territory of the Soboba Band of Luiseño Indians. During ground disturbing activities associated with the Project, a tribal cultural resource could be inadvertently discovered and damaged if not properly protected. Compliance with SJDC Section 17.300.055, included as PPP TCR-1, requires that the Project developer enter into a TDA with the Soboba Band of Luiseño Indians to address tribal cultural resources that may be uncovered during ground disturbing activities.

Additionally, as described previously, California Health and Safety Code, Section 7050.5, included as PPP CUL-1, requires that if human remains are discovered in the Project site, disturbance of the site shall halt and remain halted until the coroner has conducted an investigation. If the coroner determines that the remains are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. Therefore, compliance with regulatory requirements would ensure that impacts to tribal cultural resources would be less than significant.

Existing Plans, Programs, or Policies

PPP TCR-1: Treatment and Disposition Agreement. Prior to issuance of a grading permit, the Project developer shall enter into a Treatment and Disposition Agreement (TDA) with the Soboba Band of Luiseño Indians to address treatment and disposition of archaeological, or Tribal Cultural Resources and human remains associated with the Soboba Band of Luiseño Indians that may be uncovered or otherwise discovered during ground-disturbing activities related to the project, if monitoring deemed necessary by Soboba Band of Luiseño Indians. The TDA will establish provisions for tribal monitoring and shall be submitted to the City of San Jacinto Planning Division once it has been executed

PPP CUL-1: Human Remains. Listed previously in Section 5.5, *Cultural Resources*.

Mitigation Measures

None.

5.19. UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant Impact.

Water

The Project site is within an area that is currently served by the EMWD. The Project would install new onsite water lines which would connect to the existing 12-inch water line in W 7th Street. The new onsite water system would convey water supplies to the proposed Project and landscaping through plumbing/landscaping fixtures that are compliant with the CalGreen Plumbing Code for efficient use of water.

The proposed Project would continue to receive water supplies through the existing water lines located within W. 7th Street right-of-way which has the capacity to provide the increased water supplies needed to serve the proposed Project, and no expansions of the water pipelines that convey water to the Project site would be required. Installation of the new water distribution lines would only serve the proposed Project and would not provide new water supplies to any off-site areas.

The construction activities related to the onsite water infrastructure that would be needed to serve the proposed Project is included as part of the Project and would not result in any physical environmental effects beyond those identified throughout this document. For example, analysis of construction emissions from excavation and installation of the water infrastructure is included in Sections 5.3, *Air Quality* and 5.8, *Greenhouse Gas Emissions*. Therefore, the proposed Project would not result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, and impacts would be less than significant.

Wastewater

The Project includes installation of onsite sewer lines that would connect to the existing 8-inch sewer line within W. 7th Street. The existing sewer lines would accommodate development of the Project site and would not require expansion to serve the proposed Project. The construction activities related to installation of the onsite sewer infrastructure that would serve the proposed Project, is included as part of the proposed Project and would not result in any physical environmental effects beyond those identified throughout this document. For example, analysis of construction emissions for excavation and installation of the sewer infrastructure is included in Section 5.3, *Air Quality* and 5.8, *Greenhouse Gas Emissions*, and noise volumes from these activities are evaluated in Section 5.13, *Noise*. As the proposed Project includes facilities to serve the proposed development, it would not result in the need for construction of other new wastewater facilities or expansions, the construction of which could cause significant environmental effects. Therefore, impacts would be less than significant.

Stormwater

Stormwater would be collected via a new series of catch basins, inlets, and storm drain lines. The Project includes a parking lot with approximately 1,093 square feet of pervious concrete and a fire access lane surfaced with approximately 3,000 square feet of pervious concrete, which would allow for stormwater infiltration. The Project would also incorporate disconnected roof downspouts that would discharge roof runoff to adjacent landscaped areas for infiltration. Stormwater would be ultimately conveyed to the existing 24-inch storm drain line in W. 7th Street. As discussed above in Section 5.10, *Hydrology and Water Quality*, due to the appropriate sizing of the onsite drainage features and infiltration BMPs, as shown in the Project's Water Quality Management Plan (Appendix H) and Hydrology Report (Appendix I), as ensured through the Project permitting process, operation of the proposed Project would not substantially increase stormwater runoff, and the Project would not require or result in the construction of new off-site storm water drainage facilities or expansion of existing off-site facilities. Thus, impacts would be less than significant.

Electric Power

The Project would continue to connect to the existing Southern California Edison electrical distribution facilities that are adjacent to the Project would not require the construction of new electrical facilities.

Natural Gas

The Project would remain connected to the existing Southern California Gas natural gas distribution facilities that are adjacent to the Project site. The Project site and would not require the construction of new natural gas facilities.

Telecommunications

The proposed Project would require a connection to telecommunication services, such as wireless internet service and phone service. This can be accomplished through connection to existing services, that already service the Project site. There are two main telecommunications providers in the area: Spectrum and Frontier, one of which would provide service to the Project.

The Project would result in no impact related to construction of new or expanded utilities that could result in significant environmental effects.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less Than Significant Impact.

The EMWD is responsible for supplying potable water to the Project site and its region. Water supplies consist of recycled water, potable groundwater, desalinated groundwater, and imported water. EMWD provides potable water, recycled water, and wastewater services to an area of approximately 682 square miles in western Riverside County and northern San Diego County, including eleven incorporated cities and unincorporated areas of Riverside County and San Diego County (EMWD, 2026).

The 2025 EMWD Urban Water Management Plan (UWMP) details that EMWD will have sufficient supplies to meet both retail and wholesale demands from 2030 to 2050 under normal year, single dry year, and multiple dry year conditions. Furthermore, EMWD forecasts for Project water demand are based on population projections of SCAG, which rely on adopted land use designations contained within the general plans that cover the geographic area. Implementation of the proposed Project would result in 59 new patients and 100 new employees. The current EMWD's adopted indoor water use efficiency standard is 47 gallons per capita per day. Thus, 59 new patients and 100 new employees would generate an additional water demand of 7,473 gallons per day or 8.37 acre-feet per year (AFY), which is within the anticipated increased demand and supply for water. The UWMP projects the population served will increase from 641,300 in 2025 to 761,100 in 2050. The UWMP also projects that total planning water demands would increase from 147,420 AFY in 2030 to 178,920 AFY in 2050, with projected supplies of 149,600 and 186,600 acre-feet per year respectively, demonstrating a positive supply margin throughout the planning period (EMWD, 2026). Development of the Project site would also be required to be compliant with CalGreen/Title 24 requirements for low flow plumbing fixtures and irrigation, which would provide for efficient water use.

Furthermore, the UWMP states that EMWD's diverse supply portfolio is expected to allow it to maintain reliable water service through 2050 under normal and dry conditions. Therefore, EMWD has sufficient water supplies available to serve the Project site during normal, dry and multiple dry years, and impacts would be less than significant.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less Than Significant Impact.

Wastewater generated from the Project site would also be treated by EMWD, which conveys wastewater from the Project site to the San Jacinto Valley Regional Water Reclamation Facility (RWRF) within EMWD. The San Jacinto RWRF has capacity of 15,700 AFY, with a total volume received in 2025 of 8,799 AFY (EMWD, 2026). Therefore, there is a remaining capacity of 6,901 AFY, or approximately 6.2 million gallons per day (EMWD, 2026). This remaining capacity is adequate to serve the proposed Project, and the wastewater treatment provider has adequate capacity to accommodate the Project's projected demand in addition to its existing commitments. Thus, impacts would be less than significant.

d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact.

The Project site would be served by the Lamb Canyon Landfill, a Class III municipal solid waste landfill operated by Riverside County with a permitted capacity of 5,000 tons per day and a closure date of April 2032. The highest recorded daily volume was 2,820.78 tons on May 28, 2026, indicating remaining permitted capacity (Cal Recycle, 2026a). The second closest landfill is Badlands Landfill, also operated by Riverside County with a permitted capacity of 5,000 tons per day and a closure date of 2059, expected to succeed the operation of the Lamb Canyon Landfill. In the month of June, the highest recorded daily volume was 3,667.04 tons on June 2, 2026, indicating remaining permitted capacity (Cal Recycle, 2026b).

The Project would generate solid waste from 59 new patients/beds and 100 new employees, as previously described. Residential waste generation is based on 3.8 pounds per person per day from the GPU EIR (City of San Jacinto, 2022b), resulting in approximately 225 pounds per day (40.92 tons per year) for patients. Employee waste generation is based on 19.5 pounds per employee per day from the GPU EIR (City of San Jacinto, 2022b), resulting in approximately 1,905 pounds per day (356.6 tons per year) for employees. Total Project solid waste generation is approximately 2,175 pounds per day (397.5 tons per year).

The proposed Project would also be subject to the Medical Waste Management Act (Health and Safety Code Section 117600 et seq.), administered statewide by the California Department of Public Health (CDPH) and enforced locally by the Riverside County Department of Environmental Health (RCDEH) as the designated local enforcement agency. The Project operator would be required to obtain a medical waste generator permit from RCDEH and to segregate, contain, label, and store medical waste in accordance with applicable requirements. Medical waste would be collected by a registered medical waste hauler and transported to a permitted medical waste treatment facility, with treated residue subsequently disposed of at a permitted landfill. Compliance with these existing regulatory requirements would ensure that medical waste generated by the Project would not result in a significant impact related to solid waste disposal capacity or hazardous materials handling.

Pursuant to AB 341's 75 percent diversion requirement, approximately 544 pounds per day (99.4 tons per year) would be disposed of at landfill facilities. Given the relatively small incremental contribution relative

to the capacity of Lamb Canyon Landfill and other regional facilities, sufficient landfill capacity is expected to be available. Therefore, solid waste impacts would be less than significant.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than Significant Impact.

The proposed Project would result in a new development that would generate an increased amount of solid waste. All solid waste-generating activities within the City are subject to the requirements set forth in Section 5.408.1 of the 2025 California Green Building Standards Code that requires demolition and construction activities to recycle or reuse a minimum of 65 percent of the nonhazardous construction and demolition waste, and AB 341 that requires diversion of a minimum of 75 percent of operational solid waste.

The proposed Project would be required to comply with all federal, State, and local regulations related to solid waste. Furthermore, the proposed Project would comply with all standards related to solid waste diversion, reduction, and recycling during Project construction and operation. Therefore, the proposed Project is anticipated to result in less than significant impacts related to potential conflicts with federal, State, and local management and reduction statutes and regulations pertaining to solid waste.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

5.20. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact.

According to the CAL FIRE Hazard Severity Zone map, and GPU EIR Figure 5.20-1, *Fire Hazard Severity Zones,* the Project site not located within a State Responsibility Area (SRA) or a Very High Fire Hazard Severity Zone (VHFHSZ) (CAL FIRE, 2025; City of San Jacinto, 2022). The Project site does not contain any emergency facilities, nor does it serve as an emergency evacuation route. Direct access to the Project site would be provided via three driveways, two on W. 7th Street and one on S. Grand Avenue. The Project is required to design and construct internal access and provide fire suppression facilities (e.g., hydrants and sprinklers) in conformance with the SJMC, and Riverside County Fire Department would review the development plans prior to approval to ensure adequate emergency access pursuant to the requirements in Section 503 of the California Fire Code (Title 24, California Code of Regulations, Part 9, included in the SJMC (Chapter 8.16, Fire Code). As a result, the proposed Project would not impair an adopted emergency response plan or emergency evacuation plan and would not result in an impact.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact.

As described in the previous response, the Project site is not located within a SRA or a VHFHSZ. The Project site is currently developed and relatively flat. The areas within the Project's vicinity also do not contain

hillsides or other factors that could exacerbate wildfire risks. Therefore, the Project would not result in no impacts related to exposure of people or structures to significant risk involving wildland fires.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact.

As described in the previous responses, the Project site is not within a SRA or a VHFHSZ. The Project site is located within an urbanized area within the City of San Jacinto. The Project does not involve any new infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risks or result in other impacts to the environment. Therefore, the Project would result in no impacts.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact.

As described in the previous responses, the Project site is not within a SRA or VHFHSZ. As discussed in Section 5.10, *Hydrology and Water Quality*, the Project would not result in changes to drainage. Also as discussed in Section 5.7, *Geology and Soils*, the Project site is relatively flat and is not susceptible to landslides. Likewise, areas adjacent to the Project site are relatively flat urban sites that do not contain hillsides or other factors that would expose people or structures to flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes. The Project would not generate slopes and would connect to existing drainage facilities. Therefore, the Project would result in no impacts related to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

5.21. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than Significant Impact with Mitigation Incorporated.

Based on the discussion in Section 5.4, *Biological Resources*, the Project site is fully disturbed and does not support native habitat, riparian areas, wetlands, or jurisdictional waters. The Project site does not suitable habitat for any special-status plant species, wildlife species, or sensitive plant communities (Appendix C). The Project site is located within the San Jacinto Valley Area Plan of the Western Riverside County MSHCP but is not located within a Criteria Cell, conservation areas, or designated survey areas. With the payment of MSHCP fees pursuant to PPP BIO-1, the Project would not result in any conflicts with the MSHCP. However, the existing ornamental landscaping trees on the site have the potential to provide habitat for nesting migratory birds. Therefore, MM BIO-1 has been incorporated to ensure MBTA compliance and would require a nesting bird survey to be conducted prior to the commencement of construction during nesting season, which would reduce potential impacts related to nesting avian species and native wildlife nursery sites to a less-than-significant level.

As described in Section 5.5, *Cultural Resources,* the cultural resources study and structural evaluation determined that the four on-site buildings, while over 50 years old, do not meet the criteria for listing on the California Register of Historical Resources and are not considered historically significant (Appendix D). No prehistoric resources were identified during the field survey. However, Mitigation Measure CUL-1 has been included to require archaeological evaluation in the event a resource is inadvertently discovered. Therefore, with implementation of MM CUL-1, potential impacts related to cultural resources would be reduced to a less-than-significant level.

As described in Section 5.7, *Geology and Soils*, earthmoving activities, including grading and excavation activities, have the potential to disturb previously unknown paleontological resources if earthmoving activities occur at substantial, undisturbed depths. Thus, MM GEO-1, which requires the preparation of a PRIMP and that ground disturbing activities be monitored to identify and recover any significant fossil remains, has been included. With the implementation of MM GEO-1 into the Project, potential impacts to paleontological resources would be less than significant.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less than Significant with Mitigation Incorporated.

