Tuesday, March 10, 2026
701 East Carson Street, Carson, CA 90745
Helen Kawagoe Council Chambers, 2nd Floor
6:30 p.m.

AGENDA
REGULAR MEETING OF THE
PLANNING COMMISSION

Members:	Dianne Thomas Chair	Louie Diaz Vice Chair	Frederick Docdocil
	Carlos Guerra	Del Huff	DeQuita Mfume
	Clarence Johnson	Leticia Wilson	
Alternates:	Jaime Monteclaro		
Staff:	Nathan Freeman Community and Economic Development Director	McKina Alexander Planning Manager	Chris Palmer, AICP Economic Dev. Manager
	Benjamin Jones Asst. City Attorney	Laura Gonzalez Planning Secretary	

This Agenda and corresponding staff reports can be found on the City of Carson website at www.carsonca.gov

"In accordance with the Americans with Disabilities Act of 1990, if you require a disability related modification or accommodation to attend or participate in this meeting, including auxiliary aids or services, please call the City Clerk's office at 310-952-1720 at least 48 hours prior to the meeting." (Government Code Section 54954.2)

PUBLIC INFORMATION

The public may address the members of the Planning Commission on matters within the jurisdiction of the Planning Commission or on any items on the agenda of the Planning Commission during the designated public comment periods. There will be two oral communication sessions: one for Agendized Items (comment about items ON the agenda) and the other non-Agendized items (comment about items NOT on the agenda). The Oral Communications portion of the agenda is limited to a duration of one hour unless otherwise approved by the Planning Commission. Comment time is normally 3 minutes depending on the number of speakers.

IF YOU ARE NOT ABLE TO ATTEND THE MEETING IN-PERSON, PUBLIC COMMENTS CAN BE SUBMITTED BEFORE THE MEETING VIA:

- **Email: planning@carsonca.gov** (up to 3 hours prior to the start of the meeting).
- **Written:** Delivered to the Planning Division at City Hall (up to 3 hours prior to the start of the meeting).

Emailed and written comments received by the Planning Division may not be read aloud during the meeting but will be provided to the Board and incorporated into the record.

PUBLIC VIEWING OF THIS MEETING WILL BE AVAILABLE BY:

- **Livestream: www.carsonca.gov**
- **YouTube: www.youtube.com/@CityofCarsonCalifornia**
- **Cable TV: Spectrum (Channel 35) and ATT (Channel 99)**

RULES OF DECORUM:

1. *No person attending a Public Meeting shall engage in disorderly or boisterous conduct, including but not limited to applause, whistling, stamping of feet, booing, or making any loud, threatening, profane, abusive, personal, impertinent, or slanderous utterance-that disturbs, disrupts, or otherwise impedes the orderly conduct of the meeting.*
2. *All remarks by members of the public shall be addressed to the Mayor or the Chair and not to any other member of the public or to any single Council, Board or Commission Member unless in response to a question from that Member.*
3. *Signs, placards, banners, or other similar items shall not be permitted in the audience during a Public Meeting if the presence of such item disturbs, disrupts or otherwise impedes the orderly conduct of the meeting.*
4. *All persons attending a Public Meeting shall remain seated in the seats provided, unless addressing the body at the podium or entering or leaving the meeting.*
5. *All persons attending a Public Meeting shall obey any lawful order of the Presiding Officer to enforce the Rules of Decorum.*

- *Treat everyone courteously*
- *Listen to others respectfully*
- *Exercise self-control*
- *Give open-minded consideration to all viewpoints*
- *Focus on the issues and avoid personalizing debate*
- *Embrace respectful disagreement and dissent as democratic rights that are inherent components of an inclusive public process and rolls for forging sound decisions*

1. CALL TO ORDER: PLANNING COMMISSION

2. ROLL CALL

3. FLAG SALUTE

4. CLOSED SESSION

CONFERENCE WITH LEGAL COUNSEL - A closed session will be held pursuant to Government Code Section 54956.9 (d)(2) or (d)(3) and (e)(1) because there is significant exposure to litigation in one (1) case.

5. ORAL COMMUNICATIONS FOR MATTERS NOT LISTED ON THE AGENDA

The public may at this time address the members of the Planning Commission on any matters within the jurisdiction of the Planning Commission. No action may be taken on non-agendized items except as authorized by law. Speakers are requested to limit their comments to no more than three minutes each, speaking once.

6. ORAL COMMUNICATIONS FOR NON-PUBLIC HEARING ITEMS LISTED ON THE AGENDA (MEMBERS OF THE PUBLIC)

The public may at this time address the members of the Planning Commission on any matters within the jurisdiction of the Planning Commission. No action may be taken on non-agendized items except as authorized by law. Speakers are requested to limit their comments to no more than three minutes each, speaking once.

7. APPROVAL OF MINUTES

7.A. APPROVAL OF MINUTES - FEBRUARY 24, 2026

RECOMMENDED ACTION

— 1. APPROVE the minutes as listed.

8. PRESENTATIONS

8.A. COMPREHENSIVE DEVELOPMENT FEE STUDY

9. NEW PUBLIC HEARING

9.A. PUBLIC HEARING OF THE PLANNING COMMISSION OF THE CITY OF CARSON TO CONSIDER FINDING A CEQA EXEMPTION, RENDERING A DECISION ON DESIGN OVERLAY REVIEW (DOR) NO. 1935-23 AND CONDITIONAL USE PERMIT (CUP) NO. 1128-23, AND MAKING A RECOMMENDATION TO THE CITY COUNCIL REGARDING A DECISION ON DEVELOPMENT AGREEMENT (DA) NO. 33-23, FOR THE DEVELOPMENT OF AN APPROXIMATELY 100-MEGAWATT BATTERY ENERGY STORAGE SYSTEM (BESS) LOCATED AT 18800 BROADWAY (APN: 7339-014-009)

RECOMENDED ACTION

— 1. CONDUCT a Public Hearing;

— 2. RECEIVE and FILE the staff report and all related testimony;

— 3. CLOSE the Public Hearing; and

— 4. DELIBERATE and TAKE ACTION at the discretion of the planning Commission, including considering adoption of one of the following resolutions:

— Resolution No. 26-XXXX, entitled “A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CARSON FINDING A CEQA EXEMPTION AND CONDITIONALLY APPROVING SITE PLAN AND DESIGN REVIEW NO. 1935-23 AND CONDITIONAL USE PERMIT NO. 1128-23 CONTINGENT UPON CITY COUNCIL ADOPTION AND APPROVAL OF, AND RECOMMENDING THAT THE CITY COUNCIL ADOPT AND APPROVE, DEVELOPMENT AGREEMENT NO. 33-23 FOR A PROPOSED BATTERY ENERGY STORAGE SYSTEM (BESS) FACILITY LOCATED AT 18800 BROADWAY AVENUE, APN 7339-014-009"; or

— Resolution No. 26-XXXX, entitled "A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CARSON DENYING SITE PLAN AND DESIGN REVIEW NO. 1935-23 AND CONDITIONAL USE PERMIT NO. 1128-23, AND RECOMMENDING THAT THE CITY COUNCIL DENY DEVELOPMENT AGREEMENT NO. 33-23 FOR A PROPOSED BATTERY ENERGY STORAGE SYSTEM (BESS) FACILITY LOCATED AT 18800 BROADWAY AVENUE, APN 7339-014-009".

10. MANAGER'S REPORT

11. ORAL COMMUNICATIONS (COMMISSIONERS)

12. ADJOURNMENT

Date Posted: March 5, 2026

Report to Planning Commission

Tuesday, March 10, 2026, 6:30 PM

APPROVAL OF MINUTES 7A.

TO:	Planning Commission
FROM:	McKina Alexander, Planning Manager
PREPARED BY:	Laura Gonzalez, Planning Secretary
SUBJECT:	APPROVAL OF MINUTES - FEBRUARY 24, 2026

I. SUMMARY

The Planning Division is seeking approval of the following minutes:

- Tuesday, February 24, 2026

II. RECOMMENDATION

APPROVE the minutes as listed.

III. ATTACHMENTS

1. Minutes, February 24, 2025

Attachments

Minutes 2-24-26.pdf

CITY OF CARSON

MINUTES
PLANNING COMMISSION
FEBRUARY 24, 2026

1. CALL TO ORDER: PLANNING COMMISSION

The meeting was called to order at 6:30 p.m. by Chair Dianne Thomas in the Helen Kawagoe Council Chambers, Carson City Hall, 701 E. Carson Street, Carson, California 90745.

2. ROLL CALL

Planning Secretary Laura Gonzalez noted the roll:

Planning Commissioners Present: Chair Dianne Thomas, Vice Chair Louie Diaz, Commissioner Del Huff, Commissioner DeQuita Mfume, Commissioner Clarence Johnson, Commissioner Leticia Wilson, Commissioner Frederick Docdocil

Planning Commissioners Absent: Commissioner Carlos Guerra, Commissioner Jaime Monteclaro

Also Present: Community and Economic Development Director Nathan Freeman, Planning Manager McKina Alexander, Assistant City Attorney Benjamin Jones, Associate Planner Aaron Whiting

3. FLAG SALUTE

Commissioner Docdocil led the Pledge of Allegiance.

4. ORAL COMMUNICATIONS FOR MATTERS NOT LISTED ON THE AGENDA

None.

5. ORAL COMMUNICATIONS FOR NON-PUBLIC HEARING ITEMS LISTED ON THE AGENDA (MEMBERS OF THE PUBLIC)

None.

6. APPROVAL OF MINUTES

6.A. APPROVAL OF MINUTES - JANUARY 27, 2026

RECOMMENDED ACTION

— APPROVE the minutes as listed.

Motion To Approve submitted by Louie Diaz seconded by Del Huff resulting in 7-0-0-0-0

7. PRESENTATIONS

7.A. BUILDING AND SAFETY/ TRANSTECH ENGINEERING SEMI-ANNUAL UPDATE

The presentation was provided by Rafaela Diaz (Client Success Manager) and Jason Robbins (Building Supervisor).

8. NEW PUBLIC HEARING

8.A. CONSIDER ADOPTION OF A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CARSON FINDING A CEQA EXEMPTION AND CONDITIONALLY APPROVING MODIFICATION OF CONDITIONS OF APPROVAL OF A DISCRETIONARY PERMIT (MOD) NO. 0001-26 TO MODIFY DOR NO. 1952-23 AS TO THE FAÇADE OF THE SHOWROOM BUILDING OF AN EXISTING HYUNDAI CAR DEALERSHIP LOCATED AT 2205 E. 223RD STREET (APN 7315-040-013)

RECOMMENDED ACTION

— 1. OPEN the public hearing, take public comment, and CLOSE the public hearing; and

— 2. ADOPT Resolution No. 26-2899, "A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CARSON FINDING A CEQA EXEMPTION AND CONDITIONALLY APPROVING MODIFICATION OF CONDITIONS OF APPROVAL OF A DISCRETIONARY PERMIT (MOD) NO. 0001-26 TO MODIFY DOR NO. 1952-23 AS TO THE FAÇADE OF THE SHOWROOM BUILDING OF AN EXISTING HYUNDAI CAR DEALERSHIP LOCATED AT 2205 E. 223RD STREET (APN 7315-040-013)."

Vice Chair Diaz - Are you in agreement with the conditions of approval?

Brian Stump (Architect) - We're in agreement with the conditions. We are only making revisions to the tower element.

Chair Thomas - Thank you for coming with these improvements.

Motion To Approve submitted by Louie Diaz seconded by DeQuita Mfume resulting in 7-0-0-0-0

9. MANAGER'S REPORT

Director Freeman - Thank you to the commission for your hard work on behalf of this community. I would also like to recognize Planning Manager Alexander and her dedicated team for the hard work and effort to get this agenda to you this evening so that you can make good decisions on behalf of the community.

Planning Manager Alexander - I really appreciate our staff and the hard work that's put into presenting these matters before you. Thank you for your efforts as well.

10. ORAL COMMUNICATIONS (COMMISSIONERS)

Commissioner Johnson - Happy to be here and making meaningful progress.

Commissioner Mfume - Pleasure to serve. It's great to see everyone. Thank you to city staff, they do an awesome job. Looking forward to the State of the City.

Commissioner Wilson - Ditto.

Commissioner Docdocil - It's always nice to have a very streamlined meeting which doesn't take away from the productivity that this group has. I would like to acknowledge the hard work that our city staff always does.

Commissioner Huff - It's wonderful to be here this evening. Thank you, staff, for the wonderful job and my fellow commissioners for being here again to look out for the Jewel of the South Bay.

Chair Thomas - Carson will be hosting its Black History Program on February 27th at 6:00 p.m. at the Community Center. The State of the City is happening on March 19th.

11. ADJOURNMENT

The meeting was adjourned by Chair Dianne Thomas at 6:57 p.m.

_____

Dianne Thomas, Chairperson

Attest:

_____

Laura Gonzalez, Secretary

Report to Planning Commission

Tuesday, March 10, 2026, 6:30 PM

NEW PUBLIC HEARING 9A.

TO:	Planning Commission
FROM:	McKina Alexander, Planning Manager
PREPARED BY:	Kaneca Pompey, Consultant Planner
SUBJECT:	PUBLIC HEARING OF THE PLANNING COMMISSION OF THE CITY OF CARSON TO CONSIDER FINDING A CEQA EXEMPTION, RENDERING A DECISION ON DESIGN OVERLAY REVIEW (DOR) NO. 1935-23 AND CONDITIONAL USE PERMIT (CUP) NO. 1128-23, AND MAKING A RECOMMENDATION TO THE CITY COUNCIL REGARDING A DECISION ON DEVELOPMENT AGREEMENT (DA) NO. 33-23, FOR THE DEVELOPMENT OF AN APPROXIMATELY 100-MEGAWATT BATTERY ENERGY STORAGE SYSTEM (BESS) LOCATED AT 18800 BROADWAY (APN: 7339-014-009)

PROJECT/APPLICATION INFORMATION

Project Summary:	A request by the applicant to consider finding a CEQA exemption, approving DOR No. 1935-23 and CUP No. 1128-23, contingent upon City Council approval of Development Agreement (DA) No. 33-23, and recommending the City Council adopt DA No. 33-23 for the development of an approximately 100-megawatt battery energy storage system (BESS) and project-related on-site and offsite improvements
Project Location:	18800 Broadway (APN: 7339-014-009)
General Plan/Zoning:	Heavy Industrial/Manufacturing, Heavy
Project Applicant:	Jessica Mowry, ORMAT
Project Owner:	VESI 27 LLC

I. OVERVIEW

A. Introduction and Background

The approximately 3-acre vacant project site contains one parcel and is located in the northwestern portion of the city, south of Victoria Avenue, on the southeast corner of Griffith Street and Main Street. The proposed project includes an on-site approximately 100-megawatt battery energy storage system (BESS) development and project-related on and off-site improvements. The applicant/prospective permittee, and the contracting party under the proposed Development Agreement (DA) No. 33-23 and the contemplated shared easement agreement with the adjacent Edison substation, is VESI 27 LLC. The BESS site will be operated by Ormat Energy Storage (Ormat). Ormat has over 60 years of experience in energy markets and currently operates eighteen (18) BESS projects across California, Ohio, and Texas.

From March 2019 to February 2025, the site was previously occupied by BD Topsoil and LA County Sandbags, an industrial topsoil supplier operation. Previous entitlement(s) for the project site include Tentative Parcel Map (TPM) 15195-82 to create two lots.

The applicant's requested entitlements consist of the following:

- DOR No. 1935-23, to approve the development plan for the project pursuant to CMC Section 9113.2 which designates the requirement for properties within a Design Overlay zone to be subject to CMC Section 9172.23 for Site Plan and Design Review for any development that is evaluated for $50,000 or more;
- CUP No. 1128-23, to approve the proposed BESS use containing hazardous materials pursuant to CMC Section 9141.1; and
- DA No. 33-23, to grant specified development rights in exchange for provision of specified community benefits.

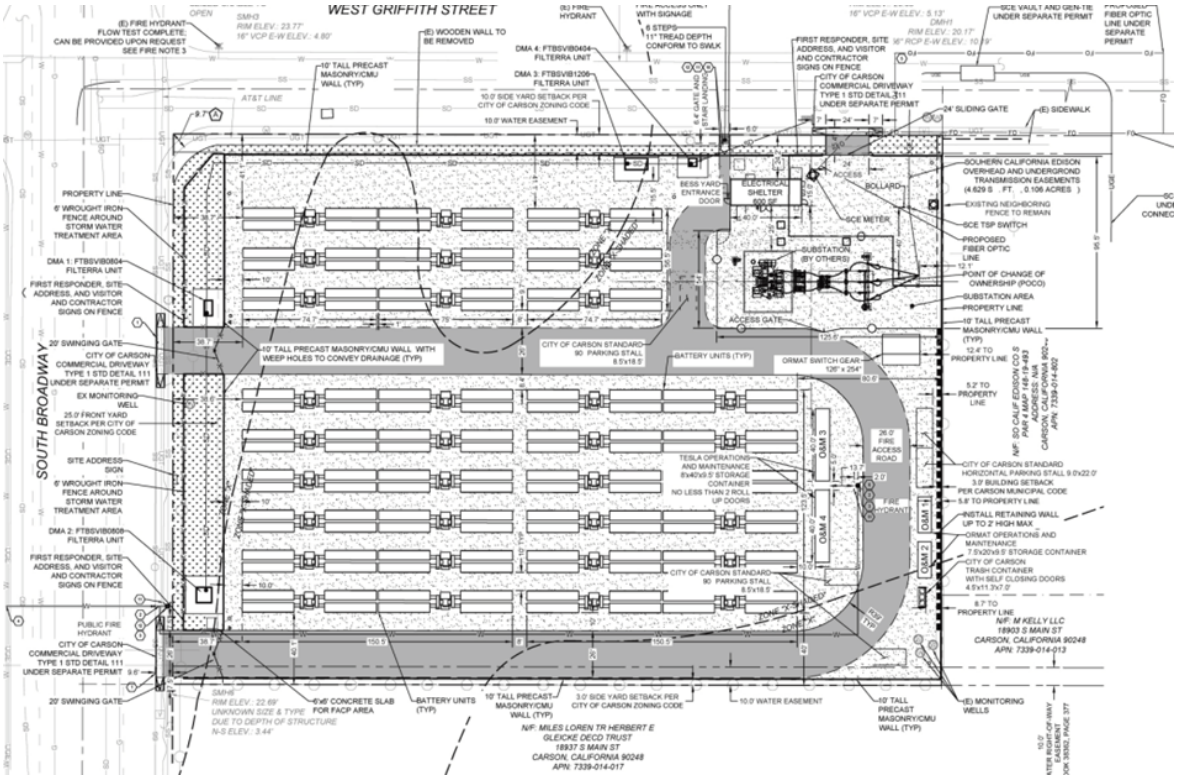
B. Project Description

The proposed project is an approximately 100-megawatt BESS consisting of lithium-ion batteries installed in refabricated steel enclosures housing internal racks, inverters, medium-voltage transformers, switchgear, collector substation, and other associated equipment to interconnect into the adjacent Southern California Edison (SCE) Nola Substation located east of the project site. The enclosures would have battery storage racks with relay and communications systems for automated monitoring and management of the batteries to ensure design performance. A battery management system would be provided to control the charging/discharging of the batteries, along with temperature monitoring and control of the individual battery cell temperature with an integrated cooling system. Power inverters to convert between AC and DC, along with transformers to step up the voltage, would also be included.

A single underground 66-kilovolt generation transmission line (gen-tie line) would interconnect the proposed project to the existing SCE NOLA substation. The proposed underground gen-tie line route would start at the northeast portion the project site, run east along the west Griffith Street frontage, and connect to the SCE Nola Substation located approximately 165 feet east of the project site, on the SCE Nola Substation property. To facilitate communication with SCE facilities, a fiber-optic cable will connect the project site switchyard with the SCE Nola Substation. Installation of the underground fiber optic cable lines would require trenching and earthmoving activities within the West Griffith Street public right-of-way and would be contingent upon City granting an easement or license to SCE or Developer, as applicable, for the location of the fiber optic cable lines in the West Griffith Street public right-of-way in exchange for fair market value consideration pursuant to a written agreement, and all required City encroachment and excavation permits.

The proposed BESS facility would provide a service to the regional electric grid by receiving energy (charging) from the SCE electric transmission system, storing energy, and then later delivering energy (discharging) back to the point of interconnection. The facility is intended to operate year-round and would be available to receive or deliver energy 24 hours a day and 365 days a year.

Proposed Site Plan:



Gen-tie and fiber line routes from Project Site to the SCE Nola Substation



C. Existing Site Conditions

1. Zoning and General Plan Land Use Information

The project site is located approximately 0.35 miles east of the I-110 Freeway and approximately 0.46 miles north of the I-405 Freeway. Although the site and adjacent lots are primarily industrial uses, institutional use (Kaiser Permanente Hospital) is located further northwest, the City's Community Services/Public Works facility is located further north, a residential community is located east of Main St. across from the site, and Victoria Park and Towne Ave. Elementary School is located further to the southeast.

The 3-acre project and the project-related offsite improvements are within the Manufacturing, Heavy with Site Plan and Design review Overlay (MH-D) zone with a General Plan land use designation of Heavy Industrial (HI).

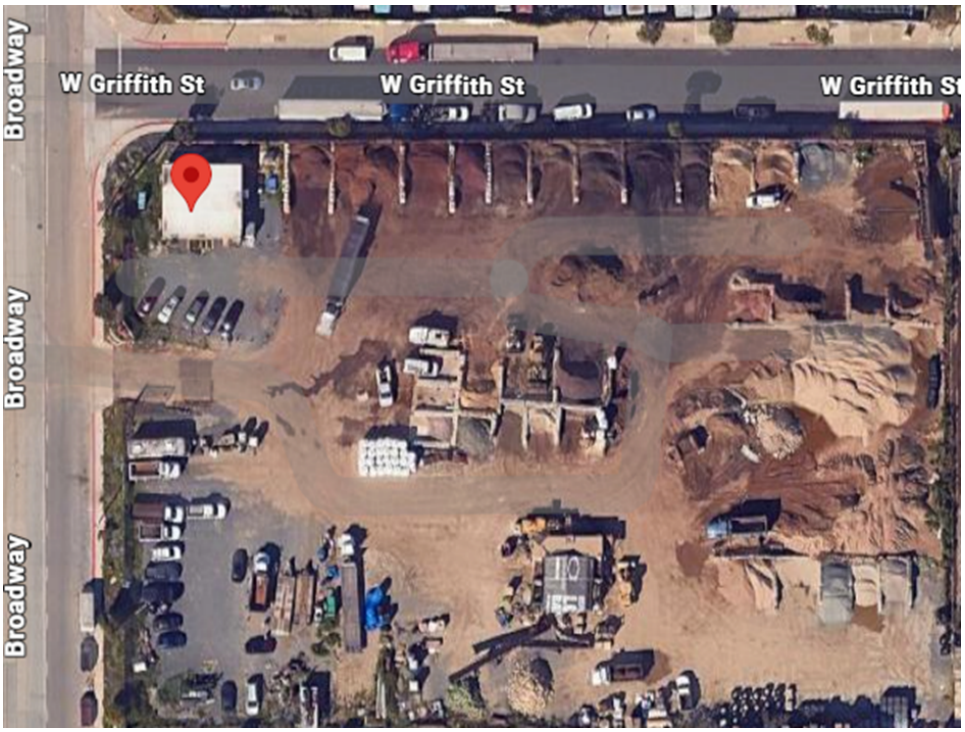
The following table summarizes the surrounding land uses, zoning, and general plan designations, as well as certain nearby sensitive receptors:

Land Use Summary Table			
	Existing Use	**Zoning**	**General Plan**
Subject Site	Vacant	MH-D (Manufacturing, Heavy -Design Overlay)	Heavy Industrial
North of Subject Site	Pactrans, LLC (freight forwarding office)	MH-D (Manufacturing, Heavy -Design Overlay) and ML-D (Manufacturing Light - Design Overlay)	Heavy Industrial Light Industrial
South of Subject Site	OP Fleet Service (truck repair)	MH-D (Manufacturing, Heavy -Design Overlay)	Heavy Industrial
East (adjacent) of Subject Site	SCE Nola Substation	MH-D (Manufacturing, Heavy -Design Overlay)	Heavy Industrial
Further East/Southeast (Across Main St.)	Residential neighborhood, Victoria Park, and Towne Ave. Elementary School	Residential Single Family and Open Space	Low Density Residential and Open Space

West of Subject Site **Further Northwest of Subject Site**	Metro Division 18 and Kaiser Permanente Hospital	ML-D (Manufacturing, Light -Design Overlay)	Light Industrial

2. Site Conditions

The project site is currently vacant. The below photo shows the prior topsoil operation on the site. Vegetation consisting of ground cover (grass) and shade trees are located in planted areas within the frontage of the project site.



II. ANALYSIS

A. General Plan Consistency

The project site and project-related offsite improvements are located located within industrial area surrounded by existing development and within close proximity of sensitive receptors (hospital, park, residential, and school).

The General Plan land use designation for the project site is Heavy Industrial (HI). The heavy industrial designation is intended to provide for the full range of industrial uses that are acceptable within the community, but whose operations are more intensive and may have nuisance or hazardous characteristics, which for reasons of health, safety, environmental effects, or general welfare, are best segregated form other uses, and uses handling hazardous materials would be permitted only with proper safeguards and a conditional sue permit. The proposed use involves lithium ion batteries, which is a hazardous material, and is best segregated from other uses due not only to the batteries themselves but to the amount of energy they will be storing and the associated blast and fire hazards.

General Plan Policies:

Policy	Project (In)Consistency
LUR-G-1: Maintain a balanced land use program that promotes a diversified economic base and capitalizes on Carson's location and assets - strong industrial economy, access to major freeways, rail corridors, airports, and the ports of Long Beach and Los Angeles, and the presence of California State University, Dominguez Hills	The Project adds regionally serving industrial use which will generate tax revenue and community benefits for the City (See Development Agreement, Article 3). The proposed project capitalizes on the presence of the nearby SCE Nola Substation.
LUR-G-15: Prioritize uses that provide services to the community, generate sales tax, generate good paying jobs, or provide other benefits to the community.	The Project would provide a service to the regional electric grid, and the initial development of the Project will generate sales tax revenue and community benefits for the City (See Development Agreement). The Project construction would employ good paying union labor jobs. In operation, the Project would be remotely monitored and would only require intermittent on-site maintenance, meaning there will be very few employees on-site (and frequently none) and the Project operation will not involve heavy trucking. Tesla, the battery manufacturer, would employ labor for Project operations and maintenance.

CIR-G-5: Manage parking demand and supply through the provision of adequate and convenient facilities	The Project would have insignificant traffic impact and parking demands, and provides four off-street parking spaces for the occasional maintenance visits.
Guiding Principle 6: Foster harmony between industrial and residential land uses. LU-7: Adjacent land uses that are compatible with one another. LUR-G-13: Ensure adequate buffers and transitions between industrial and residential land uses as sites are developed or redeveloped.	Area of Concern. The Project would contain hazardous materials in the form of a large volume of lithium-ion batteries intended to store electricity, involves a risk of fires and explosions emitting or ejecting materials from the Project site, and is located on a relatively small (3-acre) site that is surrounded by existing industrial development and is in proximity to multiple sensitive uses (Kaiser Permanente Hospital, residential neighborhood east of Main St., and Victoria Park, as well as the City's Corporate Yard, all within 1,000 feet). Towne Avenue Elementary School and one or more daycare uses are slightly further away.

LU-7: Adjacent land uses that are compatible with one another. CHE-G-4: Protect community health from pollution by toxics and hazardous materials, especially in areas with vulnerable or sensitive populations. CSES-G-14: Protect Carson residents and workers from hazardous material exposure and minimize the threat to public health and safety and to the environment posed by a release of hazardous materials. CSES-G-16: Continue mitigating against and restricting hazardous material usage in efforts to reduce pollution and hazard burden on Carson residents.	The Project would comply with applicable federal, State, and local standards that would help to mitigate any potential adverse impacts related to an accidental release of hazardous materials during construction or operation of the Project.

	Area of Concern. Lithium battery systems have documented risks of thermal runaway, fire, explosion, and toxic gas release. BESS facilities such as the project carry potential off-site public health and safety impacts resulting from explosions and fires involving the BESS facilities. There have been several recent failures of outdoor utility-scale containerized-BESS (like the Project) in other jurisdictions, mostly in remote areas. Until recently, BESS facilities have much-more commonly been installed in such remote areas, whereas the Project site is in a densely developed area. If a failure incident occurred on the Project site, the consequences to public health and safety could be far more grave than a similar incident occurring in a remote area. Fires involving BESS facilities must be simply contained and allowed to burn themselves out, meaning the hazardous materials would be consumed and emitted in the smoke. Explosions involving BESS facilities can eject projectiles high into the air, so although a blast wall can contain horizontal projectiles, it may not prevent a rain-down effect on surrounding properties.

B. Zoning Ordinance Compliance

The proposed project is consistent with applicable development standards pursuant to CMC Sections 9146.23-9146.25. However, the Zoning Ordinance does not specifically address BESS uses.

Development Standards

Criteria	Required	Provided
Front Yard	25 feet	25 feet
Side Yard	10 feet	15 feet
Rear Yard	N/a	3 feet
Wall	Not to exceed 50 feet	6 foot wrought iron fence, and 10 foot perimeter cmu block wall
Parking	n/a	4

III. ANALYSIS OF ENTITLEMENTS (DOR, CUP, and DA)

A. Site Plan and Design Review (DOR) No. 1935-23

Section 9172.23 (Site Plan and design Review) states that the Planning Commission shall approve a DOR if the commission is able to make the following affirmative findings:

a. Compatibility with the General Plan, any specific plans for the area, and surrounding uses.

b. Compatibility of architecture and design with existing and anticipated development in the vicinity, including the aspects of site planning, land coverage, landscaping, appearance and scale of structures and open spaces, and other features relative to a harmonious and attractive development of the area.

c. Convenience and safety of circulation for pedestrians and vehicles.

d. Attractiveness, effectiveness and restraint in signing graphics and color.

e. Development scheduling (if phased development) which will satisfy the above criteria in each phase.

f. Conformance to any applicable design standards and guidelines which have been adopted pursuant to CMC 9172.15. Such design standards and guidelines may be generally applicable or may specify different requirements for different areas.

The proposed project and project-related offsite improvements includes the development of energy storage facilities and associated infrastructure within an Industrial zone. With the inclusion of the conditions of approval, the proposed project is designed to be compatible with zoning code development standards and design regulations and would adhere to allowable building height and setbacks. The proposed development placement is located approximately 38.5 feet from the front property line, behind landscaped areas and a decorative concrete 6-foot-high wrought iron fence along Broadway and a 10-foot-high CMU block wall around the perimeter of the site. However, BESS facilities have documented risks of thermal runaway, fire, explosion, and toxic gas release and staff has concerns about the proposed project's potential to have an incident resulting in off-site public health and safety impacts to the surrounding business, institutional, park and residential communities.

Architecture and Design

The proposed BESS development plan includes the following facilities and project-related offsite improvements.

BESS Enclosures

The enclosures would be approximately 9 feet in height, with equipment placed on a concrete pad. The proposed BESS would be designed and installed in conformance with the nationally recognized National Fire Protection Association (NFPA) 855 Standard for the Installation of Stationary Energy Storage Systems, along with all applicable State and City fire protection requirements. The BESS would be unstaffed, with remote operational control and periodic on-site inspections and maintenance performed as necessary.

Batteries and Racks

The proposed lithium-ion batteries would be housed on racks, similar to common computer server racks. The racks are typically made of aluminum but may be composed of steel. The battery racks would be designed and installed in accordance with local seismic design requirements. The batteries/battery enclosures would be manufactured by/purchased from Tesla, and are a product known as the Tesla Megapack XL2.

Outdoor Electric Equipment

The proposed project includes transformers and additional electrical equipment that would be installed outside the BESS enclosures. The collector substation would be located to the east of the BESS facility components, and would be surrounded by an internal chain link fence which would not be visible from outside the property. Components would include a main power transformer, control house, and switchgear. Underground wires and cabling would run from the battery cable collection box (inside the enclosure) to a concrete pad housing the inverter and transformer. From the transformer, cabling would be run to the collector substation. All outside electrical equipment would be housed in the appropriate National Electrical Manufacturers Association (NEMA) rated enclosures and screened from view to the extent possible, on all sides. All outside electrical cabling on the site will be run underground.

Power Inverters and Transformers

Industry-standard nationally recognized equipment would be installed as part of the proposed project and project-related offsite improvements. The power inverters would be unattended stand-alone units that operate in all conditions. Inverters operate in both a charge mode and a discharge mode and are monitored and controlled remotely. In the event of an emergency or unscheduled maintenance, on-site disconnects would be utilized. Power inverters and transformers are designed to be robust with an anticipated life-span of approximately 30 years with proper maintenance.

Collector Substation

The proposed collector substation would include an open rack, air-insulated switch gear, and the main power transformer to step up medium-voltage. The substation area is anticipated to be located in the northeast corner of the BESS area.

Generation Transmission Line (Gen-tie Line)

A single 66-kilovolt generation transmission line (gen-tie line) would interconnect the proposed project to the existing SCE NOLA substation. The proposed gen-tie line route would start at the northeast portion the project site, run east along the west Griffith Street frontage, and connect to the SCE Nola Substation located approximately 165 feet east of the project site, on the SCE Nola Substation property.

Landscape

The project is proposing approximately 6,093 square feet of landscaping. Landscaping includes ground covers, shrubs, and three different tree species. The proposed landscaping would utilize low water use climate adapted plants and would improve the streetscape while providing additional screening for the proposed project. The project's landscaping would comply with all City and State requirements.

Operations and Maintenance Storage Area (O&M)

O&M storage area is proposed at the eastern portion of the project site. The O&M storage will consist of two 40-foot-long storage containers and two 20-foot-long storage containers. The area would house equipment and materials necessary to complete O&M activities. The O&M storage area would be unmanned with no personnel facilities such as restrooms, showers, etc.

Signage

No signage is proposed at this time. Any future proposed signage shall comply with all City requirements pursuant to CMC Sections 9146.7 (Industrial Signs) and 9172.23 (Site Plan and Design Review).

Site Access, Parking, Traffic, and Security

Access to the project site would be provided via two driveways (one existing and one proposed) along Broadway. No new roads would be required to provide access to the project site. A paved 26-foot-wide internal access road would surround the BESS portion of the project site. The proposed project includes four (4) parking spaces on site near the proposed operations and maintenance (O & M) storage area in compliance with the Zoning Ordinance parking requirements. The project would generate very few traffic trips, as the BESS facility would not be open to the public and would not involve daily employee staffing or truck servicing. The proposed project and project-related offsite improvements would be unoccupied and monitored remotely. Minimal periodic employee visits would be conducted for on-site equipment inspections, monitoring, and testing. Permanent motion-sensitive, directional security lights would be installed to provide adequate illumination around the substation area and points of ingress/egress. Pursuant to City of Carson Municipal Code (CMC) Section 9127.1, all exterior lighting installed on the project site would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties. Security cameras would be placed throughout the project site and monitored 7 days a week and 24 hours per day as deemed appropriate by the Los Angeles County Sheriff Department.

Telecommunication Facilities

The proposed project would require telecommunication facilities to meet the communication requirements for interconnecting and communicating with the SCE/ California Independent System Operator (CAISO) facilities and to support remote project operations monitoring. To provide for communication with SCE facilities, a fiber-optic cable would be used to connect the project site switchyard with the SCE point of interconnection. Utility interconnection regulations require the installation of a second, separate, redundant fiber-optic cable. The redundant fiber-optic cable would also be installed within the project footprint. The project would use local exchange carrier services for telecommunication to support remote monitoring requirements. The project would connect to telecommunication fiberoptic lines owned and managed by local telecommunication providers.

Trash Enclosure

A three-sided trash enclosure with a self-closing gate is proposed near the project's southeastern boundary and would be approximately 7 feet in height and 11 feet, 3 inches in width. Design standards are pursuant to CMC Sections 9164.3-9164.5.

Wall

Per the Conditions of approval, a reinforced, 10-foot-high, decorative CMU block wall would be installed around the perimeter of the project site for safety and security purposes. The wall shall be a containment wall, engineered to withstand and contain the blast hazard associated with the Project, to the reasonable satisfaction of the City Engineer and the Los Angeles County Fire Marshal or designee. A 6-foot wrought iron fence and access gate at the driveway entrance are proposed along the project frontage on Broadway. All gates would be equipped with Knox boxes for emergency access. The decorative CMU block wall will be a natural, muted color designed in such a way that provides an aesthetically visual enhancement from the street view, public places, and adjacent properties. The City Traffic Engineer and the Los Angeles County Fire Department, Fire Prevention Land Development reviewed and approved of these proposed conditions of approval.

Below are renderings illustrating the BESS development.

Proposed View from Broadway Avenue



Proposed View from Griffith Street



Proposed View North



Proposed View East



Although the site is designated Heavy Industrial, the proposed development plan presents potential explosion and fire hazards. The project site is surrounded by existing development and is in close proximity to multiple sensitive uses including a Kaiser Permanente hospital to the northwest, a residential area approximately 500 feet away to the east, Victoria Park to the southeast within 1,000 feet, and Towne Elementary School and at least one daycare use slightly further to the east. The potential public health and safety risks presented by the project create compatibility concerns with the surrounding uses and sensitive receptors. Additionally, although the immediately adjacent area is industrially zoned, the proposed 24/7/365 battery storage and energy cycling operation, the scale and concentration of hazardous materials proposed to be used in the project, and the potential for catastrophic fire and explosion events involving the project results in concerns that the proposed development is incompatible with the surrounding industrial properties, which were not developed with adjacent utility-scale energy storage hazards in mind. Furthermore, although the Project has completed Fire Department Alternate Materials and Methods (AMMR) review, the proposed Fire Department conditions of approval requiring risk mitigating measures such as blast walls do not negate the Project's risks to public health and safety. For example, although the blast wall could contain horizontal projectiles, it may not contain rain-down effects from an explosion, and the AMMR review and conditions do not preclude the possibility of a fire involving the BESS facility emitting toxic smoke that could affect surrounding uses and sensitive receptors.

B. Conditional Use Permit No.1128-23

Carson Municipal Code Section 9172.21 (Conditional Use Permit) states that the Commission shall approve a CUP if it is able to make the following affirmative findings:

a. The proposed use and development will be consistent with the General Plan.

b. The site is adequate in size, shape, topography, location, utilities, and other factors to accommodate the proposed use and development.

c. There will be adequate street access and traffic capacity.

d. There will be adequate water supply for fire protection.

e. The proposed use and development will be compatible with the intended character of the area.

f. Such other criteria as are specified for the particular use in other Sections of this Chapter

The 3-acre site adequately accommodates the proposed BESS development. Fire Department conditions of approval have been included in the project's conditions of approval. Adequate street access is provided via Broadway. The lithium-ion batteries, which are hazardous materials, are on racks in battery enclosures. As designed and conditioned, certain safeguards will be in place before any operation of the Project, including a reinforced 10-foot-high CMU block wall around the entire perimeter of the property. Additionally, per the Conditions, none of the battery enclosures shall be within 25’ of any property line, and the battery enclosures shall be equipped with internal, fail safe heat and gas detection and alarm systems, which shall provide audio and visual early warnings of increases in heat or gas in any battery enclosure to a third-party reporting station that actively monitors for such warnings on a 24/7/365 basis.

Whenever any of the batteries fail, reach the end of their useful life, or need to be disposed of due to a legal requirement or due to their continued presence posing an added risk to public health or safety, the developer shall promptly discontinue use and dispose of such batteries in accordance with all applicable laws and regulations, including but not limited to those related to hazardous materials and hazardous waste. As described above, per the General Plan, uses handling hazardous materials on properties designated Heavy Industrial cannot be permitted without proper safeguards and a conditional use permit. The required conditions of approval set forth in CMC 9141.1 associated with issuance of conditional use permits for uses that involve hazardous materials have been incorporated into the Conditions, and additional health and safety measures have been incorporated into the Conditions as discussed above, in addition to the conditions pursuant to the Fire Department's AMMR review.

However, when a failure occurs involving a BESS facility, due to a number of life-safety reasons (i.e., explosion potential and toxic exposure, coupled with the fact that suppression efforts are ineffective and cause potentially-contaminated runoff, and exposure-protection efforts can actually *cause* failures in otherwise-unaffected units), it is anticipated that there is little to nothing the Fire Department would be able to do to intervene during these incidents other than to ensure that evacuation of the area has occurred (on and off site, depending on the incident type), coordinate site-operator activities as the incident commander, and monitor the situation. Stated differently, a fire involving a BESS facility generally cannot be put out, but rather must be allowed to burn itself out, which would occur once all the lithium-ion batteries and other involved materials have been consumed and emitted into the air as toxic smoke, which could then be carried by the wind affecting air quality and leading to severe public health and safety hazards for nearby sensitive receptors and other existing uses and developments.

Based on the relative frequency at which BESS-site failures continue to occur, fire incidents are expected to likely occur during the 15-to-30-year lifespan of the BESS units to be installed and the proposed 20-year term of the development agreement.

C. Development Agreement No. 33-23

The proposed DA is required to comply with the procedures established by the City Council as required by Government Code Section 65865(c) and the provisions of Government Code Sections 65864 through 65869.5, the State development agreement law. The applicant applied for a Development Agreement (DA) detailing the obligations of both the Applicant and City of Carson, and specifying standards and conditions that will govern the project for the proposed term of the DA, which would be until March 1, 2047, with options to extend to as late as March 1, 2052, or until the Developer's leasehold interest in the subject property ends, whichever is sooner. The DA, for its term, confers vested rights to the Developer as described in Articles 4-5 of the DA in exchange for the provision of public/community benefits to the City as provided in Article 3 of the DA. Approval of the proposed DA requires a finding that it is consistent with the City's General Plan and will further the overall public health, safety, and welfare in the City. The applicant has entered into a contract giving it an option to lease the Property for a period of twenty (20) years from the time the option is exercised, and as such, possesses the requisite legal or equitable interest in the Property under Government Code §65865 that allows it to enter into the DA.

Article 3 of the DA outlines the public benefits that the project will contribute towards community public benefits to the City. The community benefits include: payment of Interim Development Impact Fees (IDIF) per the City's Municipal Code (anticipated to be $189,093.12 if paid during FY 25-26); payment of a "O & M Payment" in the amount of $357,006; and payment of a "Battery Fee" as set forth in Section 3.3 (in an amount that could be anywhere from $250,000 to $1,487,500, depending on whether and to what extent the project batteries are purchased in a way that generates sales tax revenue for the City), in addition to likely generating significant sales tax revenue to the City from the purchase of project batteries. If the project battery purchase generates no sales tax (including applicable Bradley Burns sales and use tax and City transaction and use tax) revenue for the City, the Battery Fee amount will be the maximum amount of $1,487,500; for every dollar of tax revenue generated to the City by the purchase of project batteries, the Battery Fee amount will be reduced by a dollar, to a minimum Battery Fee amount of $250,000. The City will receive the applicable Battery Fee amount in addition to any and all sales tax revenue generated for the City by the project. The proposed DA provides for a public convenience through significant monetary benefits which will contribute to programs and services designed to provide for the health, safety, and welfare of the public, thereby exhibiting good land use practices. The proposed project will also provide additional health & safety features as detailed in the Conditions.

IV. COMMUNITY OUTREACH

Over the last two years, the applicant has conducted four neighborhood community meetings, including two meetings in 2024 and two meetings in 2026.

July 1, 2024 Community Meeting at Victoria Park

The first community meeting was held at Victoria Park, a location intentionally selected for its accessibility to nearby residents and its close proximity to the project site. Ormat hosted the meeting from 2:30 to 4:30 pm and remained on site from 12:00 to 5:00 pm to maximize opportunities for community members to attend, ask questions, and engage directly with the project team. No attendees arrived.

August 13, 2024 Community Meeting at Stevenson Park

The second community meeting was held at Stevenson Park. On behalf of Ormat Technologies, the City mailed notices to all residents and businesses within an increased specific radius of the project site. Ormat hosted the meeting from 6:30 to 8:30 pm. The meeting was structured as an open forum, supported by a presentation, and attendees were encouraged to ask questions throughout. Eight community members attended the meeting. Following the meeting, Ormat continued its engagement with nearby residents by proactively sharing additional information with community members who requested follow-up. Speakers expressed safety concerns during and after the meeting.

January 13, 2026 Community Meeting at Towne Avenue Elementary School

On December 29, 2026, mailers with addresses provided by the city were sent to area residents and businesses surrounding the project site for the third community meeting. In addition to the mailers, the applicant reached out to the Carson Chamber of Commerce, Towne Avenue Elementary School staff, parents, and students, personnel from IBEW Local 11, and staff from after school programs hosted by the Boys and Girls Club.

The third community meeting was held at Towne Avenue Elementary School and Ormat hosted the meeting from 5:30 to 7:30 pm. A total of six community members attended, including staff from the Los Angeles County Fire Department. Community members expressed support for the project.

February 10, 2026 Community Meeting at Stevenson Park

The fourth and final community meeting, hosted by Ormat, was held at the Stevenson Park Multi-Purpose Room from 6:00 to 8:00 pm. Prior to the meeting, the city mailed a notices to residents and business owners located in a 1,000 foot radius of the project site. Attendees to this meeting included members of the Carson Chamber of Commerce, Towne Avenue Elementary School, the Boys and Girls Club of Carson, Collab CDC, and representatives from IBEW Local 11. In addition to the outreach noted above, the project team collaborated with Towne Avenue Elementary School staff to share additional information on ClassDojo for interested parents and requested the project mailer be disseminated at the Chamber of Commerce Mix and Mingle event. Approximately 12 people attended the meeting, and four comment cards were submitted, all of which were either supportive or expressed interested in receiving ongoing updates.

V. PROJECT CONCERNS

Public Safety and Fire Risk

Large-scale lithium-ion battery storage facilities present a documented risk of thermal runaway events, which can result in the following:

1. Intense, difficult to extinguish fires
2. Prolonged burn duration and potential re-ignition
3. Release of toxic gases, smoke and particulate matter
4. Off-site impacts requiring evacuations
5. Explosions and projectiles, including rain-down effect projectiles although horizontal projectiles may be contained by blast walls

Although modern systems include monitoring and suppression technologies, the risk cannot be eliminated. The subject property is in proximity to the City's Public Facilities Yard and sensitive uses, including residential neighborhoods, hospital, park, and an elementary school. This dense surrounding existing development and proximity to sensitive uses amplifies potential impacts in the event of failure.

Emergency Response Capacity

Lithium-ion battery fires differ significantly from conventional structure or industrial fires.

They often require:

1. Defensive firefighting strategies
2. Hazardous materials monitoring
3. Extended incident command operations
4. Evacuation coordination

Moreover, BESS facilities are not without potential off-site consequence/impact and much remains unpredictable. There have been several recent failures of outdoor utility-scale containerized-BESS (like the proposed project), mostly in remote areas. Traditionally, BESS facilities have generally been installed in remote areas, unlike the proposed Project. If a failure incident occurred, for a number of life-safety reasons (i.e., explosion potential and toxic exposure, coupled with the fact that suppression efforts are ineffective and cause potentially-contaminated runoff, and exposure-protection efforts can actually *cause* failures in otherwise-unaffected units), it is anticipated that there is little to nothing the Fire Department would be able to do to intervene during these incidents other than to ensure evacuation of the area has occurred (on and off site, depending on the incident type), coordinate site-operator activities as the incident commander, and monitor the situation. Based on the relative frequency at which BESS-site failures continue to occur, fire incidents are expected to occur during the 15-to-30-year lifespan of the BESS units to be installed.

VI. ENVIRONMENTAL REVIEW

The proposed approval resolution contains a finding that the project is categorically exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15332 (Class 32), based on a Class 32 exemption memorandum that was prepared for the proposed project (Attachment 5).

Class 32 consists of projects characterized as in-fill development meeting the conditions described below:

a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.

(b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.

(c) The project site has no value as habitat for endangered, rare or threatened species.

(d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.

e) The site can be adequately served by all required utilities and public services.

The proposed denial resolution contains a finding of exemption pursuant to CEQA Guidlines Section 15061(b)(4), which provides that a project is exempt from CEQA if the project will be rejected or disapproved by the City.

VII. PUBLIC HEARING NOTICE

Notice of this public hearing was given in accordance with Chapter 9173.22 of the CMC. The Planning Division mailed notification to property owners and occupants within a 1000-foot radius of the site and published notice in a newspaper of general circulation, and posted notices on-site by February 18, 2026. As of noticing and writing this report, three public comments were received.

VIII. RECOMMENDATION

That the Planning Commission:

1. Open the public hearing;
2. Receive and file the staff report and all related testimony;
3. Close the public hearing; and
4. Deliberate and take action at the discretion of the Planning Commission, including considering potential adoption of one of the following Resolutions:
    1. Resolution No. 26-2900, entitled “A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CARSON FINDING A CEQA EXEMPTION AND CONDITIONALLY APPROVING SITE PLAN AND DESIGN REVIEW NO. 1935-23 AND CONDITIONAL USE PERMIT NO. 1128-23 CONTINGENT UPON CITY COUNCIL ADOPTION AND APPROVAL OF, AND RECOMMENDING THAT THE CITY COUNCIL ADOPT AND APPROVE, DEVELOPMENT AGREEMENT NO. 33-23, FOR A PROPOSED BATTERY ENERGY STORAGE SYSTEM (BESS) FACILITY LOCATED AT 18800 BROADWAY AVENUE, APN 7339-014-009"; or

    2. Resolution No. 26-2900, entitled "A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CARSON DENYING SITE PLAN AND DESIGN REVIEW NO. 1935-23 AND CONDITIONAL USE PERMIT NO. 1128-23, AND RECOMMENDING THAT THE CITY COUNCIL DENY DEVELOPMENT AGREEMENT NO. 33-23, FOR A PROPOSED BATTERY ENERGY STORAGE SYSTEM (BESS) FACILITY LOCATED AT 18800 BROADWAY AVENUE, APN 7339-014-009".

IX. ATTACHMENTS

1. Draft Resolution No. 26-2900 (Conditionally Approving the Project)
    A. Legal Description
    B. Conditions of Approval
2. Draft Resolution No. 26-2900 (Denying the Project)
    A. Legal Description
3. Radius Map
4. Project Plans
5. Class 32 Exemption Memorandum
6. Draft Development Agreement
7. Public Comment Letters

Attachments

Draft PC Resolution Conditionally Approving Project(2101001.3).pdf
Draft PC Resolution Denying Project(2100261.3).pdf
Radius Map.pdf
Project Plans.pdf
Class 32 Exemption Memorandum.pdf
Draft Development Agreement _Griffith BESS (PC 3.10.26)(962849.18).pdf
Public Comments

CITY OF CARSON

PLANNING COMMISSION

RESOLUTION NO. 26- 2900

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CARSON FINDING A CEQA EXEMPTION AND CONDITIONALLY APPROVING SITE PLAN AND DESIGN REVIEW NO. 1935-23 AND CONDITIONAL USE PERMIT NO. 1128-23 CONTINGENT UPON CITY COUNCIL ADOPTION AND APPROVAL OF, AND RECOMMENDING THAT THE CITY COUNCIL ADOPT AND APPROVE, DEVELOPMENT AGREEMENT NO. 33-23, FOR A PROPOSED BATTERY ENERGY STORAGE SYSTEM (BESS) FACILITY LOCATED AT 18800 BROADWAY AVENUE, APN 7339-014-009.

WHEREAS, on April 13, 2023, the Department of Community Development received an application from Jessica Mowry on behalf of VESI 27, LLC ("VESI") for the following entitlements for a proposed battery energy storage system (BESS) facility on a 3-acre parcel currently vacant located at 18800 Broadway (APN 7339-014-009) and legally described in Exhibit "A" attached hereto (the "Property"):

• A project description for applicable CEQA review;

• Development Agreement (DA) No. 33-23, to grant specified development rights in exchange for provision of specified community benefits;

• Site Plan Review and Design Review (DOR) No. 1935-23, to approve the development plan for the project; and

• Conditional Use Permit (CUP) No. 1128-23, to approve the proposed use of the project.

WHEREAS, The proposed project is an approximately 100-megawatt BESS consisting of lithium-ion batteries installed in refabricated enclosures housing internal racks, inverters, medium-voltage transformers, switchgear, collector substation, and other associated equipment to interconnect into the Southern California Edison (SCE) Nola Substation. The enclosures would have battery storage racks, with relay and communications systems for automated monitoring and management of the batteries to ensure design performance. A battery management system would be provided to control the charging/discharging of the batteries, along with temperature monitoring and control of the individual battery cell temperature with an integrated cooling system. Power inverters to convert between AC and DC, along with transformers to step up the voltage, would also be included. The proposed facility would operate on a 24/7/365 basis.

A single 66-kilovolt generation transmission line (gen-tie line) would interconnect the proposed project to the existing SCE NOLA substation. The proposed gen-tie line route would start at the northeast portion the project site, run east along the west Grifith Street frontage, and connect to the SCE Nola Substation located approximately 165 feet east of the project site, on the SCE Nola Substation property.

The proposed facility will provide a service by receiving energy (charging) from the SCE electric transmission system, storing energy, and then later delivering energy (discharging) back to the point of interconnection. The facilities are intended to operate year-round and would be available to receive or deliver energy 24 hours a day and 365 days a year.

WHEREAS, a Class 32 Categorical Exemption Memorandum was prepared for the proposed project, which demonstrates that the proposed project is Categorically Exempt from the California Environmental Quality Act (CEQA)pursuant to CEQA Guidelines Section 15332, Class 32 (In-fill Development Projects), and o exception to the categorical exemption applies under CEQA Guidelines Section 15300.2.

WHEREAS, studies and investigations were made, and a staff report with recommendations was submitted, and the Planning Commission, upon giving the required notice, did on the 10th day of March 2026, conduct a duly noticed public hearing as required by law to consider the project application. Notice of the hearing was posted on the subject property, mailed to property owners of properties within a 1000-foot radius of the project site, and published in a newspaper of general circulation in the City by February 18, 2025.

WHEREAS, the Planning Commission, having duly reviewed and considered the project and all associated documents and evidence in the record, hereby intends to take the following actions with respect to the project: (i) find a CEQA exemption; (ii) recommend to the City Council approval of DA No. 33-23; and (iii) approve DOR No. 1935-23 and CUP No. 1128-23, contingent upon City Council approval of the DA No. 33-23 and subject to the conditions of approval set forth in Exhibit "B" hereto ("Conditions").

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, THE PLANNING COMMISSION OF THE CITY OF CARSON, CALIFORNIA, HEREBY FINDS AND RESOLVES AS FOLLOWS:

SECTION 1. The Planning Commission finds that the foregoing recitals are true and correct, and the same are incorporated herein by this reference as findings of fact.

SECTION 2. With respect to Site Plan and Design Review No. (DOR) 1935-23, the Planning Commission finds that, with the inclusion of the Conditions:

a) The proposed development plan is compatible with the General Plan, including but not limited to the Heavy Industrial Land Use Designation applicable to the Property, and surrounding uses. There is no applicable specific plan.

As stated in the General Plan, the Heavy Industrial designation is intended to provide for the full range of industrial uses that are acceptable within the community, but whose operations are more intensive and may have nuisance or hazardous characteristics, which for reasons of health, safety, environmental effects, or general welfare, are best segregated from other uses, and uses handling hazardous materials would be permitted only with proper safeguards and a conditional use permit. The proposed development plan involves installation of a large number of lithium-ion batteries, which are hazardous materials, on racks in battery enclosures. However, the proposed development, as conditioned, will be properly segregated from other uses and had been subjected to proper safeguards and a conditional use permit. Conditions have been imposed as required by the City's hazardous materials land use regulations (CMC 9141.1), and to require, among other safeguards, a reinforced CMU block wall, 10' in height, to be built around the entire perimeter of the Property, except for the access driveways on Broadway, which will be gated. The proposed development is also compatible with the surrounding uses, which are predominantly industrial, as the subject property and surrounding area is zoned MH-D (Manufacturing Heavy – Design Overlay) and ML-D (Manufacturing Light—Design Overlay). There is no applicable specific plan for the area.

b) The proposed development plan is compatible in architecture and design with existing and anticipated development in the vicinity, including the aspects of site planning, land coverage, landscaping, appearance and scale of structures and open spaces, and other features relative to a harmonious and attractive development of the area.

c) The proposed development plan provides for convenience and safety of circulation for pedestrians and vehicles. The development would have vehicular accessibility via two access driveways on Broadway, and pedestrian accessibility on Griffith Street. A paved 26-foot-wide internal access road would surround the BESS portion of the project site. The proposed development would include four parking spaces on-site near the proposed operations & maintenance (O&M) storage area, which complies with the Zoning Ordinance parking requirements. The project would generate very few traffic trips, as the BESS facility would not be open to the public and would not involve daily employee staffing or truck servicing. The proposed project and project-related offsite improvements would be unoccupied and monitored remotely. Minimal periodic employee visits would be conducted for on-site equipment inspections, monitoring, and testing.

d) There is no proposed signage for the project. Any signage associated with the project will be pursuant to a separate permit and shall exhibit attractiveness, effectiveness, and restraint in signing graphics and color.

e) The proposed development will be in one phase (i.e., will not be a phased development).

f) The required findings pursuant to Section 9172.23(D), "Site Plan and Design Review," can be and are made in the affirmative.

SECTION 3. With respect to Conditional Use Permit No. 1128-23, the Planning Commission finds that, with the inclusion of the Conditions:

a) The proposed use and development will be consistent with the General Plan. As stated in the General Plan, the Heavy Industrial designation is intended to provide for the full range of industrial uses that are acceptable within the community, but whose operations are more intensive and may have nuisance or hazardous characteristics, which for reasons of health, safety, environmental effects, or general welfare, are best segregated from other uses, and uses handling hazardous materials would be permitted only with proper safeguards and a conditional use permit. The proposed use and development, as designed and conditioned, will include proper safeguards. The project batteries, which will be lithium-ion, constitute hazardous materials. The required conditions of approval set forth in CMC 9141.1 have been incorporated into the Conditions, and additional health and safety measures have been incorporated into the Conditions as discussed above, in addition to all recommended Los Angeles County Fire Department conditions, including but not limited to all conditions in its Alternative Materials or Methods Review (AMMR) results last updated as December 11, 2025 and as may be further amended. The proposed use and development is consistent with the General Plan policies.

b) The site is adequate in size, shape, topography, location, utilities, and other factors to accommodate the proposed use and development.

c) There will be adequate street access and traffic capacity. See Section 2(c), above.

d) There will be adequate water supply for fire protection. Several Fire Department conditions of approval have been included in the Conditions, one of which provides, "The required total fire flow from the on-site fire hydrants is 2,500 GPM at 20 psi residual pressure for 2 hours duration. A single on-site fire hydrant shall be capable to supply a fire flow of 1,250 GPM @ 20 psi residual pressure for 2 hours, including one being located the furthest from the public fire hydrant.

e) The proposed use and development will be compatible with the intended character of the area, which is industrial in nature, as the subject property is designated Heavy Industrial in the General Plan and is zoned MH-D.

SECTION 4. With respect to Development Agreement No. 33-23 ("DA"), pursuant to Government Code Sections 65864 through 65869.5, as applicable, the Planning Commission finds that, with the inclusion of the Conditions:

a) The DA is consistent with the City's General Plan and will further the overall public health, safety, and welfare in the City.

b) VESI 27, LLC has a current leasehold interest in the Property, and as such, VESI 27, LLC possesses the requisite legal or equitable interest in the Property under Government Code §65865 that allows the City and VESI 27, LLC to enter into the DA.

c) The DA, in Article 3, outlines the public benefits that the project will contribute towards community public benefits to the City. The community benefits include: (i) payment of Interim Development Impact Fees (IDIF) per the City's Municipal Code (anticipated to be $189,093 if paid during FY 25-26); (ii) payment of a "O & M Payment" in the amount of $357,006; and (iii) payment of a "Battery Fee" as set forth in Section 3.3 (in an amount that could be anywhere from $250,000 to $1,487,500, depending on whether and to what extent the project batteries are purchased in a way that generates sales tax revenue for the City), in addition to likely generating significant sales tax revenue to the City from the purchase of project batteries. The project will also provide additional health & safety features as detailed in the Conditions.

d) The approval of the DA will allow for the orderly development of the project on a 3-acre parcel which is suitable for the proposed use, is in conformity with public convenience and good land use practices, will not adversely affect the orderly development of property, and will not adversely affect property values. The term of the DA is until March 1, 2047 (with potential extensions to as late as March 1, 2052), or until the date of expiration or termination of the Developer's leasehold interest in the Property, whichever is sooner.

e) The DA provides for a public convenience through significant monetary benefits which will contribute to programs and services designed to provide for the health, safety and welfare of the public, thereby exhibiting good land use practices.

f) The DA is in compliance with the procedures established by the City Council as required by Government Code Section 65865(c).

g) The DA is in compliance with the provisions of Government Code Sections 65864 through 65869.5.

SECTION 5. The Planning Commission further finds that, as demonstrated by substantial evidence in the record including the Class 32 Categorical Exemption Memorandum attached to the March 5, 2026 staff report to the Planning Commission and on file with the Planning Division, the Project is categorically exempt from CEQA pursuant to CEQA Guidelines Section 15332, Class 32 (In-Fill development Projects). as the Project meets all the required criteria of this CEQA categorical exemption. Specifically, and as further detailed above and in the Class 32 Categorical Exemption Memorandum: (i) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations; (ii) The proposed development is within the City of Carson's jurisdictional boundaries and the project site is not larger than five acres and is substantially surrounded by urban uses; (iii) the property has no value as habitat for endangered, rare of threatened species; (iv) The site can be adequately serviced by all required utilities and public services; and (v) approval of the project will not result in any significant effects related to traffic, noise, air quality or water quality. No exception to the categorical exemption applies under CEQA Guidelines Section 15300.2.

SECTION 6. Based on the findings and conclusions set forth above, the Planning Commission hereby: (1) approves DOR No. 1935-23 and CUP No. 1128-23 contingent upon City Council approval of DA No. 33-23, and subject to the Conditions (Exhibit "B"); and (2) recommends that the City Council approve DA No. 33-23 (including an appropriate adopting ordinance to be prepared by staff), subject to the Conditions.

SECTION 7. The Planning Commission's action conditionally approving DOR No. 1935-23 and CUP No. 1128-23 shall take effect 15 days from the date of this action unless an appeal is filed within that time pursuant to CMC Section 9173.4. The Planning Commission's action recommending City Council approval of DA No. 33-23 shall take effect immediately and is not subject to appeal pursuant to CMC Section 9173.4.

SECTION 8. The Secretary shall certify to the adoption of the Resolution and shall transmit copies of the same to the applicant.

[signatures on the following page]

APPROVED and **ADOPTED** this 10th day of March 2026.

_____

CHAIRPERSON

ATTEST:

_____

SECRETARY

Exhibit A: Legal Description

Exhibit B: Conditions of Approval

EXHIBIT A

LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF CARSON IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

THE WESTERLY 750.97 FEET OF LOT 119 OF TRACT 4671, IN THE CITY OF CARSON, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 56, PAGES 30 AND 31 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT THEREFROM THE WESTERLY 222.97 FEET THEREOF.

ALSO EXCEPT THEREFROM THE EASTERLY 100 FEET OF THE WESTERLY 322.97 FEET AS PER FINAL JUDGMENT, CASE NO. 274,177 RECORDED IN BOOK 12339, PAGE 97 OF OFFICIAL RECORDS IN SAID COUNTY.

APN 7339-014-009

COMMUNITY DEVELOPMENT DEPARTMENT

PLANNING DIVISION

CONDITIONS OF APPROVAL

EXHIBIT "B"

SITE PLAN AND DESIGN REVIEW NO. 1935-23,

CONDITIONAL USE PERMIT NO. 11128-23,

DEVELOPMENT AGREEMENT NO. 33-23

GENERAL CONDITIONS

1. Site Plan and Design Overlay Review No. 1935-23, Conditional Use Permit No. 1128- 23, and Development Agreement No. 33-23 is for the development of an approximately 100-megawatt battery energy storage system (BESS) and project related offsite improvements (as detailed in Development Agreement No. 32-22) at 18800 Broadway (APN: 7339-014-009) ("Project").

2. Development project approval for Design Overlay Review No. Review No. 1935-23, Conditional Use Permit No. 1128-23, and Development Agreement No. 33-23 shall become null and void if building permits are not issued within two years of the effective date of the Development Agreement No. 33-23 unless an extension of time is requested prior to expiration and approved by the Planning Commission.

3. The applicant shall submit a complete set of electronic plans that conform to all the Conditions of Approval to be reviewed and approved by the Planning Division prior to Building and Safety plan check submittal.

4. **Interim Development Impact Fee**: In accordance with Article XI (Interim Development Impact Fee Program) of the Carson Municipal Code ("CMC"), the Project and the developer thereof, including the applicant, property owner, tenant, permittee/holder of the Project entitlements, and successor to whom the Project entitlements are assigned ("Developer"), shall be responsible for payment of one-time interim development impact fees ("IDIF") at the applicable amounts/rates detailed below for each square foot of industrial development constructed for the Project. If the Project increases or decreases regarding the square footage constructed, the total IDIF amount will be adjusted accordingly at the applicable rate.

Per CMC 11504, the IDIF shall be paid per building prior to issuance of the applicable building permit, and the applicable IDIF rate (detailed below) shall be that in effect at the time of such payment. No building permit shall be issued prior to the full payment of the required IDIF amount for such building, which payment shall be made in one lump sum installment. IDIF amounts/rates are subject to adjustment every July 1st based on State of California Construction Cost Index (Prior March to Current March Adjustment), per CMC Section 11500. EXHIBIT NO. B The fee for Fiscal Year 2025-2026 IDIF is set at $3.68 per square feet for all square footage of Battery Enclosures (approximately 51,384 square feet). Therefore, if IDIF is paid for the Project between July 1, 2025, to June 30, 2026, the required amount will be $189,093.12. Subsequent fiscal year IDIF rates have not yet been determined.

To understand the requirements in more detail, please visit the City's IDIF webpage at: https://ci.carson.ca.us/communitydevelopment/IDIFProgram.aspx and/or contact James Nguyen at jnguyen@carsonca.gov or 310-952-1700 ext. 1310

Notice of Imposition of Interim Development Impact Fees; Right to Protest

Pursuant to CMC Section 11503, Developer is hereby notified of the IDIF imposed on the Project, as described and in the amount stated above. In accordance with Government Code Section 66020, Developer may protest the imposition of the IDIF on the Project by complying with the requirements set forth in CMC 11900. Any such protest shall be filed within ninety (90) days after the effective of approval by the City of the entitlement(s) or permit(s) that is/are the subject of these conditions of approval. The ninety (90) day approval period in which the Developer may submit a protest has begun as of the effective date of the City's approval of the entitlement(s) or permit(s) that is/are the subject of these conditions of approval.

5. Prior to issuance of any temporary or final Certificate of Occupancy, the then-owner(s) and tenant(s) of the premises holding Conditional Use Permit that is the subject of these conditions: (i) shall file a certification with City stating under penalty of perjury (a) whether the use possesses or may possess or use hazardous materials, (b) itemizing the specific types of hazardous materials that will or may be possessed or used, specifying the quantities (both then-current and anticipated maximum quantities) that will or may be possessed or used at any given time, both on an itemized basis and cumulatively, and (c) reporting any outstanding violations of state Unified Program regulations and the status of efforts or measures taken to correct same. If at any time any information specified in the certification becomes outdated or is no longer accurate, the then-owner(s) and tenant(s) of the premises holding Conditional Use Permit that is the subject of these conditions must submit, within thirty (30) days after learning that the information is no longer accurate, an

addendum to the certification which includes the corrected/updated information; and (ii) submit to City inspections of the subject premises at least once per year for compliance with the Carson Municipal Code and the permit conditions and identification of any and all hazardous materials present at the location, including reporting of such inspection to the Certified Unified Program Agency having jurisdiction in the City (the Los Angeles County Fire Department, Health Hazardous Materials Division) when the inspector finds any suspected violations of State Unified Program regulations identified during the inspections.

6. Developer shall comply with all city, county, state, and federal regulations applicable to the Project.

7. Developer shall make any necessary site plan and design revisions to the site plan and elevations approved by the Planning Commission to comply with all the conditions of approval and applicable Zoning Ordinance provisions. Any revisions will require review and approval by the Planning Division.

8. A modification of these conditions, including additions or deletions, may be considered upon filing of an application by Developer in accordance with the Carson Municipal Code.

9. It is further made a condition of this approval that if any of these conditions is violated, or if any applicable law, statute, or ordinance is violated, the subject entitlement(s) may be revoked by the Planning Division (or Commission), as may be applicable, in accordance with CMC 9172.28 and the Development Agreement .

10. Precedence of Conditions. If any of the Conditions of Approval alter a commitment made by Developer in another document, the conditions enumerated herein shall take precedence except as otherwise provided in Development Agreement No. 323-23.

11. City Approvals. All approvals by City, unless otherwise specified, shall be by the department head of the department requiring the condition. All agreements, covenants, easements, deposits, and other documents required herein where City is a party shall be in a form approved by the City Attorney. The Developer shall pay the cost for review and approval of such agreements and deposit necessary funds pursuant to a deposit agreement.

12. Deposit Account. A trust deposit account shall be established for all deposits and fees required in all applicable conditions of approval of the Project. The trust deposit shall be maintained by Developer with no deficits. The trust deposit shall be governed by a deposit agreement. The trust deposit account shall be maintained separate from other City funds and shall be non-interest bearing. City may make demands for additional deposits to cover all expenses over a period of 60 days, and funds shall be deposited within 15 days of the request therefor, or work may cease on the Project.

13. Indemnification. Developer shall defend, indemnify, and hold harmless the City of Carson, its agents, officers, and employees, and each of them, on the terms provided in Development Agreement No. 33-23 and the Reimbursement and Indemnification Agreement entered into by and between the City and VESI 27, LLC dated April 13, 2023.

14. Developer shall pay all applicable City fees when due, and at the applicable rate.

AESTHETICS

15. There shall be no deviation of architectural design or details from the approved set of plans. Any alteration shall be first approved by the Planning Division.

16. Prior to Issuance of Building Permit, a wall design specification and plan details including colors and materials must be submitted and approved by the Planning Division to assure a decorative wall design is provided.

17. Prior to Issuance of Building Permit, the specification of all colors and materials must be submitted and approved by the Planning Division.

FENCE/WALLS

18. Chain link fencing is prohibited on the exterior of the property, any location that is visible from the public right of way, any other public areas, or any adjacent properties.

HEALTH AND SAFETY FEATURES

19. Developer shall incorporate the following features into the Project for the purpose of ensuring protection of public health and safety against potential risks associated with fires, explosions, and hazardous materials:

a. None of the battery enclosures shall be located within 25' of any property line.

b. The battery enclosures shall be equipped with internal, failsafe heat and gas detection and alarm systems, which shall provide audio and visual early warnings of increases in heat or gas in any battery enclosure to a third-party reporting station that actively monitors for such warnings on a 24/7/365 basis. A battery enclosure or system that relies solely on sparkplugs will not be considered failsafe for purposes of this requirement. The system shall ensure that appropriate authorities (e.g., Los Angeles County Fire Department) will receive early warnings of any potential fire or explosion in or among the Battery Enclosures and therefore be able to act timely to evacuate the area and take other responsive actions as they deem necessary to protect public health and safety.

c. Prior to issuance of any temporary or final Certificate of Occupancy, Developer shall install a reinforced CMU block wall, 10' in height, around the entire perimeter of the

Property, except for the access driveway on Broadway. The wall shall be a containment wall, engineered to withstand and contain the blast hazard associated with the Project, to the reasonable satisfaction of the City Engineer and the Los Angeles County Fire Marshal or his or her designee. Developer shall submit blast modeling data to the City Engineer and the Los Angeles County Fire Marshal as deemed necessary by City Engineer and the Los Angeles County Fire Marshal for this purpose.

d. Whenever any Project batteries fail, reach the end of their useful life, or need to be disposed of due to a legal requirement or due to their continued presence posing an added risk to public health or safety, Developer shall promptly discontinue use and dispose of such batteries in accordance with all applicable laws and regulations, including but not limited to those related to hazardous materials and hazardous waste.

e. The Project shall obtain approval and comply with all Los Angeles County Fire Department requirements.

f. Developer shall comply with all Los Angeles County Fire Department requirements and all conditions of approval imposed or recommended by the Los Angeles County Fire Department, including but not limited to all requirements and conditions set forth in its Alternative Materials or Methods Review (AMMR) results last updated as December 11, 2025, and as may be further amended.

LANDSCAPE/IRRIGATION

20. Comply with the provisions of Section 9168 of the Zoning Ordinance, “Water Efficient Landscaping.”

21. Landscaping shall be provided with a permanently installed, automatic irrigation system and operated by an electrically timed controller station set for early morning or late evening irrigation. Installation, maintenance, and repair of all landscaping shall be the responsibility of the property owner.

22. Installation of 6” x 6” concrete curbs are required around all landscaped planter areas, except for areas determined by National Pollutant Discharge Elimination System (NPDES) permit or other applicable condition of approval that requires certain landscaped areas to remain clear of concrete curbs for more efficient storm water runoff flow and percolation. Revised landscaping and irrigation plans shall be reviewed and approved by the Planning Division should subsequent modifications be required by other concerned agencies regarding the removal of concrete curbs.

23. Existing and new irrigation system shall include best water conservation practices.

24. Installation, maintenance, and repair of all landscaping shall be the responsibility of the property owner.

25. Prior to City issuance of any permit, the applicant shall electronically submit landscape and irrigation plans drawn, stamped, and signed by a licensed landscape architect. Such plans are to be approved by the Planning Division.

26. All new and retrofitted landscape of 500 square feet or greater is subject to the Model Water Efficient Landscape Ordinance (MWELO) per Department of Water Resources Title 23, Chapter 2.7. The Developer shall include the signed MWELO project information, WELO water budget calculations and compliance checklist items on landscape plans, prior to the issuance of building permits.

LIGHTING

27. All exterior lighting shall be provided in compliance with the standards pursuant to Section 9127.1 (Exterior Lighting) of the Zoning Ordinance.

28. Such lights are to be directed on-site in such a manner as to not create a nuisance or hazard to adjacent street and properties, subject to the approval of the Planning Division.

PARKING

29. Parking areas and driveways shall remain clear. No encroachment into parking areas and/or driveways shall be permitted.

30. All areas used for the movement parking, loading, repair or storage of vehicles shall be paved with either:

a. Concrete or asphaltic concrete to a minimum thickness of three and onehalf inches over four inches of crushed aggregate base; or

b. Other surfacing material which, in the opinion of the Director of Engineering Services, provides equivalent life, service and appearance.

TRASH

31. Trash collection shall comply with the requirements of the City's trash collection company.

32. Recycling areas shall be provided in accordance with Sections 9164.4 (Collection and Loading of Recyclable Materials) and 9164.5 (Design Standards for Trash and Recycling Areas) of the Zoning Ordinance.

UTILITIES

33. All utilities and aboveground equipment shall be constructed and located pursuant to Section 9126.8 (Utilities) of the Zoning Ordinance, unless otherwise provided for in these conditions.

34. Public utility easements shall be provided in the location as required by all utility companies with easements free and clear of obstructions, and electrical utilities shall be installed underground.

35. Developer shall remove at its own expense any obstructions within the utility easements that would interfere with the use for which the easements are intended.

36. Any aboveground utility cabinet or equipment cabinet shall be screened from the public right-of way by a decorative block wall or landscaping, to the satisfaction of the Planning Division, and in compliance with public utility access requirements

BUILDING AND SAFETY DIVISION

37. The second sheet of building plans is to list all conditions of approval and to include a copy of the

Planning Commission Decision letter. This information shall be incorporated into the plans prior

to the first submittal for plan check.

38. Plans prepared in compliance with the current Building Code shall be submitted to Building Division for review prior to permit issuance.

39. A separate building permit is required for the masonry perimeter fences of height taller than 6 feet above grade.

40. A separate building permit is required for the proposed Electrical Shelter.

41. In accordance with paragraph 5538(b) of the California Business and Professions Code, plans are to be prepared and stamped by a licensed architect or civil engineer.

42. Structural calculations prepared under the direction of an architect, civil engineer or structural engineer shall be provided for supporting pads for Electrical Shelter and Energy Storage systems, electrical equipment anchorage, and masonry perimeter fences.

44. A geotechnical and soils investigation report is required, the duties of the soils engineer of record, as indicated on the first sheet of the approved plans, shall include the following:

a) Observation of cleared areas and benches prepared to receive fill;

b) Observation of the removal of all unsuitable soils and other materials;

c) The approval of soils to be used as fill material;

d) Inspection of compaction and placement of fill;

e) The testing of compacted fills; and

f) The inspection of review of drainage devices.

45. The owner shall retain the soils engineer preparing the Preliminary Soils and/or Geotechnical Investigation accepted by the City for observation of all grading, site preparation, and compaction testing. Observation and testing shall not be performed by other soils and/or geotechnical engineer unless the subsequent soils and/or geotechnical engineer submits and has accepted by the City, a new Preliminary Soils and/or Geotechnical Investigation.

46. A grading and drainage plan shall be approved prior to issuance of the building permit. The grading and drainage plan shall indicate how all storm drainage including contributory drainage from adjacent lots is carried to the public way or drainage structure approved to receive storm water.

47. Stormwater Planning Program LID Plan Checklist (MS4-1 FORM) completed by Engineer of Record shall be copied on the first sheet of Building Plans and on the first sheet of Grading Plans. The form can be found at the following link:

https://www.dropbox.com/scl/fi/up1jbcg2e9sv4i0t6vrp3/CARSON-LID-PLAN-CHECKLISTMS4-1-FORM.pdf?rlkey=1y5bsf2iladt6mzv56qgyz7cj&dl=0

48. A feasibility study for stormwater infiltration shall be conducted to evaluate the potential for hazard materials being released in an event of battery failure or leakage and mobilized by storm water. Alternative compliance for stormwater mitigation and pollutants contentment system design shall be considered to prevent ground water contamination. Building permits shall not be issued until the study along with mitigation measure recommendations has been submitted to and approved by the Building Official.

49. A flood risk assessment shall be conducted to evaluate the potential hazard for energy storage systems to be fully or partially submerged under water in a design rain event and to determine minimum height of equipment anchorage above the base flood level. Building permits shall not be issued until the report along with mitigation measure recommendations has been submitted to and approved by the Building Official.

50. Outdoor stationary Energy Storage Systems shall be installed in accordance with the California Fire Code and California Electrical Code.

51. The property shall be surveyed, and the boundaries marked by a land surveyor licensed by the State of California.

52. Separate application and plan review is required for Electrical plans.

53. No form work or other construction materials will be permitted to encroach into adjacent property without written approval of the affected property owner.

54. Prior to the issuance of building permit, a written consent shall be obtained from the current easement holder(s) for any proposed development encroaching into existing easement(s).

BUSINESS LICENSE

55. All parties involved in the development of the Project, including but not limited to contractors and subcontractors, are required to obtain a City business license per Section 6310 of the Carson Municipal Code

PUBLIC WORKS DEPARTMENT, ENGINEERING SERVICES DIVISION

GENERAL

56. Any existing off-site improvements damaged during the construction shall be removed and reconstructed per City of Carson PW Standard Drawings and to the satisfaction of the City Engineer.

57. A construction permit is required for any work to be done in the public right-of-way.

58. Construction bond for all work to be done within the public right of way shall be submitted and approved by Engineering Division prior to issuance of permit by Engineering Division.

59. Proof of Worker's Compensation and Liability Insurance shall be submitted to the city prior to issuance of permit by Engineering Division.

60. The Developer shall submit a copy of **approved** Grading plans on bond paper to the City of Carson – Engineering Division, prior to issuance of grading permits.

61. The Developer shall submit an electronic copy of **approved** plans (*such as, Sewer, Street and/or Storm Drain Improvements, whichever applies),* to the City of Carson – Engineering Division, prior to the issuance of construction permits.

BUILDING PERMITS

Prior to issuance of **Building Permit**, the proposed development is subject to the following:

62. Drainage/Grading plan shall be submitted for approval of the Building and Safety Division. The Developer shall submit a **copy of approved** Drainage/Grading plans on bond paper to the City of Carson – Engineering Division.

63. Soils report, sewer area study, drainage concept, hydrology study and stormwater quality plan shall be reviewed and approved. Building Permit issuance will not be granted until the required soils, sewer, drainage concept, hydrology study and stormwater information have been received and found satisfactory. Comply with mitigation measures recommended in the approved soils, sewer area study, drainage concept, hydrology study and stormwater quality plan.

64. The Developer shall submit improvement plans to the Engineering Division showing all the required improvements in the public right of way for review and approval of the City Engineer. A copy of approved conditions of approval shall be attached to the plans when submitted. The following are required as a part of the projects improvement plans.

    a) Repair any broken or raised/sagged sidewalk, curb and gutter within the public right of way along Broadway and Griffith Streets abutting this proposed development per City of Carson PW Standard Drawings and to the satisfaction of the City Engineer.

    b) Remove and replace any broken/damaged driveway approach within the public right of way along Broadway and Griffith Streets abutting this proposed development per City of Carson PW Standard Drawings and to the satisfaction of the City Engineer.

    c) Remove unused driveway approach if any, within the public right of way along Broadway abutting this proposed development and replace it with full height curb and gutter and sidewalk per City of Carson PW Standard Drawings and to the satisfaction of the City Engineer.

    d) The Developer shall modify existing driveways within the public right of way along Broadway and Griffith Streets abutting this proposed development per City of Carson PW Standard Drawings to comply with the ADA requirements and to the satisfaction of the City Engineer.

    e) The Vehicle Entryway along Griffith Street needs to meet City Standard details for a commercial driveway. This driveway appears to be of secondary use, please clarify the use.

    f) Pedestrian entryway along Giffith Street needs greater clarification, gates and doors shall not swing over the public right-of-way, clarify the design of this element.

g) Streets abutting the development, shall be slurry sealed from curb-to-curb or from median-to-curb when medians are existing or as approved by the City Engineer. Slurry Seal materials shall be rubberized emulsion aggregate slurry (REAS).

CERTIFICATE OF OCCUPANCY

Prior to issuance of **Certificate of Occupancy**, the proposed development is subject to the following:

65. The Developer shall comply with all requirements from L.A. County Sewer Maintenance Division for maintenance of new and/or existing sewer main, relating to this development, prior to release of all improvement bonds.

66. The Developer shall execute and provide to the City Engineer, a written statement from the water purveyor indicating that the water system will be operated by the purveyor and that under normal conditions, the system will meet the requirements for the development and that water service will be provided to each building.

a) Comply with mitigation measures recommended by the water purveyor.

67. The Developer shall construct and guarantee the construction of all required and previously approved Street Improvements to the satisfaction of the City of Carson Public Works Inspector and the City Engineer.

68. The Developer shall construct and guarantee the construction of all required drainage infrastructures in accordance with the requirements and recommendations of the hydrology study, subject to the approval of the City Engineer.

69. All new utility lines, servicing the proposed development shall be underground to the satisfaction of the City Engineer.

FIRE DEPARTMENT – LOS ANGELES COUNTY FIRE DEPARTMENT

70. Explosion-Hazard Early Warning Detection and Notification. Where the chemistry or design of the ESS, or battery ESS (BESS, or electrochemical ESS), is capable, during normal or failure modes, of creating an explosive atmosphere of consequence within the airspace of its battery compartment, room, or other enclosure (whether a full-volume or partial-volume explosive atmosphere):

a. Early warning detection and notification via a fire-alarm system compliant with the Los Angeles County Fire Code and the NFPA-72 standard shall be designed with detection inside each battery compartment to effectively provide advanced warning of any accumulation

towards an explosive limit of flammable/explosive gases, in accordance with the Los Angeles County Fire Code.

b. These detection devices shall be addressable.

c. Automatic notification serving potential impact areas via on-site sets of horns, beacons (red or orange), and signs, shall be provided as determined by LACoFD.

d. Automatic notification by the fire-alarm system shall be made to 9-1-1 as determined by LACoFD.

e. On-site identification of the particular enclosure(s) in alarm shall be achieved via horn-strobe notification device(s).

f. Gas detection systems, including any that are used to initiate an explosion-control system, shall comply with the requirements of NFPA 72.and be supervised by the fire-alarm system.

71. Explosion-Hazard Shielding. The maximum-potential explosion-hazard consequences, including pressure-wave generation and projectile/shrapnel impact, for a battery-failure gas-accumulation scenario not less-severe than the scenario defined by the Los Angeles County Fire Department (LACoFD), shall be established by a qualified third party and subject to approval by the LACoFD.

a. Based on the maximum-potential explosion-hazard results, an explosion-shielding wall that is engineered to provide protection from one such maximum-potential explosion occurrence, for the closest BESS enclosure thereto, for each BESS enclosure to be installed, shall be provided:

i. Around the entire BESS-installation perimeter of the BESS installation(s) or BESS field as a whole, to protect persons outside the facility; and

ii. As a shield for four persons operating at each required first-responder/ fire-command station for these installations.

b. The height of these perimeter walls shall provide a minimum height of 10 feet or exceed the height of the BESS enclosures by at least 18 inches, and shall in no case be less than any minimum height requirement set therefor by the jurisdictional planning agency.

c. Fire apparatus access road gates through the wall shall be compliant with the Los Angeles County Fire Code, including Section 503 thereof

72. Site Layout of BESS Units. In accordance with the Fire Code, separation distances between BESS units, enclosures, and groups of BESS units/enclosures, and setback distances from sensitive exposures called out by the Fire Code (e.g., combustibles,

hazardous materials), shall be validated by large-scale fire testing or modeling, as specified and approved by LACoFD. This may effectively reduce the number and position of BESS units permitted to be installed on site.

73. Fire-Apparatus Access.

a. Two points of fire-apparatus access to the BESS installation, remotely located from one another.

b. Fire-apparatus access that leads directly and immediately from outside the BESS facility to each required first-responder/ fire-command station shall be provided.

c. Fire-apparatus access roads shall be provided to achieve fire-apparatus access to within 150 feet of all portions of the facility and all portions of the exterior walls, at grade, of the buildings and BESS enclosures.

d. The on-site fire-apparatus access roadways and fire lanes shall maintain a minimum unobstructed width of 26 feet, clear to the sky, maintain a 32-foot centerline turning radius on all turns, and maintain all-weather driving capabilities, as approved by LACoFD, of supporting the imposed load of fire apparatus weighing at least 75,000 pounds.

74. Fire-Protection Water Supplies.

a. Install 1 new public fire hydrant as noted on the site plan. The minimum required fire flow from the public fire hydrants on this BESS projects is 1,500 gpm at 20 psi residual pressure for 2 hours.

b. Install 1 new on-site fire hydrants. The required fire flow is 1,250 gpm at 20 psi residual pressure for 2 hours duration. The location of the required on-site fire hydrants have been located by LACoFD as part of the entitlement review process, see enclosed site plan, but the location can be modify or adjusted as needed during the LACoFD review of the architectural/construction plans prior to issuance.

c. Where fire-sprinkler systems and/or a private fire hydrant are provided or required, approval shall be required to be obtained from the LACoFD Fire-Sprinkler Plan-Review Unit.

75. Site Security. Site security shall comply with Section 1207.4.9 of the LA County Fire Code but LACoFD advocates for enhanced security measures at these sites just like is standard practice at electrical substations, for several reasons (theft of wire, injury to intruder, terrorism, grid reliability, prevention of damage that might cause a failure event, fire, or explosion):

1207.4.9 Security of installations: Rooms, areas and walk-in units in which electrochemical ESS are located shall be secured against unauthorized entry and safe- guarded in an

approved manner. Security barriers, fences, landscaping and other enclosures shall not inhibit the required air flow to or exhaust from the electrochemical ESS and its components.

76. Emergency Response Signage. Facility emergency-action and -response signage, and NFPA-704 hazard-classification placards, shall be provided in accordance with LACoFD determinations.

77. Emergency Response Plan (ERP).

a. An Emergency Response Plan (ERP) shall be developed, and maintained and trained on by site personnel, for the life of the installation, in accordance with LACoFD determinations and direction.

b. A qualified after-incident mitigation company shall be maintained on retainer at all times, maintained in the list of contacts in the ERP, and disclosed to LACoFD and jurisdictional building department.

80. Inspection, Testing, and Maintenance (ITM). The BESS installation and related equipment and systems shall be inspected, tested, and maintained by the operator for the life of the installation, in accordance with the submittals and installation that were approved by LACoFD, as well as established ITM standards for these systems, installations, and equipment. In no case shall ITM be less restrictive than either the ITM standards nor the submittals and installation that were approved by LACoFD.

78. Repairs, Replacements, Decommissioning, and Disposal or Other Removal from Site. BESS repairs, replacements, decommissioning, and disposal or other removal from site shall be in accordance with all federal, State, and local laws.

79. Cost Recovery. Facility owners shall reimburse government emergency-services providers and site-cleanup providers for costs thereto for service provision made necessary by emergency incidents at their facility.

For any questions regarding the report, please contact Juan Padilla at (323) 890-4243 or

Juan.Padilla@fire.lacounty.gov.

SHERIFF DEPARTMENT –LOS ANGELES COUNTY

80. A Construction Traffic Management Plan shall be implemented as part of the proposed Project to address construction-related traffic congestion and emergency access issues. If temporary lane closures are necessary for the installation of utilities, emergency access shall be always maintained. Flag persons and/or detours should also be provided as needed

to ensure safe traffic operations, and construction signs shall be posted to advise motorists of reduced construction zone speed limits. On-site inspector shall notify the Carson Station when these measures are in place.

81. Developer shall install a video monitoring system where appropriate to the satisfaction of the Sheriff's Department.

82. Provide notification to LASD of any methane extraction systems at the project site

CITY OF CARSON

PLANNING COMMISSION

RESOLUTION NO. 26- 2900

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CARSON DENYING SITE PLAN AND DESIGN REVIEW NO. 1935-23 AND CONDITIONAL USE PERMIT NO. 1128-23, AND RECOMMENDING THAT THE CITY COUNCIL DENY DEVELOPMENT AGREEMENT NO. 33-23 FOR A PROPOSED BATTERY ENERGY STORAGE SYSTEM (BESS) FACILITY LOCATED AT 18800 BROADWAY AVENUE, APN 7339-014-009.

WHEREAS, on April 13, 2023, the Department of Community Development received an application from Jessica Mowry on behalf of VESI 27, LLC ("VESI") for the following entitlements for a proposed battery energy storage system (BESS) facility (the "Project") on a 3-acre parcel currently vacant located at 18800 Broadway (APN 7339-014-009) and legally described in Exhibit "A" attached hereto (the "Property"), which has a General Plan land use designation of Heavy Industrial and is zoned MH-D (Manufacturing Heavy – Design Overlay).

• A project description for applicable CEQA review;

• Development Agreement (DA) No. 33-23, to grant specified development rights in exchange for provision of specified community benefits;

• Site Plan Review and Design Review (DOR) No. 1935-23, to approve the development plan for the project; and

• Conditional Use Permit (CUP) No. 1128-23, to approve the proposed use of the project.

WHEREAS, the Project is an approximately 100-megawatt BESS consisting of lithium-ion batteries installed in refabricated enclosures housing internal racks, inverters, medium-voltage transformers, switchgear, collector substation, and other associated equipment to interconnect into the Southern California Edison (SCE) Nola Substation. The enclosures would have battery storage racks, with relay and communications systems for automated monitoring and management of the batteries to ensure design performance. A battery management system would be provided to control the charging/discharging of the batteries, along with temperature monitoring and control of the individual battery cell temperature with an integrated cooling system. Power inverters to convert between AC and DC, along with transformers to step up the voltage, would also be included. The proposed facility would operate on a 24/7/365 basis.

A single 66-kilovolt generation transmission line (gen-tie line) would interconnect the proposed project to the existing SCE NOLA substation. The proposed gen-tie line route would start at the northeast portion of the Project site, run east along the west Grifith Street frontage, and connect to the SCE Nola Substation located approximately 165 feet east of the project site, on the SCE Nola Substation property.

The proposed facility would provide a service by receiving energy (charging) from the SCE electric transmission system, storing energy, and then later delivering energy (discharging) back to the point of interconnection. The facility is intended to operate year-round and would be available to receive or deliver energy 24 hours a day and 365 days a year.

WHEREAS, studies and investigations were made, and a staff report with recommendations was submitted, and the Planning Commission, upon giving the required notice, did on the 10th day of March 2026, conducted a duly noticed public hearing as required by law to consider the project application. Notice of the hearing was posted on the subject property, mailed to property owners of properties within a 1000-foot radius of the project site, and published in a newspaper of general circulation in the City by February 18, 2026.

WHEREAS, the Planning Commission, having duly reviewed and considered the project and all associated documents and evidence in the record, hereby intends to take the following actions with respect to the project: (i) finding a CEQA exemption applicable to denial of the Project; (ii) recommend to the City Council denial of DA No. 33-23; and (iii) denying DOR No. 1935-23 and CUP No. 1128-23.

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, THE PLANNING COMMISSION OF THE CITY OF CARSON, CALIFORNIA, HEREBY FINDS AND RESOLVES AS FOLLOWS:

SECTION 1. The Planning Commission finds that the foregoing recitals are true and correct, and the same are incorporated herein by this reference as findings of fact.

SECTION 2. With respect to Site Plan and Design Review No. (DOR) 1935-23, the Planning Commission is unable to make the required findings for approval and instead finds as follows, based on substantial evidence in the record:

a) The development plan for the Project is incompatible with the General Plan and surrounding uses.

Although the site is designated Heavy Industrial, the proposed development plan includes a large-scale lithium-ion battery installation intended for storage of electricity, which constitutes a hazardous materials use of significant intensity that introduces substantial public health and safety risks than cannot be adequately mitigated to ensure compatibility with the General Plan or the surrounding uses. The development plan presents a magnitude of potential explosion and fire hazards which are exacerbated by the fact that the Project is proposed to be located on a relatively small (3-acre) Project site that is surrounded by existing development and in proximity to multiple sensitive uses including a Kaiser Permanente hospital, a school, a residential neighborhood east of Main St, and Victoria Park, all within 1,000 feet of the Project site, with the residential area being approximately 500 feet away, as well as schools and daycares slightly further away.

As further detailed in Section 3 and below, the public health and safety risks presented by the Project make it incompatible with all surrounding uses, particularly the nearby sensitive receptors, and obstruct the attainment of numerous General Plan Guiding Principles, Guiding Policies, and Implementing Policies. Although the immediately adjacent area is industrially zoned, the proposed 24/7/365 battery storage and energy cycling operation, the scale and concentration of hazardous materials proposed to be used in the Project, and the potential for catastrophic fire and explosion events involving the Project render the development incompatible with even the surrounding industrial properties, which were not developed with adjacent utility-scale energy storage hazards in mind. As noted below, even the City's industrial zones do not permit BESS uses, with or without a conditional use permit. Furthermore, although the Project has completed Fire Department Alternate Materials and Methods (AMMR) review, the proposed Fire Department conditions of approval requiring risk mitigating measures such as blast walls do not negate the Project's risks to public health and safety nor its incompatibility with the General Plan and surrounding uses. Although measures such as the blast wall help to reduce the risks and could contain projectiles moving horizontally/laterally in the event of an explosion, there is an expectation of a "rain down effect" where projectiles could be launched from the proposed facility high into the air and over the blast wall, landing in surrounding areas and causing injury.

The proposed development plan cannot meet and cannot be modified to meet the requirements of the Carson Zoning Ordinance and CMC 9172.23(D)(1), so the Development Plan must be disapproved.

SECTION 3. With respect to Conditional Use Permit No. 1128-23, the Planning Commission is unable to make the required findings for approval and instead finds as follows, based on substantial evidence in the record:

a) The proposed use and development will not be consistent with the General Plan.

Considering all aspects of the proposed use and development, it will not further the objectives and policies of the General Plan, and it instead will obstruct their attainment. The Project obstructs the attainment of numerous General Plan policies, including, without limitation: Guiding Principle 6 (foster harmony between industrial and residential land uses); Guiding Policies LUR-G-13 (ensure adequate buffers and transitions between industrial and residential land uses as sites are developed or redeveloped), CHE-G-4 (protect community health from pollution by toxics and hazardous materials, especially in areas with vulnerable or sensitive populations, CSES-G-14 (protect Carson residents and workers from hazardous material exposure and minimize the threat to public health and safety and to the environment posed by a release of hazardous materials) and CSES-G-16 (continue mitigating against and restricting hazardous material usage in efforts to reduce pollution and hazard burden on Carson residents); and Implementing Policies CHE-P-4 (continue to enforce zoning and design standards that protect sensitive uses from the encroachment of land uses that would result in impacts from noxious fumes or toxins), CSES-P-26 (minimize the threat to public health and safety and the environment through strict enforcement of rules and regulations and by working closely with first responders), CSES-P-27 (minimize the threat of a release of hazardous materials through strict enforcement of rules and regulations), and CSES-P-28 (strictly enforce federal, State and local laws and regulations relating to the use, storage, and transportation of toxic, explosive, and other hazardous and extremely hazardous materials to prevent unauthorized discharges).

As further detailed above, the Project is located on a relatively small (3-acre) site surrounded by existing development, is in proximity to multiple sensitive receptors, and involves hazardous materials including a large volume of lithium-ion batteries intended to store a large amount of electricity. The City also has not been able to confirm that the proposed facility would not utilize heavy metals that constitute hazardous materials in the connections for the batteries/battery enclosures, as such materials are in some cases used for BESS facilities.

Lithium battery systems have documented risks of thermal runaway, fire, explosion, and toxic gas release. BESS facilities such as the Project's proposed facility carry potential off-site public health and safety impacts resulting from explosions and fires involving the BESS facilities. There have been several recent failures of outdoor utility-scale containerized-BESS (like the Project) in other jurisdictions, mostly in remote areas. Until recently, BESS facility have much-more commonly been installed in such remote areas, whereas the Project site is in a densely developed area. If a failure incident occurred on the Project site, the consequences to public health and safety could be far more grave than a similar incident occurring in a remote area.

When a failure occurs involving a BESS facility, due to a number of life-safety reasons (i.e., explosion potential and toxic exposure, coupled with the fact that suppression efforts are ineffective and cause potentially-contaminated runoff, and the fact that exposure-protection efforts can actually *cause* failures in otherwise-unaffected units), it is anticipated that there is little to nothing the Fire Department would be able to do to safely intervene during these incidents other than to ensure that evacuation of the area has occurred (on and off site, depending on the incident type), coordinate site-operator activities as the incident commander, and monitor the situation. Stated differently, a fire involving a BESS facility generally cannot be put out, but rather must be allowed to burn itself out, which would occur once all the lithium-ion batteries and other involved materials have been consumed and emitted into the air as toxic smoke, which could then be carried by the wind affecting air quality and leading to severe public health and safety hazards for nearby sensitive receptors and other existing uses and developments.

Based on the relative frequency at which BESS-site failures continue to occur, fire incidents are expected to occur during the 15-to-30-year lifespan of the BESS units to be installed and the proposed 20+ year term of the development agreement.

Additionally, as noted in Section 2 above, in the event of an explosion involving a BESS facility there is an expectation of a "rain down effect" whereby projectiles could be launched from the facility high into the air and over the blast wall, landing in surrounding areas and causing injury.

b) The proposed use and development will not be compatible with the intended character of the area. Although the Project site is heavy industrial in designation, the surrounding area includes residential, park/open space and light industrial designations and uses. The Project's proposed utility-scale battery energy storage

facility represents a specialized and emerging use with characteristics and hazards that are materially different from traditional heavy industrial operations and that are not compatible with the intended character of the area. This is further evidenced by the fact that BESS uses are not permitted within the City zoning designation applicable to the Project site or the zoning designations applicable to any properties within the surrounding area, as detailed below.

c) CMC Section 9172.21 provides, "If the Commission finds that any adverse effects will occur as a result of the proposed use and development, such effects must be found to be justified by the benefits to the public interest which will occur as a result of such use and development. If the Commission does not make affirmative findings with respect to the [criteria set forth in CMC 9172.21(D)(1)(a)-(f)] and is unable to impose conditions to mitigate any adverse finding, the Commission shall disapprove a Conditional Use Permit. Here, the Commission finds that adverse effects will occur as a result of the proposed use and development, and that such effects are not justified by the benefits to the public interest which will occur as a result of such use and development, including the proposed community benefits provided for in the proposed development. Additionally, the Commission does not make affirmative findings with respect to the criteria set forth in CMC 9172.21(D)(1)(a)-(f) and is unable to impose conditions to mitigate its adverse findings. Accordingly, the Commission must disapprove the Conditional Use Permit.

d) CMC Section 9141.3, pertaining to the uses permitted in industrial zones, provides, "All uses are prohibited except as expressly permitted by the provisions of this Chapter." BESS uses are not specified as permitted or conditionally permitted in the relevant Chapter of the City's Municipal Code (Chapter 1 of Article IX, titled the Carson Zoning Ordinance). The conditional use permit application was erroneously based on the general requirement of CMC 9141.1 (as amended by Ordinance No. 21-2120) that industrial uses *that are not otherwise prohibited* by the Carson Zoning Ordinance shall require a conditional use permit if they involve hazardous materials. Because BESS uses are not expressly permitted (nor conditionally permitted) in industrial zones in the Carson Zoning Ordinance, the proposed use is prohibited pursuant to CMC Section 9141.3.

SECTION 4. With respect to Development Agreement No. 32-22 ("DA"), pursuant to Government Code Sections 65864 through 65869.5, as applicable, the Planning Commission recommends that the City Council deny Development Agreement No. 33-23 based on the following:

a) The underlying land use entitlements (DOR and CUP) are denied. The DA is not supported and cannot be approved without approval of the underlying land use entitlements;

b) Pursuant to Government Code Section 65867.5, "a development agreement shall not be approved unless the legislative body finds that the provisions of the agreement are consistent with the general plan." The Planning Commission finds that the development agreement is not consistent with the City's General Plan for the reasons detailed in Sections 2-3 above, and therefore that the development agreement cannot be approved; and

c) By Resolution No. 90-050, the City has adopted procedures and requirements for the consideration of development agreements pursuant to Government Code Section 65865(c). Section 7.F of those procedures and requirements provides that the City Council shall not approve a development agreement unless it finds that the proposed development agreement will not be detrimental to the health, safety and general welfare. The Planning Commission finds that the aforementioned finding cannot be made with respect to the proposed development agreement due to the public health and safety risks associated with the Project as detailed in Sections 2-3 above, and therefore the proposed development agreement cannot be approved, and this is not negated or outweighed by the monetary payments and other community benefits proposed in the development agreement.

SECTION 5. The Planning Commission's action set forth in this Resolution is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(4), which provides that a project is exempt from CEQA if the project will be rejected or disapproved.

SECTION 6. Based on the findings and conclusions set forth above, the Planning Commission hereby: (1) denies, rejects and disapproves DOR No. 1935-23 and CUP No. 1128-23; and (2) recommends that the City Council deny, reject and disapprove DA No. 33-23.

SECTION 7. The Planning Commission's action denying DOR No. 1935-23 and CUP No. 1128-23 shall take effect 15 days from the date of this action unless an appeal is filed within that time pursuant to CMC Section 9173.4. The Planning Commission's action recommending City Council denial of DA No. 33-23 shall take effect immediately and is not subject to appeal pursuant to CMC Section 9173.4.

SECTION 8. The Secretary shall certify to the adoption of the Resolution and shall transmit copies of the same to the applicant.

APPROVED and **ADOPTED** this 10th day of March 2026.

_____

CHAIRPERSON

ATTEST:

_____

SECRETARY

Exhibit A: Legal Description

EXHIBIT A

LEGAL DESCRIPTION

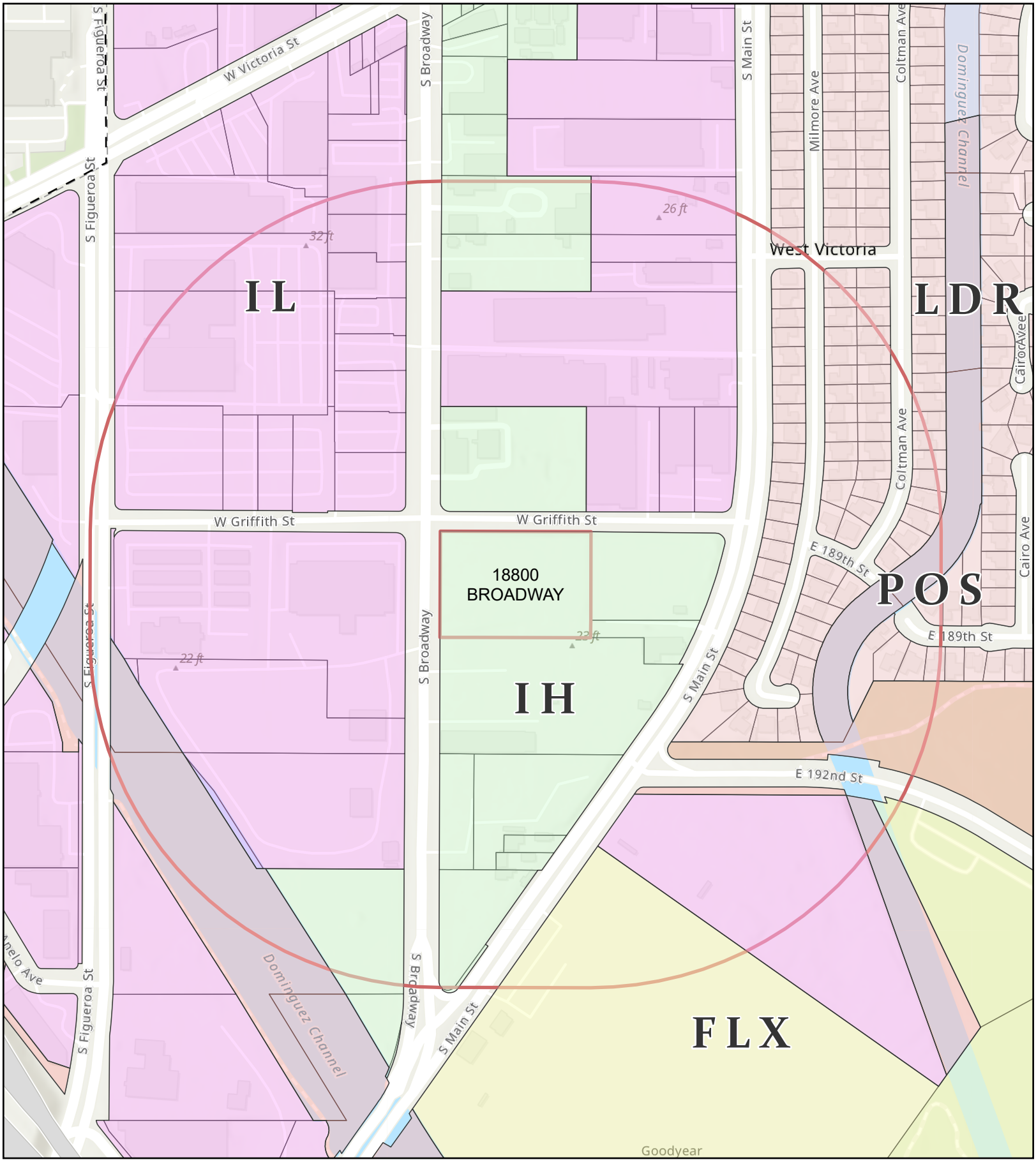
THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF CARSON IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

THE WESTERLY 750.97 FEET OF LOT 119 OF TRACT 4671, IN THE CITY OF CARSON, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 56, PAGES 30 AND 31 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT THEREFROM THE WESTERLY 222.97 FEET THEREOF.

ALSO EXCEPT THEREFROM THE EASTERLY 100 FEET OF THE WESTERLY 322.97 FEET AS PER FINAL JUDGMENT, CASE NO. 274,177 RECORDED IN BOOK 12339, PAGE 97 OF OFFICIAL RECORDS IN SAID COUNTY.

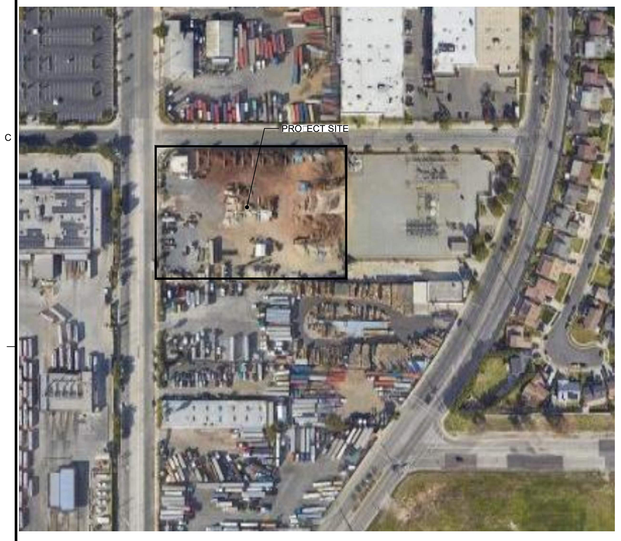
APN 7339-014-009



Radius Map:
1000FT
18800 Broadway

City of Carson

GRIFFITH ENERGY STORAGE PRO□ECT



VICINITY MAP
SCALE □ NTS

PRO□ECT DIRECTORY

APPLICANT□	VESI 27 LLC POC□□ESSICA MOWRY 6884 SIERRA CENTER PARKWAY RENO, NV 89511 484□474□5350
PRO□ECT ADDRESS□	18800 S. BROADWAY AVE CARSON, CA 90248□4627
AIN□	7339□014□009
ENGINEER□	COFFMAN ENGINEERS, INC. 626 WILSHIRE BOULEVARD, SUITE 1010 LOS ANGELES, CA 90017 □□□.□□□□ □□.□□□
LANDSCAPE ARCHITECT□	DUDEK 605 3RD STREET ENCINITAS, CA 92024

PRO□ECT DESCRIPTION

GENERAL□	100MW/400MWH BATTERY ENERGY STORAGE SYSTEM (BESS) FACILITY
TOTAL SITE AREA□	130,487 SF (2.996 ACRES)
TOTAL FENCED AREA□	121,752 SF (2.795 ACRES)
SUBSTATION□SCE AREA□	10,747 SF
LANDSCAPE AREA□	6,191 SF
STORMWATER AREA□	9,382 SF
ACCESS ROAD AREA□	24,382 SF
BESS ENCLOSURE AREA□	79,785 SF (1.83 ACRES)

REFERENCES

ALTA/NSPS LAND TITLE SURVEY BY BLEW □ ASSOCIATES, P.A.
3825 N. SHILOH DRIVE
FAYETTEVILLE, AR 72703
DATED□10/7/2022

2021 BUILDING CODE

SHEET INDEX

C□0.0	COVER SHEET
S□1	ALTA/NSPS LAND TITLE SURVEY
C□1.0	CIVIL SITE PLAN
C□1.1	FIRE PLAN
C□2.0	GRADING PLAN
C□2.1	SECTION VIEW
C□3.0	ENLARGED SCE SUBSTATION PLAN (BY OTHERS)
C□3.1	ENLARGED ELECTRICAL SHELTER PLAN (BY OTHERS)
C□3.2	ENLARGED O□M PLAN (BY OTHERS)
C□4.0	DETAILS (BY OTHERS)
C□4.1	FENCE DETAILS (BY OTHERS)
C□5.0	PRELIMINARY WATER □UALITY MANAGEMENT PLAN
C□5.1	WATER □UALITY MANAGEMENT DETAILS
C□6.0	TURNING EXHIBIT
LS□1	PRELIMINARY LANDSCAPE PLAN
LS□2	PRELIMINARY IRRIGATION PLAN

CITY STANDARD GENERAL NOTES□

1. ALL WORK AND MATERIALS SHALL COMPLY WITH THE CITY OF CARSON, STANDARD DRAWINGS, AMERICAN PUBLIC WORKS ASSOCIATION AND CALTRANS STANDARD PLANS AND SPECIFICATIONS. (ALL LATEST EDITION)
2. CONSTRUCTION PERFORMANCE BOND SHALL BE POSTED THROUGH CITY OF CARSON ENGINEERING SERVICES DIVISION PRIOR TO CONSTRUCTION PERMIT ISSUANCE. CONSTRUCTION BOND IS BASED ON ESTIMATED CONSTRUCTION COST AS REVIEWED AND APPROVED BY THE CITY ENGINEER.
3. COSTRUCTION PERMIT FROM THE CITY OF CARSON ENGINEERING SERVICES DIVISION SHALL BE OBTAINED AT LEAST SEVEN (7) DAYS PRIOR TO PRE□CONSTRUCTION MEETING. (A TOTAL OF 21□DAYS PRIOR TO START OF CONSTRUCTION)
4. PRE□CONSTRUCTION MEETING SHALL BE COORDINATED AND COMPLETED THROUGH CITY OF CARSON ENGINEERING SERVICES DIVISION AT LEAST 14□DAYS PRIOR TO START OF CONSTRUCTION.
5. THE CONTRACTOR SHALL NOTIFY THE ENGINEERING SERVICES FOR INSPECTION A MINIMUM OF 48□HRS PRIOR TO STARTING WORK AT (310) 952□1700 EXT. 1795
6. WORKING HOURS SHALL BE 9□00 AM TO 3□00 PM FOR ARTERIAL STREETS AND 7□00 AM TO 3□00 PM FOR LOCAL/RESIDENTIAL STREETS, UNLESS OTHERWISE APPROVED.
7. STAGING AREAS FOR CONSTRUCTION MATERIALS AND E□UIPMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
8. PEDESTRIANS AND/OR VEHICULAR ACCESS SHALL BE ALLOWED AT ALL TIMES, UNLESS APPROVED OTHERWISE BY THE CITY ENGINEER. PROHIBITING PEDESTRIAN AND/OR VEHICULAR ACCESS RE□UIRES DETOUR AND/OR ACCESS CLOSURE PLANS SUB□ECT TO REVIEW AND APPROVAL OF THE CITY ENGINEER.
9. OVERNIGHT TRAFFIC CONTROLS SHALL BE REVIEWED AND APPROVED BY TRAFFIC ENGINEER, PRIOR TO PRE□CONSTRUCTION MEETING. OTHERWISE TRAFFIC CONTROL SHALL BE PER CA M.U.T.C.D, LATEST EDITION.
10. CONTRACTOR SHALL NOTIFY AFFECTED RESIDENTS, BUSINESSES AND AGENCIES 72□HOURS PRIOR TO START OF CONSTRUCTION, AT THE DISCRETION OF THE CITY ENGINEER.
11. DAMAGED EXISTING IMPROVEMENTS, NOT PART OF THE SCOPE OF WORK, SHALL BE PROTECTED INPLACE AND SHALL BE REPLACED IN KIND AT NO COST TO THE CITY, TO THE SATISFACTION OF THE CITY ENGINEER.
12. NO TRENCHES MAY BE LEFT OPEN OVERNIGHT UNLESS APPROVED BY THE CITY ENGINEER.
13. IF ANY UTILITIES OR FACILITIES CONFLICT WITH PROPOSED IMPROVEMENTS, ALL WORK SHALL STOP AND THE CITY ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
14. CONTRACTOR SHALL COORDINATE AND/OR OBTAIN NECESSARY PERMITS FROM AFFECTED AGENCIES.
15. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (U.S.A.) 48□HRS PRIOR TO START UPON EXPOSING ANY UTILITY S UNDERGROUND FACILITY THE CONTRACTOR SHALL NOTIFY THAT OWNER OF THAT UTILITY IMMEDIATELY.
16. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL SUBSTRUCTURES WITHIN THE ALIGNMENT OF THE PROPOSED IMPROVEMENTS, AND IN THE EVENT OF SUBSTRUCTURE DAMAGE, THE CONTRACTOR SHALL BEAR ALL THE COST OF REPAIR OR REPLACEMENT.
17. CONTRACTOR SHALL HAVE SUFFICIENT MATERIALS ON HAND AT ALL TIMES TO EXPEDITE ANY EMERGENCY REPAIR.
18. AS RE□UIRED BY THE CITY ENGINEER, THE CONTRACTOR SHALL FURNISH AND OPERATE A SELFLOADING MOTOR SWEEPER WITH SPRAY NOZZLES AT LEAST TWICE EACH WORKING DAY TO KEEP PAVED AREAS ACCEPTABLY CLEAN WHEREVER CONSTRUCTION IS INCOMPLETE.
19. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN AT ALL TIMES DURING CONSTRUCTION AMPLE MEANS AND DEVICES WITH WHICH TO PROMPTLY REMOVE AND PROPERLY DISPOSE OF ALL WATER FROM ANY SOURCE ENTERING THE EXCAVATION OR OTHER PARTS OF THE WORK.
20. CONTRACTOR SHALL COMPLY WITH ALL STORMWATER POLLUTION CONTROL PER BY REGIONAL WATER □UALITY CONTROL BOARD (RW□CB) RE□UIREMENTS, INCLUDING BUT NOT LIMITED TO BEST MANAGEMENT PRACTICE (BMPS)
21. CONTRACTOR SHALL APPLY FOR AND OBTAIN A TREE REMOVAL PERMIT WHEN DEMOLISHING AN EXISTING TREE WITHIN THE PUBLIC RIGHT□OF□WAY. REFER TO "EXHIBIT B" OF ARTICLE III, CHAPTER 9 OF THE OF CARSON MUNICIPAL CODE AND CONTACT GREGORY MACDONALD, TREE AND CONCRETE MAINTENANCE SUPERVISOR, AT (310) 847□3500.
22. CONTRACTOR SHALL PROVIDE TREE PROTECTION FOR TREES WITHIN THE PUBLIC RIGHT□OF□WAY PER ARTICLE III, CHAPTER 9, SECTION 3928 OF THE CITY OF CARSON MUNICIPAL CODE.
23. THE PRO□ECT SITE SHALL BE KEPT CONTINUOUSLY FENCED IN ACCORDANCE WITH THE BUILDING CODE UNTIL THE PRO□ECT IS FINAL OR APPROVAL TO REMOVE THE FENCE HAS BEEN OBTAINED FROM CITY BUILDING DIVISION. 24 HOUR SECURITY SHALL BE PROVIED ANY TIME THE FENCE CANNOT BE MAINTAINED INTACT
24. BUILDING DIVISION REVIEW AND APPROVAL IS SOLELY FOR WORK WITHIN THE PRIVATE PROPERTY, SEPARATE APPROVAL AND PERMIT SHALL FIRST BE OBTAINED FROM THE CITY PUBLIC WORKS/ENGINEERING DEPARTMENT FOR ANY WORK IN THE PUBLIC WAY.

AH□STAMP APPROVAL

COFFMAN ENGINEERS
1939 H□rr□□□S□r□□□, S□□□320
O□□□d, CA 94612
ph 510.251.9578
www.coffman.com

PRELIMINARY □NOT FOR CONSTRUCTION

GRIFFITH ENERGY STORAGE

ORMAT

REV	DATE	DESCRIPTION
12	09/18/25	TESLA REV8
11	07/02/25	TESLA REV6
10	12/04/24	TESLA REV5
9	8/14/24	TESLA REV4
8	6/06/24	TESLA REV3
7	5/10/24	TESLA REV2
6	4/10/24	TESLA LAYOUT
5	2/2/24	REVISED LAYOUT
4	11/8/23	REVISED LAYOUT
3	9/29/23	REVISED LAYOUT

PRO□ NO.	222288
DRAWN	RH
CHECKED	□A
DATE	07/02/2025

© COFFMAN ENGINEERS INC.

SHEET TITLE□

COVER SHEET

SHEET NO□

C□0.0

P:\ANC\22JOBS\22288 GRIFFITH BATTERY ENERGY STORAGE\0.0 DWGS\G\22288 COVER SHEET.DWG,COVER - HOLMES, RYAN - LAST SAVED: September 18, 2025 - PLOT DATE: 9/18/25

ALTA/NSPS LAND TITLE SURVEY

18800 BROADWAY

CARSON, CALIFORNIA 90248

LOS ANGELES COUNTY

TITLE COMMITMENT INFORMATION

THE PROPERTY HEREON DESCRIBED IS THE SAME AS THE PERTINENT PROPERTY AS DESCRIBED IN FIDELITY NATIONAL TITLE COMPANY, TITLE COMMITMENT #997-30090434-ML6, WITH AN EFFECTIVE DATE OF AUGUST 10, 2022 AT 7:30 AM.

SCHEDULE A DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF CARSON IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

THE WESTERLY 750.97 FEET OF LOT 119 OF TRACT 4671, IN THE CITY OF CARSON, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 56, PAGES 30 AND 31 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT THEREFROM THE WESTERLY 222.97 FEET THEREOF.

ALSO EXCEPT THEREFROM THE EASTERLY 100 FEET OF THE WESTERLY 322.97 FEET AS PER FINAL JUDGMENT, CASE NO. 274,177 RECORDED IN BOOK 12339, PAGE 97 OF OFFICIAL RECORDS IN SAID COUNTY.

APN 7339-014-009

NOTES CORRESPONDING TO SCHEDULE B

(2) — *EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS CONDEMNED BY AN INSTRUMENT,*
ENTITLED: FINAL DECREE OF PARTITION
COURT: SUPERIOR
CASE NO.: 3284
PURPOSE: RIGHT OF ENTRY FOR DITCHES, PIPES AND OTHER WATER CONDUITS FOR WATER USED FOR IRRIGATION OR DOMESTIC PURPOSES, AND FOR THE TRANSMISSION AND FLOW OF SAID WATER AND INCIDENTAL PURPOSES
RECORDING NO: BOOK 2911, PAGE 1 OF DEEDS AFFECTS: A PORTION OF SAID LAND AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT.
REFERENCE IS HEREBY MADE TO SAID DOCUMENT FOR FULL PARTICULARS.
(AFFECTS, CONTAINS NO PLOTTABLE EASEMENT ITEMS)

(3) — *EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:*
GRANTED TO: DOMINGUEZ WATER COMPANY
PURPOSE: RIGHT OF ENTRY AND TO DEVELOP AND REMOVE WATER AND CONSTRUCT PUMPING PLANTS, DITCHES, CONDUITS AND INCIDENTAL PURPOSES
RECORDING NO: BOOK 936, PAGE 287 OF OFFICIAL RECORDS
AFFECTS: A PORTION OF SAID LAND AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT.
REFERENCE IS HEREBY MADE TO SAID DOCUMENT FOR FULL PARTICULARS.
(AFFECTS, CONTAINS NO PLOTTABLE EASEMENT ITEMS)

(4) — *EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT:*
PURPOSE: PIPES AND INCIDENTAL PURPOSES
RECORDING NO: BOOK 15283, PAGE 6 OF OFFICIAL RECORDS
AFFECTS: A PORTION OF SAID LAND AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT.
REFERENCE IS HEREBY MADE TO SAID DOCUMENT FOR FULL PARTICULARS.
(AFFECTS, CONTAINS NO PLOTTABLE EASEMENT ITEMS)

(5) — *EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT:*
PURPOSE: WATER PIPES AND INCIDENTAL PURPOSES
RECORDING NO: BOOK 38362, PAGE 377 OF OFFICIAL RECORDS
AFFECTS: A PORTION OF SAID LAND AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT.
REFERENCE IS HEREBY MADE TO SAID DOCUMENT FOR FULL PARTICULARS.
(AFFECTS, PLOTTED AS SHOWN)

(6) — *EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT:*
PURPOSE: TEMPORARY CONSTRUCTION AREA AND INCIDENTAL PURPOSES
RECORDING DATE: JUNE 27, 2000
RECORDING NO: 00-0983300 OF OFFICIAL RECORDS
AFFECTS: A PORTION OF SAID LAND AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT.
REFERENCE IS HEREBY MADE TO SAID DOCUMENT FOR FULL PARTICULARS.
(AFFECTS, PLOTTED AS SHOWN)

(7) — *EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT:*
PURPOSE: TEMPORARY CONSTRUCTION AREA AND INCIDENTAL PURPOSES
RECORDING DATE: JUNE 27, 2000
RECORDING NO: 00-0983301 OF OFFICIAL RECORDS
AFFECTS: A PORTION OF SAID LAND AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT.
REFERENCE IS HEREBY MADE TO SAID DOCUMENT FOR FULL PARTICULARS.
(AFFECTS, PLOTTED AS SHOWN)

(8) — *EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT:*
PURPOSE: TEMPORARY CONSTRUCTION AREA AND INCIDENTAL PURPOSES
RECORDING DATE: JUNE 27, 2000
RECORDING NO: 00-0983302 OF OFFICIAL RECORDS
AFFECTS: A PORTION OF SAID LAND AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT.
REFERENCE IS HEREBY MADE TO SAID DOCUMENT FOR FULL PARTICULARS.
(AFFECTS, PLOTTED AS SHOWN)

UTILITY INFORMATION

THE UTILITIES SHOWN ON THIS DRAWING HEREON HAVE BEEN LOCATED BY FIELD MEASUREMENTS. UTILITY MAP DRAWINGS, BLEW & ASSOCIATES MAKES NO WARRANTY TO THE EXACT LOCATION OF ANY UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THIS DRAWING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ANY AND ALL UTILITIES PRIOR TO CONSTRUCTION. CALL (STATE) ONE-CALL AT 811 OR 800-422-4133 FOR FIELD LOCATIONS (REQUEST FOR GROUND MARKINGS) OF UNDERGROUND UTILITY LINES BEFORE DIGGING.

COMPANY:	CONTACT:
ATTDSOUTH - AT&T	800-332-1321
CWSDOM01 - CA WATER SERVICE/DOMINGUES WTR CO	310-257-1400
LAWP3 - LADWP - WATER	800-342-5397
P66CAS2 - PHILLIPS 66 PIPELINE LLC	877-267-2290
SCE1014 - SC EDISON - METRO WEST TRANS	626-302-1212
SCG32W - SOCALGAS DISTRIBUTION COMPTON	800-826-6576
TLC04 - TORRANCE LOGISTICS CO/PBF ENERGY	877-662-4575
UCHTRW_N4 - SPECTRUM - HERMOSA BEACH	844-780-6054
UQSTSO - UTILIQUEST MAIN RECEIVING	INFORMATION NOT AVAILABLE
USCEMW - UTILIQUEST FOR SCE DIST METRO WEST	800-611-1911
USCETT83NW - SCE TRANS TELECOM	800-655-8844
WBMWD - WEST BASIN MUNICIPAL WATER DISTRICT	310-217-2417

ZONING INFORMATION

PROPERTY IS CURRENTLY ZONED: INDUSTRIAL

ITEM	REQUIRED	OBSERVED
PERMITTED USE	SEE NOTE 1	INDUSTRIAL
MIN. LOT AREA	20,000 SQ. FT.	130,487 SQ. FT. ±
MIN. STREET FRONTAGE	100'	304.82'
MIN. LOT WIDTH	100'	304.82'
MAX. BLDG COVERAGE	NO CODE REQUIREMENT	01%
MIN. SETBACKS FRONT	SEE NOTE 2	25.4'
MIN. SETBACKS SIDE	SEE NOTE 3	250.3'
MIN. SETBACKS STREET SIDE	10'	19.5'
MIN. SETBACKS REAR	SEE NOTE 3	362.6'
MAX. BUILDING HEIGHT	NONE REQUIRED	13.6'
PARKING REGULAR	NONE REQUIRED	0
PARKING HANDICAP	NONE REQUIRED	0
PARKING TOTAL	NONE REQUIRED	0

PARKING INFORMATION:

NOTES:
BECAUSE THERE MAY BE A NEED FOR INTERPRETATION OF THE APPLICABLE ZONING CODES, WE REFER YOU TO CITY OF CARSON FOR ZONING LAWS AND APPLICABLE CODES.

1. USES PERMITTED IN INDUSTRIAL ZONES.

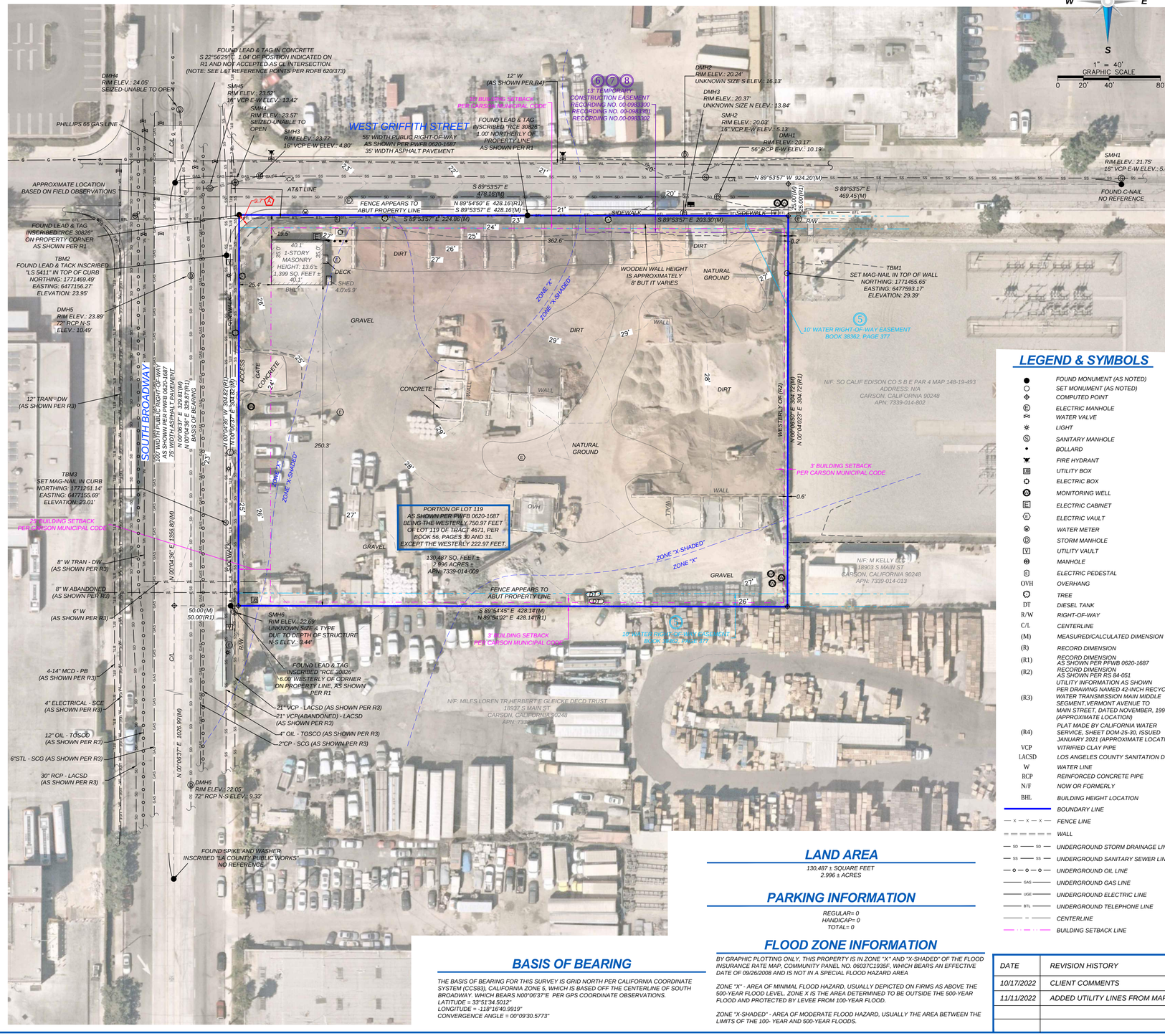
2. 25'-0R VARIABLE IF LANDSCAPED.

3. 0 / 3' IF ABUTTING NON-RESIDENTIAL ZONE.

ZONING PROVIDED BY: CARSON MUNICIPAL CODE - ZONING REQUIREMENTS

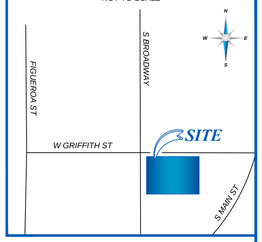
SIGNIFICANT OBSERVATIONS

(A) — *WALL APPEARS TO CROSS PROPERTY LINE BY AS MUCH AS 9.7'.*



VICINITY MAP

NOT TO SCALE



GENERAL NOTES

1. *SOME FEATURES SHOWN ON THIS PLAT MAY BE SHOWN OUT OF SCALE FOR CLARITY.*
2. *DIMENSIONS ON THIS PLAT ARE EXPRESSED IN FEET AND DECIMAL PARTS THEREOF UNLESS OTHERWISE NOTED. MONUMENTS WERE FOUND AT POINTS WHERE INDICATED.*
3. *AT THE TIME OF THE ALTA SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF RECENT EARTH WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS WITHIN RECENT MONTHS.*
4. *AT THE TIME OF THE ALTA SURVEY, THERE WAS NO KNOWLEDGE OF PROPOSED CHANGES IN STREET RIGHT-OF-WAY LINES AND NO SUCH INFORMATION WAS MADE AVAILABLE FROM THE CONTROLLING JURISDICTION. THERE WAS NO OBSERVABLE EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.*
5. *AT THE TIME OF THE ALTA SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP, OR SANITARY LANDFILL.*
6. *AT THE TIME OF THE ALTA SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF SITE USE AS A CEMETERY, ISOLATED GRAVE SITE OR BURIAL GROUNDS.*
7. *COMPLETED FIELD WORK WAS OCTOBER 05, 2022.*
8. *THE DISTANCES SHOWN HEREON ARE UNITS OF GROUND MEASUREMENT.*
9. *THE SUBJECT PROPERTY HAS DIRECT PHYSICAL ACCESS TO SOUTH BROADWAY , BEING A PUBLICLY DEDICATED RIGHT-OF-WAY.*
10. *EXCEPT AS SPECIFICALLY STATED OR SHOWN ON THIS PLAT, THIS SURVEY DOES NOT PURPORT TO REFLECT ANY OF THE FOLLOWING WHICH MAY BE APPLICABLE TO THE SUBJECT PROPERTY: EASEMENTS, OTHER THAN POSSIBLE EASEMENTS WHICH WERE VISIBLE AT THE TIME OF SURVEY; RESTRICTIVE COVENANTS; SUBDIVISION RESTRICTIONS OR OTHER LAND USE REGULATIONS; AND ANY OTHER FACTS WHICH AN ACCURATE TITLE SEARCH MAY DISCLOSE.*
11. *NO SURVEYOR OR ANY OTHER PERSON OTHER THAN A LICENSED CALIFORNIA ATTORNEY MAY PROVIDE LEGAL ADVICE CONCERNING THE STATUS OF TITLE TO THE PROPERTY DESCRIBED IN THIS SURVEY ("THE SUBJECT PROPERTY"). THE PURPOSE OF THIS SURVEY, AND THE COMMENTS RELATED TO THE SCHEDULE B-II EXCEPTIONS, IS ONLY TO SHOW THE LOCATION OF BOUNDARIES AND PHYSICAL OBJECTIONS IN RELATION THERETO. TO THE EXTENT THAT THE SURVEY INDICATES THAT THE LEGAL INSTRUMENT "AFFECTS" THE SUBJECT PROPERTY, SUCH STATEMENT IS ONLY INTENDED TO INDICATE THAT PROPERTY BOUNDARIES INCLUDED IN SUCH INSTRUMENT INCLUDE SOME OR ALL OF THE SUBJECT PROPERTY. THE SURVEYOR DOES NOT PURPORT TO DESCRIBE HOW SUCH INSTRUMENT AFFECTS THE SUBJECT PROPERTY OR THE ENFORCEABILITY OR LEGAL CONSEQUENCES OF SUCH INSTRUMENT.*
12. *ALL BEARINGS AND DISTANCES SHOWN HEREON ARE MEASURED DIMENSIONS UNLESS OTHERWISE NOTED HEREON. RECORD DIMENSIONS, IF DIFFERING FROM MEASURED DIMENSIONS, WILL BE FOLLOWED BY "(R#)" WHERE THE # INDICATES FROM WHICH REFERENCE DOCUMENT THE DIMENSION ORIGINATED.*
13. *NAMES AND ADDRESSES OF ADJOINING PROPERTY OWNERS WERE TAKEN FROM LOS ANGELES COUNTY GIS.*
14. *IN REGARDS TO ALTA TABLE A ITEM 10, NO VISIBLE CERTAIN DIVISION OR PARTY WALLS WITH RESPECT TO ADJOINING PROPERTIES WERE OBSERVED AT THE TIME THE FIELDWORK WAS PERFORMED, NOR WERE ANY DESIGNATED BY THE CLIENT, NECESSARY PERMISSIONS WERE NOT PROVIDED.*
15. *IN REGARDS TO ALTA TABLE A ITEM 18, THE FOLLOWING ITEMS, IF ANY, ARE PLOTTED ON THE SURVEY TO THE EXTENT REFERENCED ON THE APPLICABLE TITLE COMMITMENT, 1: ALL PLOTTABLE AREAS DENOTED IN THE RECIPROCAL EASEMENT AGREEMENTS AND, 2: THE BOUNDARY LIMITS ONLY OF ALL OFFSITE APPURTENANT EASEMENTS.*
16. *ELEVATION ON THIS SITE ARE NAVD88 BASED UPON GPS STATIC OBSERVATION POST PROCESSED USING THE NATIONAL GEODETIC SURVEY (NGS) ONLINE POSITIONING USER SERVICE (OPUS) AND VERIFIED AFAINS NGS PID AB9450.*
17. *THE AERIAL MAPPING AND PLANIMETRIC FEATURES SHOWN HEREON (INCLUDING BUT NOT LIMITED TO; FENCES. OVERHEAD POWER LINES, CHANNELS, IRRIGATION/DRIP LINES, BUILDINGS, ROADS [GRAVEL, DIRT, OR PAVED], & CONTOURS) ARE DERIVED FROM AN AERIAL FLYOVER OBTAINED 10/10/2022 BY NEARMAP.*

LEGEND & SYMBOLS

- *FOUND MONUMENT (AS NOTED)*
- *SET MONUMENT (AS NOTED)*
- *COMPUTED POINT*
- *ELECTRIC MANHOLE*
- *WATER VALVE*
- *LIGHT*
- *SANITARY MANHOLE*
- *BOLLARD*
- *FIRE HYDRANT*
- *UTILITY BOX*
- *ELECTRIC BOX*
- *MONITORING WELL*
- *ELECTRIC CABINET*
- *ELECTRIC VAULT*
- *WATER METER*
- *STORM MANHOLE*
- *UTILITY VAULT*
- *MANHOLE*
- *ELECTRIC PEDESTAL*
- OVH *OVERHANG*
- *TREE*
- DT *DIESEL TANK*
- R/W *RIGHT-OF-WAY*
- C/L *CENTERLINE*
- (M) *MEASURED/CALCULATED DIMENSION*
- (R) *RECORD DIMENSION*
- (R1) *RECORD DIMENSION AS SHOWN PER PFWB 0620-1687*
- (R2) *RECORD DIMENSION AS SHOWN PER RS 84-051*
- (R3) *UTILITY INFORMATION AS SHOWN PER DRAWING NAMED 42-INCH RECYCLED WATER TRANSMISSION MAIN MIDDLE SEGMENT,VERMONT AVENUE TO MAIN STREET, DATED NOVEMBER, 1998 (APPROXIMATE LOCATION)*
- (R4) *PLAT MADE BY CALIFORNIA WATER SERVICE, SHEET DOM-25-30, ISSUED JANUARY 2021 (APPROXIMATE LOCATION)*
- VCP *VITRIFIED CLAY PIPE*
- LACSD *LOS ANGELES COUNTY SANITATION DISTRICT*
- W *WATER LINE*
- RCP *REINFORCED CONCRETE PIPE*
- N/F *NOW OR FORMERLY*
- BHL *BUILDING HEIGHT LOCATION*
- *BOUNDARY LINE*
- — X — X — *FENCE LINE*
- *WALL*
- SD — SD — *UNDERGROUND STORM DRAINAGE LINE*
- SS — SS — *UNDERGROUND SANITARY SEWER LINE*
- O — O — O — *UNDERGROUND OIL LINE*
- GAS — *UNDERGROUND GAS LINE*
- UGE — *UNDERGROUND ELECTRIC LINE*
- BTL — *UNDERGROUND TELEPHONE LINE*
- — — *CENTERLINE*
- *BUILDING SETBACK LINE*

LAND AREA

130,487 ± SQUARE FEET
2.996 ± ACRES

PARKING INFORMATION

REGULAR= 0
HANDICAP= 0
TOTAL= 0

FLOOD ZONE INFORMATION

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS IN ZONE "X" AND "X-SHADED" OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 06037C1935F, WHICH BEARS AN EFFECTIVE DATE OF 09/26/2008 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA

ZONE "X" - AREA OF MINIMAL FLOOD HAZARD, USUALLY DEPICTED ON FIRMS AS ABOVE THE 500-YEAR FLOOD LEVEL. ZONE X IS THE AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOOD AND PROTECTED BY LEVEE FROM 100-YEAR FLOOD.

ZONE "X-SHADED" - AREA OF MODERATE FLOOD HAZARD, USUALLY THE AREA BETWEEN THE LIMITS OF THE 100- YEAR AND 500-YEAR FLOODS.

BASIS OF BEARING

THE BASIS OF BEARING FOR THIS SURVEY IS GRID NORTH PER CALIFORNIA COORDINATE SYSTEM (CCS83), CALIFORNIA ZONE 5, WHICH IS BASED OFF THE CENTERLINE OF SOUTH BROADWAY. WHICH BEARS N00°06'37"E PER GPS COORDINATE OBSERVATIONS.
LATITUDE = 33°51'34.5012"
LONGITUDE = -118°16'40.9919"
CONVERGENCE ANGLE = 00°09'30.5773"

SURVEYOR'S CERTIFICATE

TO: FIDELITY NATIONAL TITLE COMPANY; VESI 27 LLC; GUNTHER MERLI; AND SETEFAN MERLI:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS. JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 2, 3, 4, 5, 8, 10, 11A, 13, 15, 16, 17 AND 18 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON 10/05/2022.

DATE OF PLAT OR MAP: 10/07/2022

PRELIMINARY

JASON M. PAGE
LICENSED LAND SURVEYOR NO. 9687
STATE OF CALIFORNIA

DATE	REVISION HISTORY	BY
10/17/2022	CLIENT COMMENTS	W.R.G.
11/11/2022	ADDED UTILITY LINES FROM MAP	TKS

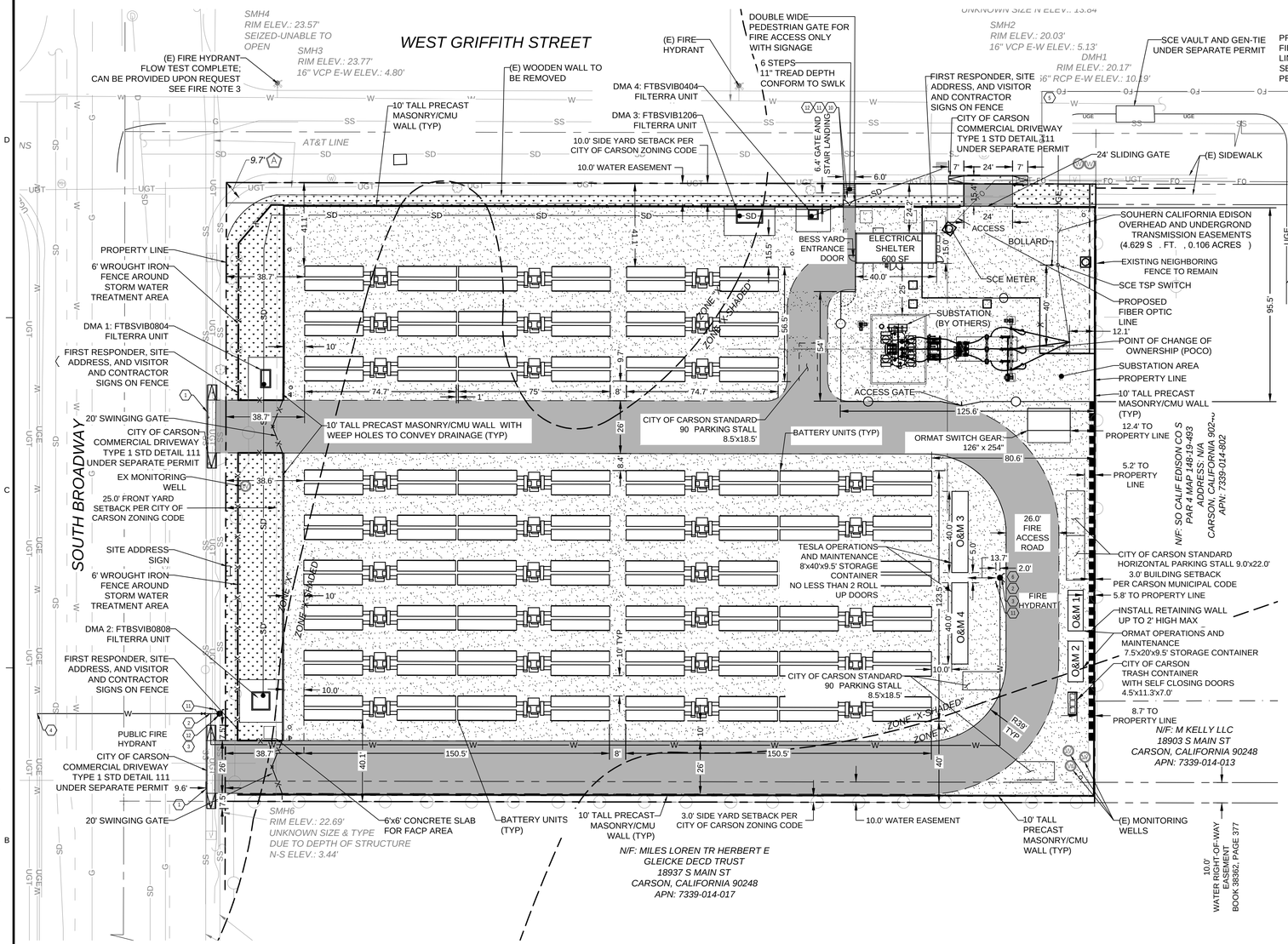
BLEW & ASSOCIATES, P.A.
Surveying
Engineering
Mapping
3825 N. SHILOH DRIVE - FAYETTEVILLE, AR 72703
EMAIL:SURVEY@BLEWINC.COM
OFFICE: 479.443.4506 FAX: 479.582.1883
EMAIL: SURVEY@BLEWINC.COM WWW.BLEWINC.COM

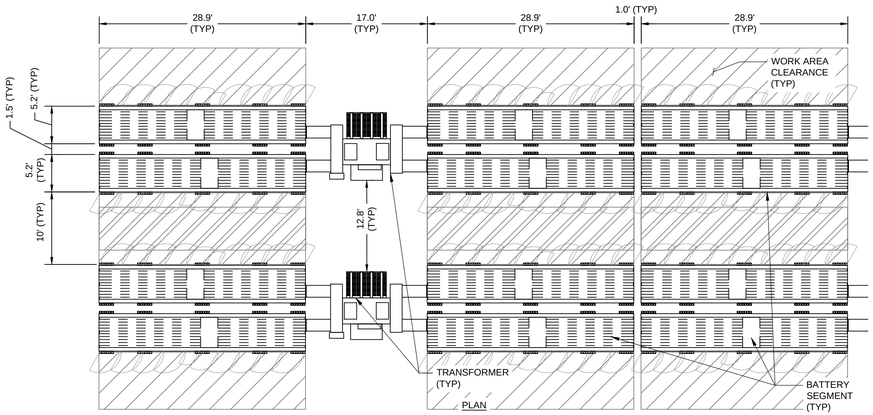
SURVEYOR JOB NUMBER: 22-8909	**SURVEY DRAWN BY:** W.R.G. - 22-8909
SURVEY REVIEWED BY: T.S.	**SHEET:** 1 OF 1

GENERAL GRADING NOTES

GENERAL

1. California Title 24 Compliance. All [illegible] shall comply with Section 110.10 of the 2019 California Title 24 [illegible] and [illegible] [illegible] [illegible]





TYPICAL BESS ENCLOSURE DIMENSIONS

THIS CONFIGURATION INCLUDES CHARACTERISTICS THAT DEVIATE FROM OEM INSTALLATION INSTRUCTIONS BUT ARE COMPLIANT WITH STATE AND LOCAL CODE. OWNER AND/OR CONTRACTOR RESPONSIBLE FOR APPROVAL BY OEM FOR SPECIFIC CONFIGURATION



LOCATION: CARSON, CA

VICINITY MAP

REQUIRED FIRE ACCESS WIDTH	26'
CENTERLINE FIRE ACCESS RADIUS	32' (MINIMUM)
SUBSTATION DIMENSIONS	96' x 126'
TOTAL SITE AREA	3.00 ACRES
FRONT YARD SETBACK	25'
SIDE YARD SETBACK	3'
STREET SIDE YARD SETBACK	10'
REAR YARD SETBACK	3'
CITY OF CARSON ZONING DESIGNATION	INDUSTRIAL

CIVIL SITE INFORMATION

CIVIL SITE NOTES

1. DRIVEWAY CURB CUT.
2. FIRE WATER PIPE, SIZE TBD.
3. FIRE HYDRANT. SEE FIRE NOTES. INSTALL HYDRANT 7' MAXIMUM FROM FACE OF CURB PER LOS ANGELES COUNTY DETAIL W-9. COORDINATE WITH COUNTY OF LOS ANGELES FOR UTILITY EASEMENT AS NEEDED
4. TIE INTO (E) MAIN.
5. 2' X 3' SITE IDENTIFICATION SIGNAGE ON EACH ACCESS GATE.
6. NO PARKING - FIRE LANE SIGNAGE, SEE FIRE NOTES
7. FOR ALL FUTURE BESS UNITS. INSTALL DEEPENED FOOTING FOUNDATIONS ADJACENT TO STORMWATER TREATMENT BASINS
8. WIND SOCK, 20-FT TALL, TYP
9. POLE-MOUNTED BEACON, INDUSTRIAL HORN, AND SIGN
10. 6' DOUBLE WIDE PEDESTRIAN ACCESS FOR FIRE ACCESS
11. 77" COMBINED GATE AND STAIR STAIR LANDING PER:
    -CBC 11B-404.2.4.1 SWINGING DOORS AND GATES
    -CBC 1011.6 STAIRWAY LANDINGS
12. FIRE DEPARTMENT SIGNAGE FOR PEDESTRIAN FIRE ACCESS TO BE DETERMINED IN FUTURE SUBMITTAL PER FIRE DEPARTMENT INSTRUCTION

LEGEND

- ASPHALT
- PERVIOUS GRAVEL
- LANDSCAPE
- 10' TALL PRECAST MASONRY/CMU WALL
- 6' WROUGHT IRON FENCE
- RETAINING WALL
- FIRE LANE SIGN

THE EXISTING INFORMATION SHOWN ON THESE PLANS IS PER THE SURVEY COMPLETED BY:
BLEW & ASSOCIATES, P.A.
3825 N. SHILOH DRIVE
FAYETTEVILLE, AR 72703
479.443.4506
DATED: 11/11/2022 .
THE CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS AND CONTACT THE ENGINEER IF DISCREPANCIES ARE NOTED.

UTILITY STATEMENT
LOCATION OF EXISTING UNDERGROUND UTILITIES HAVE BEEN TAKEN FROM DRAWINGS AND FIELD LOCATES SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES. UTILITY LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE ONLY. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EACH UTILITY.

AHJ STAMP APPROVAL

Know what's **below.** **Call** before you dig.

COFFMAN ENGINEERS
1939 Harrison Street, Suite 320
Oakland, CA 94612
ph 510.251.9578
www.coffman.com

PRELIMINARY - NOT FOR CONSTRUCTION

GRIFFITH ENERGY STORAGE

ORMAT

REV	DATE	DESCRIPTION
12	09/18/25	TESLA REV8
11	07/02/25	TESLA REV6
10	12/04/24	TESLA REV5
9	8/14/24	TESLA REV4
8	6/06/24	TESLA REV3
7	5/10/24	TESLA REV2
6	4/10/24	TESLA LAYOUT
5	2/2/24	REVISED LAYOUT
4	11/8/23	REVISED LAYOUT
3	9/29/23	REVISED LAYOUT

PROJ. NO.	222288
DRAWN	LB/RH
CHECKED	JA
DATE	09/18/2025

© COFFMAN ENGINEERS INC.