Cumulative impacts are defined as two or more individual effects that, when considered together, are considerable or that compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the development when added to the impacts of other closely related past, present, and reasonably foreseeable or probable future developments. Cumulative impacts can result from individually minor, but collectively significant, developments taking place over a period. The CEQA Guidelines, Section 15130 (a) and (b), states:

a) Cumulative impacts shall be discussed when the project's incremental effect is cumulatively considerable.
b) The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided of the effects attributable to the project. The discussion should be guided by the standards of practicality and reasonableness.

As presented in this document, potential Project-related impacts are either no impact, less than significant or would be less than significant with mitigation incorporated. Based on the analysis contained in this document, Project-related impacts would be reduced to less than significant levels with the incorporation of mitigation measures.

The cumulative effect of the proposed Project taken into consideration with other development projects in the area would be limited, because the Project would develop the site in consistency with the General Plan land use designation, zoning designation, and City code, and would not result in substantial effects to any environmental resource topic, as described though out this document.

Given that the potential Project-related impacts would all be mitigated to a less than significant level, implementation of the proposed Project would not result in impacts that are cumulatively considerable when evaluated with the impacts of other current projects, or the effects of probable future projects. Therefore, the proposed Project's contribution to any significant cumulative impacts would be less than cumulatively considerable. As discussed in Sections 5.1 through 5.20 of this document, mitigation would be required and incorporated as necessary. Therefore, impacts would be less than significant with mitigation incorporated.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant with Mitigation Incorporated.

Based on the Project Description and the preceding responses in Sections 5.1 through 5.20 of this document, implementation of the proposed Project would not cause substantial adverse effects to human beings because all potentially significant impacts of the proposed Project would be mitigated to a less than significant level. Therefore, since all potentially significant impacts of the proposed Project are expected to be mitigated to a less than significant level, implementation of the proposed Project would not cause substantial adverse effects on human beings.

Existing Plans, Programs, or Policies

PPP AES-1: Glare and Outdoor Lighting Standards. As listed in Section 5.1, *Aesthetics*.

PPP AQ-1: SCAQMD Rule 403. As listed in Section 5.3, *Air Quality*.

PPP AQ-2: SCAQMD Rule 1113. As listed in Section 5.3, *Air Quality*.

PPP AQ-3: SCAQMD Rule 402. As listed in Section 5.3, *Air Quality*.

PPP BIO-1: MSHCP Fees. As listed in Section 5.4, *Biological Resources*.

PPP CUL-1: Human Remains. As listed in Section 5.5, *Cultural Resources*.

PPP GEO-1: CBC Compliance. As listed in Section 5.7, *Geology and Soils.*

PPP HAZ-1: SCAQMD Rule 1403. As listed in Section 5.9, *Hazards and Hazardous Materials***.**

PPP HAZ-2: Lead. As listed in Section 5.9, *Hazards and Hazardous Materials***.**

PPP HYD-1: SWPPP. As listed in Section 5.10, *Hydrology and Water Quality.*

PPP HYD-2: WQMP. As listed in Section 5.10, *Hydrology and Water Quality*.

PPP TCR-1: Treatment and Disposition Agreement. As listed in Section 5.18, *Tribal Cultural Resources*.

Mitigation Measures

MM BIO-1: Pre-Construction Nesting Bird Survey. As listed in Section 5.4, *Biological Resources*.

MM CUL-1: Inadvertent Discovery. As listed in Section 5.5, *Cultural Resources*.

MM GEO-1: Paleontological Monitoring. As listed in Section 5.7, *Geology and Soils*.

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2. RESPONSE TO COMMENTS ON THE PUBLIC REVIEW MND

This chapter of the Final Initial Study/Mitigated Negative Declaration (MND) contains responses to the comments that the City of San Jacinto (Lead Agency) received on the Public Review MND (SCH No. 2026090689) (Chapter 1) for the Bradley Gardens Skilled Nursing Facility Expansion Project during the public review period, which began on September 17, 2026, and ended on October 16, 2026. This document has been prepared in accordance with the California Environmental Quality Act (CEQA) as amended (Public Resources Code Section 21000 et seq.) and the Guidelines for Implementation of the California Environmental Quality Act (State CEQA Guidelines) (Cal. Code Regs., tit. 14, § 15000 et seq.) and represents the independent judgment of the Lead Agency. This document, together with the Public Review Initial Study/MND and the Mitigation Monitoring and Reporting Program (MMRP) comprise the Final Initial Study/MND.

The following public comments were submitted to the City of San Jacinto during the public review period:

Individuals

I1. Allison Jones, Received September 18, 2026

Agencies

A1. South Coast Air Quality Management District, Received October 16, 2026

The public comments and responses to comments are included in the public record and are available to the Lead Agency decision-makers for their review and consideration prior to making their decision whether to approve the proposed Project. Pursuant to State CEQA Guidelines Section 15074(b), *Consideration and Adoption of a Negative Declaration or Mitigated Negative Declaration*, none of the comments provide substantial evidence that the Project will have significant environmental effects which would require preparation of an Environmental Impact Report. Further, none of the information in the letters or responses constitute the type of significant new information that requires recirculation of the Bradley Gardens Skilled Nursing Facility Expansion Project IS/MND for further public review under State CEQA Guidelines Section 15073.5, *Recirculation of a Negative Declaration Prior to Adoption*. None of this new material indicates that the Project will result in a significant new environmental impact not previously disclosed in the Bradley Gardens Skilled Nursing Facility Expansion Project MND. Additionally, none of this information indicates that there would be a substantial increase in the severity of a previously identified environmental impact that will not be mitigated, or that there would be any of the other circumstances requiring recirculation described in State CEQA Guidelines Section 15073.5.

Although State CEQA Guidelines Section 15088 does not require a Lead Agency to prepare written responses to comments received, the City of San Jacinto has elected to prepare the following written responses with the intent of providing a comprehensive and meaningful evaluation of the proposed Project. The number designations in the responses are correlated to the bracketed and identified portions of each comment letter.

LETTER I1: ALISON JONES, RECEIVED SEPTEMBER 18, 2026

From: Alison Jones <alison.jones.otsc@gmail.com>
Sent: Friday, September 18, 2026 11:08 AM
To: Chen, Frank <fchen@sanjacintoca.gov>
Subject: Formal Public Comment and Objection – Bradley Gardens Expansion Project PROJ25-0178

[**NOTICE:** This message originated outside of City of San Jacinto -- **DO NOT CLICK** on **links** or open **attachments** unless you are sure the content is safe.]

Dear Mr. Chen,

My name is Alison Jones, and I live at Parkview Estates, 913 South Grand Avenue, Space 71, San Jacinto, California 92582.

My home is very close to the proposed Bradley Gardens Skilled Nursing Facility Expansion Project at 980 West Seventh Street.

Please accept this email as my formal public comment and objection to the Draft Initial Study and Mitigated Negative Declaration for the Bradley Gardens Skilled Nursing Facility Expansion Project, PROJ25-0178, SCH No. 2026090689. I1.1

I also object to the approval of the Conditional Use Permit and Site Plan and Design Review in their present form.

I am requesting that the City not adopt the Mitigated Negative Declaration as currently written and not approve the project as presently proposed.

Before making any decision, the City should require additional analysis of traffic, parking, pedestrian safety, emergency access, noise, lighting, security, construction impacts, and compatibility with the nearby residential community. I1.2

If these potential impacts cannot be adequately evaluated and mitigated through the current environmental document, I request preparation of an Environmental Impact Report or revision and recirculation of the environmental study for additional public review.	I1.2 cont.
The proposed project would expand the existing facility from 44 beds to 103 beds, add psychiatric treatment capacity, construct an approximately 17,372-square-foot addition, and reportedly add approximately 100 employees. The notice estimates only 181 additional daily vehicle trips. That estimate requires closer examination considering employee shift changes, visitors, patient transportation, ambulances, deliveries, vendors, medical providers, and other service vehicles.	I1.3
Parkview Estates and the surrounding streets already experience significant parking and traffic problems. Vehicles frequently occupy the available street space, and key intersections serving our neighborhood lack adequate traffic controls. Adding this level of activity may create additional risks for residents, pedestrians, children, disabled individuals, emergency vehicles, and drivers entering or leaving the mobile home park.	I1.4
I ask the City to provide and carefully examine the following: 1. The complete traffic study and the data used to calculate the projected increase of 181 daily trips.	I1.5
2. The expected number of employees on each shift and the anticipated times of shift changes.	I1.6
3. The number of on-site parking spaces and evidence that the parking supply will accommodate employees, visitors, medical transportation, ambulances, deliveries, and vendors without causing overflow parking in the surrounding neighborhood.	I1.7
4. An evaluation of the entrances and intersections serving the project and Parkview Estates, including whether stop signs, crosswalks, improved lighting, turn controls, or other traffic-safety improvements are necessary.	I1.8
5. An emergency-access analysis addressing whether fire engines and ambulances can safely and promptly reach the facility and surrounding homes when nearby streets are congested or lined with parked vehicles.	I1.9
6. A pedestrian-safety analysis that considers nearby homes, children, disabled residents, and San Jacinto Elementary School.	I1.10
7. The anticipated frequency of ambulance arrivals, emergency calls, sirens, nighttime activity, deliveries, and patient transportation.	I1.11
8. A detailed operational and security plan describing staffing, secure entrances and exits, patient admissions and discharges, unauthorized-departure prevention, emergency incidents, and coordination with local police, fire, and emergency medical services.	I1.12
9. An evaluation of operational noise, exterior lighting, mechanical equipment, construction noise, dust, construction vehicles, and nighttime impacts on nearby residents.	I1.13
10. An assessment of whether the project's size and around-the-clock operations are	I1.14

compatible with the immediately adjacent residential community. I1.14 con

I am a disabled resident and an autistic adult. Members of my family and other residents of Parkview Estates also live with autism, disabilities, mobility limitations, and sensory sensitivities. Increased traffic, noise, emergency activity, lighting, congestion, and restricted access can affect disabled and autistic residents more seriously than the general population. Predictable and safe access to our homes is especially important for residents with mobility and sensory-related disabilities. I1.15

My concerns are not based on hostility toward individuals who need mental-health or skilled-nursing services. I support appropriate access to healthcare.

My concern is whether a development of this size and intensity can operate safely at this particular location without creating significant impacts for the surrounding residential community. I1.16

If the City considers approving the project, I request enforceable conditions requiring sufficient on-site employee and visitor parking, restrictions against neighborhood overflow parking, appropriate traffic controls, protected emergency access, controlled exterior lighting, construction-hour limitations, noise restrictions, a written security and emergency-response plan, and a designated facility contact for neighborhood complaints. I1.17

Please include this email and any attachments in the official administrative record for PROJ25-0178. Please also add me to the notification list for every Planning Commission or City Council meeting, environmental decision, revised study, staff report, project modification, and appeal associated with this project. I1.18

Please confirm in writing that this comment was received on time and made part of the official record. I also request a copy or working link to the complete Initial Study, traffic analysis, parking plan, site plan, operational statement, security plan, and all supporting technical studies.

Thank you for considering the effects this project may have on Parkview Estates and the surrounding San Jacinto community. I1.19

Sincerely,

Alison Jones
913 South Grand Avenue, Space 71
San Jacinto, California 92582

RESPONSE TO COMMENT LETTER I1: Alison Jones

Response to Comment I1.1: This comment states that the commenter resides at Parkview Estates, 913 South Grand Avenue, near the Project site, and submits a formal comment and objection to the Draft IS/MND for the Bradley Gardens Skilled Nursing Facility Expansion Project (SCH No. 2026090689). The commenter also objects to approval of the Conditional Use Permit and Site Plan and Design Review in their present form, and requests that the City not adopt the MND as currently written and not approve the Project as presently proposed.

The commenter's opposition to the Project is noted. The comment does not identify any specific deficiency in the IS/MND or provide evidence of significant environmental impacts that would rise to the level of a fair argument requiring the preparation of an EIR. The specific concerns raised by the commenter are addressed in Responses to Comments I1.2 through I1.19 below. The comment is introductory in nature and does not contain any information requiring changes to the IS/MND. The comment will be forwarded to City decisionmakers as part of the Final IS/MND.

Response to Comment I1.2: This comment states that, before making any decision, the City should require additional analysis of traffic, parking, pedestrian safety, emergency access, noise, lighting, security, construction impacts, and compatibility with the nearby residential community. The commenter requests the preparation of an EIR, or the revision and recirculation of the IS/MND, if these potential impacts cannot be adequately evaluated and mitigated through the current environmental document.

Each of the topics identified by the commenter was evaluated in the IS/MND. Traffic, pedestrian facilities, and emergency access are addressed in Section 5.17, *Transportation*, and Section 5.9, *Hazards and Hazardous Materials*. Parking is addressed in Table AES-1 of Section 5.1, *Aesthetics*, and Table LU-1 of Section 5.11, *Land Use and Planning*. Noise and vibration are addressed in Section 5.13, *Noise*. Lighting and glare are addressed in Section 5.1, *Aesthetics*. Police and fire protection services are addressed in Section 5.15, *Public Services*. Construction-related air quality and health risk impacts are addressed in Section 5.3, *Air Quality*. Compatibility with surrounding land uses is addressed in Section 5.11, *Land Use and Planning*. As described in those sections and in Responses to Comments I1.3 through I1.17 below, impacts related to each of these topics were determined to be less than significant.

Pursuant to State CEQA Guidelines Section 15064(f)(5), argument, speculation, unsubstantiated opinion or narrative, or evidence that is clearly inaccurate or erroneous does not constitute substantial evidence. The comment does not provide any substantial evidence to support a fair argument that the Project would result in a significant environmental impact requiring preparation of an EIR. Further, none of the information in the comment letter or responses constitutes the type of significant new information that requires recirculation of the IS/MND for further public review under State CEQA Guidelines Section 15073.5, *Recirculation of a Negative Declaration Prior to Adoption*. The comment does not contain any information requiring changes to the IS/MND. The comment will be forwarded to City decisionmakers as part of the Final IS/MND.

Response to Comment I1.3: This comment summarizes the Project description, including the expansion of the existing facility from 44 beds to 103 beds, the addition of psychiatric treatment capacity, the construction of an approximately 17,372-square-foot addition, and the addition of approximately 100 employees. The commenter states that the estimate of 181 additional daily vehicle trips requires closer

examination considering employee shift changes, visitors, patient transportation, ambulances, deliveries, vendors, medical providers, and other service vehicles.

As described in Section 3, *Project Description*, of the IS/MND, the Project would increase the capacity of the existing Bradley Gardens facility from 44 beds to 103 beds through an approximately 17,372 SF addition to the existing SNF building (conservatively analyzed as 18,000 SF) and the conversion of the existing 2,596 SF vacant office building into a 16-bed PHF. The Project would add 100 new employees across all shifts to the existing 150 employees, for a total of 250 employees. The existing facility currently operates 24 hours a day, seven days a week, and the Project would not change these existing operations.