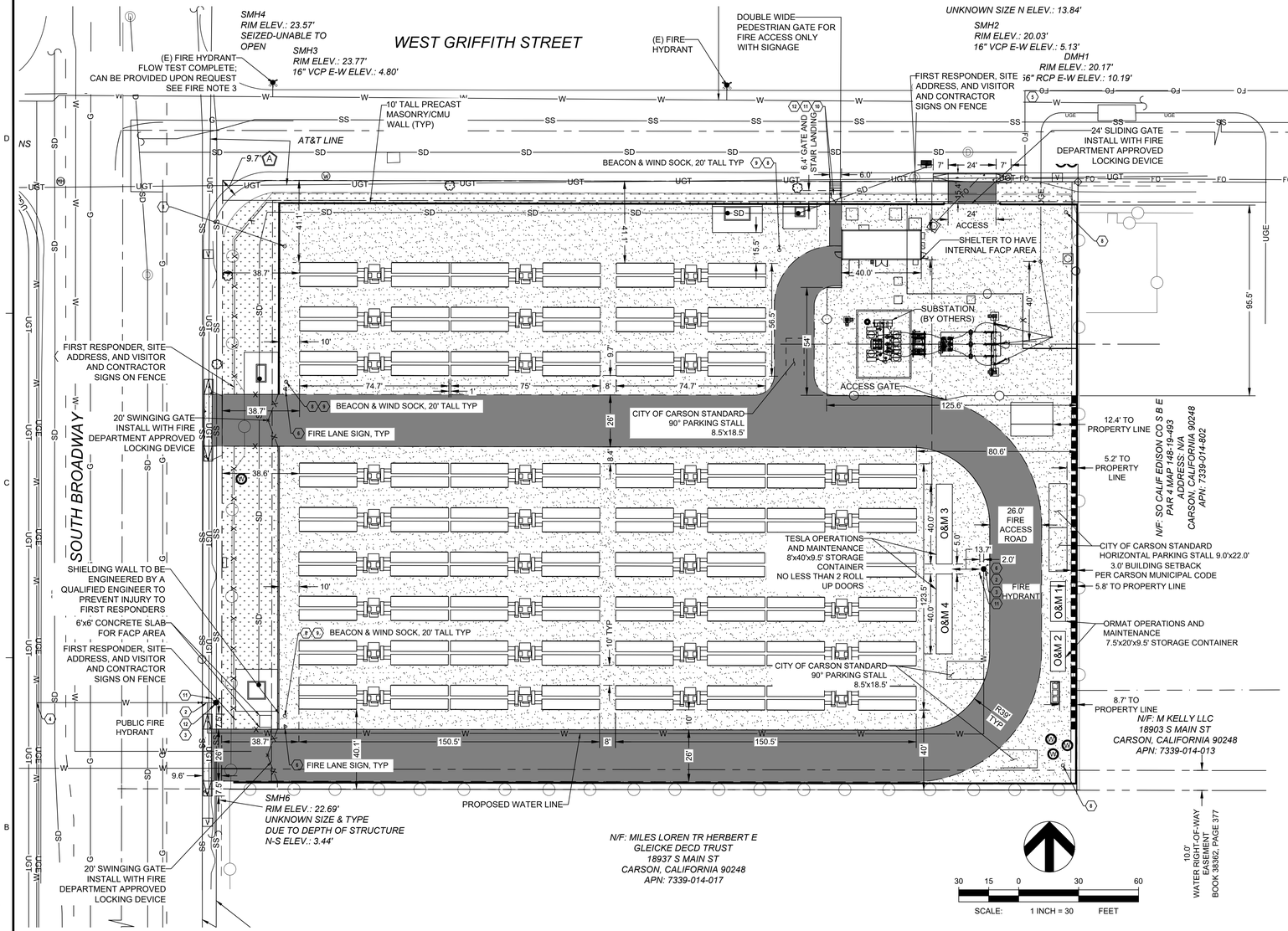
SHEET TITLE:

CIVIL SITE PLAN

SHEET NO:

C-1.0

P:\ANC\22\JOBS\222288 GRIFFITH BATTERY ENERGY STORAGE\0.0 DWGS\C222288 CIVIL SITE PLAN-10' SPACING.DWG, CIVIL SITE PLAN : HOLMES, RYAN : LAST SAVED: September 25, 2025 : PLOT DATE: 9/25/25





LOCATION: CARSON, CA

VICINITY MAP

REQUIRED FIRE ACCESS WIDTH	26'
CENTERLINE FIRE ACCESS RADIUS	32' (MINIMUM)
SUBSTATION DIMENSIONS	96' x 126'
TOTAL SITE AREA	3.00 ACRES
FRONT YARD SETBACK	25'
SIDE YARD SETBACK	3'
STREET SIDE YARD SETBACK	10'
REAR YARD SETBACK	3'
CITY OF CARSON ZONING DESIGNATION	INDUSTRIAL

CIVIL SITE INFORMATION

FIRE NOTES:

1. THE PROPOSED BATTERY ENERGY STORAGE SYSTEM DEVELOPMENT SHALL BE IN COMPLIANCE WITH CHAPTER 12 AND ALL OTHER APPLICABLE SECTIONS WITHIN THE COUNTY OF LOS ANGELES FIRE CODE
2. ALL HYDRANTS SHALL MEASURE 6"X 4"X 2-1/2" BRASS OR BRONZE, CONFORMING TO CURRENT AWWA STANDARD C503 OR APPROVED EQUAL.
3. VEHICULAR ACCESS MUST BE PROVIDED AND MAINTAINED SERVICEABLE THROUGHOUT CONSTRUCTION TO ALL REQUIRED FIRE HYDRANTS. ALL REQUIRED FIRE HYDRANTS SHALL BE INSTALLED, TESTED, AND ACCEPTED PRIOR TO CONSTRUCTION.
4. FIRE HYDRANT SPACING SHALL COMPLY WITH THE SPACING REQUIREMENTS SET FORTH IN THE COUNTY OF LOS ANGELES FIRE CODE APPENDIX C, SECTION C 105.
5. FIRE HYDRANT SHALL COMPLY WITH SECTION C105.3 BUILDINGS OTHER THAN ONE- AND TWO-FAMILY DWELLINGS, AND GROUP R-3 BUILDINGS. FOR ALL OCCUPANCIES OTHER THAN ONE- AND TWO-FAMILY DWELLINGS, AND GROUP R-3 BUILDINGS, INCLUDING COMMERCIAL, INDUSTRIAL, MULTIFAMILY DWELLINGS, PRIVATE SCHOOLS, AND INSTITUTIONS, FIRE HYDRANT SPACING SHALL BE 300 FEET. NO PORTION OF THE LOT FRONTAGE SHALL BE MORE THAN 200 FEET, VIA FIRE APPARATUS ACCESS FROM A PUBLIC HYDRANT. NO PORTION OF A BUILDING SHALL BE MORE THAN 400 FEET VIA FIRE APPARATUS ACCESS, FROM A PROPERLY SPACED PUBLIC HYDRANT.
6. PROPOSED AND EXISTING PRIVATE REQUIRED FIRE FLOW 1,250 GPM @ 20 PSI FOR 2 HOURS. PUBLIC FIRE HYDRANT(S) FLOWING SIMULTANEOUSLY MAY BE USED TO ACHIEVE THE REQUIRED FIRE FLOW PER FIRE CODE 507.3 & APPENDIX B105.1, B105.2
7. NO PARKING - FIRE LANE SIGNAGE SHALL BE IN COMPLIANCE WITH CHAPTER 12 AND ALL OTHER APPLICABLE SECTIONS WITHIN THE COUNTY OF LOS ANGELES FIRE CODE AND COUNTY OF LOS ANGELES FIRE CODE APPENDIX C, SECTION C 503.3 AND FIRE CODE SECTION 501.4. APPLICATION FOR FIRE FLOW TESTING HAS BEEN SUBMITTED TO LA COUNTY FIRE DEPARTMENT
8. ALL PROPOSED GATES SHALL BE EQUIPPED WITH FIRE DEPARTMENT APPROVED LOCKING DEVICE(S) PER FIRE CODE 503.5 & 503.6.
9. WATER SYSTEMS IMPROVEMENT PLANS SHALL BE SUBMITTED FROM THE LOCAL WATER PURVEYOR THROUGH EPICAL.LACOUNTY.GOV TO THE COUNTY OF LOS ANGELES FIRE DEPARTMENT FIRE PREVENTION DIVISION LAND DEVELOPMENT UNIT FOR REVIEW AND APPROVAL PRIOR TO BUILDING PERMIT ISSUANCE
10. SUBMITTAL TO THE COUNTY OF LOS ANGELES FIRE DEPARTMENT FIRE PREVENTION ENGINEERING SECTION BUILDING PLAN CHECK UNIT IS REQUIRED. YOU MAY REACH THEM AT (323) 890-4125 FOR SPECIFIC SUBMITTAL INFORMATION
11. GUARD POST SHALL BE INSTALLED AROUND THE ON-SITE PRIVATE FIRE HYDRANT IN COMPLIANCE WITH CFC SECTION 312 AND STRIPPING TO PREVENT VEHICLE PARKING ADJACENT TO THE PUBLIC FIRE HYDRANT SHALL BE IN COMPLIANCE WITH CVC SECTION 22514.
12. PROPOSED PUBLIC FIRE HYDRANT REQUIRED FIRE FLOW 1,500 GPM @ 20 PSI FOR 2 HOURS. PUBLIC FIRE HYDRANT(S) FLOWING SIMULTANEOUSLY MAY BE USED TO ACHIEVE THE REQUIRED FIRE FLOW PER FIRE CODE 507.3 & APPENDIX B105.1, B105.2
13. VIDEO SURVEILLANCE OF ALL PARTS OF THE FACILITY AT ALL TIMES, FOR BOTH SECURITY AND INCIDENT MANAGEMENT. LOCATIONS TO BE DETERMINED AND CAMERAS INSTALLED PRIOR TO OPERATION OF FACILITIES.

LEGEND

- ASPHALT
- PERVIOUS GRAVEL
- LANDSCAPE
- 10' TALL PRECAST MASONRY/CMU WALL
- 6' WROUGHT IRON FRENCE
- RETAINING WALL
- FIRE LANE SIGN

CIVIL SITE NOTES

1. DRIVEWAY CURB CUT.
2. FIRE WATER PIPE, SIZE TBD.
3. FIRE HYDRANT. SEE FIRE NOTES. INSTALL HYDRANT 7' MAXIMUM FROM FACE OF CURB PER LOS ANGELES COUNTY DETAIL W-9. COORDINATE WITH COUNTY OF LOS ANGELES FOR UTILITY EASEMENT AS NEEDED
4. TIE INTO (E) MAIN.
5. 2' X 3' SITE IDENTIFICATION SIGNAGE ON EACH ACCESS GATE.
6. NO PARKING - FIRE LANE SIGNAGE, SEE FIRE NOTES
7. FOR ALL FUTURE BESS UNITS. INSTALL DEEPENED FOOTING FOUNDATIONS ADJACENT TO STORMWATER TREATMENT BASINS
8. WIND SOCK, 20-FT TALL, TYP
9. POLE-MOUNTED BEACON, INDUSTRIAL HORN, AND SIGN
10. 6' DOUBLE WIDE PEDESTRIAN ACCESS FOR FIRE ACCESS
11. 77" COMBINED GATE AND STAIR STAIR LANDING PER:
    -CBC 11B-404.2.4.1 SWINGING DOORS AND GATES
    -CBC 1011.6 STAIRWAY LANDINGS
12. FIRE DEPARTMENT SIGNAGE FOR PEDESTRIAN FIRE ACCESS TO BE DETERMINED IN FUTURE SUBMITTAL PER FIRE DEPARTMENT INSTRUCTION

LANDSCAPE NOTES:
CONTRACTOR SHALL INSTALL LANDSCAPE, GROUNDCOVER, MULCH, GRAVEL, ETC. PER AHJ AND EROSION PROTECTION REQUIREMENTS

THE EXISTING INFORMATION SHOWN ON THESE PLANS IS PER THE SURVEY COMPLETED BY:
BLEW & ASSOCIATES, P.A.
3825 N. SHILOH DRIVE
FAYETTEVILLE, AR 72703
479.443.4506
DATED: 11/11/2022
THE CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS AND CONTACT THE ENGINEER IF DISCREPANCIES ARE NOTED.

UTILITY STATEMENT
LOCATION OF EXISTING UNDERGROUND UTILITIES HAVE BEEN TAKEN FROM DRAWINGS AND FIELD LOCATES SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES. UTILITY LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE ONLY. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EACH UTILITY.

811 Know what's below. Call before you dig.

AHJ STAMP APPROVAL

COFFMAN ENGINEERS
1939 Harrison Street, Suite 320
Oakland, CA 94612
ph 510.251.9578
www.coffman.com

PRELIMINARY - NOT FOR CONSTRUCTION

GRIFFITH ENERGY STORAGE

ORMAT

REV	DATE	DESCRIPTION
12	09/18/25	TESLA REV8
11	07/02/25	TESLA REV6
10	12/04/24	TESLA REV5
9	8/14/24	TESLA REV4
8	6/06/24	TESLA REV3
7	5/10/24	TESLA REV2
6	4/10/24	TESLA LAYOUT
5	2/2/24	REVISED LAYOUT
4	11/8/23	REVISED LAYOUT
3	9/29/23	REVISED LAYOUT

PROJ. NO.	222288
DRAWN	RH
CHECKED	JA
DATE	09/18/2025

© COFFMAN ENGINEERS INC.

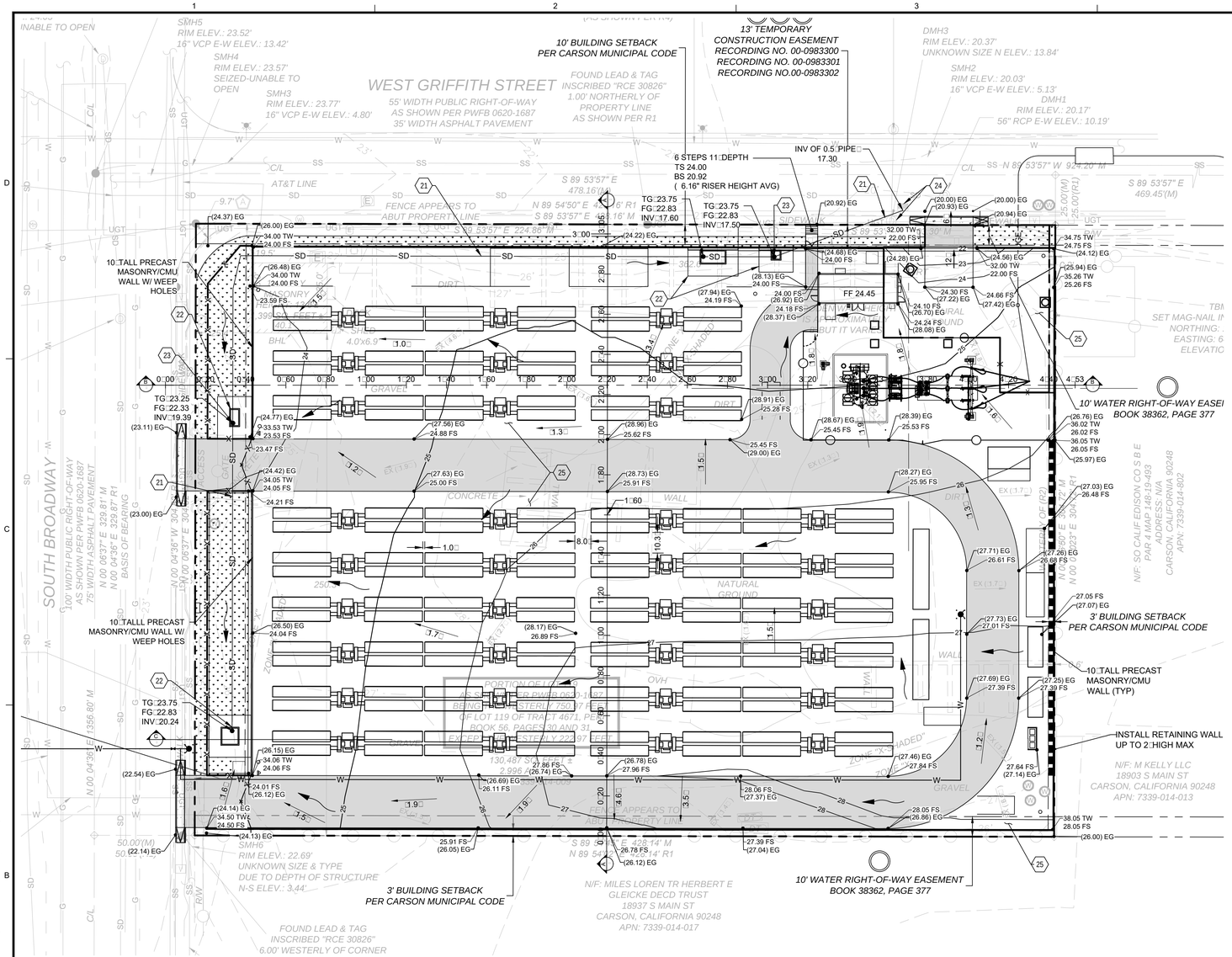
SHEET TITLE:

FIRE PLAN

SHEET NO:

C-1.1

P:\ANC\22\JOBS\222288 GRIFFITH BATTERY ENERGY STORAGE\0.0 DWGS\C\222288 CIVIL SITE PLAN-10' SPACING.DWG FIRE PLAN - HOLMES, RYAN : LAST SAVED: September 25, 2025 - PLOT DATE: 9/30/25



VICINITY MAP



RE□UIRED FIRE ACCESS WIDTH	26□
CENTERLINE FIRE ACCESS RADIUS	32□(MINIMUM)
SUBSTATION DIMENSIONS	96□□126□
TOTAL SITE AREA	3.00 ACRES
FRONT YARD SETBACK	25□
SIDE YARD SETBACK	3□
STREET SIDE YARD SETBACK	10□
REAR YARD SETBACK	3□
CITY OF CARSON ZONING DESIGNATION	INDUSTRIAL

CIVIL SITE INFORMATION

DRAINAGE NOTES

21 6" PVC STORM DRAIN PIPE.

22 NEW FILTERA UNIT. SEE STORMWATER DETAILS SHEET C□5.1

23 12"□12" STORM DRAIN INLET.

24 8" DIP STORM DRAIN PIPE TO TIE INTO (E) STORM DRAIN SYSTEM.

25 GRAVEL OVERLAY OVER COMPACTED EARTH IN BESS YARD AND SUBSTATION AREA, SEE EXTENTS ON SITE PLAN C□1.0

LEGEND

ASPHALT

LANDSCAPE

10□TALL PRECAST MASONRY/CMU WALL

6□WROUGHT IRON FENCE

RETAINING WALL

FIRE LANE SIGN

PROPOSED CONTOUR 24

EXISTING CONTOUR 24

30 15 0 30 60

SCALE□ 1 INCH □30 FEET

LANDSCAPE NOTES□

1. CONTRACTOR SHALL INSTALL LANDSCAPE, GROUNDCOVER, MULCH, GRAVEL, ETC. PER AH□ AND EROSION PROTECTION RE□UIREMENTS
2. LANDSCAPE LIMITS ARE SHOWN FOR REFERENCE ONLY, SEE LANDSCAPE PLANS.

UTILITY STATEMENT

LOCATION OF EXISTING UNDERGROUND UTILITIES HAVE BEEN TAKEN FROM DRAWINGS AND FIELD LOCATES SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES. UTILITY LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE ONLY. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EACH UTILITY.

811 Know what's **below.** **Call** before you dig.

THE EXISTING INFORMATION SHOWN ON THESE PLANS IS PER THE SURVEY COMPLETED BY□
BLEW & ASSOCIATES, P.A.
3825 N. SHILOH DRIVE
FAYETTEVILLE, AR 72703
479.443.4506
DATED: 11/11/2022 .
THE CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS AND CONTACT THE ENGINEER IF DISCREPANCIES ARE NOTED.

AH□STAMP APPROVAL

COFFMAN ENGINEERS
1939 H□rr□□□S□t□□□, S□□□320
O□□□d, CA 94612
ph 510.251.9578
www.coffman.com

PRELIMINARY □NOT FOR CONSTRUCTION

GRIFFITH ENERGY STORAGE

ORMAT

REV	DATE	DESCRIPTION
12	09/18/25	TESLA REV8
11	07/02/25	TESLA REV6
10	12/04/24	TESLA REV5
9	8/14/24	TESLA REV4
8	6/06/24	TESLA REV3
7	5/10/24	TESLA REV2
6	4/10/24	TESLA LAYOUT
5	2/2/24	REVISED LAYOUT
4	11/8/23	REVISED LAYOUT
3	9/29/23	REVISED LAYOUT

PRO□ NO.	222288
DRAWN	RH
CHECKED	□A
DATE	09/18/2025

© COFFMAN ENGINEERS INC.

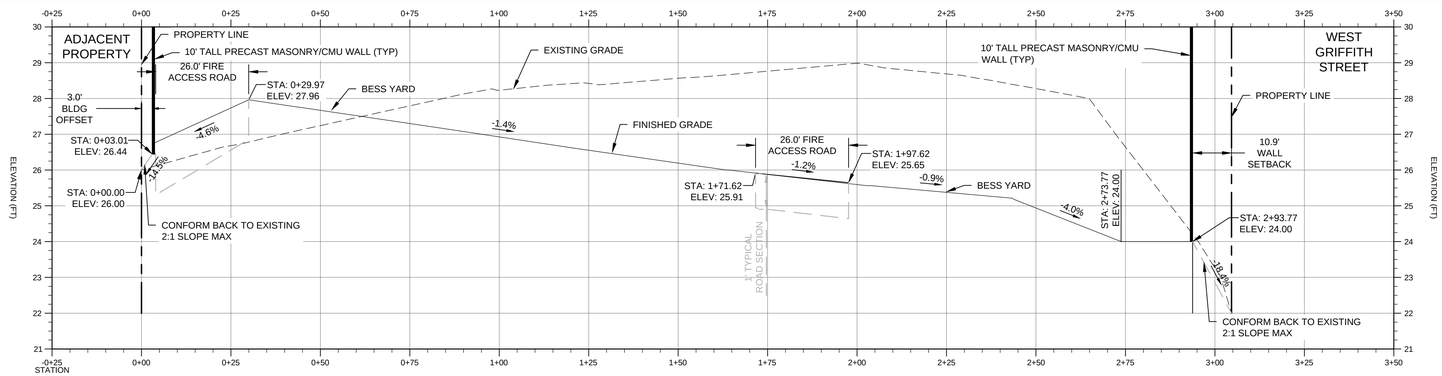
SHEET TITLE□

GRADING PLAN

SHEET NO□

C□2.0

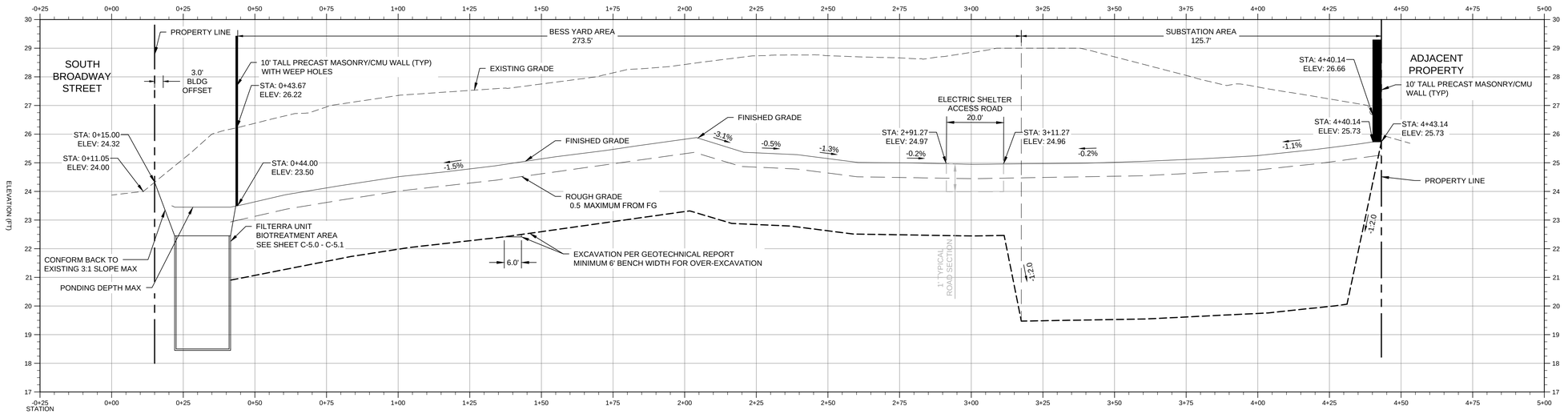
P:\ANC\22JOBS\222288 GRIFFITH BATTERY ENERGY STORAGE\0.0 DWGS\C222288 GRADING & DRAINAGE PLAN\0.DWG,GRADING PLAN - HOLMES, RYAN - LAST SAVED: September 25, 2025 - PLOT DATE: 9/25/25



PROFILE OF FINISHED GRADE
VERT SCALE: 1"=0' HOR SCALE: 1"=5'

A SECTION A - EXISTING GRADE AND FINISHED GRADE COMPARISON (SOUTH TO NORTH)

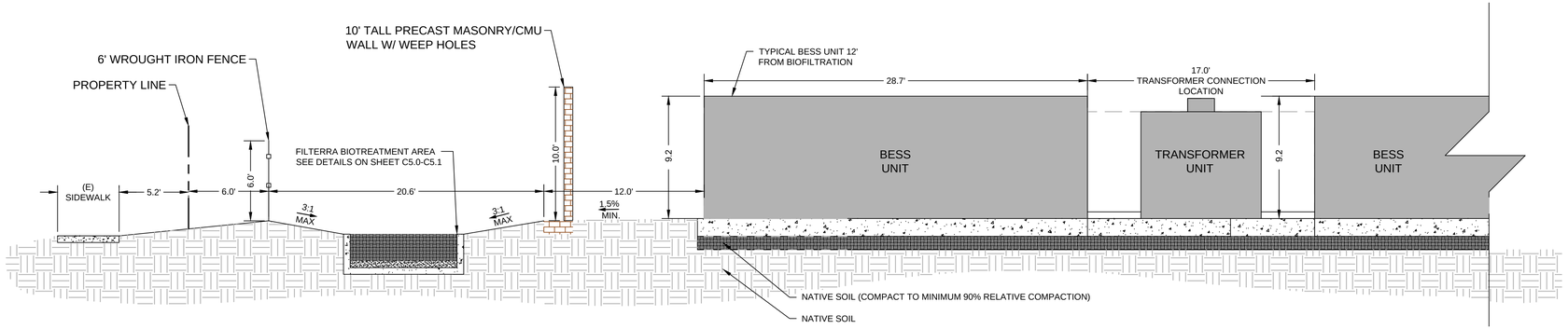
LISTED ABOVE



PROFILE OF SECTION WEST TO EAST
VERT SCALE: 1"=0' HOR SCALE: 1"=5'

B SECTION B - EXISTING GRADE AND FINISHED GRADE COMPARISON (WEST TO EAST)

LISTED ABOVE



C SECTION C - FINISHED GRADE FENCE AND BESS UNITS COLOR ELEVATIONS

NTS

THE EXISTING INFORMATION SHOWN ON THESE PLANS IS PER THE SURVEY COMPLETED BY:
BLEW & ASSOCIATES, P.A.
3825 N. SHILOH DRIVE
FAYETTEVILLE, AR 72703
479.443.4506
DATED: 11/11/2022 .
THE CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS AND CONTACT THE ENGINEER IF DISCREPANCIES ARE NOTED.

UTILITY STATEMENT
LOCATION OF EXISTING UNDERGROUND UTILITIES HAVE BEEN TAKEN FROM DRAWINGS AND FIELD LOCATES SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES. UTILITY LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE ONLY. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EACH UTILITY.

811 Know what's **below.** **Call** before you dig.

AHJ STAMP APPROVAL

COFFMAN ENGINEERS
1939 Harrison Street, Suite 320
Oakland, CA 94612
ph 510.251.9578
www.coffman.com

PRELIMINARY - NOT FOR CONSTRUCTION

GRIFFITH ENERGY STORAGE

ORMAT

REV	DATE	DESCRIPTION
12	09/18/25	TESLA REV8
11	07/02/25	TESLA REV6
10	12/04/24	TESLA REV5
9	8/14/24	TESLA REV4
8	6/06/24	TESLA REV3
7	5/10/24	TESLA REV2
6	4/10/24	TESLA LAYOUT
5	2/2/24	REVISED LAYOUT
4	11/8/23	REVISED LAYOUT
3	9/29/23	REVISED LAYOUT

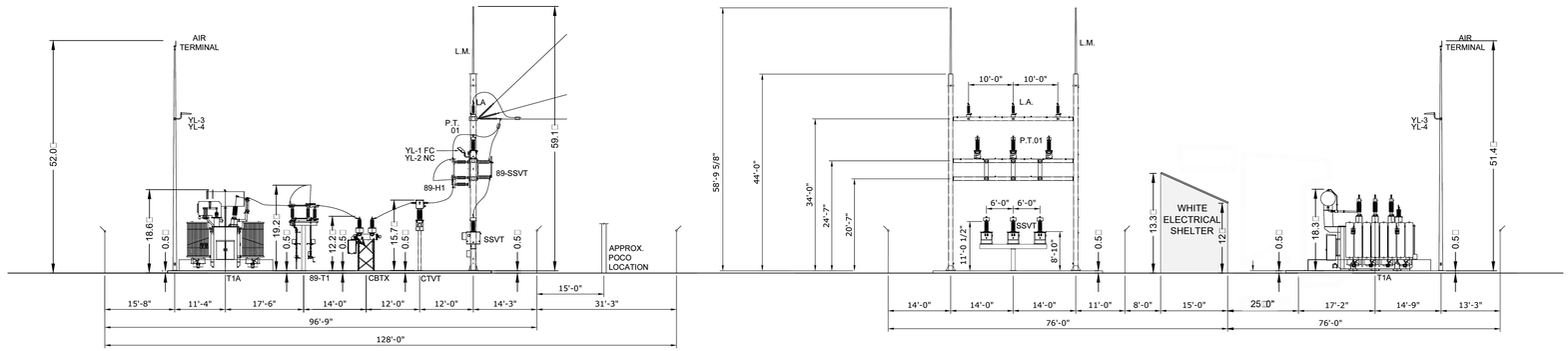
PROJ. NO.	222288
DRAWN	RH
CHECKED	JA
DATE	09/18/2025

© COFFMAN ENGINEERS INC.

SHEET TITLE:
SECTION VIEW

SHEET NO:
C-2.1

P:\ANC\22JOBS\222288 GRIFFITH BATTERY ENERGY STORAGE\0.0 DWGS\C222288 GRADING & DRAINAGE PLAN V3.DWG SECTIONS - HOLMES, RYAN - LAST SAVED: September 18, 2025 - PLOT DATE: 9/18/25

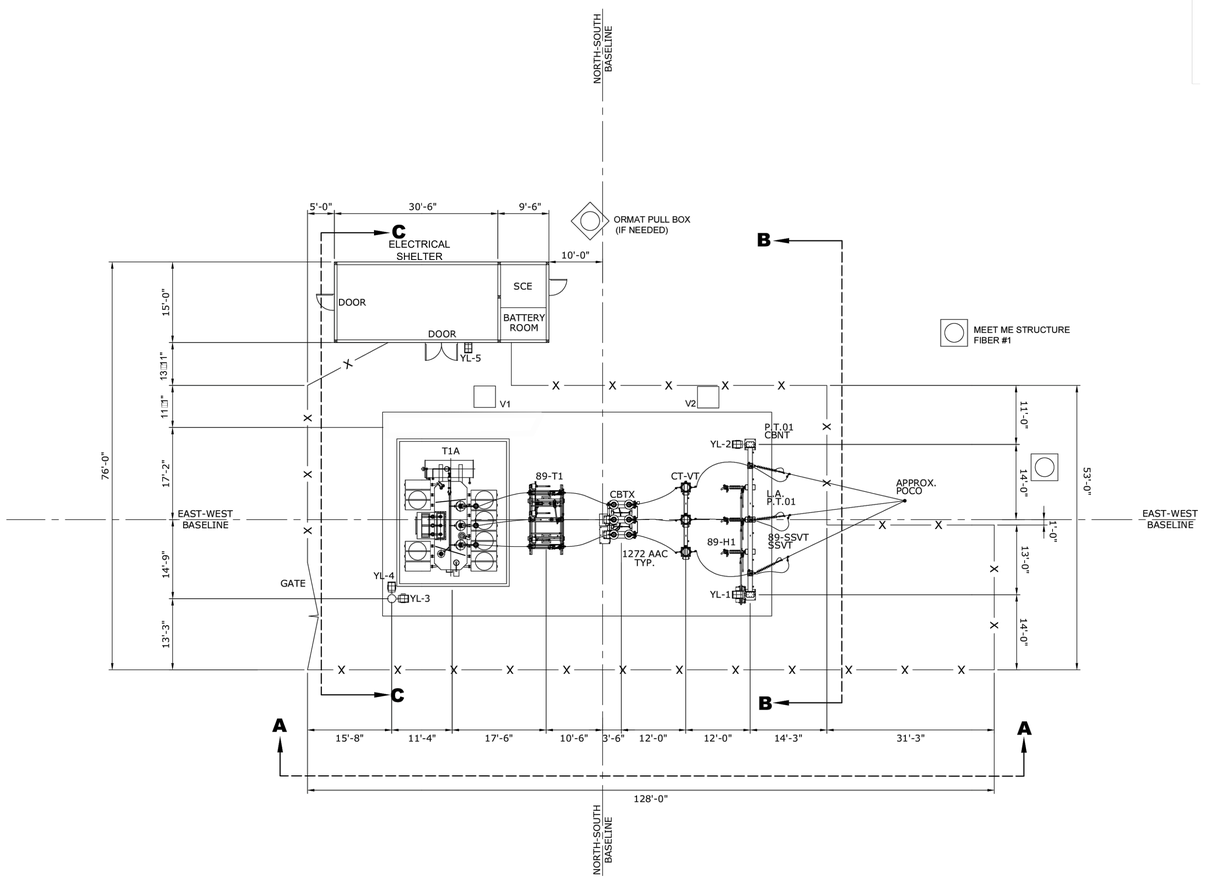


ELEVATION A-A
LOOKING NORTH

ELEVATION B-B
LOOKING WEST

ELEVATION C-C
LOOKING EAST

B SCE SUBSTATION ELEVATIONS A□A, B□B, C□C (BY OTHERS)
NTS



A SCE SUBSTATION LAYOUT (BY OTHERS)
NTS

AH□STAMP APPROVAL

COFFMAN ENGINEERS
1939 H□rr□□□ S□r□□□ S□□□ 320
O□□□d, CA 94612
ph 510.251.9578
www.coffman.com

PRELIMINARY □NOT FOR CONSTRUCTION

GRIFFITH ENERGY STORAGE

ORMAT

REV	DATE	DESCRIPTION
12	09/18/25	TESLA REV8
11	07/02/25	TESLA REV6
10	12/04/24	TESLA REV5
9	8/14/24	TESLA REV4
8	6/06/24	TESLA REV3
7	5/10/24	TESLA REV2
6	4/10/24	TESLA LAYOUT
5	2/2/24	REVISED LAYOUT
4	11/8/23	REVISED LAYOUT
3	9/29/23	REVISED LAYOUT

PRO□ NO.	222288
DRAWN	RH
CHECKED	□A
DATE	09/18/2025

© COFFMAN ENGINEERS INC.

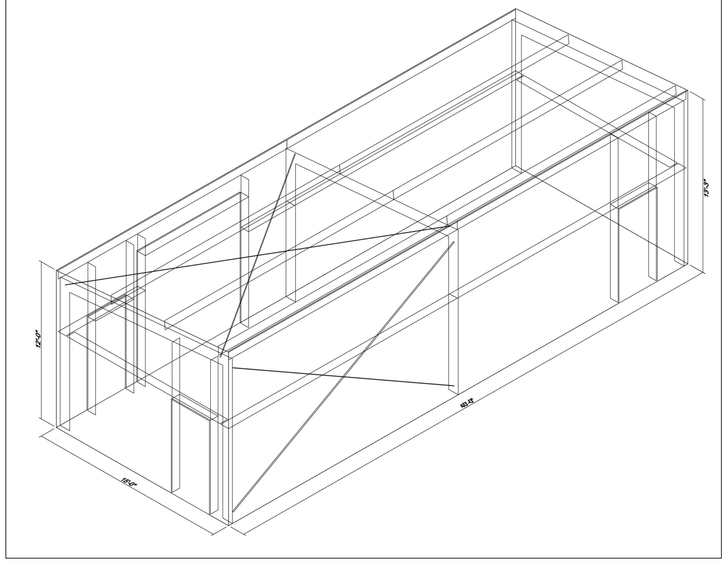
SHEET TITLE□

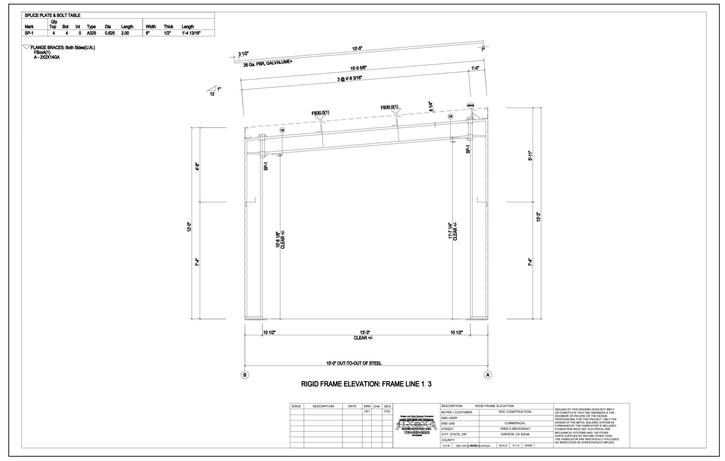
ENLARGED SCE SUBSTATION (BY OTHERS)

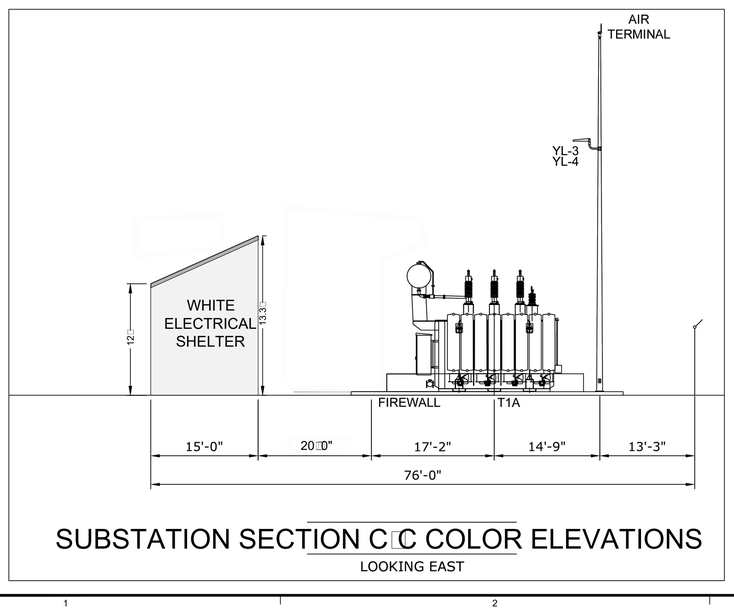
SHEET NO□

C□3.0

P:\ANC\22\OBS\222288 GRIFFITH BATTERY ENERGY STORAGE\0.0 DWGS\C222288 ENLARGED SUBSTATION.DWG ENLARGED SCE SUBSTATION (BY OTHERS) - HOLMES, RYAN - LAST SAVED: September 24, 2025 - PLOT DATE: 9/24/25
P:\ANC\22\OBS\222288 GRIFFITH BATTERY ENERGY STORAGE\0.0 DWGS\C222288 ENLARGED SUBSTATION

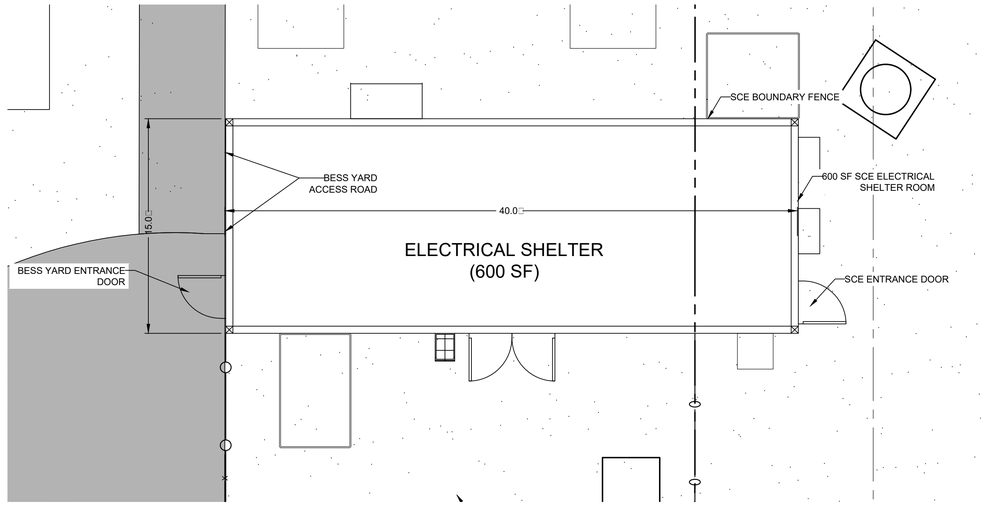


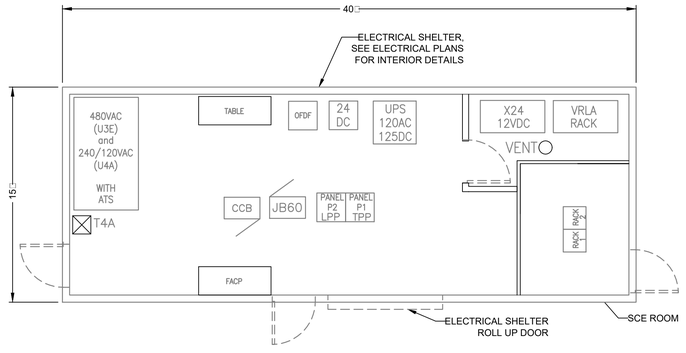




SUBSTATION SECTION C□C COLOR ELEVATIONS

LOOKING EAST





A ELECTRICAL SHELTER DETAILS (BY OTHERS)

NTS

AH□STAMP APPROVAL

COFFMAN ENGINEERS
1939 H□rr□□□S□r□□□, S□□□320
O□□□d, CA 94612
ph 510.251.9578
www.coffman.com

PRELIMINARY □NOT FOR CONSTRUCTION

GRIFFITH ENERGY STORAGE

ORMAT

REV	DATE	DESCRIPTION
12	09/18/25	TESLA REV8
11	07/02/25	TESLA REV6
10	12/04/24	TESLA REV5
9	8/14/24	TESLA REV4
8	6/06/24	TESLA REV3
7	5/10/24	TESLA REV2
6	4/10/24	TESLA LAYOUT
5	2/2/24	REVISED LAYOUT
4	11/8/23	REVISED LAYOUT
3	9/29/23	REVISED LAYOUT

PRO□ NO.	222288
DRAWN	RH
CHECKED	RB
DATE	09/18/2025

© COFFMAN ENGINEERS INC.

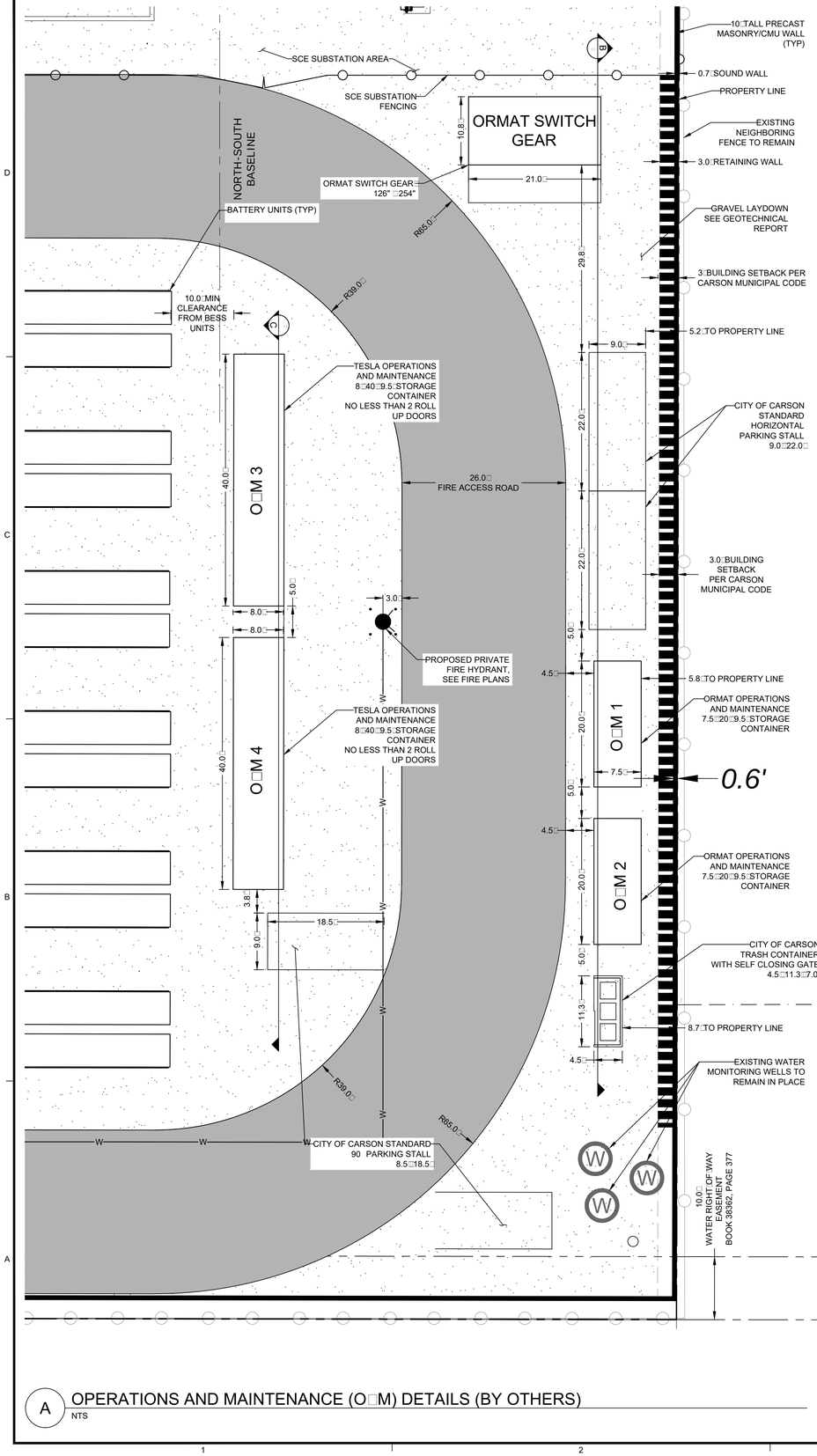
SHEET TITLE□

ENLARGED ELECTRICAL SHELTER PLAN (BY OTHERS)

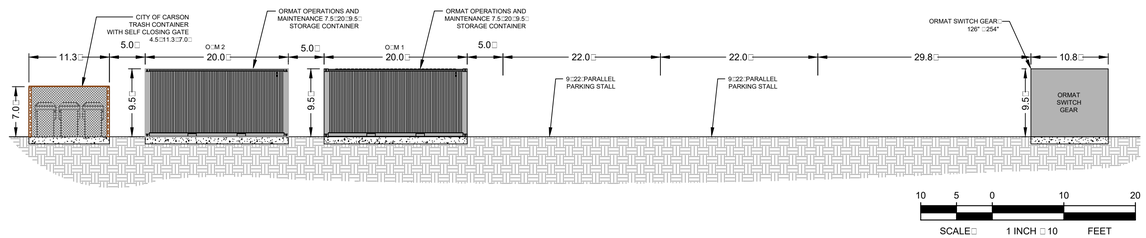
SHEET NO□

C□3.1

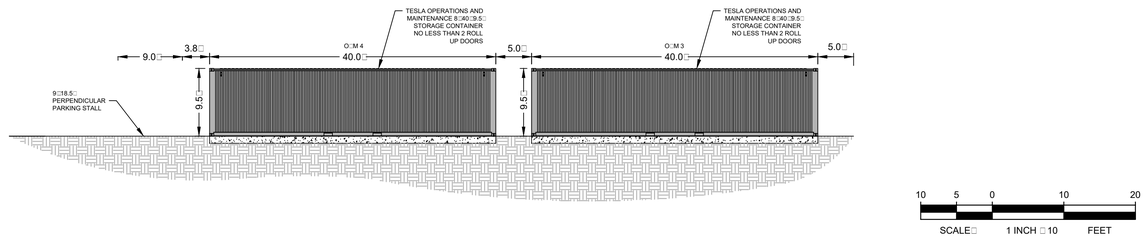
P:\ANC\22\OBS\222288 GRIFFITH BATTERY ENERGY STORAGE\0.0 DWGS\C222288 ENLARGED SCE BLDG.DWG;ENLARGED ELECTRICAL SHELTER PLAN (BY OTHERS) - HOLMES, RYAN - LAST SAVED: September 17, 2025 - PLOT DATE: 9/18/25
P:\ANC\22\OBS\222288 GRIFFITH BATTERY ENERGY STORAGE\0.0 DWGS\C222288 ENLARGED SCE BLDG.DWG
P:\ANC\22\OBS\222288 GRIFFITH BATTERY ENERGY STORAGE\0.0 DWGS\C222288 ENLARGED SCE BLDG



A OPERATIONS AND MAINTENANCE (O□M) DETAILS (BY OTHERS)
NTS



B OPERATIONS AND MAINTENANCE (O□M) SECTION B COLOR ELEVATIONS (BY OTHERS)
NTS



C OPERATIONS AND MAINTENANCE (O□M) SECTION C COLOR ELEVATIONS (BY OTHERS)
NTS

COFFMAN ENGINEERS
1939 H□rr□□□ S□r□□□, S□□□ 320
O□□□d, CA 94612
ph 510.251.9578
www.coffman.com

PRELIMINARY □NOT FOR CONSTRUCTION

GRIFFITH ENERGY STORAGE

ORMAT

REV	DATE	DESCRIPTION
12	09/18/25	TESLA REV8
11	07/02/25	TESLA REV6
10	12/04/24	TESLA REV5
9	8/14/24	TESLA REV4
8	6/06/24	TESLA REV3
7	5/10/24	TESLA REV2
6	4/10/24	TESLA LAYOUT
5	2/2/24	REVISED LAYOUT
4	11/8/23	REVISED LAYOUT
3	9/29/23	REVISED LAYOUT

PRO□ NO.	222288
DRAWN	XXX
CHECKED	XXX
DATE	09/18/2025

© COFFMAN ENGINEERS INC.

SHEET TITLE□

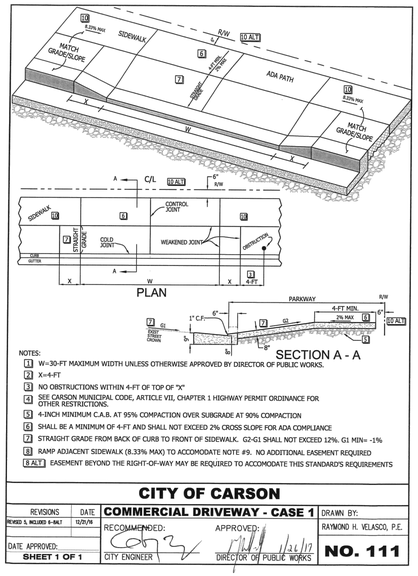
ENLARGED O□M PLAN (BY OTHERS)

SHEET NO□

C□3.2

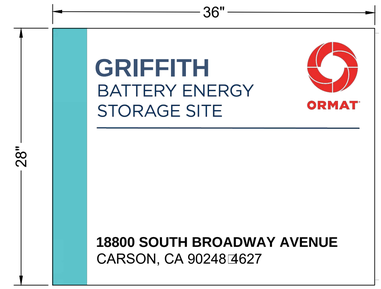
AH□STAMP APPROVAL

P:\ANC\22.0\DS\222288 GRIFFITH BATTERY ENERGY STORAGE\0.0 DWGS\C\222288 ENLARGED O&M PLANS (BY OTHERS) - HOLMES, RYAN - LAST SAVED: September 17, 2025 - PLOT DATE: 9/18/25
P:\ANC\22.0\DS\222288 GRIFFITH BATTERY ENERGY STORAGE\0.0 DWGS\C.222288 ENLARGED O&M.DWG.ENLARGED O&M PLANS (BY OTHERS)
P:\ANC\22.0\DS\222288 GRIFFITH BATTERY ENERGY STORAGE\0.0 DWGS\C.222288 ENLARGED O□M



NOTES:
1. W=30-FT MAXIMUM WIDTH UNLESS OTHERWISE APPROVED BY DIRECTOR OF PUBLIC WORKS.
2. X=4-FT
3. NO OBSTRUCTIONS WITHIN 4-FT OF TOP OF "X"
4. SEE CARSON MUNICIPAL CODE, ARTICLE VII, CHAPTER 1 HIGHWAY PERMIT ORDINANCE FOR OTHER RESTRICTIONS.
5. 4-INCH MINIMUM C.A.B. AT 95% COMPACTION OVER SUBGRADE AT 90% COMPACTION
6. SHALL BE A MINIMUM OF 4-FT AND SHALL NOT EXCEED 2% CROSS SLOPE FOR ADA COMPLIANCE
7. STRAIGHT GRADE FROM BACK OF CURB TO FRONT OF SIDEWALK. G2-G1 SHALL NOT EXCEED 12%. G1 MIN= -1%
8. RAMP ADJACENT SIDEWALK (8.33% MAX) TO ACCOMODATE NOTE #9. NO ADDITIONAL EASEMENT REQUIRED
9 ALT. EASEMENT BEYOND THE RIGHT-OF-WAY MAY BE REQUIRED TO ACCOMODATE THIS STANDARD'S REQUIREMENTS

D CITY OF CARSON STD COMMERCIAL DRIVEWAY □CASE 1
NTS



NOTES:□
1. SIGN SHALL MEET ALL CITY CODE RE□UIREMENTS. FINAL SIGN MESSAGING AND LOGOS BY OWNER.

C SITE ADDRESS FENCE SIGN
NTS



NOTES:□
1. SIGN SHALL MEET ALL CITY CODE RE□UIREMENTS. FINAL SIGN MESSAGING AND LOGOS BY OWNER.

B VISITOR □ CONTRACTOR REGISTRATION FENCE SIGN
NTS



NOTES:□
1. SIGN SHALL MEET ALL CITY CODE RE□UIREMENTS. FINAL SIGN MESSAGING AND LOGOS BY OWNER.

A FIRST RESPONDERS FENCE SIGN
NTS

THE EXISTING INFORMATION SHOWN ON THESE PLANS IS PER THE SURVEY. COMPLETED BY:
BLEW & ASSOCIATES, P.A.
3825 N. SHILOH DRIVE
FAYETTEVILLE, AR 72703
479.443.4506
DATED: 11/11/2022.
THE CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS AND CONTACT THE ENGINEER IF DISCREPANCIES ARE NOTED.

UTILITY STATEMENT
LOCATION OF EXISTING UNDERGROUND UTILITIES HAVE BEEN TAKEN FROM DRAWINGS AND FIELD LOCATES SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES. UTILITY LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE ONLY. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EACH UTILITY.

811 Know what's **below.** **Call** before you dig.

AH□STAMP APPROVAL

COFFMAN ENGINEERS
1939 H□rr□□□S□r□□□, S□□□320
O□□□□d, CA 94612
ph 510.251.9578
www.coffman.com

PRELIMINARY □NOT FOR CONSTRUCTION

GRIFFITH ENERGY STORAGE

ORMAT

REV	DATE	DESCRIPTION
12	09/18/25	TESLA REV8
11	07/02/25	TESLA REV6
10	12/04/24	TESLA REV5
9	8/14/24	TESLA REV4
8	6/06/24	TESLA REV3
7	5/10/24	TESLA REV2
6	4/10/24	TESLA LAYOUT
5	2/2/24	REVISED LAYOUT
4	11/8/23	REVISED LAYOUT
3	9/29/23	REVISED LAYOUT

PRO□ NO.	222288
DRAWN	RH
CHECKED	RB
DATE	09/18/2025

© COFFMAN ENGINEERS INC.

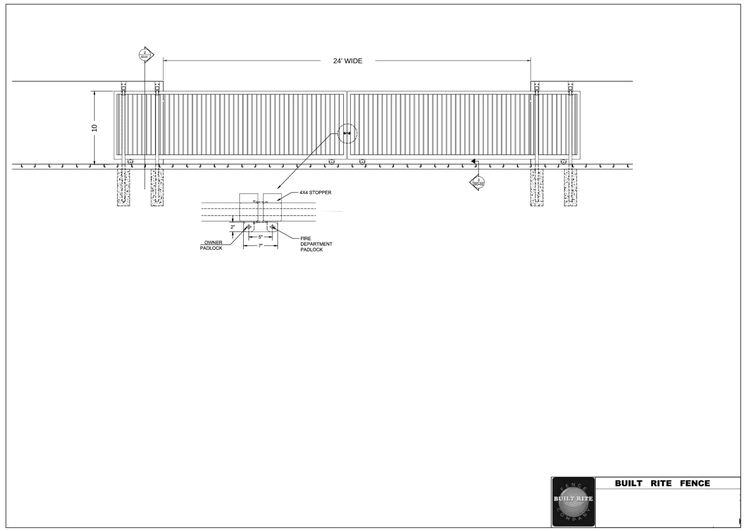
SHEET TITLE□

DETAILS (BY OTHERS)

SHEET NO□

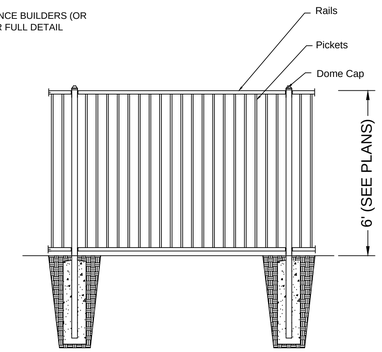
C□4.0

P:\ANC\22\JOBS\222288 GRIFFITH BATTERY ENERGY STORAGE\0.0 DWGS\C\222288 DETAILS.DWG, DETAILS - HOLMES, RYAN - LAST SAVED: September 17, 2025 - PLOT DATE: 9/18/25



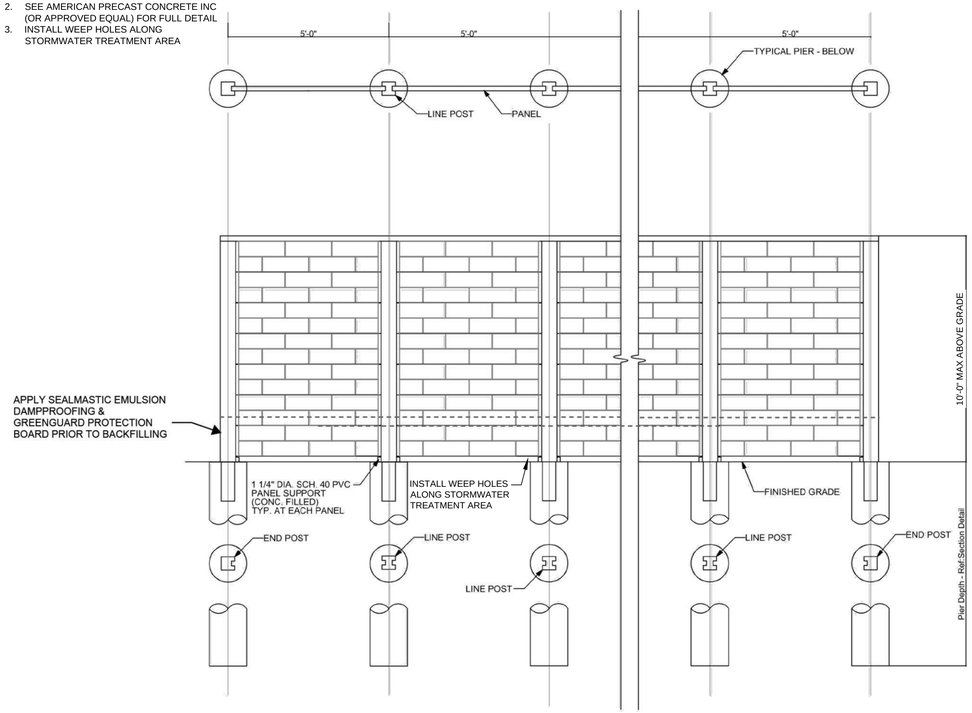
G 24' WIDE SLIDING FENCE (BY OTHERS)
NTS

NOTE:
1. FOR REFERENCE ONLY
2. SEE LOSE ANGELES FENCE BUILDERS (OR APPROVED EQUAL) FOR FULL DETAIL



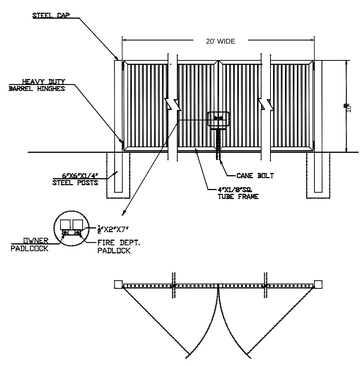
E 6' WROUGHT IRON FENCE (BY OTHERS)
NTS

NOTE:
1. FOR REFERENCE ONLY
2. SEE AMERICAN PRECAST CONCRETE INC (OR APPROVED EQUAL) FOR FULL DETAIL
3. INSTALL WEEP HOLES ALONG STORMWATER TREATMENT AREA



ELEVATION - SCREENING WALL AND PIERS

D 10' TALL PRECAST MASONRY/CMU WALL (BY OTHERS)
NTS



F 20' WIDE SWING FENCE (BY OTHERS)
NTS

THE EXISTING INFORMATION SHOWN ON THESE PLANS IS PER THE SURVEY COMPLETED BY:
BLEW & ASSOCIATES, P.A.
3825 N. SHILOH DRIVE
FAYETTEVILLE, AR 72703
479.443.4506
DATED: 11/11/2022 .
THE CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS AND CONTACT THE ENGINEER IF DISCREPANCIES ARE NOTED.

UTILITY STATEMENT
LOCATION OF EXISTING UNDERGROUND UTILITIES HAVE BEEN TAKEN FROM DRAWINGS AND FIELD LOCATES SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES. UTILITY LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE ONLY. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EACH UTILITY.

811 Know what's **below.** **Call** before you dig.

AHJ STAMP APPROVAL

COFFMAN ENGINEERS
1939 Harrison Street, Suite 320
Oakland, CA 94612
ph 510.251.9578
www.coffman.com

PRELIMINARY - NOT FOR CONSTRUCTION

GRIFFITH ENERGY STORAGE

ORMAT

REV	DATE	DESCRIPTION
12	09/18/25	TESLA REV8
11	07/02/25	TESLA REV6
10	12/04/24	TESLA REV5
9	8/14/24	TESLA REV4
8	6/06/24	TESLA REV3
7	5/10/24	TESLA REV2
6	4/10/24	TESLA LAYOUT
5	2/2/24	REVISED LAYOUT
4	11/8/23	REVISED LAYOUT
3	9/29/23	REVISED LAYOUT

PROJ. NO.	222288
DRAWN	RH
CHECKED	RB
DATE	09/18/2025

© COFFMAN ENGINEERS INC.

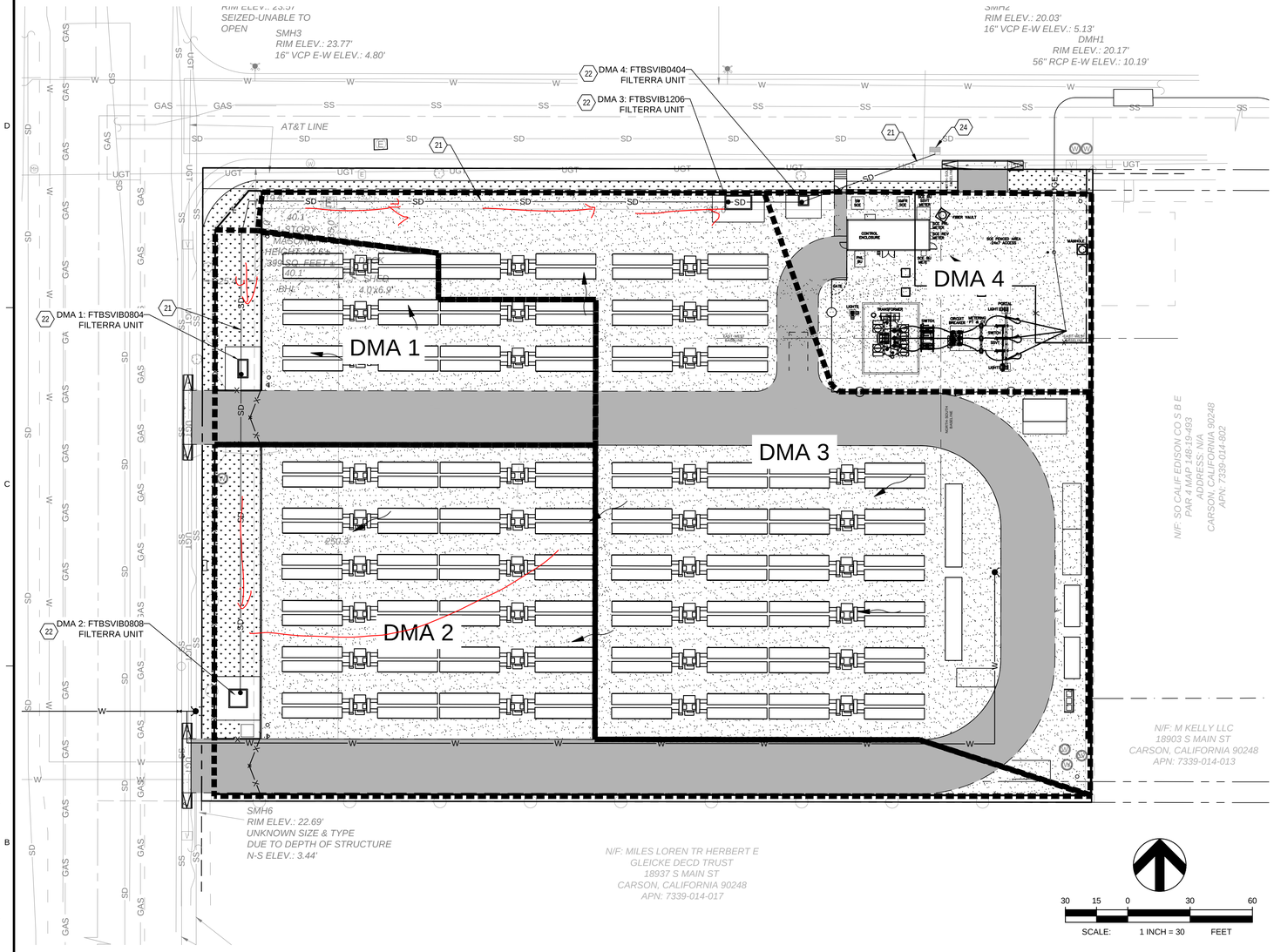
SHEET TITLE:

FENCE DETAILS (BY OTHERS)

SHEET NO:

C-4.1

P:\ANC\22\JOBS\222288 GRIFFITH BATTERY ENERGY STORAGE\0.0 DWGS\C\222288 DETAILS.DWG FENCE DETAILS : HOLMES, RYAN - LAST SAVED: September 17, 2025 - PLOT DATE: 9/18/25



DRAINAGE NOTES

21 STORM DRAIN PIPE, SIZE TBD.

22 STORMWATER BIOFILTRATION LID TREATMENT AREA. SEE DETAILS ON SHEET C5.1.

23 STORM DRAIN INLET.

24 TIE INTO (E) STORM DRAIN MANHOLE.

STORMWATER NOTES:

1. PRELIMINARY SIZING IS BASED ON THE LA COUNTY LOW IMPACT DEVELOPMENT (LID) STANDARDS MANUAL.
2. THE PROPOSED SITE IS LOCATED WITHIN THE URBAN FLOOD ZONE.
3. THIS ANALYSIS UTILIZES THE 85TH PERCENTILE STORM EVENT PER LID REQUIREMENTS. THIS DOES NOT CONSIDER HYDROMODIFICATION (ESTIMATED AT 1 ACRE OR MORE OF IMPERVIOUS DEVELOPMENT) FOR THE SITE.
4. PER THE GEOTECHNICAL ENGINEERING REPORT BY EARTH SYSTEMS PACIFIC (DATED FEBRUARY 29, 2024, REVISED APRIL 5, 2024) STORMWATER INFILTRATION IS NOT RECOMMENDED DUE TO DEBRIS LADEN FILLS, RELATIVELY SHALLOW GROUNDWATER AND POTENTIAL FOR CONTAMINATED SOILS.

LEGEND

DRAINAGE ROUTE

ABBREVIATIONS

DMA DRAINAGE MANAGEMENT AREA

IMPERVIOUS AREA

	DMA1	DMA 2	DMA 3	DMA 4
IMPERVIOUS (SF)	9,846	23,625	29,682	2,449
STORMWATER TREATMENT AREA (SF)	32	64	72	16
TOTAL AREA (SF)	15,880	36,345	58,200	11,660
FENCED AREA (SF)	15,880	36,345	58,200	11,660
% IMPERVIOUS	62	65	51	21

HYDROCALC OUTPUTS - HYDROLOGY

	DESIGN STORM	TOTAL AREA (ACRE)	PEAK INTENSITY (IN/HR)	RUNOFF COEFFICIENT	TC	PEAK FLOW RATE (CFS)	RUNOFF VOLUME (CU-FT)
PRE-	25-YEAR	2.99	3.20	0.90	5	8.02	45,606
POST-	25-YEAR	2.99	3.20	0.90	5	8.02	46,653
DELTA	-						1,047

HYDROCALC OUTPUTS - LID

	DESIGN STORM	FENCED AREA (ACRE)	PEAK INTENSITY (IN/HR)	RUNOFF COEFFICIENT	TC	PEAK FLOW RATE (CFS)	RUNOFF VOLUME (CU-FT)
DMA 1	85TH PERCENTILE	0.37	0.39	0.78	15	0.85	861
DMA 2	85TH PERCENTILE	0.83	0.34	0.78	20	0.18	2,047
DMA 3	85TH PERCENTILE	1.34	0.34	0.78	20	0.23	2,696
DMA 4	85TH PERCENTILE	0.27	0.44	0.78	12	0.03	285

THE EXISTING INFORMATION SHOWN ON THESE PLANS IS PER THE SURVEY COMPLETED BY:
BLEW & ASSOCIATES, P.A.
3825 N. SHILOH DRIVE
FAYETTEVILLE, AR 72703
479.443.4506
DATED: 11/11/2022 .
THE CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS AND CONTACT THE ENGINEER IF DISCREPANCIES ARE NOTED.

UTILITY STATEMENT
LOCATION OF EXISTING UNDERGROUND UTILITIES HAVE BEEN TAKEN FROM DRAWINGS AND FIELD LOCATES SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES. UTILITY LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE ONLY. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EACH UTILITY.

811 Know what's **below.** **Call** before you dig.

AHJ STAMP APPROVAL

COFFMAN ENGINEERS
1939 Harrison Street, Suite 320
Oakland, CA 94612
ph 510.251.9578
www.coffman.com

PRELIMINARY - NOT FOR CONSTRUCTION

GRIFFITH ENERGY STORAGE

ORMAT

REV	DATE	DESCRIPTION
12	09/18/25	TESLA REV8
11	07/02/25	TESLA REV6
10	12/04/24	TESLA REV5
9	8/14/24	TESLA REV4
8	6/06/24	TESLA REV3
7	5/10/24	TESLA REV2
6	4/10/24	TESLA LAYOUT
5	2/2/24	REVISED LAYOUT
4	11/8/23	REVISED LAYOUT
3	9/29/23	REVISED LAYOUT

PROJ. NO. 222288
DRAWN LB
CHECKED JA
DATE 09/18/2025

© COFFMAN ENGINEERS INC.

SHEET TITLE:

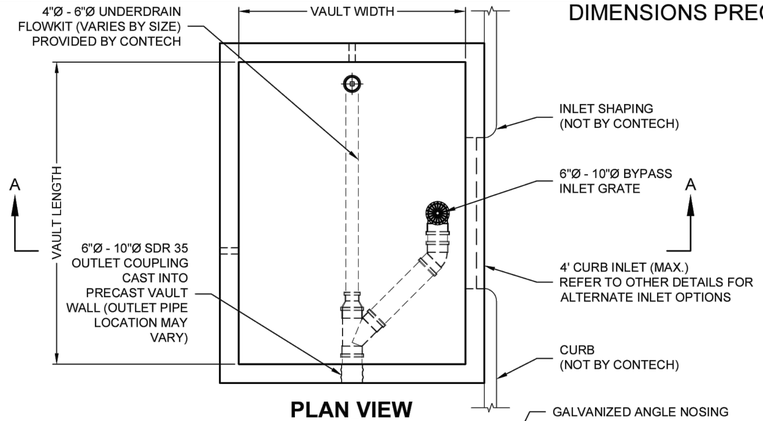
PRELIMINARY WATER QUALITY MANAGEMENT PLAN

SHEET NO:

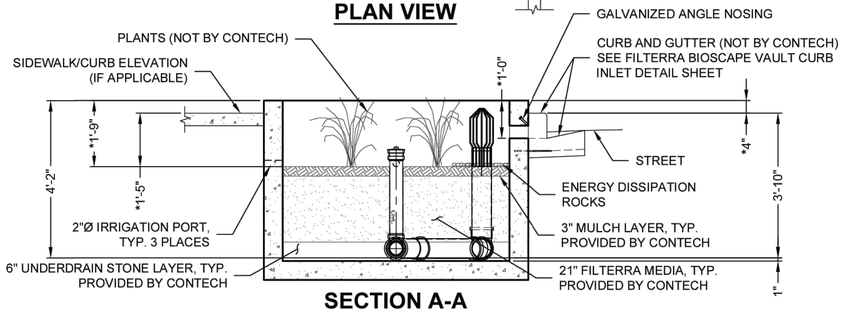
C-5.0

P:\ANC\22\JOBS\222288 GRIFFITH BATTERY ENERGY STORAGE\0.0 DWGS\C\222288 STORMWATER PLAN.DWG,STORMWATER PLAN - HOLMES, RYAN - LAST SAVED: September 18, 2025 - PLOT DATE: 9/18/25

DIMENSIONS PRECEDED BY " * " ARE CRITICAL AND MAY NOT BE MODIFIED WITHOUT CONSULTING CONTECH

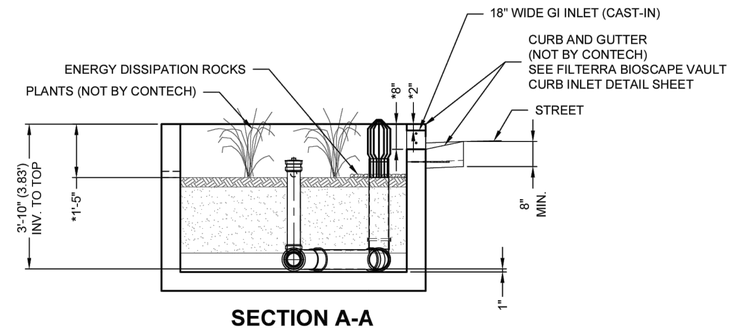


PLAN VIEW



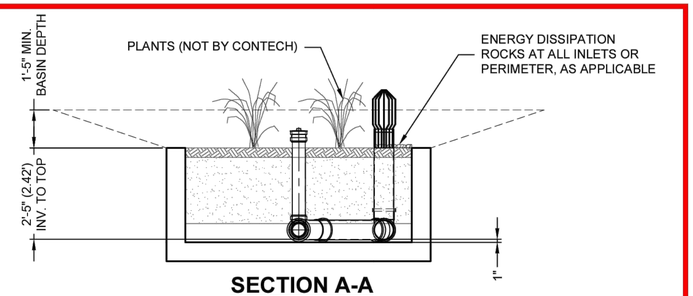
SECTION A-A

SLOTTED THROAT INLET - TOP EXTENDS 4" ABOVE CURB FOR ADJACENT SIDEWALKS (-T)



SECTION A-A

GREEN INFRASTRUCTURE INLET - TOP FLUSH WITH TOP OF CURB, NOT INTENDED FOR SIDEWALK APPLICATIONS (-I)



SECTION A-A

BASIN - CURB INLET OR PIPE INLETS OPTIONAL (-B)

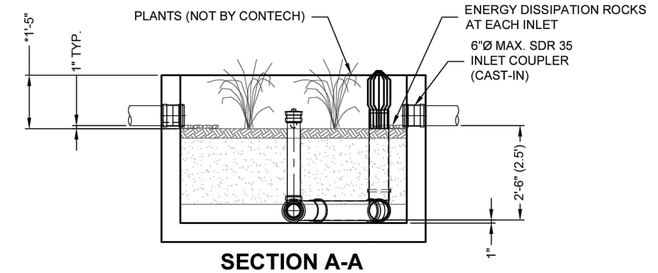
FTBSVIB CONFIGURATION

(OPTIONS: BASIN "-B", GREEN INFRASTRUCTURE (GI) INLET "-I", PIPE INLET "-P", SLOTTED THROAT INLET "-T")

VAULT SIZE (L x W)	MEDIA AREA (SF)	LONG SIDE INLET DESIG. / PART NO.	SHORT SIDE INLET DESIG. / PART NO.	AVAILABILITY	MAX. OUTLET / BYPASS PIPE DIA.	MAX. BYPASS FLOW (CFS)	UNDER-DRAIN PIPE DIA. (PERF)	MIN. NO. OF INLET PIPES (-P ONLY)
4 x 4	16	FTBSVIB0404	FTBSVIB0404	ALL	6" SDR 35	1.42	4" SDR 35	1
6 x 4	24	FTBSVIB0604	FTBSVIB0406	ALL	8" SDR 35	1.89	4" SDR 35	1
8 x 4	32	FTBSVIB0804	FTBSVIB0408	ALL (EXCEPT DE,MD,NJ,PA,VA,WV)	8" SDR 35	1.89	4" SDR 35	1
7.83 x 4.5	35	FTBSVIB078045	FTBSVIB045078	DE,MD,NJ,PA,VA.WV ONLY	8" SDR 35	1.89	4" SDR 35	1
6 x 6	36	FTBSVIB0606	FTBSVIB0606	ALL (EXCEPT CA, TX)	8" SDR 35	1.89	4" SDR 35	1
8 x 6	48	FTBSVIB0806	FTBSVIB0608	ALL	10" SDR 35	2.37	4" SDR 35	1
10 x 6	60	FTBSVIB1006	FTBSVIB0610	ALL (EXCEPT CA, TX)	10" SDR 35	2.37	6" SDR 35	2
8 x 8	64	FTBSVIB0808	FTBSVIB0808	CA, TX ONLY	10" SDR 35	2.37	6" SDR 35	2
12 x 6	72	FTBSVIB1206	FTBSVIB0612	ALL (EXCEPT TX)	10" SDR 35	2.37	6" SDR 35	2
10 x 8	80	FTBSVIB1008	FTBSVIB0810	CA, TX ONLY	10" SDR 35	2.37	6" SDR 35	2
13 x 7	91	FTBSVIB1307	FTBSVIB0713	ALL (EXCEPT CA, TX)	10" SDR 35	2.37	6" SDR 35	2
12 x 8	96	FTBSVIB1208	FTBSVIB0812	CA, TX ONLY	10" SDR 35	2.37	6" SDR 35	2
14 x 8	112	FTBSVIB1408	N/A	ALL	10" SDR 35	2.37	6" SDR 35	3
16 x 8	128	FTBSVIB1608†	N/A	ALL (EXCEPT OR,WA)	10" SDR 35	2.37	6" SDR 35	3
15 x 9	135	FTBSVIB1509†	N/A	OR,WA ONLY	10" SDR 35	2.37	6" SDR 35	3
18 x 8	144	FTBSVIB1808†	N/A	CALL CONTECH	10" SDR 35	2.37	6" SDR 35	3
20 x 8	160	FTBSVIB2008†	N/A	CALL CONTECH	10" SDR 35	2.37	6" SDR 35	4
22 x 8	176	FTBSVIB2208†	N/A	CALL CONTECH	10" SDR 35	2.37	6" SDR 35	4

†UTILIZES (2) CURB OPENINGS WITH MIN 1' SPACING

INTERNAL PIPE CONFIGURATION MAY VARY DEPENDING ON VAULT SIZE



SECTION A-A

PIPE INLET (-P)

filterra®

FOR PATENT INFORMATION, GO TO www.ContechES.com/IP

AS WITH ALL OPEN TOP BIORETENTION SYSTEMS, FILTERRA BIOSCAPE IS OPEN TO THE ATMOSPHERE WITH A MEDIA SURFACE RECESSED BELOW FINISHED GRADE. CONTRACTOR OR OWNER IS RESPONSIBLE FOR PROVIDING ANY REQUIRED SAFETY MEASURES AROUND SYSTEM PERIMETER. TO MAINTAIN AESTHETICS, REMOVAL OF HEAVY STORMWATER DEBRIS MAY BE NECESSARY BETWEEN REGULAR FILTERRA SYSTEM MAINTENANCE EVENTS.

The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC or one of its affiliated companies ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use. If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech accepts no liability for designs based on missing, incomplete or inaccurate information supplied by others.

CONTECH® ENGINEERED SOLUTIONS LLC
www.ContechES.com
9100 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

FILTERRA BIOSCAPE VAULT INTERNAL BYPASS (FTBSVIB) CONFIGURATION DETAIL

AHJ STAMP APPROVAL

COFFMAN ENGINEERS
1939 Harrison Street, Suite 320
Oakland, CA 94612
ph 510.251.9578
www.coffman.com

PRELIMINARY - NOT FOR CONSTRUCTION

GRIFFITH ENERGY STORAGE

ORMAT®

REV	DATE	DESCRIPTION
12	09/18/25	TESLA REV8
11	07/02/25	TESLA REV6
10	12/04/24	TESLA REV5
9	8/14/24	TESLA REV4
8	6/06/24	TESLA REV3
7	5/10/24	TESLA REV2
6	4/10/24	TESLA LAYOUT
5	2/2/24	REVISED LAYOUT
4	11/8/23	REVISED LAYOUT
3	9/29/23	REVISED LAYOUT

PROJ. NO.	222288
DRAWN	LB
CHECKED	RB
DATE	09/18/2025

© COFFMAN ENGINEERS INC.

SHEET TITLE:

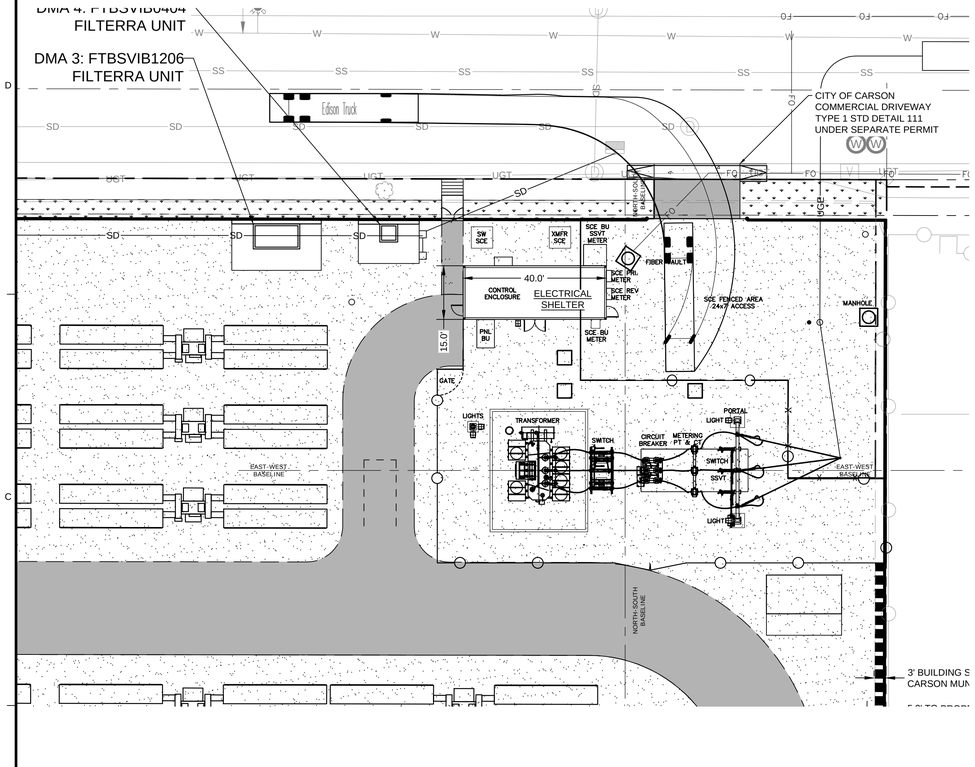
STORMWATER DETAILS

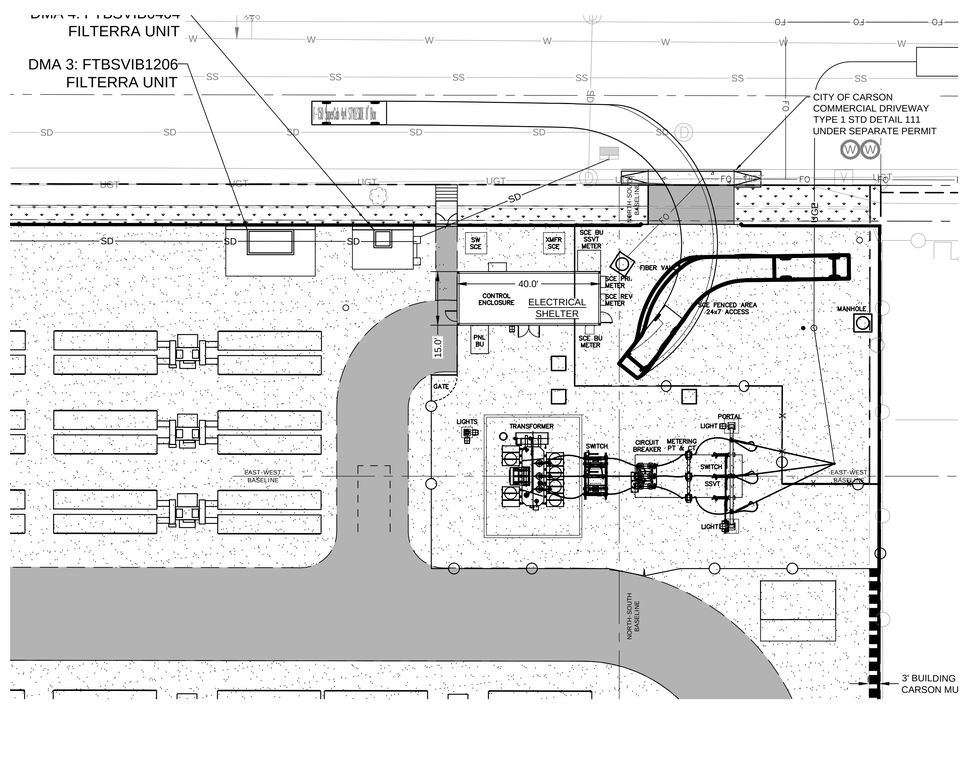
SHEET NO:

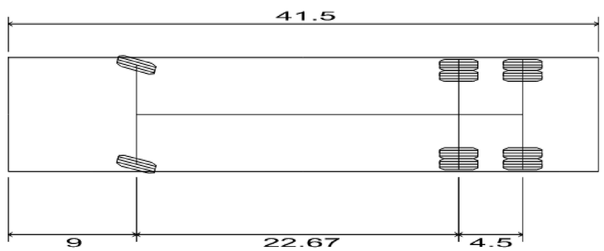
C-5.1

I:\COMMON\CAD\TREATMENT\54 FILTERRA\40 STANDARD DRAWINGS\IN PROCESS\STD DETAILS\FTBSVIB - FILTERRA BIOSCAPE VAULT INTERNAL BYPASS CONFIG DTL.DWG 3/15/2023 5:57 PM

P:\ANC\22JOBS\222288 GRIFFITH BATTERY ENERGY STORAGE\0.0 DWGS\C222288 STORMWATER PLAN.DWG,STORMWATER DETAILS - HOLMES, RYAN - LAST SAVED: September 18, 2025 - PLOT DATE: 9/18/25

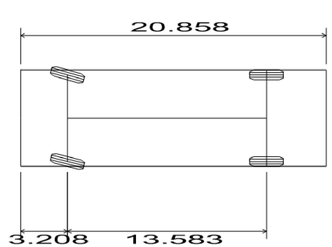






EDISON TRUCK

OVERALL LENGTH	41.500'
OVERALL WIDTH	8.000'
OVERALL BODY HEIGHT	12.819'
MIN. BODY GROUND CLEARANCE	1.284'
TRACK WIDTH	7.750'
LOCK-TO-LOCK TIME	4.0 SEC
CURB TO CURB TURNING RADIUS	50.000'



F150 4X4 TRUCK

OVERALL LENGTH	20.858'
OVERALL WIDTH	6.575'
OVERALL BODY HEIGHT	6.392'
MIN. BODY GROUND CLEARANCE	0.833'
TRACK WIDTH	6.575'
LOCK-TO-LOCK TIME	4.0 SEC
CURB TO CURB TURNING RADIUS	26.150'

AHJ STAMP APPROVAL

COFFMAN ENGINEERS
1939 Harrison Street, Suite 320
Oakland, CA 94612
ph 510.251.9578
www.coffman.com

PRELIMINARY - NOT FOR CONSTRUCTION

GRIFFITH ENERGY STORAGE

ORMAT

REV	DATE	DESCRIPTION
12	09/18/25	TESLA REV8
11	07/02/25	TESLA REV6
10	12/04/24	TESLA REV5
9	8/14/24	TESLA REV4
8	6/06/24	TESLA REV3
7	5/10/24	TESLA REV2
6	4/10/24	TESLA LAYOUT
5	2/2/24	REVISED LAYOUT
4	11/8/23	REVISED LAYOUT
3	9/29/23	REVISED LAYOUT

PROJ. NO.	222288
DRAWN	RH
CHECKED	JA
DATE	09/18/2025

© COFFMAN ENGINEERS INC.

SHEET TITLE:

TURNING EXHIBIT

SHEET NO:

C-6.0

P:\ANC\22JOBS\222288 GRIFFITH BATTERY ENERGY STORAGE\0.0 DWGS\C\222288 CIVIL SITE PLAN-10' SPACING.DWG,VEHICLE TRACKING - HOLMES, RYAN - LAST SAVED: September 18, 2025 - PLOT DATE: 9/18/25

PLANT SCHEDULE

SYMBOL	BOTANICAL / COMMON NAME	SIZE	TY
TREES			
	ARBUTUS X 'MARINA' MARINA STRAWBERRY TREE STANDARD	*24" BOX*	*12*
	CERCIS OCCIDENTALIS WESTERN REDBUD MULTI-TRUNK	*15 GAL.*	*6*
	GEI ERA PARVIFLORA AUSTRALIAN WILLOW	*24" BOX*	*9*
SHRUBS			
	VINES		*8*
	BOUGAINVILLEA X 'GOLD RUSH' GOLD RUSH BOUGAINVILLEA	*5 GAL.*	
	BOUGAINVILLEA X 'MONETH' PURPLE QUEEN BOUGAINVILLEA	*5 GAL.*	
	CLEMATIS LIGUSTICIFOLIA WESTERN CLEMATIS	*5 GAL.*	

SYMBOL	BOTANICAL / COMMON NAME	SIZE	TY
SHRUB AREAS			
	STREETSCAPE SHRUBS		*3,560 SF*
	ARBUTUS UNEDO 'COMPACTA' COMPACT STRAWBERRY TREE	*5 GAL.*	*34*
	CEANOTHUS THYRSIFLORUS 'SNOW FLURRY' SNOW FLURRY BLUEBLOSSOM	*5 GAL.*	*20*
	ENCELIA CALIFORNICA CALIFORNIA ENCELIA	*5 GAL.*	*79*
	EUPHORBIA TIRUCALLI 'STICKS ON FIRE' STICKS ON FIRE PENCIL TREE	*EXISTING*	*3,560 SF*
	FILTERRA SHRUBS		*184 SF*
	CAREX TUMULICOLA FOOTHILL SEDGE	*1 GAL.*	*31 SF*
	CERCIS OCCIDENTALIS WESTERN REDBUD MULTI-TRUNK	*15 GAL*	*29 SF*
	COTINUS COGGYGRIA SMOKE TREE	*5 GAL.*	*31 SF*
	UNCUS PATENS CALIFORNIA GRAY RUSH	*1 GAL.*	*31 SF*
	LONICERA INVOLUCRATA TWINBERRY	*5 GAL.*	*29 SF*
	PHILADELPHUS LEWISII WILD MOCK ORANGE	*5 GAL.*	*31 SF*

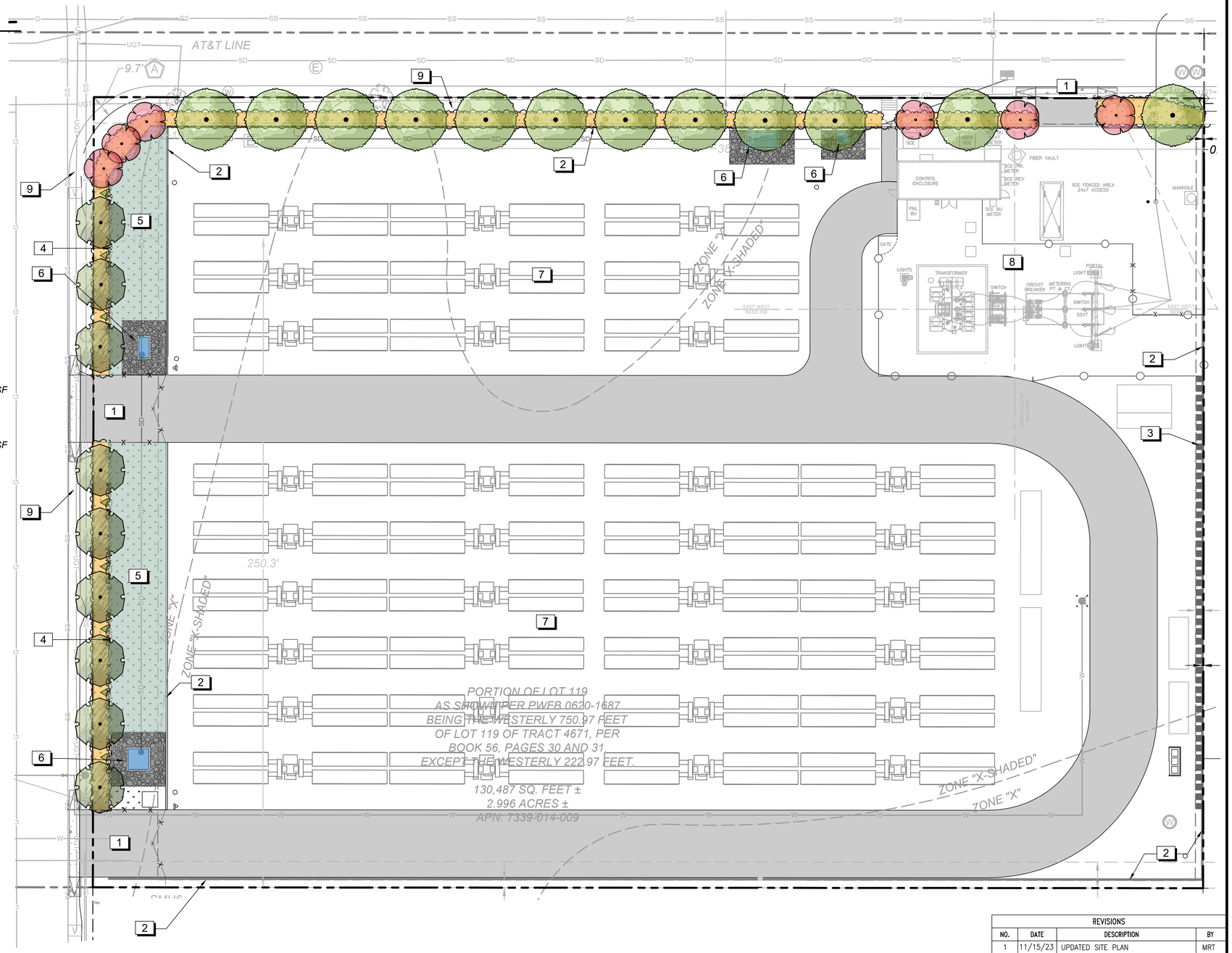
SYMBOL	BOTANICAL / COMMON NAME	SIZE
GROUND COVERS		
	STORMWATER BASIN SEED MIX	
	ACMISPON GLABER DEERWEED	*SEED*
	EPILOBIUM CANUM LATIFOLIUM CALIFORNIA FUCHSIA	*SEED*
	ERYTHRANTHE GUTTATA YELLOW MONKEYFLOWER	*SEED*
	LEYMUS TRITICOIDES 'GREY DAWN' GREY CREEPING WILD RYE	*SEED*
	MUHLENBERGIA RIGENS DEER GRASS	*SEED*
	PLANTAGO ERECTA DOTSEED PLANTAIN	*SEED*

MAP KEY

CODE	DESCRIPTION
1	ENTRY DRIVEWAY
2	CONCRETE OR CMU WALL
3	RETAINING WALL (REFER TO CIVIL PLANS)
4	WROUGHT IRON FENCE (REFER TO CIVIL PLANS)
5	STORMWATER SWALE (REFER TO CIVIL PLANS FOR PROPOSED GRADING)
6	FILTERRA UNIT W/ GRAVEL (REFER TO CIVIL PLANS)
7	BATTERY UNITS AND INVERTERS, TYP.
8	SUBSTATION
9	SIDEWALK

PLANTING IRRIGATION NOTES

1. LANDSCAPE PLANTINGS AND IRRIGATION HAVE BEEN DESIGNED IN COMPLIANCE WITH THE CITY OF CARSON GUIDELINES AND STANDARDS FOR LANDSCAPE PLANTING AND IRRIGATION PLANS AND THE CALIFORNIA MODEL WATER EFFICIENT LANDSCAPE ORDINANCE.
2. ALL SHRUB AND TREE AREAS WILL BE MULCHED WITH COBBLE AND WILL BE IRRIGATED.
3. PLANTING AND IRRIGATION PLANS ARE ANTICIPATED TO BE ON 22" X 34" OR 24" X 36" SHEETS AT A SCALE OF 1" 20 .
4. ALL EXISTING TREES WILL BE REMOVED AS PART OF SITE CONSTRUCTION.
5. APPLICATION RATES FOR SEED (IN POUNDS PER ACRE OF PURE LIVE SEED) WILL BE DETERMINED DURING DETAILED DESIGN AND PREPARATION OF CONSTRUCTION DOCUMENTS.



SCALE: 1" = 20' @ 24" X 36"

0' 10' 20' 40'

DUDEK
605 Third Street
Encinitas, CA 92024
Ph. 760-942-5147

REVISIONS			
NO.	DATE	DESCRIPTION	BY
1	11/15/23	UPDATED SITE PLAN	MRT
2	2/22/24	UPDATED SITE PLAN	ETA
3	8/21/24	UPDATED SITE PLAN	MRT

GRIFFITH ENERGY STORAGE PROJECT

DRAWING TITLE

PRELIMINARY LANDSCAPE PLAN

PROJECT NO.	SCALE:	DATE:	REVISION NO.
12782.05	AS NOTED	9/26/2025	05
DESIGNED BY: EA/MT	CHECKED BY: JZ		DRAWING NO. LS-1
DRAWN BY: EA	REVIEWED BY: JZ		

IRRIGATION KEY

SYMBOL	DESCRIPTION
M	EXISTING WATER METER
BF	REDUCED PRESSURE BACKFLOW DEVICE
FS	FLOW METER
C	IRRIGATION CONTROLLER
	REMOTE CONTROL VALVE
	LATERAL LINE
	MAINLINE
	ROOT WATERING SYSTEM
	SHRUB DRIP ZONE
2 / 1½" / 22	VALVE CALLOUT — NUMBER / SIZE | GPM

MAP KEY

CODE	DESCRIPTION
1	ENTRY DRIVEWAY
2	CONCRETE OR CMU WALL
3	RETAINING WALL (REFER TO CIVIL PLANS)
4	WROUGHT IRON FENCE (REFER TO CIVIL PLANS)
5	STORMWATER SWALE (REFER TO CIVIL PLANS FOR PROPOSED GRADING)
6	FILTERRA UNIT W/ GRAVEL (REFER TO CIVIL PLANS)
7	BATTERY UNITS AND INVERTERS, TYP.
8	SUBSTATION
9	SIDEWALK

WATER EFFICIENT LANDSCAPE WORKSHEET

(AS REQUIRED BY THE M.W.E.L.O.)

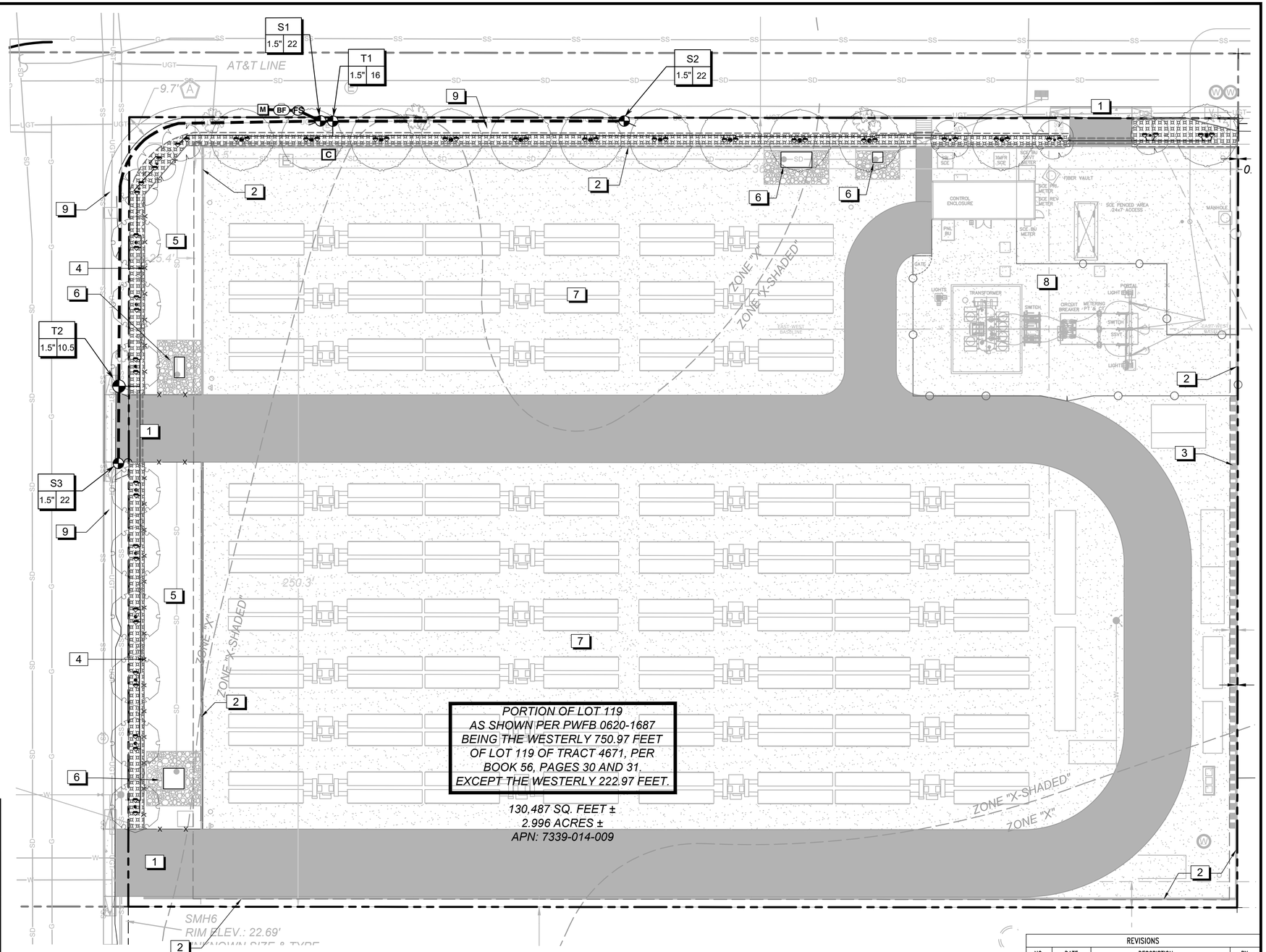
REFERENCE EVAPOTRANSPIRATION (ETo)	58	MAWA ETAF	0.45

HYDROZONE / PLANT TYPE	VALVE #	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY (IE)	ETAF (PF/IE)	LANDSCAPE AREA (SQ.FT.)	ETAF x AREA	ESTIMATED TOTAL WATER USE (ETWU)
REGULAR LANDSCAPE AREAS								
LOW WATER SHRUBS	S1, S2, S3	0.3	BUBBLERS	0.81	0.37	1,854	686.67	24,692.53
LOW WATER TREES	T1, T2	0.3	ROOT ZONE BUBBLER	0.81	0.37	4,239	1,570.00	56,457.20
					TOTALS	6,093	2,256.67	
						TOTAL LANDSCAPE AREA (SQFT)		6,093
						ETWU (GAL/YEAR)		81,149.73
						MAWA (GAL/YEAR)		98,596.93

NOTES:

1	IRRIGATION EFFICIENCY	3	ETAF Variable
	SPRAY 0.75		RESIDENTIAL 0.55
	DRIP 0.81		ALL OTHERS 0.45
2	PLANT FACTOR	4	MAWA (MAXIMUM APPLIED WATER ALLOWANCE)
	LOW 0.1-0.3		=(ETO)(0.62)[(ETAF X LA)+((1-ETAF) X SLA)]
	MED 0.4-0.6	5	ETWU (ESTIMATED TOTAL WATER USE)
	HIGH 0.7-1		=(ETO)(0.62)[(ETAF)(LA)+SLA]

IMPORTANT NOTE REGARDING IRRIGATION DESIGN EFFICIENCY: THE IRRIGATION SYSTEM HYDRAULICS, CONTROLLER OPERATION, NOZZLE SELECTION, HEAD SPACING AND PLACEMENT ARE DESIGNED TO BE IN CONFORMANCE WITH THE MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (AB 1881). THE IRRIGATION DESIGN IS INTENDED TO OPERATE WITH A MINIMUM DISTRIBUTION UNIFORMITY OF 75% FOR OVERHEAD SPRAY DEVICES AND 81% FOR BUBBLER SYSTEM DEVICES. WHILE THE DESIGN IS DIAGRAMMATIC, THE CONTRACTOR SHALL ENSURE THAT THE MINIMUM DISTRIBUTION UNIFORMITY IS MET BY MAKING MINOR YET VIABLE ADJUSTMENTS IN THE FIELD DURING CONSTRUCTION. CONTRACTOR SHALL CONTACT THE PROJECT OWNER IMMEDIATELY IF, FOR ANY REASON, HE/SHE FORESEES THAT THE SYSTEM AS DESIGNED CANNOT MEET THE MINIMUM DISTRIBUTION UNIFORMITY SPECIFIED.



SCALE: 1" = 20' @ 24" X 36"

0' 10' 20' 40'

REVISIONS			
NO.	DATE	DESCRIPTION	BY
1	11/15/23	UPDATED SITE PLAN	MRT
2	2/22/24	UPDATED SITE PLAN	ETA
3	8/21/24	UPDATED SITE PLAN	MRT

GRIFFITH ENERGY STORAGE PROJECT

DRAWING TITLE

PRELIMINARY IRRIGATION PLAN

PROJECT NO.	SCALE:	DATE:	REVISION NO.
12782.05	AS NOTED	9/26/2025	05
DESIGNED BY: EA/MT	CHECKED BY: JZ		DRAWING NO. LS-2
DRAWN BY: EA	REVIEWED BY: JZ		

DUDEK
605 Third Street
Encinitas, CA 92024
Ph. 760-942-5147

FCS
An ADEC Innovation

Memorandum

Date: December 8, 2025

To: McKina Alexander, Senior Planner, City of Carson

From: Jason Brandman, Vice President/Director
Cecilia So, Associate Director

Subject: Class 32 Exemption Memorandum for the Griffith Energy Storage Project

INTRODUCTION

The purpose of this California Environmental Quality Act (CEQA) Class 32 Infill Exemption memorandum is to determine whether the proposed Griffith Energy Storage Project (proposed project) meets all the criteria for such an exemption as set forth in CEQA Guidelines Section 15332 (Infill Development Projects). As evaluated herein, the proposed project would be consistent with all criteria listed in CEQA Section 15332 and would not trigger any of the disqualifying exceptions listed in CEQA Section 15300.2. Separately, and independently, from the infill exemption, this memorandum also demonstrates that the proposed project would not have a significant effect on the environment and is, therefore, not subject to CEQA pursuant to Section 15061(b)(3).

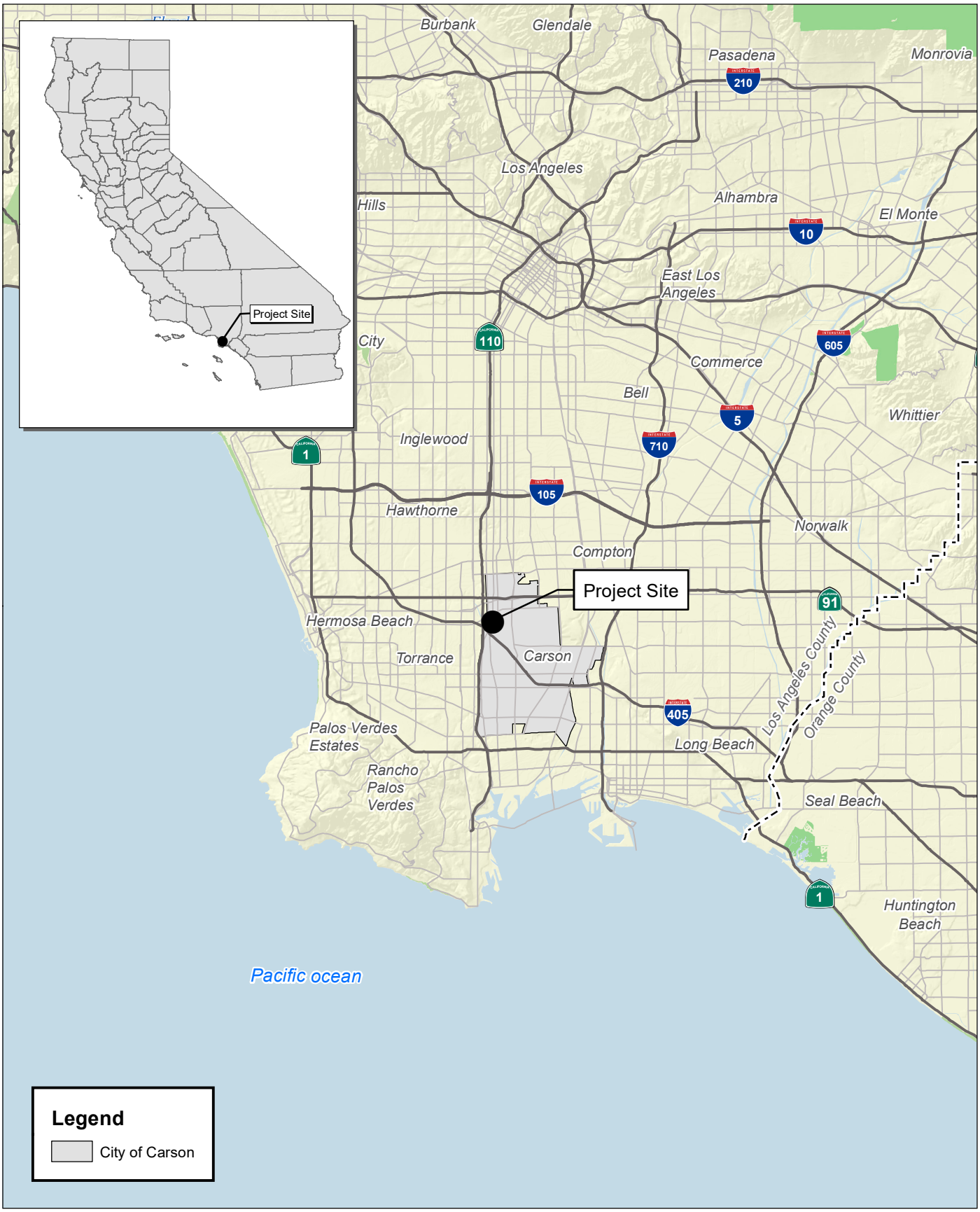
EXISTING CONDITIONS

Project Location and Existing Setting

The approximately 3-acre project site is located at 18800 South Broadway Avenue, in the City of Carson, in Los Angeles County, California (Exhibit 1 and Exhibit 2). The project site is located on Assessor's Identification Number (AIN) 7339-014-009. The project site is currently developed with an existing industrial/topsoil supplier operation. Buildings on the project site include a single-story, 1,399-square-foot building on the northwest corner of the property. Additionally, the project site has been developed with concrete paving and gravel surfaces; concrete and wooden walls; several concrete soil bunkers; and an access gate.

Surrounding Land Uses

Surrounding land uses include existing industrial uses to the north, east, south, and west. The Southern California Edison (SCE) NOLA substation is located directly adjacent to the site to the east and the Kaiser Permanente Carson Medical Offices are located to the northwest. Residential uses are located approximately 395 feet to the east, across South Main Street.



Source: Census 2000 Data, The California Spatial Information Library (CaSIL).

FIRSTCARBON SOLUTIONS™

5 2.5 0 5 Miles

Exhibit 1
Regional Location Map

11900011 • 10/2023 | 1_regional.mxd

CITY OF CARSON
GRIFFITH ENERGY STORAGE PROJECT
CLASS 32 EXEMPTION MEMORANDUM



Source: ESRI Aerial Imagery.

FIRSTCARBON SOLUTIONS™

1,000 500 0 1,000 Feet

Exhibit 2
Local Vicinity Map

11900011 • 10/2023 | 2_local_vicinity.mxd

CITY OF CARSON
GRIFFITH ENERGY STORAGE PROJECT
CLASS 32 EXEMPTION MEMORANDUM

City of Carson General Plan and Zoning

The City of Carson General Plan (General Plan) Land Use Map designates the project site "Heavy Industrial" (Exhibit 3). The City's Zoning Ordinance zones the project site "Manufacturing Heavy–Design Overlay (MH-D)" (Exhibit 4).

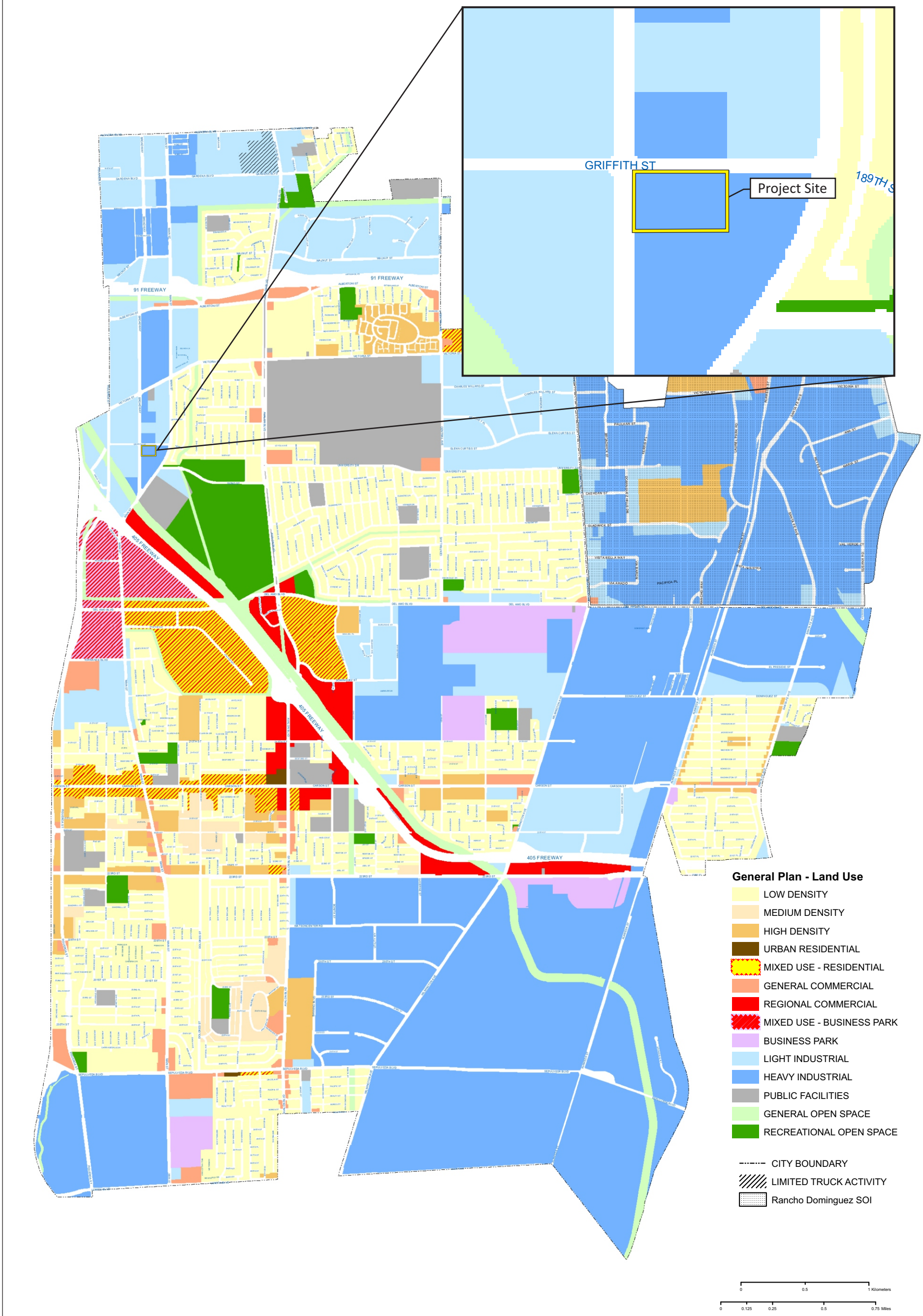
PROJECT DESCRIPTION

The proposed project would result in the redevelopment of the approximately 3-acre project site with a Battery Energy Storage System (BESS) and associated infrastructure (Exhibit 5). Lithium-ion batteries would be stored within modular outdoor enclosures, and power that is released or captured by the batteries would be transferred to and from the SCE Nola Substation via an underground 66-kilovolt generation transmission (gen-tie) line (Exhibit 6).

The proposed project would consist of lithium-ion batteries installed in racks located in prefabricated outdoor enclosures; inverters; medium-voltage transformers; switchgear; a collector substation; and other associated equipment. The proposed facility would provide a service by receiving energy (charging) from the SCE transmission system, storing the energy, and then later delivering energy (discharging) back to the point of interconnection at the SCE Nola Substation. The facilities would operate year-round and would be available to receive or deliver energy 24 hours a day, 365 days a year.

The proposed project would include the following components:

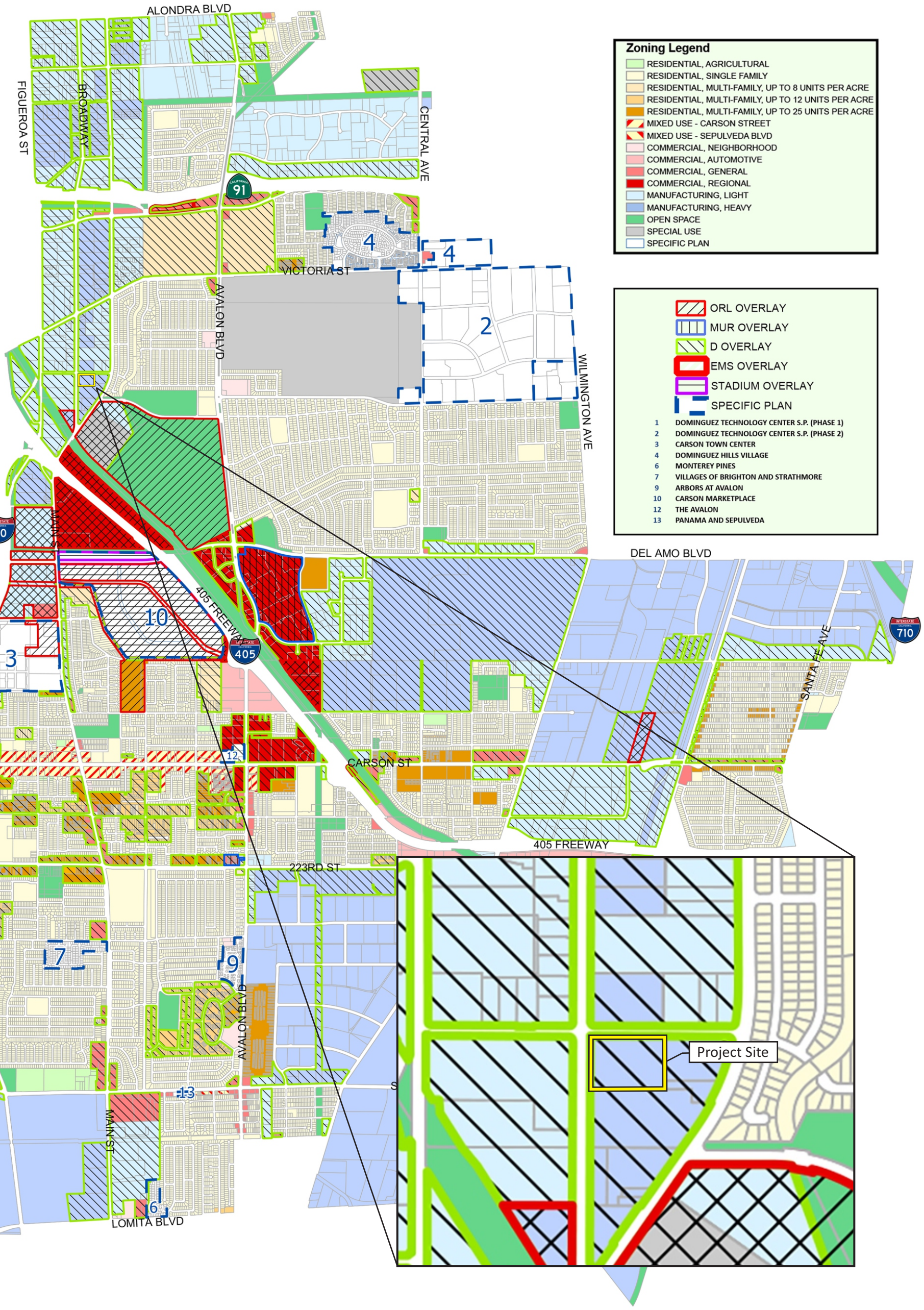
- **Energy Storage Facility**: An energy storage facility would be constructed that would provide energy storage capacity and dispatch for the electric grid.
- **Battery Management System**: A battery management system would be provided to control the charging/discharging of the batteries, along with temperature monitoring and control of the individual battery cell temperature with an integrated cooling system.
- **Power Inverters and Transformers**: Power inverters to convert between AC and DC would be included, along with transformers that would step up the voltage.
- **Telecommunication Facilities**: Telecommunication equipment, including underground and overhead fiber optics or Supervisory Control and Data Acquisition (SCADA), would be installed.
- **Site Access and Security**: On-site access driveways, perimeter security fencing, and nighttime directional lighting would be provided.
- **Generation Tie-Line**: An underground 66-kilovolt generation tie-line would be constructed to transfer power between the SCE Nola Substation and the proposed project.



Source: City of Carson, August 05, 2015.

FIRSTCARBON SOLUTIONS™

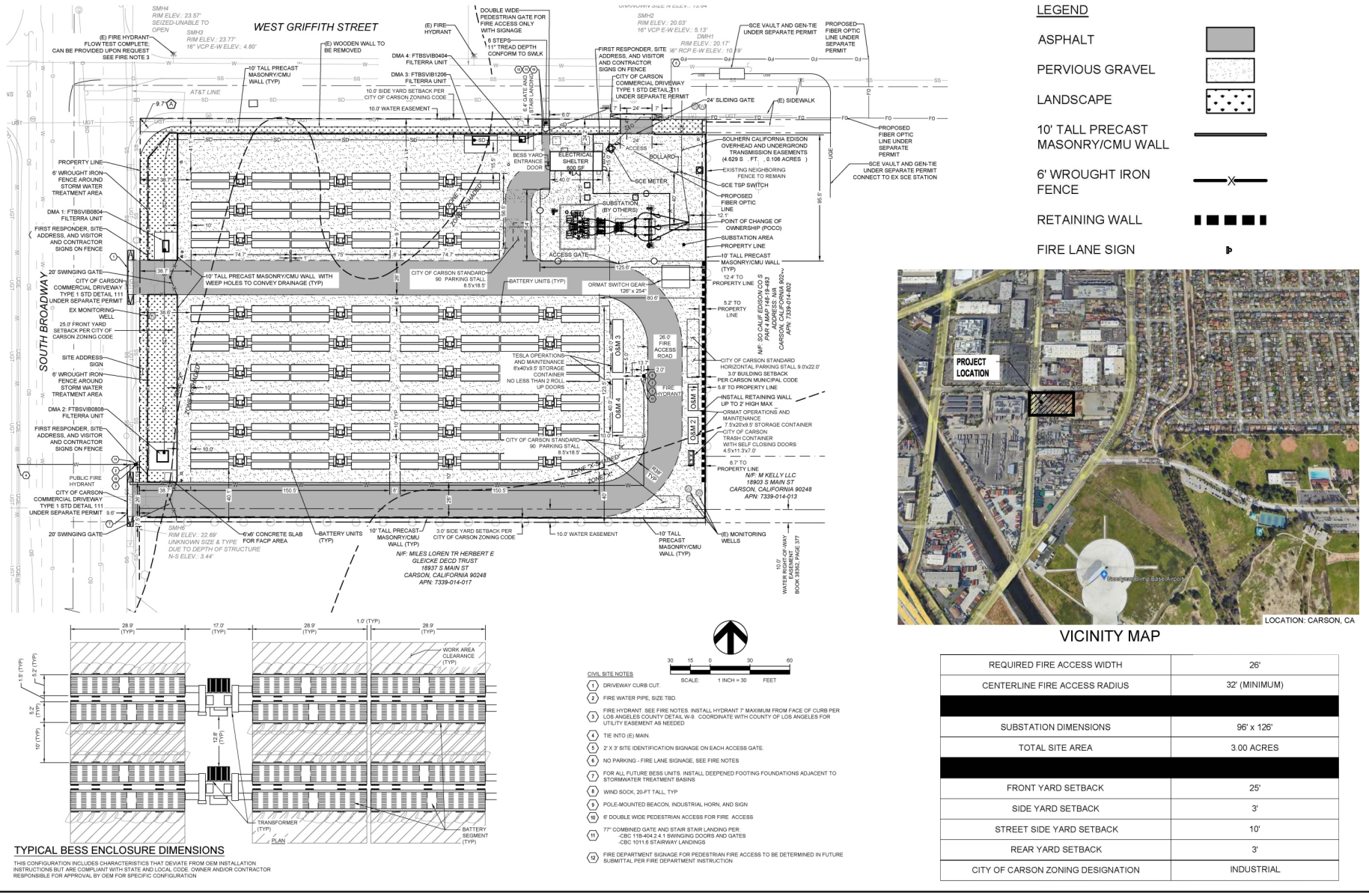
Exhibit 3
City of Carson Land Use Map



Source: City of Carson, August 01, 2017.

FIRSTCARBON SOLUTIONS™

Exhibit 4
City of Carson Zoning Map



REQUIRED FIRE ACCESS WIDTH	26'
CENTERLINE FIRE ACCESS RADIUS	32' (MINIMUM)
SUBSTATION DIMENSIONS	96' x 126'
TOTAL SITE AREA	3.00 ACRES
FRONT YARD SETBACK	25'
SIDE YARD SETBACK	3'
STREET SIDE YARD SETBACK	10'
REAR YARD SETBACK	3'
CITY OF CARSON ZONING DESIGNATION	INDUSTRIAL

Source: Coffman Engineers; Ormat, 09/18/2025.

FIRSTCARBON SOLUTIONS™

Exhibit 5
Site Plan



Source: Dudek.

FIRSTCARBON SOLUTIONS™

Exhibit 6
Off-Site Improvements:
SCE Generation Transmission Line Route and Potholing Locations

SCE Facility Upgrades

SCE has identified a need for the proposed project to contribute its fair-share payment toward utility grid system upgrades that are planned to be completed within SCE's service territory. These SCE facility upgrades include an underground generation tie-line installation across West Griffith Street.

Generation Transmission Line

The proposed project includes electrical and telecommunications improvements to support interconnection of the generation facility. All work would occur within previously disturbed areas and existing rights-of-way, consistent with CEQA Class 32 categorical exemption criteria for infill development.

An underground 66-kilovolt (kV) generation tie-line would be constructed by SCE to transfer power between the project site and the Nola Substation. SCE would own and operate the generation tie-line, with final routing determined during the interconnection review process. The proposed alignment would begin at the northeast portion of the project site, run east along West Griffith Street frontage, and connect to the Nola Substation approximately 165 feet east of the site (see Exhibit 6). Construction would involve trenching and earthmoving across West Griffith Street.

Substation Work

Within the existing Nola Substation fenceline, the project will install facilities for a new 66 kV switchrack position to terminate the generation tie-line. This includes:

- One 66 kV dead-end switchyard structure
- Three 66 kV voltage transformers mounted on steel pedestal support structures
- Three 66 kV line drops
- One 66 kV circuit breaker
- Three 66 kV group-operated disconnect switches

Battery Energy Storage System Facility

The proposed project would install and operate a utility scale energy storage facility consisting of prefabricated enclosures, each housing:

- Internal racks and system control modules
- Thermal management
- Communication systems

The battery modules would be delivered from the manufacturer preassembled that would be moved into place by forklifts or cranes. These modules would be connected in parallel to aggregate the required energy capacity.

The BESS facility would move energy on and off the transmission power grid based on market and utility demand. In general, the California Independent System Operator (CAISO) would dispatch the system to both place energy onto the grid (discharge) during times of high load and to take energy off the grid (charge) in times of low load relative to generation. SCE may have different requirements for when to dispatch the system, potentially dictated by the status of critical equipment that comprises the grid.

Once developed, the proposed project would be monitored by a remote management system 24 hours a day, 365 days a year. Remote access to battery status, meters, schedules, and other telemetry data would be available to off-site personnel.

Fire Protection System

The design of the proposed BESS facility would comply with the National Fire Protection Association (NFPA) 855 Code, which dictates specific fire access, protection, and suppression requirements to ensure the safe operation of the facility. Additionally, the BESS would be Underwriters Laboratories Inc. (UL) certified and include built-in failsafe and cooling systems designed to prevent thermal runway (uncontrollable temperature increase)[1] and the spread of fire. The Los Angeles County Fire Department (LACFD)—the authority having jurisdiction—would require site plan review and approval to ensure that the proposed project meets NFPA 855 Code.

Outdoor Electrical Equipment

Medium-voltage transformers, inverters, switchgear, electronic switchboards, and additional electrical equipment would be installed outside the BESS enclosures. Underground wires and cabling would run from the battery enclosures to a concrete head, housing the inverters and medium-voltage transformers. All electrical equipment would be housed in appropriately rated National Electrical Manufacturers Association enclosures. All outside electrical cabling would run underground. Underground wires and cabling would run from the medium-voltage transformers to the collector substation. The collector substation would be located on the northeastern portion of the parcel on approximately 10,747 square feet (approximately 0.247 acre) of ground. Components would include a main power transformer, control house, and switchgear.

Inverters

Industry-standard nationally (and internationally) recognized inverter equipment would be used for the proposed project. The inverters would be stand-alone units that would operate in all conditions in a charge mode and discharge mode. The inverters would be controlled and monitored remotely. On-site disconnects would be installed in case of an emergency or unscheduled maintenance. The inverters used for the proposed project are designed to last more than 30 years with proper preventive maintenance, schedule maintenance, and occasional major overhauls.

---

[1] UL Research Institutes. 2021. What is Thermal Runway? Website: https://ul.org/research/electrochemical-safety/getting-started-electrochemical-safety/what-thermal-runaway. Accessed January 11, 2024.

Telecommunication Facilities and SCADA System

The proposed project would include telecommunication facilities to meet communication requirements for interconnection with SCE/CAISO and to support remote monitoring of project operations. To facilitate communication with SCE facilities, two new underground fiber-optic paths would be installed from just outside SCE's Nola Substation to the generation facility. A fiber-optic cable would connect the project site switchyard with the SCE point of interconnection. Utility interconnection regulations require installation of a second, separate redundant fiber-optic cable within the project boundaries.

- **Route 1:** Approximately 80 linear feet of underground fiber conduit and one 4-foot by 4-foot manhole
- **Route 2:** Approximately 350 linear feet of underground fiber conduit and one 4-foot by 4-foot manhole

The proposed project would also use local exchange carrier services for telecommunication to support remote monitoring requirements and would connect to fiber-optic lines owned and managed by local telecommunication providers.

Supervisory Control and Data Acquisition System

The SCADA system is critical for CAISO and SCE utility interconnection and for proper operation and maintenance of the proposed project. The SCADA system uses proprietary software, a fiber-optic transmission system, and a communication network that may include telephone, radio, and/or microwave links, as well as other methods such as radio links and phase loop communication systems. SCADA enables remote start, stop, reset, and tag-out functions for the facility, reducing labor and providing diagnostic information from control panels. It also controls the substation, allowing fully centralized operation of the proposed project to meet all CAISO and utility interconnection requirements.

Site Access and Security

The project site would be accessed from existing project driveways off South Broadway. A perimeter wall would be installed around the project site for safety and security purposes. Security cameras would be placed on-site and monitored 7 days a week and 24 hours per day. The proposed project would have a restricted fire access pedestrian gate off West Griffith Street.

The substation area at the northeast corner of the project site would be gated off from the rest of the property. This area would be accessed by a proposed commercial driveway and sliding gate off West Griffith Street.

Lighting

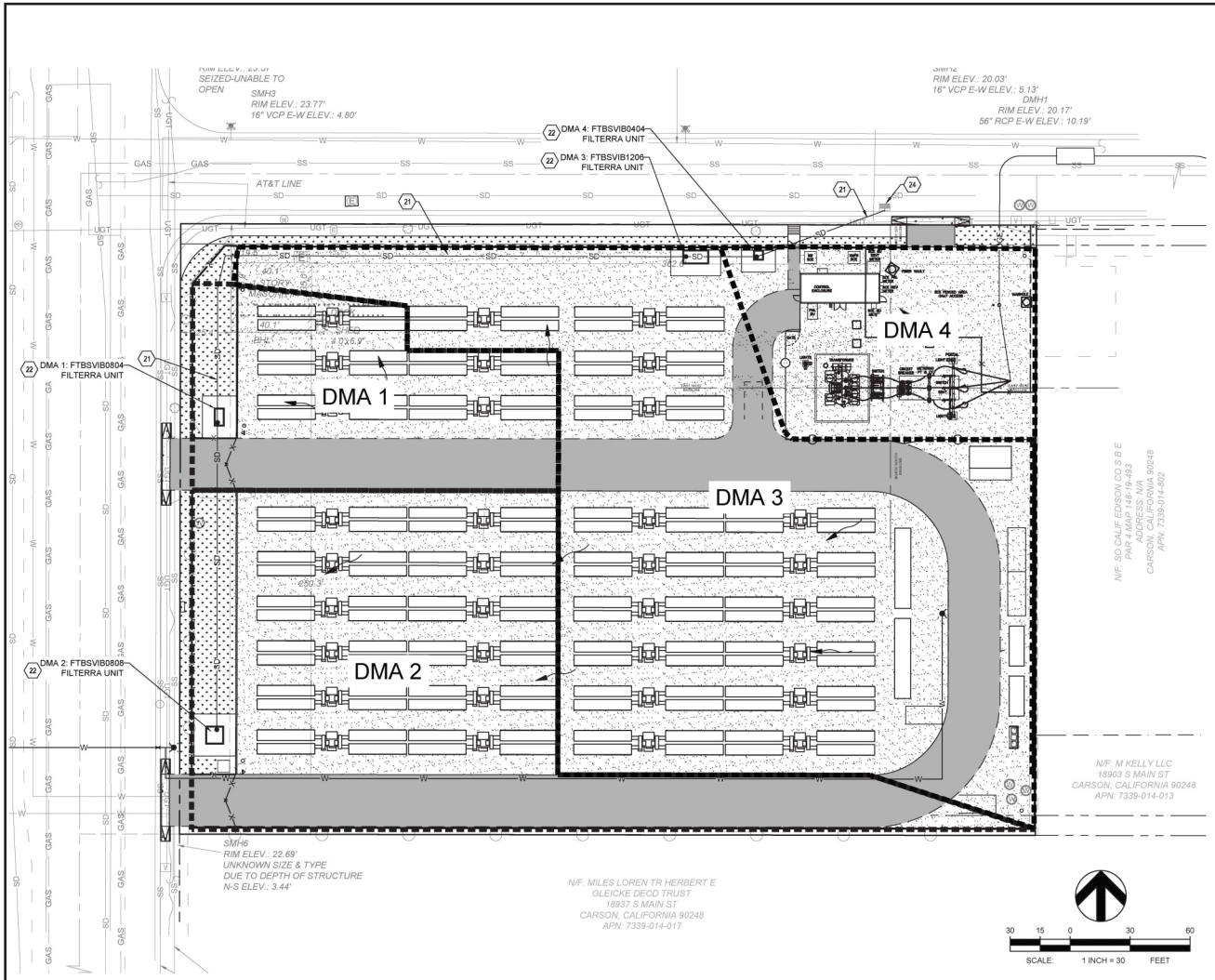
Permanent motion-sensitive, directional security lights would be installed to provide adequate illumination around the substation area and points of ingress and egress. Additional lighting would provide operations and maintenance personnel with illumination for both normal and emergency conditions. Lighting on-site would be designed to provide the minimum illumination needed to achieve safety and security objectives. Proposed lighting would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties.

Stormwater Collection and Treatment

Stormwater treatment areas would be constructed along the northern and western boundaries of the project site (along South Broadway and West Griffith Street) to collect and treat all stormwater generated on the project site prior to discharge into the adjacent municipal stormwater system (Exhibit 7).

Landscaping

Landscaping would be installed on the project site and would require minor water during the project operation. Landscaping would be provided along the northern and western boundaries of the project site. A variety of trees would be planted such as marina strawberry tree (*Arbutus marina*), western redbud multi-trunk (*Cercis occidentalis*), and Australian willow (*Geijera parviflora*). Vine species would include gold rush bougainvillea, purple queen bougainvillea (*Bougainvillea* spp.), and western clematis (*Clematis ligusticifolia*). The streetscape shrub area includes sticks on fire pencil tree (*Euphorbia tirucalli*), California encelia (*Encelia californica*), compact strawberry tree (*Arbutus unedo*), and snow flurry blueblossom (*Ceanothus thyrisflorus*). Stormwater basin grass seed mix would be planted along the tree and shrub areas, including California fuchsia (*Epilobium canum latifolium*), deer grass (*Muhlenbergia rigens*), deerweed (*Acmispon glaber*), dotseed plantain (*Plantago erecta*), creeping wild rye (*Leymus triticoides*), and yellow monkeyflower (*Erythranthe guttata*). Lastly, Filterra shrubs, including foothill sedge (*Carex tumulicola*), western redbud multi-trunk, smoke tree (*Cotinus coggygria*), California gray rush (*Juncus patens*), twinberry (*lonicera involucrata*), and wild mock orange (*Philadelphus lewisii*), would be planted for water management. Exhibit 8 depicts the site plan and associated improvements.



DRAINAGE NOTES

21 STORM DRAIN PIPE, SIZE TBD.

22 STORMWATER BIOFILTRATION LID TREATMENT AREA. SEE DETAILS ON SHEET C5.1.

23 STORM DRAIN INLET.

24 TIE INTO (E) STORM DRAIN MANHOLE.

STORMWATER NOTES:

1. PRELIMINARY SIZING IS BASED ON THE LA COUNTY LOW IMPACT DEVELOPMENT (LID) STANDARDS MANUAL.
2. THE PROPOSED SITE IS LOCATED WITHIN THE URBAN FLOOD ZONE.
3. THIS ANALYSIS UTILIZES THE 85TH PERCENTILE STORM EVENT PER LID REQUIREMENTS. THIS DOES NOT CONSIDER HYDROMODIFICATION (ESTIMATED AT 1 ACRE OR MORE OF IMPERVIOUS DEVELOPMENT) FOR THE SITE.
4. PER THE GEOTECHNICAL ENGINEERING REPORT BY EARTH SYSTEMS PACIFIC (DATED FEBRUARY 29, 2024, REVISED APRIL 5, 2024) STORMWATER INFILTRATION IS NOT RECOMMENDED DUE TO DEBRIS LADEN FILLS, RELATIVELY SHALLOW GROUNDWATER AND POTENTIAL FOR CONTAMINATED SOILS.

LEGEND

DRAINAGE ROUTE

ABBREVIATIONS

DMA DRAINAGE MANAGEMENT AREA

IMPERVIOUS AREA

	DMA1	DMA 2	DMA 3	DMA 4
IMPERVIOUS (SF)	9,846	23,625	29,682	2,449
STORMWATER TREATMENT AREA (SF)	32	64	72	16
TOTAL AREA (SF)	15,880	36,345	58,200	11,660
FENCED AREA (SF)	15,880	36,345	58,200	11,660
% IMPERVIOUS	62	65	51	21

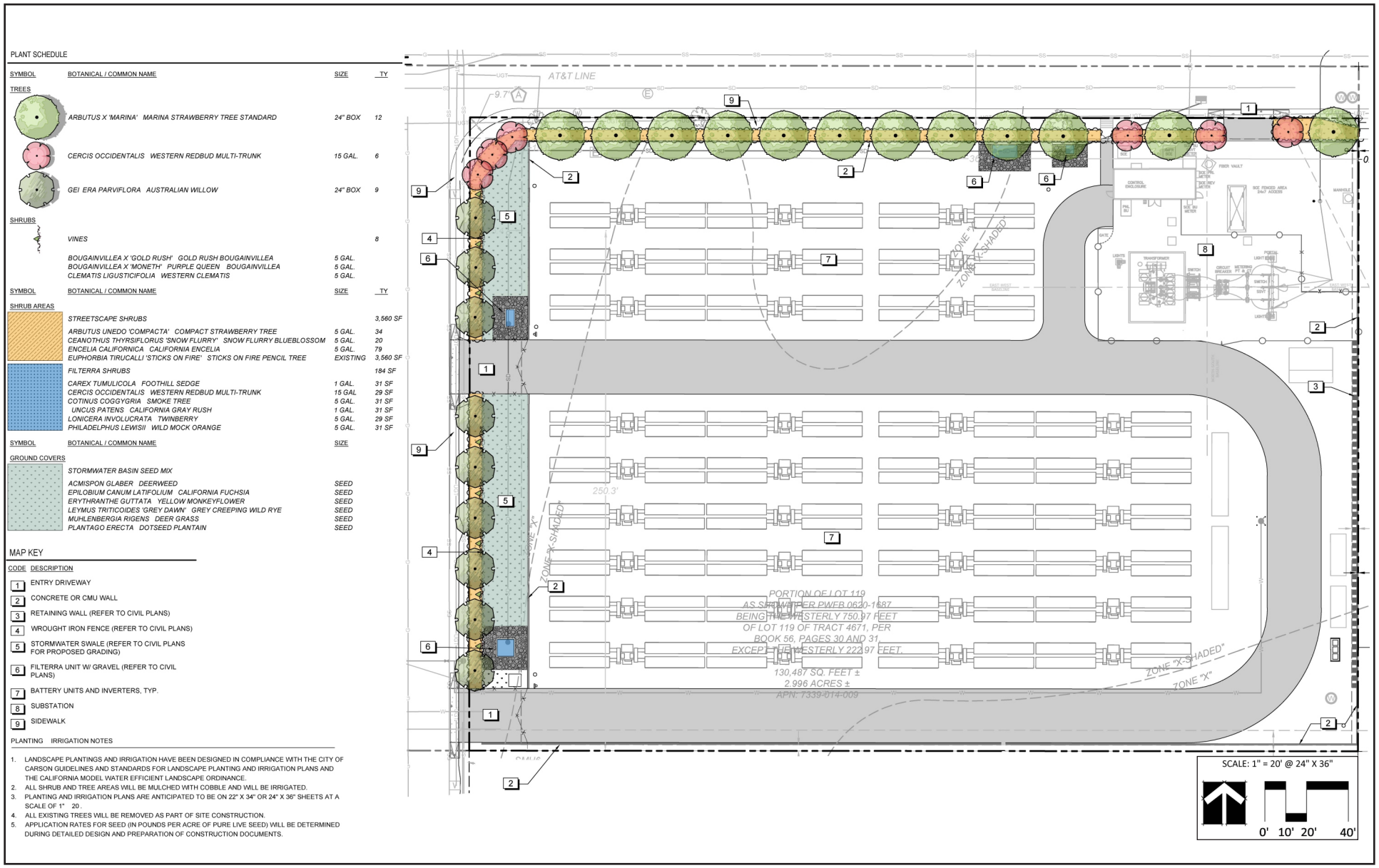
HYDROCALC OUTPUTS - HYDROLOGY

	DESIGN STORM	TOTAL AREA (ACRE)	PEAK INTENSITY (IN/HR)	RUNOFF COEFFICIENT	TC	PEAK FLOW RATE (CFS)	RUNOFF VOLUME (CU-FT)
PRE-	25-YEAR	2.99	3.20	0.90	5	8.02	45,606
POST-	25-YEAR	2.99	3.20	0.90	5	8.02	46,653
DELTA			-				1,047

HYDROCALC OUTPUTS - LID

	DESIGN STORM	FENCED AREA (ACRE)	PEAK INTENSITY (IN/HR)	RUNOFF COEFFICIENT	TC	PEAK FLOW RATE (CFS)	RUNOFF VOLUME (CU-FT)
DMA 1	85TH PERCENTILE	0.37	0.39	0.78	15	0.85	861
DMA 2	85TH PERCENTILE	0.83	0.34	0.78	20	0.18	2,047
DMA 3	85TH PERCENTILE	1.34	0.34	0.78	20	0.23	2,696
DMA 4	85TH PERCENTILE	0.27	0.44	0.78	12	0.03	285

Source: Coffman Engineers; Ormat, 09/18/2025.



Source: Dudek, 09/26/2025.

FIRSTCARBON SOLUTIONS™

Exhibit 8
Landscape Plan

Construction

The physical construction/site activities of the proposed project would last up to 10 months, not including commissioning. Construction activities for the proposed project would generally fall into the following main categories: (1) demolition; (2) site preparation; (3) system installation; and (4) testing, commissioning, and cleanup.

All existing structures within the project site would be demolished including a small building residing in the northwest portion of the site, and removal of several concrete soil bunkers scattered throughout the site. The on-site construction workforce is expected to peak at several dozen individuals; however, the average daily workforce on-site during construction would be one to two dozen individuals, comprising construction, supervisory, support, and construction management personnel.

The proposed project would be constructed by several specialized construction contractors. Construction would primarily occur during daylight hours, Monday through Saturday between 7:00 a.m. and 7:00 p.m., as required to meet the construction schedule. Any construction work performed outside the normal work schedule would be coordinated with the appropriate agencies and would comply with City regulations.

Potholing

Potholing is the method of safely and precisely locating underground utilities for identification prior to site excavation. Before installation of the proposed underground gen-tie and telecommunications lines, the proposed project would conduct potholing for fiber routes and gen-tie work directly east of the project site within and adjacent to West Griffith Street. The proposed project would install a total of six potholes:

- One pothole would be located within West Griffith Street. This pothole would require a 375-square-foot area of asphalt clearing, would have a 12-inch by 18-inch boring, and would be 12 feet deep. During this potholing, road detours would be necessary but no road closures would occur.
- Four potholes would be located within the utility interconnection structure (called a “meet me structure”) located on the median of West Griffith Street. This pothole would require a 36-square-foot area of asphalt clearing, would have a 12-inch by 18-inch boring and would be 10 feet deep.
- One pothole would be located on private property on the south side of West Griffith Street. No asphalt clearing would be required. The 12-inch by 18-inch boring would be 12 feet deep.

All potholes would be cut in a “Z” pattern. Backfilling would be conducted at all proposed pothole locations.

Operations and Maintenance Activities

Typical operations and maintenance activities that would occur on the project site during operation include, but are not limited to, liaison and remote monitoring administration and reporting; semi-annual

and annual services; remote operations of batteries, inverters, substation, and site security and management; additional communication protocols; and repair and maintenance of the BESS, electrical transmission lines, and other project facilities. The electrical equipment and security would be automated and monitored remotely.

The project site would mostly be unoccupied but would be visited periodically through the year for equipment inspections, monitoring and testing, and maintenance as needed. Periodically, batteries and various components would be replaced or renewed to ensure optimal performance.

CLASS 32 (INFILL DEVELOPMENT)

Among the classes of projects that are exempt from CEQA review are those that are specifically identified as urban infill development. CEQA Guidelines Section 15332 states that the term infill development (or the Class 32 exemption) is applicable to projects that meet the following conditions:

(a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as applicable zoning designations and regulations.

(b) The proposed development occurs within the city limits, on a project site that is no more than 5 acres and surrounded by urban uses.

(c) The project site has no value as habitat for endangered, rare, or threatened species.

(d) Approval of the project would not result in any significant effects related to traffic, noise, air quality, or water quality.

(e) The site can be adequately served by all required utilities and public services.

The analysis presented in the following section provides substantial evidence that the proposed project qualifies for an exemption under CEQA Guidelines Section 15332, as a Class 32 urban infill development, and would not have a significant effect on the environment.

EXCEPTIONS

Even if a project is ordinarily exempt under the potential categorical exemptions, CEQA Guidelines Section 15300.2 provides specific instances where exceptions to otherwise applicable exemptions apply. Exceptions to a categorical exemption apply in the following circumstances, effectively nullifying a CEQA categorical exemption:

(a) **Location.** Classes 3, 4, 5, 6, and 11 are qualified by consideration of where the project is to be located. A project that is ordinarily insignificant in its impact on the environment may, in a particularly sensitive environment, be significant. Therefore, these classes are considered to apply in all instances, except when the project may affect an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, State, or local agencies.

(b) **Cumulative Impact.** All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type and in the same place over time is significant.

(c) **Significant Effect.** A categorical exemption shall not be used for an activity when there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances.

(d) **Scenic Highways.** A categorical exemption shall not be used for a project that may result in damage to scenic resources, including, but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway that has been officially designated as a State Scenic Highway. This does not apply to improvements that are required as mitigation by an adopted negative declaration or certified Environmental Impact Report (EIR).

(e) **Hazardous Waste Sites.** A categorical exemption shall not be used for a project located on a site that is included on any list compiled pursuant to Section 65962.5 of the Government Code.

(f) **Historical Resources.** A categorical exemption shall not be used for a project that may cause a substantial adverse change in the significance of a historical resource.

The analysis contained within this memorandum presents substantial evidence that there are no exceptions that apply to the project or its site, that the proposed project would not have a significant effect on the environment, and that the Class 32 exemption remains applicable.

15061(B)(3) EXEMPTION

CEQA applies only to projects that have the potential to cause a significant effect on the environment. Under the exemption established in Sate CEQA Guidelines Section 15061(b)(3), a lead agency may find a project exempt from CEQA if "it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment." This exemption is based on the idea that CEQA applies jurisdictionally only to activities that have the potential for causing environmental effects. See *No Oil, Inc. v City of Los Angeles* (1974) 13 C3d 68.

The analysis contained within this memorandum presents substantial evidence that the project has no potential to cause significant environmental impacts.

CEQA EXEMPTION CHECKLIST

Introduction

The following analysis provides substantial evidence to support a conclusion that the proposed project qualifies for an exemption under CEQA Guidelines Section 15332 as a Class 32 urban infill development and would not have a significant effect on the environment.

Criteria Section 15332(a): General Plan and Zoning Consistency

	Yes	No
The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.	☒	☐

The General Plan Land Use Map designates the project site "Heavy Industrial."[2] The City's Zoning Ordinance zones the project site "Manufacturing Heavy–Design Overlay (MH-D)."[3] The proposed project's land use activities are industrial in nature, which is consistent with the City's General Plan policies and applicable Zoning designations and regulations. As required by CMC 9141.1, the project requires approval of a Conditional Use Permit (CUP) because of the presence of hazardous materials on the project site.[4]

Criteria Section 15332(b): Project Location, Size, and Context

	Yes	No
The project occurs within city limits on the project site of no more than 5 acres substantially surrounded by urban uses.	☒	☐

The project site is approximately 3-acres in size and is located on the southeast corner of South Broadway and West Griffith Street, entirely within the limits of the City of Carson (City), in Los Angeles County, California (Exhibits 1 and 2). The project site is currently developed with an existing industrial/topsoil supplier operation. Surrounding land uses include existing industrial uses to the north, east, south, and west. The SCE Nola Substation is located directly adjacent to the site to the east and the Kaiser Permanente Carson Medical Offices are located to the northwest. Residential uses are located approximately 395 feet to the east, across South Main Street. As such, the project site is located in a fully-developed area within the City and is substantially surrounded by urban uses.

Criteria Section 15332(c): Endangered, Rare, or Threatened Species

	Yes	No
The project site has no value as habitat for endangered, rare, or threatened species.	☒	☐

The project site consists of a disturbed, developed area with an existing industrial/topsoil supplier operation. The site is surrounded by existing industrial uses to the north, east, south, and west. It is enclosed by a metal fence and gate along the western boundary, a wooden wall along the northern boundary, and chain-link fence along the eastern and southern boundaries.

A review of existing databases determined that a total of 49 special-status plant species have previously been recorded within 10 miles of the project site or within the nine-quadrangle search area that encompasses the project site (Appendix A). The potential for occurrence of a species was based on

[2] City of Carson. 2023. City of Carson General Plan Land Use Map. Website: https://www.dropbox.com/s/f5l4w3ic9tazp1r/Land%20Use%20Map_032923.pdf?e=1&dl=0. Accessed March 6, 2024.
[3] City of Carson. 2017. City of Carson Zoning Map. Website: https://gis.carson.ca.us/pdfs/mapgallery/Zoning_11x17.pdf. Accessed November 27, 2023.
[4] City of Carson. 2022. Carson Municipal Code Section 9141.1. See also Protect Tustin Ranch v. City of Tustin (2021) 70 Cal.App.5th 951 (Appeal court holding City properly applied Class 32 exemption for project requiring CUP).

presence of suitable habitats, soil types, and recency, proximity, and number of occurrences recorded in the California Native Plant Society's (CNPS) Inventory of Rare Plants (CNPS Inventory) and California Natural Diversity Database (CNDDB). [5,6,7] Based on active surface disturbances occurring throughout the project site, as well as its situation as a small, isolated patch of developed land in an urbanized area, and the presence of non-native, invasive, annual plant species, the likelihood for the potential for persistence and occurrence of populations of many special-status plant species is lowered. Because of the urban/developed nature of the project site and lack of suitable habitat, all special-status plants that occur in the region were assessed as having no potential for occurrence (Appendix A, Table 1). Thus, special-status plants are not expected to occur on the project site and are not discussed further.

There are CNDDB records for 41 special-status wildlife species within 10 miles of the project site or as identified in the United States Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) review.[8,9,10] Because of the urban/developed nature of the project site, all special-status wildlife species that occur in the region were assessed as having no potential for occurrence (Appendix A, Table 2). Thus, special-status wildlife are not expected to occur on the project site and are not discussed further.

Migratory and Nesting Birds

The urban/developed character of the project site, as well as active disturbances likely prevents native bird species from nesting on the project site. Trees adjacent to and within 500 feet of the project site could provide suitable nesting habitat for various other native avian species, including those protected under the Migratory Bird Treaty Act (MBTA) and Fish and Game Code. These species include northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), and house finch (*Haemorhous mexicanus*), among others.

Potential direct and indirect impacts could occur to resident and migratory species during project construction, which would render the project site temporarily unsuitable for birds because of the noise, vibrations, and increased activity levels associated with various construction activities. These activities could potentially subject birds to risk of death or injury, and they would likely avoid using the area until such construction activities have dissipated or ceased. Relocation, in turn, could cause hunger or stress among individual birds by displacing them into adjacent territories belonging to other individuals.

---

5 California Native Plant Society (CNPS). 2023. California Native Plant Society Rare and Endangered Plant Inventory. Website: http://www.rareplants.cnps.org/. Accessed September 26, 2023.

6 California Department of Fish and Wildlife (CDFW). 2023. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed September 26, 2023.

7 California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: https://map.dfg.ca.gov/bios/. Accessed September 26, 2023.

8 California Department of Fish and Wildlife (CDFW). 2023. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed September 26, 2023.

9 California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: https://map.dfg.ca.gov/bios/. Accessed September 26, 2023.

10 United States Fish and Wildlife Service (USFWS). 2023. Information for Planning and Consultation (IPaC). Website: https://ecos.fws.gov/ipac/. Accessed September 26, 2023.

Construction activities that occur during the nesting season (generally February 1 to August 31) could disturb nesting sites for birds protected by the MBTA and Fish and Game Code. The MBTA and California Fish and Game Code protect native, migratory birds that may reside on or adjacent to the project site during construction and makes it unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, or kill migratory birds and prohibits the removal of nests occupied by migratory birds. The proposed project would be required to comply with the MBTA and the California Fish and Game Codes to avoid construction-related impacts to nesting birds and their nests. Project compliance with the MBTA would ensure potential impacts to migratory and nesting birds are less than significant under CEQA.

Regulated Trees

The City manages all aspects of parkway trees to preserve aesthetics and maintain the natural environment of the community. Article III, Public Safety, Chapter 9, City Tree Preservation and Protection, of the Carson Municipal Code outlines all the management practices of the City, Best Management Practices (BMPs) for contractors, and penalties for violations of the Carson Municipal Code.[11] No one is allowed to work on a parkway tree in the City without obtaining a permit first and must follow the guidelines discussed in the Carson Municipal Code.

Multiple ornamental trees that are located along the western and northern boundaries of the project site, along South Broadway and West Griffith Street respectively, would be removed by the project. These trees are not considered regulated parkway trees because they are planted along a public street and would be managed by the City's Public Works Division. The Public Works Division allows tree removal if existing publicly owned trees impede improvements, including foundations, driveway, and sidewalks.[12] Thus, the proposed project would not remove or affect any trees that are regulated trees under the City Tree Preservation and Protection Ordinance.

Criteria Section 15332(d): Traffic

	Yes	No
Approval of the project would not result in any significant effects related to traffic.	☒	☐

The proposed project would result in the redevelopment of the approximately 3-acre project site with a BESS and associated infrastructure. The project site would be accessed from existing project driveways off South Broadway. It is anticipated that the construction workforce would commute to the site each day from local communities and report to the designated construction staging yards prior to the beginning of each workday.

Although there would be no road closures during project construction, off-site improvements may require a temporary detour to guide and divert traffic. However, the proposed project would comply with City regulations for minimizing traffic impacts during off-site improvements, including Municipal

[11] City of Carson. 2023. Carson Municipal Code Chapter 9: City Tree Preservation and Protection. Website: https://www.codepublishing.com/CA/Carson/html/Carson03/Carson030900.html. Accessed January 2, 2024.
[12] City of Carson. 2023. City of Carson Municipal Code 3924. Website: https://www.codepublishing.com/CA/Carson/html/Carson03/Carson030900.html#3924. Accessed January 11, 2024.

Code Sections 3230 through 3242 regulating the use of traffic control devices, speed zones, and signs and markings in the event of temporary lane closures. These improvements would be conducted under the oversight of the City Traffic Engineer during project construction per Municipal Code Section 3203, therefore minimizing project impacts on surrounding traffic.

The project site would mostly be unoccupied but would be maintained periodically throughout the year for equipment inspections, monitoring and testing, and maintenance as needed. Thus, the proposed project would not be expected to result in substantial net increase in trip generation that would result in significant impacts on traffic operations.