As described in Section 5.17, *Transportation*, of the IS/MND, Project trip generation was calculated using trip rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 12th Edition (2025), for Land Use Code 620, Nursing Home. ITE trip rates are derived from vehicle counts taken at the driveways of existing facilities of the same land use type, and therefore account for all vehicles entering and exiting those facilities, including employee trips associated with shift changes, visitors, patient transportation, ambulances, deliveries, vendors, and other service vehicles. As shown in Table T-1, *Project Trip Generation*, of the IS/MND, the expanded 103-bed facility would generate a total of 315 daily trips, which represents a net increase of 181 daily trips compared to the existing 44-bed facility, including a net increase of 8 AM peak hour trips and 13 PM peak hour trips.

Pursuant to State CEQA Guidelines Section 15064.3, vehicle miles traveled (VMT) is the appropriate metric for evaluating transportation impacts under CEQA. As described in the VMT Screening Analysis (Appendix K of the IS/MND), projects that generate 500 or fewer daily vehicle trips are presumed to have a less than significant VMT impact as regulated by the City of San Jacinto Traffic Impact Analysis Guidelines. The Project's total of 315 daily trips is less than the 500 daily vehicle trip threshold. Therefore, the Project satisfies Screening Criterion 3, Project Type Screening, and VMT impacts would be less than significant. The comment does not contain any information requiring changes to the IS/MND. The comment will be forwarded to City decisionmakers as part of the Final IS/MND.

Response to Comment I1.4: This comment states that Parkview Estates and the surrounding streets already experience significant parking and traffic problems, that vehicles frequently occupy the available street space, and that key intersections serving the neighborhood lack adequate traffic controls. The commenter expresses concern that the Project could create additional risks for residents, pedestrians, children, disabled individuals, emergency vehicles, and drivers entering or leaving the mobile home park.

As part of the 2019 amendments to the CEQA Guidelines, SB 743 directed that the revised CEQA Guidelines "shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses" (Public Resources Code Section 21099[b][1]); and that "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment" (Public Resources Code Section 21099[b][2]). As such, pursuant to Public Resources Code Section 21099(b)(2), the IS/MND is not required to analyze impacts related to traffic congestion as it shall not be considered an impact on the environment. As shown in Table T-1, *Project Trip Generation*, in Section 5.17 of the IS/MND, the proposed Project would result in a net increase of 181 daily trips compared to existing conditions, with a net increase of 8 AM peak hour trips and a net increase of 13 PM peak hour trips.

Regarding parking, under CEQA, a project's effect on parking availability is not, in itself, a physical impact on the environment. Parking deficits are considered a social effect rather than an environmental impact (*San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656), and the State CEQA Guidelines Appendix G checklist does not include parking as a threshold of significance. Nevertheless, as shown in Table AES-1, Consistency with San Jacinto Development Code Standards, in Section 5.1 of the IS/MND, the Project would provide 52 on-site parking spaces, which meets the San Jacinto Development Code (SJDC) parking requirement for congregate care facilities of one space for each on-duty employee and one space for each 10 beds. Parking for employees, patients, and visitors would be provided on site in a surface lot along the northern boundary of the Project site.

Regarding safety, vehicular access for daily operations would be provided via two driveways on W. 7th Street. The Project would consolidate the two existing driveways along the center of the site's W. 7th Street frontage into one 24-foot-wide driveway and widen the existing driveway in the northeastern corner of the site to 24 feet. The proposed 25-foot-wide driveway on S. Grand Avenue would be gated and would provide emergency vehicle access only. The Project would also dedicate 3 feet of right-of-way along W. 7th Street and 6 feet along S. Grand Avenue and install 5-foot-wide sidewalks along both Project frontages. The Project would not introduce any new roadways or land uses that would conflict with existing uses in the surrounding area, and the design of the Project's driveways and internal circulation is subject to review for compliance with the City's development standards and California Building Code safety standards. As discussed in Section 5.17(c) of the IS/MND, impacts related to hazards due to a geometric design feature would be less than significant. The comment does not contain any information requiring changes to the IS/MND. The comment will be forwarded to City decisionmakers as part of the Final IS/MND.

Response to Comment I1.5: This comment requests the complete traffic study and the data used to calculate the projected increase of 181 daily trips.

The VMT Screening Analysis, which was prepared in accordance with the City of San Jacinto Traffic Impact Analysis Guidelines, is included as Appendix K of the IS/MND. The trip generation data is summarized in Table T-1, *Project Trip Generation*, in Section 5.17 of the IS/MND. As shown in Table T-1, trip generation was calculated using the ITE Trip Generation Manual, 12th Edition (2025). The existing 44-bed facility generates approximately 135 daily trips, and the expanded 103-bed facility would generate approximately 315 daily trips, for a net increase of 181 daily trips, including a net increase of 8 AM peak hour trips and 13 PM peak hour trips. As described in Response to Comment I1.3, ITE trip rates reflect all vehicles accessing surveyed facilities, including employee, visitor, delivery, patient transport, and service vehicle trips.

As described in Response to Comment I1.4, automobile delay and traffic congestion are not considered significant impacts on the environment pursuant to Public Resources Code Section 21099(b)(2). Therefore, a level of service (LOS) traffic study is not required for purposes of CEQA. The IS/MND and its technical appendices, including Appendix K, are available for review at https://www.sanjacintoca.gov/city_departments/community-development/planning/c_e_q_a. The comment does not contain any information requiring changes to the IS/MND. The comment will be forwarded to City decisionmakers as part of the Final IS/MND.

Response to Comment I1.6: This comment requests the expected number of employees on each shift and the anticipated times of shift changes.

As described in Section 3.4, *Operational Characteristics*, of the IS/MND, the existing Bradley Gardens facility operates 24 hours a day, seven days a week, and the Project would not change these existing operations. The Project would add 100 new employees across all shifts to the existing 150 employees, for a total of 250 employees.

As described in Response to Comment I1.3, the ITE trip rates used to calculate Project trip generation are based on vehicle counts at existing nursing home facilities and inherently account for employee trips associated with shift changes. Additionally, the Project's on-site parking supply was calculated based on the SJDC requirement of one parking space for each on-duty employee and one space for each 10 beds, as shown in Table AES-1 of the IS/MND. The City would review and approve the site's circulation to ensure safety features as provided in the California Building Code are implemented as part of the Project's permitting process. The comment does not contain any information requiring changes to the IS/MND. The comment will be forwarded to City decisionmakers as part of the Final IS/MND.

Response to Comment I1.7: This comment requests the number of on-site parking spaces and evidence that the parking supply would accommodate employees, visitors, medical transportation, ambulances, deliveries, and vendors without causing overflow parking in the surrounding neighborhood.

As described in Section 3.2, Project Features, of the IS/MND, the expanded facility would include a total of 52 passenger vehicle parking spaces, including 4 accessible spaces, in a surface lot along the northern boundary of the Project site for employees, patients, and visitors. As shown in Table AES-1, *Consistency with San Jacinto Development Code Standards*, the Project's 52 parking spaces meet the SJDC minimum parking requirement for congregate care facilities with 15 or more beds of one space for each on-duty employee and one space for each 10 beds. As shown in Table LU-1 of the Draft IS/MND, the Project would also be consistent with General Plan Policy M-5.1, Appropriate Parking Supply. In addition, as shown on Figure 3-1, *Conceptual Site Plan*, the Project would retain the existing covered passenger drop-off and loading zone to accommodate patient transportation and medical transport vehicles, and would provide a 10-foot by 25-foot loading space for deliveries and vendors. The Project would also provide 6 bicycle parking spaces.

Under CEQA, a project's effect on parking availability is not, in itself, a physical impact on the environment. Parking deficits are considered a social effect rather than an environmental impact (*San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656), and the State CEQA Guidelines Appendix G checklist does not include parking as a threshold of significance. The comment does not contain any information requiring changes to the IS/MND. The comment will be forwarded to City decisionmakers as part of the Final IS/MND.

Response to Comment I1.8: This comment requests an evaluation of the entrances and intersections serving the Project and Parkview Estates, including whether stop signs, crosswalks, improved lighting, turn controls, or other traffic-safety improvements are necessary.

As described in Section 5.17(c), *Transportation*, of the IS/MND, vehicular access to the Project site would be provided via two ingress and egress driveways on W. 7th Street and one gated emergency access driveway on S. Grand Avenue. The Project would consolidate two existing driveways on W. 7th Street into one 24-foot-wide driveway and widen the existing northeastern driveway to 24 feet, which would reduce the number of driveway conflict points along the W. 7th Street frontage. Vehicular traffic to and from the Project site would use the existing network of regional and local roadways that currently serve the site,

and the Project would not introduce any new roadways or incompatible uses. The design of the Project's driveways, internal circulation, and frontage improvements compliance with the City's development standards would be ensured by the City's development review and permitting process. The Project would also install 5-foot-wide sidewalks along its W. 7th Street and S. Grand Avenue frontages to enhance pedestrian access and safety.

As described in Section 5.17, *Transportation*, the Project would generate a net increase of 8 AM peak hour trips and 13 PM peak hour trips compared to existing conditions. Per the City's Traffic Impact Analysis Guidelines, this level of trip generation would not substantially change traffic conditions at the intersections serving the Project site or Parkview Estates. California Building Code and circulation development standards would be ensured by the City's development review and permitting process. Therefore, impacts related to hazards due to a geometric design feature were determined to be less than significant, and no off-site traffic control improvements are required to mitigate a CEQA impact. The comment does not contain any information requiring changes to the IS/MND. The comment will be forwarded to City decisionmakers as part of the Final IS/MND.

Response to Comment I1.9: This comment requests an emergency-access analysis addressing whether fire engines and ambulances can safely and promptly reach the facility and surrounding homes when nearby streets are congested or lined with parked vehicles.

Emergency access is evaluated in Section 5.9(f), *Hazards and Hazardous Materials*, Section 5.15, *Public Services*, Section 5.17(d), *Transportation*, and Section 5.20(a), *Wildfire*, of the IS/MND. Fire protection and emergency medical services would be provided by the Riverside County Fire Department (RCFD). The nearest fire station is RCFD Fire Station 25, located approximately 1.4 miles northeast of the Project site.

During operation, the Project site would be accessed by two unrestricted driveways on W. 7th Street and a gated 25-foot-wide emergency vehicle access driveway on S. Grand Avenue, which would be equipped with Knox padlocks for fire department access. The Project would provide a 27.3-foot-wide drive aisle throughout the parking area and a fire access lane along the southern and eastern sides of the proposed SNF-STP building addition, surfaced with pervious concrete designed to support an 80,000-pound fire apparatus load. The Project is required to design and construct internal access and provide fire suppression facilities (e.g., hydrants and sprinklers) in conformance with the San Jacinto Municipal Code (SJMC), and RCFD would review the development plans prior to approval to ensure adequate emergency access pursuant to Section 503 of the California Fire Code (SJMC Chapter 8.16). As described in Response to Comment I1.7, the Project would provide its required parking on site and would not rely on on-street parking along W. 7th Street or S. Grand Avenue.

During construction, equipment and supply staging and storage would occur within the Project site. Driveway installation and utility connections could require the temporary closure of one side or portions of W. 7th Street and S. Grand Avenue for a short period of time (i.e., hours or a few days); however, construction activities would be required to maintain emergency access in accordance with Section 503 of the California Fire Code, which would be ensured through the City's permitting process. As concluded in the IS/MND, impacts related to emergency access would be less than significant. The comment does not contain any information requiring changes to the IS/MND. The comment will be forwarded to City decisionmakers as part of the Final IS/MND.

Response to Comment I1.10: This comment requests a pedestrian-safety analysis that considers nearby homes, children, disabled residents, and San Jacinto Elementary School.

As described in Section 5.17(a), *Transportation*, of the IS/MND, the Project would install 5-foot-wide sidewalks along its W. 7th Street and S. Grand Avenue frontages and would not conflict with any program, plan, ordinance, or policy addressing pedestrian facilities. The sidewalk along the S. Grand Avenue frontage, which is currently undeveloped, would enhance pedestrian and disabled resident access to and from the nearby Parkview Estates. The Project would also provide 4 accessible parking spaces on site. As described in Section 5.9(c), *Hazards and Hazardous Materials*, of the IS/MND, the closest school to the Project site is San Jacinto Elementary School, located approximately 0.95 miles northeast of the Project site. The Project site is therefore not located within one-quarter mile of an existing school, and the Project would not be expected to substantially affect pedestrian routes to the school.

As described in Response to Comment I1.8, the Project's vehicular access for daily operations would be located on W. 7th Street, the Project would consolidate existing driveways along the W. 7th Street frontage, and the Project would generate a net increase of 181 daily trips, including 8 AM peak hour trips and 13 PM peak hour trips. Consistent with the City's Traffic Impact Analysis Guidelines, further traffic analysis is not warranted given that the Project is anticipated to generate fewer than 500 daily trips. The Project would not introduce any new roadways or geometric design features that would increase hazards to pedestrians. Therefore, potential impacts related to pedestrian facilities and safety would be less than significant. The comment does not contain any information requiring changes to the IS/MND. The comment will be forwarded to City decisionmakers as part of the Final IS/MND.

Response to Comment I1.11: This comment requests the anticipated frequency of ambulance arrivals, emergency calls, sirens, nighttime activity, deliveries, and patient transportation.

The existing Bradley Gardens facility currently operates 24 hours a day, seven days a week, and receives patient transportation, deliveries, and service vehicles under existing conditions. As described in Section 3.4, *Operational Characteristics*, of the IS/MND, the Project would not change the existing operations of the facility. As described in Response to Comment I1.3, ambulance, patient transportation, and delivery trips are accounted for in the ITE trip rates used to calculate Project trip generation.

Regarding noise, as described in Section 5.13, *Noise*, of the IS/MND, operational noise from HVAC equipment and on-site mobile sources, including passenger vehicles, delivery trucks, and garbage trucks, would be approximately 40.7 dBA during the daytime and 36.1 dBA during the nighttime at the nearest sensitive receptors, which would not exceed the City's exterior noise standards of 65 dBA (daytime) and 45 dBA (nighttime) for residential properties. As shown in Table N-2, *Project Operational Noise Level*s, the Project would increase ambient noise levels by 0.1 dBA, which would not exceed the applicable incremental thresholds. Emergency vehicle sirens are associated with emergency response on public roadways, are intermittent, and are an existing characteristic of the facility and the surrounding roadway network. Regarding sirens, SJMC Section 8.40.070(C) exempts public safety personnel in the course of executing their official duties, including emergency personnel, from the provisions of the City's noise control chapter, including sound emanating from all equipment used by such personnel, whether stationary or mobile. Therefore, siren noise from emergency vehicles responding to the facility is exempt from the City's noise standards. Siren use would also be intermittent and is an existing characteristic of the facility and the surrounding roadway network. Regarding nighttime lighting, as described in Section 5.1, *Aesthetics*, all Project lighting would be directed downward and shielded consistent with SJDC Section

17.300.080 (PPP AES-1). The comment does not contain any information requiring changes to the IS/MND. The comment will be forwarded to City decisionmakers as part of the Final IS/MND.