Criteria Section 15332(d): Noise	Yes	No
Approval of the project would not result in any significant effects related to noise.	☒	☐

The following analysis is based, in part, on the construction and operational noise analyses memorandum prepared by Dudek, dated October 5, 2025.[13] The Dudek analysis demonstrates that the proposed project would be consistent with the City Noise Ordinance and the General Plan Noise Element and, as a result, would not expose any noise-sensitive receptors to substantial noise increases from construction or operations.[14,15] Therefore, the proposed project would not result in any significant impacts related to noise. Dudek's memorandum is included in Appendix B for reference. Their findings are summarized below.

Construction Noise

Dudek evaluated the potential for the proposed project's on-site construction and off-site potholing to result in substantial noise increases in excess of City standards at surrounding noise-sensitive receptors. The nearest noise-sensitive receptors identified were residential land uses located along Main Street to the east. These noise-sensitive receptors are located approximately 395 feet to 720 feet from the project site and 250 feet from the nearest proposed potholing location. Dudek's noise modeling demonstrates that, based on the distances and equipment types, the maximum calculated hourly equivalent sound level (L_{eq}) at the nearest receptor is approximately 64 A-weighted decibels (dBA) from on-site construction and 63.5 dBA L_{eq} from the off-site potholing. Therefore, the proposed project's construction noise levels would not exceed the City's 65 dBA L_{eq} noise limit for construction noise affecting single-family residential homes. This is the applicable limit for extended construction activities that occur during daytime hours, as established by Carson Municipal Code Section 5502(b). Construction activities would not occur on Sunday or legal holidays, or during nighttime hours. Therefore, construction would not result in a substantial noise increase in excess of applicable standards.

---

[13] Dudek. 2025. Griffith Energy Storage Project–Operational Noise Analysis and Construction Noise Study. October 5.
[14] City of Carson. 2021. City of Carson Municipal Code; Chapter 5: Noise Control Ordinance. Website: https://www.codepublishing.com/CA/Carson/html/Carson05/Carson050500.html. Accessed November 5, 2025.
[15] City of Carson. 2023. Chapter 9 in Carson General Plan 2040. Adopted April. Website: https://www.dropbox.com/s/q923ahszefj24h8/9%20Noise.pdf?dl=0. Accessed November5, 2025.

Operational Noise

Dudek also evaluated the potential for the proposed project's operational components (e.g., battery energy storage enclosures, inverters, and a substation transformer) to result in substantial noise increases in excess of City standards. Dudek's analysis, which modeled the three-dimensional (3D) outdoor sound propagation associated with these noise-generating features, demonstrates that the predicted aggregate sound emission from an hour-long period of all operating battery energy storage enclosures, inverters, and the collector substation transformer could be as high as 44.5 dBA L_{eq} at the project site boundary line. [16] Therefore, reasonable worst-case projected operational noise levels would not result in exceedances of the City's most stringent 45 dBA L_{eq} noise limit for stationary sources, which is established by the City's latest 2040 General Plan Noise Element. Likewise, operational noise levels would not exceed other less-stringent standards and regulations established by the 2040 General Plan Noise Element (e.g., 70 dBA Community Noise Equivalent Level [CNEL] "normally acceptable" standard for industrial uses, 60 dBA CNEL "normally acceptable" standard for low-density residential uses, etc.) and Carson Municipal Code (e.g., minimum 50 dB daytime and 45 dB nighttime standards). As a result, operations of the proposed project would not expose surrounding land uses and noise-sensitive residential receptors to substantial noise increases.

Criteria Section 15332(d): Air Quality

	Yes	No
Approval of the project would not result in any significant effects related to air quality.	☒	☐

The project site is located within South Coast Air Basin (SoCAB) and is under the jurisdiction of South Coast Air Quality Management District (SCAQMD). While the final determination of whether a project is significant is within the purview of the Lead Agency pursuant to Section 15064(b) of the CEQA Guidelines, the SCAQMD recommends that its quantitative air pollution thresholds be used to determine the significance of project emissions. The SCAQMD has developed regional and localized significance thresholds to evaluate construction and operational emissions within its jurisdiction to address the CEQA Guidelines. These significance thresholds were set at a level that protects public health with an adequate margin of safety and are considered conservative. Thus, they would overstate an individual project's contribution related to air quality and health risks.

Appendix G of the State CEQA Guidelines also provides considerations for determining the significance of a project's impacts, in the form of the following initial study checklist questions:

Impact AQ-1 Conflict with or obstruct implementation of the applicable air quality plan?

[16] Note that the operational equipment reference noise levels used for the project noise study are based upon project-specific information provided by the currently proposed battery vendor, Tesla Energy, via email on April 18, 2024, by Wanning Lyu, Tesla Energy Staff Engineer.

Impact AQ-2 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard?

Impact AQ-3 Expose sensitive receptors to substantial pollutant concentrations?

Impact AQ-4 Result in other emissions (such as those leading to odors or) adversely affecting a substantial number of people?

Pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and State law and standards are detailed in the SoCAB Air Quality Management Plan (AQMP). Air pollutants for which Ambient Air Quality Standards (AAQS) have been developed are known as criteria air pollutants, including ozone (O_3), carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_X), sulfur dioxide, coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead. VOC and NO_X are criteria pollutant precursors and go on to form secondary criteria pollutants, such as O_3, through chemical and photochemical reactions in the atmosphere. Air basins are classified as attainment/nonattainment areas for particular pollutants depending on whether they meet AAQS for that pollutant. Based on the SoCAB AQMP, the SoCAB is designated nonattainment for O_3, $PM_{2.5}$, PM_{10}, and lead (Los Angeles County only) under the California and National AAQS and nonattainment for NO_2 under the California AAQS. The SCAQMD established regional and localized thresholds of significance to represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable California and National AAQS.

According to the SCAQMD, the project is 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 or contribute to new violations or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

The proposed project would be constructed under the policies and requirements of the General Plan, which contains numerous measures addressing Air Quality within its Community Health and Environmental Justice Element (under Guiding Policies CHE-G-2, CHE-G-3, CHE-P-4 through to CHE-P-8), and its Open Space and Environmental Conservation Element (under Guiding Policies OSEC-G-17 through to OSEC-G-22). The programmatic EIR (certified April 10, 2023; State Clearinghouse No. 2001091120) developed for the 2040 General Plan Update did not identify project-specific significance determinations for Impact AQ-2 and Impact AQ-3 on an individual project basis, given the inability to project construction parameters, duration, and intensity for future projects accurately. Therefore, project-specific potential impacts are addressed in the analysis below, along with a summary of the findings contained within the certified General Plan EIR and any relevant mitigation measures from the General Plan EIR. As discussed below, all potential impacts would be fully addressed by General Plan policies and/or mitigation requirements that would be applicable to the proposed project.

Impact AQ-1: Consistency with Air Quality Plan

As described above, the proposed project would include the installation of lithium-ion batteries in racks within prefabricated outdoor enclosures; inverters; medium-voltage transformers; switchgear; a collector substation; and other associated equipment. The proposed installation would provide a charging service to the SCE transmission system. As such, the proposed facilities and land use would be consistent with the project site's Heavy Industrial land use designation and MH-D zoning designation and would not require a General Plan or land use amendment. Thus, development of the proposed project at the project site was accounted for by local and regional land use planning strategies, including the SCAQMD 2022 AQMP. Criteria pollutant and precursor emissions associated with the proposed project's influence on regional population growth have also therefore been accounted for by the AQMP.

As demonstrated below in Impact AQ-2, construction of the proposed project would be below the SCAQMD's localized and regional thresholds of significance. Therefore, General Plan EIR mitigation measures MM AQ-1 through MM AQ-5, and MM AQ-8 would not be applicable to the proposed project, and the proposed project would comply with General Plan EIR MM AQ-6 and MM AQ-7 through the submittal of this air quality analysis to the City, pending City approval. Because operation of the proposed project does not involve population or employment growth, determining consistency with the 2022 AQMP involves assessing whether applicable control measures contained in the 2022 AQMP are implemented and whether implementation of the proposed project would disrupt or hinder implementation of Air Quality Plan control measures. The proposed project would comply with all applicable Air Quality Plan (AQP) control measures through compliance with SCAQMD's Rule 403 which requires that projects implement the best available dust control measures during construction. Additionally, the proposed project would not include any special features that would disrupt or hinder implementation of the AQMP control measures during construction and operation. Furthermore, the proposed project would be consistent with the conclusions in the General Plan EIR relating to air quality.

Impact AQ-2: Project Cumulatively Considerable Net Increase of Any Criteria Pollutants

This impact evaluates whether an individual proposed project would cause construction-generated criteria air pollutant or precursor emissions to exceed SCAQMD's recommended mass emission thresholds.

As described above, the SCAQMD has developed regional thresholds of significance that address the potential for project construction or operation to result in potentially significant air quality impacts. The regional thresholds of significance provide lead agencies and project applicants with a conservative indication of whether a proposed project could result in potentially significant air quality impacts. If all the screening criteria are met by a proposed project, then a detailed air quality assessment is not

necessary to demonstrate that air quality impacts would be less than significant.[17] Regional thresholds of significance were last updated in March 2023.[18]

Table 1 summarizes the predicted emissions from the construction of the proposed BESS compared to the SCAQMD regional emission thresholds.

In accordance with General Plan Guiding Policy OSEC-P-35, the proposed project would be required to implement SCAQMD BMPs for fugitive dust control during construction activities in accordance with SCAQMD Rule 403. Compliance with these BMPs was assumed in the modeling conducted for the project analysis, as described below. The results demonstrate that, with implementation of these BMPs project emissions would not exceed regional or local significance thresholds.

Modeling of the construction activities using California Emissions Estimator Model (CalEEMod) incorporating BMPs as per Rule 403 predicts emissions levels of PM_{10} and $PM_{2.5}$ below SCAQMD thresholds. Since the proposed project does include increased local traffic trips from material delivery and construction workers, vehicle emissions were included with a worker trip length of 18.5 miles, a vendor trip length of 10.2 miles, and a haul trip length of 20 miles. The modeling was performed assuming construction would start in the summer of 2024; however, if construction is delayed and occurs later than assumed, emissions would likely decrease due to improvements in technology and compliance with more stringent regulatory requirements.

Table 1: Regional Construction Emissions by Construction Activity

Construction Activity	Regional Pollutant Emissions (pounds per day)					
	VOC	NO_X	CO	SO_X	PM_{10} (Total)	$PM_{2.5}$ (Total)
Demolition Plus Site Grading (2024)	3.63	32.77	37.05	0.05	5.11	2.87
Site Grading (2024)	1.89	16.92	18.71	0.02	3.94	2.14
Foundations Plus Construction (2024)	3.01	25.69	30.27	0.04	5.24	2.70
Construction (2024)	1.21	8.78	12.26	0.02	1.17	0.54
Construction (2025)	1.14	8.15	12.52	0.02	1.12	0.49
Construction Plus Paving (2025)	1.98	15.37	23.20	0.03	2.01	0.91
Maximum Daily Emissions	*3.63*	*32.77*	*37.05*	*0.05*	*5.24*	*2.87*
SCAQMD Significance Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

[17] South Coast Air Quality Management District (SCAQMD). 1993. CEQA Handbook. Available at SCAQMD, 21865 Copley Drive, Diamond Bar, CA 91765.

[18] South Coast Air Quality Management District (SCAQMD). 2023. Air Quality Analysis Handbook. Website: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook. Accessed December 11, 2023.

Construction Activity	Regional Pollutant Emissions (pounds per day)					
	VOC	NO_X	CO	SO_X	PM_{10} (Total)	$PM_{2.5}$ (Total)
Notes: CO = carbon monoxide NO_X = nitrogen oxides PM_{10} = particulate matter less than 10 microns in diameter $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter SCAQMD = South Coast Air Quality Management District SO_X = sulfur oxide Source: CalEEMod Output (Appendix C).						

Conservative modeling shows that emissions from the buildout of the proposed project would not exceed SCAQMD thresholds for construction-related criteria pollutant and precursors. Pollutant emissions were estimated using CalEEMod Version 2022.1. Detailed modeling assumptions and methodology are contained in Appendix C. As shown in Table 1, construction of the proposed project would not generate construction-related criteria pollutant or precursor emissions in excess of SCAQMD thresholds of significance.

In addition, the operation of the proposed project would be limited to the continuous operation of the battery energy storage facility and would not have any employees on-site and only produce infrequent maintenance trips. As such, operation of the proposed project would not generate significant ongoing vehicle trips that would lead to an exceedance of any regional or localized thresholds, Therefore, the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant, and this impact would be less than significant.

Impact AQ-3: Expose Sensitive Receptors to Substantial Pollutant Concentrations

Criteria Pollutant Exposure

The SCAQMD has developed localized significance thresholds (LSTs) in addition to the regional thresholds to serve as a screening method for identifying localized impacts of criteria pollutants. The LST methodology was developed to analyze localized impacts associated with project-level development. The LSTs depend on the location of the project, overall size of the project site, and distance of existing sensitive receptors from the project site. The SCAQMD has developed LSTs for projects that are 5 acres or less in size.

Modeling of construction emissions was conducted using CalEEMod Version 2022.1. Compliance with SCAQMD Rule 403, which requires best practices for fugitive dust control, is included in construction emission estimates. The SCAQMD's localized assessment methodology specifically limits emissions considered to those generated from on-site activities. The conceptual construction schedule includes overlapping construction activities and these are accounted for in the LST analysis. The proposed project

is located within Source Receptor Area (SRA) 4, South Coastal Los Angeles County,[19] and the nearest sensitive receptors are single-family residences located to the southeast (along Milmore Avenue) approximately 115 meters (375 feet) southeast of the project site. The total area of disturbance/construction at any one time would be approximately two acres. Therefore, for conservative analysis purposes, the selected LSTs are for a 2-acre site in SRA 4 with receptors within 100 meters. Further modeling assumptions and details can be found in Appendix C along with modeling outputs. Results of the LST analysis are shown in Table 2 below.

Table 2: Construction Localized Significance Analysis

Emission Source	Pollutants (Maximum Pounds per Day)			
	NO_X	CO	PM_{10} (Total)	$PM_{2.5}$ (Total)
Demolition Plus Site Grading (2024)	32.31	32.46	4.29	2.68
Site Grading (2024)	16.73	16.43	3.53	2.05
Foundations Plus Construction (2024)	32.61	23.85	3.89	2.37
Construction (2024)	8.44	8.44	0.38	0.35
Construction (2025)	7.86	8.35	0.34	0.31
Construction Plus Paving (2025)	13.99	16.56	0.61	0.56
Daily Maximum Emissions (On-Site)	*32.61*	*32.46*	*4.29*	*2.68*
SCAQMD Localized Significance Thresholds SRA 4, 2-acre site, within 100 meters	**87**	**1,611**	**37**	**13**
Emissions Exceed Thresholds?	**No**	**No**	**No**	**No**

Notes:
CO = carbon monoxide
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
SCAQMD = South Coast Air Quality Management District
SRA = Source Receptor Area
Source of Table: CalEEMod Output (Appendix C).

As shown above, the proposed project's construction emissions would not exceed any LSTs for localized criteria pollutants. Additionally, as noted under Impact AQ-2, the proposed project would not generate significant, consistent, ongoing operational vehicle trips that would lead to an exceedance of any regional mass emission thresholds.

[19] South Coast Air Quality Management District (SCAQMD). 2009. Final Localized Significance Threshold Methodology. October 21.

Toxic Air Contaminant Exposure

The primary toxic air contaminant (TAC) that would be generated by construction of the proposed project is diesel particulate matter (DPM), which would be released from the exhaust of diesel-powered construction vehicles and equipment. A number of factors demonstrate that health risks from the proposed project's construction-related DPM emissions would be below SCAQMD TAC thresholds and accordingly less than significant. First, health risks from carcinogenic air toxics such as DPM are quantified in terms of individual cancer risk, which is the likelihood that a person exposed to concentrations of TACs over a 30-year period will contract cancer based on standard risk-assessment methodology. However, the anticipated duration of construction activities associated with the proposed project is approximately one year. Given the temporary nature of construction, the scale of construction proposed, and demonstration that PM2.5 emissions are below SCAQMD LST thresholds, construction of the proposed project would have less than significant health risk impacts.

Impact AQ-4: Result in Other Emissions, Such as Odors

The proposed project would not be a source of other emissions, such as those leading to odors, during operations. During construction, a limited number of diesel engines would be operating on the project site for limited durations. Diesel exhaust and organic compounds (VOCs) from these diesel engines would be emitted during construction of the proposed project, which are objectionable to some; however, emissions would disperse rapidly from the project site, and diesel exhaust odors would be consistent with existing vehicle odors in the area.

As discussed under Impact AQ-1, the proposed project would be required to comply with SCAQMD Rule 403, which would require new construction to include BMPs to minimize dust. Furthermore, the proposed project would also be required to comply with SCAQMD Rule 402, which prohibits emissions of nuisance air contaminants or odorous compounds. Given compliance with both SCAQMD Rules, odor impacts from construction would be less than significant.

Criteria Section 15332(d): Water Quality

	Yes	No
Approval of the project would not result in any significant effects related to water quality.	☒	☐

The proposed project would result in the redevelopment of an approximately 3-acre project site with a BESS and associated infrastructure. Stormwater flows would be directed into proposed treatment areas along the northern and western boundaries of the project site (along South Broadway Street and West Griffith Street). Grading for the project will ensure that all stormwater flows are collected and treated in these areas prior to being discharged into the adjacent municipal stormwater system (Exhibit 7). Accordingly, stormwaters would not be released into the Domiguez Channel without proper treatment and permits. Thus, it would not be expected to result in a significant effect related to water quality.

Criteria Section 15332(e): Utilities and Public Services	Yes	No
The site can be adequately served by all required utilities and public services.	☒	☐

Fire Protection

The LACFD provides fire protection and emergency medical services to the project site, as well as urban search and rescue, air operations, and response to hazardous material release incidents. The project site is part of Division 1 of the LACFD, which includes five fire stations staffed by 40 members stationed in the City.[20] The nearest fire station is Fire Station 116, located at 18800 South Broadway, which is 1.3 miles east of the project site.

As identified in Chapter 1 Section 3100 of the Municipal Code, the City has adopted the Los Angeles County Title 32 Code, an amended California Fire Code (California Code of Regulations [CCR] Title 24, Part 9). The Fire Code contains regulations related to construction, maintenance and design of buildings and land uses. The proposed project would be required to adhere to all Fire Code requirements.

As mentioned previously under Section 15332(d) Traffic, although the proposed project would not result in road closures during construction, off-site improvements may require a temporary detour, which could impact emergency access in the area. However, the proposed project would comply with existing City requirements for minimizing traffic impacts when conducting off-site improvements, including those for the use of traffic control devices, speed zones, and signs and markings, per Municipal Code Sections 3230 through 3242. These improvements, which would be conducted under the oversight of the City Traffic Engineer per Municipal Code Section 3203, would ensure fire response times are not impacted in the event of temporary lane closures.

The design of the proposed BESS facility would comply with the NFPA 855 Code, which dictates specific fire access, protection, and suppression requirements to ensure the safe operation of the facility. Additionally, the BESS would be certified by UL and would include built-in failsafe and cooling systems designed to prevent thermal runway and the spread of fire. The LACFD would require site plan review and approval to ensure the proposed project meets NFPA 855 Code. Thus, the proposed project would not be expected to result in a substantial increase in demand for fire protection.

Police Protection

Police services in the City are provided by the Los Angeles County Sheriff's Department (LASD). The Carson Station of the LASD is headquartered at 21356 South Avalon, which is 2.3 miles southeast of the project site. The Carson Station provides a full range of police services with 184 sworn officers and 39 professional staff, responding to almost 37,600 calls for service in the 2020 calendar year.[21]

[20] City of Carson. 2023. Carson 2040 General Plan, Section 7.2, Public Safety Services.
[21] Ibid.

As previously mentioned, the proposed project would not result in road closures during construction, but may require a temporary detour for off-site improvements, which would impact emergency access in the area. However, compliance with City Municipal Code Sections 3203 and Sections 3230 through 3242 would ensure police response times are not impacted. Although the City does not have its own police force, changes in facilities or staffing are determined based on the contract between the City and LASD. The General Plan supports coordinating with the County to ensure that the City has adequate police service for a safe and healthy community. Additionally, the Public Safety Services Center is an extension of the City of Carson Public Safety Department and the Sheriff's Department Community Relations Office. It is designed to promote crime prevention awareness and increase service accessibility to the community, plus provide additional neighborhood and personal safety, crime prevention, and disaster preparedness services through the Community Emergency Response Team (CERT). Furthermore, the General Plan supports Crime Prevention Through Environmental Design (CPTED) to help prevent crime and improve the quality of life. CPTED elements include locating windows to overlook sidewalks and parking lots, increasing pedestrian and bicycle traffic, and selectively installing fencing, landscaping, or lighting to control access.[22]

A perimeter wall would be installed around the project site for safety and security purposes. Security cameras would be placed on-site and monitored 7 days a week and 24 hours per day. Thus, the proposed project would not be expected to result in a substantial increase in demand for police protection.

Water

The proposed project would connect to existing water lines in South Broadway, and the City has confirmed that the existing lines have adequate capacity to serve the proposed project. Because of the nature of the proposed project, minimal amounts of water would be required during construction and operation. Landscaping would be installed on the project site and would require minor water usage during the project operation. Thus, the proposed project would not be expected to result in a substantial increase in potable water consumption.

Wastewater

Because of the nature of the proposed project, no wastewater would be generated during construction and operation. Thus, the proposed project would not result in a substantial increase in wastewater generation.

Telecommunications

The proposed project would conduct off-site improvements, including the installation of gen-ties and fiber-optic lines through potholing at six locations within or directly adjacent to West Griffith Street. Each route for the fiber-optic paths would install their own 4-foot by 4-foot manhole. The proposed improvements would facilitate telecommunications improvements for the proposed project by

[22] City of Carson. 2023. Carson 2040 General Plan, Section 7.2, Public Safety Services.

identifying the presence of existing utility lines for connections within the existing grid. The installation of these telecommunications facilities is not expected to result in utility disruption.

Solid Waste

Because of the nature of the proposed project, minimal amounts of solid waste would be generated during construction and operation. The proposed project would produce a small amount of waste associated with maintenance activities, which would include broken and rusted metal, defective or malfunctioning electrical materials, empty containers, and other miscellaneous solid waste, including the typical refuse generated by workers. Most of these materials would be collected and delivered back to the manufacturer or to recyclers. Non-recyclable waste would be placed in covered dumpsters and removed on a regular basis by a certified waste-handling contractor for disposal at a landfill. Hazardous materials such as fuels and lubricants used during operation would be subject to the spill prevention control and countermeasures plan to be prepared for the project. Solid waste, if generated during operations, would be subject to the material disposal and solid waste management plan to be prepared for the proposed project.

At the end of the project's operational term, decommissioning would include removal of project components including batteries, battery enclosures, inverters, transformers, substation steel bus work and structures, and electrical wiring from the project site. All decommissioning activities would adhere to the requirements of the appropriate governing authorities and would be in accordance with all applicable federal, State, and City regulations. Collection and recycling programs would be implemented to minimize disposal in landfills. Equipment will be de-energized prior to removal, salvaged when possible, placed in appropriate shipping containers, and secured in a truck transport trailer for shipment off-site to be recycled or disposed of at a licensed disposal facility. Demolition debris and removed equipment may be cut and dismantled into pieces that can be safely transported. The area will be thoroughly cleaned, and all debris will be removed. Thus, the proposed project would not be expected to result in a substantial increase in solid waste generation.

EXCEPTIONS TO CATEGORICAL EXEMPTIONS CHECKLIST

In addition to investigating the applicability of CEQA Guidelines Section 15332 (Class 32), this CEQA document also assesses whether any of the exceptions to qualifying for the Class 32 categorical exemption for an Infill Project are present. The following analysis compares the criteria of CEQA Guidelines Section 15300.2 (Exceptions) to the proposed project.

Criterion 15300.2(a): Location	Yes	No
Classes 3, 4, 5, 6, and 11 are qualified by consideration of where the project is to be located.	☐	☒

This exception only applies to Class 3, 4, 5, 6, and 11 exemptions. As this project is being evaluated for exemption pursuant to Class 32, this exception does not apply.

Criterion 15300.2(b): Cumulative Impact

	Yes	No
Is there an exception to the Class 32 exemption for the project due to significant cumulative impacts of successive projects of the same type and in the same place, over time?	☐	☒

The geographic scope of potential cumulative environmental effects associated with the proposed project is limited to the project site, its surrounding area, or a broader area depending on the topic. CEQA Guidelines Section 15300.2 (b) asks whether the cumulative impact of successive projects of the same type, in the same place, and over time would be significant.

The site is substantially surrounded by other developed urban residential and commercial properties and is consistent with the development anticipated in the General Plan. Accordingly, successive development of projects in the same location is not reasonably anticipated. The project site is currently developed with an existing industrial/topsoil supplier operation. The proposed project would result in the redevelopment of the approximately 3-acre project site with a BESS and associated infrastructure.

The proposed project would be consistent with the land use density established by the General Plan, would comply with existing regulations and City policies, and would not have any project-specific significant impacts. Therefore, its contribution, if any, to cumulative impacts would be minimal. Furthermore, as shown in the analysis above for Class 32 conditions (a) through (e), the proposed project would not result in any significant impacts, and therefore would not have the potential to significantly contribute to cumulative impacts related to those environmental issues. Accordingly, the exception under CEQA Guidelines 15300.2(b) does not apply to the proposed project.

Criterion 15300.2(c): Significant Effect Due to an Unusual Circumstance

	Yes	No
Is there an exception to the Class 32 exemption for the project because there is a reasonable possibility that the project will have a significant effect on the environment due to unusual circumstances?	☐	☒

The project site is currently developed with an existing industrial/topsoil supplier operation. The lot contains a temporary sales office, soil bunkers, and asphalt. An existing fence encloses the northern and western perimeter of the project site. Construction activities would not involve any unusual or highly impactive activities (e.g., blasting) that may have the potential to have significant impacts on the environment. There are no known unusual circumstances related to site conditions or the type of project proposed, and the project site does not contain any unusual features that could result in a significant effect on the environment. Implementation of the proposed project would not result in unusual circumstances that could result in significant environmental effects. Furthermore, there is no evidence the proposed project would have a significant effect on the environment. Therefore, the exception under CEQA Guidelines Section 15300.2(c) does not apply to the proposed project.

Criterion 15300.2(d): Scenic Highway	Yes	No
Is there an exception to the Class 32 exemption for the project because project may result in damage to scenic resources including but not limited to, trees, historic buildings, rock outcroppings or similar resources, within a highway officially designated as a State Scenic Highway?	☐	☒

The closest State Highway to the project site is Interstate 110 (I-110), located approximately 0.4 mile west of the project site; and I-405, located approximately 0.4 mile south of the project site. Neither I-110 nor I-405 are designated as State Scenic Highways. Additionally, the project site does not contain scenic resources such as trees, historic buildings, or rock outcroppings. Thus, the proposed project would not have the potential to damage scenic resources within a highway designated as a State Scenic Highway. Accordingly, the exception under CEQA Guidelines Section 15300.2(d) does not apply to the proposed project.

Criterion 15300.2(e): Hazardous Waste Sites	Yes	No
Is there an exception to the Class 32 exemption for the project because the project is located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code?	☐	☒

The project site is not listed as a hazardous materials site by GeoTracker database, which contains sites compiled pursuant to Government Code 65962.5,[23] or on a list of hazardous sites as compiled by the California Department of Toxic Substances Control (DTSC).[24] Thus, the proposed project would not have the potential to be developed on a hazardous waste site. Accordingly, the exception under CEQA Guidelines 15300.2(e) does not apply to the proposed project.

Hazardous Materials

Construction activities would potentially require the routine transport, use, and disposal of small amounts of hazardous materials such as fuels, paints, or solvents, which are required during construction. Limited amounts of hazardous materials would be stored or used on the site during operations, including diesel fuel, gasoline, and motor oil for vehicles; mineral oil to be sealed within the transformers; and lead-acid-based and/or lithium-ion batteries. Operational transport, use, or disposal of hazardous substances would be limited as required for operation of the proposed project. The proposed project would be required to comply with all applicable local, State, and federal safety codes and regulations related to transporting, using, or disposing hazardous materials, including Resource Conservation and Recovery Act; Comprehensive Environmental Response, Compensation, and Liability Act; federal Clean Air Act; and the Occupational Safety and Health Administration (OSHA) that regulates worker safety hazards. Construction activities that involve hazardous materials would be governed by

[23] California State Water Resources Control Board (State Water Board). 2024. GeoTracker. Map: https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=18800+S+Broadway%2C+Gardena%2C+CA+90248. Accessed January 3, 2024.

[24] California Department of Toxic Substances Control (DTSC). 2024. Website: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=18800+S+Broadway%2C+Gardena%2C+CA+90248. Accessed January 3, 2024.

several agencies, including the California Environmental Protection Agency (Cal/EPA), California Department of Transportation (Caltrans), California Division of Occupational Safety and Health (Cal/OSHA), and the DTSC, as well as applicable local regulations. Compliance with the provisions of these agencies would ensure that the routine transport, use, or disposal of hazardous materials does not create a significant hazard to the public. Appropriate spill containment and cleanup kits would be maintained during operation of the project. To address potential impacts, a spill prevention control and countermeasures plan would be developed for site operations.

In the unlikely event that an issue was to arise (e.g., a change in battery temperature), the monitoring system would immediately notify contracted local operations and maintenance personnel residing in the project area, who could then expeditiously act on the issue. Additionally, several different fail-safes would be built into both hardware and software to ensure safe and efficient operations and, if necessary, to automatically trigger a temporary shutdown of the facility until the issue is diagnosed and resolved.

Hazardous Waste

Fuels and lubricants used in operations would be subject to the spill prevention control and countermeasures plan to be prepared for the proposed project. As discussed previously, hazardous materials such as fuels and lubricants used during operation would be subject to the spill prevention control and countermeasures plan to be prepared for the project. Solid waste, if generated during operations, would be subject to the material disposal and solid waste management plan to be prepared for the proposed project. Additionally, the proposed project would be required to comply with all applicable local, State, and federal safety codes and regulations related to transport, use, and disposal of hazardous materials as discussed above.

At the end of the project's operational term, decommissioning would include removal of project components including batteries, battery enclosures, inverters, transformers, substation steel bus work and structures, and electrical wiring from the project site. All decommissioning activities will adhere to the requirements of the appropriate governing authorities and would be in accordance with all applicable federal, State, and City regulations. Collection and recycling programs would be implemented to minimize disposal in landfills. Equipment will be de-energized prior to removal, salvaged when possible, placed in appropriate shipping containers, and secured in a truck transport trailer for shipment off-site to be recycled or disposed of at a licensed disposal facility. Demolition debris and removed equipment may be cut and dismantled into pieces that can be safely transported. The area will be thoroughly cleaned, and all debris will be removed.

Criterion 15300.2(f): Historical Resources	Yes	No
Is there an exception to the Class 32 exemption for the project because the project may cause a substantial adverse change in the significance of a historical resource?	☐	☒

Section 15300.2(f) states that a categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of a historic resource. For purposes of exception 15300.2(f), historical resources include both built environment and archaeological/cultural resources.

The following General Plan Policies would be implemented to avoid impacts resulting from inadvertent discoveries of resources.

OSEC-P-8 Development projects shall comply with State and federal law that upon discovery of Native American remains or archaeological artifacts during construction, all activity will cease until qualified professional archaeological examination and reburial in an appropriate manner is accomplished.

OSEC-P-9 For development and redevelopment proposals in archaeologically-or culturally-sensitive areas of Carson, require an assessment of the potential presence of archaeological and tribal cultural resources, including a site survey and a records search of the California Historical Resources Information System at the South Central Coastal Information Center (SCCIC). As warranted by the results of the assessment, require additional studies to identify and address project-specific impacts on archaeological and tribal cultural resources.

The City should incorporate the study recommendations as project conditions of approval to ensure that impacts on archaeological and/or tribal cultural resources are mitigated to the extent possible. Studies should be prepared according to National Register Bulletin 24: Guidelines for Local Surveys: A Basis for Preservation Planning and the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation.

OSEC-P-10 Using an annually updated Archaeological Resource Sensitivity Map, review proposed development projects to determine whether a site contains known prehistoric or historic cultural resources and/or to determine the potential for discovery of additional cultural resources.

As discussed below, the proposed project would not result in project-related impacts on cultural resources. The analysis includes the results of cultural resources record searches conducted at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton, the Native American Heritage Commission (NAHC) Sacred Lands File, and a pedestrian survey of the project site conducted by FirstCarbon Solutions (FCS). The current inventories of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California Historic Landmarks (CHL) list, the California Points of Historical Interest (CPHI) list, and the California Built Environment Resource Directory

(BERD) for Los Angeles County were also reviewed. The purpose of this assessment is to identify the presence or absence of potentially significant cultural resources within the project area, and if such resources would be impacted by the proposed development, to provide recommendations for mitigation and/or further study or research.

Southern Central Coastal Information Center

On October 2, 2023, a records search for the project site and a 0.5-mile radius surrounding it was conducted at the SCCIC at California State University Fullerton California. The purpose of this review was to assess any existing cultural resources survey reports, archaeological site records, and historic maps to evaluate whether previously documented pre-contact or historic archaeological sites, architectural resources, and cultural landscapes exist within or near the project site. The record search/literature review was also conducted to evaluate whether the project site contains any historic properties listed on or determined eligible for listing on the NRHP, CRHR, the CHL list, the CPHI list, and the BERD for Los Angeles County.

Results from the SCCIC indicate that no resources have been recorded within the project site or off-site improvement area and one pre-contact resource has been recorded within a 0.5-mile radius of the project (Table 3). In addition, 10 area-specific survey reports are on file with the SCCIC for the 0.5-mile search radius, two (LA-4512 and LA-12440) of which address the project site, indicating that it has been previously surveyed for cultural resources (Table 4). Complete record search results from the SCCIC can be found in Appendix D.

Table 3: Cultural Resources Located Within a 0.5-mile Radius of the Project Site

Resource No.	Resource Description	Date Recorded
P-19-000088	CA-LAN-000088: Racer's Misc Sites #1 and Racer's Site #14, AP01 (Unknown); AP15 (Habitation debris)	1939
Source: South Central Coastal Information Center (SCCIC). October 2, 2023.		

Table 4: Previous Investigations Within a 0.5-mile Radius of the Project Site

Report No.	Report Title/Project Focus	Author	Date
LA-00114	Evaluation of the Archaeological Resources and Potential Impact of Proposed New Freeway Construction on the Harbor Freeway (Route 11)	Clewlow, William C. Jr.	1974
LA-01016	Archaeological Resources Assessment of Replacement Bus Operations and Maintenance Facility for Division 18 in the City of Carson, California	Schroth, Adella	1981

Report No.	Report Title/Project Focus	Author	Date
LA-01445	An Archaeological Survey and Impact Assessment of 9.99 Acre Parcel at 190th Street and the Harbor Freeway, City of Los Angeles, California	Dillon, Brian D.	1984
LA-03583	The Los Angeles Basin and Vicinity: a Gazetteer and Compilation of Archaeological Site Information	Bucknam, Bonnie M.	1974
LA-04512	Cultural Resources Inventory of the City of Carson, California	Eggers, A.V.	1977
LA-05499	Negative Archaeological Survey Report to Cold Plane the Existing Pavement on Route 405 and Overlay with 30mm of Rubberized Asphalt Concrete at Selected On/Off-ramps From Vermont Ave. to Manchester Boulevard	Smith, Philomene C.	2000
LA-10567	Identification and Evaluation of Historic Properties–West Basin Municipal Water District Harbor–South Bay Water Recycling Project Proposed Project Laterals	Hogan, Michael, Bai "Tom" Tang, Josh Smallwood, Laura Hensley Shaker, and Casey Tibbitt	2005
LA-11150	West Basin Municipal Water District Harbor/South Bay Water Recycling Project	Maxwell, Pamela	2003
LA-11482	Camp Sites in Harbor District–F.H. Racer	Racer, F.H.	1939
LA-12440	**Cultural Resources Records Search and Site Visit Results for AT&T Mobility, LLC Candidate LA0573 (NOLA Substation) 125 Griffith Street, Carson, Los Angeles County, California**	**Bonner, Wayne**	**2013**

Notes:
Reports listed in **Bold** are within the project site.
Source: South Central Coastal Information Center (SCCIC) Records Search. October 2, 2023.

NAHC Sacred Lands File Search Results

On October 2, 2023, FCS contacted the NAHC to determine whether any sacred sites were located within the project site or its vicinity. A response was received on November 20, 2023, indicating that the Sacred Lands File search produced a negative result for Native American cultural resources in the project area. The NAHC included a list of 11 tribal representatives available for consultation. NAHC correspondence can be found in Appendix D.

Pedestrian Survey Results

On October 30, 2023, FCS Archaeologist Natalie Adame conducted a pedestrian survey for unrecorded cultural resources in the project site. The project site is located at 18800 South Broadway, in the City of Carson. The survey began in the northwest corner of the project site. However, due to the current overall logistic use of the proposed project, transects were not possible. All accessible areas of the project site were closely inspected for culturally modified soils or other indicators of potential historic or pre-contact resources. The current use of the project area affected the overall ground cover of the project area. The

northern section of the project area ground cover consisted mostly of various types of mulch, while the center/east section of the project consisted mostly of fill and the southern section consisted mostly of gravel/silt mix. Not all sections of ground were visible due to several sections of the project area not being accessible due to those sections being used for storage or heavy machinery.

Survey conditions were documented using digital photographs and field notes. During the survey, Ms. Adame examined all areas of the exposed ground surface for pre-contact artifacts (e.g., fire-affected rock, milling tools, flaked stone tools, toolmaking debris, ceramics), soil discoloration and depressions that might indicate the presence of a cultural midden, faunal and human osteological remains, and features indicative of the former presence of structures or buildings (e.g., postholes, standing exterior walls, foundations) or historic debris (e.g., glass, metal, ceramics).

No indications of historic or pre-contact archaeological resources were found over the course of the pedestrian survey. Pedestrian survey photos can be found in Appendix D.

Architectural and Historical Significance

The structures on-site were built between 2018 and 2020 and are too young to be considered potentially eligible as historic resources under CEQA for the purposes of listing on the NRHP, CRHR, or any local listings.

Summary and Recommendations

Based on the results of the records searches, archival research, and pedestrian survey and in accordance with General Plan Policy OSEC-P-9, FCS considers the proposed project to have a low potential to have an adverse effect on historic or pre-contact cultural resources. There are no recorded cultural resources in the project site and there is one recorded pre-contact resource within the 0.5-mile search radius, and NAHC Sacred Lands File results are yet to be received. The entire project site has been previously surveyed for cultural resources. The structures within the project site are younger than 45 years in age, and do not meet the criteria for the CRHR or NRHP.

In accordance with General Plan Policy OSEC-P-8, the proposed project would be required to comply with State and federal laws in the event of an inadvertent discovery of Native American remains or archaeological artifacts. As such, the proposed project as planned would not have an adverse impact on a historic or pre-contact resource, and the exception under CEQA Guidelines 15300.2(f) does not apply to the proposed project.

CONCLUSIONS

On the basis of the evidence provided above, the proposed project is eligible for a Class 32 categorical exemption, in accordance with Section 15332, Infill Development Projects, of the CEQA Guidelines, as well as the exceptions listed in 15300.2.

Separately, and independent from the Class 32 categorical exemption, the above analysis demonstrates that the proposed project does not have the potential to cause a significant effect on the environment and is therefore also exempt from further CEQA review pursuant to Section 15061(b)(3).

Based on City of Carson's threshold criteria, no additional substantial adverse impacts beyond those discussed above are anticipated. Because the proposed project meets the criteria for categorically exempt infill development projects, and because it would not have a significant effect on the environment, this analysis finds that a Notice of Exemption can be prepared for the proposed project. No further review is needed.

Please contact us if you have any questions or would like additional information.

Sincerely,

Jason Brandman, Director
FirstCarbon Solutions
250 Commerce Street, Suite 210
Irvine, CA 92602

Cecilia So, Project Manager
FirstCarbon Solutions
250 Commerce Street, Suite 210
Irvine, CA 92602

Enc: Attachment A: Biological Resources Supporting Documents
Attachment B: Noise Report
Attachment C: Air Quality Supporting Documents
Attachment D: Cultural Resources Supporting Documents

FCS
An ADEC Innovation

Attachment A:
Biological Resources Supporting Documents

Table 1: Potential for On-site Occurrence of Special-status Plant Species Recorded in the Project Vicinity

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS[1]	CDFW[2]	CNPS[3]			
Dicots						
Abronia maritima red sand-verbena	—	—	4.2	Perennial herb found in coastal dunes. Elevation: 0–100 m Bloom period: February–November	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species.	No
Aphanisma blitoides aphanisma	—	—	1B.2	Annual herb found in gravelly (sometimes) and sandy (sometimes) soils in coastal bluff scrub, coastal dunes, and coastal scrub communities. Elevation: 1–305 m Bloom period: February–June	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There are four recent and two historical records between five and ten miles from the project site.	No
Astragalus hornii var. *hornii* Horn's milk-vetch	—	—	1B.1	Annual herb found in alkaline soils and lake margins in meadows and seeps and playas. Elevation: 60–850 m Bloom period: May–October	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record between five and ten miles from the project site. This species is believed to be locally extirpated.	No
Astragalus pycnostachyus var. *lanosissimus* Ventura Marsh milk-vetch	FE	CE	1B.1	Perennial herb found in coastal dunes, coastal scrub, and marshes and swamps (edges, coastal salt, brackish). Elevation: 1–35 m Bloom period: August–October	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species.	No
Astragalus tener var. *titi* coastal dunes milk-vetch	FE	CE	1B.1	Annual herb found in mesic (often) and vernally mesic (often) soils in coastal bluff scrub (sandy), coastal dunes, and coastal prairie (mesic) communities. Elevation: 1–50 m Bloom period: March–May	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record between five and ten miles from the project site. This species may be locally extirpated.	No

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS[1]	CDFW[2]	CNPS[3]			
Atriplex coulteri Coulter's saltbush	—	—	1B.2	Perennial herb found in alkaline (sometimes) and clay (sometimes) soils in coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grassland communities. Elevation: 3–460 m Bloom period: March–October	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical and one unknown record within five miles of the project site and one recent between five and ten miles from the project site.	No
Atriplex pacifica south coast saltscale	—	—	1B.2	Annual herb found in coastal bluff scrub, coastal dunes, coastal scrub, and playas. Elevation: 0–140 m Bloom period: March–October	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There are four recent and one historical records between five and ten miles from the project site.	No
Atriplex parishii Parish's brittlescale	—	—	1B.1	Annual herb found in alkaline soils in chenopod shrub, playas, and vernal pools. Elevation: 25–1,900 m Bloom period: June–October	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one record within five miles of the project site and one record between five and ten miles from the project site.	No
Atriplex serenana var. *davidsonii* Davidson's saltscale	—	—	1B.2	Annual herb found in alkaline soils in coastal bluff scrub and coastal scrub communities. Elevation: 10–200 m Bloom period: April–October	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record between five and ten miles from the project site. This species may be locally extirpated.	No
Calystegia peirsonii Peirson's morning-glory	—	—	4.2	Perennial rhizomatous herb found in chaparral, chenopod scrub, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley and foothill grassland communities. Elevation: 30–1500 m Bloom period: April–June	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species.	No

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS[1]	CDFW[2]	CNPS[3]			
Camissoniopsis lewisii Lewis' evening-primrose	—	—	3	Annual herb found in clay (sometimes) and sandy (sometimes) soils in coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland communities. Elevation: 0–300 m Bloom period: March–May	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species.	No
Centromadia parryi ssp. *australis* southern tarplant	—	—	1B.1	Annual herb found in marshes and swamps (margins), valley and foothill grasslands (vernally mesic), and vernal pools communities. Elevation: 0–480 m Bloom period: May–November	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There are five recent records within five miles of the project site and one recent and six historical records between five and ten miles from the project site.	No
Centromadia pungens ssp. *laevis* smooth tarplant	—	—	1B.1	Annual herb found in alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, and valley and foothill grassland communities. Elevation: 0–640 m Bloom period: April–September	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record between five and ten miles from the project site. This species may be locally extirpated.	No
Chaenactis glabriuscula var. *orcuttiana* Orcutt's pincushion	—	—	1B.1	Annual herb found in coastal bluff scrub (sandy) and coastal dunes communities. Elevation: 0–100 m Bloom period: January–August	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one recent and two historical records between five and ten miles from the project site.	No
Chenopodium littoreum coastal goosefoot	—	—	1B.2	Annual herb found in coastal dunes. Elevation: 10–30 m Bloom period: April–August	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species.	No

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS[1]	CDFW[2]	CNPS[3]			
Chloropyron maritimum ssp. *maritimum* salt marsh bird's-beak	FE	CE	1B.2	Annual herb (hemiparasitic) found in coastal dunes and marshes and swamps (coastal salt). Elevation: 0–30 m Bloom period: May-October	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There are two historical records between five and ten miles from the project site. This species may be locally extirpated.	No
Chorizanthe parryi var. *fernandina* San Fernando Valley spineflower	—	CE	1B.1	Annual herb found in coastal scrub (sandy) and valley and foothill grassland communities. Elevation: 150–1220 m Bloom period: April–July	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species.	No
Cistanthe maritima seaside cistanthe	—	—	4.2	Annual herb found in sandy soils in coastal bluff scrub, coastal scrub, and valley and foothill grassland communities. Elevation: 5–300 m Bloom period: March–June	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species.	No
Convolvulus simulans small-flowered morning-glory	—	—	4.2	Annual herb found in clay soils, seeps, and serpentine soils in openings in chaparral, coastal scrub, and valley and foothill grassland communities. Elevation: 30–740 m Bloom period: March–July	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species.	No
Crossosoma californicum Catalina crossosoma	—	—	1B.2	Perennial deciduous shrub found in rocky soils in chaparral and coastal scrub communities. Elevation: 0–500 m Bloom period: February-May	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one recent and one historical record between five and ten miles from the project site.	No
Deinandra paniculata paniculate tarplant	—	—	4.2	Annual herb found in sandy (sometimes) and vernally mesic (usually) soils in coastal scrub, valley and foothill grassland, and vernal pools. Elevation: 25–940 m Bloom period: April–November	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species.	No

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS[1]	CDFW[2]	CNPS[3]			
Dichondra occidentalis western dichondra	—	—	4.2	Perennial rhizomatous herb found in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland communities. Elevation: 50–500 m Bloom period: March–July	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species.	No
Dithyrea maritima beach spectaclepod	—	CT	1B.1	Perennial rhizomatous herb found in coastal dunes and coastal scrub (sandy) communities. Elevation: 3–50 m Bloom period: March–May	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There are two historical records between five and ten miles from the project site. This species is believed to be locally extirpated.	No
Dudleya virens ssp. *insularis* island green dudleya	—	—	1B.2	Perennial herb found in rocky soils in coastal bluff scrub and coastal scrub communities. Elevation: 5–300 m Bloom period: April–June	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one recent and one historical record between five and ten miles from the project site.	No
Eryngium aristulatum var. *parishii* San Diego button-celery	FE	CE	1B.1	Annual/perennial herb found in mesic soils in coastal scrub, valley and foothill grassland, and vernal pools. Elevation: 20–620 m Bloom period: April–June	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record between five and ten miles from the project site. This species is believed to be locally extirpated.	No
Erysimum insulare island wallflower	—	—	1B.3	Perennial herb found in coastal bluff scrub and coastal dunes. Elevation: 0–300 m Bloom period: March–July	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species.	No
Erysimum suffrutescens suffrutescent wallflower	—	—	4.2	Perennial herb found in coastal bluff scrub, chaparral (maritime), coastal dunes, and coastal scrub communities. Elevation: 0–150 m Bloom period: January–July	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species.	No

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS[1]	CDFW[2]	CNPS[3]			
Horkelia cuneata var. *puberula* mesa horkelia	—	—	1B.1	Perennial herb found in chaparral, coastal scrub, and cismontane woodland communities. Elevation: 70–810 m Bloom period: February–July	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There are two historical records between five and ten miles from the project site. This species may be locally extirpated.	No
Isocoma menziesii var. *decumbens* decumbent goldenbush	—	—	1B.2	Perennial shrub found in chaparral and coastal scrub (often disturbed areas, sandy) communities. Elevation: 10–250 m Bloom period: April–November	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record between five and ten miles from the project site. This species is believed to be locally extirpated.	No
Juglans californica southern California black walnut	—	—	4.2	Perennial, deciduous tree found in chaparral, cismontane woodland, coastal scrub, and riparian woodland communities. Elevation: 50–900 m Bloom period: March–August	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species.	No
Lasthenia glabrata ssp. *coulteri* Coulter's goldfields	—	—	1B.1	Annual herb found in marshes and swamps, playas, and vernal pools. Elevation: 1–1,220 m Bloom period: February–June	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There are three historical records within five miles of the project site and two historical records between five and ten miles from the project site.	No
Lycium brevipes var. *hassei* Santa Catalina Island desert-thorn	—	—	3.1	Perennial deciduous shrub found in coastal bluff scrub and coastal scrub communities. Elevation: 65–300 m Bloom period: June	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There are two recent records between five and ten miles from the project site.	No

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS[1]	CDFW[2]	CNPS[3]			
Lycium californicum California box-thorn	—	—	4.2	Perennial herb found in coastal bluff scrub, chaparral (maritime), coastal dunes, and coastal scrub communities. Elevation: 0–150 m Bloom period: January–July	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species.	No
Nama stenocarpa mud nama	—	—	2B.2	Annual/perennial herb found in marshes and swamps (lake margins, riverbanks). Elevation: 5–500 m Bloom period: January–July	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record within five miles of the project site.	No
Navarretia fossalis spreading navarretia	FT	—	1B.1	Annual herb found in chenopod scrub, marshes and swamps (shallow freshwater), playas, and vernal pools. Elevation: 30–655 m Bloom period: April–June	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record between five and ten miles from the project site. This species is believed to be locally extirpated.	No
Navarretia prostrata prostrate vernal pool navarretia	—	—	1B.2	Annual herb found in mesic, alkaline soils in coastal scrub, meadows and seeps, valley and foothill grassland, and vernal pool communities. Elevation: 3–1,210 m Bloom period: April–July	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There are three historical records within five miles of the project site and three historical records between five and ten miles from the project site. This species may be locally extirpated.	No
Nemacaulis denudata var. *denudata* coast woolly-heads	—	—	1B.2	Annual herb found in coastal dunes. Elevation: 0–100 m Bloom period: April–September	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record between five and ten miles from the project site.	No

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS[1]	CDFW[2]	CNPS[3]			
Pentachaeta lyonii Lyon's pentachaeta	FE	CE	1B.1	Annual herb found in clay and rocky soils in chaparral (openings), coastal scrub, and valley and foothill grassland communities. Elevation: 30–690 m Bloom period: March–August	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one record within five miles of the project site and one historical record between five and ten miles from the project site.	No
Phacelia ramosissima var. *austrolitoralis* south coast branching phacelia	—	—	3.2	Perennial herb found in rocky (sometimes) and sandy soils in chaparral, coastal dunes, coastal scrub, and marshes and swamps (coastal salt). Elevation: 5–300 m Bloom period: March–August	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species.	No
Phacelia stellaris Brand's star phacelia	—	—	1B.1	Annual herb found in coastal dunes and coastal scrub communities. Elevation: 1–400 m Bloom period: March–June	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There are three historical records between five and ten miles from the project site.	No
Potentilla multijuga Ballona cinquefoil	—	—	1A	Perennial herb found in meadows and seeps (brackish) Elevation: 0–2 m Bloom period: June–August	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species.	No
Sidalcea neomexicana salt spring checkerbloom	—	—	2B.2	Perennial herb found in alkaline and mesic soils in chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas. Elevation: 15–1530 m Bloom period: March–June	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species.	No
Suaeda esteroa estuary seablite	—	—	1B.2	Perennial herb found in marshes and swamps (coastal salt). Elevation: 0–5 m Bloom period: July–October	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record between five and ten miles from the project site.	No

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS[1]	CDFW[2]	CNPS[3]			
Suaeda taxifolia woolly seablite	—	—	4.2	Perennial evergreen shrub found in coastal bluff scrub, coastal dunes, and marshes and swamps (coastal margins). Elevation: 0–50 m Bloom period: January–December	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species.	No
Symphyotrichum defoliatum San Bernardino aster	—	—	1B.2	Perennial, rhizomatous herb found in banks of ditches, streams, and springs in cismontane woodlands, coastal scrub, lower montane coniferous forests, meadows and seeps, marshes and swamps, and vernally mesic valley and foothill grassland communities. Elevation: 2–2,040 m Bloom period: July–November	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record within five miles of the project site and one historical record between five and ten miles from the project site. This species is believed to be locally extirpated.	No
Monocots						
Calochortus catalinae Catalina mariposa lily	—	—	4.2	Perennial, bulbiferous herb found in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland communities. Elevation: 15–700 m Bloom period: March–June	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species.	No
Hordeum intercedens vernal barley	—	—	3.2	Annual herb found in vernal pools and depressions and saline flats in coastal dunes, coastal scrub, and valley and foothill grassland communities. Elevation: 5–1,000 m Bloom period: March–June	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species.	No
Juncus acutus ssp. *leopoldii* southwestern spiny rush	—	—	4.2	Perennial rhizomatous herb found in coastal dunes (mesic), coastal scrub, meadows and seeps (alkaline seeps), and marshes and swamps (coastal salt). Elevation: 3–900 m Bloom period: May –June	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species.	No

Scientific Name Common Name	Status			Habitat Description[4]	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS[1]	CDFW[2]	CNPS[3]			
Orcuttia californica California Orcutt grass	FE	CE	1B.1	Annual herb found in vernal pools. Elevation: 15–660 m Bloom period: April-August	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record within five miles of the project site and two records between five and ten miles from the project site. This species is believed to be locally extirpated.	No

Code Designations

[1] Federal Status: 2023 USFWS Listing

- **FE** = Listed as endangered under Endangered Species Act.
- **FT** = Listed as threatened under the Endangered Species Act.
- **FC** = Candidate for listing (threatened or endangered) under the Endangered Species Act.
- **FD** = Delisted in accordance with the Endangered Species Act.
- **FPD** = Federally Proposed to be Delisted.
- **—** = Not federally listed

[2] State Status: 2023 CDFW Listing

- **SE** = Listed as endangered under California Endangered Species Act (CESA).
- **ST** = Listed as threatened under CESA.
- **SC** = Candidate for listing (threatened or endangered) under CESA.
- **CR** = Rare in California.
- **—** = Not State listed

[3] CNPS: 2023 CNPS Listing

- **Rank 1A** = Plants species that presumed extinct in California.
- **Rank 1B** = Plant species that are rare, threatened, or endangered in California and elsewhere.
- **Rank 2** = Plant species that are rare, threatened, or endangered in California, but more common elsewhere.
- **Rank 3** = Plants about which we need more information—A Review List
- **Rank 4** = Plants of limited distribution—A Watch List

Blooming period: Months in parentheses are uncommon.

[3] **Habitat description**: Habitat description adapted from CNDDB (CDFW 2023) and CNPS online inventory (CNPS 2023).

Table 2: Potential for On-site Occurrence of Special-status Wildlife Species Recorded in the Project Vicinity

Scientific Name Common Name	Status		Habitat Description[3]	Potential to Occur and Rationale[4]	Included in Impact Analysis
	USFWS[1]	CDFW[2]			
Insects/Invertebrates					
Bombus crotchii Crotch bumble bee	—	SC	Occurs in grassland and scrubland habitats. Nests in abandoned rodent burrows.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record within five miles of the project site and one recent and five historical records between five and ten miles from the project site.	No
Brennania belkini Belkin's dune tabanid fly	—	—	Sand obligate species known from coastal dunes near Playa del Rey and El Segundo south to Ensenada, Mexico.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There are one recent and three historical records between five and ten miles from the project site.	No
Cicindela hirticollis gravida sandy beach tiger beetle	—	—	Occurs in coastal dunes adjacent to non-brackish water along the coast of California from San Francisco Bay to northern Mexico.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There are three historical records between five and ten miles from the project site. This species is believed to be locally extirpated.	No
Cicindela latesignata western beach tiger beetle	—	—	Occurs in mudflats and beaches of coastal estuaries from San Diego County to Los Angeles County. Typically inhabit wet or dry sandy beaches and mud, sand, or salt flats.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There are two historical records between five and ten miles from the project site. This species is believed to be locally extirpated.	No
Cicindela senilis frosti senile tiger beetle	—	—	Occurs along marine shoreline, from Central California coast south to salt marshes of San Diego. Also found at Lake Elsinore. Inhabits dark-colored mud in the lower zone and dried salt pans in the upper zone.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one record between five and ten miles from the project site. This species is believed to be locally extirpated.	No

Scientific Name Common Name	Status		Habitat Description[3]	Potential to Occur and Rationale[4]	Included in Impact Analysis
	USFWS[1]	CDFW[2]			
Coelus globosus globose dune beetle	—	—	Inhabits foredunes and sand hummocks; it burrows beneath the sand surface and is most common beneath dune vegetation.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record between five and ten miles from the project site.	No
Danaus plexippus monarch butterfly	FC	—	Occurs in temperate climates, such as eastern and western North America and undergoes long-distance migration. Lays eggs on obligate milkweed host plant (primarily *Asclepias* spp.)	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one recent and one historical record within five miles of the project site and four recent and three historical records between five and ten miles from the project site.	No
Eugnosta busckana Busck's gallmoth	—	—	Occurs in a variety of grassland, dunes, and scrub habitats.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record between five and ten miles from the project site.	No
Euphilotes battoides allyni El Segundo blue butterfly	FE	—	Restricted to remnant coastal dune habitat in Southern California. Host plant is *Eriogonum parvifolium*.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There are three recent and one historical records between five and ten miles from the project site.	No
Glaucopsyche lygdamus palosverdesensi Palos Verdes blue butterfly	FE	—	Restricted to the cool, fog-shrouded, seaward side of Palos Verdes Hills, Los Angeles County. Host plant is *Astragalus trichopodus* var. *lonchus* (locoweed).	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record within five miles of the project site and eleven historical records between five and ten miles from the project site.	No
Glyptostoma gabrielense San Gabriel chestnut	—	—	Occurs in humid spots in semiarid areas in rocky hills and mountains at relatively low elevations. Range restricted to the San Gabriel Mountains and foothills near Los Angeles.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record within five miles of the project site and one historical record between five and ten miles from the project site. This species may be locally extirpated.	No

Scientific Name Common Name	Status		Habitat Description[3]	Potential to Occur and Rationale[4]	Included in Impact Analysis
	USFWS[1]	CDFW[2]			
Gonidea angulata western ridged mussel	—	—	Occurs primarily in creeks and rivers and less often lakes. Historically occurred throughout most of state, now extirpated from Central and Southern California.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one record within five miles of the project site. This species is believed to be locally extirpated.	No
Habroscelimorpha gabbii western tidal-flat tiger beetle	—	—	Occurs in estuaries and mudflats along the coast of Southern California. Generally found on dark-colored mud in the lower zone; occasionally found on dry saline flats of estuaries.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one record within five miles of the project site, and two historical records between five and ten miles from the project site.	No
Onychobaris langei Lange's El Segundo Dune weevil	—	—	Occurs in coastal dunes, including the El Segundo Dunes.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record between five and ten miles from the project site.	No
Pelochrista hennei Henne's eucosman moth	—	—	Occurs in coastal sand dunes with host *Phacelia ramosissima*.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record between five and ten miles from the project site.	No
Rhaphiomidas terminatus terminatus El Segundo flower-loving fly	—	—	Historically restricted to dunes and associated habitats. Presumed extinct but recently discovered on Malaga Dunes, Los Angeles County.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record between five and ten miles from the project site.	No
Trigonoscuta dorothea dorothea Dorothy's El Segundo Dune weevil	—	—	Occurs in coastal sand dunes in Los Angeles County.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record between five and ten miles from the project site.	No
Tryonia imitator mimic tryonia (=California brackishwater snail)	—	—	Occurs in coastal lagoons, estuaries and salt marshes, from Sonoma County south to San Diego County. Found only in permanently submerged areas in a variety of sediment types; able to withstand a wide range of salinities.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one recent and one historical record between five and ten miles from the project site.	No

Scientific Name Common Name	Status		Habitat Description[3]	Potential to Occur and Rationale[4]	Included in Impact Analysis
	USFWS[1]	CDFW[2]			
Crustaceans					
Streptocephalus woottoni Riverside fairy shrimp	FE	—	Vernal pools on the Santa Rosa Plateau on Murrieta stony clay loams, Las Posas series, Wyman clay loam, and Willows soils.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one recent record within five miles of the project site and one historical record between five and ten miles from the project site.	No
Fish					
Siphateles bicolor mohavensis Mohave tui chub	FE	SE FP	Formerly found in deep pools and slough-like areas of the Mojave River, this species now only occurs in highly modified refuge sites in San Bernardino County.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record between five and ten miles from the project site. This species is believed to be locally extirpated.	No
Amphibians					
Spea hammondii western spadefoot	—	SSC	Occurs in open areas with sandy or gravelly soils in mixed woodlands, grasslands, coastal sage and Riversidean alluvial fan sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Breeds in ephemeral rain pools that do not contain bullfrogs, fish, or crayfish.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There are two historical records within five miles of the project site and four historical records between five and ten miles from the project site. This species may be locally extirpated.	No
Reptiles					
Anniella stebbinsi southern California legless lizard	—	SSC	Occurs in moist, loose soil in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans. Tolerant of disturbances.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There are three recent and two historical records within five miles of the project site and five recent and eight historical records between five and ten miles from the project site.	No
Phrynosoma blainvillii coast horned lizard	—	SSC	Occurs in open areas with sandy soil and low vegetation in grasslands, coniferous forests, woodlands, and chaparral.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There are three historical records within five	No

Scientific Name Common Name	Status USFWS[1]	 CDFW[2]	Habitat Description[3]	Potential to Occur and Rationale[4]	Included in Impact Analysis
				miles of the project site and three historical records between five and ten miles from the project site.	
Birds					
Agelaius tricolor tricolored blackbird	MBTA	ST SSC FGC	Occurs and nests in large freshwater marshes with dense stands of hydrophytic vegetation (cattails, bulrushes, etc.). Short-distance migrant.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There are three historical records within five miles of the project site.	No
Athene cunicularia burrowing owl	MBTA	SSC FGC	Occurs and nests in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. A subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel. Short-distance migrant.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record between five and ten miles from the project site.	No
Charadrius nivosus nivosus western snowy Plover	FT MBTA	SSC FGC	Sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species.	No
Coccyzus americanus occidentalis western yellow-billed cuckoo	FT MBTA	SE FGC	Occurs and nests in riparian forest along the broad lower flood-bottoms of larger river systems. Found in riparian jungles of willow, often mixed with cottonwoods; understory consists of blackberry, nettles, and wild grape. Long-distance migrant.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There are four historical records within five miles of the project site and one historical record between five and ten miles from the project site. This species is believed to be locally extirpated.	No
Coturnicops noveboracensis yellow rail	MBTA	SSC FGC	Shallow marshes, and wet meadows; in winter, drier fresh-water and brackish marshes, as well as dense, deep grass, and rice fields.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record between five and ten miles from the project site.	No
Empidonax traillii extimus southwestern willow flycatcher	FE MBTA	SE FGC	Occurs and nests in dense riparian woodlands. Long-distance migrant.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record within five	No

Scientific Name Common Name	Status USFWS[1]	 CDFW[2]	Habitat Description[3]	Potential to Occur and Rationale[4]	Included in Impact Analysis
				miles of the project site and one historical record between five and ten miles from the project site.	
Polioptila californica californica coastal California gnatcatcher	FT MBTA	SSC FGC	Occurs and nests in arid washes, on mesas, and slopes in coastal sage scrub below 2,500 ft. Year-round resident in California.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There are eight recent and four historical records between five and ten miles from the project site.	No
Riparia riparia bank swallow	MBTA	ST FGC	Nests in riparian scrub and riparian woodland. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There are two historical records between five and ten miles from the project site.	No
Sternula antillarum browni California least tern	FE MBTA	SE FP	Occurs and nests on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, land fills, or paved areas.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record within five miles of the project site and two historical records between five and ten miles from the project site.	No
Vireo bellii pusillus least Bell's vireo	FE MBTA	SE FGC	Occurs and nests in low riparian habitat in the vicinity of water or in dry river bottoms. Long-distance migrant.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record between five and ten miles from the project site. This species may be locally extirpated.	No
Mammals					
Eumops perotis californicus western mastiff bat	—	SSC	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There are two historical records within five miles of the project site.	No
Lasionycteris noctivagans silver-haired bat	—	—	Occurs in coastal and montane coniferous forests, valley foothill woodlands, pinyon-juniper woodlands, and valley foothill and montane	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this	No

Scientific Name Common Name	Status		Habitat Description[3]	Potential to Occur and Rationale[4]	Included in Impact Analysis
	USFWS[1]	CDFW[2]			
			riparian habitats. Roosts in hollow trees, snags, buildings, rock crevices, caves, and under bark.	species. There are two historical records between five and ten miles from the project site.	
Microtus californicus stephensi south coast marsh vole	—	SSC	Occurs in tidal marshes in Los Angeles, Orange and southern Ventura counties.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record between five and ten miles from the project site.	No
Neotoma lepida intermedia San Diego desert woodrat	—	SSC	Occurs in rock outcrops, rocky cliffs, and slopes in coastal sage and Riversidean alluvial fan sage scrub with moderate to dense canopies.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record between five and ten miles from the project site.	No
Nyctinomops femorosaccus pocketed free-tailed bat	—	SSC	Occurs in pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian habitats. Roosts in caves, crevices, mines, tunnels, and man-made structures.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record within five miles of the project site and one historical record between five and ten miles from the project site.	No
Nyctinomops macrotis big free-tailed bat	—	SSC	Occurs in rocky habitats in arid landscapes and has been found in a variety of plant associations, including desert shrub, woodlands, and evergreen forests. Roosts by day in crevices on cliff faces. These bats forage mostly for large moths, but may eat other insects as well.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record between five and ten miles from the project site.	No
Perognathus longimembris pacificus Pacific pocket mouse	FE	SSC	Occurs in coastal strand, coastal dunes, and coastal sage scrub growing on marine terraces. Prefers soils of fine alluvial sands near the ocean.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record within five miles of the project site and two historical records between five and ten miles from the project site. This species is believed to be locally extirpated.	No
Taxidea taxus American badger	—	SSC	Occurs in drier open stages of most shrub, forest, and herbaceous habitats with friable soils. Requires sufficient food sources (rodents), friable soils, and open, uncultivated ground. Digs large burrows.	**None:** The project site does not contain suitable habitat(s) that would support occurrence of this species. There is one record between five and ten miles from the project site.	No

Scientific Name Common Name	Status		Habitat Description[3]	Potential to Occur and Rationale[4]	Included in Impact Analysis
	USFWS[1]	CDFW[2]			
Code Designations					
1 Federal Status: 2023 USFWS Listing			**2 State Status: 2023 CDFW Listing**		
ESU = Evolutionary Significant Unit is a distinctive population. **FE** = Listed as endangered under the Endangered Species Act. **FT** = Listed as threatened under the Endangered Species Act. **FC** = Candidate for listing (threatened or endangered) under the Endangered Species Act. **FD** = Delisted in accordance with the Endangered Species Act. **FPD** = Federally Proposed to be Delisted. **MBTA** = protected by the Migratory Bird Treaty Act **—** = Not federally listed			**SE** = Listed as endangered under the CESA. **ST** = Listed as threatened under the CESA. **SC** = Candidate for listing (threatened or endangered) under CESA. **SSC** = Species of Special Concern as identified by the CDFW. **FP** = Listed as Fully Protected under FGC. **FGC** = protected by FGC 3503, 3503.5, and/or 3513 **WL** = CDFW Watch List **—** = Not State listed		

Notes:
[3] **Habitat Description**: Habitat description adapted from CNDDB or other specified source
[4] **Potential to Occur and Rationale**: Location of recorded species occurrences determined by geospatial information from BIOS 6 or other specified source.

Sources:

California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: https://map.dfg.ca.gov/bios/. Accessed September 26, 2023.

California Department of Fish and Wildlife (CDFW). 2023. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed September 26, 2023.

U.S. Fish and Wildlife Service (USFWS). 2023. Information for Planning and Consultation. Website: https://ecos.fws.gov/ipac/. Accessed September 26, 2023.

SciName	ComName	TaxonGroup	ElmCode	FedList	CalList	GRank	SRank	RPlantRank	OthrStatus	OccNumber	EOndx	Mapndx	ElmDate	SiteDate	Sensitive	OccRank	Presence	Accuracy	ccuracyOrde	Trend	OccType	County	Quad	Elevation	Latitude	Longitude
Atriplex serenana var. davidsonii	Davidson's saltscale	Dicots	PDCHE041T1	None	None	G5T1	S1	1B.2	SB_CalBG/RSA	3	253	34592	19060602	19060602	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	San Pedro (3311863) | To		33.73644	-118.28092
Phacelia stellaris	Brand's star phacelia	Dicots	PDHYD0C510	None	None	G1	S1	1B.1	SB_CalBG/RSA	4	757	1700	18970320	18970320	N	U-Unknown	Presumed E:	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Torrance (33	50	33.82921	-118.39056
Cicindela hirticollis gravida	sandy beach tiger beetle	Insects	IICOL02101	None	None	G5T2	S2			11	758	36918	XXXXXXXX	1979XXXX	N	X-None	Extirpated	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Redondo Be	12	33.8292	-118.39055
Atriplex pacifica	south coast saltscale	Dicots	PDCHE041C0	None	None	G4	S2	1B.2	SB_CalBG/RSA	8	759	1700	19031015	19031015	N	U-Unknown	Presumed E:	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Torrance (33	12	33.82921	-118.39056
Nemacaulis denudata var. denudata	coast woolly-heads	Dicots	PDPGN0G011	None	None	G3G4T2	S2	1B.2	SB_CalBG/RSA	19	1006	86418	19510818	19510818	N	U-Unknown	Presumed E:	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Seal Beach (3311861) | L		33.74819	-118.11288
Atriplex parishii	Parish's brittlescale	Dicots	PDCHE041D0	None	None	G1G2	S1	1B.1	SB_CRES-San	9	1401	1700	XXXXXXXX	XXXXXXXX	N	U-Unknown	Presumed E:	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Torrance (33	15	33.82921	-118.39056
Phacelia stellaris	Brand's star phacelia	Dicots	PDHYD0C510	None	None	G1	S1	1B.1	SB_CalBG/RSA	3	1726	90351	19230319	19230319	N	X-None	Possibly Exti	Circular feat	50	Unknown	Natural/Nat	Los Angeles	South Gate (	90	33.91037	-118.14066
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	Insects	IILEPP2012	Candidate	None	G4T1T2Q	S2		IUCN_EN-End	298	2682	33187	20220102	20220102	N	U-Unknown	Presumed E:	Specific bou	20	Unknown	Natural/Nat	Los Angeles	Torrance (33	100	33.82964	-118.37414
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	Insects	IILEPP2012	Candidate	None	G4T1T2Q	S2		IUCN_EN-End	297	2683	33186	20001207	202201XX	N	B-Good	Presumed E:	Non-specific	30	Decreasing	Natural/Nat	Los Angeles	Redondo Be	300	33.80337	-118.38474
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	Insects	IILEPP2012	Candidate	None	G4T1T2Q	S2		IUCN_EN-End	296	2746	33185	202201XX	202201XX	N	B-Good	Presumed E:	Specific bou	10	Unknown	Natural/Nat	Los Angeles	Venice (331	15	33.96355	-118.44085
Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	Insects	IILEPG402A	Endangered	None	G5T1	S1			18	5484	25610	20010427	20010427	Y	A-Excellent	Presumed E:	Specific bou	20	Fluctuating	Natural/Nat	Los Angeles	Torrance (33	100		
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	Dicots	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2	BLM_S-Sensit	13	6167	26479	19010525	1980XXXX	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	San Pedro (3	5	33.75713	-118.23704
Polioptila californica californica	coastal California gnatcatcher	Birds	ABPBJ08081	Threatened	None	G4G5T3Q	S2		CDFW_SSC-Sp	450	6520	24341	20200128	20200128	N	B-Good	Presumed E:	Non-specific	30	Stable	Natural/Nat	Los Angeles	Torrance (33	150	33.77287	-118.30204
Agelaius tricolor	tricolored blackbird	Birds	ABPBXB0020	None	Threatened	G1G2	S2		BLM_S-Sensit	275	6521	24342	198XXXXX	198XXXXX	N	U-Unknown	Presumed E:	Circular feat	60	Unknown	Natural/Nat	Los Angeles	Torrance (33	20	33.78603	-118.28988
Centromadia parryi ssp. australis	southern tarplant	Dicots	PDAST4R0P4	None	None	G3T2	S2	1B.1	SB_CalBG/RSA	29	7744	35369	19310731	19310731	N	U-Unknown	Presumed E:	Circular feat	60	Unknown	Natural/Nat	Los Angeles	South Gate (	60	33.98902	-118.13773
Atriplex parishii	Parish's brittlescale	Dicots	PDCHE041D0	None	None	G1G2	S1	1B.1	SB_CRES-San	5	7795	23782	XXXXXXXX	XXXXXXXX	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Long Beach	75	33.83821	-118.17658
Charadrius nivosus nivosus	western snowy plover	Birds	ABNNB03031	Threatened	None	G3T3	S3		CDFW_SSC-Sp	36	7920	1488	1914XXXX	1914XXXX	N	X-None	Extirpated	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	10	33.95266	-118.44858
Phacelia stellaris	Brand's star phacelia	Dicots	PDHYD0C510	None	None	G1	S1	1B.1	SB_CalBG/RSA	2	8663	83468	1909XXXX	1909XXXX	N	U-Unknown	Presumed E:	Circular feat	70	Unknown	Natural/Nat	Los Angeles	Venice (3311884)		33.9559	-118.44603
Southern Coastal Bluff Scrub	Southern Coastal Bluff Scrub	Scrub	CTT31200CA	None	None	G1	S1.1			23	9609	17053	19900901	19900901	N	U-Unknown	Presumed E:	Non-specific	30	Unknown	Natural/Nat	Los Angeles	San Pedro (3	40	33.75515	-118.41529
Aphanisma blitoides	aphanisma	Dicots	PDCHE02010	None	None	G3G4	S2	1B.2	SB_CRES-San	5	11724	17565	193004XX	193004XX	N	U-Unknown	Presumed E:	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Redondo Be	1000	33.77685	-118.39592
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	Insects	IILEPP2012	Candidate	None	G4T1T2Q	S2		IUCN_EN-End	218	12042	17190	19981108	202111XX	N	C-Fair	Presumed E:	Specific bou	10	Unknown	Natural/Nat	Los Angeles	Long Beach	38	33.83102	-118.13229
Atriplex pacifica	south coast saltscale	Dicots	PDCHE041C0	None	None	G4	S2	1B.2	SB_CalBG/RSA	3	12350	34590	2006XXXX	2006XXXX	N	C-Fair	Presumed E:	Specific bou	20	Unknown	Natural/Nat	Los Angeles	San Pedro (3	230	33.72441	-118.33673
Cicindela hirticollis gravida	sandy beach tiger beetle	Insects	IICOL02101	None	None	G5T2	S2			13	12878	2010	XXXXXXXX	1979XXXX	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	San Pedro (3	16	33.74851	-118.25243
Aphanisma blitoides	aphanisma	Dicots	PDCHE02010	None	None	G3G4	S2	1B.2	SB_CRES-San	1	12882	37104	20150109	20150109	N	B-Good	Presumed E:	Specific bou	20	Unknown	Natural/Nat	Los Angeles	San Pedro (3	100	33.72737	-118.348
Sternula antillarum browni	California least tern	Birds	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2		CDFW_FP-Ful	14	13026	1492	1981XXXX	1987XXXX	N	X-None	Possibly Exti	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	3	33.96411	-118.44601
Onychobaris langei	Lange's El Segundo Dune weevil	Insects	IICOL4W010	None	None	G1	S1			1	13171	1535	19380928	19380928	N	U-Unknown	Presumed E:	Specific bou	20	Unknown	Natural/Nat	Los Angeles	Venice (331	100	33.93791	-118.43366
Brennania belkini	Belkin's dune tabanid fly	Insects	IIDIP17010	None	None	G1G2	S1S2		IUCN_VU-Vuln	2	14453	B8182	202206XX	202206XX	N	C-Fair	Presumed E:	Non-specific	30	Fluctuating	Natural/Nat	Los Angeles	Venice (331	137	33.94224	-118.43706
Trigonoscuta dorothea dorothea	Dorothy's El Segundo Dune weevil	Insects	IICOL51021	None	None	G1T1	S1			2	14454	59331	19540312	19540312	N	U-Unknown	Presumed E:	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	120	33.94612	-118.44464
Pelochrista hennei	Henne's eucosman moth	Insects	IILEM0R390	None	None	G1	S1			1	14461	1535	1984XXXX	1984XXXX	N	U-Unknown	Presumed E:	Specific bou	20	Unknown	Natural/Nat	Los Angeles	Venice (331	130	33.93791	-118.43366
Panoquina errans	wandering (=saltmarsh) skipper	Insects	IILEP84030	None	None	G4G5	S2		IUCN_NT-Nea	1	14465	85090	201007XX	201007XX	N	U-Unknown	Presumed E:	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	5	33.96964	-118.43652
Euphilotes allyni	El Segundo blue butterfly	Insects	IILEPG201B	Endangered	None	G5T1	S1			1	14469	1535	20050813	20050813	N	C-Fair	Presumed E:	Specific bou	20	Stable	Natural/Nat	Los Angeles	Venice (331	140	33.93791	-118.43366
Potentilla multijuga	Ballona cinquefoil	Dicots	PDROS1B120	None	None	GX	SX	1A		1	14622	23785	189008XX	189008XX	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Venice (331	5	33.97291	-118.44837

SciName	ComName	TaxonGroup	ElmCode	FedList	CalList	GRank	SRank	RPlantRank	OthrStatus	OccNumber	EOndx	Mapndx	ElmDate	SiteDate	Sensitive	OccRank	Presence	Accuracy	ccuracyOrde	Trend	OccType	County	Quad	Elevation	Latitude	Longitude
Passerculus sandwichensis beldingi	Belding's savannah sparrow	Birds	ABPBX99015	None	Endangered	G5T3	S3		USFWS_BCC-E	37	14647	1504	1981XXXX	1981XXXX	N	X-None	Extirpated	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	15	33.97373	-118.43992
Passerculus sandwichensis beldingi	Belding's savannah sparrow	Birds	ABPBX99015	None	Endangered	G5T3	S3		USFWS_BCC-E	7	14649	1492	20010509	20010509	N	C-Fair	Presumed E	Non-specific	30	Decreasing	Natural/Nat	Los Angeles	Venice (331	5	33.96411	-118.44601
Sternula antillarum browni	California least tern	Birds	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2		CDFW_FP-Ful	78	14719	1942	19770803	19770803	N	U-Unknown	Presumed E	Specific bou	20	Unknown	Natural/Nat	Los Angeles	Torrance (33	30	33.78585	-118.29271
Southern Coastal Salt Marsh	Southern Coastal Salt Marsh	Marsh	CTT52120CA	None	None	G2	S2.1			1	16122	1492	197906XX	197906XX	N	U-Unknown	Presumed E	Non-specific	30	Decreasing	Natural/Nat	Los Angeles	Venice (331	80	33.96411	-118.44601
Pentachaeta lyonii	Lyon's pentachaeta	Dicots	PDAST6X060	Endangered	Endangered	G1	S1	1B.1	SB_CalBG/RSA	1	16675	1943	19100321	1997XXXX	N	X-None	Possibly Exti	Circular feat	50	Unknown	Natural/Nat	Los Angeles	San Pedro (3	100	33.70639	-118.29341
Laterallus jamaicensis coturniculus	California black rail	Birds	ABNME03041	None	Threatened	G3T1	S2		BLM_S-Sensit	68	17538	23785	19280225	19280225	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Venice (331	5	33.97291	-118.44837
Cicindela hirticollis gravida	sandy beach tiger beetle	Insects	IICOL02101	None	None	G5T2	S2			16	17539	1488	19070805	19070805	N	X-None	Extirpated	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	10	33.95266	-118.44858
Astragalus pycnostachyus var. lanosissimus	Ventura Marsh milk-vetch	Dicots	PDFAB0F7B1	Endangered	Endangered	G2T1	S1	1B.1	SB_CalBG/RSA	4	19295	1453	19510719	1981XXXX	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Venice (331	5	33.98612	-118.45702
Dithyrea maritima	beach spectaclepod	Dicots	PDBRA10020	None	Threatened	G1	S1	1B.1	SB_SBBG-Sant	2	20545	1655	19020525	19980701	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Redondo Be	20	33.86695	-118.40396
Dithyrea maritima	beach spectaclepod	Dicots	PDBRA10020	None	Threatened	G1	S1	1B.1	SB_SBBG-Sant	3	20552	1557	19340509	19980701	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Venice (331	10	33.91505	-118.4281
Charadrius nivosus nivosus	western snowy plover	Birds	ABNNB03031	Threatened	None	G3T3	S3		CDFW_SSC-Sp	37	21223	36797	1904XXXX	1904XXXX	N	X-None	Extirpated	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	10	33.96645	-118.45814
Polioptila californica californica	coastal California gnatcatcher	Birds	ABPBJ08081	Threatened	None	G4G5T3Q	S2		CDFW_SSC-Sp	34	21796	1865	20120514	20120514	N	B-Good	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	San Pedro (3	200	33.7294	-118.33958
Nemacaulis denudata var. denudata	coast woolly-heads	Dicots	PDPGN0G011	None	None	G3G4T2	S2	1B.2	SB_CalBG/RSA	21	22217	27996	1905XXXX	1905XXXX	N	U-Unknown	Presumed E	Circular feat	70	Unknown	Natural/Nat	Los Angeles	San Pedro (3	20	33.74045	-118.26454
Orcuttia californica	California Orcutt grass	Monocots	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1	SB_CalBG/RSA	12	22413	1899	19630508	1976XXXX	N	X-None	Extirpated	Circular feat	60	Unknown	Natural/Nat	Los Angeles	Inglewood (3311883)		33.9073	-118.3141
Brennania belkini	Belkin's dune tabanid fly	Insects	IIDIP17010	None	None	G1G2	S1S2		IUCN_VU-Vul	4	22614	B8183	194904XX	194904XX	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Redondo Be	62	33.88789	-118.41297
Brennania belkini	Belkin's dune tabanid fly	Insects	IIDIP17010	None	None	G1G2	S1S2		IUCN_VU-Vul	3	22616	1563	19860616	1987XXXX	N	U-Unknown	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	134	33.92554	-118.42697
Brennania belkini	Belkin's dune tabanid fly	Insects	IIDIP17010	None	None	G1G2	S1S2		IUCN_VU-Vul	1	22617	1476	19800723	1990XXXX	N	X-None	Possibly Exti	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	10	33.96225	-118.44969
Trigonoscuta dorothea dorothea	Dorothy's El Segundo Dune weevil	Insects	IICOL51021	None	None	G1T1	S1			1	22645	85097	2001XXXX	2001XXXX	N	U-Unknown	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	10	33.96716	-118.43843
Cicindela senilis frosti	senile tiger beetle	Insects	IICOL02121	None	None	G2G3T1T3	S1			4	22657	1609	XXXXXXXX	1979XXXX	N	X-None	Extirpated	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	10	33.89038	-118.41588
Cicindela hirticollis gravida	sandy beach tiger beetle	Insects	IICOL02101	None	None	G5T2	S2			15	22672	2201	XXXXXXXX	1979XXXX	N	X-None	Extirpated	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Los Alamitos	10	33.75578	-118.12246
Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	Insects	IILEPG402A	Endangered	None	G5T1	S1			16	23009	1823	1981XXXX	1988XXXX	N	X-None	Possibly Exti	Circular feat	50	Unknown	Natural/Nat	Los Angeles	San Pedro (3	1200	33.75028	-118.3473
Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	Insects	IILEPG402A	Endangered	None	G5T1	S1			10	23017	1838	1983XXXX	1988XXXX	N	X-None	Possibly Exti	Non-specific	30	Unknown	Natural/Nat	Los Angeles	San Pedro (3	500	33.73182	-118.34123
Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	Insects	IILEPG402A	Endangered	None	G5T1	S1			9	23019	1822	1982XXXX	1988XXXX	N	X-None	Possibly Exti	Circular feat	50	Unknown	Natural/Nat	Los Angeles	San Pedro (3	600	33.73973	-118.34757
Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	Insects	IILEPG402A	Endangered	None	G5T1	S1			8	23020	1771	1981XXXX	1988XXXX	N	X-None	Possibly Exti	Circular feat	50	Unknown	Natural/Nat	Los Angeles	Torrance (33	1000	33.75584	-118.36563
Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	Insects	IILEPG402A	Endangered	None	G5T1	S1			6	23022	1753	1982XXXX	1988XXXX	N	X-None	Possibly Exti	Circular feat	50	Unknown	Natural/Nat	Los Angeles	Torrance (33	1200	33.75918	-118.37369
Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	Insects	IILEPG402A	Endangered	None	G5T1	S1			5	23023	1725	198605XX	198605XX	N	X-None	Possibly Exti	Circular feat	50	Unknown	Natural/Nat	Los Angeles	Redondo Be	400	33.74695	-118.38314
Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	Insects	IILEPG402A	Endangered	None	G5T1	S1			4	23024	1861	1983XXXX	1988XXXX	N	X-None	Possibly Exti	Non-specific	30	Unknown	Natural/Nat	Los Angeles	San Pedro (3	640	33.72993	-118.33055
Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	Insects	IILEPG402A	Endangered	None	G5T1	S1			3	23025	1665	1979XXXX	1988XXXX	N	X-None	Extirpated	Specific bou	10	Unknown	Natural/Nat	Los Angeles	Redondo Be	400	33.76586	-118.40341
Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	Insects	IILEPG402A	Endangered	None	G5T1	S1			2	23026	1696	1982XXXX	1988XXXX	N	X-None	Extirpated	Specific bou	10	Unknown	Natural/Nat	Los Angeles	Redondo Be	940	33.76637	-118.39238

SciName	ComName	TaxonGroup	ElmCode	FedList	CalList	GRank	SRank	RPlantRank	OthrStatus	OccNumber	EOndx	Mapndx	ElmDate	SiteDate	Sensitive	OccRank	Presence	Accuracy	ccuracyOrde	Trend	OccType	County	Quad	Elevation	Latitude	Longitude
Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	Insects	IILEPG402A	Endangered	None	G5T1	S1			1	23027	1687	1976XXXX	1988XXXX	N	X-None	Extirpated	Circular feat	50	Unknown	Natural/Nat	Los Angeles	Redondo Be	780	33.75329	-118.39749
Euphilotes allyni	El Segundo blue butterfly	Insects	IILEPG201B	Endangered	None	G5T1	S1			2	23047	1586	20050818	20050818	N	B-Good	Presumed E	Circular feat	50	Stable	Natural/Nat	Los Angeles	Venice (331	150	33.91611	-118.42147
Tryonia imitator	mimic tryonia (=California brackishwater snail)	Mollusks	IMGASJ7040	None	None	G2	S2		IUCN_DD-Dat	16	23211	36780	1974XXXX	2001XXXX	N	X-None	Possibly Exti	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (3311884)		33.9722	-118.43699
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Dicots	PDAST5L0A1	None	None	G4T2	S2	1B.1	BLM_S-Sensit	26	24245	80779	19170411	19170411	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Torrance (3311873)		33.85124	-118.27455
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Dicots	PDAST5L0A1	None	None	G4T2	S2	1B.1	BLM_S-Sensit	25	25094	23784	19010410	19010410	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Inglewood (	160	33.98167	-118.33078
Polioptila californica californica	coastal California gnatcatcher	Birds	ABPBJ08081	Threatened	None	G4G5T3Q	S2		CDFW_SSC-Sp	35	25112	1722	1980XXXX	1980XXXX	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Inglewood (	200	33.99055	-118.38285
Polioptila californica californica	coastal California gnatcatcher	Birds	ABPBJ08081	Threatened	None	G4G5T3Q	S2		CDFW_SSC-Sp	33	25114	1805	1980XXXX	1980XXXX	N	U-Unknown	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Torrance (33	750	33.76757	-118.35841
Athene cunicularia	burrowing owl	Birds	ABNSB10010	None	None	G4	S2		BLM_S-Sensit	67	25454	85090	201010XX	2011XXXX	N	D-Poor	Presumed E	Non-specific	30	Decreasing	Natural/Nat	Los Angeles	Venice (331	5	33.96964	-118.43652
Sternula antillarum browni	California least tern	Birds	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2		CDFW_FP-Ful	63	25657	2008	19960801	19960801	N	U-Unknown	Presumed E	Circular feat	50	Increasing	Natural/Nat	Los Angeles	San Pedro (3311863) | Lc		33.73862	-118.25258
Sternula antillarum browni	California least tern	Birds	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2		CDFW_FP-Ful	20	25690	2190	1977XXXX	1977XXXX	N	U-Unknown	Presumed E	Specific bou	10	Unknown	Natural/Nat	Los Angeles	Long Beach	10	33.75511	-118.13792
Sternula antillarum browni	California least tern	Birds	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2		CDFW_FP-Ful	16	25695	2005	19850731	1987XXXX	N	X-None	Extirpated	Circular feat	50	Unknown	Natural/Nat	Los Angeles	San Pedro (	5	33.75057	-118.25508
Sternula antillarum browni	California least tern	Birds	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2		CDFW_FP-Ful	13	25698	1562	1977XXXX	1978XXXX	N	X-None	Extirpated	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	10	33.97988	-118.42637
Sternula antillarum browni	California least tern	Birds	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2		CDFW_FP-Ful	12	25699	1439	1996XXXX	1996XXXX	N	U-Unknown	Presumed E	Non-specific	30	Stable	Natural/Nat	Los Angeles	Venice (331	10	33.96777	-118.45888
Southern Dune Scrub	Southern Dune Scrub	Dune	CTT21330CA	None	None	G1	S1.1			1	26328	1534	1983XXXX	1983XXXX	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Venice (331	130	33.93401	-118.43379
Phrynosoma blainvillii	coast horned lizard	Reptiles	ARACF12100	None	None	G4	S4		BLM_S-Sensit	207	28018	1796	XXXXXXXX	XXXXXXXX	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Torrance (33	100	33.86418	-118.35641
Phrynosoma blainvillii	coast horned lizard	Reptiles	ARACF12100	None	None	G4	S4		BLM_S-Sensit	152	28063	2079	XXXXXXXX	XXXXXXXX	N	X-None	Possibly Exti	Circular feat	50	Unknown	Natural/Nat	Los Angeles	South Gate (	60	33.87862	-118.20758
Phrynosoma blainvillii	coast horned lizard	Reptiles	ARACF12100	None	None	G4	S4		BLM_S-Sensit	150	28066	2093	19510317	19510317	N	X-None	Extirpated	Circular feat	50	Unknown	Natural/Nat	Los Angeles	Long Beach	25	33.77173	-118.19937
Phrynosoma blainvillii	coast horned lizard	Reptiles	ARACF12100	None	None	G4	S4		BLM_S-Sensit	130	28078	1965	19520415	19520415	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	South Gate (	70	33.90327	-118.22273
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	None	None	G3G4	S3		BLM_S-Sensit	913	28190	1492	19411029	1987XXXX	N	X-None	Possibly Exti	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	5	33.96411	-118.44601
Siphateles bicolor mohavensis	Mohave tui chub	Fish	AFCJB1303H	Endangered	Endangered	G4T1	S1		AFS_EN-Enda	5	28635	1666	1976XXXX	1976XXXX	N	X-None	Extirpated	Circular feat	50	Unknown	Transplant C	Los Angeles	Torrance (33	720	33.78311	-118.34565
Centromadia parryi ssp. australis	southern tarplant	Dicots	PDAST4R0P4	None	None	G3T2	S2	1B.1	SB_CalBG/RSA	25	29314	35371	1932XXXX	1932XXXX	N	U-Unknown	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Long Beach	15	33.78593	-118.18194
Neotoma lepida intermedia	San Diego desert woodrat	Mammals	AMAFF08041	None	None	G5T3T4	S3S4		CDFW_SSC-Sp	11	29698	33547	19910826	19910826	N	D-Poor	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	San Pedro (3	200	33.73142	-118.35211
Polioptila californica californica	coastal California gnatcatcher	Birds	ABPBJ08081	Threatened	None	G4G5T3Q	S2		CDFW_SSC-Sp	30	29840	1686	20180618	20180618	N	B-Good	Presumed E	Non-specific	30	Decreasing	Natural/Nat	Los Angeles	San Pedro (3	350	33.7453	-118.39689
Polioptila californica californica	coastal California gnatcatcher	Birds	ABPBJ08081	Threatened	None	G4G5T3Q	S2		CDFW_SSC-Sp	31	29841	15982	20120605	20120605	N	C-Fair	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Redondo Be	600	33.76465	-118.39907
Polioptila californica californica	coastal California gnatcatcher	Birds	ABPBJ08081	Threatened	None	G4G5T3Q	S2		CDFW_SSC-Sp	108	29842	1741	20180518	20180518	N	A-Excellent	Presumed E	Non-specific	30	Stable	Natural/Nat	Los Angeles	San Pedro (3	800	33.74529	-118.35486
Centromadia parryi ssp. australis	southern tarplant	Dicots	PDAST4R0P4	None	None	G3T2	S2	1B.1	SB_CalBG/RSA	30	30040	28742	190507XX	190507XX	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Inglewood (	100	33.9593	-118.35104
Centromadia parryi ssp. australis	southern tarplant	Dicots	PDAST4R0P4	None	None	G3T2	S2	1B.1	SB_CalBG/RSA	31	30041	28743	19330922	19971019	N	X-None	Extirpated	Circular feat	60	Unknown	Natural/Nat	Los Angeles	Inglewood (	125	33.95803	-118.26836
Centromadia parryi ssp. australis	southern tarplant	Dicots	PDAST4R0P4	None	None	G3T2	S2	1B.1	SB_CalBG/RSA	37	30042	35368	2008XXXX	2008XXXX	N	B-Good	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Torrance (33	20	33.7794	-118.29182
Centromadia parryi ssp. australis	southern tarplant	Dicots	PDAST4R0P4	None	None	G3T2	S2	1B.1	SB_CalBG/RSA	27	30105	97162	199XXXXX	19971019	N	U-Unknown	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (3311884)		33.97876	-118.43071
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Dicots	PDAST5L0A1	None	None	G4T2	S2	1B.1	BLM_S-Sensit	27	30106	23785	19340403	1980XXXX	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Venice (3311884)		33.97291	-118.44837
Agelaius tricolor	tricolored blackbird	Birds	ABPBXB0020	None	Threatened	G1G2	S2		BLM_S-Sensit	332	32179	39583	198XXXXX	198XXXXX	N	U-Unknown	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Torrance (33	75	33.82705	-118.3424
Centromadia parryi ssp. australis	southern tarplant	Dicots	PDAST4R0P4	None	None	G3T2	S2	1B.1	SB_CalBG/RSA	43	34585	97121	20100930	20100930	N	U-Unknown	Presumed E	Specific bou	20	Unknown	Natural/Nat	Los Angeles	Torrance (33	80	33.8269	-118.3418

9 QUAD

SciName	ComName	TaxonGroup	ElmCode	FedList	CalList	GRank	SRank	RPlantRank	OthrStatus	OccNumber	EOndx	Mapndx	ElmDate	SiteDate	Sensitive	OccRank	Presence	Accuracy	AccuracyOrde	Trend	OccType	County	Quad	Elevation	Latitude	Longitude
Perognathus longimembris pacificus	Pacific pocket mouse	Mammals	AMAFD01042	Endangered	None	G5T2	S2		CDFW_SSC-Sp	1	34856	39854	19310905	19310905	N	X-None	Extirpated	Circular feat	70	Unknown	Natural/Nat	Los Angeles	Torrance (33	100	33.82667	-118.38139
Perognathus longimembris pacificus	Pacific pocket mouse	Mammals	AMAFD01042	Endangered	None	G5T2	S2		CDFW_SSC-Sp	2	34860	39858	193806XX	193806XX	N	X-None	Extirpated	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	100	33.93139	-118.42565
Perognathus longimembris pacificus	Pacific pocket mouse	Mammals	AMAFD01042	Endangered	None	G5T2	S2		CDFW_SSC-Sp	3	34866	39864	186510XX	186510XX	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Long Beach	30	33.79001	-118.24785
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	Dicots	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2	BLM_S-Sensit	12	34952	35371	1932XXXX	1932XXXX	N	X-None	Extirpated	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Long Beach	10	33.78593	-118.18194
Dithyrea maritima	beach spectaclepod	Dicots	PDBRA10020	None	Threatened	G1	S1	1B.1	SB_SBBG-Sant	4	35194	23785	190304XX	190304XX	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Venice (3311884)		33.97291	-118.44837
Dithyrea maritima	beach spectaclepod	Dicots	PDBRA10020	None	Threatened	G1	S1	1B.1	SB_SBBG-Sant	11	35196	40194	188407XX	188407XX	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Venice (331	20	34.01281	-118.49073
Chorizanthe parryi var. fernandina	San Fernando Valley spineflower	Dicots	PDPGN040J1	None	Endangered	G2T1	S1	1B.1	SB_CalBG/RSA	9	41266	23785	19010401	19010401	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Venice (331	50	33.97291	-118.44837
Aphanisma blitoides	aphanisma	Dicots	PDCHE02010	None	None	G3G4	S2	1B.2	SB_CRES-San	31	41675	41675	20150105	20150105	N	C-Fair	Presumed E	Specific bou	20	Unknown	Natural/Nat	Los Angeles	San Pedro (3	100	33.73867	-118.37326
Astragalus tener var. titi	coastal dunes milk-vetch	Dicots	PDFAB0F8R2	Endangered	Endangered	G2T1	S1	1B.1	SB_CalBG/RSA	4	42744	23784	19030412	19030412	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Inglewood (3311883)		33.98167	-118.33078
Dudleya virens ssp. insularis	island green dudleya	Dicots	PDCRA040S2	None	None	G3?T3	S3	1B.2		3	47066	17598	20100507	20100507	N	B-Good	Presumed E	Specific bou	20	Unknown	Natural/Nat	Los Angeles	San Pedro (3	70	33.72685	-118.34605
Dudleya virens ssp. insularis	island green dudleya	Dicots	PDCRA040S2	None	None	G3?T3	S3	1B.2		4	47067	17574	1990XXXX	1990XXXX	N	B-Good	Presumed E	Specific bou	20	Unknown	Natural/Nat	Los Angeles	Redondo Be	80	33.74151	-118.40606
Dudleya virens ssp. insularis	island green dudleya	Dicots	PDCRA040S2	None	None	G3?T3	S3	1B.2		19	47104	1943	19340607	19340607	N	U-Unknown	Presumed E	Circular feat	50	Unknown	Natural/Nat	Los Angeles	San Pedro (3311863)		33.70639	-118.29341
Dudleya virens ssp. insularis	island green dudleya	Dicots	PDCRA040S2	None	None	G3?T3	S3	1B.2		20	47105	47105	19460612	19460612	N	U-Unknown	Presumed E	Circular feat	50	Unknown	Natural/Nat	Los Angeles	San Pedro (3311863)		33.71606	-118.31613
Orcuttia californica	California Orcutt grass	Monocots	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1	SB_CalBG/RSA	14	47231	26503	XXXXXXXX	XXXXXXXX	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Whittier (33	125	33.94216	-118.13586
Orcuttia californica	California Orcutt grass	Monocots	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1	SB_CalBG/RSA	13	47232	47232	XXXXXXXX	XXXXXXXX	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Los Alamitos	40	33.83581	-118.11743
Navarretia fossalis	spreading navarretia	Dicots	PDPLM0C080	Threatened	None	G2	S2	1B.1	SB_CalBG/RSA	40	47436	28742	19060719	19060719	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Inglewood (3311883)		33.9593	-118.35104
Chaenactis glabriuscula var. orcuttiana	Orcutt's pincushion	Dicots	PDAST20095	None	None	G5T1	S1	1B.1	SB_CalBG/RSA	20	47545	79025	20100513	20100513	N	C-Fair	Presumed E	Specific bou	10	Unknown	Natural/Nat	Los Angeles	Venice (331	125	33.89918	-118.41276
Chaenactis glabriuscula var. orcuttiana	Orcutt's pincushion	Dicots	PDAST20095	None	None	G5T1	S1	1B.1	SB_CalBG/RSA	21	47564	79013	20110408	20110408	N	U-Unknown	Presumed E	Specific bou	10	Unknown	Natural/Nat	Los Angeles	Venice (331	20	33.962	-118.44956
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	Insects	IILEPP2012	Candidate	None	G4T1T2Q	S2		IUCN_EN-End	338	47887	47887	19850123	19850123	N	X-None	Possibly Exti	Non-specific	30	Unknown	Natural/Nat	Los Angeles	San Pedro (3	100	33.70661	-118.29434
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	Insects	IILEPP2012	Candidate	None	G4T1T2Q	S2		IUCN_EN-End	339	47888	47888	197X12XX	197X12XX	N	U-Unknown	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	100	33.92112	-118.41194
Navarretia prostrata	prostrate vernal pool navarretia	Dicots	PDPLM0C0Q0	None	None	G2	S2	1B.2		10	47944	39864	188205XX	188205XX	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Long Beach (3311872) | T		33.79001	-118.24785
Navarretia prostrata	prostrate vernal pool navarretia	Dicots	PDPLM0C0Q0	None	None	G2	S2	1B.2		11	47952	26503	189505XX	189505XX	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Whittier (3311881) | Sou		33.94216	-118.13586
Navarretia prostrata	prostrate vernal pool navarretia	Dicots	PDPLM0C0Q0	None	None	G2	S2	1B.2		12	47953	1965	1882XXXX	1882XXXX	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	South Gate (3311882)		33.90327	-118.22273
Navarretia prostrata	prostrate vernal pool navarretia	Dicots	PDPLM0C0Q0	None	None	G2	S2	1B.2		13	47954	83433	19630508	19630508	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Inglewood (	40	33.90781	-118.31103
Navarretia prostrata	prostrate vernal pool navarretia	Dicots	PDPLM0C0Q0	None	None	G2	S2	1B.2		14	47955	47545	19440415	19440415	N	X-None	Possibly Exti	Circular feat	70	Unknown	Natural/Nat	Los Angeles	Venice (331	100	33.90242	-118.39629
Pentachaeta lyonii	Lyon's pentachaeta	Dicots	PDAST6X060	Endangered	Endangered	G1	S1	1B.1	SB_CalBG/RSA	7	48741	39864	XXXXXXXX	XXXXXXXX	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Long Beach (3311872) | T		33.79001	-118.24785
Pentachaeta lyonii	Lyon's pentachaeta	Dicots	PDAST6X060	Endangered	Endangered	G1	S1	1B.1	SB_CalBG/RSA	2	48785	34591	188407XX	1994XXXX	N	X-None	Possibly Exti	Circular feat	90	Decreasing	Natural/Nat	Los Angeles	San Pedro (3311863) | To		33.74588	-118.33602
Suaeda esteroa	estuary seablite	Dicots	PDCHE0P0D0	None	None	G3	S2	1B.2		17	48871	34592	19040906	19040906	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	San Pedro (3311863) | To		33.73644	-118.28092
Suaeda esteroa	estuary seablite	Dicots	PDCHE0P0D0	None	None	G3	S2	1B.2		18	48872	A2487	20060121	20060121	N	U-Unknown	Presumed E	Circular feat	50	Unknown	Natural/Nat	Los Angeles	Long Beach	5	33.77163	-118.13387
Athene cunicularia	burrowing owl	Birds	ABNSB10010	None	None	G4	S2		BLM_S-Sensit	571	51258	51258	19210505	19210505	N	U-Unknown	Presumed E	Circular feat	100	Unknown	Natural/Nat	Los Angeles	South Gate (	280	34.05366	-118.24549
Lycium brevipes var. hassei	Santa Catalina Island desert-thorn	Dicots	PDSOL0G0N0	None	None	G5T1Q	S1	3.1		4	55725	55709	20140801	20140801	N	C-Fair	Presumed E	Specific bou	20	Unknown	Natural/Nat	Los Angeles	San Pedro (3	100	33.73791	-118.37479
Taxidea taxus	American badger	Mammals	AMAJF04010	None	None	G5	S3		CDFW_SSC-Sp	291	57504	51258	XXXXXXXX	XXXXXXXX	N	U-Unknown	Presumed E	Circular feat	100	Unknown	Natural/Nat	Los Angeles	South Gate (	280	34.05366	-118.24549

SciName	ComName	TaxonGroup	ElmCode	FedList	CalList	GRank	SRank	RPlantRank	OthrStatus	OccNumber	EOndx	Mapndx	ElmDate	SiteDate	Sensitive	OccRank	Presence	Accuracy	ccuracyOrde	Trend	OccType	County	Quad	Elevation	Latitude	Longitude
Tryonia imitator	mimic tryonia (=California brackishwater snail)	Mollusks	IMGASJ7040	None	None	G2	S2		IUCN_DD-Dat	30	57937	57921	XXXXXXXX	XXXXXXXX	N	X-None	Extirpated	Specific bou	20	Unknown	Natural/Nat	Los Angeles	San Pedro (3	50	33.71045	-118.30057
Crossosoma californicum	Catalina crossosoma	Dicots	PDCRO02020	None	None	G3	S3	1B.2	SB_CalBG/RSA	19	58935	58899	19960301	19960301	N	C-Fair	Presumed E	Specific bou	10	Unknown	Natural/Nat	Los Angeles	San Pedro (3	580	33.74457	-118.35309
Crossosoma californicum	Catalina crossosoma	Dicots	PDCRO02020	None	None	G3	S3	1B.2	SB_CalBG/RSA	20	58946	58910	20090416	20090416	N	B-Good	Presumed E	Specific bou	20	Unknown	Natural/Nat	Los Angeles	San Pedro (3	1000	33.74167	-118.34163
Microtus californicus stephensi	south coast marsh vole	Mammals	AMAFF11035	None	None	G5T2T3	S2		CDFW_SSC-Sp	1	58980	58944	19770317	19770317	N	U-Unknown	Presumed E	Circular feat	50	Unknown	Natural/Nat	Los Angeles	Inglewood (3	300	33.99722	-118.3635
Microtus californicus stephensi	south coast marsh vole	Mammals	AMAFF11035	None	None	G5T2T3	S2		CDFW_SSC-Sp	2	58981	1722	19570414	19570414	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Inglewood (3	200	33.99055	-118.38285
Microtus californicus stephensi	south coast marsh vole	Mammals	AMAFF11035	None	None	G5T2T3	S2		CDFW_SSC-Sp	3	58983	85090	2011XXXX	2011XXXX	N	U-Unknown	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	5	33.96964	-118.43652
Empidonax traillii extimus	southwestern willow flycatcher	Birds	ABPAE33043	Endangered	Endangered	G5T2	S3			42	59152	1965	18950629	18950629	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	South Gate (3311882)		33.90327	-118.22273
Empidonax traillii extimus	southwestern willow flycatcher	Birds	ABPAE33043	Endangered	Endangered	G5T2	S3			43	59153	51258	18940520	18940520	N	U-Unknown	Presumed E	Circular feat	100	Unknown	Natural/Nat	Los Angeles	South Gate (	280	34.05366	-118.24549
Sorex ornatus salicornicus	southern California saltmarsh shrew	Mammals	AMABA01104	None	None	G5T1?	S1		CDFW_SSC-Sp	1	59229	85090	19910228	20090604	N	X-None	Possibly Exti	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	5	33.96964	-118.43652
Nyctinomops macrotis	big free-tailed bat	Mammals	AMACD04020	None	None	G5	S3		CDFW_SSC-Sp	5	59564	27997	19831007	19831007	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Long Beach	20	33.7712	-118.18868
Cicindela hirticollis gravida	sandy beach tiger beetle	Insects	IICOL02101	None	None	G5T2	S2			33	60109	60073	19450815	19450815	N	X-None	Extirpated	Circular feat	70	Unknown	Natural/Nat	Los Angeles	Seal Beach (	10	33.75431	-118.12182
Cicindela hirticollis gravida	sandy beach tiger beetle	Insects	IICOL02101	None	None	G5T2	S2			35	60115	60079	19370307	19370307	N	X-None	Extirpated	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	10	33.92414	-118.43289
Eugnosta busckana	Busck's gallmoth	Insects	IILEM2X090	None	None	G1G3	S2S3			4	60416	1534	19581119	19581119	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Venice (331	100	33.93401	-118.43379
Symphyotrichum defoliatum	San Bernardino aster	Dicots	PDASTE80C0	None	None	G2	S2	1B.2	SB_CalBG/RSA	28	60571	80779	19301018	19301018	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Torrance (3311873)		33.85124	-118.27455
Coelus globosus	globose dune beetle	Insects	IICOL4A010	None	None	G1G2	S1S2		IUCN_VU-Vuln	16	60666	59331	19730830	19730830	N	U-Unknown	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	10	33.94612	-118.44464
Pelecanus occidentalis californicus	California brown pelican	Birds	ABNFC01021	Delisted	Delisted	G4T3T4	S3		BLM_S-Sensit	14	63649	63544	2000XXXX	2000XXXX	N	A-Excellent	Presumed E	Specific bou	20	Unknown	Natural/Nat	Los Angeles	Long Beach	0	33.72344	-118.19059
Pelecanus occidentalis californicus	California brown pelican	Birds	ABNFC01021	Delisted	Delisted	G4T3T4	S3		BLM_S-Sensit	16	63663	63568	20000709	20000709	N	A-Excellent	Presumed E	Specific bou	20	Unknown	Natural/Nat	Los Angeles	Venice (331	0	33.96092	-118.46304
Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	Insects	IILEPG402A	Endangered	None	G5T1	S1			19	65114	B7047	200103XX	200103XX	N	U-Unknown	Presumed E	Circular feat	50	Unknown	Natural/Nat	Los Angeles	Redondo Be	348	33.8001	-118.38096
Rhaphiomidas terminatus terminatus	El Segundo flower-loving fly	Insects	IIDIP05022	None	None	G1T1	S1			1	65118	65035	200107XX	200107XX	Y	U-Unknown	Presumed E	Circular feat	50	Unknown	Natural/Nat	Los Angeles	Redondo Be	341		
Eumops perotis californicus	western mastiff bat	Mammals	AMACD02011	None	None	G4G5T4	S3S4		BLM_S-Sensit	65	66394	66308	19870401	19870401	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Inglewood (3	200	33.93103	-118.30905
Eumops perotis californicus	western mastiff bat	Mammals	AMACD02011	None	None	G4G5T4	S3S4		BLM_S-Sensit	168	66526	23783	19290722	19290722	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Inglewood (3	50	33.88942	-118.31857
Nyctinomops femorosaccus	pocketed free-tailed bat	Mammals	AMACD04010	None	None	G5	S3		CDFW_SSC-Sp	15	68716	68461	19851018	19851018	N	U-Unknown	Presumed E	Circular feat	80	Unknown	Natural/Nat	Los Angeles	Torrance (33	50	33.79001	-118.29745
Nyctinomops femorosaccus	pocketed free-tailed bat	Mammals	AMACD04010	None	None	G5	S3		CDFW_SSC-Sp	16	68717	28742	19941018	19941018	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Inglewood (3	100	33.9593	-118.35104
Lasionycteris noctivagans	silver-haired bat	Mammals	AMACC02010	None	None	G3G4	S3S4		IUCN_LC-Leas	50	68930	68566	19861118	19861118	N	U-Unknown	Presumed E	Specific bou	10	Unknown	Natural/Nat	Los Angeles	Long Beach	10	33.79315	-118.20057
Euphilotes allyni	El Segundo blue butterfly	Insects	IILEPG201B	Endangered	None	G5T1	S1			3	70689	69867	1990XXXX	1990XXXX	N	U-Unknown	Presumed E	Circular feat	50	Unknown	Natural/Nat	Los Angeles	Redondo Be	20	33.80342	-118.39419
Euphilotes allyni	El Segundo blue butterfly	Insects	IILEPG201B	Endangered	None	G5T1	S1			4	70908	70052	2007XXXX	2007XXXX	N	U-Unknown	Presumed E	Circular feat	40	Unknown	Natural/Nat	Los Angeles	Redondo Be	50	33.81491	-118.39049
Polioptila californica californica	coastal California gnatcatcher	Birds	ABPBJ08081	Threatened	None	G4G5T3Q	S2		CDFW_SSC-Sp	891	72239	71336	20060421	20120522	N	U-Unknown	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Torrance (33	1050	33.76937	-118.37214
Polioptila californica californica	coastal California gnatcatcher	Birds	ABPBJ08081	Threatened	None	G4G5T3Q	S2		CDFW_SSC-Sp	892	72240	71337	199311XX	199311XX	N	U-Unknown	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Redondo Be	650	33.78269	-118.40507
Atriplex coulteri	Coulter's saltbush	Dicots	PDCHE040E0	None	None	G3	S1S2	1B.2	SB_CalBG/RSA	56	74608	23782	XXXXXXXX	XXXXXXXX	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Long Beach (3311872)		33.83821	-118.17658
Aphanisma blitoides	aphanisma	Dicots	PDCHE02010	None	None	G3G4	S2	1B.2	SB_CRES-San	47	76611	75742	20050408	20050408	N	U-Unknown	Presumed E	Specific bou	10	Unknown	Natural/Nat	Los Angeles	Redondo Be	100	33.7389	-118.39989
Aphanisma blitoides	aphanisma	Dicots	PDCHE02010	None	None	G3G4	S2	1B.2	SB_CRES-San	48	76662	75744	20080308	20080308	N	B-Good	Presumed E	Specific bou	10	Unknown	Natural/Nat	Los Angeles	Redondo Be	85	33.76341	-118.41889
Aphanisma blitoides	aphanisma	Dicots	PDCHE02010	None	None	G3G4	S2	1B.2	SB_CRES-San	49	76663	1700	XXXXXXXX	XXXXXXXX	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Torrance (3311873) | Red		33.82921	-118.39056
Aphanisma blitoides	aphanisma	Dicots	PDCHE02010	None	None	G3G4	S2	1B.2	SB_CRES-San	51	76767	75752	20090405	20090405	N	U-Unknown	Presumed E	Circular feat	40	Unknown	Natural/Nat	Los Angeles	Redondo Be	100	33.79697	-118.40738

SciName	ComName	TaxonGroup	ElmCode	FedList	CalList	GRank	SRank	RPlantRank	OthrStatus	OccNumber	EOndx	Mapndx	ElmDate	SiteDate	Sensitive	OccRank	Presence	Accuracy	ccuracyOrde	Trend	OccType	County	Quad	Elevation	Latitude	Longitude
Centromadia parryi ssp. australis	southern tarplant	Dicots	PDAST4R0P4	None	None	G3T2	S2	1B.1	SB_CalBG/RSA	81	78129	77193	20140703	20140703	N	U-Unknown	Presumed E	Specific bou	20	Unknown	Natural/Nat	Los Angeles	Torrance (33	65	33.84299	-118.33022
Symphyotrichum defoliatum	San Bernardino aster	Dicots	PDASTE80C0	None	None	G2	S2	1B.2	SB_CalBG/RSA	76	79628	78718	19320707	19320707	N	X-None	Extirpated	Circular feat	40	Unknown	Natural/Nat	Los Angeles	Long Beach	20	33.78852	-118.13883
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	16	80225	79246	20090222	20090222	N	D-Poor	Presumed E	Specific bou	10	Unknown	Natural/Nat	Los Angeles	Torrance (33	95	33.8075	-118.31861
Nama stenocarpa	mud nama	Dicots	PDHYD0A0H0	None	None	G4G5	S1S2	2B.2		21	81336	80349	192407XX	192407XX	N	U-Unknown	Presumed E	Circular feat	80	Unknown	Natural/Nat	Los Angeles	Torrance (3311873)		33.78887	-118.28864
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Dicots	PDAST5L0A1	None	None	G4T2	S2	1B.1	BLM_S-Sensit	80	81879	80900	19730615	19730615	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Long Beach	20	33.8457	-118.20445
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Dicots	PDAST5L0A1	None	None	G4T2	S2	1B.1	BLM_S-Sensit	81	81881	80349	19620327	19620327	N	U-Unknown	Presumed E	Circular feat	80	Unknown	Natural/Nat	Los Angeles	Torrance (3311873)		33.78887	-118.28864
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Dicots	PDAST5L0A1	None	None	G4T2	S2	1B.1	BLM_S-Sensit	83	81892	1557	19300120	19300120	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Venice (3311884)		33.91505	-118.4281
Phrynosoma blainvillii	coast horned lizard	Reptiles	ARACF12100	None	None	G4	S4		BLM_S-Sensit	764	82897	81926	19300819	19300819	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	San Pedro (3	170	33.73344	-118.29979
Navarretia prostrata	prostrate vernal pool navarretia	Dicots	PDPLM0C0Q0	None	None	G2	S2	1B.2		33	83691	28742	19060719	19060719	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Inglewood (3311883)		33.9593	-118.35104
Chenopodium littoreum	coastal goosefoot	Dicots	PDCHE091Z0	None	None	G1	S1	1B.2	SB_SBBG-Sant	1	84489	83468	19040514	19040514	N	X-None	Extirpated	Circular feat	70	Unknown	Natural/Nat	Los Angeles	Venice (3311884)		33.9559	-118.44603
Riparia riparia	bank swallow	Birds	ABPAU08010	None	Threatened	G5	S3		BLM_S-Sensit	102	85259	84233	1921XXXX	1921XXXX	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	San Pedro (3	20	33.72983	-118.27637
Riparia riparia	bank swallow	Birds	ABPAU08010	None	Threatened	G5	S3		BLM_S-Sensit	3	85481	84452	19190629	19190629	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Long Beach	60	33.76402	-118.16737
Coelus globosus	globose dune beetle	Insects	IICOL4A010	None	None	G1G2	S1S2		IUCN_VU-Vul	38	86141	85097	2001XXXX	2001XXXX	N	U-Unknown	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	10	33.96716	-118.43843
Tryonia imitator	mimic tryonia (=California brackishwater snail)	Mollusks	IMGASJ7040	None	None	G2	S2		IUCN_DD-Dat	42	86194	85175	20071205	20071205	N	U-Unknown	Presumed E	Circular feat	50	Unknown	Natural/Nat	Los Angeles	San Pedro (3	59	33.75072	-118.28454
Centromadia parryi ssp. australis	southern tarplant	Dicots	PDAST4R0P4	None	None	G3T2	S2	1B.1	SB_CalBG/RSA	85	87361	86322	20090713	20090713	N	B-Good	Presumed E	Specific bou	20	Unknown	Natural/Nat	Los Angeles	Torrance (33	5	33.85474	-118.27864
Centromadia parryi ssp. australis	southern tarplant	Dicots	PDAST4R0P4	None	None	G3T2	S2	1B.1	SB_CalBG/RSA	86	87362	86323	20110906	20110906	N	C-Fair	Presumed E	Specific bou	10	Unknown	Natural/Nat	Los Angeles	Inglewood (	100	33.90261	-118.2727
Habroscelimorpha gabbii	western tidal-flat tiger beetle	Insects	IICOL02080	None	None	G2G4	S1			6	87726	39864	XXXXXXXX	XXXXXXXX	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Long Beach	30	33.79001	-118.24785
Habroscelimorpha gabbii	western tidal-flat tiger beetle	Insects	IICOL02080	None	None	G2G4	S1			8	87727	60935	XXXXXXXX	XXXXXXXX	N	X-None	Possibly Exti	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Seal Beach (	20	33.76188	-118.16108
Phacelia stellaris	Brand's star phacelia	Dicots	PDHYD0C510	None	None	G1	S1	1B.1	SB_CalBG/RSA	15	91447	1557	19320424	19320424	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Venice (3311884)		33.91505	-118.4281
Vireo bellii pusillus	least Bell's vireo	Birds	ABPBW01114	Endangered	Endangered	G5T2	S3			561	93062	91988	18950523	18950523	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	South Gate (	150	33.97502	-118.25006
Streptocephalus woottoni	Riverside fairy shrimp	Crustaceans	ICBRA07010	Endangered	None	G1G2	S2		IUCN_EN-End	56	93075	92002	2005XXXX	2005XXXX	N	X-None	Extirpated	Circular feat	50	Unknown	Natural/Nat	Los Angeles	Venice (331	100	33.939	-118.42979
Vireo bellii pusillus	least Bell's vireo	Birds	ABPBW01114	Endangered	Endangered	G5T2	S3			563	93076	92003	20101016	20140403	N	B-Good	Presumed E	Specific bou	20	Unknown	Natural/Nat	Los Angeles	Venice (331	15	33.96851	-118.42325
Streptocephalus woottoni	Riverside fairy shrimp	Crustaceans	ICBRA07010	Endangered	None	G1G2	S2		IUCN_EN-End	57	93077	92005	2005XXXX	2005XXXX	N	X-None	Extirpated	Circular feat	50	Unknown	Natural/Nat	Los Angeles	Venice (331	100	33.9329	-118.4244
Streptocephalus woottoni	Riverside fairy shrimp	Crustaceans	ICBRA07010	Endangered	None	G1G2	S2		IUCN_EN-End	67	93129	39583	2003XXXX	201007XX	N	U-Unknown	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Torrance (33	80	33.82705	-118.3424
Streptocephalus woottoni	Riverside fairy shrimp	Crustaceans	ICBRA07010	Endangered	None	G1G2	S2		IUCN_EN-End	68	93131	92050	2005XXXX	2005XXXX	N	X-None	Extirpated	Circular feat	50	Unknown	Natural/Nat	Los Angeles	Venice (331	100	33.951	-118.4332
Eryngium aristulatum var. parishii	San Diego button-celery	Dicots	PDAPI0Z042	Endangered	Endangered	G5T1	S1	1B.1	SB_CalBG/RSA	120	96484	95346	19010720	19010720	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Inglewood (3311883) | V		33.92366	-118.37848
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	ABNRB02022	Threatened	Endangered	G5T2T3	S1		BLM_S-Sensit	201	97015	95877	19210615	19210615	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Long Beach	30	33.83475	-118.21869
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	ABNRB02022	Threatened	Endangered	G5T2T3	S1		BLM_S-Sensit	202	97020	95887	19150531	19150531	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Long Beach	30	33.7976	-118.2394
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	ABNRB02022	Threatened	Endangered	G5T2T3	S1		BLM_S-Sensit	203	97028	95888	19230623	19230623	N	X-None	Extirpated	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Long Beach	10	33.79604	-118.205
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	ABNRB02022	Threatened	Endangered	G5T2T3	S1		BLM_S-Sensit	204	97029	1965	19100724	19100724	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	South Gate (	70	33.90327	-118.22273
Centromadia parryi ssp. australis	southern tarplant	Dicots	PDAST4R0P4	None	None	G3T2	S2	1B.1	SB_CalBG/RSA	95	98383	97136	19301104	19301104	N	U-Unknown	Presumed E	Circular feat	80	Unknown	Natural/Nat	Los Angeles	South Gate (3311882) | I		33.94023	-118.24246
Bombus crotchii	Crotch bumble bee	Insects	IIHYM24480	None	Candidate En	G2	S2		IUCN_EN-End	162	98991	1722	19530502	19530502	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Inglewood (3	200	33.99055	-118.38285
Bombus crotchii	Crotch bumble bee	Insects	IIHYM24480	None	Candidate En	G2	S2		IUCN_EN-End	163	98992	28742	19170526	19170526	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Inglewood (3	150	33.9593	-118.35104
Bombus crotchii	Crotch bumble bee	Insects	IIHYM24480	None	Candidate En	G2	S2		IUCN_EN-End	164	98993	85090	19810611	199009XX	N	U-Unknown	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	10	33.96964	-118.43652
Bombus crotchii	Crotch bumble bee	Insects	IIHYM24480	None	Candidate En	G2	S2		IUCN_EN-End	165	98995	1557	19380706	19380706	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Venice (331	10	33.91505	-118.4281
Bombus crotchii	Crotch bumble bee	Insects	IIHYM24480	None	Candidate En	G2	S2		IUCN_EN-End	166	98996	97654	19380710	19380710	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Torrance (33	100	33.87281	-118.37015

SciName	ComName	TaxonGroup	ElmCode	FedList	CalList	GRank	SRank	RPlantRank	OthrStatus	OccNumber	EOndx	Mapndx	ElmDate	SiteDate	Sensitive	OccRank	Presence	Accuracy	AccuracyOrde	Trend	OccType	County	Quad	Elevation	Latitude	Longitude
Bombus crotchii	Crotch bumble bee	Insects	IIHYM24480	None	Candidate En	G2	S2		IUCN_EN-End	167	98997	27997	19670228	19670228	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Long Beach	20	33.7712	-118.18868
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	Insects	IILEPP2012	Candidate	None	G4T1T2Q	S2		IUCN_EN-End	382	99118	97751	20150121	20150121	N	C-Fair	Presumed E	Circular feat	40	Unknown	Natural/Nat	Los Angeles	Venice (331	15	33.98547	-118.4521
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	Insects	IILEPP2012	Candidate	None	G4T1T2Q	S2		IUCN_EN-End	383	99136	97758	201411XX	202111XX	N	U-Unknown	Presumed E	Circular feat	40	Unknown	Natural/Nat	Los Angeles	Venice (331	100	33.9154	-118.4005
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	Insects	IILEPP2012	Candidate	None	G4T1T2Q	S2		IUCN_EN-End	384	99141	97762	200811XX	202201XX	N	U-Unknown	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Torrance (33	40	33.79032	-118.25819
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	Insects	IILEPP2012	Candidate	None	G4T1T2Q	S2		IUCN_EN-End	385	99151	97766	200811XX	202201XX	N	U-Unknown	Presumed E	Circular feat	50	Unknown	Natural/Nat	Los Angeles	Long Beach	29	33.77594	-118.13567
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	Insects	IILEPP2012	Candidate	None	G4T1T2Q	S2		IUCN_EN-End	408	99712	98295	19851129	19851129	N	U-Unknown	Presumed E	Circular feat	40	Unknown	Natural/Nat	Los Angeles	Venice (331	100	33.9579	-118.4329
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	Insects	IILEPP2012	Candidate	None	G4T1T2Q	S2		IUCN_EN-End	409	99745	98324	19851103	19851103	N	U-Unknown	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Torrance (33	100	33.86475	-118.35808
Horkelia cuneata var. puberula	mesa horkelia	Dicots	PDROS0W045	None	None	G4T1	S1	1B.1	SB_CalBG/RSA	67	100201	17565	19310326	19310326	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Redondo Beach (3311874		33.77685	-118.39592
Horkelia cuneata var. puberula	mesa horkelia	Dicots	PDROS0W045	None	None	G4T1	S1	1B.1	SB_CalBG/RSA	68	100202	1557	19320424	19320424	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Venice (3311884)		33.91505	-118.4281
Atriplex coulteri	Coulter's saltbush	Dicots	PDCHE040E0	None	None	G3	S1S2	1B.2	SB_CalBG/RSA	102	100548	99025	20120601	20120601	N	U-Unknown	Presumed E	Specific bou	20	Unknown	Natural/Nat	Los Angeles	Redondo Be	10	33.80247	-118.39758
Atriplex coulteri	Coulter's saltbush	Dicots	PDCHE040E0	None	None	G3	S1S2	1B.2	SB_CalBG/RSA	103	100549	99026	19020515	19020515	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Inglewood (3311883)		33.89139	-118.302
Agelaius tricolor	tricolored blackbird	Birds	ABPBXB0020	None	Threatened	G1G2	S2		BLM_S-Sensit	774	101254	99707	19400510	19400510	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Inglewood (	43	33.9033	-118.324
Lycium brevipes var. hassei	Santa Catalina Island desert-thorn	Dicots	PDSOL0G0N0	None	None	G5T1Q	S1	3.1		6	101506	99959	20180304	20180304	N	B-Good	Presumed E	Specific bou	20	Unknown	Natural/Nat	Los Angeles	Redondo Be	300	33.79026	-118.40719
Aphanisma blitoides	aphanisma	Dicots	PDCHE02010	None	None	G3G4	S2	1B.2	SB_CRES-San	76	101704	A0142	20150127	20150127	N	C-Fair	Presumed E	Specific bou	20	Unknown	Natural/Nat	Los Angeles	Redondo Be	25	33.74151	-118.38587
Chaenactis glabriuscula var. orcuttiana	Orcutt's pincushion	Dicots	PDAST20095	None	None	G5T1	S1	1B.1	SB_CalBG/RSA	36	102210	A0653	20010513	20010513	N	U-Unknown	Presumed E	Circular feat	40	Unknown	Natural/Nat	Los Angeles	Venice (3311884)		33.90258	-118.41854
Chaenactis glabriuscula var. orcuttiana	Orcutt's pincushion	Dicots	PDAST20095	None	None	G5T1	S1	1B.1	SB_CalBG/RSA	37	102212	A0655	19860401	19860401	N	U-Unknown	Presumed E	Circular feat	80	Unknown	Natural/Nat	Los Angeles	Venice (3311884)		33.94172	-118.43801
Chaenactis glabriuscula var. orcuttiana	Orcutt's pincushion	Dicots	PDAST20095	None	None	G5T1	S1	1B.1	SB_CalBG/RSA	38	102214	A0657	20150520	20150520	N	C-Fair	Presumed E	Specific bou	20	Unknown	Natural/Nat	Los Angeles	Venice (331	10	33.97083	-118.45858
Isocoma menziesii var. decumbens	decumbent goldenbush	Dicots	PDAST57091	None	None	G3G5T2T3	S2	1B.2	BLM_S-Sensit	101	103371	26479	18970817	18970817	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	San Pedro (3311863) | Lo		33.75713	-118.23704
Sidalcea neomexicana	salt spring checkerbloom	Dicots	PDMAL110J0	None	None	G4	S2	2B.2	USFS_S-Sensit	27	105338	A3696	192205XX	192205XX	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Inglewood (3311883) | V		34.01264	-118.37575
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	Dicots	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2	BLM_S-Sensit	50	106381	A4685	19010606	19010606	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Venice (3311884) | Bever		33.98812	-118.40409
Coturnicops noveboracensis	yellow rail	Birds	ABNME01010	None	None	G4	S2		CDFW_SSC-Sp	23	106991	A5268	19981020	19981020	N	U-Unknown	Presumed E	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Venice (331	53	33.8924	-118.4154
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	1	110041	A8262	20100420	20100420	N	B-Good	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	145	33.94184	-118.43758
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	45	110046	A8265	20051124	20051124	N	C-Fair	Presumed E	Circular feat	40	Unknown	Natural/Nat	Los Angeles	Venice (331	12	33.95844	-118.45092
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	46	110049	A8267	19590510	19590510	N	X-None	Possibly Exti	Circular feat	40	Unknown	Natural/Nat	Los Angeles	Venice (331	55	33.955	-118.44747
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	47	110050	A8268	20160514	20160514	N	B-Good	Presumed E	Specific bou	20	Unknown	Natural/Nat	Los Angeles	Venice (331	15	33.96252	-118.44982
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	48	110056	A8273	20130202	20130202	N	B-Good	Presumed E	Specific bou	20	Unknown	Natural/Nat	Los Angeles	Venice (331	7	33.96697	-118.43237
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	49	110057	A8276	20130302	20130302	N	B-Good	Presumed E	Specific bou	20	Unknown	Natural/Nat	Los Angeles	Venice (331	54	33.96548	-118.4263
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	50	110063	A8280	20040523	20040523	N	D-Poor	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	24	33.92966	-118.43512

SciName	ComName	TaxonGroup	ElmCode	FedList	CalList	GRank	SRank	RPlantRank	OthrStatus	OccNumber	EOndx	Mapndx	ElmDate	SiteDate	Sensitive	OccRank	Presence	Accuracy	ccuracyOrde	Trend	OccType	County	Quad	Elevation	Latitude	Longitude
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	51	110064	A8281	19561024	19561024	N	D-Poor	Presumed E:	Circular feat	50	Unknown	Natural/Nat	Los Angeles	Venice (331	181	33.891	-118.40707
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	52	110065	A8282	20160629	20160629	N	D-Poor	Presumed E:	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	20	33.89901	-118.41963
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	53	110066	A8283	19610304	19610304	N	D-Poor	Presumed E:	Circular feat	40	Unknown	Natural/Nat	Los Angeles	Venice (331	112	33.88564	-118.40038
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	54	110068	A8285	19890315	19890315	N	D-Poor	Presumed E:	Circular feat	40	Unknown	Natural/Nat	Los Angeles	Venice (331	95	33.87809	-118.40616
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	55	110941	A9105	19650702	19650702	N	D-Poor	Presumed E:	Circular feat	50	Unknown	Natural/Nat	Los Angeles	Redondo Be	94	33.86443	-118.39321
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	56	110947	A9112	20020818	20020818	N	D-Poor	Presumed E:	Circular feat	40	Unknown	Natural/Nat	Los Angeles	Redondo Be	72	33.87306	-118.40175
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	57	110948	A9113	19760301	19760301	N	D-Poor	Presumed E:	Circular feat	70	Unknown	Natural/Nat	Los Angeles	Redondo Be	61	33.84152	-118.38969
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	58	110949	A9114	20010422	20010422	N	U-Unknown	Presumed E:	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Redondo Be	5	33.80981	-118.39244
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	59	110950	A9115	19680707	19680707	N	D-Poor	Presumed E:	Circular feat	40	Unknown	Natural/Nat	Los Angeles	Torrance (33	89	33.80538	-118.31465
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	60	110951	A9117	20121207	20121207	N	U-Unknown	Presumed E:	Specific bou	10	Unknown	Natural/Nat	Los Angeles	Torrance (33	91	33.84953	-118.34174
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	61	110952	A9118	20110515	20110515	N	U-Unknown	Presumed E:	Specific bou	10	Unknown	Natural/Nat	Los Angeles	Torrance (33	100	33.86373	-118.3576
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	63	110954	A9120	19571028	19571028	N	D-Poor	Presumed E:	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Inglewood (	45	33.88753	-118.33924
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	64	110955	A9121	19390529	19390529	N	D-Poor	Presumed E:	Circular feat	90	Unknown	Natural/Nat	Los Angeles	South Gate (	114	33.95471	-118.21127
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	70	110970	A9136	1952XXXX	1952XXXX	N	D-Poor	Presumed E:	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Venice (331	34	34.0066	-118.46009
Centromadia pungens ssp. laevis	smooth tarplant	Dicots	PDAST4R0R4	None	None	G3G4T2	S2	1B.1	SB_CalBG/RSA	143	113213	34592	19200420	19200420	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	San Pedro (3311863) | To		33.73644	-118.28092
Atriplex pacifica	south coast saltscale	Dicots	PDCHE041C0	None	None	G4	S2	1B.2	SB_CalBG/RSA	119	113346	B1438	20141230	20141230	N	U-Unknown	Presumed E:	Non-specific	30	Unknown	Natural/Nat	Los Angeles	San Pedro (3	35	33.74231	-118.38025
Atriplex pacifica	south coast saltscale	Dicots	PDCHE041C0	None	None	G4	S2	1B.2	SB_CalBG/RSA	120	113347	B1439	20090702	20090702	N	U-Unknown	Presumed E:	Specific bou	20	Unknown	Natural/Nat	Los Angeles	San Pedro (3	50	33.73857	-118.36262
Atriplex pacifica	south coast saltscale	Dicots	PDCHE041C0	None	None	G4	S2	1B.2	SB_CalBG/RSA	121	113348	B1440	20090326	20090326	N	U-Unknown	Presumed E:	Specific bou	10	Unknown	Natural/Nat	Los Angeles	San Pedro (3	345	33.74471	-118.36056
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	401	113598	B1684	20181222	20181222	N	B-Good	Presumed E:	Circular feat	40	Unknown	Natural/Nat	Los Angeles	Redondo Be	327	33.79999	-118.38199
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	403	113629	B1714	20141004	20141004	N	D-Poor	Presumed E:	Circular feat	40	Unknown	Natural/Nat	Los Angeles	Redondo Be	65	33.85568	-118.39257
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	404	113632	B1718	20180430	20180430	N	D-Poor	Presumed E:	Specific bou	10	Unknown	Natural/Nat	Los Angeles	Venice (331	12	33.967	-118.45484
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	None	None	G3	S3		CDFW_SSC-Sp	405	113643	B1729	20180602	20180602	N	C-Fair	Presumed E:	Circular feat	40	Unknown	Natural/Nat	Los Angeles	Venice (331	144	33.96918	-118.42219
Lycium brevipes var. hassei	Santa Catalina Island desert-thorn	Dicots	PDSOL0G0N0	None	None	G5T1Q	S1	3.1		7	113687	B1772	20090227	20090227	N	U-Unknown	Presumed E:	Specific bou	10	Unknown	Natural/Nat	Los Angeles	Redondo Be	50	33.74098	-118.40305
Centromadia parryi ssp. australis	southern tarplant	Dicots	PDAST4R0P4	None	None	G3T2	S2	1B.1	SB_CalBG/RSA	109	114229	B2305	201607XX	201607XX	N	B-Good	Presumed E:	Specific bou	20	Unknown	Natural/Nat	Los Angeles	Torrance (33	17	33.79693	-118.28961
Spea hammondii	western spadefoot	Amphibians	AAABF02020	None	None	G2G3	S3S4		BLM_S-Sensit	1046	116862	B3948	19660425	19660425	N	X-None	Possibly Exti	Circular feat	50	Unknown	Natural/Nat	Los Angeles	Torrance (33	145	33.84837	-118.37753
Spea hammondii	western spadefoot	Amphibians	AAABF02020	None	None	G2G3	S3S4		BLM_S-Sensit	1047	116863	B3949	19580415	19580415	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Inglewood (	72	33.91872	-118.35075
Spea hammondii	western spadefoot	Amphibians	AAABF02020	None	None	G2G3	S3S4		BLM_S-Sensit	1048	116865	B3951	19380203	19380203	N	X-None	Possibly Exti	Circular feat	50	Unknown	Natural/Nat	Los Angeles	Inglewood (	239	33.94543	-118.30907
Spea hammondii	western spadefoot	Amphibians	AAABF02020	None	None	G2G3	S3S4		BLM_S-Sensit	1049	116866	B3953	19560502	19560502	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Los Alamitos	76	33.88792	-118.11662
Spea hammondii	western spadefoot	Amphibians	AAABF02020	None	None	G2G3	S3S4		BLM_S-Sensit	1082	116931	B4015	19XXXXXX	19XXXXXX	N	X-None	Extirpated	Circular feat	60	Unknown	Natural/Nat	Los Angeles	Torrance (33	42	33.82188	-118.29037
Spea hammondii	western spadefoot	Amphibians	AAABF02020	None	None	G2G3	S3S4		BLM_S-Sensit	1083	116932	B4016	195903XX	195903XX	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	San Pedro (3	1190	33.75948	-118.36297
Astragalus hornii var. hornii	Horn's milk-vetch	Dicots	PDFAB0F421	None	None	GUT1	S1	1B.1	BLM_S-Sensit	28	117528	B4592	189607XX	189607XX	N	X-None	Extirpated	Circular feat	100	Unknown	Natural/Nat	Los Angeles	Newport Beach (3311768		33.78301	-118.06702
Bombus crotchii	Crotch bumble bee	Insects	IIHYM24480	None	Candidate En	G2	S2		IUCN_EN-End	241	118094	34591	20010324	20010324	N	U-Unknown	Presumed E:	Circular feat	90	Unknown	Natural/Nat	Los Angeles	San Pedro (3	1200	33.74588	-118.33602
Glyptostoma gabrielense	San Gabriel chestnut	Mollusks	IMGASB1010	None	None	G2	S3			19	118937	B5925	19530522	19530522	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Long Beach	189	33.86276	-118.23165
Glyptostoma gabrielense	San Gabriel chestnut	Mollusks	IMGASB1010	None	None	G2	S3			23	118949	34591	19XXXXXX	19XXXXXX	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	San Pedro (3311863) | To		33.74588	-118.33602

9 QUAD

SciName	ComName	TaxonGroup	ElmCode	FedList	CalList	GRank	SRank	RPlantRank	OthrStatus	OccNumber	EOndx	Mapndx	ElmDate	SiteDate	Sensitive	OccRank	Presence	Accuracy	ccuracyOrde	Trend	OccType	County	Quad	Elevation	Latitude	Longitude
Gonidea angulata	western ridged mussel	Mollusks	IMBIV19010	None	None	G3	S2		IUCN_VU-Vul	153	119087	B6054	XXXXXXXX	1993XXXX	N	X-None	Extirpated	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Long Beach	283	34.05581	-118.22744
Polioptila californica californica	coastal California gnatcatcher	Birds	ABPBJ08081	Threatened	None	G4G5T3Q	S2		CDFW_SSC-Sp	1031	119312	B6262	20110214	20110214	N	B-Good	Presumed E	Specific bou	10	Unknown	Natural/Nat	Los Angeles	Venice (331	16	33.97821	-118.4337
Polioptila californica californica	coastal California gnatcatcher	Birds	ABPBJ08081	Threatened	None	G4G5T3Q	S2		CDFW_SSC-Sp	1032	119313	B6263	20110318	20110318	N	B-Good	Presumed E	Specific bou	10	Unknown	Natural/Nat	Los Angeles	Venice (331	14	33.97389	-118.43598
Polioptila californica californica	coastal California gnatcatcher	Birds	ABPBJ08081	Threatened	None	G4G5T3Q	S2		CDFW_SSC-Sp	1033	119314	B6264	20130522	20130522	N	C-Fair	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Venice (331	151	33.93889	-118.43566
Bombus crotchii	Crotch bumble bee	Insects	IIHYM24480	None	Candidate End	G2	S2		IUCN_EN-End	314	119453	B6396	20170715	20170715	N	U-Unknown	Presumed E	Circular feat	40	Unknown	Natural/Nat	Los Angeles	San Pedro (3	140	33.7167	-118.31507
Polioptila californica californica	coastal California gnatcatcher	Birds	ABPBJ08081	Threatened	None	G4G5T3Q	S2		CDFW_SSC-Sp	1037	119742	B6682	20190301	20190301	N	C-Fair	Presumed E	Specific bou	20	Unknown	Natural/Nat	Los Angeles	Torrance (33	389	33.7796	-118.33624
Polioptila californica californica	coastal California gnatcatcher	Birds	ABPBJ08081	Threatened	None	G4G5T3Q	S2		CDFW_SSC-Sp	1038	119755	B6698	20190708	20190708	N	A-Excellent	Presumed E	Non-specific	30	Unknown	Natural/Nat	Los Angeles	San Pedro (3	165	33.71801	-118.31483
Polioptila californica californica	coastal California gnatcatcher	Birds	ABPBJ08081	Threatened	None	G4G5T3Q	S2		CDFW_SSC-Sp	1045	119808	1700	19041015	19041015	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Torrance (33	50	33.82921	-118.39056
Cicindela latesignata	western beach tiger beetle	Insects	IICOL02110	None	None	G2G3	S1			3	121048	B7893	19071006	1979XXXX	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	San Pedro (3	19	33.74968	-118.28125
Cicindela latesignata	western beach tiger beetle	Insects	IICOL02110	None	None	G2G3	S1			5	121049	60935	189508XX	1979XXXX	N	X-None	Extirpated	Non-specific	30	Unknown	Natural/Nat	Los Angeles	Seal Beach (	20	33.76188	-118.16108
Cicindela latesignata	western beach tiger beetle	Insects	IICOL02110	None	None	G2G3	S1			21	121066	B7886	19451021	1979XXXX	N	X-None	Extirpated	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Seal Beach (	3	33.76324	-118.11553
Brennania belkini	Belkin's dune tabanid fly	Insects	IIDIP17010	None	None	G1G2	S1S2		IUCN_VU-Vul	5	121299	28742	19580630	19580630	N	X-None	Possibly Exti	Circular feat	90	Unknown	Natural/Nat	Los Angeles	Inglewood (	100	33.9593	-118.35104
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	Insects	IILEPP2012	Candidate	None	G4T1T2Q	S2		IUCN_EN-End	431	121319	B8250	20220116	20220116	N	U-Unknown	Presumed E	Specific bou	20	Unknown	Natural/Nat	Los Angeles	Redondo Be	62	33.86358	-118.39496

9 QUAD

UTM	PLSS	Location	LocDetails	Ecological	ThreatList	Threat	General	OwnerMgt	LastUpdate	KeyQuad	UTMZone	UTME	UTMN
Zone-11 N3	T05S, R13W	SAN PEDRO.	EXACT LOCATION UNKNO		Developmer	AREA HAS B	OCCURRENC	UNKNOWN	1/16/2013 0:00	San Pedro (3	11	381341	3733670
Zone-11 N3	T04S, R14W	NEAR REDO	EXACT LOCATION UNKNOWN. ORIGINAL LABEL CIT				ONLY SOUR	UNKNOWN	9/26/2013 0:00	Redondo Be	11	371323	3744088
Zone-11 N3	T04S, R14W	REDONDO BEACH.		INHABITED	Other	SENSITIVE T	HISTORICAL	LAX COUNTY	9/14/2012 0:00	Redondo Be	11	371324	3744087
Zone-11 N3	T04S, R14W	REDONDO.	EXACT LOCATION UNKNOWN. MAPPED AS BEST G				ONLY SOUR	UNKNOWN	2/12/1996 0:00	Redondo Be	11	371323	3744088
Zone-11 N3	T05S, R12W	SEAL BEACH	EXACT LOCATIONS UNKNOWN. MAPPED AS BEST				OCCURRENC	UNKNOWN	7/31/2012 0:00	Seal Beach (	11	396922	3734792
Zone-11 N3	T04S, R14W	REDONDO (	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB				MAIN SOUR	UNKNOWN	8/28/2009 0:00	Redondo Be	11	371323	3744088
Zone-11 N3	T03S, R12W	DOWNEY CE	EXACT LOCA	SANDY SOIL.			ONLY SOUR	UNKNOWN	9/17/2013 0:00	South Gate (	11	394548	3752804
Zone-11 N3	T04S, R14W	WILDERNES	XERCES SITE	ROOST TREES ARE EUCALYPTUS.			CLUSTERS O	CITY OF RED	9/19/2022 0:00	Torrance (33	11	372843	3744116
Zone-11 N3	T04S, R14W	VIA LA SELV	TREATED AS	EUCALYPTUS WINDROWS IN YARDS O			LARGE CLUS	PVT	9/6/2022 0:00	Redondo Be	11	371822	3741216
Zone-11 N3	T02S, R15W	BALLONA W	XERCES SITE	ROOST TREES CONSIST OF A SMALL, D			10S OBS 198	DFG-BALLON	9/6/2022 0:00	Venice (331	11	366878	3759049
		SENSITIVE	PLEASE CON	HABITAT CO	Over-collect	THREATS INCLUDE HABITAT DESTRUC			9/28/2007 0:00	Torrance (33	0		
Zone-11 N3	T05S, R13W	TERMINAL ISLAND, SAN F		SALINE MEADOWS.			SITE KNOWN	UNKNOWN	5/18/1995 0:00	Long Beach	11	385434	3735914
Zone-11 N3	T05S, R14W	DEFENSE FU	MAPPED TO	HABITAT CO	Other | Non	THREATENE	1993: 28 AP	DOD-NAVY	12/10/2020 0:00	Torrance (33	11	379435	3737734
Zone-11 N3	T04S, R13W	HARBOR LAKE, IN THE SA		NESTING SUBSTRATE IS REEDS.			SUCCESSFUL	UNKNOWN	10/7/1993 0:00	Torrance (33	11	380580	3739179
Zone-11 N3	T02S, R12W	EAST LOS AN	MAPPED EAST OF THE SANTA ANA FREEWAY (I-5) A				ONLY SOUR	UNKNOWN	2/4/1997 0:00	South Gate (	11	394916	3761522
Zone-11 N3	T04S, R12W	BIXBY.	EXACT LOCATION UNKNOWN. MAPPE			THIS AREA IS	ONLY SOUR	UNKNOWN	8/28/2009 0:00	Long Beach	11	391136	3744839
Zone-11 N3	T02S, R15W	PLAYA DEL REY.					ONE EGG SE	DPR-DOCKW	12/7/2007 0:00	Venice (331	11	366147	3757852
Zone-11 N3	T02S, R15W	PLAYA DEL F	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB				ONLY SOUR	UNKNOWN	9/17/2013 0:00	Venice (331	11	366387	3758208
Zone-11 N3	T05S, R15W	BLUFFS OF P	ALONG BLU	NATIVE SPP	Developmer	DEVELOPME	CONDITION	UNKNOWN	7/13/1998 0:00	Redondo Be	11	368922	3735907
Zone-11 N3	T05S, R14W	PALOS VERD	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB				ONLY SOUR	UNKNOWN	10/7/1991 0:00	Redondo Be	11	370748	3738289
Zone-11 N3	T04S, R12W	HEARTWELL	XERCES SITE	ROOST TREE	Wood cuttir	POSSIBLE TH	CLUSTERS R	CITY OF LON	8/10/2022 0:00	Long Beach	11	395225	3743996
Zone-11 N3	T05S, R14W	PALOS VERD	2 POLYGONS	IN COASTAL	Foot traffic/	INCREASED	24 PLANTS I	CITY OF RAN	11/15/2018 0:00	San Pedro (3	11	376155	3732402
Zone-11 N3	T05S, R13W	TERMINAL ISLAND.		INHABITED	Other	SENSITIVE T	HISTORICAL	UNKNOWN	9/14/2012 0:00	San Pedro (3	11	383997	3734976
Zone-11 N3	T05S, R14W	PALOS VERD	SCATTERED	COASTAL BL	Developmer	GOLF COURS	ABOUT 60 P	PVT, OTHER	5/31/2016 0:00	San Pedro (3	11	375115	3732743
Zone-11 N3	T02S, R15W	MOUTH OF	1965 OBSER	TERNS NEST	Altered floo	EQUESTRIAN	1965: BIRDS	DFG-BALLON	12/10/2012 0:00	Venice (331	11	366401	3759118
Zone-11 N3	T03S, R15W	EL SEGUNDO	ENDEMIC; O	POSSIBLE FO	Non-native	MAIN THREAT IS INVASIC		CITY OF LA-L	10/25/1995 0:00	Venice (331	11	367502	3756197
Zone-11 N3	T03S, R15W	EL SEGUNDO	MAPPED NC	COASTAL DU	Developmer	HOUSING DI	COLLECTED	CITY OF LOS	7/18/2022 0:00	Venice (331	11	367196	3756682
Zone-11 N3	T03S, R15W	EL SEGUNDO	FOUND BEN	LIMITED TO COASTAL SAND DUNES.			TYPE LOCAL	PVT-LAX AIR	3/1/2005 0:00	Venice (331	11	366501	3757121
Zone-11 N3	T03S, R15W	EL SEGUNDO DUNES, JUS		LARVAE ARE	Developmer	SITE PROPO	THREE LARV	CITY OF LA-L	12/7/1995 0:00	Venice (331	11	367502	3756197
Zone-11 N3	T02S, R15W	BALLONA W	1981: LARGE	HOST PLANT IS SALTGRASS (DISTICHLI			FOUND IN A	DFG-BALLON	12/10/2012 0:00	Venice (331	11	367287	3759720
Zone-11 N3	T03S, R15W	EL SEGUNDO	70% OF AN	LARVAL FOO	Non-native	IN 1984 POF	POPULATIOI	CITY OF LA-L	9/6/2007 0:00	Venice (331	11	367502	3756197
Zone-11 N3	T02S, R15W	FLATS NEAR	BALLONA W	HABITAT RE	Developmer	EXTIRPATED	TYPE LOCAL	UNKNOWN	12/2/2022 0:00	Venice (331	11	366198	3760097

9 QUAD

UTM	PLSS	Location	LocDetails	Ecological	ThreatList	Threat	General	OwnerMgt	LastUpdate	KeyQuad	UTMZone	UTME	UTMN
Zone-11 N3	T02S, R15W	BALLONA W	AREA A. SM	SUBSEQUENT TO 1987 THIS POPULATION WAS EX				DFG-BALLON	12/10/2012 0:00	Venice (331	11	366979	3760177
Zone-11 N3	T02S, R15W	MOUTH OF	1991: ALL TE	101 HA SALT	Altered floo	EXOTIC RED	POPULATIO	DFG-BALLON	12/10/2012 0:00	Venice (331	11	366401	3759118
Zone-11 N3	T04S, R13W	HARBOR LAI	BIRDS USE T	A MAJOR PC	Recreationa	HUMAN DIS	TERNS OBSE	CITY OF LOS	10/20/1998 0:00	Torrance (33	11	380318	3739162
Zone-11 N3	T02S, R15W	MOUTH OF	ABOUT 70 A	LACKS LOW AND MIDDLE		CREEK DIKE	RESTORATIC	DFG-BALLON	12/10/2012 0:00	Venice (331	11	366401	3759118
Zone-11 N3	T05S, R13W	POINT FERM	A 1899 BRAN	DEGEE COLLECTION FROM "SAN PED			SITE MAPPE	UNKNOWN	9/24/2008 0:00	San Pedro (3	11	380142	3730352
Zone-11 N3	T02S, R15W	VICINITY OF	1895 LOCAT	EXTENSIVE M	Developmer	DEVELOPME	ONE RAIL OI	DPR-DOCKW	7/26/2017 0:00	Venice (331	11	366198	3760097
Zone-11 N3	T02S, R15W	PLAYA DEL REY.		INHABITED (	Other	SENSITIVE T	HISTORICAL	DPR-DOCKW	9/14/2012 0:00	Venice (331	11	366147	3757852
Zone-11 N3	T02S, R15W	BALLONA M	VICINITY IS	PRESENTLY MARINA DEL R		MARSHES N	VARIOUS CC	UNKNOWN	2/3/2010 0:00	Venice (331	11	365419	3761573
Zone-11 N3	T03S, R15W	HERMOSA B	EXACT LOCA	SAND DUNES.			TYPE LOCAL	UNKNOWN	8/7/2012 0:00	Redondo Be	11	370140	3748290
Zone-11 N3	T03S, R15W	EL SEGUNDO	EXACT LOCA	IN ESTABLISHED SAND DUNES. NEAR S			COLLECTED	UNKNOWN	8/7/2012 0:00	Venice (331	11	367981	3753655
Zone-11 N3	T02S, R15W	BALLONA BE	MAPPED AT	THE BEACH NORTH OF BALLONA CREE			FORTY-SIX E	DPR-DOCKW	12/7/2007 0:00	Venice (331	11	365285	3759393
Zone-11 N3	T05S, R14W	BETWEEN M	INCLUDES S	HABITAT IS (	Developmer	THREATENE	1980: 7 PRS,	CITY OF RAN	2/2/2021 0:00	San Pedro (3	11	375896	3732958
Zone-11 N3	T05S, R13W	EAST SAN PE	EXACT LOCA	SANDY SEA BEACHES.			OCCURRENC	UNKNOWN	6/11/1996 0:00	San Pedro (3	11	382864	3734096
Zone-11 N3	T03S, R14W	DRY DITCHE	MAPPED AS	IN DRY DITC	Developmer	DEVELOPME	OBSERVED I	UNKNOWN	8/18/2021 0:00	Inglewood (3	11	378510	3752655
Zone-11 N3	T03S, R15W	MANHATTA	LOCATION S	SAND DUNE	Developmer	LOSS OF HA	ONE FEMAL	UNKNOWN	7/15/2022 0:00	Venice (331	11	369339	3750624
Zone-11 N3	T03S, R15W	SAND DUNE	MAPPED NO	DUNE SYSTE	Developmer	HABITAT WA	ABOUT 30 W	LADWP	7/18/2022 0:00	Venice (331	11	368102	3754817
Zone-11 N3	T02S, R15W	SAND DUNE	AT SOUTHW	REMNANT C	Developmer	HABITAT LO	ONE ADULT	DFG-BALLON	7/18/2022 0:00	Venice (331	11	366059	3758917
Zone-11 N3	T02S, R15W	BALLONA W	BALLONA W	FOUND ONLY ON COASTAL SAND DUN			1980: COMN	DFG-BALLON	12/10/2012 0:00	Venice (331	11	367107	3759447
Zone-11 N3	T03S, R15W	MANHATTA	THE BEETLE	THE BEETLE HAS A BIMODAL FLIGHT P			UNCOMMO	LAX COUNTY	9/14/2012 0:00	Venice (331	11	369073	3750904
Zone-11 N3	T05S, R12W	NAPLES.		INHABITED (	Other	SENSITIVE T	HISTORICAL	UNKNOWN	9/14/2012 0:00	Los Alamitos	11	396045	3735643
Zone-11 N3	T05S, R14W	TOP OF SAN PEDRO HILL, BOUNDED B			Non-native p	GRADING AI	PVBB AND A	PVT-S&S CO	1/5/2000 0:00	Torrance (33	11	375212	3735283
Zone-11 N3	T05S, R14W	GULFCREST-	PALO VISTA DRIVE, SEA C		Developmer	GRADING AI	SITE DISCOV	PVT	1/4/2000 0:00	San Pedro (3	11	375747	3733229
Zone-11 N3	T05S, R14W	CANYON NEAR FORRESTAL DR; N & W			ORV activity	ORV'S ACTIV	BOTH PALOS	PVT-PALOS V	1/5/2000 0:00	San Pedro (3	11	375171	3734114
Zone-11 N3	T05S, R14W	ALONG OLD CRENSHAW BLVD BTWN ALTAMIRA & PORTUGUES					SITE DISCOV	PVT-FILIORU	1/5/2000 0:00	Torrance (33	11	373522	3735922
Zone-11 N3	T05S, R14W	NEAR INTERSECTION OF SEACREST DRIVE, CRENSHAW BLVD AN					SITE DISCOV	PVT	1/5/2000 0:00	Torrance (33	11	372781	3736302
Zone-11 N3	T05S, R14W	ALONG TRAILS WEST OF		THE HOST PLANT, ASTRAGALUS, GRO			AREA RECEI	PVT-FILIORU	1/3/2000 0:00	Redondo Be	11	371887	3734957
Zone-11 N3	T05S, R14W	SWITCHBAC	3 LOCATION	39 ASTRAGA	Developmer	CONTINUIN	SITE NEEDS	PVT, CITY OF	10/21/2011 0:00	San Pedro (3	11	376734	3733006
Zone-11 N3	T05S, R15W	AGUA AMARGA CANYON		WEED MAN.	Other	GOPHERS AI	DESIGNATEI	PVT-RANCH(	1/3/2000 0:00	Redondo Be	11	370038	3737080
Zone-11 N3	T05S, R14W	FRED HESSE	ABOUT 15 A	NO ASTRAGALUS SEEN HERE 1983 TH			DESIGNATEI	CITY OF RAN	12/22/2004 0:00	Redondo Be	11	371060	3737122