Response to Comment I1.12: This comment requests a detailed operational and security plan describing staffing, secure entrances and exits, patient admissions and discharges, unauthorized-departure prevention, emergency incidents, and coordination with local police, fire, and emergency medical services.

CEQA requires the evaluation of a project's physical changes to the environment. An operational and security plan is not required to evaluate the Project's environmental impacts under CEQA. As described in Section 5.15, *Public Services*, of the IS/MND, police protection services would be provided by the Riverside County Sheriff's Department San Jacinto Station, located approximately 1.08 roadway miles northeast of the Project site. SNFs typically generate limited demand for police services because operations are supervised by trained staff on a 24-hour basis and visitor access is controlled and monitored. The Project would generate a service demand equivalent to less than one additional officer and would not require the construction or expansion of police facilities. Fire protection and emergency medical services are addressed in Response to Comment I1.9.

As described in Section 3.0, *Project Description*, and Table LU-1 of the IS/MND, the Project includes site design features that promote public safety, including perimeter fencing, controlled access points, exterior lighting, and landscaping improvements. The Project would retain the existing 7-foot-tall perimeter fencing, construct a new 7-foot-tall block wall along the western boundary of the site, and provide Knox padlocks at all gates. The facility operates with 24-hour supervised staff and controlled visitor access. In addition, the facility's staffing, admissions, discharges, and patient safety procedures are subject to State licensing and certification requirements. The commenter's request for an operational and security plan will be forwarded to City decisionmakers for consideration. The comment does not contain any information requiring changes to the IS/MND. The comment will be forwarded to City decisionmakers as part of the Final IS/MND.

Response to Comment I1.13: This comment requests an evaluation of operational noise, exterior lighting, mechanical equipment, construction noise, dust, construction vehicles, and nighttime impacts on nearby residents.

Regarding construction noise, as described in Section 5.13, *Noise*, of the IS/MND and the Noise and Vibration Impact Analysis (Appendix J), construction would be limited to the hours permitted by SJMC Section 8.40.090 (7:00 a.m. to 7:00 p.m. on weekdays and Saturdays, and 9:00 a.m. to 6:00 p.m. on Sundays and holidays), and no nighttime construction is proposed. The Project would not include pile driving. Assuming the two loudest pieces of equipment operating simultaneously during each construction phase, construction noise levels at the nearest off-site sensitive receptors would be 62.8 dBA, which would not exceed the Federal Transit Administration daytime threshold of 80 dBA Leq for residential uses. Construction vibration at the nearest off-site residential structure would be 0.013 in/sec PPV, well below the 0.3 in/sec PPV threshold. The Project would generate a maximum of approximately 8 worker trips and 25 hauling trips per day during the most intensive construction phase, which would not result in a perceptible increase in traffic noise along W. 7th Street. Construction would be temporary and is expected to occur over approximately 12 months.

Regarding construction dust and emissions, the Project would be required to comply with SCAQMD Rule 403 (included in the IS/MND as PPP AQ-1), which requires that fugitive dust be controlled with best available control measures so that dust does not remain visible beyond the property line, and SCAQMD Rule 402 (included in the IS/MND as PPP AQ-3), which requires dust suppression techniques to prevent fugitive dust from creating a nuisance off site. As shown in Table AQ-4, *Localized Construction Emission Estimates*, construction emissions would not exceed the SCAQMD localized significance thresholds. As described in Section 5.3, *Air Quality*, and the Health Risk Assessment (Appendix B), the maximum cancer risk at the most impacted sensitive receptor would be 4.88 in one million and the chronic hazard index would be 0.01, which are below the SCAQMD thresholds of 10 in one million and 1.0, respectively.

Regarding operational noise and mechanical equipment, as described in Response to Comment I1.11, HVAC equipment and on-site mobile sources would generate approximately 40.7 dBA during the daytime and 36.1 dBA during the nighttime at the nearest sensitive receptors, below the City's exterior standards of 65 dBA and 45 dBA, respectively, and would increase ambient noise levels by 0.1 dBA. Off-site Project traffic would increase noise levels along W. 7th Street by approximately 0.09 dBA CNEL, well below the 1.5 dBA CNEL threshold. Regarding exterior lighting, as described in Section 5.1, *Aesthetics*, all Project lighting would be directed downward and shielded so as not to spill onto neighboring properties, consistent with SJDC Section 17.300.080 (PPP AES-1). As concluded in the IS/MND, impacts related to noise, vibration, light and glare, and construction air quality would be less than significant. The comment does not contain any information requiring changes to the IS/MND. The comment will be forwarded to City decisionmakers as part of the Final IS/MND.

Response to Comment I1.14: This comment requests an assessment of whether the Project's size and around-the-clock operations are compatible with the immediately adjacent residential community.

As described in Section 2.2, *Existing Project Site*, and Section 3.4, *Operational Characteristics*, of the IS/MND, the Bradley Gardens facility currently operates on the Project site 24 hours a day, seven days a week, and the Project would not change the existing use or hours of operation. The proposed SNF-STP addition would be single-story with a maximum height of approximately 22 feet, and the PHF would occupy an existing single-story building approximately 14 feet in height. As shown in IS/MND Table AES-1, the Project would result in a floor area ratio (FAR) of 0.27, below the maximum FAR of 0.50. The Parkview Estates community is located southwest of the Project site, across S. Grand Avenue, and does not directly abut the site. As shown in Table AES-1 of the IS/MND, the Project would meet or exceed all applicable SJDC setback standards. The Project would provide a front setback of 68 feet, exceeding the 50-foot minimum that applies adjacent to residential uses. The Project would provide interior and side street setbacks of 10 feet, consistent with the 10-foot minimum required abutting nonresidential uses; and a rear setback of 36 feet, where no minimum setback is required. As shown in Table LU-1 of the IS/MND, the Project would be consistent with General Plan Policy LU 3.1, Surrounding Uses, because the one-story addition would remain consistent with the existing low-rise development pattern and the Project would add landscaping, updated architectural finishes, new sidewalks, and improved site access. As described in Section 5.11(a), the Project would not physically divide an established community.

The physical environmental effects of the Project on nearby residences, including noise, lighting, traffic, air quality, and emergency access, were evaluated in the IS/MND and determined to be less than significant, as described in Responses to Comments I1.3 through I1.13. Additionally, the Project is being processed under the legal nonconforming provisions of SJMC Section 17.705.120 and requires approval

of a Conditional Use Permit and Site Plan and Design Review, through which City decisionmakers will consider the Project's compatibility with surrounding uses. The comment does not contain any information requiring changes to the IS/MND. The comment will be forwarded to City decisionmakers as part of the Final IS/MND.

Response to Comment I1.15: This comment states that the commenter is a disabled resident and an autistic adult, and that members of the commenter's family and other residents of Parkview Estates also live with autism, disabilities, mobility limitations, and sensory sensitivities. The commenter states that increased traffic, noise, emergency activity, lighting, congestion, and restricted access can affect disabled and autistic residents more seriously than the general population, and that predictable and safe access to their homes is especially important for residents with mobility and sensory-related disabilities.

The City acknowledges the commenter's concerns and the importance of predictable and safe access for residents of Parkview Estates. The noise, lighting, and air quality thresholds used in the IS/MND are designed to protect sensitive receptors, including residences. In addition, the Project would be reviewed to ensure consistency with City development standards as part of the development review and permitting process. As described in Response to Comment I1.13, the Project would increase ambient noise levels at the nearest sensitive receptors by 0.1 dBA, which would not be perceptible, and nighttime operational noise levels of 36.1 dBA would be below the City's 45 dBA nighttime standard. All Project lighting would be shielded and directed downward to prevent spillover onto neighboring properties (PPP AES-1). As described in Responses to Comments I1.3 and I1.4, the Project would generate a net increase of 13 PM peak hour trips, and daily vehicular access to the site would be provided from W. 7th Street, with the S. Grand Avenue driveway gated for emergency vehicle access only.

Regarding access, the Project would not restrict access to Parkview Estates or any surrounding residences. As described in Response to Comment I1.9, construction of driveways and utility connections could require the temporary closure of one side or portions of W. 7th Street and S. Grand Avenue for a short period of time (i.e., hours or a few days); however, access would be maintained through the City's permitting process, including emergency access in accordance with Section 503 of the California Fire Code. As concluded in the IS/MND, impacts to nearby residents would be less than significant. The comment does not contain any information requiring changes to the IS/MND. The comment will be forwarded to City decisionmakers as part of the Final IS/MND.

Response to Comment I1.16: This comment states that the commenter's concerns are not based on hostility toward individuals who need mental-health or skilled-nursing services, and that the commenter supports appropriate access to healthcare. The commenter states that the concern is whether a development of this size and intensity can operate safely at this location without creating significant impacts for the surrounding residential community.

The physical environmental effects associated with the size and intensity of the Project are addressed in Responses to Comments I1.3 through I1.15. The comment expresses general concerns and does not contain any comments related to the IS/MND environmental analysis or information requiring changes to the IS/MND. The comment will be forwarded to City decisionmakers as part of the Final IS/MND.

Response to Comment I1.17: This comment requests that, if the City considers approving the Project, enforceable conditions be imposed requiring sufficient on-site employee and visitor parking, restrictions against neighborhood overflow parking, appropriate traffic controls, protected emergency access,

controlled exterior lighting, construction-hour limitations, noise restrictions, a written security and emergency-response plan, and a designated facility contact for neighborhood complaints.

Under CEQA, mitigation measures are required only to reduce significant environmental impacts. As described in Responses to Comments I1.3 through I1.15, impacts related to transportation, emergency access, noise, and lighting were determined to be less than significant. The IS/MND details existing regulations including the provision of on-site parking consistent with SJDC standards (Table AES-1), shielded exterior lighting consistent with SJDC Section 17.300.080 (PPP AES-1), limitation of construction activities to the hours permitted by SJMC Section 8.40.090, emergency access consistent with Section 503 of the California Fire Code and RCFD plan review, and construction dust control consistent with SCAQMD Rules 402 and 403 (PPP AQ-3 and PPP AQ-1). Conditions of approval are imposed at the discretion of the City through the Conditional Use Permit and Site Plan and Design Review process. The commenter's request for conditions of approval will be forwarded to City decisionmakers for consideration. The comment does not contain any comments related to the IS/MND environmental analysis or information requiring changes to the IS/MND. The comment will be forwarded to City decisionmakers as part of the Final IS/MND.

Response to Comment I1.18: This comment requests that the comment letter and any attachments be included in the official administrative record for PROJ25-0178. The commenter also requests to be added to the notification list for every Planning Commission or City Council meeting, environmental decision, revised study, staff report, project modification, and appeal associated with the Project.

The comment letter has been included in the administrative record for the Project and is included in this Final IS/MND. Pursuant to Public Resources Code Section 21092.2, the City will provide notice to all persons who have filed a written request for notice, and the commenter will be added to the Project notification list. The comment does not contain any information requiring changes to the IS/MND. The comment will be forwarded to City decisionmakers as part of the Final IS/MND.

Response to Comment I1.19: This comment requests written confirmation that the comment was received on time and made part of the official record. The commenter also requests a copy of, or working link to, the complete Initial Study, traffic analysis, parking plan, site plan, operational statement, security plan, and all supporting technical studies. The comment concludes by thanking the City for considering the effects of the Project on Parkview Estates and the surrounding San Jacinto community.

The comment letter was received on September 18, 2026, within the public review period for the IS/MND, which began on September 17th, 2026, and ended on October 16th, 2026, and has been made part of the administrative record. The IS/MND and its technical appendices, including the VMT Screening Analysis (Appendix K), are available at https://www.sanjacintoca.gov/city_departments/community-development/planning/c_e_q_a. The Project site plan and parking layout are shown on Figure 3-1, *Conceptual Site Plan*, of the Draft IS/MND. As described in Response to Comment I1.12, an operational or security plan is not required to evaluate the Project's environmental impacts under CEQA. The comment is conclusory in nature and does not contain any information requiring changes to the IS/MND. The comment will be forwarded to City decisionmakers as part of the Final IS/MND.

LETTER A1: SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, RECEIVED OCTOBER 16, 2026

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT VIA E-MAIL:
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Frank Chen, Associate City Planner
Planning Department
City of San Jacinto
595 S. San Jacinto Avenue
San Jacinto, CA 92583

October 16, 2026

Draft Mitigated Negative Declaration (MND) for the Bradley Gardens Skilled Nursing Facility Expansion Project (Proposed Project) (SCH No.: 2026090689)

South Coast Air Quality Management District (South Coast AQMD) Staff appreciate the opportunity to review the above-mentioned document. The City of San Jacinto is the California Environmental Quality Act (CEQA) Lead Agency for the Proposed Project. To provide context, South Coast AQMD Staff have provided a brief summary of the project information and prepared the following comments which are organized by topic of concern.

Summary of Proposed Project Information in the Draft MND

Based on the Draft MND, the Proposed Project consists of expanding an existing 44-bed skilled nursing facility to 103 beds through construction of a single-story addition (17,372 square feet) providing 43 additional skilled nursing and short-term psychiatric beds, conversion of an existing vacant office building (2,596 square feet) into a 16-bed psychiatric health facility, and demolition of an existing maintenance and storage building (1,074 square feet), with 52 vehicle parking spaces and 6 bicycle parking spaces. Based on a review of aerial photographs, South Coast AQMD Staff found that the nearest sensitive receptor (e.g., residential development) is located approximately 90 feet (27 meters) north of the Project site. Construction of the Proposed Project is anticipated to occur over 12 months. The Proposed Project is located at 980 West 7th Street in San Jacinto.[1] A1.1

South Coast AQMD Comments

South Coast AQMD Air Permits and Role as a Responsible Agency

If implementation of the Proposed Project would require the use of new stationary and portable sources, including but not limited to emergency generators, fire water pumps, boilers, etc., air permits from South Coast AQMD will be required. The Final MND should include a discussion about the potentially applicable South Coast AQMD rules that may be applicable to the Proposed Project. Those rules may include, for example, Rule 201 – Permit to Construct,[2] Rule 203 – Permit A1.2

[1] Initial study. Page 26.
[2] South Coast AQMD, Rule 201 is available at: https://www.aqmd.gov/docs/default-source/rule-book/reg-ii/rule-201.pdf

to Operate,[3] Rule 401 – Visible Emissions,[4] Rule 402 – Nuisance,[5] Rule 403 – Fugitive Dust,[6] Rule 1110.2 – Emissions from Gaseous and Liquid Fueled Engines,[7] Rule 1113 – Architectural Coatings,[8] Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil,[9] Rule 1179 – Publicly Owned Treatment Works Operations,[10] Regulation XIII – New Source Review,[11] Rule 1401 – New Source Review of Toxic Air Contaminants,[12] Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants,[13] Rule 1470 – Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines,[14] etc. It is important to note if air permits from South Coast AQMD are required, the role of South Coast AQMD would change from a Commenting Agency to a Responsible Agency under CEQA. In addition, if South Coast AQMD is identified as a Responsible Agency, per CEQA Guidelines Sections 15086, the Lead Agency is required to consult with South Coast AQMD.