9 QUAD

UTM	PLSS	Location	LocDetails	Ecological	ThreatList	Threat	General	OwnerMgt	LastUpdate	KeyQuad	UTMZone	UTME	UTMN
Zone-11 N3	T05S, R14W	ALTA VISTA WAY WEST C		FORMERLY A LARGE, UNDISTURBED C			EXTIRPATED	PVT	12/22/2004 0:00	Redondo Be	11	370567	3735678
Zone-11 N3	T03S, R15W	EL SEGUNDO	PRESERVE C	ERIOGONUM	Non-native p	1984: NON-I	POPULATIOI	PVT-CHEVRO	9/5/2007 0:00	Venice (331	11	368596	3753764
Zone-11 N3	T02S, R15W	BALLONA CR	MAPPED AL	HABITAT IS (	Developmer	HABITAT CO	LACM SPECI	DPR-DOCKW	7/21/2016 0:00	Venice (331	11	367248	3760003
Zone-11 N3	T04S, R13W	DOMINGUEZ	EXACT LOCA	GROWING IN	Developmer	PROBABLY E	SITE BASED (	UNKNOWN	11/22/2010 0:00	Torrance (33	11	382089	3746393
Zone-11 N3	T02S, R14W	HYDE PARK.	EXACT LOCATION UNKNOWN. MAPPE			PROBABLY E	ONLY SOUR(	UNKNOWN	12/7/2010 0:00	Inglewood (	11	377074	3760921
Zone-11 N3	T02S, R14W	BALDWIN HILLS, VICINITY		HABITAT IS COASTAL SAG		THREATENE	ONE INDIVI	UNKNOWN	8/10/1989 0:00	Venice (331	11	372277	3761970
Zone-11 N3	T05S, R14W	SUNNYRIDG	MAPPED TO	HABITAT IS COASTAL SAG		THREATENE	1-2 PAIRS OI	UNKNOWN	5/19/2008 0:00	Torrance (33	11	374208	3737214
Zone-11 N3	T02S, R15W	BALLONA W	PRIMARILY A	PAIRS NEST	Non-native p	PRIMARILY I	POP STABLE	DFG-BALLON	12/14/2012 0:00	Venice (331	11	367287	3759720
Zone-11 N3	T99X, R99X,	TERMINAL ISLAND LAND(		SITE CREATE	Other | Non	THREATS IN(	1982: 70 NE	DOD-NAVY	10/20/1998 0:00	San Pedro (3	11	383970	3733879
Zone-11 N3	T05S, R12W	BELMONT SHORE BEACH		SITE SERVES AS A NIGHT ROOST FOR U			MANY FLED(	UNKNOWN	10/20/1998 0:00	Long Beach	11	394612	3735585
Zone-11 N3	T05S, R13W	REEVES FIELD ON TERMI		SITE NOW A	Developmer	LANDFILL &	1974:10-12	PVT	10/20/1998 0:00	Torrance (33	11	383754	3735207
Zone-11 N3	T02S, R15W	BEETHOVEN ST FILL. BAL		NESTING AREA TRIANGULARLY BORDE			FIRST YEAR (	DFG-BALLON	10/21/1998 0:00	Venice (331	11	368241	3760842
Zone-11 N3	T02S, R15W	VENICE BEA	HISTORICALI	PRIOR TO TH	Other | Non	1990 CAT PF	1973-84: ME	DPR-DOCKW	10/21/1998 0:00	Venice (331	11	365219	3759541
Zone-11 N3	T03S, R15W	EL SEGUNDO	REMNANT C	VEG DOM BY ERICAMERI		MUCH OF A(	HABITAT FO	CITY OF LOS	7/13/1998 0:00	Venice (331	11	367484	3755764
Zone-11 N3	T03S, R14W	EL NIDO, APPROX 8 MI NW OF LOS ANGELES.					USNM SPEC	UNKNOWN	8/10/1989 0:00	Torrance (33	11	374535	3747924
Zone-11 N3	T03S, R13W	1 MILE WEST LOS ANGELES RIVER, 200 WEST BLOCK OF EAST 68					LACM SPECI	UNKNOWN	1/23/2006 0:00	South Gate (	11	388321	3749353
Zone-11 N3	T05S, R13W	4TH AND DAISY, LONG BEACH.					LACM SPECI	UNKNOWN	1/23/2006 0:00	Long Beach	11	388942	3737492
Zone-11 N3	T03S, R13W	CITY OF CON	1 RECORD FROM JUNCTION OF ROSECRANS AVE &				LACM SPECI	UNKNOWN	1/23/2006 0:00	South Gate (	11	386952	3752103
Zone-11 N3	T02S, R15W	BALLONA CR	TAKEN IN SALTMARSH.				MUSEUM C(	DFG-BALLON	12/14/2012 0:00	Venice (331	11	366401	3759118
Zone-11 N3	T04S, R14W	SOUTH COA	EXPERIMEN	THE BOTANIC GARDEN SITE WAS AN (			EXPERIMEN	LAX COUNTY	10/19/1998 0:00	Torrance (33	11	375412	3738921
Zone-11 N3	T04S, R12W	BRYANT RAN	COLLECTED IN T04S R12W NW 1/4 SECTION 31.				ONLY SOUR(	UNKNOWN	3/17/1997 0:00	Long Beach	11	390574	3739048
Zone-11 N3	T05S, R14W	PALOS VERD	WOODRATS	SITE IS MAD	Developmer	THREATENE	19 ADULTS T	UNKNOWN	11/5/1996 0:00	San Pedro (3	11	374739	3733197
Zone-11 N3	T05S, R14W	PALOS VERD	PALOS VERD	MOST FOUN	Developmer	THREATENE	1980: 5PRS.	CITY OF RAN	1/29/2021 0:00	Redondo Be	11	370611	3734792
Zone-11 N3	T05S, R15W	AGUA AMAR	1993-95 STU	HABITAT WA	Developmer	THREATENE	1980: 3 PRS	CITY OF RAN	2/12/2021 0:00	Redondo Be	11	370438	3736941
Zone-11 N3	T05S, R14W	BOUNDED B	KLONDIKE C	HABITAT: CO	Developmer	THREATENE	1972: 2UNK.	CITY OF RAN	2/2/2021 0:00	San Pedro (3	11	374504	3734739
Zone-11 N3	T02S, R14W	INGLEWOOD, NEAR LOS ANGELES.					ONLY SOUR(	UNKNOWN	2/4/1997 0:00	Inglewood (	11	375170	3758465
Zone-11 N3	T02S, R13W	LOS ANGELE	MAPPED SOUTH OF MANCHESTER AVE & WEST OF				MAPPED BA	UNKNOWN	8/27/1998 0:00	Inglewood (	11	382808	3758227
Zone-11 N3	T05S, R13W	AT HARBOR	6 POLYGONS	IN NARROW	Other | Foo	TRAILS, SHE	HARBOR PA	DOD-NAVY,	2/8/2019 0:00	Torrance (33	11	380392	3738446
Zone-11 N3	T02S, R15W	BALLONA M	MAPPED AC	EDGE OF SALT MARSH SUPPORTING S			30 PLANTS S	DFG-BALLON	8/10/2015 0:00	Venice (331	11	367838	3760723
Zone-11 N3	T02S, R15W	BALLONA M	EXACT LOCA	GROWING IN SALT MARS		NO LONGER	SITE BASED (	DFG-BALLON	10/1/2015 0:00	Venice (331	11	366198	3760097
Zone-11 N3	T04S, R14W	MADRONA MARSH, AT M		HABITAT CONSISTS OF A VERNAL POO			75-100 INDI	CITY OF TOR	9/22/1998 0:00	Torrance (33	11	375777	3743790
Zone-11 N3	T04S, R14W	MADRONA I	MAPPED AC	ALONG THE INNER AND OUTER EDGE			SEVERAL TH	CITY OF TOR	8/5/2015 0:00	Torrance (33	11	375832	3743773

9 QUAD

UTM	PLSS	Location	LocDetails	Ecological	ThreatList	Threat	General	OwnerMgt	LastUpdate	KeyQuad	UTMZone	UTME	UTMN
Zone-11 N3	T04S, R14W	CLIFTON, EAST OF REDONDO STATE BEACH.					HISTORIC SI	UNKNOWN	4/10/2003 0:00	Redondo Be	11	372168	3743796
Zone-11 N3	T03S, R15W	MARINA DEI	COLLECTION LOCALITIES INCLUDEL: DEL REY, PLAY				HISTORIC SI	UNKNOWN	4/10/2003 0:00	Venice (331	11	368233	3755463
Zone-11 N3	T04S, R13W	WILMINGTON, LOS ANGELES.					HISTORIC SI	UNKNOWN	4/10/2003 0:00	Long Beach	11	384477	3739572
Zone-11 N3	T04S, R12W	LONG BEACI	MAPPED BY	SALT MARSH	Developmer	ENTIRE ARE/	SITE BASED	UNKNOWN	8/18/2009 0:00	Long Beach	11	390574	3739048
Zone-11 N3	T02S, R15W	BALLONA, P	EXACT LOCATION UNKNOWN. MAPPED AS BEST G				ONLY SOUR	UNKNOWN	11/17/1998 0:00	Venice (331	11	366198	3760097
Zone-11 N3	T02S, R15W	DUNES OF C	EXACT LOCA	COASTAL DUNES.			ONLY SOUR	UNKNOWN	5/15/2015 0:00	Beverly Hills	11	362349	3764578
Zone-11 N3	T02S, R15W	BALLONA HA	MAPPED IN VICINITY OF		Developmer	MUCH OF TH	ONLY SOUR	DFG-BALLON	9/29/2008 0:00	Venice (331	11	366198	3760097
Zone-11 N3	T05S, R14W	ABALONE C	MAPPED AS	SOUTHERN	Non-native p	NON-NATIV	1 PLANT OB	CITY OF RAN	5/11/2016 0:00	San Pedro (3	11	372791	3734027
Zone-11 N3	T02S, R14W	NEAR HYDE	EXACT LOCA	LOW GROUI	Developmer	DEVELOPME	ONLY SOUR	UNKNOWN	2/22/2017 0:00	Inglewood (3	11	377074	3760921
Zone-11 N3	T05S, R14W	PALOS VERD	TWO POLYO	ROCKY OUT	Developmer	CITY OF PAL	UNKNOWN	PVT, UNKNC	12/12/2012 0:00	San Pedro (3	11	375293	3732683
Zone-11 N3	T05S, R15W	PALOS VERD	2 POLYGONS	ROCKY OUT	Developmer	DEVELOPME	UNKNOWN	UNKNOWN	12/12/2012 0:00	Redondo Be	11	369756	3734384
Zone-11 N3	T05S, R13W	POINT FERM	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB				ONLY SOUR	UNKNOWN	1/28/2002 0:00	San Pedro (3	11	380142	3730352
Zone-11 N3	T05S, R14W	WHITES POI	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB				ONLY SOUR	UNKNOWN	1/28/2002 0:00	San Pedro (3	11	378051	3731451
Zone-11 N3	T03S, R12W	NEAR DOWNEY, WEST LOS ANGELES COUNTY.					COLLECTED	UNKNOWN	2/14/2002 0:00	South Gate (	11	395032	3756324
Zone-11 N3	T04S, R12W	NEAR LAKEWOOD, WEST LOS ANGELES COUNTY.					COLLECTED	UNKNOWN	2/14/2002 0:00	Los Alamitos	11	396606	3744512
Zone-11 N3	T02S, R14W	SINK NEAR I	EXACT LOCA	IN SINK.			ONLY SOUR	UNKNOWN	3/15/2002 0:00	Inglewood (3	11	375170	3758465
Zone-11 N3	T03S, R15W	SAND DUNE	BEHIND CITY	REMNANT S	Developmer	HEAVY RECR	SEEN IN 200	CITY OF MAI	6/15/2016 0:00	Venice (331	11	369375	3751875
Zone-11 N3	T02S, R15W	BALLONA W	ON A NARRO	ON COASTA	Other | Roa	MECHANICA	LIKELY OBSE	DFG-BALLON	6/15/2016 0:00	Venice (331	11	366071	3758889
Zone-11 N3	T05S, R14W	POINT FERM	XERCES SITE	HABITAT CO	Wood cuttin	REMOVAL O	100-200 REF	DHS-COAST	11/17/2015 0:00	San Pedro (3	11	380057	3730378
Zone-11 N3	T03S, R15W	RECREATION	XERCES SITE	AUTUMNAL	Other	MUSIC BANI	100S OBSER	CITY OF EL S	10/30/2015 0:00	Venice (331	11	369484	3754307
Zone-11 N3	T04S, R13W	WILMINGTON.			Developmer	AREA HAS B	ONLY SOUR	UNKNOWN	2/11/2015 0:00	Long Beach	11	384477	3739572
Zone-11 N3	T03S, R12W	DOWNEY.			Developmer	AREA HAS B	ONLY SOUR	UNKNOWN	2/11/2015 0:00	South Gate (	11	395032	3756324
Zone-11 N3	T03S, R13W	COMPTON.			Developmer	AREA HAS B	OCCURRENC	UNKNOWN	2/11/2015 0:00	South Gate (	11	386952	3752103
Zone-11 N3	T03S, R14W	JUNCTION C	EXACT LOCA	IN GRASSY M	Developmer	AREA HAS B	SITE BASED	UNKNOWN	2/11/2015 0:00	Inglewood (3	11	378793	3752708
Zone-11 N3	T03S, R14W	NEAR JUNCT	EXACT LOCA	ON MARGIN	Developmer	AREA HAS B	ONLY SOUR	UNKNOWN	2/11/2015 0:00	Venice (331	11	370902	3752214
Zone-11 N3	T04S, R13W	WILMINGTON.					LOCATION B	UNKNOWN	9/6/2002 0:00	Long Beach	11	384477	3739572
Zone-11 N3	T05S, R14W	PALOS VERD	EXACT LOCATION UNKNC		Developmer	AREA HAS B	TYPE LOCAL	UNKNOWN	10/2/2012 0:00	San Pedro (3	11	376250	3734781
Zone-11 N3	T05S, R13W	BORDERS OI	EXACT LOCA	BORDERS OI	Developmer	DEVELOPME	ONLY SOUR	UNKNOWN	11/10/2016 0:00	San Pedro (3	11	381341	3733670
Zone-11 N3	T05S, R12W	BELMONT SI	MAPPED BY	DISTURBED SALT MARSH		IN SANDY SC	SITE BASED	CITY OF LON	11/4/2016 0:00	Long Beach	11	395008	3737413
Zone-11 N3	T01S, R13W	HERMON HI	UNABLE TO FIND ANY REFERENCE TO "HERMON H				MVZ EGG SE	UNKNOWN	5/9/2003 0:00	Los Angeles	11	385050	3768805
Zone-11 N3	T05S, R14W	ON TOP (ED	ALONG WES	ADJACENT S	Non-native p	TOP OF POI	50-75 PLANT	CITY OF RAN	5/10/2016 0:00	San Pedro (3	11	372648	3733945
Zone-11 N3	T01S, R13W	LOS ANGELE	NO OTHER LOCATION INFORMATION GIVEN.				1 COLLECTEI	UNKNOWN	1/5/2005 0:00	Los Angeles	11	385050	3768805

9 QUAD

UTM	PLSS	Location	LocDetails	Ecological	ThreatList	Threat	General	OwnerMgt	LastUpdate	KeyQuad	UTMZone	UTME	UTMN
Zone-11 N3	T05S, R14W	SAN PEDRO	USNM RECORD GIVES "NEAREST PLACE NAME" AS				USNM #153	UNKNOWN	11/5/2004 0:00	San Pedro (3	11	379485	3730811
Zone-11 N3	T05S, R14W	RANCHO PA	EAST OF DR	RIPARIAN H	Developmer	PROPOSED	2 PLANTS O	CITY OF RAN	9/16/2019 0:00	San Pedro (3	11	374667	3734658
Zone-11 N3	T05S, R14W	FORRESTAL	3 POLYGON	COASTAL SA	Developmer	THREATENE	SW POLY: 2	CITY OF RPV	9/24/2018 0:00	San Pedro (3	11	375725	3734321
Zone-11 N3	T02S, R14W	BALDWIN H	1977 SPECIMENS COLLECTED AT THIS SPECIFIC LO				2 FEMALE SI	UNKNOWN	12/22/2004 0:00	Inglewood (	11	374074	3762685
Zone-11 N3	T02S, R14W	CULVER CIT	EXACT LOCATION NOT KNOWN, MAPPED IN THE G				1 M & 8 U SI	UNKNOWN	12/22/2004 0:00	Venice (331	11	372277	3761970
Zone-11 N3	T02S, R15W	BALLONA W	MAPPED AT	2009 COLLE	Non-native	A VARIETY C	1925: 6 COL	DFG-BALLON	10/12/2018 0:00	Venice (331	11	367287	3759720
Zone-11 N3	T03S, R13W	COMPTON.	NO OTHER LOCATION INFORMATION GIVEN, MAP				MVZ #649, N	UNKNOWN	1/4/2005 0:00	South Gate (	11	386952	3752103
Zone-11 N3	T01S, R13W	LOS ANGELE	NO OTHER LOCATION INFORMATION GIVEN, MAP				MVZ #2205	UNKNOWN	1/5/2005 0:00	Los Angeles	11	385050	3768805
Zone-11 N3	T02S, R15W	BALLONA W	COLLECTED AT: 1-BALLOI		Non-native	A VARIETY C	BC: 1 FEM 2	DFG-BALLON	12/10/2012 0:00	Venice (331	11	367287	3759720
Zone-11 N3	T05S, R13W	LONG BEACI	EXACT LOCATION NOT KNOWN; MAPPED IN GENE				ONE FEMAL	UNKNOWN	1/21/2005 0:00	Long Beach	11	389931	3737422
Zone-11 N3	T05S, R12W	ALAMITOS BAY.					HISTORICAL	UNKNOWN	2/17/2005 0:00	Los Alamitos	11	396101	3735480
Zone-11 N3	T03S, R15W	EL SEGUNDO	EXACT LOCATION UNKNOWN; MAPPED ALONG DO				HISTORICAL	DPR-DOCKW	2/17/2005 0:00	Venice (331	11	367552	3754669
Zone-11 N3	T03S, R15W	EL SEGUNDO	LOCATION C	COMSTOCK HOLOTYPE LOCATION. PR			HOLOTYPE N	CITY OF LOS	2/23/2023 0:00	Venice (331	11	367484	3755764
Zone-11 N3	T04S, R13W	LAGUNA DO	EXACT LOCA	DRY BOTTOI	Developmer	SITE PRESUI	ONLY SOUR	UNKNOWN	11/24/2010 0:00	Torrance (3	11	382089	3746393
Zone-11 N3	T03S, R15W	EL SEGUNDO	INCLUDES L	SCH81R0001: NOTED AS OCCURRING			1 SPECIMEN	CITY OF LOS	8/24/2012 0:00	Venice (331	11	366501	3757121
Zone-11 N3	T99X, R99X,	EASTERN AI	ROOST NUM	COMBINED BREAKWATE		POTENTIAL	DAY & NIGH	LONG BEACI	12/29/2005 0:00	Long Beach	11	389693	3732128
Zone-11 N3	T99X, R99X,	MARINA DE	ROOST NUM	BREAKWATE	Recreationa	POTENTIAL	MAJOR DAY	MARINA DE	1/4/2006 0:00	Venice (331	11	364823	3758787
Zone-11 N3	T04S, R14W	MALAGA DUNES.		A PERCHED	Other	THREATENE	SPECIES DIS	UNKNOWN	2/25/2021 0:00	Redondo Be	11	372168	3740849
		SENSITIVE	PLEASE CON	A PERCHED DUNE FORMATION IN UPPER MALAGA CANYON, TH					2/25/2021 0:00	Redondo Be	0		
Zone-11 N3	T03S, R14W	SW LOS ANG	EXACT LOCATION UNKNOWN. MAPPED ACCORDIN				1 MALE AND	UNKNOWN	9/21/2006 0:00	Inglewood (	11	379010	3755281
Zone-11 N3	T03S, R14W	GARDENA.	EXACT LOCATION UNKNOWN. MAPPED ACCORDIN				SPECIMEN C	UNKNOWN	11/1/2006 0:00	Inglewood (	11	378070	3750677
Zone-11 N3	T04S, R14W	HARBOR CIT	LOCATION GIVEN ONLY AS 'HARBOR". MAPPED AC				1 FEMALE SI	UNKNOWN	3/14/2007 0:00	Torrance (33	11	379884	3739630
Zone-11 N3	T02S, R14W	INGLEWOOD.					1 MALE SPE	UNKNOWN	3/14/2007 0:00	Inglewood (	11	375170	3758465
Zone-11 N3	T04S, R13W	LONG BEACI	MAPPED ACCORDING TO LOCALITY DESCRIPTION A				1 MALE SPE	UNKNOWN	3/20/2007 0:00	Long Beach	11	388858	3739869
Zone-11 N3	T04S, R14W	MALAGA CO	AREA IS APP	THE SITE WI	Non-native	SITE HEAVIL	DISCOVERED	UNKNOWN,	9/11/2007 0:00	Redondo Be	11	370948	3741233
Zone-11 N3	T04S, R14W	MIRAMAR PARK, REDONDO BEACH.					BUTTERFLIE	CITY OF TOR	9/27/2007 0:00	Redondo Be	11	371308	3742503
Zone-11 N3	T05S, R14W	ALONG INDI	MAPPED AC	CAGN OBSE	Developmer	DEVELOPME	2 INDIVIDUA	CITY OF RAN	12/10/2020 0:00	Torrance (33	11	372940	3737431
Zone-11 N3	T04S, R15W	BETWEEN V	MAPPED TO	FROM 2007	Developmer	FURTHER DE	1 PAIR DETE	CITY OF PAL	2/16/2021 0:00	Redondo Be	11	369909	3738949
Zone-11 N3	T04S, R12W	BIXBY.	EXACT LOCATION UNKNOWN. MAPPE			THIS AREA IS	ONLY SOUR	UNKNOWN	2/18/2009 0:00	Long Beach	11	391136	3744839
Zone-11 N3	T05S, R15W	PALOS VERD	ON LONG PO	MOSTLY DIS	Developmer	SOME DEVE	TWO SMALL	PVT?	5/11/2016 0:00	Redondo Be	11	370324	3734087
Zone-11 N3	T05S, R15W	PALOS VERD	TRAILHEAD	COASTAL BL	Other	LANDSLIDE A	8 PLANTS SE	CITY OF PAL	7/30/2009 0:00	Redondo Be	11	368600	3736828
Zone-11 N3	T04S, R14W	REDONDO.	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB				ONLY SOUR	UNKNOWN	7/3/2009 0:00	Redondo Be	11	371323	3744088
Zone-11 N3	T04S, R15W	FLAT ROCK F	EXACT LOCA	COASTAL BLUFF SCRUB.			~100 PLANT	CITY OF PAL	7/3/2009 0:00	Redondo Be	11	369717	3740535

9 QUAD

UTM	PLSS	Location	LocDetails	Ecological	ThreatList	Threat	General	OwnerMgt	LastUpdate	KeyQuad	UTMZone	UTME	UTMN
Zone-11 N3	T04S, R14W	WEST SIDE (	TRIANGULAI	HIGHLY DIST	Developmer	SITE TO BE D	"VERY COMI	PVT	8/7/2015 0:00	Torrance (33	11	376926	3745543
Zone-11 N3	T04S, R12W	BRYANT RAI	MAPPED BY	EDGE OF FIE	Developmer	SITE PRESUI	ONLY SOUR(	UNKNOWN	4/28/2010 0:00	Long Beach	11	394568	3739290
Zone-11 N3	T04S, R14W	ABOUT 70 M	LOCATION M	HABITAT CO	Developmer	DEVELOPME	TWO (4-5 IN	PVT	6/30/2010 0:00	Torrance (33	11	377950	3741594
Zone-11 N3	T04S, R13W	BIXBY SLOU(	BIXBY SLOUGH IS NOW HARBOR REGIONAL PARK.				ONLY SOUR(	UNKNOWN	10/11/2010 0:00	Torrance (33	11	380698	3739493
Zone-11 N3	T04S, R13W	WEST OF LO	ALONG OVE	IN DISTURBED WEEDY AREA WITH SAI			ONLY SOUR(	UNKNOWN	12/20/2010 0:00	Long Beach	11	388567	3745700
Zone-11 N3	T04S, R13W	NORTHEAST	EXACT LOCA	FORMING BRIGHT GOLDEN PATCHES .			ONLY SOUR(	UNKNOWN	5/6/2019 0:00	Torrance (33	11	380698	3739493
Zone-11 N3	T03S, R15W	EL SEGUNDO	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB				ONLY SOUR(	UNKNOWN	11/30/2010 0:00	Venice (331	11	367981	3753655
Zone-11 N3	T05S, R14W	VICINITY OF	SDNHM SPE	2009 AERIAL PHOTO SHOWS THAT TH			SDNHM SPE	UNKNOWN	3/3/2011 0:00	San Pedro (3	11	379589	3733359
Zone-11 N3	T02S, R14W	SINK NEAR I	EXACT LOCATION UNKNO		Developmer	AREA HAS B	SITE IS BASE	UNKNOWN	2/11/2015 0:00	Inglewood (3	11	375170	3758465
Zone-11 N3	T02S, R15W	PLAYA DEL R	EXACT LOCATION UNKNOWN. MAPPE			MAGNEY ST.	ONLY SOUR(	UNKNOWN	8/10/2011 0:00	Venice (331	11	366387	3758208
Zone-11 N3	T99X, R99X,	AREA OF SA	WFVZ EGG S	AERIAL IMAGE (2010) SHOWS THAT T			2 LARGE CO	UNKNOWN	12/2/2011 0:00	San Pedro (3	11	381753	3732933
Zone-11 N3	T05S, R12W	OCEAN BLUI	LOCATION S	NEST WAS LOCATED IN THE BACK OF .			NEST WITH 4	CITY OF LON	12/6/2011 0:00	Long Beach	11	391895	3736603
Zone-11 N3	T02S, R15W	BALLONA W	BALLONA W	FOUND IN DUNE AREAS.			NOT FOUND	DFG-BALLON	12/10/2012 0:00	Venice (331	11	367107	3759447
Zone-11 N3	T05S, R13W	KNOLL HILL	NO INFORM	NO OBVIOUS SUITABLE H		THERE IS AN	100 COLLEC	CITY OF LOS	2/24/2012 0:00	Torrance (33	11	381025	3735257
Zone-11 N3	T04S, R13W	SCATTERED	MAPPED AL	BASE OF SLO	Waterway b	THREATENE	627 PLANTS	LAX COUNTY	7/12/2012 0:00	Torrance (33	11	381715	3746786
Zone-11 N3	T03S, R13W	OIL FIELD AT	ACTIVE OIL F	OIL FIELD.	Other	DISTURBED	100-500 PLA	PVT?	7/12/2012 0:00	Inglewood (3	11	382331	3752087
Zone-11 N3	T04S, R13W	WILMINGTO	LOCALITY ST	AIR PHOTOS SUGGEST AREA IS FULLY			NAGANO (19	UNKNOWN	9/19/2012 0:00	Long Beach	11	384477	3739572
Zone-11 N3	T05S, R12W	LONG BEACI	LOCALITY ST	AIR PHOTOS SUGGEST NAPLES IS FULI			NAGANO (19	UNKNOWN	9/19/2012 0:00	Long Beach	11	392475	3736360
Zone-11 N3	T03S, R15W	EL SEGUNDO	EXACT LOCA	SAND DUNES, NEAR STRAND.			ONLY SOUR(	UNKNOWN	9/18/2013 0:00	Venice (331	11	367981	3753655
Zone-11 N3	T02S, R13W	FLORENCE, \	EXACT LOCA	MAJORITY OF AREA HAS BEEN DEVEL(			UNKNOWN	UNKNOWN	4/7/2014 0:00	South Gate (	11	384522	3760090
Zone-11 N3	T03S, R15W	LOS ANGELE	MAPPED TO	SITE WAS DE	Developmer	CONSIDERE(	CYST-BEARIN	PVT	5/21/2014 0:00	Venice (331	11	367861	3756313
Zone-11 N3	T02S, R15W	ALONG DRA	SITE PART O	HABITAT CO	Recreationa	RECREATION	3 ADULTS &	DFG-BALLON	4/29/2014 0:00	Venice (331	11	368511	3759578
Zone-11 N3	T03S, R15W	LOS ANGELE	MAPPED TO	SITE WAS DE	Developmer	CONSIDERE(	CYST-BEARIN	PVT	5/21/2014 0:00	Venice (331	11	368350	3755629
Zone-11 N3	T04S, R14W	MADRONA	MARSH PRES	44-ACRE PRESERVE PROTECTING THE			3 CYSTS FOU	CITY OF TOR	4/14/2014 0:00	Torrance (33	11	375777	3743790
Zone-11 N3	T02S, R15W	LOS ANGELE	MAPPED TO	SITE WAS DE	Developmer	CONSIDERE(	CYST-BEARIN	PVT	5/21/2014 0:00	Venice (331	11	367565	3757648
Zone-11 N3	T03S, R14W	WISEBURN.	EXACT LOCATION UNKNO		Developmer	AREA HAS B	ONLY SOUR(	UNKNOWN	3/3/2015 0:00	Venice (331	11	372581	3754547
Zone-11 N3	T04S, R13W	DOMINGUEZ	MAPPED GE	ORIGINAL C(	Developmer	HISTORICAL	SET OF 3 EG	UNKNOWN	4/13/2015 0:00	Long Beach	11	387235	3744502
Zone-11 N3	T04S, R13W	VICINITY OF	JAY SPECIME	NESTS IN WI	Developmer	HISTORICAL	2 EGG SETS	UNKNOWN	5/8/2015 0:00	Long Beach	11	385269	3740405
Zone-11 N3	T04S, R13W	LOS ANGELE	EXACT LOCA	NEST DESCR	Developmer	MOST OF TH	BIRD FLUSH	UNKNOWN	4/13/2015 0:00	Long Beach	11	388452	3740194
Zone-11 N3	T03S, R13W	VICINITY OF	EXACT COLL	NEST MADE	Developmer	A HISTORICA	3 EGGS COLI	UNKNOWN	6/3/2015 0:00	South Gate (	11	386952	3752103
Zone-11 N3	T03S, R13W	WATTS.	EXACT LOCA	WITH DISTIC	Developmer	LOTS OF DEV	ONLY SOUR(	UNKNOWN	8/6/2015 0:00	South Gate (	11	385177	3756225
Zone-11 N3	T02S, R14W	BALDWIN HI	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB				COLLECTION	UNKNOWN	9/29/2015 0:00	Venice (331	11	372277	3761970
Zone-11 N3	T02S, R14W	INGLEWOOI	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB				COLLECTION	UNKNOWN	9/29/2015 0:00	Inglewood (3	11	375170	3758465
Zone-11 N3	T02S, R15W	BALLONA W	MAPPED BY CNDDB NON-SPECIFICALLY ACROSS TH				COLLECTION	DFG-BALLON	12/15/2020 0:00	Venice (331	11	367287	3759720
Zone-11 N3	T03S, R15W	EL SEGUNDO	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB				COLLECTION	UNKNOWN	9/29/2015 0:00	Venice (331	11	367981	3753655
Zone-11 N3	T03S, R14W	NORTH RED(	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB				COLLECTION	PVT	10/14/2015 0:00	Torrance (33	11	373276	3748899

9 QUAD

UTM	PLSS	Location	LocDetails	Ecological	ThreatList	Threat	General	OwnerMgt	LastUpdate	KeyQuad	UTMZone	UTME	UTMN
Zone-11 N3	T05S, R13W	LONG BEACI	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB				COLLECTION	UNKNOWN	9/29/2015 0:00	Long Beach	11	389931	3737422
Zone-11 N3	T02S, R15W	NORTH SIDE	MAPPED TO	ROOST TREES WERE EUCALYPTUS LIN			48 OBSERVE	UNKNOWN	10/28/2015 0:00	Venice (331	11	365873	3761495
Zone-11 N3	T03S, R15W	CHEVRON E	CHEVRON EL SEGUNDO REFINERY. XERCES SITE #2				250 OBSERV	PVT-CHEVRO	8/24/2022 0:00	Venice (331	11	370533	3753659
Zone-11 N3	T04S, R13W	BANNING PA	XERCES SITE #2887.				125 OBSERV	CITY OF LOS	9/6/2022 0:00	Torrance (33	11	383519	3739619
Zone-11 N3	T05S, R12W	RECREATION	XERCES SITE	THANKSGIVING COUNTS BEGAN IN 19			NORTH SITE	CITY OF LON	9/6/2022 0:00	Long Beach	11	394846	3737892
Zone-11 N3	T02S, R15W	"CROSS CRE	ADDRESS GI	ROOST TREES WERE PINES AND MAPL			UP TO 250 C	PVT	11/25/2015 0:00	Venice (331	11	367603	3758413
Zone-11 N3	T03S, R14W	EL NIDO PAF	"NORTHWES	ROOST TREES WERE EUCALYPTUS.			50-75 OBSEI	CITY OF TOR	12/16/2015 0:00	Torrance (33	11	374381	3747990
Zone-11 N3	T05S, R14W	PALOS VERD	EXACT LOCA	HILLSIDE.	Developmer	THERE HAS I	SITE BASED	UNKNOWN	1/20/2016 0:00	Redondo Be	11	370748	3738289
Zone-11 N3	T03S, R15W	EL SEGUNDO	EXACT LOCA	SAND DUNE	Developmer	THERE HAS I	ONLY SOUR	UNKNOWN	1/28/2016 0:00	Venice (331	11	367981	3753655
Zone-11 N3	T04S, R15W	PALOS VERD	MAPPED AC	JUST ABOVE HIGH TIDE LINE ON ROCK			ONLY SOUR	CITY OF PAL	2/1/2016 0:00	Redondo Be	11	370634	3741132
Zone-11 N3	T03S, R14W	GARDENA.	EXACT LOCATION UNKNO		Developmer	SITE PRESUI	ONLY SOUR	UNKNOWN	2/2/2016 0:00	Inglewood (	11	379607	3750876
Zone-11 N3	T03S, R14W	ABOUT 3 MI	LOCATION D	THE AREA HAS BEEN COMPLETELY DE			4-200 BIRDS	UNKNOWN	4/21/2016 0:00	Inglewood (	11	377589	3752223
Zone-11 N3	T04S, R15W	BLUFF COVE	MAPPED AS	ON BLUFF-T	Road/trail c	TRAIL OR RO	WEST POLYG	CITY OF PAL	1/4/2019 0:00	Redondo Be	11	369725	3739791
Zone-11 N3	T05S, R14W	NW SIDE OF	MAPPED AS	SOUTHERN (	Non-native p	NON-NATIVI	IN 2015, PO	CITY OF RAN	5/31/2016 0:00	Redondo Be	11	371626	3734359
Zone-11 N3	T03S, R15W	MANHATTA	MAPPED AS	DUNE FRAGMENT.			ONLY SOUR	UNKNOWN	6/20/2016 0:00	Venice (331	11	368846	3752260
Zone-11 N3	T03S, R15W	EL SEGUNDO	MAPPED AS	FLATS AT FOOT OF DUNES WITH ERIO			SITE BASED	UNKNOWN	6/20/2016 0:00	Venice (331	11	367107	3756625
Zone-11 N3	T02S, R15W	WEST BANK	MAPPED AS	OPEN UPLAI	Non-native p	NON-NATIVI	APPROXIMA	CITY OF LOS	6/22/2016 0:00	Venice (331	11	365252	3759880
Zone-11 N3	T05S, R13W	TERMINAL IS	EXACT LOCATION UNKNO		Developmer	BASED ON A	ONLY SOUR	UNKNOWN	9/8/2016 0:00	Long Beach	11	385434	3735914
Zone-11 N3	T02S, R14W	BETWEEN W	EXACT LOCA	HILLSIDE.			ONLY SOUR	UNKNOWN	2/9/2017 0:00	Hollywood (	11	372967	3764410
Zone-11 N3	T02S, R15W	MESMER, EA	MAPPED BY CNDDB AS B		Developmer	SITE LIKELY I	ONLY SOUR	UNKNOWN	5/16/2017 0:00	Venice (331	11	370312	3761727
Zone-11 N3	T03S, R15W	THE STRAND	MAPPED GENERALLY, BASED ON SPECIMEN LOCAL				INJURED BIR	UNKNOWN	7/12/2017 0:00	Venice (331	11	369121	3751127
Zone-11 N3	T03S, R15W	DUNES BOU	HOLOTYPE L	SOUTHERN DUNE SCRUB		FORMER DU	MOST ABUN	CITY OF LOS	1/4/2022 0:00	Venice (331	11	367147	3756638
Zone-11 N3	T02S, R15W	NEAR THE IN	COLLECTION	PLAYA DEL R	Developmer	SURROUNDI	COLLECTED	PVT	1/4/2022 0:00	Venice (331	11	365940	3758496
Zone-11 N3	T02S, R15W	WEST END C	LOCATION IS UNCERTAIN. IT'S POSSIBLE THIS WAS				ONE COLLEC	PVT	1/29/2018 0:00	Venice (331	11	366253	3758110
Zone-11 N3	T02S, R15W	DUNE AREA	BEHIND APA	DUNE RESTORATION AREA. FOUND IN			1 COLLECTE	DFG-BALLON	12/19/2018 0:00	Venice (331	11	366048	3758947
Zone-11 N3	T02S, R15W	0.5 MILE S C	AREA DESCR	DUNE WASH HABITAT; SANDY FLAT. S			ONE WAS FO	DFG-BALLON	1/30/2018 0:00	Venice (331	11	367667	3759418
Zone-11 N3	T02S, R15W	W SIDE OF H	SOUTHEAST	FOUND UNDER COVER OBJECTS IN SA			ONE FOUND	DFG-BALLON	1/30/2018 0:00	Venice (331	11	368226	3759245
Zone-11 N3	T03S, R15W	VICINITY OF	1940S COLL	HISTORICAL	Developmer	DEVELOPME	TWO COLLE	DPR-DOCKW	4/20/2018 0:00	Venice (331	11	367355	3755284

9 QUAD

UTM	PLSS	Location	LocDetails	Ecological	ThreatList	Threat	General	OwnerMgt	LastUpdate	KeyQuad	UTMZone	UTME	UTMN
Zone-11 N3	T03S, R15W	SOUTHEAST	ONE COLLEC	WHEREAS TI	Developmer	DEVELOPME	KNOWN GEI	PVT	1/30/2018 0:00	Venice (331	11	369889	3750961
Zone-11 N3	T03S, R15W	VICINITY OF	UNCERTAIN,	INDIVIDUAL PHOTOGRAPHED IN 2016			ONE COLLEC	LAX COUNTY	12/19/2018 0:00	Venice (331	11	368740	3751866
Zone-11 N3	T03S, R15W	VICINITY OF 10TH ST AT F		THIS AREA V	Developmer	DEVELOPME	ONE COLLEC	PVT	1/30/2018 0:00	Venice (331	11	370500	3750359
Zone-11 N3	T03S, R15W	VICINITY OF 1ST STREET A		THIS AREA V	Developmer	DEVELOPME	ONE COLLEC	PVT	1/30/2018 0:00	Venice (331	11	369954	3749528
Zone-11 N3	T03S, R14W	VICINITY OF	COLLECTED	COLLECTED	Developmer	DEVELOPME	HISTORIC HE	UNKNOWN	4/20/2018 0:00	Redondo Be	11	371132	3747998
Zone-11 N3	T03S, R15W	VICINITY OF VALLEY PARK, END OF MORNINGSIDE DRIVE, CITY (					ONE COLLEC	CITY OF HER	4/20/2018 0:00	Redondo Be	11	370355	3748965
Zone-11 N3	T04S, R14W	REDONDO B	COLLECTION	ONE COLLEC	Developmer	DEVELOPME	COLLECTED	UNKNOWN	4/24/2018 0:00	Redondo Be	11	371423	3745453
Zone-11 N3	T04S, R14W	TORRANCE (	MAPPED NON-SPECIFICALLY TO BEACH AREA FRON				ONE COLLEC	LAX COUNTY	4/20/2018 0:00	Redondo Be	11	371120	3741940
Zone-11 N3	T04S, R14W	VICINITY OF ESHELMAN AVENUE AT 2			Developmer	DEVELOPME	CHASE COLL	PVT	4/20/2018 0:00	Torrance (33	11	378315	3741355
Zone-11 N3	T04S, R14W	ABOUT 0.2 MILE ENE OF		FOUND BY ARTIFICIAL COVER FLIPPIN(			ONE FOUND	UNKNOWN	4/23/2018 0:00	Torrance (33	11	375870	3746283
Zone-11 N3	T03S, R14W	EL NIDO PARK, SOUTH OF WEST 182ND STREET, TORRANCE.					ONE FOUND	CITY OF TOR	4/23/2018 0:00	Torrance (33	11	374424	3747876
Zone-11 N3	T03S, R14W	VICINITY OF	1952 & 1959 AERIAL IMA		Developmer	DEVELOPME	L. KLAUBER	UNKNOWN	4/23/2018 0:00	Inglewood (	11	376157	3750492
Zone-11 N3	T02S, R13W	CITY OF SOU	MAPPED NC	AERIAL IMA(	Developmer	DEVELOPME	ONE COLLEC	UNKNOWN	4/23/2018 0:00	South Gate (	11	388079	3757795
Zone-11 N3	T02S, R15W	VENICE, LOS	EXACT LOCA	GOLF COURS	Developmer	DEVELOPME	ONE COLLEC	UNKNOWN	4/24/2018 0:00	Beverly Hills	11	365169	3763849
Zone-11 N3	T05S, R13W	SAN PEDRO.	EXACT LOCATION UNKNC		Developmer	AREA HAS B	ONLY SOUR(	UNKNOWN	11/5/2018 0:00	San Pedro (3	11	381341	3733670
Zone-11 N3	T05S, R14W	ABALONE C(	EXACT LOCA	EDGE OF BLUFF AND TERRACE TOP, A			ONLY SOUR(	UNKNOWN	11/19/2018 0:00	Redondo Be	11	372148	3734440
Zone-11 N3	T05S, R14W	MOUTH OF	MAPPED AC	ASSOCIATED WITH SALSOLA TRAGUS,			LESS THAN 1	CITY OF RAN	11/15/2018 0:00	San Pedro (3	11	373776	3734004
Zone-11 N3	T05S, R14W	EAST SIDE O	MAPPED AC	ASSOCIATED WITH ATRIPLEX LENTIFO			LESS THAN 1	CITY OF RAN	11/15/2018 0:00	San Pedro (3	11	373976	3734682
Zone-11 N3	T04S, R14W	ABOUT 0.15	APPEARS TO BE OPEN SPACE/UNDEVELOPED AREA				1 FOUND AN	CITY OF PAL(	1/7/2019 0:00	Redondo Be	11	372073	3740838
Zone-11 N3	T04S, R14W	VICINITY OF ARDMORE A		FOUND IN RESIDENTIAL YARD WHILE			1 FOUND AN	PVT	12/19/2018 0:00	Redondo Be	11	371177	3747026
Zone-11 N3	T02S, R15W	VICINITY OF	LIKELY FOUND AND PHOTOGRAPHED ON THE DEC(				1 FOUND AN	UNKNOWN	12/19/2018 0:00	Venice (331	11	365591	3759450
Zone-11 N3	T02S, R15W	ABOUT 0.3 MILES EAST OF LINCOLN BLVD AT BLUFF CREEK DR,					1 FOUND AN	PVT	1/3/2019 0:00	Venice (331	11	368611	3759650
Zone-11 N3	T05S, R15W	PELICAN CO	MAPPED ACCORDING TO VEGETATION SURVEY CO				22% COVER	CITY OF RAN	1/2/2019 0:00	Redondo Be	11	370035	3734321
Zone-11 N3	T04S, R13W	WILMINGTO	MAPPED AC	DISTURBED	Developmer	SITE WAS GI	330 INDIVID	LAX COUNTY	2/12/2019 0:00	Torrance (33	11	380621	3740388
Zone-11 N3	T04S, R14W	N PROSPECT	GIVEN LOCA	AREA HAS B	Developmer	DEVELOPME	1 COLLECTEI	UNKNOWN	9/16/2019 0:00	Redondo Be	11	372558	3746197
Zone-11 N3	T03S, R14W	VICINITY OF	GIVEN LOCA	THIS AREA H	Developmer	DEVELOPME	6 SPECIMEN	UNKNOWN	9/16/2019 0:00	Inglewood (	11	375138	3753965
Zone-11 N3	T03S, R14W	CENTURY BLVD AND WES		AREA HAS B	Developmer	DEVELOPME	1 COLLECTEI	UNKNOWN	9/16/2019 0:00	Inglewood (	11	379029	3756877
Zone-11 N3	T03S, R12W	VICINITY OF BELLFLOWEF		AREA HEAVI	Developmer	DEVELOPME	1 COLLECTEI	UNKNOWN	9/16/2019 0:00	Whittier (33	11	396745	3750290
Zone-11 N3	T04S, R13W	VERMONT A	GIVEN LOCA	AREA HAS B	Developmer	DEVELOPME	1 COLLECTEI	UNKNOWN	10/22/2019 0:00	Torrance (33	11	380585	3743156
Zone-11 N3	T05S, R14W	VICINITY OF	GIVEN LOCATION, "PALO		Developmer	AREA HAS H	1 COLLECTEI	UNKNOWN	10/22/2019 0:00	Torrance (33	11	373775	3736322
Zone-11 N3	T04S, R11W	ALAMITOS R	EXACT LOCA	ALKALI FLAT	Developmer	MUCH DEVE	ONLY SOUR(	UNKNOWN	12/19/2019 0:00	Los Alamitos	11	401211	3738609
Zone-11 N3	T05S, R14W	VICINITY OF	LOCATION UNCERTAIN; DESCRIBED AS "SAN PEDR(				ONE COLLEC	UNKNOWN	2/24/2020 0:00	San Pedro (3	11	376250	3734781
Zone-11 N3	T03S, R13W	VICINITY OF	GIVEN COLL	E. CHACE FC	Developmer	DEVELOPME	COLLECTION	UNKNOWN	7/30/2020 0:00	Long Beach	11	386074	3747622
Zone-11 N3	T05S, R14W	PALOS VERD	COLLECTION	PALOS VERD	Developmer	DEVELOPME	COLLECTED	UNKNOWN	7/28/2020 0:00	San Pedro (3	11	376250	3734781

9 QUAD

UTM	PLSS	Location	LocDetails	Ecological	ThreatList	Threat	General	OwnerMgt	LastUpdate	KeyQuad	UTMZone	UTME	UTMN
Zone-11 N3	T01S, R13W	LOS ANGELE	LOCALITY LIS	LISTED AS H	Developmer	DEVELOPME	LOCALITY LIS	UNKNOWN	8/31/2020 0:00	Los Angeles	11	386720	3769024
Zone-11 N3	T02S, R15W	JUST NORTH	ATTRIBUTED	OPEN SPACE	Other | Foo	FIRE, TRAMF	COLLECTED	DFG-BALLON	11/9/2020 0:00	Venice (331	11	367562	3760666
Zone-11 N3	T02S, R15W	JUST SOUTH	ATTRIBUTED	PATCH OF SCRUB DOMINATED BY CAL			COLLECTED	DFG-BALLON	11/9/2020 0:00	Venice (331	11	367345	3760190
Zone-11 N3	T03S, R15W	EL SEGUNDO	DUNES ESH	COASTAL DUNE DOMINATED BY SILVE			3 MALES AN	CITY OF LOS	10/13/2020 0:00	Venice (331	11	367320	3756308
Zone-11 N3	T05S, R14W	WHITE POIN	MAPPED TO	OBSERVED ON ANNUAL SUNFLOWERS			1 INDIVIDUA	CITY OF LOS	11/12/2020 0:00	San Pedro (3	11	378150	3731521
Zone-11 N3	T05S, R14W	LINDEN H. CHANDLER PR		HABITAT ON SITE CONSISTED LARGEL			1 HEARD CA	CITY OF ROL	12/10/2020 0:00	Torrance (33	11	376279	3738521
Zone-11 N3	T05S, R14W	WHITE POINT NATURE RI		COASTAL SA	Other	HUMAN ACT	2 PAIRS OBS	CITY OF LOS	12/11/2020 0:00	San Pedro (3	11	378175	3731666
Zone-11 N3	T04S, R14W	VICINITY OF	GIVEN LOCATIONS "REDO		Developmer	DEVELOPME	1 MALE ADU	UNKNOWN	12/17/2020 0:00	Redondo Be	11	371323	3744088
Zone-11 N3	T05S, R13W	SAN PEDRO.	MAPPED NO	THIS AREA H	Developmer	DEVELOPME	COLLECTED	UNKNOWN	11/30/2021 0:00	San Pedro (3	11	381329	3735139
Zone-11 N3	T05S, R12W	LONG BEACI	MAPPED NON-SPECIFICA		Developmer	DEVELOPME	COLLECTED	UNKNOWN	12/2/2021 0:00	Long Beach	11	392475	3736360
Zone-11 N3	T05S, R12W	VICINITY OF	MAPPED NO	COLLECTED	Developmer	DEVELOPME	COLLECTED	UNKNOWN	11/30/2021 0:00	Los Alamitos	11	396696	3736464
Zone-11 N3	T02S, R14W	INGLEWOOI	EXACT LOCATION UNKNO		Developmer	DEVELOPME	ONE MALE (	UNKNOWN	7/18/2022 0:00	Inglewood (3	11	375170	3758465
Zone-11 N3	T03S, R14W	ALONG VALI	XERCES SITE #3259. SITE NAME: HERMOSA BEACH				1349 COUN	CITY OF HER	9/9/2022 0:00	Redondo Be	11	370968	3747906

5 MILE

Object ID	Scientific Name	Common Name	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site_Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
91445	Spea hammondii	western spadefoot	AAABF02020	1047	B3949	116863	3311883	Inglewood	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19580415	19580415	UNKNOWN	None	None	G2G3	S3S4		SSC	BLM_S; IUCN_NT	204	Amphibians
85868	Spea hammondii	western spadefoot	AAABF02020	1082	B4015	116931	3311873	Torrance	LAX	2/5 mile	Extirpated	Natural/Native occurrence	None	N	19XXXXXX	19XXXXXX	UNKNOWN	None	None	G2G3	S3S4		SSC	BLM_S; IUCN_NT	204	Amphibians
16810	Agelaius tricolor	tricolored blackbird	ABPBXB0020	332	39583	32179	3311873	Torrance	LAX	non-specific	Presumed Extant	Natural/Native occurrence	Unknown	N	198XXXXX	198XXXXX	CITY OF TORRANCE-MADRONA MARSH	None	Threatened	G1G2	S2		SSC	BLM_S; IUCN_EN; USFWS_BCC	803	Birds
14998	Agelaius tricolor	tricolored blackbird	ABPBXB0020	275	24342	6521	3311873	Torrance	LAX	2/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	198XXXXX	198XXXXX	UNKNOWN	None	Threatened	G1G2	S2		SSC	BLM_S; IUCN_EN; USFWS_BCC	204	Birds
72842	Agelaius tricolor	tricolored blackbird	ABPBXB0020	774	99707	101254	3311883	Inglewood	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19400510	19400510	UNKNOWN	None	Threatened	G1G2	S2		SSC	BLM_S; IUCN_EN; USFWS_BCC	204	Birds
67525	Coccyzus americanus occidentalis	western yellow-billed cuckoo	ABNRB02022	201	95877	97015	3311872	Long Beach	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	19210615	19210615	UNKNOWN	Threatened	Endangered	G5T2T3	S1			BLM_S; USFS_S	204	Birds
67527	Coccyzus americanus occidentalis	western yellow-billed cuckoo	ABNRB02022	203	95888	97028	3311872	Long Beach	LAX	non-specific	Extirpated	Natural/Native occurrence	None	N	19230623	19230623	UNKNOWN	Threatened	Endangered	G5T2T3	S1			BLM_S; USFS_S	203	Birds
67530	Coccyzus americanus occidentalis	western yellow-billed cuckoo	ABNRB02022	204	1965	97029	3311882	South Gate	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	19100724	19100724	UNKNOWN	Threatened	Endangered	G5T2T3	S1			BLM_S; USFS_S	804	Birds
67526	Coccyzus americanus occidentalis	western yellow-billed cuckoo	ABNRB02022	202	95887	97020	3311872	Long Beach	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	19150531	19150531	UNKNOWN	Threatened	Endangered	G5T2T3	S1			BLM_S; USFS_S	204	Birds
27021	Empidonax traillii extimus	southwestern willow flycatcher	ABPAE33043	42	1965	59152	3311882	South Gate	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	18950629	18950629	UNKNOWN	Endangered	Endangered	G5T2	S3				804	Birds
9846	Sternula antillarum browni	California least tern	ABNNM08103	78	1942	14719	3311873	Torrance	LAX	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19770803	19770803	CITY OF LOS ANGELES	Endangered	Endangered	G4T2T3Q	S2		FP		202	Birds
62625	Streptocephalus woottoni	Riverside fairy shrimp	ICBRA07010	67	39583	93129	3311873	Torrance	LAX	non-specific	Presumed Extant	Natural/Native occurrence	Unknown	N	201007XX	2003XXXX	CITY OF TORRANCE	Endangered	None	G1G2	S2			IUCN_EN	803	Crustaceans
71941	Atriplex coulteri	Coulter's saltbush	PDCHE040E0	103	99026	100549	3311883	Inglewood	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	19020515	19020515	UNKNOWN	None	None	G3	S1S2	1B.2		SB_CalBG/RSABG; SB_CRES	104	Dicots
41001	Atriplex coulteri	Coulter's saltbush	PDCHE040E0	56	23782	74608	3311872	Long Beach	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G3	S1S2	1B.2		SB_CalBG/RSABG; SB_CRES	804	Dicots
2413	Atriplex parishii	Parish's brittlescale	PDCHE041D0	5	23782	7795	3311872	Long Beach	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G1G2	S1	1B.1		SB_CRES; USFS_S	804	Dicots
98326	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	109	B2305	114229	3311873	Torrance	LAX	specific area	Presumed Extant	Natural/Native occurrence	Good	N	201607XX	201607XX	LAX COUNTY	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	102	Dicots
55082	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	85	86322	87361	3311873	Torrance	LAX	specific area	Presumed Extant	Natural/Native occurrence	Good	N	20090713	20090713	LAX COUNTY-DPW	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	102	Dicots
69213	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	43	97121	34585	3311873	Torrance	LAX	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20100930	20100930	CITY OF TORRANCE-MADRONA MARSH	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	102	Dicots
55083	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	86	86323	87362	3311883	Inglewood	LAX	80 meters	Presumed Extant	Natural/Native occurrence	Fair	N	20110906	20110906	PVT?	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	101	Dicots
69261	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	81	77193	78129	3311873	Torrance	LAX	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20140703	20140703	PVT	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	102	Dicots
48515	Lasthenia glabrata ssp. coulteri	Coulter's goldfields	PDAST5L0A1	26	80779	24245	3311873	Torrance	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19170411	19170411	UNKNOWN	None	None	G4T2	S2	1B.1		BLM_S; SB_CalBG/RSABG; SB_SBBG	804	Dicots
48899	Lasthenia glabrata ssp. coulteri	Coulter's goldfields	PDAST5L0A1	80	80900	81879	3311872	Long Beach	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19730615	19730615	UNKNOWN	None	None	G4T2	S2	1B.1		BLM_S; SB_CalBG/RSABG; SB_SBBG	104	Dicots
48671	Lasthenia glabrata ssp. coulteri	Coulter's goldfields	PDAST5L0A1	81	80349	81881	3311873	Torrance	LAX	4/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19620327	19620327	UNKNOWN	None	None	G4T2	S2	1B.1		BLM_S; SB_CalBG/RSABG; SB_SBBG	804	Dicots
47945	Nama stenocarpa	mud nama	PDHYD0A0H0	21	80349	81336	3311873	Torrance	LAX	4/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	192407XX	192407XX	UNKNOWN	None	None	G4G5	S1S2	2B.2			804	Dicots
51664	Navarretia prostrata	prostrate vernal pool navarretia	PDPLM0C0Q0	13	83433	47954	3311883	Inglewood	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19630508	19630508	UNKNOWN	None	None	G2	S2	1B.2			104	Dicots
19519	Navarretia prostrata	prostrate vernal pool navarretia	PDPLM0C0Q0	12	1965	47953	3311882	South Gate	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	1882XXXX	1882XXXX	UNKNOWN	None	None	G2	S2	1B.2			804	Dicots
19517	Navarretia prostrata	prostrate vernal pool navarretia	PDPLM0C0Q0	10	39864	47944	3311872	Long Beach	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	188205XX	188205XX	UNKNOWN	None	None	G2	S2	1B.2			804	Dicots
20014	Pentachaeta lyonii	Lyon's pentachaeta	PDAST6X060	7	39864	48741	3311872	Long Beach	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	XXXXXXXX	XXXXXXXX	UNKNOWN	Endangered	Endangered	G1	S1	1B.1		SB_CalBG/RSABG	804	Dicots
48583	Symphyotrichum defoliatum	San Bernardino aster	PDASTE80C0	28	80779	60571	3311873	Torrance	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	19301018	19301018	UNKNOWN	None	None	G2	S2	1B.2		SB_CalBG/RSABG; SB_CRES; USFS_S	804	Dicots
70236	Bombus crotchii	Crotch bumble bee	IIHYM24480	166	97654	98996	3311873	Torrance	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19380710	19380710	PVT	None	Candidate En	G2	S2			IUCN_EN	204	Insects
70163	Danaus plexippus plexippus pop. 1	monarch - California overwintering population	IILEPP2012	384	97762	99141	3311873	Torrance	LAX	non-specific	Presumed Extant	Natural/Native occurrence	Unknown	N	202201XX	200811XX	CITY OF LOS ANGELES	Candidate	None	G4T1T2Q	S2			IUCN_EN; USFS_S	203	Insects
71244	Danaus plexippus plexippus pop. 1	monarch - California overwintering population	IILEPP2012	409	98324	99745	3311873	Torrance	LAX	non-specific	Presumed Extant	Natural/Native occurrence	Unknown	N	19851103	19851103	CITY OF TORRANCE	Candidate	None	G4T1T2Q	S2			IUCN_EN; USFS_S	203	Insects
101199	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	18	25610	5484	3311873	Torrance	LAX	specific area	Presumed Extant	Natural/Native occurrence	Excellent	Y	20010427	20010427		Endangered	None	G5T1	S1				999	Insects
55631	Habroscelimorpha gabbii	western tidal-flat tiger beetle	IICOL02080	6	39864	87726	3311872	Long Beach	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G2G4	S1				804	Insects
32819	Eumops perotis californicus	western mastiff bat	AMACD02011	168	23783	66526	3311883	Inglewood	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19290722	19290722	UNKNOWN	None	None	G4G5T4	S3S4		SSC	BLM_S	204	Mammals

5 MILE

Object ID	Scientific Name	Common Name	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site_Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
32206	Eumops perotis californicus	western mastiff bat	AMACD02011	65	66308	66394	3311883	Inglewood	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19870401	19870401	UNKNOWN	None	None	G4G5T4	S3S4		SSC	BLM_S	204	Mammals
34238	Nyctinomops femorosaccus	pocketed free-tailed bat	AMACD04010	15	68461	68716	3311873	Torrance	LAX	4/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19851018	19851018	UNKNOWN	None	None	G5	S3		SSC	IUCN_LC	204	Mammals
6307	Perognathus longimembris pacificus	Pacific pocket mouse	AMAFD01042	3	39864	34866	3311872	Long Beach	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	186510XX	186510XX	UNKNOWN	Endangered	None	G5T2	S2		SSC		804	Mammals
92736	Glyptostoma gabrielense	San Gabriel chestnut	IMGASB1010	19	B5925	118937	3311872	Long Beach	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19530522	19530522	UNKNOWN	None	None	G2	S3				204	Mollusks
87822	Gonidea angulata	western ridged mussel	IMBIV19010	153	B6054	119087	3411812	Los Angeles	LAX	non-specific	Extirpated	Natural/Native occurrence	None	N	1993XXXX	XXXXXXXX	UNKNOWN	None	None	G3	S2			IUCN_VU	203	Mollusks
72041	Orcuttia californica	California Orcutt grass	PMPOA4G010	12	1899	22413	3311883	Inglewood	LAX	2/5 mile	Extirpated	Natural/Native occurrence	None	N	1976XXXX	19630508	UNKNOWN	Endangered	Endangered	G1	S1	1B.1		SB_CalBG/RSABG; SB_CRES	104	Monocots
98290	Anniella stebbinsi	Southern California legless lizard	ARACC01060	59	A9115	110950	3311873	Torrance	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Poor	N	19680707	19680707	PVT	None	None	G3	S3		SSC	USFS_S	204	Reptiles
81299	Anniella stebbinsi	Southern California legless lizard	ARACC01060	60	A9117	110951	3311873	Torrance	LAX	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	20121207	20121207	UNKNOWN	None	None	G3	S3		SSC	USFS_S	201	Reptiles
81301	Anniella stebbinsi	Southern California legless lizard	ARACC01060	63	A9120	110954	3311883	Inglewood	LAX	non-specific	Presumed Extant	Natural/Native occurrence	Poor	N	19571028	19571028	UNKNOWN	None	None	G3	S3		SSC	USFS_S	203	Reptiles
81300	Anniella stebbinsi	Southern California legless lizard	ARACC01060	61	A9118	110952	3311873	Torrance	LAX	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	20110515	20110515	CITY OF TORRANCE	None	None	G3	S3		SSC	USFS_S	201	Reptiles
46733	Anniella stebbinsi	Southern California legless lizard	ARACC01060	16	79246	80225	3311873	Torrance	LAX	80 meters	Presumed Extant	Natural/Native occurrence	Poor	N	20090222	20090222	PVT	None	None	G3	S3		SSC	USFS_S	201	Reptiles
3054	Phrynosoma blainvillii	coast horned lizard	ARACF12100	130	1965	28078	3311882	South Gate	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19520415	19520415	UNKNOWN	None	None	G4	S4		SSC	BLM_S; IUCN_LC	804	Reptiles
3057	Phrynosoma blainvillii	coast horned lizard	ARACF12100	152	2079	28063	3311882	South Gate	LAX	1/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G4	S4		SSC	BLM_S; IUCN_LC	204	Reptiles
3046	Phrynosoma blainvillii	coast horned lizard	ARACF12100	207	1796	28018	3311873	Torrance	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G4	S4		SSC	BLM_S; IUCN_LC	204	Reptiles

BETWEEN 5 AND 10 MILE

Object ID	Scientific Name	Common Name	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
85791	Spea hammondii	western spadefoot	AAABF02020	1046	B3948	116862	3311874	Redondo Beach	LAX	1/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19660425	19660425	UNKNOWN	None	None	G2G3	S3S4		SSC	BLM_S; IUCN_NT	204	Amphibians
91446	Spea hammondii	western spadefoot	AAABF02020	1083	B4016	116932	3311873	Torrance	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	195903XX	195903XX	UNKNOWN	None	None	G2G3	S3S4		SSC	BLM_S; IUCN_NT	204	Amphibians
85792	Spea hammondii	western spadefoot	AAABF02020	1048	B3951	116865	3311883	Inglewood	LAX	1/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19380203	19380203	UNKNOWN	None	None	G2G3	S3S4		SSC	BLM_S; IUCN_NT	204	Amphibians
85793	Spea hammondii	western spadefoot	AAABF02020	1049	B3953	116866	3311881	Whittier	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19560502	19560502	UNKNOWN	None	None	G2G3	S3S4		SSC	BLM_S; IUCN_NT	204	Amphibians
21716	Athene cunicularia	burrowing owl	ABNSB10010	571	51258	51258	3411812	Los Angeles	LAX	5 miles	Presumed Extant	Natural/Native occurrence	Unknown	N	19210505	19210505	UNKNOWN	None	None	G4	S2		SSC	BLM_S; IUCN_LC; USFWS_BCC	804	Birds
6341	Coccyzus americanus occidentalis	western yellow-billed cuckoo	ABNRB02022	72	2238	13009	3311871	Los Alamitos	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	19120622	19120622	PVT	Threatened	Endangered	G5T2T3	S1			BLM_S; USFS_S	203	Birds
91017	Coturnicops noveboracensis	yellow rail	ABNME01010	23	A5268	106991	3311884	Venice	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19981020	19981020	UNKNOWN	None	None	G4	S2		SSC	IUCN_LC; USFS_S; USFWS_BCC	204	Birds
27044	Empidonax traillii extimus	southwestern willow flycatcher	ABPAE33043	43	51258	59153	3411812	Los Angeles	LAX	5 miles	Presumed Extant	Natural/Native occurrence	Unknown	N	18940520	18940520	UNKNOWN	Endangered	Endangered	G5T2	S3				804	Birds
38475	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	34	1865	21796	3311863	San Pedro	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Good	N	20120514	20120514	CITY OF RANCHO PALOS VERDES	Threatened	None	G4G5T3Q	S2		SSC		203	Birds
89819	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	891	71336	72239	3311873	Torrance	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20120522	20060421	CITY OF RANCHO PALOS VERDES	Threatened	None	G4G5T3Q	S2		SSC		203	Birds
3041	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	35	1722	25112	3311884	Venice	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	1980XXXX	1980XXXX	UNKNOWN	Threatened	None	G4G5T3Q	S2		SSC		804	Birds
89899	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	1045	1700	119808	3311874	Redondo Beach	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19041015	19041015	UNKNOWN	Threatened	None	G4G5T3Q	S2		SSC		804	Birds
89805	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	1037	B6682	119742	3311873	Torrance	LAX	specific area	Presumed Extant	Natural/Native occurrence	Fair	N	20190301	20190301	CITY OF ROLLING HILLS ESTATES	Threatened	None	G4G5T3Q	S2		SSC		202	Birds
89825	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	1038	B6698	119755	3311863	San Pedro	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Excellent	N	20190708	20190708	CITY OF LOS ANGELES	Threatened	None	G4G5T3Q	S2		SSC		203	Birds
38458	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	31	15982	29841	3311874	Redondo Beach	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Fair	N	20120605	20120605	CITY OF RANCHO PALOS VERDES	Threatened	None	G4G5T3Q	S2		SSC		203	Birds
38473	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	30	1686	29840	3311874	Redondo Beach	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Good	N	20180618	20180618	CITY OF RANCHO PALOS VERDES	Threatened	None	G4G5T3Q	S2		SSC		203	Birds
38456	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	33	1805	25114	3311873	Torrance	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	1980XXXX	1980XXXX	UNKNOWN	Threatened	None	G4G5T3Q	S2		SSC		203	Birds
38476	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	450	24341	6520	3311873	Torrance	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Good	N	20200128	20200128	DOD-NAVY	Threatened	None	G4G5T3Q	S2		SSC		203	Birds
38457	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	892	71337	72240	3311874	Redondo Beach	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	199311XX	199311XX	CITY OF PALOS VERDES ESTATES	Threatened	None	G4G5T3Q	S2		SSC		203	Birds
38474	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	108	1741	29842	3311863	San Pedro	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Excellent	N	20180518	20180518	CITY OF RANCHO PALOS VERDES	Threatened	None	G4G5T3Q	S2		SSC		203	Birds
52992	Riparia riparia	bank swallow	ABPAU08010	3	84452	85481	3311872	Long Beach	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19190629	19190629	CITY OF LONG BEACH, UNKNOWN	None	Threatened	G5	S3			BLM_S; IUCN_LC	204	Birds
52677	Riparia riparia	bank swallow	ABPAU08010	102	84233	85259	3311863	San Pedro	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	1921XXXX	1921XXXX	UNKNOWN	None	Threatened	G5	S3			BLM_S; IUCN_LC	204	Birds
13458	Sternula antillarum browni	California least tern	ABNNM08103	16	2005	25695	3311873	Torrance	LAX	1/5 mile	Extirpated	Natural/Native occurrence	None	N	1987XXXX	19850731	PVT	Endangered	Endangered	G4T2T3Q	S2		FP		204	Birds
13459	Sternula antillarum browni	California least tern	ABNNM08103	63	2008	25657	3311863	San Pedro	LAX	1/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19960801	19960801	DOD-NAVY	Endangered	Endangered	G4T2T3Q	S2		FP		204	Birds
62547	Vireo bellii pusillus	least Bell's vireo	ABPBW01114	561	91988	93062	3311882	South Gate	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	18950523	18950523	UNKNOWN	Endangered	Endangered	G5T2	S3				204	Birds
63137	Streptocephalus woottoni	Riverside fairy shrimp	ICBRA07010	57	92005	93077	3311884	Venice	LAX	1/5 mile	Extirpated	Natural/Native occurrence	None	N	2005XXXX	2005XXXX	PVT	Endangered	None	G1G2	S2			IUCN_EN	204	Crustaceans
12667	Aphanisma blitoides	aphanisma	PDCHE02010	5	17565	11724	3311874	Redondo Beach	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	193004XX	193004XX	UNKNOWN	None	None	G3G4	S2	1B.2		SB_CRES; SB_SBBG	804	Dicots

BETWEEN 5 AND 10 MILE

Object ID	Scientific Name	Common Name	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
73408	Aphanisma blitoides	aphanisma	PDCHE02010	76	A0142	101704	3311874	Redondo Beach	LAX	specific area	Presumed Extant	Natural/Native occurrence	Fair	N	20150127	20150127	CITY OF RANCHO PALOS VERDES	None	None	G3G4	S2	1B.2		SB_CRES; SB_SBBG	102	Dicots
73167	Aphanisma blitoides	aphanisma	PDCHE02010	31	41675	41675	3311863	San Pedro	LAX	specific area	Presumed Extant	Natural/Native occurrence	Fair	N	20150105	20150105	CITY OF RANCHO PALOS VERDES	None	None	G3G4	S2	1B.2		SB_CRES; SB_SBBG	102	Dicots
42902	Aphanisma blitoides	aphanisma	PDCHE02010	49	1700	76663	3311874	Redondo Beach	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G3G4	S2	1B.2		SB_CRES; SB_SBBG	804	Dicots
73158	Aphanisma blitoides	aphanisma	PDCHE02010	1	37104	12882	3311863	San Pedro	LAX	specific area	Presumed Extant	Natural/Native occurrence	Good	N	20150109	20150109	PVT, OTHERS	None	None	G3G4	S2	1B.2		SB_CRES; SB_SBBG	102	Dicots
42882	Aphanisma blitoides	aphanisma	PDCHE02010	51	75752	76767	3311874	Redondo Beach	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	20090405	20090405	CITY OF PALOS VERDES ESTATES	None	None	G3G4	S2	1B.2		SB_CRES; SB_SBBG	104	Dicots
89300	Astragalus hornii var. hornii	Horn's milk-vetch	PDFAB0F421	28	B4592	117528	3311871	Los Alamitos	ORA	5 miles	Extirpated	Natural/Native occurrence	None	N	189607XX	189607XX	UNKNOWN	None	None	GUT1	S1	1B.1		BLM_S	104	Dicots
76566	Astragalus tener var. titi	coastal dunes milk-vetch	PDFAB0F8R2	4	23784	42744	3311883	Inglewood	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19030412	19030412	UNKNOWN	Endangered	Endangered	G2T1	S1	1B.1		SB_CalBG/RSABG	804	Dicots
71940	Atriplex coulteri	Coulter's saltbush	PDCHE040E0	102	99025	100548	3311874	Redondo Beach	LAX	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20120601	20120601	CITY OF PALOS VERDES ESTATES	None	None	G3	S1S2	1B.2		SB_CalBG/RSABG; SB_CRES	102	Dicots
98291	Atriplex pacifica	south coast saltscale	PDCHE041C0	119	B1438	113346	3311874	Redondo Beach	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20141230	20141230	UNKNOWN	None	None	G4	S2	1B.2		SB_CalBG/RSABG; SB_CRES	103	Dicots
11470	Atriplex pacifica	south coast saltscale	PDCHE041C0	8	1700	759	3311874	Redondo Beach	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19031015	19031015	UNKNOWN	None	None	G4	S2	1B.2		SB_CalBG/RSABG; SB_CRES	804	Dicots
83561	Atriplex pacifica	south coast saltscale	PDCHE041C0	3	34590	12350	3311863	San Pedro	LAX	specific area	Presumed Extant	Natural/Native occurrence	Fair	N	2006XXXX	2006XXXX	CITY OF RANCHO PALOS VERDES	None	None	G4	S2	1B.2		SB_CalBG/RSABG; SB_CRES	102	Dicots
98292	Atriplex pacifica	south coast saltscale	PDCHE041C0	120	B1439	113347	3311863	San Pedro	LAX	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20090702	20090702	CITY OF RANCHO PALOS VERDES	None	None	G4	S2	1B.2		SB_CalBG/RSABG; SB_CRES	102	Dicots
98293	Atriplex pacifica	south coast saltscale	PDCHE041C0	121	B1440	113348	3311863	San Pedro	LAX	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	20090326	20090326	CITY OF RANCHO PALOS VERDES	None	None	G4	S2	1B.2		SB_CalBG/RSABG; SB_CRES	101	Dicots
11471	Atriplex parishii	Parish's brittlescale	PDCHE041D0	9	1700	1401	3311874	Redondo Beach	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G1G2	S1	1B.1		SB_CRES; USFS_S	804	Dicots
11779	Atriplex serenana var. davidsonii	Davidson's saltscale	PDCHE041T1	3	34592	253	3311863	San Pedro	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19060602	19060602	UNKNOWN	None	None	G5T1	S1	1B.2		SB_CalBG/RSABG	804	Dicots
13033	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	30	28742	30040	3311883	Inglewood	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	190507XX	190507XX	UNKNOWN	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	804	Dicots
854	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	21	35373	30109	3311871	Los Alamitos	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	19971010	19320628	UNKNOWN	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	103	Dicots
855	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	22	35374	30110	3311871	Los Alamitos	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	19971010	19340816	UNKNOWN	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	103	Dicots
69236	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	95	97136	98383	3311882	South Gate	LAX	4/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19301104	19301104	UNKNOWN	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	104	Dicots
9818	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	25	35371	29314	3311872	Long Beach	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	1932XXXX	1932XXXX	UNKNOWN	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	803	Dicots
84299	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	37	35368	30042	3311873	Torrance	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Good	N	2008XXXX	2008XXXX	DOD-NAVY, CITY OF LOS ANGELES	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	103	Dicots
2676	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	31	28743	30041	3311883	Inglewood	LAX	2/5 mile	Extirpated	Natural/Native occurrence	None	N	19971019	19330922	UNKNOWN	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	104	Dicots
83456	Centromadia pungens ssp. laevis	smooth tarplant	PDAST4R0R4	143	34592	113213	3311863	San Pedro	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19200420	19200420	UNKNOWN	None	None	G3G4T2	S2	1B.1		SB_CalBG/RSABG	804	Dicots
46456	Chaenactis glabriuscula var. orcuttiana	Orcutt's pincushion	PDAST20095	20	79025	47545	3311884	Venice	LAX	80 meters	Presumed Extant	Natural/Native occurrence	Fair	N	20100513	20100513	CITY OF MANHATTAN BEACH	None	None	G5T1	S1	1B.1		SB_CalBG/RSABG; SB_CRES	101	Dicots