CEQA Guidelines Section 15096 sets forth specific procedures for a Responsible Agency, including making a decision on the adequacy of the CEQA document for use as part of the process for conducting a review of the Proposed Project and issuing discretionary approvals. Moreover, it is important to note that if a Responsible Agency determines that a CEQA document is not adequate to rely upon for its discretionary approvals, the Responsible Agency must take further actions listed in CEQA Guideline Section 15096(e), which could have the effect of delaying the implementation of the Proposed Project. In its role as CEQA Responsible Agency, the South Coast AQMD is obligated to ensure that the CEQA document prepared for this Proposed Project contains a sufficient project description and analysis to be relied upon in order to issue any discretionary approvals that may be needed for air permits. South Coast AQMD is concerned that the project description and analysis in its current form in the MND is inadequate to be relied upon for this purpose.

A1.2 contd.

For these reasons, the final CEQA document should be revised to include a discussion about any and all new stationary and portable equipment requiring South Coast AQMD air permits, provide the evaluation of their air quality and greenhouse gas impacts, and identify South Coast AQMD as a Responsible Agency for the Proposed Project as this information will be relied upon as the basis for the permit conditions and emission limits for the air permit(s). Please contact South Coast AQMD's Engineering and Permitting Staff at (909) 396-3385 for questions regarding what types of equipment would require air permits. For more general information on permits, please visit South Coast AQMD's webpage at https://www.aqmd.gov/home/permits.

Conclusion

[3] South Coast AQMD, Rule 203 is available at: https://www.aqmd.gov/docs/default-source/rule-book/reg-ii/rule-203.pdf
[4] South Coast AQMD, Rule 401 is available at: https://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-401.pdf
[5] South Coast AQMD, Rule 402 is available at: https://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf
[6] South Coast AQMD, Rule 403 is available at: https://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403
[7] South Coast AQMD, Rule 1110.2 is available at: https://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1110_2.pdf
[8] South Coast AQMD, Rule 1113 is available at https://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf
[9] South Coast AQMD, Rule 1166 isa vailable at: https://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1166.pdf
[10] South Coast AQMD, Rule 1179 is available at: https://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1179.pdf
[11] South Coast AQMD, Regulation XIII is available at: https://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/regulation-xiii
[12] South Coast AQMD, Rule 1401 is available at: https://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1401.pdf
[13] South Coast AQMD, Rule 1466 is available at: https://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1466.pdf
[14] South Coast AQMD, Rule 1470 is available at: https://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1470.pdf

The Lead Agency is recommended to revise the CEQA analysis to address the aforementioned comments and provide the necessary evidence to sufficiently support the conclusions reached. If the requested information and analysis are not included in the final CEQA document, either the Final MND or other type of CEQA document, the Lead Agency should provide reasons for not doing so. Pursuant to California Public Resources Code Section 21092.5(b) and CEQA Guidelines Section 15074, prior to approving the Proposed Project, the Lead Agency shall consider the MND for adoption together with any comments received during the public review process and notify each public agency when any public hearings are scheduled. Please provide South Coast AQMD with written responses to all comments contained herein prior to the adoption of the Final MND. When responding to issues raised in the comments, detailed reasons supported by substantial evidence in the record to explain why specific comments and suggestions are not accepted must be provided. In addition, if the Lead Agency decides to adopt the Final MND, please provide South Coast AQMD with a notice of any scheduled public hearing(s). A1.3

South Coast AQMD staff are available to work with the Lead Agency to ensure that impacts to air quality, GHG emissions, and health risk from the Proposed Project are accurately evaluated and mitigated to the greatest extent possible. Please contact Sahar Ghadimi, Ph.D., Air Quality Specialist, at sghadimi@aqmd.gov or me at SWang1@aqmd.gov should you have any questions.

Sincerely,

Sam Wang

Sam Wang
Program Supervisor, CEQA IGR
Planning, Rule Development & Implementation

SW:SG
RVC260916-08
Control Number

Response to Comment A1.1: This comment states that the South Coast Air Quality Management District (SCAQMD) has reviewed the Draft IS/MND for the Bradley Gardens Skilled Nursing Facility Expansion Project. This comment then provides a summary of the Project information within the Draft IS/MND.

This comment is introductory in nature and does not raise a specific issue with the adequacy of the Draft IS/MND. Because the comment does not express any specific concern or question regarding the adequacy of the Draft IS/MND, no further response is warranted.

Response to Comment A1.2: The comment states that if implementation of the proposed Project would require the use of stationary and portable equipment such as emergency generator(s) and fire pump(s), permit(s) from SCAQMD will be required. The comment states that if permits are required, SCAQMD will be a Responsible Agency for the Project. The comment states that as a Responsible Agency, SCAQMD is obligated to ensure that the CEQA document prepared for the Project contains a sufficient project description and analysis. The comment states that the Final IS/MND should include a discussion about any new stationary and portable equipment requiring SCAQMD air permits, provide evaluation of their air quality and greenhouse gas impacts, and identify SCAQMD as a Responsible Agency.

The City acknowledges the comment. The Draft IS/MND did not identify an emergency generator as part of the Project. Because the Project would include a skilled nursing facility, the Project analysis within this Final IS/MND has been conservatively assumed to include one 236-horsepower diesel-powered emergency generator to provide backup power for the expanded facility. The generator is conservatively assumed to operate up to 200 hours per year, consistent with SCAQMD Rule 1470. Because installation and operation of the generator would require SCAQMD permits, SCAQMD has been identified as a Responsible Agency in Chapter 3 of this Final IS/MND.

In response to this comment, the following technical studies have been revised to address the emergency generator as included in this Final IS/MND:

- **Revised Appendix A: Air Quality, Energy, and Greenhouse Gas Assessment,** which addresses stationary source criteria pollutant regional and localized emissions, diesel fuel consumption, and GHG emissions from the emergency generator.
- **Revised Appendix B: Construction and Operational Health Risk Assessment**, which addresses diesel particulate matter (DPM) emissions from generator operation and evaluates operational cancer and chronic non-cancer health risks, as well as combined construction and operational cancer risk.
- **Revised Appendix J: Noise and Vibration Impact Analysis**, which includes a qualitative discussion of noise from the emergency generator. A quantitative analysis was not prepared because the generator would operate only during power outages or other emergencies and for brief, infrequent, daytime maintenance and testing, and it would not be a routine operational noise source.

As a result, the following changes have been made to the Draft IS/MND, as shown in Section 3.0, Errata, of this Final IS/MND:

- **Section 3.4, Operational Characteristics**: The Project Description now states that the Project would include a 236-horsepower diesel emergency generator.
- **Section 3.5, Discretionary Approvals and Permits**: SCAQMD has been added as a Responsible Agency for permits and approvals associated with stationary equipment.
- **Section 4.1, Environmental Checklist**: SCAQMD has been added as a Responsible Agency.

- **Section 5.3, Air Quality**:
    - Threshold 5.3b): Stationary source emissions are added to the operational discussion and Table AQ-3. Net emissions remain below SCAQMD regional thresholds, and impacts would remain less than significant.
    - Threshold 5.3c): A localized operational analysis is added (Table AQ-5), and emissions remain below SCAQMD LSTs; and therefore, impacts would remain less than significant.
    - Threshold 5.3c): The Health Risk Assessment has been revised to include operational DPM and new Tables AQ-7 and AQ-8. As shown in Table AQ-7, the maximum operational cancer risk is 2.21 in one million at the sensitive receptor and 0.24 in one million at the worker receptor; which is below the SCAQMD cancer risk threshold of 10 in one million. The chronic hazard index is below 1.0. As shown in Table AQ-8, the combined construction and operational cancer risk for the maximally impacted sensitive receptor is 2.37 in one million and 0.36 in one million at the maximally impacted worker receptor, both of which are below the SCAQMD threshold of 10 in one million. The construction risk results (Table AQ-6) were also updated due to an error in exposure duration; the cancer risk during construction is now estimated at approximately 4.76 in one million and remains below the threshold. Therefore, impacts related to air quality emissions would be less than significant.

- **Section 5.6, Energy**: Diesel fuel consumption is added to the text and Table E-2. Diesel fuel consumption from the proposed Project is estimated to be approximately 1,723 gallons per year, which is less than 0.01 percent of Riverside County diesel consumption, and not used in an inefficient, wasteful, or wasteful manner.
- **Section 5.8, Greenhouse Gas Emissions**: Stationary source emissions (18 $MTCO_2e$ per year) are added to Table GHG-2. Net Project emissions (478 MTCO2e per year) remain below the SCAQMD Tier 3 threshold of 3,000 $MTCO_2e$. Thus, impacts related to greenhouse gas emissions would remain less than significant.
- **Section 5.13, Noise**: The stationary noise discussion now includes a qualitative discussion of the emergency generator. As the generator would operate only during power outages or other emergencies and for brief, infrequent, daytime maintenance and testing, and it would not be a routine operational noise source, operational noise impacts would remain less than significant.

The revisions described above clarify and amplify the Project Description and the analysis in the Draft IS/MND. The revisions do not alter any impact significance conclusions. None of the information in this response, Revised Appendix A, Revised Appendix B, Revised Appendix J, or the corresponding revisions to the Draft IS/MND constitutes significant new information requiring recirculation of the Draft IS/MND for further public review under State CEQA Guidelines Section 15073.5, *Recirculation of a Negative Declaration Prior to Adoption*. None of the revised material indicates that the Project will result in a significant new environmental impact not previously disclosed in the Draft IS/MND. Additionally, none of this information indicates that there would be a substantial increase in the severity of a previously identified environmental impact that will not be mitigated, or that there would be any of the other circumstances requiring recirculation described in State CEQA Guidelines Section 15073.5.

Response to Comment A1.3: This comment recommends that the Lead Agency revise the Draft IS/MND to address the issues raised and provide sufficient supporting evidence for its conclusions or alternatively explain in the Final IS/MND why the requested information and analysis were not included. This comment

concludes the SCAQMD's discussion and summarizes the standard practice for Lead Agencies when responding to Public Agencies' comments. The comment also thanks the Lead Agency for giving the SCAQMD the opportunity to comment on the Draft IS/MND and contact information if future questions arise.

As substantiated by the responses provided above, the Draft IS/MND has been revised to adequately address the issues raised in this comment letter. Pursuant to State CEQA Guidelines Section 15074(b), *Consideration and Adoption of a Negative Declaration or Mitigated Negative Declaration*, none of the comments or additional analysis within this Final IS/MND indicate or provide a fair argument that the Project will have significant environmental effects which would require preparation of an Environmental Impact Report. Further, none of the information in the letters or responses constitute the type of significant new information that requires recirculation of the Draft IS/MND for further public review under State CEQA Guidelines Section 15073.5, R*ecirculation of a Negative Declaration Prior to Adoption*. None of the revised material indicates that the Project will result in a significant new environmental impact not previously disclosed in the Draft IS/MND. Additionally, none of this information indicates that there would be a substantial increase in the severity of a previously identified environmental impact that will not be mitigated, or that there would be any of the other circumstances requiring recirculation described in State CEQA Guidelines Section 15073.5.

3. ERRATA TO THE BRADLEY GARDENS SKILLED NURSING FACILITY EXPANSION PUBLIC REVIEW IS/MND

This section contains revisions to the Draft IS/MND based upon: (1) clarifications required to prepare a response to a specific comment; and/or (2) typographical errors. These revisions do not alter any impact significance conclusions as disclosed in the Draft IS/MND. Changes made to the IS/MND are identified here in ~~strikeout~~ text to indicate deletions and in **bold underlined** text to signify additions.

REVISIONS IN RESPONSE TO WRITTEN COMMENTS AND CITY CHANGES TO TEXT

The following text, organized by IS/MND section, has been revised in response to comments received on the IS/MND and corrections identified by the City.

Project Description

Section 3.4 on page 20 is revised as follows:

3.4. OPERATIONAL CHARACTERISTICS

The Project is analyzed as a healthcare facility. Typical operational characteristics include employees, patients, and visitors traveling to and from the site. The proposed Project would not change the existing operations of the Bradley Gardens facility, which operates 24 hours a day, seven days a week. The proposed Project would add 100 new employees across all shifts to the existing facility, which currently includes 150 employees, resulting in a total employee count of 250. The existing facility currently has the capacity to serve 44 beds/patients. Implementation of the proposed Project would increase capacity by 59 beds/patients, resulting in a total capacity of 103 beds/patients at the facility. **The proposed Project would include a 236 horsepower diesel emergency generator in order to provide backup power for the expanded facility.**

Section 3.5 on page 20 is revised as follows:

3.5. DISCRETIONARY APPROVALS AND PERMITS

The City is processing the proposed Project under the legal nonconforming provisions of SJMC Section 17.705.120 (Nonconforming Adjustment). Implementation of the proposed Project would require the following discretionary approvals and permits from the City of San Jacinto and other applicable agencies.

City of San Jacinto (Lead Agency):

- Conditional Use Permit
- Site Plan and Design Review
- Ministerial approvals and permits necessary to implement the proposed Project, including but not limited to, grading permit, building permit, etc.

Responsible Agency:

- State Department of Health Care Access and Information (HCAI): Review and issuance of building permits for the expansion of the SNF.

- **South Coast Air Quality Management District (SCAQMD): Issuance of permits and approvals associated with the operation of stationary equipment.**

Environmental Checklist

Section 4.1 on page 29 is revised as follows:

Responsible Agency:

State Department of Health Care Access and Information (HCAI) **and South Coast Air Quality Management District (SCAQMD)**

Air Quality

Threshold 5.3b) on pages 43 and 44 is revised as follows:

Operation

Implementation of the proposed Project would result in long-term regional emissions of criteria air pollutants and ozone precursors associated with area sources, such as natural gas consumption, landscaping, applications of architectural coatings, and consumer products. Operation of the proposed Project would include emissions from vehicles traveling to the Project site and from vehicles in the parking lots and loading areas. The proposed Project would generate an additional 181 daily trips including 8 trips during the AM peak hour and 13 trips during the PM peak hour according to the Vehicle Miles Traveled (VMT) Screening Analysis (Appendix K). Area source emissions would occur from operation of the expanded SNF. **Stationary source emissions would occur from the operation of an emergency generator.**

Operational emissions associated with the existing facility and proposed Project were modeled using CalEEMod Version 2022.1 land use emission model. Operational emissions for the existing facility, the proposed Project, and the resulting net Project emissions are presented in Table AQ-3, *Regional Operational Emission Estimates*. Net Project emissions represent the increase in emissions attributable to the proposed Project and were calculated by subtracting the existing operational operations from the proposed Project operational emissions. The net project emissions were compared to the SCAQMD regional operational significance thresholds to evaluate project impacts. As shown, the net Project emissions would result in long-term regional emissions below the SCAQMD's applicable thresholds. Therefore, operation of the proposed Project would not exceed the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS), would not result in a cumulatively considerable net increase of any criteria pollutant, and impacts would be less than significant.

Table AQ-3: Regional Operational Emission Estimates

Operational Activity	Maximum Daily Regional Emissions (pounds/day)					
	ROG	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
Mobile	1.2	1.3	12.3	<0.01	3.1	0.8
Area	1.4	0.1	6.0	<0.01	<0.01	<0.01
Energy	<0.01	0.4	0.2	<0.01	<0.01	<0.01

Operational Activity	Maximum Daily Regional Emissions (pounds/day)					
	ROG	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
Stationary	**0.4**	**1.1**	**1.0**	**<0.01**	**0.1**	**0.1**
~~**Total Proposed Project Operational Emissions**~~	~~**2.6**~~	~~**1.8**~~	~~**18.5**~~	~~**<0.01**~~	~~**3.1**~~	~~**0.8**~~
Total Proposed Project Operational Emissions	**3.0**	**2.9**	**19.5**	**<0.01**	**3.2**	**0.9**
Existing Operational Emissions	1.1	0.8	7.9	<0.01	1.3	0.4
~~**Net Project Operational Emissions**~~	~~**1.5**~~	~~**1.0**~~	~~**10.6**~~	~~**<0.01**~~	~~**1.8**~~	~~**0.4**~~
Net Project Operational Emissions	**1.9**	**2.1**	**11.6**	**<0.01**	**1.9**	**0.5**
SCAQMD Significance Thresholds	55	55	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: ROG = reactive organic gases; NOx = nitrogen oxides; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = particulate matter, 10 microns in diameter; $PM_{2.5}$ = particulate matter, 2.5 microns in diameter
Source: **Revised** Air Quality, Energy, and Greenhouse Gas Assessment (Appendix A)

Threshold 5.3c) on pages 46 and 47 is revised as follows:

Operation

The localized significance thresholds for operation are determined by the size of the Project site and the distance to the nearest sensitive receptor, as well as the maximum trip length possible within the Project site. As the Project site is 2.98 acres, operational LSTs were estimated by interpolating between the 2-acre and 5-acre site thresholds to approximate values corresponding to the Project site area. Consistent with the localized construction emissions analysis, the 25-meter receptor distance category was applied.

As shown in Table AQ-5, *Localized Operational Emission Estimates*, the Project's localized operational emissions would be below the SCAQMD LSTs. Therefore, localized operational air quality impacts would be less than significant.

Table AQ-1: Localized Operational Emission Estimates

Operational Activity	Maximum Daily Localized Emissions (pounds/day)			
	NOx	CO	PM_{10}	$PM_{2.5}$
Mobile	**0.3**	**1.9**	**<0.01**	**<0.01**
Area	**0.1**	**6.0**	**<0.01**	**<0.01**
Energy	**0.4**	**0.2**	**<0.01**	**<0.01**
Stationary	**1.1**	**1.0**	**0.1**	**0.1**
Total Project Emissions	**1.9**	**9.1**	**0.1**	**0.1**
SCAQMD Significance Thresholds	**260.9**	**1,269.5**	**2.4**	**1.2**
Threshold Exceeded?	**No**	**No**	**No**	**No**

Notes: NOx = nitrogen oxides; CO = carbon monoxide; PM_{10} = particulate matter, 10 microns in diameter; $PM_{2.5}$ = particulate matter, 2.5 microns in diameter

Source: Revised Air Quality, Energy, and Greenhouse Gas Assessment (Appendix A)

Construction and Operational Health Risk Assessment

In addition to criteria pollutant emissions, construction of the proposed Project would generate diesel particulate matter (DPM) emissions from the exhaust of off-road, heavy-duty diesel construction equipment used during demolition, site preparation, grading, building construction, paving, and architectural coating activities, as well as from on-road haul, vendor, and worker vehicles traveling to and from the Project site. **The proposed Project would also generate DPM emissions during operations from the use of an emergency generator.** DPM has been identified as a toxic air contaminant (TAC) by the California Air Resources Board (CARB). Because sensitive receptors are located in proximity to the Project site, a Construction **and Operational** Health Risk Assessment was prepared for the proposed Project (included as Appendix B) to evaluate the potential carcinogenic and non-carcinogenic health risks to nearby receptors resulting from exposure to Project construction-source DPM emissions.

The City of San Jacinto has not adopted a numerical significance threshold for cancer risk or non-cancer chronic health risk impacts; therefore, the SCAQMD's significance thresholds were used.

The SCAQMD recommends using a risk level of 10 in one million as the cancer risk threshold. A risk level of 10 in one million implies a likelihood that up to 10 people, out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of toxic air contaminants over a specified duration of time. Non-cancer health risks are conveyed in terms of the Hazard Index (HI). A ratio of the predicted concentration of the facility's reported TAC emissions to a concentration is considered acceptable to public health professionals. A significant risk is defined as an HI of 1 or greater.

The SCAQMD defines a sensitive receptor as any residence, including private homes, condominiums, apartments, and living quarters, schools, preschools, daycare centers, and health facilities such as hospitals or retirement and nursing homes. For purposes of this HRA, sensitive receptors were placed within the air dispersion model at the locations of the closest existing residences and other establishments or residences nearest to the Project site that qualify as sensitive receptors. In addition, a uniform grid network of receptors was placed over the Project vicinity to complete the receptor network. The nearest off-site sensitive receptor is a single-family residential structure located approximately 90 feet (27 meters) north of the Project site, across W. 7th Street, which was identified as the most impacted sensitive receptor during the construction of the Project. The nearest off-site worker receptor is Talley Metal Fabrication, located at 989 W 7th St, San Jacinto, CA, approximately 107 feet (33 meters) north of the Project site.

As shown in Table ~~AQ-5~~ AQ-6, *Construction Health Risk Results*, the estimated maximum cancer risk attributable to construction of the proposed Project would be ~~4.88~~ **4.76** in one million at the maximally impacted sensitive/residential receptor and 0.13 in one million at the maximally impacted worker receptor, both of which are below the SCAQMD significance threshold of 10 in one million. The maximum chronic non-cancer HI during construction would be 0.01 for both the maximally impacted sensitive receptor and the maximally impacted worker receptor, which is below the SCAQMD significance threshold of 1.0. Thus, the construction of the Project would have a less-than-significant impact for both cancer risk and chronic non-cancer impacts.

Table ~~AQ-5~~ AQ-6: Construction Health Risk Results

Receptor	Cancer Risk (per million)		Threshold Exceeded?
	Maximum Lifetime Project Risk	SCAQMD Significance Threshold	
Maximum Impacted Sensitive Receptor - Cancer Risk (Prebirth to ~~1.02~~ **0.99** Years)	~~4.88~~ **4.76** in one million	10 in one million	**No**
Maximum Impacted Sensitive Receptor - Cancer Risk (Adult, ~~1.02~~ **0.99** Years)	0.18 in one million	10 in one million	**No**
Maximum Impacted Worker Receptor - Cancer Risk (~~1.02~~ **0.99** Years)	0.13 in one million	10 in one million	**No**
Receptor	**Chronic Non-Cancer Hazard Index**		**Threshold Exceeded?**
	Maximum Lifetime Project Risk	**SCAQMD Significance Threshold**	
Maximum Impacted Sensitive Receptor	0.01	1.0	**No**
Maximum Impacted Worker Receptor	0.01	1.0	**No**

Source: Construction **and Operational** Health Risk Assessment (**Revised** Appendix B)

Table AQ-7, *Operational Health Risk Results*, presents a summary of the cancer risks and chronic non-cancer hazards resulting from Project operations along with the SCAQMD health risk significance thresholds. As shown in Table AQ-7, the estimated maximum cancer risk during operations is 2.21 in one million for the maximally impacted sensitive/residential receptors and 0.24 in one million at the maximally impacted worker receptor, both of which are below the SCAQMD significance threshold of 10 in one million. The maximum chronic non-cancer HI during operations would be less than 0.01 for the maximally impacted sensitive receptor and 0.05 for the maximally impacted worker receptor, which is below the SCAQMD significance threshold of 1.0. Thus, operation of the Project would have a less-than-significant impact for both cancer risk and chronic non-cancer impacts.

Table AQ-7: Operational Health Risk Results

Receptor	Cancer Risk (per million)		Exceeds Significance Threshold?
	Maximum Lifetime Proposed Project Risk	Significance Threshold	
Maximum Impacted Sensitive Receptor – Infant to Adult (30 years)	**2.21**	**10**	**No**
Maximum Impacted Sensitive Receptor – Adult (30 years)	**1.44**	**10**	**No**
Maximum Impacted Worker Receptor (25 years)	**0.24**	**10**	**No**

Receptor	Chronic Non-Cancer Hazard Index		Exceeds Significance Threshold?
	Maximum Lifetime Proposed Project Risk	Significance Threshold	
Maximum Impacted Sensitive Receptor	<0.01	1.0	No
Maximum Impacted Worker Receptor	0.05	1.0	No

Source: Construction and Operational Health Risk Assessment (Revised Appendix B)

Table AQ-8, *Combined Construction and Operational Health Risk Results*, presents the combined construction and operational cancer risk for the Project. As shown in Table AQ-8, the combined construction and operational cancer risk for the maximally impacted sensitive receptor is 2.37 in one million, below the SCAQMD cancer risk threshold of 10 in one million. The cancer risk for combined construction and operation at the maximally impacted worker receptor is 0.36 in one million, which is below the significance threshold of 10 in one million. Thus, impacts related to combined construction and operation cancer risk would be less than significant.

Table AQ-8: Combined Construction and Operational Health Risk Results

Receptor	Cancer Risk (per million)		Exceeds Significance Threshold?
	Maximum Lifetime Proposed Project Risk	Significance Threshold	
Maximum Impacted Sensitive Receptor Prebirth to 30 years	2.37	10	No
Maximum Impacted Worker (25 years)	0.36	10	No

Source: Construction and Operational Health Risk Assessment (Revised Appendix B)

Energy

Threshold 5.6a) on page 59 is revised as follows:

As detailed in Table E-2, *Project Net Annual Operational Energy Consumption*, operation of the proposed Project is estimated to result in an annual use of approximately 52,117 gallons of gasoline fuel, **approximately 1,723 gallons of diesel fuel,** approximately 1,399,933 British thermal units (BTU) of natural gas, and approximately 646,337 kilowatt-hours (kWh) of electricity. As shown in Table E-2, compared to the existing facility on-site, the proposed Project would result in a net annual increase of 29,853 gallons of gasoline fuel, **1,723 gallons of diesel fuel,** 760,676 BTU of natural gas, and 332,746 kWh of electricity. These increases represent less than 0.01 percent of Riverside Countywide electricity, natural gas, and gasoline consumption, respectively**, and less than 0.01 percent of Riverside County diesel consumption**. Thus, operation of the Project would not use large amounts of energy or fuel in a wasteful manner, and operational energy impacts would be less than significant.

Table E-2: Project Net Annual Operational Energy Consumption

Operational Source	Energy Usage	Countywide Energy Consumption	Percentage Increase in Countywide Consumption from Project
Electricity (Kilowatt-Hour)			
Proposed Project	646,337	NA	
Existing Conditions	313,592		
Net Electricity Consumption from Project	**332,746**	**16,286,000,000**	**<0.01%**
Natural Gas (Thousands British Thermal Units)			
Proposed Project	1,399,933	NA	
Existing Conditions	639,257		
Net Natural Gas Consumption From Project	**760,676**	**42,670,000,000**	**<0.01%**
Petroleum (Gasoline Fuel) Consumption (Gallons)			
Proposed Project	52,117	NA	
Existing Conditions	22,263		
Net Petroleum (Gasoline) Consumption from Project	**29,853**	**430,881,899**	**<0.01%**
Petroleum (Diesel Fuel) Consumption (Gallons)			
Proposed Project	**1,723**	**NA**	
Existing Conditions	**-**		
Net Petroleum (Diesel) Consumption from Project	**1,723**	**227,147,767**	**<0.01%**

Notes: NA = Not Applicable, as this analysis compares the net increase of the Project with countywide consumption.
Source: **Revised** Air Quality, Energy, and Greenhouse Gas Assessment (Appendix A)

Greenhouse Gas Emissions

Threshold 5.8a) on pages 69 and 70 is revised as follows:

Global climate change is not confined to a particular project area. A typical project does not generate enough GHG emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact. GHGs are produced by both direct and indirect emissions sources. Direct emissions include consumption of natural gas, heating and cooling of buildings, landscaping activities and other equipment used directly by land uses. Indirect emissions include the consumption of fossil fuels for vehicle trips, electricity generation, water usage, and solid waste disposal.

Construction activities produce combustion emissions from various sources, such as site excavation, grading, utility engines, heavy-duty construction vehicles on-site, equipment hauling materials to and from the site, asphalt paving, and motor vehicles transporting the construction crew. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

In addition, operation of the proposed Project would result in area and indirect sources of operational GHG emissions that would primarily result from vehicle trips, electricity and natural gas consumption, water transport (the energy used to pump water), and solid waste generation. GHG emissions from electricity consumed by the building would be generated off-site by fuel combustion at the electricity provider. GHG emissions from water transport are also indirect emissions resulting from the energy required to transport water from its source.

GHG emissions during Project construction and operations were estimated using CalEEMod version 2022.1. In accordance with SCAQMD recommendations, the Project's amortized construction GHG emissions (as shown in Table GHG-1) are added to the operational emissions in order to determine the Project's total annual estimated GHG emissions. The estimated operational GHG emissions that would be generated from implementation of the proposed Project, combined with the construction emissions, are shown in Table GHG-2. As shown in Table GHG-2, net Project GHG emissions would be less than the SCAQMD's Tier 3 threshold of 3,000 $MTCO_2e$. Therefore, based upon SCAQMD's screening threshold, impacts related to GHG emissions would be less than significant.

Table GHG-1: Project Construction GHG Emissions

Construction Year	Annual GHG Emissions ($MTCO_2e$)
2026	33
2027	386
Total Emissions	**419**
Total Emissions Amortized Over 30 Years	14

Notes: Numbers have been rounded. $MTCO_2e$ = metric tons of carbon dioxide equivalent.
Source: Air Quality, Energy, and Greenhouse Gas Assessment (Appendix A)

Table GHG-2: Total Project GHG Emissions

Activity	Annual GHG Emissions ($MTCO_2e$)
Mobile	509
Area	2
Energy	177
Water	12
Waste	96
Refrigeration	0.1
Stationary	**18**
~~**Total Project Operation Emissions**~~	~~**796**~~
Total Project Operation Emissions	**814**

Amortized Project Construction Emissions	14
~~**Total Project Emissions**~~	~~**810**~~
Total Project Emissions	**828**
Existing Emissions	349
~~**Net Project Emissions**~~	~~**460**~~
Net Project Emissions	**478**
SCAQMD Tier III Significance Threshold	3,000
Threshold Exceeded?	**No**

Notes: Numbers have been rounded. $MTCO_2e$ = metric tons of carbon dioxide equivalent.
Source: **Revised** Air Quality, Energy, and Greenhouse Gas Assessment (Appendix A)

Noise

Threshold 5.13a) on page 107 will be revised as follows:

Operation

Stationary Noise Impacts. Long-term operational noise would be generated from on-site stationary sources including heating, ventilation, and air conditioning (HVAC) equipment, and from on-site mobile sources including passenger vehicles, delivery trucks, and garbage trucks. **The proposed Project would have one 236 horsepower (hp) emergency generator on-site. Emergency generators operate only during power outages or other emergencies, which are infrequent and temporary events, and are not a routine operational noise source. Periodic maintenance and testing would be brief, infrequent, limited to daytime hours, and restricted in annual duration by SCAQMD requirements. Accordingly, the generator would not substantially affect ambient noise levels or contribute to the Project's long-term operational noise level. Thus, impacts would be less than significant.**

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4. Mitigation Monitoring and Reporting Program

INTRODUCTION

The California Environmental Quality Act (CEQA) requires a lead or public agency that approves or carries out a project for which a Mitigated Negative Declaration has been certified which identifies one or more significant adverse environmental effects and where findings with respect to changes or alterations in the project have been made to adopt a "…reporting or monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment" (CEQA, Public Resources Code Sections 21081, 21081.6).

A Mitigation Monitoring and Reporting Program (MMRP) is required to ensure that adopted mitigation measures are successfully implemented for the Bradley Gardens Skilled Nursing Facility Expansion Project (Project). The City of San Jacinto is the Lead Agency for the Project and is responsible for implementation of the MMRP. This report describes the MMRP for the Project and identifies the parties that will be responsible for monitoring implementation of the individual mitigation measures in the MMRP.

MITIGATION MONITORING AND REPORTING PROGRAM

The MMRP for the Project will be active through all phases of the Project, including design, construction, and operation. The table identifies the Plans, Programs, and Policies (PPPs) and mitigation measures required by the City to mitigate or avoid significant adverse impacts associated with implementation of the Project, the timing of implementation, and the responsible party or parties for monitoring compliance.

The MMRP also includes a column that will be used by the compliance monitor (individual responsible for monitoring compliance) to document when implementation of the measure is completed. As individual PPPs and mitigation measures are completed, the compliance monitor will sign and date the MMRP, indicating that the required actions have been completed.

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Table 4-1: Mitigation Monitoring and Reporting Program

Plan, Program, Policy (PPP) / Mitigation Measure	Responsible Party for Implementation	Timing	Responsible Party for Monitoring	Date of Completion and Initials
AESTHETICS				
PPP AES-1: Glare and Outdoor Lighting Standards. The Project is required to comply with San Jacinto Development Code Section 17.300.080 which requires all exterior lighting to be shielded or modified and located so as to eliminate spillover illumination or glare beyond the property line or upward into the sky.	Project Applicant	Prior to issuance of building permits	City of San Jacinto Building & Safety Division	
AIR QUALITY				
PPP AQ-1: SCAQMD Rule 403. The Project is required to comply with the provisions of South Coast Air Quality Management District (SCAQMD) Rule 403, which includes the following: • All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions. • The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the project are watered, with complete coverage of disturbed areas, at least 3 times daily during dry weather; preferably in the mid-morning, afternoon, and after work is done for the day. • The contractor shall ensure that traffic speeds on unpaved roads and project site areas are reduced to 15 miles per hour or less.	Project Applicant	Prior to issuance of demolition, grading and building permits	City of San Jacinto Building & Safety Division	
PPP AQ-2: SCAQMD Rule 1113. The Project is required to comply with the provisions of South Coast Air Quality Management District Rule (SCAQMD) Rule 1113. Only "Low-Volatile Organic Compounds" paints (no more than 50 gram/liter of VOC) and/or High Pressure Low Volume (HPLV) applications shall be used.	Project Applicant	Prior to issuance of building permits	City of San Jacinto Building & Safety Division	

Plan, Program, Policy (PPP) / Mitigation Measure	Responsible Party for Implementation	Timing	Responsible Party for Monitoring	Date of Completion and Initials
PPP AQ-3: Rule 402. The Project is required to comply with the provisions of South Coast Air Quality Management District (SCAQMD) Rule 402. The Project shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.	Project Applicant	Prior to issuance of demolition, grading and building permits	City of San Jacinto Building & Safety Division	
BIOLOGICAL RESOURCES				
PPP BIO-1: MSHCP Fees. Prior to issuance of a grading or building permit, the Project Applicant shall pay fees required pursuant to the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) implemented under San Jacinto Municipal Code Chapter 15.50. Western Riverside County MSHCP requires a per-acre local development impact and mitigation fee payment prior to the issuance of a grading or building permit.	Project Applicant	Prior to issuance of grading and building permits	City of San Jacinto Planning Division	
MM BIO-1: Pre-Construction Nesting Bird Survey. Vegetation within and surrounding the Project site has the potential to provide refuge cover from predators, perching sites and favorable conditions for avian nesting that could be impacted by construction activities associated with the Project. Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or destruction of birds, their nests or eggs). In order to protect migratory bird species, a nesting bird clearance survey should be conducted prior to any ground disturbance or vegetation removal activities that may disrupt the birds during the nesting season. To avoid such impacts, a preconstruction nesting bird clearance survey shall be conducted by a qualified biologist within three (3) days prior to the commencement of any vegetation removal or ground-disturbing	Project Applicant, Qualified Biologist	Within 3 days prior to ground disturbing activities	City of San Jacinto Planning Division	

Plan, Program, Policy (PPP) / Mitigation Measure	Responsible Party for Implementation	Timing	Responsible Party for Monitoring	Date of Completion and Initials
activities occurring during the nesting season (February 1 through August 31). If no active nests are observed, the biologist shall document the negative findings in a brief letter report and submit it to the Lead Agency. If an active nest is identified, a no-disturbance buffer shall be established around the nest. The buffer distance shall be determined by the biologist based on species-specific sensitivity, the type and duration of construction activity, ambient noise and human activity levels, line-of-sight between the nest and construction areas, and the presence of topographic or vegetative screening. Buffers shall be established depending on these site-specific factors, and shall remain in place until the biologist determines that the nest is no longer active and the young have successfully fledged. The limits of the exclusion zone shall be clearly marked in the field with flagging, fencing, or other appropriate barriers, and construction personnel shall be briefed on the location and sensitivity of protected nesting areas. A biological monitor shall oversee the implementation of exclusion zones and monitor nesting behavior to ensure compliance. Construction activities may resume within the previously established buffer area only after the qualified biologist confirms that the young have successfully fledged and the nest is no longer active.				
CULTURAL RESOURCES				
PPP CUL-1: Human Remains. In the event that human remains are encountered on the Project site, work within 50 feet of the discovery shall cease and the County Coroner shall be notified immediately consistent with the requirements of California Code of Regulations (CCR) Section 15064.5(e). State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. Prior to the issuance of grading permits, the City Community and Planning, Building, and Code Enforcement	City of San Jacinto Planning Division, Qualified Archaeologist	Prior to issuance of grading permits	City of San Jacinto Planning Division	

Plan, Program, Policy (PPP) / Mitigation Measure	Responsible Party for Implementation	Timing	Responsible Party for Monitoring	Date of Completion and Initials
Department Director, or designee, shall verify that all grading plans specify the requirements of CCR Section 15064.5(e), State Health and Safety Code Section 7050.5, and PRC Section 5097.98, as stated above.				
MM CUL-1: Inadvertent Discovery. In the event that potential archaeological resources are discovered during excavation, grading, or construction activities, work shall cease within 50 feet of the find until a qualified archaeologist from the City or County List of Qualified Archaeologists has evaluated the find to determine whether the find constitutes a "unique archaeological resource," as defined in Section 21083.2(g) of the California Public Resources Code. Any resources identified shall be treated in accordance with California Public Resources Code Section 21083.2(g). If the discovered resource(s) appears Native American in origin, a Native American Monitor shall be contacted to evaluate any potential tribal cultural resource(s) and shall have the opportunity to consult on appropriate treatment and curation of these resources. The discovery would also be reported to the City and the South Central Coastal Information Center (SCCIC). Prior to the issuance of any permits for ground-disturbing activities that include the excavation of soils (including as grading, excavation, and trenching), the City of San Jacinto shall ensure that all Project grading and construction plans and specifications include requirement to halt construction activity and contact an archaeologist as specified above.	City of San Jacinto Planning Division, Qualified Archaeologist	Prior to issuance of grading permits	City of San Jacinto Planning Division	
GEOLOGY AND SOILS				
PPP GEO-1: CBC Compliance. The Project is required to comply with the California Building Standards Code as included in Section 15.04.020 of the San Jacinto Municipal Code to preclude significant adverse effects associated with seismic and soils hazards. CBC related and geologist and/or civil engineer specifications for the proposed Project are required to be incorporated into grading plans and building specifications as a condition of construction permit approval.	Project Applicant	Prior to issuance of building permits	City of San Jacinto Building & Safety Division	

Plan, Program, Policy (PPP) / Mitigation Measure	Responsible Party for Implementation	Timing	Responsible Party for Monitoring	Date of Completion and Initials
MM GEO-1: Paleontological Monitoring. Prior to the issuance of grading permits, the Project Applicant shall provide a letter to the City, or City designee, from a professional paleontologist, stating that a qualified paleontologist has been retained to provide services for the proposed Project. The paleontologist shall develop a Paleontological Resources Impact Mitigation Plan (PRIMP) to mitigate the potential impacts to unknown buried paleontological resources that may exist onsite. The PRIMP shall be provided to the City for review and approval. The PRIMP shall require that the paleontologist be present at the pre-grading conference to establish procedures for paleontological resource surveillance. Prior to commencement of grading activities, the City of San Jacinto Planning Division, or designee, shall verify that all Project grading and construction plans specify the requirements herein related to the PRIMP and the unanticipated discovery of paleontological resources. Full-time monitoring will be required starting at 3 feet deep below the current surface. In the event paleontological resources are encountered, ground disturbing activity within 50 feet of the area shall cease. The paleontologist shall examine the materials encountered, assess the nature and extent of the find, and recommend a course of action to further investigate and protect or recover and salvage those resources that have been encountered pursuant to the guidelines of the Society of Vertebrate Paleontology. Criteria for discarding specific fossil specimens shall be made explicit in the PRIMP. If the qualified paleontologist determines that impacts to a sample containing significant paleontological resources cannot be avoided by Project construction, then recovery techniques shall be applied. Actions include recovering a sample of the fossiliferous material prior to construction, monitoring construction activities and halting construction if an important fossil needs to be recovered, and/or cleaning, identifying, and cataloging specimens for curation and research purposes. Recovery, salvage, and treatment shall be done at the Project	Project Applicant, Qualified Paleontologist	Prior to issuance of grading permits	City of San Jacinto Planning Division	

Plan, Program, Policy (PPP) / Mitigation Measure	Responsible Party for Implementation	Timing	Responsible Party for Monitoring	Date of Completion and Initials
Applicant's expense. All recovered and salvaged resources shall be prepared to the point of identification and permanent preservation by the paleontologist. Resources shall be identified and curated into an established accredited professional repository. The paleontologist shall have a repository agreement in hand prior to initiating recovery of the resource. A report documenting the results of the monitoring, including any salvage activities and the significance of any fossils, shall be prepared and submitted to the City, or City designee. The report and inventory, when submitted to the City of San Jacinto Planning Division, shall signify completion of the program to mitigate impacts to paleontological resources.				
HAZARDS AND HAZARDOUS MATERIALS				
PPP HAZ-1: SCAQMD Rule 1403. Prior to issuance of demolition permits, the Project Applicant shall submit verification to the City Building and Safety Division that an asbestos survey has been conducted at all existing buildings located on the Project site. If asbestos or asbestos containing material is found, the Project Applicant shall follow all procedural requirements and regulations of the South Coast Air Quality Management District (SCAQMD) Rule 1403. Rule 1403 regulations require that the following actions be taken: notification of SCAQMD prior to construction activity, asbestos removal in accordance with prescribed procedures, placement of collected asbestos in leak-tight containers or wrapping, and proper disposal.	Project Applicant	Prior to issuance of demolition permits	City of San Jacinto Building & Safety Division	
PPP HAZ-2: Lead. Prior to issuance of demolition permits, the Project Applicant shall submit verification to the City Building and Safety Division that a lead-based paint survey has been conducted at all existing buildings located on the Project site. If lead-based paint is found, the Project Applicant shall follow all procedural requirements and regulations for proper removal and disposal of the lead-based paint. CalOSHA has established limits of exposure to lead contained in dusts and fumes.	Project Applicant	Prior to issuance of demolition permits	City of San Jacinto Building & Safety Division	

Plan, Program, Policy (PPP) / Mitigation Measure	Responsible Party for Implementation	Timing	Responsible Party for Monitoring	Date of Completion and Initials
Specifically, CCR Title 8, Section 1532.1 provides for exposure limits, exposure monitoring, and respiratory protection, and mandates good working practices by workers exposed to lead.				
PPP HYD-1: SWPPP. Listed below in *Hydrology and Water Quality*.	Project developer	Prior to issuance of grading permit	City of San Jacinto Engineering Division	
HYDROLOGY & WATER QUALITY				
PPP HYD-1: SWPPP. Prior to grading permit issuance, the Project developer shall have a SWPPP prepared by a Qualified SWPPP Developer (QSD) pursuant to the San Jacinto Municipal Code Chapter 17.600. The SWPPP shall incorporate all necessary BMPs and other City requirements to comply with the NPDES requirements to limit the potential of polluted runoff during construction activities. Project contractors shall be required to ensure compliance with the SWPPP and permit periodic inspection of the construction site by San Jacinto City staff or its designee to confirm compliance.	Project developer	Prior to issuance of grading permit	City of San Jacinto Engineering Division	
PPP HYD-2: WQMP. Prior to grading permit issuance, the Project developer shall have a WQMP approved by the City for implementation. The project shall comply with the San Jacinto Municipal Code Chapter 19.600 and the Municipal Separate Storm Sewer System (MS4) permit requirements in effect for the Regional Water Quality Control Board (RWQCB) at the time of grading permit to control discharges of sediments and other pollutants during operations of the Project.	Project developer	Prior to issuance of grading permit	City of San Jacinto Engineering Division	
NOISE				
PPP N-1: Construction Equipment Buffer Distance. To minimize the effects of vibration from construction equipment on existing structures, loaded trucks would be required to maintain a minimum buffer distance of 10 feet from the existing building and small bulldozers would be required to maintain a minimum buffer distance of 1 foot from the existing building.	Project Applicant	During construction	City of San Jacinto Building & Safety Division	

Plan, Program, Policy (PPP) / Mitigation Measure	Responsible Party for Implementation	Timing	Responsible Party for Monitoring	Date of Completion and Initials
TRIBAL CULTURAL RESOURCES				
PPP TCR-1: Treatment and Disposition Agreement. Prior to issuance of a grading permit, the Project developer shall enter into a Treatment and Disposition Agreement (TDA) with the Soboba Band of Luiseño Indians to address treatment and disposition of archaeological, or Tribal Cultural Resources and human remains associated with the Soboba Band of Luiseño Indians that may be uncovered or otherwise discovered during ground-disturbing activities related to the project, if monitoring deemed necessary by Soboba Band of Luiseño Indians. The TDA will establish provisions for tribal monitoring and shall be submitted to the City of San Jacinto Planning Division once it has been executed.	Project developer	Prior to issuance of grading permits	City of San Jacinto Planning Division	
PPP CUL-1: Human Remains. Listed previously in *Cultural Resources*.	City of San Jacinto Planning Division, Qualified Archaeologist	Prior to issuance of grading permits	City of San Jacinto Planning Division	

Outlook

Formal Public Comment and Objection – Bradley Gardens Expansion Project PROJ25-0178

From Alison Jones <alison.jones.otsc@gmail.com>
Date Fri 9/18/2026 11:08 AM
To Chen, Frank <fchen@sanjacintoca.gov>

[**NOTICE:** This message originated outside of City of San Jacinto -- **DO NOT CLICK** on **links** or open **attachments** unless you are sure the content is safe.]

Dear Mr. Chen,

My name is Alison Jones, and I live at Parkview Estates, 913 South Grand Avenue, Space 71, San Jacinto, California 92582.

My home is very close to the proposed Bradley Gardens Skilled Nursing Facility Expansion Project at 980 West Seventh Street.

Please accept this email as my formal public comment and objection to the Draft Initial Study and Mitigated Negative Declaration for the Bradley Gardens Skilled Nursing Facility Expansion Project, PROJ25-0178, SCH No. 2026090689.

I also object to the approval of the Conditional Use Permit and Site Plan and Design Review in their present form.

I am requesting that the City not adopt the Mitigated Negative Declaration as currently written and not approve the project as presently proposed.

Before making any decision, the City should require additional analysis of traffic, parking, pedestrian safety, emergency access, noise, lighting, security, construction impacts, and compatibility with the nearby residential community.

If these potential impacts cannot be adequately evaluated and mitigated through the current environmental document, I request preparation of an Environmental Impact Report or revision and recirculation of the environmental study for additional public review.

The proposed project would expand the existing facility from 44 beds to 103 beds, add psychiatric treatment capacity, construct an approximately 17,372-square-foot addition, and reportedly add approximately 100 employees. The notice estimates only 181 additional daily vehicle trips. That estimate requires closer examination considering employee shift changes, visitors, patient transportation, ambulances, deliveries, vendors, medical providers, and other service vehicles.

Parkview Estates and the surrounding streets already experience significant parking and traffic problems. Vehicles frequently occupy the available street space, and key intersections serving our

neighborhood lack adequate traffic controls. Adding this level of activity may create additional risks for residents, pedestrians, children, disabled individuals, emergency vehicles, and drivers entering or leaving the mobile home park.

I ask the City to provide and carefully examine the following:

1. The complete traffic study and the data used to calculate the projected increase of 181 daily trips.

2. The expected number of employees on each shift and the anticipated times of shift changes.

3. The number of on-site parking spaces and evidence that the parking supply will accommodate employees, visitors, medical transportation, ambulances, deliveries, and vendors without causing overflow parking in the surrounding neighborhood.

4. An evaluation of the entrances and intersections serving the project and Parkview Estates, including whether stop signs, crosswalks, improved lighting, turn controls, or other traffic-safety improvements are necessary.

5. An emergency-access analysis addressing whether fire engines and ambulances can safely and promptly reach the facility and surrounding homes when nearby streets are congested or lined with parked vehicles.

6. A pedestrian-safety analysis that considers nearby homes, children, disabled residents, and San Jacinto Elementary School.

7. The anticipated frequency of ambulance arrivals, emergency calls, sirens, nighttime activity, deliveries, and patient transportation.

8. A detailed operational and security plan describing staffing, secure entrances and exits, patient admissions and discharges, unauthorized-departure prevention, emergency incidents, and coordination with local police, fire, and emergency medical services.

9. An evaluation of operational noise, exterior lighting, mechanical equipment, construction noise, dust, construction vehicles, and nighttime impacts on nearby residents.

10. An assessment of whether the project's size and around-the-clock operations are compatible with the immediately adjacent residential community.

I am a disabled resident and an autistic adult. Members of my family and other residents of Parkview Estates also live with autism, disabilities, mobility limitations, and sensory sensitivities. Increased traffic, noise, emergency activity, lighting, congestion, and restricted access can affect disabled and autistic residents more seriously than the general population. Predictable and safe access to our homes is especially important for residents with mobility and sensory-related disabilities.

My concerns are not based on hostility toward individuals who need mental-health or skilled-nursing services. I support appropriate access to healthcare.

My concern is whether a development of this size and intensity can operate safely at this particular location without creating significant impacts for the surrounding residential community.

If the City considers approving the project, I request enforceable conditions requiring sufficient on-site employee and visitor parking, restrictions against neighborhood overflow parking, appropriate traffic controls, protected emergency access, controlled exterior lighting, construction-hour limitations, noise restrictions, a written security and emergency-response plan, and a designated facility contact for neighborhood complaints.

Please include this email and any attachments in the official administrative record for PROJ25-0178. Please also add me to the notification list for every Planning Commission or City Council meeting, environmental decision, revised study, staff report, project modification, and appeal associated with this project.

Please confirm in writing that this comment was received on time and made part of the official record. I also request a copy or working link to the complete Initial Study, traffic analysis, parking plan, site plan, operational statement, security plan, and all supporting technical studies.

Thank you for considering the effects this project may have on Parkview Estates and the surrounding San Jacinto community.

Sincerely,

Alison Jones
913 South Grand Avenue, Space 71
San Jacinto, California 92582

https://calendly.com/alison-jones-vpfeelwise/15min

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT VIA E-MAIL:
fchen@sanjacintoca.gov
Frank Chen, Associate City Planner
Planning Department
City of San Jacinto
595 S. San Jacinto Avenue
San Jacinto, CA 92583

October 16, 2026

Draft Mitigated Negative Declaration (MND) for the Bradley Gardens Skilled Nursing Facility Expansion Project (Proposed Project) (SCH No.: 2026090689)

South Coast Air Quality Management District (South Coast AQMD) Staff appreciate the opportunity to review the above-mentioned document. The City of San Jacinto is the California Environmental Quality Act (CEQA) Lead Agency for the Proposed Project. To provide context, South Coast AQMD Staff have provided a brief summary of the project information and prepared the following comments which are organized by topic of concern.

Summary of Proposed Project Information in the Draft MND

Based on the Draft MND, the Proposed Project consists of expanding an existing 44-bed skilled nursing facility to 103 beds through construction of a single-story addition (17,372 square feet) providing 43 additional skilled nursing and short-term psychiatric beds, conversion of an existing vacant office building (2,596 square feet) into a 16-bed psychiatric health facility, and demolition of an existing maintenance and storage building (1,074 square feet), with 52 vehicle parking spaces and 6 bicycle parking spaces. Based on a review of aerial photographs, South Coast AQMD Staff found that the nearest sensitive receptor (e.g., residential development) is located approximately 90 feet (27 meters) north of the Project site.Construction of the Proposed Project is anticipated to occur over 12 months. The Proposed Project is located at 980 West 7th Street in San Jacinto.[1]

South Coast AQMD Comments

South Coast AQMD Air Permits and Role as a Responsible Agency

If implementation of the Proposed Project would require the use of new stationary and portable sources, including but not limited to emergency generators, fire water pumps, boilers, etc., air permits from South Coast AQMD will be required. The Final MND should include a discussion about the potentially applicable South Coast AQMD rules that may be applicable to the Proposed Project. Those rules may include, for example, Rule 201 – Permit to Construct,[2] Rule 203 – Permit

[1] Initial study. Page 26.
[2] South Coast AQMD, Rule 201 is available at: https://www.aqmd.gov/docs/default-source/rule-book/reg-ii/rule-201.pdf

to Operate,[3] Rule 401 – Visible Emissions,[4] Rule 402 – Nuisance,[5] Rule 403 – Fugitive Dust,[6] Rule 1110.2 – Emissions from Gaseous and Liquid Fueled Engines,[7] Rule 1113 – Architectural Coatings,[8] Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil,[9] Rule 1179 – Publicly Owned Treatment Works Operations,[10] Regulation XIII – New Source Review,[11] Rule 1401 – New Source Review of Toxic Air Contaminants,[12] Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants,[13] Rule 1470 – Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines,[14] etc. It is important to note if air permits from South Coast AQMD are required, the role of South Coast AQMD would change from a Commenting Agency to a Responsible Agency under CEQA. In addition, if South Coast AQMD is identified as a Responsible Agency, per CEQA Guidelines Sections 15086, the Lead Agency is required to consult with South Coast AQMD.

CEQA Guidelines Section 15096 sets forth specific procedures for a Responsible Agency, including making a decision on the adequacy of the CEQA document for use as part of the process for conducting a review of the Proposed Project and issuing discretionary approvals. Moreover, it is important to note that if a Responsible Agency determines that a CEQA document is not adequate to rely upon for its discretionary approvals, the Responsible Agency must take further actions listed in CEQA Guideline Section 15096(e), which could have the effect of delaying the implementation of the Proposed Project. In its role as CEQA Responsible Agency, the South Coast AQMD is obligated to ensure that the CEQA document prepared for this Proposed Project contains a sufficient project description and analysis to be relied upon in order to issue any discretionary approvals that may be needed for air permits. South Coast AQMD is concerned that the project description and analysis in its current form in the MND is inadequate to be relied upon for this purpose.

For these reasons, the final CEQA document should be revised to include a discussion about any and all new stationary and portable equipment requiring South Coast AQMD air permits, provide the evaluation of their air quality and greenhouse gas impacts, and identify South Coast AQMD as a Responsible Agency for the Proposed Project as this information will be relied upon as the basis for the permit conditions and emission limits for the air permit(s). Please contact South Coast AQMD's Engineering and Permitting Staff at (909) 396-3385 for questions regarding what types of equipment would require air permits. For more general information on permits, please visit South Coast AQMD's webpage at https://www.aqmd.gov/home/permits.

Conclusion

[3] South Coast AQMD, Rule 203 is available at: https://www.aqmd.gov/docs/default-source/rule-book/reg-ii/rule-203.pdf
[4] South Coast AQMD, Rule 401 is available at: https://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-401.pdf
[5] South Coast AQMD, Rule 402 is available at: https://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf
[6] South Coast AQMD, Rule 403 is available at: https://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403
[7] South Coast AQMD, Rule 1110.2 is available at: https://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1110_2.pdf
[8] South Coast AQMD, Rule 1113 is available at https://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf
[9] South Coast AQMD, Rule 1166 isa vailable at: https://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1166.pdf
[10] South Coast AQMD, Rule 1179 is available at: https://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1179.pdf
[11] South Coast AQMD, Regulation XIII is available at: https://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/regulation-xiii
[12] South Coast AQMD, Rule 1401 is available at: https://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1401.pdf
[13] South Coast AQMD, Rule 1466 is available at: https://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1466.pdf
[14] South Coast AQMD, Rule 1470 is available at: https://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1470.pdf

The Lead Agency is recommended to revise the CEQA analysis to address the aforementioned comments and provide the necessary evidence to sufficiently support the conclusions reached. If the requested information and analysis are not included in the final CEQA document, either the Final MND or other type of CEQA document, the Lead Agency should provide reasons for not doing so. Pursuant to California Public Resources Code Section 21092.5(b) and CEQA Guidelines Section 15074, prior to approving the Proposed Project, the Lead Agency shall consider the MND for adoption together with any comments received during the public review process and notify each public agency when any public hearings are scheduled. Please provide South Coast AQMD with written responses to all comments contained herein prior to the adoption of the Final MND. When responding to issues raised in the comments, detailed reasons supported by substantial evidence in the record to explain why specific comments and suggestions are not accepted must be provided. In addition, if the Lead Agency decides to adopt the Final MND, please provide South Coast AQMD with a notice of any scheduled public hearing(s).

South Coast AQMD staff are available to work with the Lead Agency to ensure that impacts to air quality, GHG emissions, and health risk from the Proposed Project are accurately evaluated and mitigated to the greatest extent possible. Please contact Sahar Ghadimi, Ph.D., Air Quality Specialist, at sghadimi@aqmd.gov or me at SWang1@aqmd.gov should you have any questions.

Sincerely,

Sam Wang

Sam Wang
Program Supervisor, CEQA IGR
Planning, Rule Development & Implementation

SW:SG
RVC260916-08
Control Number