BETWEEN 5 AND 10 MILE

Object ID	Scientific Name	Common Name	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
73813	Chaenactis glabriuscula var. orcuttiana	Orcutt's pincushion	PDAST20095	36	A0653	102210	3311884	Venice	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	20010513	20010513	UNKNOWN	None	None	G5T1	S1	1B.1		SB_CalBG/RSABG; SB_CRES	104	Dicots
73814	Chaenactis glabriuscula var. orcuttiana	Orcutt's pincushion	PDAST20095	37	A0655	102212	3311884	Venice	LAX	4/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19860401	19860401	UNKNOWN	None	None	G5T1	S1	1B.1		SB_CalBG/RSABG; SB_CRES	104	Dicots
12876	Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	PDSCR0J0C2	13	26479	6167	3311872	Long Beach	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	1980XXXX	19010525	UNKNOWN	Endangered	Endangered	G4?T1	S1	1B.2		BLM_S; SB_CalBG/RSABG; SB_CRES; SB_SBBG	804	Dicots
43405	Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	PDSCR0J0C2	12	35371	34952	3311872	Long Beach	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	1932XXXX	1932XXXX	UNKNOWN	Endangered	Endangered	G4?T1	S1	1B.2		BLM_S; SB_CalBG/RSABG; SB_CRES; SB_SBBG	803	Dicots
82917	Crossosoma californicum	Catalina crossosoma	PDCRO02020	20	58910	58946	3311863	San Pedro	LAX	specific area	Presumed Extant	Natural/Native occurrence	Good	N	20090416	20090416	CITY OF RPV, PVT	None	None	G3	S3	1B.2		SB_CalBG/RSABG	102	Dicots
26866	Crossosoma californicum	Catalina crossosoma	PDCRO02020	19	58899	58935	3311863	San Pedro	LAX	80 meters	Presumed Extant	Natural/Native occurrence	Fair	N	19960301	19960301	CITY OF RANCHO PALOS VERDES	None	None	G3	S3	1B.2		SB_CalBG/RSABG	101	Dicots
12352	Dithyrea maritima	beach spectaclepod	PDBRA10020	2	1655	20545	3311874	Redondo Beach	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	19980701	19020525	UNKNOWN	None	Threatened	G1	S1	1B.1		SB_SBBG	104	Dicots
12350	Dithyrea maritima	beach spectaclepod	PDBRA10020	3	1557	20552	3311884	Venice	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	19980701	19340509	UNKNOWN	None	Threatened	G1	S1	1B.1		SB_SBBG	804	Dicots
56650	Dudleya virens ssp. insularis	island green dudleya	PDCRA040S2	3	17598	47066	3311863	San Pedro	LAX	specific area	Presumed Extant	Natural/Native occurrence	Good	N	20100507	20100507	PVT, UNKNOWN	None	None	G3?T3	S3	1B.2			102	Dicots
19069	Dudleya virens ssp. insularis	island green dudleya	PDCRA040S2	20	47105	47105	3311863	San Pedro	LAX	1/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19460612	19460612	UNKNOWN	None	None	G3?T3	S3	1B.2			104	Dicots
66849	Eryngium aristulatum var. parishii	San Diego button-celery	PDAPI0Z042	120	95346	96484	3311884	Venice	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	19010720	19010720	UNKNOWN	Endangered	Endangered	G5T1	S1	1B.1		SB_CalBG/RSABG; SB_CRES	104	Dicots
71543	Horkelia cuneata var. puberula	mesa horkelia	PDROS0W045	67	17565	100201	3311874	Redondo Beach	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19310326	19310326	UNKNOWN	None	None	G4T1	S1	1B.1		SB_CalBG/RSABG; USFS_S	804	Dicots
71544	Horkelia cuneata var. puberula	mesa horkelia	PDROS0W045	68	1557	100202	3311884	Venice	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19320424	19320424	UNKNOWN	None	None	G4T1	S1	1B.1		SB_CalBG/RSABG; USFS_S	804	Dicots
74754	Isocoma menziesii var. decumbens	decumbent goldenbush	PDAST57091	101	26479	103371	3311872	Long Beach	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	18970817	18970817	UNKNOWN	None	None	G3G5T2T3	S2	1B.2		BLM_S; SB_CRES	804	Dicots
12773	Lasthenia glabrata ssp. coulteri	Coulter's goldfields	PDAST5L0A1	25	23784	25094	3311883	Inglewood	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19010410	19010410	UNKNOWN	None	None	G4T2	S2	1B.1		BLM_S; SB_CalBG/RSABG; SB_SBBG	804	Dicots
48672	Lasthenia glabrata ssp. coulteri	Coulter's goldfields	PDAST5L0A1	83	1557	81892	3311884	Venice	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19300120	19300120	UNKNOWN	None	None	G4T2	S2	1B.1		BLM_S; SB_CalBG/RSABG; SB_SBBG	804	Dicots
83887	Lycium brevipes var. hassei	Santa Catalina Island desert-thorn	PDSOL0G0N0	6	99959	101506	3311874	Redondo Beach	LAX	specific area	Presumed Extant	Natural/Native occurrence	Good	N	20180304	20180304	CITY OF PALOS VERDES ESTATES	None	None	G5T1Q	S1	3.1			102	Dicots
73147	Lycium brevipes var. hassei	Santa Catalina Island desert-thorn	PDSOL0G0N0	4	55709	55725	3311863	San Pedro	LAX	specific area	Presumed Extant	Natural/Native occurrence	Fair	N	20140801	20140801	CITY OF RANCHO PALOS VERDES	None	None	G5T1Q	S1	3.1			102	Dicots
19202	Navarretia fossalis	spreading navarretia	PDPLM0C080	40	28742	47436	3311883	Inglewood	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	19060719	19060719	UNKNOWN	Threatened	None	G2	S2	1B.1		SB_CalBG/RSABG; SB_CRES	804	Dicots
66641	Navarretia prostrata	prostrate vernal pool navarretia	PDPLM0C0Q0	14	47545	47955	3311884	Venice	LAX	3/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19440415	19440415	UNKNOWN	None	None	G2	S2	1B.2			104	Dicots
19518	Navarretia prostrata	prostrate vernal pool navarretia	PDPLM0C0Q0	11	26503	47952	3311882	South Gate	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	189505XX	189505XX	UNKNOWN	None	None	G2	S2	1B.2			804	Dicots
50768	Navarretia prostrata	prostrate vernal pool navarretia	PDPLM0C0Q0	33	28742	83691	3311883	Inglewood	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	19060719	19060719	UNKNOWN	None	None	G2	S2	1B.2			804	Dicots
12945	Nemacaulis denudata var. denudata	coast woolly-heads	PDPGN0G011	21	27996	22217	3311863	San Pedro	LAX	3/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	1905XXXX	1905XXXX	UNKNOWN	None	None	G3G4T2	S2	1B.2		SB_CalBG/RSABG; SB_CRES	104	Dicots
20047	Pentachaeta lyonii	Lyon's pentachaeta	PDAST6X060	2	34591	48785	3311863	San Pedro	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	1994XXXX	188407XX	UNKNOWN	Endangered	Endangered	G1	S1	1B.1		SB_CalBG/RSABG	804	Dicots

BETWEEN 5 AND 10 MILE

Object ID	Scientific Name	Common Name	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
60622	Phacelia stellaris	Brand's star phacelia	PDHYD0C510	3	90351	1726	3311882	South Gate	LAX	1/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19230319	19230319	UNKNOWN	None	None	G1	S1	1B.1		SB_CalBG/RSABG	104	Dicots
11469	Phacelia stellaris	Brand's star phacelia	PDHYD0C510	4	1700	757	3311874	Redondo Beach	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	18970320	18970320	UNKNOWN	None	None	G1	S1	1B.1		SB_CalBG/RSABG	804	Dicots
60649	Phacelia stellaris	Brand's star phacelia	PDHYD0C510	15	1557	91447	3311884	Venice	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19320424	19320424	UNKNOWN	None	None	G1	S1	1B.1		SB_CalBG/RSABG	804	Dicots
20092	Suaeda esteroa	estuary seablite	PDCHE0P0D0	17	34592	48871	3311863	San Pedro	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19040906	19040906	UNKNOWN	None	None	G3	S2	1B.2			804	Dicots
46086	Symphyotrichum defoliatum	San Bernardino aster	PDASTE80C0	76	78718	79628	3311872	Long Beach	LAX	1/10 mile	Extirpated	Natural/Native occurrence	None	N	19320707	19320707	UNKNOWN	None	None	G2	S2	1B.2		SB_CalBG/RSABG; SB_CRES; USFS_S	104	Dicots
15548	Southern Dune Scrub	Southern Dune Scrub	CTT21330CA	1	1534	26328	3311884	Venice	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	1983XXXX	1983XXXX	CITY OF LOS ANGELES	None	None	G1	S1.1				804	Dune
6336	Siphateles bicolor mohavensis	Mohave tui chub	AFCJB1303H	5	1666	28635	3311873	Torrance	LAX	1/5 mile	Extirpated	Transplant Outside of Native Hab./Range	None	N	1976XXXX	1976XXXX	LAX COUNTY	Endangered	Endangered	G4T1	S1		FP	AFS_EN	204	Fish
89429	Bombus crotchii	Crotch bumble bee	IIHYM24480	314	B6396	119453	3311863	San Pedro	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	20170715	20170715	CITY OF LOS ANGELES	None	Candidate Endangered	G2	S2			IUCN_EN	204	Insects
69993	Bombus crotchii	Crotch bumble bee	IIHYM24480	165	1557	98995	3311884	Venice	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19380706	19380706	UNKNOWN	None	Candidate Endangered	G2	S2			IUCN_EN	804	Insects
86842	Bombus crotchii	Crotch bumble bee	IIHYM24480	241	34591	118094	3311863	San Pedro	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	20010324	20010324	UNKNOWN	None	Candidate Endangered	G2	S2			IUCN_EN	804	Insects
69994	Bombus crotchii	Crotch bumble bee	IIHYM24480	167	27997	98997	3311872	Long Beach	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19670228	19670228	UNKNOWN	None	Candidate Endangered	G2	S2			IUCN_EN	804	Insects
69991	Bombus crotchii	Crotch bumble bee	IIHYM24480	162	1722	98991	3311884	Venice	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19530502	19530502	UNKNOWN	None	Candidate Endangered	G2	S2			IUCN_EN	804	Insects
69992	Bombus crotchii	Crotch bumble bee	IIHYM24480	163	28742	98992	3311883	Inglewood	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19170526	19170526	UNKNOWN	None	Candidate Endangered	G2	S2			IUCN_EN	804	Insects
97138	Brennania belkini	Belkin's dune tabanid fly	IIDIP17010	2	B8182	14453	3311884	Venice	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Fair	N	202206XX	202206XX	CITY OF LOS ANGELES	None	None	G1G2	S1S2			IUCN_VU	203	Insects
97303	Brennania belkini	Belkin's dune tabanid fly	IIDIP17010	4	B8183	22614	3311884	Venice	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	194904XX	194904XX	UNKNOWN	None	None	G1G2	S1S2			IUCN_VU	204	Insects
97283	Brennania belkini	Belkin's dune tabanid fly	IIDIP17010	3	1563	22616	3311884	Venice	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	1987XXXX	19860616	LADWP	None	None	G1G2	S1S2			IUCN_VU	203	Insects
97352	Brennania belkini	Belkin's dune tabanid fly	IIDIP17010	5	28742	121299	3311883	Inglewood	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19580630	19580630	UNKNOWN	None	None	G1G2	S1S2			IUCN_VU	804	Insects
17759	Cicindela hirticollis gravida	sandy beach tiger beetle	IICOL02101	11	36918	758	3311874	Redondo Beach	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	1979XXXX	XXXXXXXX	LAX COUNTY	None	None	G5T2	S2				203	Insects
13460	Cicindela hirticollis gravida	sandy beach tiger beetle	IICOL02101	13	2010	12878	3311863	San Pedro	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	1979XXXX	XXXXXXXX	UNKNOWN	None	None	G5T2	S2				204	Insects
27757	Cicindela hirticollis gravida	sandy beach tiger beetle	IICOL02101	35	60079	60115	3311884	Venice	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	19370307	19370307	DPR-DOCKWEILER SB	None	None	G5T2	S2				203	Insects
94041	Cicindela latesignata	western beach tiger beetle	IICOL02110	5	60935	121049	3311872	Long Beach	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	1979XXXX	189508XX	UNKNOWN	None	None	G2G3	S1				803	Insects
94040	Cicindela latesignata	western beach tiger beetle	IICOL02110	3	B7893	121048	3311863	San Pedro	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	1979XXXX	19071006	UNKNOWN	None	None	G2G3	S1				204	Insects
16890	Cicindela senilis frosti	senile tiger beetle	IICOL02121	4	1609	22657	3311884	Venice	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	1979XXXX	XXXXXXXX	LAX COUNTY-MANHATTAN BEACH	None	None	G2G3T1T3	S1				203	Insects
28164	Coelus globosus	globose dune beetle	IICOL4A010	16	59331	60666	3311884	Venice	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19730830	19730830	CITY OF LOS ANGELES	None	None	G1G2	S1S2			IUCN_VU	803	Insects
70162	Danaus plexippus plexippus pop. 1	monarch - California overwintering population	IILEPP2012	297	33186	2683	3311874	Redondo Beach	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Good	N	202201XX	20001207	PVT	Candidate	None	G4T1T2Q	S2			IUCN_EN; USFS_S	203	Insects
3896	Danaus plexippus plexippus pop. 1	monarch - California overwintering population	IILEPP2012	218	17190	12042	3311872	Long Beach	LAX	80 meters	Presumed Extant	Natural/Native occurrence	Fair	N	202111XX	19981108	CITY OF LONG BEACH	Candidate	None	G4T1T2Q	S2			IUCN_EN; USFS_S	201	Insects
97957	Danaus plexippus plexippus pop. 1	monarch - California overwintering population	IILEPP2012	385	97766	99151	3311872	Long Beach	LAX	1/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	202201XX	200811XX	CITY OF LONG BEACH	Candidate	None	G4T1T2Q	S2			IUCN_EN; USFS_S	204	Insects
70131	Danaus plexippus plexippus pop. 1	monarch - California overwintering population	IILEPP2012	383	97758	99136	3311884	Venice	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	202111XX	201411XX	PVT-CHEVRON	Candidate	None	G4T1T2Q	S2			IUCN_EN; USFS_S	204	Insects

BETWEEN 5 AND 10 MILE

Object ID	Scientific Name	Common Name	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
97998	Danaus plexippus plexippus pop. 1	monarch - California overwintering population	IILEPP2012	431	B8250	121319	3311874	Redondo Beach	LAX	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20220116	20220116	CITY OF HERMOSA BEACH	Candidate	None	G4T1T2Q	S2			IUCN_EN; USFS_S	202	Insects
10387	Danaus plexippus plexippus pop. 1	monarch - California overwintering population	IILEPP2012	298	33187	2682	3311873	Torrance	LAX	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20220102	20220102	CITY OF REDONDO BEACH	Candidate	None	G4T1T2Q	S2			IUCN_EN; USFS_S	202	Insects
19487	Danaus plexippus plexippus pop. 1	monarch - California overwintering population	IILEPP2012	339	47888	47888	3311884	Venice	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	197X12XX	197X12XX	CITY OF EL SEGUNDO	Candidate	None	G4T1T2Q	S2			IUCN_EN; USFS_S	203	Insects
27967	Eugnosta busckana	Busck's gallmoth	IILEM2X090	4	1534	60416	3311884	Venice	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19581119	19581119	CITY OF LOS ANGELES	None	None	G1G3	S2S3				804	Insects
36881	Euphilotes allyni	El Segundo blue butterfly	IILEPG201B	4	70052	70908	3311874	Redondo Beach	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	2007XXXX	2007XXXX	CITY OF TORRANCE	Endangered	None	G5T1	S1				204	Insects
36197	Euphilotes allyni	El Segundo blue butterfly	IILEPG201B	3	69867	70689	3311874	Redondo Beach	LAX	1/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	1990XXXX	1990XXXX	UNKNOWN, PVT	Endangered	None	G5T1	S1				204	Insects
13429	Euphilotes allyni	El Segundo blue butterfly	IILEPG201B	2	1586	23047	3311884	Venice	LAX	1/5 mile	Presumed Extant	Natural/Native occurrence	Good	N	20050818	20050818	PVT-CHEVRON	Endangered	None	G5T1	S1				204	Insects
8881	Euphilotes allyni	El Segundo blue butterfly	IILEPG201B	1	1535	14469	3311884	Venice	LAX	specific area	Presumed Extant	Natural/Native occurrence	Fair	N	20050813	20050813	CITY OF LA-LA/EL SEGUNDO DUNES	Endangered	None	G5T1	S1				802	Insects
17742	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	10	1838	23017	3311863	San Pedro	LAX	non-specific area	Possibly Extirpated	Natural/Native occurrence	None	N	1988XXXX	1983XXXX	PVT	Endangered	None	G5T1	S1				203	Insects
3049	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	16	1823	23009	3311873	Torrance	LAX	1/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	1988XXXX	1981XXXX	PVT-S&S CONSTRUCTION CO	Endangered	None	G5T1	S1				204	Insects
13437	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	6	1753	23022	3311873	Torrance	LAX	1/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	1988XXXX	1982XXXX	PVT	Endangered	None	G5T1	S1				204	Insects
7231	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	2	1696	23026	3311874	Redondo Beach	LAX	80 meters	Extirpated	Natural/Native occurrence	None	N	1988XXXX	1982XXXX	CITY OF RANCHO PALOS VERDES	Endangered	None	G5T1	S1				201	Insects
90489	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	19	B7047	65114	3311874	Redondo Beach	LAX	1/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	200103XX	200103XX	UNKNOWN	Endangered	None	G5T1	S1				204	Insects
3039	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	1	1687	23027	3311874	Redondo Beach	LAX	1/5 mile	Extirpated	Natural/Native occurrence	None	N	1988XXXX	1976XXXX	PVT	Endangered	None	G5T1	S1				204	Insects
13435	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	5	1725	23023	3311874	Redondo Beach	LAX	1/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	198605XX	198605XX	PVT-FILIORUM CORP	Endangered	None	G5T1	S1				204	Insects
7230	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	3	1665	23025	3311874	Redondo Beach	LAX	80 meters	Extirpated	Natural/Native occurrence	None	N	1988XXXX	1979XXXX	PVT-RANCHO PALOS VERDES	Endangered	None	G5T1	S1				201	Insects
17741	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	4	1861	23024	3311863	San Pedro	LAX	non-specific area	Possibly Extirpated	Natural/Native occurrence	None	N	1988XXXX	1983XXXX	PVT, CITY OF RPV, LAX COUNTY	Endangered	None	G5T1	S1				203	Insects
13442	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	9	1822	23019	3311863	San Pedro	LAX	1/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	1988XXXX	1982XXXX	PVT-PALOS VERDES PROPERTIES	Endangered	None	G5T1	S1				204	Insects
13439	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	8	1771	23020	3311873	Torrance	LAX	1/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	1988XXXX	1981XXXX	PVT-FILIORUM CORP	Endangered	None	G5T1	S1				204	Insects

BETWEEN 5 AND 10 MILE

Object ID	Scientific Name	Common Name	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
55632	Habroscelimorpha gabbii	western tidal-flat tiger beetle	IICOL02080	8	60935	87727	3311872	Long Beach	LAX	non-specific area	Possibly Extirpated	Natural/Native occurrence	None	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G2G4	S1				803	Insects
101201	Habroscelimorpha gabbii	western tidal-flat tiger beetle	IICOL02080	1	72493	2504	3311861	Seal Beach	ORA	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	Y	19980711	19980711		None	None	G2G4	S1				999	Insects
8882	Onychobaris langei	Lange's El Segundo Dune weevil	IICOL4W010	1	1535	13171	3311884	Venice	LAX	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19380928	19380928	CITY OF LA-LA/EL SEGUNDO DUNES	None	None	G1	S1				802	Insects
8883	Pelochrista hennei	Henne's eucosman moth	IILEM0R390	1	1535	14461	3311884	Venice	LAX	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	1984XXXX	1984XXXX	CITY OF LA-LA/EL SEGUNDO DUNES	None	None	G1	S1				802	Insects
101444	Rhaphiomidas terminatus terminatus	El Segundo flower-loving fly	IIDIP05022	1	65035	65118	3311874	Redondo Beach	LAX	1/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	Y	200107XX	200107XX		None	None	G1T1	S1				999	Insects
27908	Trigonoscuta dorothea dorothea	Dorothy's El Segundo Dune weevil	IICOL51021	2	59331	14454	3311884	Venice	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19540312	19540312	PVT-LAX AIRPORT, CITY OF LA	None	None	G1T1	S1				803	Insects
34408	Lasionycteris noctivagans	silver-haired bat	AMACC02010	50	68566	68930	3311872	Long Beach	LAX	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	19861118	19861118	UNKNOWN	None	None	G3G4	S3S4			IUCN_LC	201	Mammals
34406	Lasionycteris noctivagans	silver-haired bat	AMACC02010	48	68564	68928	3311871	Los Alamitos	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19780222	19780222	UNKNOWN	None	None	G3G4	S3S4			IUCN_LC	204	Mammals
26929	Microtus californicus stephensi	south coast marsh vole	AMAFF11035	2	1722	58981	3311884	Venice	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19570414	19570414	UNKNOWN	None	None	G5T2T3	S2		SSC		804	Mammals
10411	Neotoma lepida intermedia	San Diego desert woodrat	AMAFF08041	11	33547	29698	3311863	San Pedro	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Poor	N	19910826	19910826	UNKNOWN	None	None	G5T3T4	S3S4		SSC		203	Mammals
34208	Nyctinomops femorosaccus	pocketed free-tailed bat	AMACD04010	16	28742	68717	3311883	Inglewood	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19941018	19941018	UNKNOWN	None	None	G5	S3		SSC	IUCN_LC	804	Mammals
27335	Nyctinomops macrotis	big free-tailed bat	AMACD04020	5	27997	59564	3311872	Long Beach	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19831007	19831007	UNKNOWN	None	None	G5	S3		SSC	IUCN_LC	804	Mammals
16820	Perognathus longimembris pacificus	Pacific pocket mouse	AMAFD01042	2	39858	34860	3311884	Venice	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	193806XX	193806XX	UNKNOWN	Endangered	None	G5T2	S2		SSC		203	Mammals
16819	Perognathus longimembris pacificus	Pacific pocket mouse	AMAFD01042	1	39854	34856	3311874	Redondo Beach	LAX	3/5 mile	Extirpated	Natural/Native occurrence	None	N	19310905	19310905	UNKNOWN	Endangered	None	G5T2	S2		SSC		204	Mammals
27043	Taxidea taxus	American badger	AMAJF04010	291	51258	57504	3411812	Los Angeles	LAX	5 miles	Presumed Extant	Natural/Native occurrence	Unknown	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G5	S3		SSC	IUCN_LC	804	Mammals
87570	Glyptostoma gabrielense	San Gabriel chestnut	IMGASB1010	23	34591	118949	3311863	San Pedro	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19XXXXXX	19XXXXXX	UNKNOWN	None	None	G2	S3				804	Mollusks
53803	Tryonia imitator	mimic tryonia (=California brackishwater snail)	IMGASJ7040	42	85175	86194	3311873	Torrance	LAX	1/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	20071205	20071205	CITY OF LOS ANGELES	None	None	G2	S2			IUCN_DD	204	Mollusks
26237	Tryonia imitator	mimic tryonia (=California brackishwater snail)	IMGASJ7040	30	57921	57937	3311863	San Pedro	LAX	specific area	Extirpated	Natural/Native occurrence	None	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G2	S2			IUCN_DD	202	Mollusks
8771	Orcuttia californica	California Orcutt grass	PMPOA4G010	13	47232	47232	3311871	Los Alamitos	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	XXXXXXXX	XXXXXXXX	UNKNOWN	Endangered	Endangered	G1	S1	1B.1		SB_CalBG/RSABG; SB_CRES	104	Monocots
8775	Orcuttia californica	California Orcutt grass	PMPOA4G010	14	26503	47231	3311882	South Gate	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	XXXXXXXX	XXXXXXXX	UNKNOWN	Endangered	Endangered	G1	S1	1B.1		SB_CalBG/RSABG; SB_CRES	804	Monocots
80561	Anniella stebbinsi	Southern California legless lizard	ARACC01060	50	A8280	110063	3311884	Venice	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Poor	N	20040523	20040523	DPR-DOCKWEILER SB, CITY OF LA	None	None	G3	S3		SSC	USFS_S	203	Reptiles
98294	Anniella stebbinsi	Southern California legless lizard	ARACC01060	401	B1684	113598	3311874	Redondo Beach	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Good	N	20181222	20181222	CITY OF PALOS VERDES ESTATES	None	None	G3	S3		SSC	USFS_S	204	Reptiles
81291	Anniella stebbinsi	Southern California legless lizard	ARACC01060	56	A9112	110947	3311874	Redondo Beach	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Poor	N	20020818	20020818	CITY OF HERMOSA BEACH	None	None	G3	S3		SSC	USFS_S	204	Reptiles
80564	Anniella stebbinsi	Southern California legless lizard	ARACC01060	53	A8283	110066	3311884	Venice	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Poor	N	19610304	19610304	PVT	None	None	G3	S3		SSC	USFS_S	204	Reptiles

BETWEEN 5 AND 10 MILE

Object ID	Scientific Name	Common Name	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
98289	Anniella stebbinsi	Southern California legless lizard	ARACC01060	58	A9114	110949	3311874	Redondo Beach	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20010422	20010422	LAX COUNTY	None	None	G3	S3		SSC	USFS_S	203	Reptiles
80565	Anniella stebbinsi	Southern California legless lizard	ARACC01060	54	A8285	110068	3311884	Venice	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Poor	N	19890315	19890315	PVT	None	None	G3	S3		SSC	USFS_S	204	Reptiles
81292	Anniella stebbinsi	Southern California legless lizard	ARACC01060	57	A9113	110948	3311874	Redondo Beach	LAX	3/5 mile	Presumed Extant	Natural/Native occurrence	Poor	N	19760301	19760301	UNKNOWN	None	None	G3	S3		SSC	USFS_S	204	Reptiles
80539	Anniella stebbinsi	Southern California legless lizard	ARACC01060	1	A8262	110041	3311884	Venice	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Good	N	20100420	20100420	CITY OF LOS ANGELES	None	None	G3	S3		SSC	USFS_S	203	Reptiles
80562	Anniella stebbinsi	Southern California legless lizard	ARACC01060	51	A8281	110064	3311884	Venice	LAX	1/5 mile	Presumed Extant	Natural/Native occurrence	Poor	N	19561024	19561024	PVT	None	None	G3	S3		SSC	USFS_S	204	Reptiles
81290	Anniella stebbinsi	Southern California legless lizard	ARACC01060	55	A9105	110941	3311874	Redondo Beach	LAX	1/5 mile	Presumed Extant	Natural/Native occurrence	Poor	N	19650702	19650702	UNKNOWN	None	None	G3	S3		SSC	USFS_S	204	Reptiles
80563	Anniella stebbinsi	Southern California legless lizard	ARACC01060	52	A8282	110065	3311884	Venice	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Poor	N	20160629	20160629	LAX COUNTY	None	None	G3	S3		SSC	USFS_S	203	Reptiles
83812	Anniella stebbinsi	Southern California legless lizard	ARACC01060	403	B1714	113629	3311874	Redondo Beach	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Poor	N	20141004	20141004	PVT	None	None	G3	S3		SSC	USFS_S	204	Reptiles
81302	Anniella stebbinsi	Southern California legless lizard	ARACC01060	64	A9121	110955	3311882	South Gate	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Poor	N	19390529	19390529	UNKNOWN	None	None	G3	S3		SSC	USFS_S	204	Reptiles
49731	Phrynosoma blainvillii	coast horned lizard	ARACF12100	764	81926	82897	3311863	San Pedro	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19300819	19300819	UNKNOWN	None	None	G4	S4		SSC	BLM_S; IUCN_LC	204	Reptiles
3059	Phrynosoma blainvillii	coast horned lizard	ARACF12100	150	2093	28066	3311872	Long Beach	LAX	1/5 mile	Extirpated	Natural/Native occurrence	None	N	19510317	19510317	UNKNOWN	None	None	G4	S4		SSC	BLM_S; IUCN_LC	204	Reptiles
6342	Phrynosoma blainvillii	coast horned lizard	ARACF12100	151	2213	28061	3311871	Los Alamitos	LAX	1/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19570414	19570414	UNKNOWN	None	None	G4	S4		SSC	BLM_S; IUCN_LC	204	Reptiles
11168	Southern Coastal Bluff Scrub	Southern Coastal Bluff Scrub	CTT31200CA	23	17053	9609	3311874	Redondo Beach	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19900901	19900901	UNKNOWN	None	None	G1	S1.1				303	Scrub

Object ID	Scientific Name	Common Name	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
85791	Spea hammondii	western spadefoot	AAABF02020	1046	B3948	116862	3311874	Redondo Beach	LAX	1/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19660425	19660425	UNKNOWN	None	None	G2G3	S3S4		SSC	BLM_S; IUCN_NT	204	Amphibians
85868	Spea hammondii	western spadefoot	AAABF02020	1082	B4015	116931	3311873	Torrance	LAX	2/5 mile	Extirpated	Natural/Native occurrence	None	N	19XXXXXX	19XXXXXX	UNKNOWN	None	None	G2G3	S3S4		SSC	BLM_S; IUCN_NT	204	Amphibians
91445	Spea hammondii	western spadefoot	AAABF02020	1047	B3949	116863	3311883	Inglewood	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19580415	19580415	UNKNOWN	None	None	G2G3	S3S4		SSC	BLM_S; IUCN_NT	204	Amphibians
91446	Spea hammondii	western spadefoot	AAABF02020	1083	B4016	116932	3311873	Torrance	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	195903XX	195903XX	UNKNOWN	None	None	G2G3	S3S4		SSC	BLM_S; IUCN_NT	204	Amphibians
85792	Spea hammondii	western spadefoot	AAABF02020	1048	B3951	116865	3311883	Inglewood	LAX	1/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19380203	19380203	UNKNOWN	None	None	G2G3	S3S4		SSC	BLM_S; IUCN_NT	204	Amphibians
85793	Spea hammondii	western spadefoot	AAABF02020	1049	B3953	116866	3311881	Whittier	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19560502	19560502	UNKNOWN	None	None	G2G3	S3S4		SSC	BLM_S; IUCN_NT	204	Amphibians
72842	Agelaius tricolor	tricolored blackbird	ABPBXB0020	774	99707	101254	3311883	Inglewood	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19400510	19400510	UNKNOWN	None	Threatened	G1G2	S2		SSC	BLM_S; IUCN_EN; USFWS_BCC	204	Birds
14998	Agelaius tricolor	tricolored blackbird	ABPBXB0020	275	24342	6521	3311873	Torrance	LAX	2/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	198XXXXX	198XXXXX	UNKNOWN	None	Threatened	G1G2	S2		SSC	BLM_S; IUCN_EN; USFWS_BCC	204	Birds
16810	Agelaius tricolor	tricolored blackbird	ABPBXB0020	332	39583	32179	3311873	Torrance	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	198XXXXX	198XXXXX	CITY OF TORRANCE-MADRONA MARSH	None	Threatened	G1G2	S2		SSC	BLM_S; IUCN_EN; USFWS_BCC	803	Birds
21716	Athene cunicularia	burrowing owl	ABNSB10010	571	51258	51258	3411812	Los Angeles	LAX	5 miles	Presumed Extant	Natural/Native occurrence	Unknown	N	19210505	19210505	UNKNOWN	None	None	G4	S2		SSC	BLM_S; IUCN_LC; USFWS_BCC	804	Birds
6341	Coccyzus americanus occidentalis	western yellow-billed cuckoo	ABNRB02022	72	2238	13009	3311871	Los Alamitos	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	19120622	19120622	PVT	Threatened	Endangered	G5T2T3	S1			BLM_S; USFS_S	203	Birds
67526	Coccyzus americanus occidentalis	western yellow-billed cuckoo	ABNRB02022	202	95887	97020	3311872	Long Beach	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	19150531	19150531	UNKNOWN	Threatened	Endangered	G5T2T3	S1			BLM_S; USFS_S	204	Birds
67530	Coccyzus americanus occidentalis	western yellow-billed cuckoo	ABNRB02022	204	1965	97029	3311882	South Gate	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	19100724	19100724	UNKNOWN	Threatened	Endangered	G5T2T3	S1			BLM_S; USFS_S	804	Birds
67527	Coccyzus americanus occidentalis	western yellow-billed cuckoo	ABNRB02022	203	95888	97028	3311872	Long Beach	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	19230623	19230623	UNKNOWN	Threatened	Endangered	G5T2T3	S1			BLM_S; USFS_S	203	Birds
67525	Coccyzus americanus occidentalis	western yellow-billed cuckoo	ABNRB02022	201	95877	97015	3311872	Long Beach	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	19210615	19210615	UNKNOWN	Threatened	Endangered	G5T2T3	S1			BLM_S; USFS_S	204	Birds
91017	Coturnicops noveboracensis	yellow rail	ABNME01010	23	A5268	106991	3311884	Venice	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19981020	19981020	UNKNOWN	None	None	G4	S2		SSC	IUCN_LC; USFS_S; USFWS_BCC	204	Birds
27021	Empidonax traillii extimus	southwestern willow flycatcher	ABPAE33043	42	1965	59152	3311882	South Gate	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	18950629	18950629	UNKNOWN	Endangered	Endangered	G5T2	S3				804	Birds
27044	Empidonax traillii extimus	southwestern willow flycatcher	ABPAE33043	43	51258	59153	3411812	Los Angeles	LAX	5 miles	Presumed Extant	Natural/Native occurrence	Unknown	N	18940520	18940520	UNKNOWN	Endangered	Endangered	G5T2	S3				804	Birds
38475	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	34	1865	21796	3311863	San Pedro	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Good	N	20120514	20120514	CITY OF RANCHO PALOS VERDES	Threatened	None	G4G5T3Q	S2		SSC		203	Birds
89819	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	891	71336	72239	3311873	Torrance	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20120522	20060421	CITY OF RANCHO PALOS VERDES	Threatened	None	G4G5T3Q	S2		SSC		203	Birds
3041	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	35	1722	25112	3311884	Venice	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	1980XXXX	1980XXXX	UNKNOWN	Threatened	None	G4G5T3Q	S2		SSC		804	Birds
89899	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	1045	1700	119808	3311874	Redondo Beach	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19041015	19041015	UNKNOWN	Threatened	None	G4G5T3Q	S2		SSC		804	Birds
89805	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	1037	B6682	119742	3311873	Torrance	LAX	specific area	Presumed Extant	Natural/Native occurrence	Fair	N	20190301	20190301	CITY OF ROLLING HILLS ESTATES	Threatened	None	G4G5T3Q	S2		SSC		202	Birds
89825	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	1038	B6698	119755	3311863	San Pedro	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Excellent	N	20190708	20190708	CITY OF LOS ANGELES	Threatened	None	G4G5T3Q	S2		SSC		203	Birds
38458	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	31	15982	29841	3311874	Redondo Beach	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Fair	N	20120605	20120605	CITY OF RANCHO PALOS VERDES	Threatened	None	G4G5T3Q	S2		SSC		203	Birds
38473	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	30	1686	29840	3311874	Redondo Beach	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Good	N	20180618	20180618	CITY OF RANCHO PALOS VERDES	Threatened	None	G4G5T3Q	S2		SSC		203	Birds

Object ID	Scientific Name	Common Name	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
38456	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	33	1805	25114	3311873	Torrance	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	1980XXXX	1980XXXX	UNKNOWN	Threatened	None	G4G5T3Q	S2		SSC		203	Birds
38476	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	450	24341	6520	3311873	Torrance	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Good	N	20200128	20200128	DOD-NAVY	Threatened	None	G4G5T3Q	S2		SSC		203	Birds
38457	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	892	71337	72240	3311874	Redondo Beach	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	199311XX	199311XX	CITY OF PALOS VERDES ESTATES	Threatened	None	G4G5T3Q	S2		SSC		203	Birds
38474	Polioptila californica californica	coastal California gnatcatcher	ABPBJ08081	108	1741	29842	3311863	San Pedro	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Excellent	N	20180518	20180518	CITY OF RANCHO PALOS VERDES	Threatened	None	G4G5T3Q	S2		SSC		203	Birds
52992	Riparia riparia	bank swallow	ABPAU08010	3	84452	85481	3311872	Long Beach	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19190629	19190629	CITY OF LONG BEACH, UNKNOWN	None	Threatened	G5	S3			BLM_S; IUCN_LC	204	Birds
52677	Riparia riparia	bank swallow	ABPAU08010	102	84233	85259	3311863	San Pedro	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	1921XXXX	1921XXXX	UNKNOWN	None	Threatened	G5	S3			BLM_S; IUCN_LC	204	Birds
9846	Sternula antillarum browni	California least tern	ABNNM08103	78	1942	14719	3311873	Torrance	LAX	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19770803	19770803	CITY OF LOS ANGELES	Endangered	Endangered	G4T2T3Q	S2		FP		202	Birds
13458	Sternula antillarum browni	California least tern	ABNNM08103	16	2005	25695	3311873	Torrance	LAX	1/5 mile	Extirpated	Natural/Native occurrence	None	N	1987XXXX	19850731	PVT	Endangered	Endangered	G4T2T3Q	S2		FP		204	Birds
13459	Sternula antillarum browni	California least tern	ABNNM08103	63	2008	25657	3311863	San Pedro	LAX	1/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19960801	19960801	DOD-NAVY	Endangered	Endangered	G4T2T3Q	S2		FP		204	Birds
62547	Vireo bellii pusillus	least Bell's vireo	ABPBW01114	561	91988	93062	3311882	South Gate	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	18950523	18950523	UNKNOWN	Endangered	Endangered	G5T2	S3				204	Birds
62625	Streptocephalus woottoni	Riverside fairy shrimp	ICBRA07010	67	39583	93129	3311873	Torrance	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	201007XX	2003XXXX	CITY OF TORRANCE	Endangered	None	G1G2	S2			IUCN_EN	803	Crustaceans
63137	Streptocephalus woottoni	Riverside fairy shrimp	ICBRA07010	57	92005	93077	3311884	Venice	LAX	1/5 mile	Extirpated	Natural/Native occurrence	None	N	2005XXXX	2005XXXX	PVT	Endangered	None	G1G2	S2			IUCN_EN	204	Crustaceans
12667	Aphanisma blitoides	aphanisma	PDCHE02010	5	17565	11724	3311874	Redondo Beach	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	193004XX	193004XX	UNKNOWN	None	None	G3G4	S2	1B.2		SB_CRES; SB_SBBG	804	Dicots
73408	Aphanisma blitoides	aphanisma	PDCHE02010	76	A0142	101704	3311874	Redondo Beach	LAX	specific area	Presumed Extant	Natural/Native occurrence	Fair	N	20150127	20150127	CITY OF RANCHO PALOS VERDES	None	None	G3G4	S2	1B.2		SB_CRES; SB_SBBG	102	Dicots
73167	Aphanisma blitoides	aphanisma	PDCHE02010	31	41675	41675	3311863	San Pedro	LAX	specific area	Presumed Extant	Natural/Native occurrence	Fair	N	20150105	20150105	CITY OF RANCHO PALOS VERDES	None	None	G3G4	S2	1B.2		SB_CRES; SB_SBBG	102	Dicots
42902	Aphanisma blitoides	aphanisma	PDCHE02010	49	1700	76663	3311874	Redondo Beach	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G3G4	S2	1B.2		SB_CRES; SB_SBBG	804	Dicots
73158	Aphanisma blitoides	aphanisma	PDCHE02010	1	37104	12882	3311863	San Pedro	LAX	specific area	Presumed Extant	Natural/Native occurrence	Good	N	20150109	20150109	PVT, OTHERS	None	None	G3G4	S2	1B.2		SB_CRES; SB_SBBG	102	Dicots
42882	Aphanisma blitoides	aphanisma	PDCHE02010	51	75752	76767	3311874	Redondo Beach	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	20090405	20090405	CITY OF PALOS VERDES ESTATES	None	None	G3G4	S2	1B.2		SB_CRES; SB_SBBG	104	Dicots
89300	Astragalus hornii var. hornii	Horn's milk-vetch	PDFAB0F421	28	B4592	117528	3311871	Los Alamitos	ORA	5 miles	Extirpated	Natural/Native occurrence	None	N	189607XX	189607XX	UNKNOWN	None	None	GUT1	S1	1B.1		BLM_S	104	Dicots
76566	Astragalus tener var. titi	coastal dunes milk-vetch	PDFAB0F8R2	4	23784	42744	3311883	Inglewood	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19030412	19030412	UNKNOWN	Endangered	Endangered	G2T1	S1	1B.1		SB_CalBG/RSABG	804	Dicots
71940	Atriplex coulteri	Coulter's saltbush	PDCHE040E0	102	99025	100548	3311874	Redondo Beach	LAX	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20120601	20120601	CITY OF PALOS VERDES ESTATES	None	None	G3	S1S2	1B.2		SB_CalBG/RSABG; SB_CRES	102	Dicots
41001	Atriplex coulteri	Coulter's saltbush	PDCHE040E0	56	23782	74608	3311872	Long Beach	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G3	S1S2	1B.2		SB_CalBG/RSABG; SB_CRES	804	Dicots
71941	Atriplex coulteri	Coulter's saltbush	PDCHE040E0	103	99026	100549	3311883	Inglewood	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	19020515	19020515	UNKNOWN	None	None	G3	S1S2	1B.2		SB_CalBG/RSABG; SB_CRES	104	Dicots
98291	Atriplex pacifica	south coast saltscale	PDCHE041C0	119	B1438	113346	3311874	Redondo Beach	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20141230	20141230	UNKNOWN	None	None	G4	S2	1B.2		SB_CalBG/RSABG; SB_CRES	103	Dicots
11470	Atriplex pacifica	south coast saltscale	PDCHE041C0	8	1700	759	3311874	Redondo Beach	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19031015	19031015	UNKNOWN	None	None	G4	S2	1B.2		SB_CalBG/RSABG; SB_CRES	804	Dicots
83561	Atriplex pacifica	south coast saltscale	PDCHE041C0	3	34590	12350	3311863	San Pedro	LAX	specific area	Presumed Extant	Natural/Native occurrence	Fair	N	2006XXXX	2006XXXX	CITY OF RANCHO PALOS VERDES	None	None	G4	S2	1B.2		SB_CalBG/RSABG; SB_CRES	102	Dicots
98292	Atriplex pacifica	south coast saltscale	PDCHE041C0	120	B1439	113347	3311863	San Pedro	LAX	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20090702	20090702	CITY OF RANCHO PALOS VERDES	None	None	G4	S2	1B.2		SB_CalBG/RSABG; SB_CRES	102	Dicots
98293	Atriplex pacifica	south coast saltscale	PDCHE041C0	121	B1440	113348	3311863	San Pedro	LAX	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	20090326	20090326	CITY OF RANCHO PALOS VERDES	None	None	G4	S2	1B.2		SB_CalBG/RSABG; SB_CRES	101	Dicots

Object ID	Scientific Name	Common Name	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
11471	Atriplex parishii	Parish's brittlescale	PDCHE041D0	9	1700	1401	3311874	Redondo Beach	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G1G2	S1	1B.1		SB_CRES; USFS_S	804	Dicots
2413	Atriplex parishii	Parish's brittlescale	PDCHE041D0	5	23782	7795	3311872	Long Beach	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G1G2	S1	1B.1		SB_CRES; USFS_S	804	Dicots
11779	Atriplex serenana var. davidsonii	Davidson's saltscale	PDCHE041T1	3	34592	253	3311863	San Pedro	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19060602	19060602	UNKNOWN	None	None	G5T1	S1	1B.2		SB_CalBG/RSABG	804	Dicots
13033	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	30	28742	30040	3311883	Inglewood	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	190507XX	190507XX	UNKNOWN	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	804	Dicots
854	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	21	35373	30109	3311871	Los Alamitos	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	19971010	19320628	UNKNOWN	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	103	Dicots
98326	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	109	B2305	114229	3311873	Torrance	LAX	specific area	Presumed Extant	Natural/Native occurrence	Good	N	201607XX	201607XX	LAX COUNTY	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	102	Dicots
69261	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	81	77193	78129	3311873	Torrance	LAX	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20140703	20140703	PVT	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	102	Dicots
55083	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	86	86323	87362	3311883	Inglewood	LAX	80 meters	Presumed Extant	Natural/Native occurrence	Fair	N	20110906	20110906	PVT?	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	101	Dicots
855	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	22	35374	30110	3311871	Los Alamitos	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	19971010	19340816	UNKNOWN	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	103	Dicots
69213	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	43	97121	34585	3311873	Torrance	LAX	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20100930	20100930	CITY OF TORRANCE-MADRONA MARSH	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	102	Dicots
69236	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	95	97136	98383	3311882	South Gate	LAX	4/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19301104	19301104	UNKNOWN	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	104	Dicots
9818	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	25	35371	29314	3311872	Long Beach	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	1932XXXX	1932XXXX	UNKNOWN	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	803	Dicots
84299	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	37	35368	30042	3311873	Torrance	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Good	N	2008XXXX	2008XXXX	DOD-NAVY, CITY OF LOS ANGELES	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	103	Dicots
2676	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	31	28743	30041	3311883	Inglewood	LAX	2/5 mile	Extirpated	Natural/Native occurrence	None	N	19971019	19330922	UNKNOWN	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	104	Dicots
55082	Centromadia parryi ssp. australis	southern tarplant	PDAST4R0P4	85	86322	87361	3311873	Torrance	LAX	specific area	Presumed Extant	Natural/Native occurrence	Good	N	20090713	20090713	LAX COUNTY-DPW	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	102	Dicots
83456	Centromadia pungens ssp. laevis	smooth tarplant	PDAST4R0R4	143	34592	113213	3311863	San Pedro	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19200420	19200420	UNKNOWN	None	None	G3G4T2	S2	1B.1		SB_CalBG/RSABG	804	Dicots
46456	Chaenactis glabriuscula var. orcuttiana	Orcutt's pincushion	PDAST20095	20	79025	47545	3311884	Venice	LAX	80 meters	Presumed Extant	Natural/Native occurrence	Fair	N	20100513	20100513	CITY OF MANHATTAN BEACH	None	None	G5T1	S1	1B.1		SB_CalBG/RSABG; SB_CRES	101	Dicots
73813	Chaenactis glabriuscula var. orcuttiana	Orcutt's pincushion	PDAST20095	36	A0653	102210	3311884	Venice	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	20010513	20010513	UNKNOWN	None	None	G5T1	S1	1B.1		SB_CalBG/RSABG; SB_CRES	104	Dicots
73814	Chaenactis glabriuscula var. orcuttiana	Orcutt's pincushion	PDAST20095	37	A0655	102212	3311884	Venice	LAX	4/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19860401	19860401	UNKNOWN	None	None	G5T1	S1	1B.1		SB_CalBG/RSABG; SB_CRES	104	Dicots
12876	Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	PDSCR0J0C2	13	26479	6167	3311872	Long Beach	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	1980XXXX	19010525	UNKNOWN	Endangered	Endangered	G4?T1	S1	1B.2		BLM_S; SB_CalBG/RSABG; SB_CRES; SB_SBBG	804	Dicots
43405	Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	PDSCR0J0C2	12	35371	34952	3311872	Long Beach	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	1932XXXX	1932XXXX	UNKNOWN	Endangered	Endangered	G4?T1	S1	1B.2		BLM_S; SB_CalBG/RSABG; SB_CRES; SB_SBBG	803	Dicots
82917	Crossosoma californicum	Catalina crossosoma	PDCRO02020	20	58910	58946	3311863	San Pedro	LAX	specific area	Presumed Extant	Natural/Native occurrence	Good	N	20090416	20090416	CITY OF RPV, PVT	None	None	G3	S3	1B.2		SB_CalBG/RSABG	102	Dicots

Object ID	Scientific Name	Common Name	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
26866	Crossosoma californicum	Catalina crossosoma	PDCRO02020	19	58899	58935	3311863	San Pedro	LAX	80 meters	Presumed Extant	Natural/Native occurrence	Fair	N	19960301	19960301	CITY OF RANCHO PALOS VERDES	None	None	G3	S3	1B.2		SB_CalBG/RSABG	101	Dicots
12352	Dithyrea maritima	beach spectaclepod	PDBRA10020	2	1655	20545	3311874	Redondo Beach	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	19980701	19020525	UNKNOWN	None	Threatened	G1	S1	1B.1		SB_SBBG	104	Dicots
12350	Dithyrea maritima	beach spectaclepod	PDBRA10020	3	1557	20552	3311884	Venice	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	19980701	19340509	UNKNOWN	None	Threatened	G1	S1	1B.1		SB_SBBG	804	Dicots
56650	Dudleya virens ssp. insularis	island green dudleya	PDCRA040S2	3	17598	47066	3311863	San Pedro	LAX	specific area	Presumed Extant	Natural/Native occurrence	Good	N	20100507	20100507	PVT, UNKNOWN	None	None	G3?T3	S3	1B.2			102	Dicots
19069	Dudleya virens ssp. insularis	island green dudleya	PDCRA040S2	20	47105	47105	3311863	San Pedro	LAX	1/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19460612	19460612	UNKNOWN	None	None	G3?T3	S3	1B.2			104	Dicots
66849	Eryngium aristulatum var. parishii	San Diego button-celery	PDAPI0Z042	120	95346	96484	3311884	Venice	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	19010720	19010720	UNKNOWN	Endangered	Endangered	G5T1	S1	1B.1		SB_CalBG/RSABG; SB_CRES	104	Dicots
71543	Horkelia cuneata var. puberula	mesa horkelia	PDROS0W045	67	17565	100201	3311874	Redondo Beach	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19310326	19310326	UNKNOWN	None	None	G4T1	S1	1B.1		SB_CalBG/RSABG; USFS_S	804	Dicots
71544	Horkelia cuneata var. puberula	mesa horkelia	PDROS0W045	68	1557	100202	3311884	Venice	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19320424	19320424	UNKNOWN	None	None	G4T1	S1	1B.1		SB_CalBG/RSABG; USFS_S	804	Dicots
74754	Isocoma menziesii var. decumbens	decumbent goldenbush	PDAST57091	101	26479	103371	3311872	Long Beach	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	18970817	18970817	UNKNOWN	None	None	G3G5T2T3	S2	1B.2		BLM_S; SB_CRES	804	Dicots
12773	Lasthenia glabrata ssp. coulteri	Coulter's goldfields	PDAST5L0A1	25	23784	25094	3311883	Inglewood	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19010410	19010410	UNKNOWN	None	None	G4T2	S2	1B.1		BLM_S; SB_CalBG/RSABG; SB_SBBG	804	Dicots
48671	Lasthenia glabrata ssp. coulteri	Coulter's goldfields	PDAST5L0A1	81	80349	81881	3311873	Torrance	LAX	4/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19620327	19620327	UNKNOWN	None	None	G4T2	S2	1B.1		BLM_S; SB_CalBG/RSABG; SB_SBBG	804	Dicots
48672	Lasthenia glabrata ssp. coulteri	Coulter's goldfields	PDAST5L0A1	83	1557	81892	3311884	Venice	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19300120	19300120	UNKNOWN	None	None	G4T2	S2	1B.1		BLM_S; SB_CalBG/RSABG; SB_SBBG	804	Dicots
48899	Lasthenia glabrata ssp. coulteri	Coulter's goldfields	PDAST5L0A1	80	80900	81879	3311872	Long Beach	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19730615	19730615	UNKNOWN	None	None	G4T2	S2	1B.1		BLM_S; SB_CalBG/RSABG; SB_SBBG	104	Dicots
48515	Lasthenia glabrata ssp. coulteri	Coulter's goldfields	PDAST5L0A1	26	80779	24245	3311873	Torrance	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19170411	19170411	UNKNOWN	None	None	G4T2	S2	1B.1		BLM_S; SB_CalBG/RSABG; SB_SBBG	804	Dicots
83887	Lycium brevipes var. hassei	Santa Catalina Island desert-thorn	PDSOL0G0N0	6	99959	101506	3311874	Redondo Beach	LAX	specific area	Presumed Extant	Natural/Native occurrence	Good	N	20180304	20180304	CITY OF PALOS VERDES ESTATES	None	None	G5T1Q	S1	3.1			102	Dicots
73147	Lycium brevipes var. hassei	Santa Catalina Island desert-thorn	PDSOL0G0N0	4	55709	55725	3311863	San Pedro	LAX	specific area	Presumed Extant	Natural/Native occurrence	Fair	N	20140801	20140801	CITY OF RANCHO PALOS VERDES	None	None	G5T1Q	S1	3.1			102	Dicots
47945	Nama stenocarpa	mud nama	PDHYD0A0H0	21	80349	81336	3311873	Torrance	LAX	4/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	192407XX	192407XX	UNKNOWN	None	None	G4G5	S1S2	2B.2			804	Dicots
19202	Navarretia fossalis	spreading navarretia	PDPLM0C080	40	28742	47436	3311883	Inglewood	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	19060719	19060719	UNKNOWN	Threatened	None	G2	S2	1B.1		SB_CalBG/RSABG; SB_CRES	804	Dicots
66641	Navarretia prostrata	prostrate vernal pool navarretia	PDPLM0C0Q0	14	47545	47955	3311884	Venice	LAX	3/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19440415	19440415	UNKNOWN	None	None	G2	S2	1B.2			104	Dicots
19517	Navarretia prostrata	prostrate vernal pool navarretia	PDPLM0C0Q0	10	39864	47944	3311872	Long Beach	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	188205XX	188205XX	UNKNOWN	None	None	G2	S2	1B.2			804	Dicots
19518	Navarretia prostrata	prostrate vernal pool navarretia	PDPLM0C0Q0	11	26503	47952	3311882	South Gate	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	189505XX	189505XX	UNKNOWN	None	None	G2	S2	1B.2			804	Dicots
19519	Navarretia prostrata	prostrate vernal pool navarretia	PDPLM0C0Q0	12	1965	47953	3311882	South Gate	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	1882XXXX	1882XXXX	UNKNOWN	None	None	G2	S2	1B.2			804	Dicots
51664	Navarretia prostrata	prostrate vernal pool navarretia	PDPLM0C0Q0	13	83433	47954	3311883	Inglewood	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19630508	19630508	UNKNOWN	None	None	G2	S2	1B.2			104	Dicots
50768	Navarretia prostrata	prostrate vernal pool navarretia	PDPLM0C0Q0	33	28742	83691	3311883	Inglewood	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	19060719	19060719	UNKNOWN	None	None	G2	S2	1B.2			804	Dicots
12945	Nemacaulis denudata var. denudata	coast woolly-heads	PDPGN0G011	21	27996	22217	3311863	San Pedro	LAX	3/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	1905XXXX	1905XXXX	UNKNOWN	None	None	G3G4T2	S2	1B.2		SB_CalBG/RSABG; SB_CRES	104	Dicots
20047	Pentachaeta lyonii	Lyon's pentachaeta	PDAST6X060	2	34591	48785	3311863	San Pedro	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	1994XXXX	188407XX	UNKNOWN	Endangered	Endangered	G1	S1	1B.1		SB_CalBG/RSABG	804	Dicots

Object ID	Scientific Name	Common Name	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
20014	Pentachaeta lyonii	Lyon's pentachaeta	PDAST6X060	7	39864	48741	3311872	Long Beach	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	XXXXXXXX	XXXXXXXX	UNKNOWN	Endangered	Endangered	G1	S1	1B.1		SB_CalBG/RSABG	804	Dicots
60622	Phacelia stellaris	Brand's star phacelia	PDHYD0C510	3	90351	1726	3311882	South Gate	LAX	1/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19230319	19230319	UNKNOWN	None	None	G1	S1	1B.1		SB_CalBG/RSABG	104	Dicots
11469	Phacelia stellaris	Brand's star phacelia	PDHYD0C510	4	1700	757	3311874	Redondo Beach	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	18970320	18970320	UNKNOWN	None	None	G1	S1	1B.1		SB_CalBG/RSABG	804	Dicots
60649	Phacelia stellaris	Brand's star phacelia	PDHYD0C510	15	1557	91447	3311884	Venice	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19320424	19320424	UNKNOWN	None	None	G1	S1	1B.1		SB_CalBG/RSABG	804	Dicots
20092	Suaeda esteroa	estuary seablite	PDCHE0P0D0	17	34592	48871	3311863	San Pedro	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19040906	19040906	UNKNOWN	None	None	G3	S2	1B.2			804	Dicots
46086	Symphyotrichum defoliatum	San Bernardino aster	PDASTE80C0	76	78718	79628	3311872	Long Beach	LAX	1/10 mile	Extirpated	Natural/Native occurrence	None	N	19320707	19320707	UNKNOWN	None	None	G2	S2	1B.2		SB_CalBG/RSABG; SB_CRES; USFS_S	104	Dicots
48583	Symphyotrichum defoliatum	San Bernardino aster	PDASTE80C0	28	80779	60571	3311873	Torrance	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	19301018	19301018	UNKNOWN	None	None	G2	S2	1B.2		SB_CalBG/RSABG; SB_CRES; USFS_S	804	Dicots
15548	Southern Dune Scrub	Southern Dune Scrub	CTT21330CA	1	1534	26328	3311884	Venice	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	1983XXXX	1983XXXX	CITY OF LOS ANGELES	None	None	G1	S1.1				804	Dune
6336	Siphateles bicolor mohavensis	Mohave tui chub	AFCJB1303H	5	1666	28635	3311873	Torrance	LAX	1/5 mile	Extirpated	Transplant Outside of Native Hab./Range	None	N	1976XXXX	1976XXXX	LAX COUNTY	Endangered	Endangered	G4T1	S1		FP	AFS_EN	204	Fish
89429	Bombus crotchii	Crotch bumble bee	IIHYM24480	314	B6396	119453	3311863	San Pedro	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	20170715	20170715	CITY OF LOS ANGELES	None	Candidate Endangered	G2	S2			IUCN_EN	204	Insects
69993	Bombus crotchii	Crotch bumble bee	IIHYM24480	165	1557	98995	3311884	Venice	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19380706	19380706	UNKNOWN	None	Candidate Endangered	G2	S2			IUCN_EN	804	Insects
70236	Bombus crotchii	Crotch bumble bee	IIHYM24480	166	97654	98996	3311873	Torrance	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19380710	19380710	PVT	None	Candidate Endangered	G2	S2			IUCN_EN	204	Insects
86842	Bombus crotchii	Crotch bumble bee	IIHYM24480	241	34591	118094	3311863	San Pedro	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	20010324	20010324	UNKNOWN	None	Candidate Endangered	G2	S2			IUCN_EN	804	Insects
69994	Bombus crotchii	Crotch bumble bee	IIHYM24480	167	27997	98997	3311872	Long Beach	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19670228	19670228	UNKNOWN	None	Candidate Endangered	G2	S2			IUCN_EN	804	Insects
69991	Bombus crotchii	Crotch bumble bee	IIHYM24480	162	1722	98991	3311884	Venice	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19530502	19530502	UNKNOWN	None	Candidate Endangered	G2	S2			IUCN_EN	804	Insects
69992	Bombus crotchii	Crotch bumble bee	IIHYM24480	163	28742	98992	3311883	Inglewood	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19170526	19170526	UNKNOWN	None	Candidate Endangered	G2	S2			IUCN_EN	804	Insects
97138	Brennania belkini	Belkin's dune tabanid fly	IIDIP17010	2	B8182	14453	3311884	Venice	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Fair	N	202206XX	202206XX	CITY OF LOS ANGELES	None	None	G1G2	S1S2			IUCN_VU	203	Insects
97303	Brennania belkini	Belkin's dune tabanid fly	IIDIP17010	4	B8183	22614	3311884	Venice	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	194904XX	194904XX	UNKNOWN	None	None	G1G2	S1S2			IUCN_VU	204	Insects
97283	Brennania belkini	Belkin's dune tabanid fly	IIDIP17010	3	1563	22616	3311884	Venice	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	1987XXXX	19860616	LADWP	None	None	G1G2	S1S2			IUCN_VU	203	Insects
97352	Brennania belkini	Belkin's dune tabanid fly	IIDIP17010	5	28742	121299	3311883	Inglewood	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19580630	19580630	UNKNOWN	None	None	G1G2	S1S2			IUCN_VU	804	Insects
17759	Cicindela hirticollis gravida	sandy beach tiger beetle	IICOL02101	11	36918	758	3311874	Redondo Beach	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	1979XXXX	XXXXXXXX	LAX COUNTY	None	None	G5T2	S2				203	Insects
13460	Cicindela hirticollis gravida	sandy beach tiger beetle	IICOL02101	13	2010	12878	3311863	San Pedro	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	1979XXXX	XXXXXXXX	UNKNOWN	None	None	G5T2	S2				204	Insects
27757	Cicindela hirticollis gravida	sandy beach tiger beetle	IICOL02101	35	60079	60115	3311884	Venice	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	19370307	19370307	DPR-DOCKWEILER SB	None	None	G5T2	S2				203	Insects
94041	Cicindela latesignata	western beach tiger beetle	IICOL02110	5	60935	121049	3311872	Long Beach	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	1979XXXX	189508XX	UNKNOWN	None	None	G2G3	S1				803	Insects
94040	Cicindela latesignata	western beach tiger beetle	IICOL02110	3	B7893	121048	3311863	San Pedro	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	1979XXXX	19071006	UNKNOWN	None	None	G2G3	S1				204	Insects
16890	Cicindela senilis frosti	senile tiger beetle	IICOL02121	4	1609	22657	3311884	Venice	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	1979XXXX	XXXXXXXX	LAX COUNTY-MANHATTAN BEACH	None	None	G2G3T1T3	S1				203	Insects
28164	Coelus globosus	globose dune beetle	IICOL4A010	16	59331	60666	3311884	Venice	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19730830	19730830	CITY OF LOS ANGELES	None	None	G1G2	S1S2			IUCN_VU	803	Insects
71244	Danaus plexippus plexippus pop. 1	monarch - California overwintering population	IILEPP2012	409	98324	99745	3311873	Torrance	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19851103	19851103	CITY OF TORRANCE	Candidate	None	G4T1T2Q	S2			IUCN_EN; USFS_S	203	Insects
70162	Danaus plexippus plexippus pop. 1	monarch - California overwintering population	IILEPP2012	297	33186	2683	3311874	Redondo Beach	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Good	N	202201XX	20001207	PVT	Candidate	None	G4T1T2Q	S2			IUCN_EN; USFS_S	203	Insects
3896	Danaus plexippus plexippus pop. 1	monarch - California overwintering population	IILEPP2012	218	17190	12042	3311872	Long Beach	LAX	80 meters	Presumed Extant	Natural/Native occurrence	Fair	N	202111XX	19981108	CITY OF LONG BEACH	Candidate	None	G4T1T2Q	S2			IUCN_EN; USFS_S	201	Insects

Object ID	Scientific Name	Common Name	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
97957	Danaus plexippus plexippus pop. 1	monarch - California overwintering population	IILEPP2012	385	97766	99151	3311872	Long Beach	LAX	1/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	202201XX	200811XX	CITY OF LONG BEACH	Candidate	None	G4T1T2Q	S2			IUCN_EN; USFS_S	204	Insects
70131	Danaus plexippus plexippus pop. 1	monarch - California overwintering population	IILEPP2012	383	97758	99136	3311884	Venice	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	202111XX	201411XX	PVT-CHEVRON	Candidate	None	G4T1T2Q	S2			IUCN_EN; USFS_S	204	Insects
97998	Danaus plexippus plexippus pop. 1	monarch - California overwintering population	IILEPP2012	431	B8250	121319	3311874	Redondo Beach	LAX	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20220116	20220116	CITY OF HERMOSA BEACH	Candidate	None	G4T1T2Q	S2			IUCN_EN; USFS_S	202	Insects
10387	Danaus plexippus plexippus pop. 1	monarch - California overwintering population	IILEPP2012	298	33187	2682	3311873	Torrance	LAX	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20220102	20220102	CITY OF REDONDO BEACH	Candidate	None	G4T1T2Q	S2			IUCN_EN; USFS_S	202	Insects
70163	Danaus plexippus plexippus pop. 1	monarch - California overwintering population	IILEPP2012	384	97762	99141	3311873	Torrance	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	202201XX	200811XX	CITY OF LOS ANGELES	Candidate	None	G4T1T2Q	S2			IUCN_EN; USFS_S	203	Insects
19487	Danaus plexippus plexippus pop. 1	monarch - California overwintering population	IILEPP2012	339	47888	47888	3311884	Venice	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	197X12XX	197X12XX	CITY OF EL SEGUNDO	Candidate	None	G4T1T2Q	S2			IUCN_EN; USFS_S	203	Insects
27967	Eugnosta busckana	Busck's gallmoth	IILEM2X090	4	1534	60416	3311884	Venice	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19581119	19581119	CITY OF LOS ANGELES	None	None	G1G3	S2S3				804	Insects
36881	Euphilotes allyni	El Segundo blue butterfly	IILEPG201B	4	70052	70908	3311874	Redondo Beach	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	2007XXXX	2007XXXX	CITY OF TORRANCE	Endangered	None	G5T1	S1				204	Insects
36197	Euphilotes allyni	El Segundo blue butterfly	IILEPG201B	3	69867	70689	3311874	Redondo Beach	LAX	1/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	1990XXXX	1990XXXX	UNKNOWN, PVT	Endangered	None	G5T1	S1				204	Insects
13429	Euphilotes allyni	El Segundo blue butterfly	IILEPG201B	2	1586	23047	3311884	Venice	LAX	1/5 mile	Presumed Extant	Natural/Native occurrence	Good	N	20050818	20050818	PVT-CHEVRON	Endangered	None	G5T1	S1				204	Insects
8881	Euphilotes allyni	El Segundo blue butterfly	IILEPG201B	1	1535	14469	3311884	Venice	LAX	specific area	Presumed Extant	Natural/Native occurrence	Fair	N	20050813	20050813	CITY OF LA-LA/EL SEGUNDO DUNES	Endangered	None	G5T1	S1				802	Insects
17742	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	10	1838	23017	3311863	San Pedro	LAX	non-specific area	Possibly Extirpated	Natural/Native occurrence	None	N	1988XXXX	1983XXXX	PVT	Endangered	None	G5T1	S1				203	Insects
3049	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	16	1823	23009	3311873	Torrance	LAX	1/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	1988XXXX	1981XXXX	PVT-S&S CONSTRUCTION CO	Endangered	None	G5T1	S1				204	Insects
13437	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	6	1753	23022	3311873	Torrance	LAX	1/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	1988XXXX	1982XXXX	PVT	Endangered	None	G5T1	S1				204	Insects
7231	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	2	1696	23026	3311874	Redondo Beach	LAX	80 meters	Extirpated	Natural/Native occurrence	None	N	1988XXXX	1982XXXX	CITY OF RANCHO PALOS VERDES	Endangered	None	G5T1	S1				201	Insects
90489	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	19	B7047	65114	3311874	Redondo Beach	LAX	1/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	200103XX	200103XX	UNKNOWN	Endangered	None	G5T1	S1				204	Insects
3039	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	1	1687	23027	3311874	Redondo Beach	LAX	1/5 mile	Extirpated	Natural/Native occurrence	None	N	1988XXXX	1976XXXX	PVT	Endangered	None	G5T1	S1				204	Insects
13435	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	5	1725	23023	3311874	Redondo Beach	LAX	1/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	198605XX	198605XX	PVT-FILIORUM CORP	Endangered	None	G5T1	S1				204	Insects
101199	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	18	25610	5484	3311873	Torrance	LAX	specific area	Presumed Extant	Natural/Native occurrence	Excellent	Y	20010427	20010427		Endangered	None	G5T1	S1				999	Insects
7230	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	3	1665	23025	3311874	Redondo Beach	LAX	80 meters	Extirpated	Natural/Native occurrence	None	N	1988XXXX	1979XXXX	PVT-RANCHO PALOS VERDES	Endangered	None	G5T1	S1				201	Insects

Object ID	Scientific Name	Common Name	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
17741	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	4	1861	23024	3311863	San Pedro	LAX	non-specific area	Possibly Extirpated	Natural/Native occurrence	None	N	1988XXXX	1983XXXX	PVT, CITY OF RPV, LAX COUNTY	Endangered	None	G5T1	S1				203	Insects
13442	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	9	1822	23019	3311863	San Pedro	LAX	1/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	1988XXXX	1982XXXX	PVT-PALOS VERDES PROPERTIES	Endangered	None	G5T1	S1				204	Insects
13439	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	IILEPG402A	8	1771	23020	3311873	Torrance	LAX	1/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	1988XXXX	1981XXXX	PVT-FILIORUM CORP	Endangered	None	G5T1	S1				204	Insects
55632	Habroscelimorpha gabbii	western tidal-flat tiger beetle	IICOL02080	8	60935	87727	3311872	Long Beach	LAX	non-specific area	Possibly Extirpated	Natural/Native occurrence	None	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G2G4	S1				803	Insects
101201	Habroscelimorpha gabbii	western tidal-flat tiger beetle	IICOL02080	1	72493	2504	3311861	Seal Beach	ORA	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	Y	19980711	19980711		None	None	G2G4	S1				999	Insects
55631	Habroscelimorpha gabbii	western tidal-flat tiger beetle	IICOL02080	6	39864	87726	3311872	Long Beach	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G2G4	S1				804	Insects
8882	Onychobaris langei	Lange's El Segundo Dune weevil	IICOL4W010	1	1535	13171	3311884	Venice	LAX	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19380928	19380928	CITY OF LA-LA/EL SEGUNDO DUNES	None	None	G1	S1				802	Insects
8883	Pelochrista hennei	Henne's eucosman moth	IILEM0R390	1	1535	14461	3311884	Venice	LAX	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	1984XXXX	1984XXXX	CITY OF LA-LA/EL SEGUNDO DUNES	None	None	G1	S1				802	Insects
101444	Rhaphiomidas terminatus terminatus	El Segundo flower-loving fly	IIDIP05022	1	65035	65118	3311874	Redondo Beach	LAX	1/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	Y	200107XX	200107XX		None	None	G1T1	S1				999	Insects
27908	Trigonoscuta dorothea dorothea	Dorothy's El Segundo Dune weevil	IICOL51021	2	59331	14454	3311884	Venice	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19540312	19540312	PVT-LAX AIRPORT, CITY OF LA	None	None	G1T1	S1				803	Insects
32206	Eumops perotis californicus	western mastiff bat	AMACD02011	65	66308	66394	3311883	Inglewood	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19870401	19870401	UNKNOWN	None	None	G4G5T4	S3S4		SSC	BLM_S	204	Mammals
32819	Eumops perotis californicus	western mastiff bat	AMACD02011	168	23783	66526	3311883	Inglewood	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19290722	19290722	UNKNOWN	None	None	G4G5T4	S3S4		SSC	BLM_S	204	Mammals
34408	Lasionycteris noctivagans	silver-haired bat	AMACC02010	50	68566	68930	3311872	Long Beach	LAX	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	19861118	19861118	UNKNOWN	None	None	G3G4	S3S4			IUCN_LC	201	Mammals
34406	Lasionycteris noctivagans	silver-haired bat	AMACC02010	48	68564	68928	3311871	Los Alamitos	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19780222	19780222	UNKNOWN	None	None	G3G4	S3S4			IUCN_LC	204	Mammals
26929	Microtus californicus stephensi	south coast marsh vole	AMAFF11035	2	1722	58981	3311884	Venice	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19570414	19570414	UNKNOWN	None	None	G5T2T3	S2		SSC		804	Mammals
10411	Neotoma lepida intermedia	San Diego desert woodrat	AMAFF08041	11	33547	29698	3311863	San Pedro	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Poor	N	19910826	19910826	UNKNOWN	None	None	G5T3T4	S3S4		SSC		203	Mammals
34238	Nyctinomops femorosaccus	pocketed free-tailed bat	AMACD04010	15	68461	68716	3311873	Torrance	LAX	4/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19851018	19851018	UNKNOWN	None	None	G5	S3		SSC	IUCN_LC	204	Mammals
34208	Nyctinomops femorosaccus	pocketed free-tailed bat	AMACD04010	16	28742	68717	3311883	Inglewood	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19941018	19941018	UNKNOWN	None	None	G5	S3		SSC	IUCN_LC	804	Mammals
27335	Nyctinomops macrotis	big free-tailed bat	AMACD04020	5	27997	59564	3311872	Long Beach	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19831007	19831007	UNKNOWN	None	None	G5	S3		SSC	IUCN_LC	804	Mammals
16820	Perognathus longimembris pacificus	Pacific pocket mouse	AMAFD01042	2	39858	34860	3311884	Venice	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	193806XX	193806XX	UNKNOWN	Endangered	None	G5T2	S2		SSC		203	Mammals
6307	Perognathus longimembris pacificus	Pacific pocket mouse	AMAFD01042	3	39864	34866	3311872	Long Beach	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	186510XX	186510XX	UNKNOWN	Endangered	None	G5T2	S2		SSC		804	Mammals
16819	Perognathus longimembris pacificus	Pacific pocket mouse	AMAFD01042	1	39854	34856	3311874	Redondo Beach	LAX	3/5 mile	Extirpated	Natural/Native occurrence	None	N	19310905	19310905	UNKNOWN	Endangered	None	G5T2	S2		SSC		204	Mammals
27043	Taxidea taxus	American badger	AMAJF04010	291	51258	57504	3411812	Los Angeles	LAX	5 miles	Presumed Extant	Natural/Native occurrence	Unknown	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G5	S3		SSC	IUCN_LC	804	Mammals
92736	Glyptostoma gabrielense	San Gabriel chestnut	IMGASB1010	19	B5925	118937	3311872	Long Beach	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19530522	19530522	UNKNOWN	None	None	G2	S3				204	Mollusks

Object ID	Scientific Name	Common Name	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
87570	Glyptostoma gabrielense	San Gabriel chestnut	IMGASB1010	23	34591	118949	3311863	San Pedro	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19XXXXXX	19XXXXXX	UNKNOWN	None	None	G2	S3				804	Mollusks
87822	Gonidea angulata	western ridged mussel	IMBIV19010	153	B6054	119087	3411812	Los Angeles	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	1993XXXX	XXXXXXXX	UNKNOWN	None	None	G3	S2			IUCN_VU	203	Mollusks
53803	Tryonia imitator	mimic tryonia (=California brackishwater snail)	IMGASJ7040	42	85175	86194	3311873	Torrance	LAX	1/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	20071205	20071205	CITY OF LOS ANGELES	None	None	G2	S2			IUCN_DD	204	Mollusks
26237	Tryonia imitator	mimic tryonia (=California brackishwater snail)	IMGASJ7040	30	57921	57937	3311863	San Pedro	LAX	specific area	Extirpated	Natural/Native occurrence	None	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G2	S2			IUCN_DD	202	Mollusks
8771	Orcuttia californica	California Orcutt grass	PMPOA4G010	13	47232	47232	3311871	Los Alamitos	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	XXXXXXXX	XXXXXXXX	UNKNOWN	Endangered	Endangered	G1	S1	1B.1		SB_CalBG/RSABG; SB_CRES	104	Monocots
8775	Orcuttia californica	California Orcutt grass	PMPOA4G010	14	26503	47231	3311882	South Gate	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	XXXXXXXX	XXXXXXXX	UNKNOWN	Endangered	Endangered	G1	S1	1B.1		SB_CalBG/RSABG; SB_CRES	804	Monocots
72041	Orcuttia californica	California Orcutt grass	PMPOA4G010	12	1899	22413	3311883	Inglewood	LAX	2/5 mile	Extirpated	Natural/Native occurrence	None	N	1976XXXX	19630508	UNKNOWN	Endangered	Endangered	G1	S1	1B.1		SB_CalBG/RSABG; SB_CRES	104	Monocots
46733	Anniella stebbinsi	Southern California legless lizard	ARACC01060	16	79246	80225	3311873	Torrance	LAX	80 meters	Presumed Extant	Natural/Native occurrence	Poor	N	20090222	20090222	PVT	None	None	G3	S3		SSC	USFS_S	201	Reptiles
81300	Anniella stebbinsi	Southern California legless lizard	ARACC01060	61	A9118	110952	3311873	Torrance	LAX	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	20110515	20110515	CITY OF TORRANCE	None	None	G3	S3		SSC	USFS_S	201	Reptiles
80561	Anniella stebbinsi	Southern California legless lizard	ARACC01060	50	A8280	110063	3311884	Venice	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Poor	N	20040523	20040523	DPR-DOCKWEILER SB, CITY OF LA	None	None	G3	S3		SSC	USFS_S	203	Reptiles
98294	Anniella stebbinsi	Southern California legless lizard	ARACC01060	401	B1684	113598	3311874	Redondo Beach	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Good	N	20181222	20181222	CITY OF PALOS VERDES ESTATES	None	None	G3	S3		SSC	USFS_S	204	Reptiles
81291	Anniella stebbinsi	Southern California legless lizard	ARACC01060	56	A9112	110947	3311874	Redondo Beach	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Poor	N	20020818	20020818	CITY OF HERMOSA BEACH	None	None	G3	S3		SSC	USFS_S	204	Reptiles
80564	Anniella stebbinsi	Southern California legless lizard	ARACC01060	53	A8283	110066	3311884	Venice	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Poor	N	19610304	19610304	PVT	None	None	G3	S3		SSC	USFS_S	204	Reptiles
98289	Anniella stebbinsi	Southern California legless lizard	ARACC01060	58	A9114	110949	3311874	Redondo Beach	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20010422	20010422	LAX COUNTY	None	None	G3	S3		SSC	USFS_S	203	Reptiles
80565	Anniella stebbinsi	Southern California legless lizard	ARACC01060	54	A8285	110068	3311884	Venice	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Poor	N	19890315	19890315	PVT	None	None	G3	S3		SSC	USFS_S	204	Reptiles
81292	Anniella stebbinsi	Southern California legless lizard	ARACC01060	57	A9113	110948	3311874	Redondo Beach	LAX	3/5 mile	Presumed Extant	Natural/Native occurrence	Poor	N	19760301	19760301	UNKNOWN	None	None	G3	S3		SSC	USFS_S	204	Reptiles
80539	Anniella stebbinsi	Southern California legless lizard	ARACC01060	1	A8262	110041	3311884	Venice	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Good	N	20100420	20100420	CITY OF LOS ANGELES	None	None	G3	S3		SSC	USFS_S	203	Reptiles
80562	Anniella stebbinsi	Southern California legless lizard	ARACC01060	51	A8281	110064	3311884	Venice	LAX	1/5 mile	Presumed Extant	Natural/Native occurrence	Poor	N	19561024	19561024	PVT	None	None	G3	S3		SSC	USFS_S	204	Reptiles
81290	Anniella stebbinsi	Southern California legless lizard	ARACC01060	55	A9105	110941	3311874	Redondo Beach	LAX	1/5 mile	Presumed Extant	Natural/Native occurrence	Poor	N	19650702	19650702	UNKNOWN	None	None	G3	S3		SSC	USFS_S	204	Reptiles
80563	Anniella stebbinsi	Southern California legless lizard	ARACC01060	52	A8282	110065	3311884	Venice	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Poor	N	20160629	20160629	LAX COUNTY	None	None	G3	S3		SSC	USFS_S	203	Reptiles
98290	Anniella stebbinsi	Southern California legless lizard	ARACC01060	59	A9115	110950	3311873	Torrance	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Poor	N	19680707	19680707	PVT	None	None	G3	S3		SSC	USFS_S	204	Reptiles
81301	Anniella stebbinsi	Southern California legless lizard	ARACC01060	63	A9120	110954	3311883	Inglewood	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Poor	N	19571028	19571028	UNKNOWN	None	None	G3	S3		SSC	USFS_S	203	Reptiles
83812	Anniella stebbinsi	Southern California legless lizard	ARACC01060	403	B1714	113629	3311874	Redondo Beach	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Poor	N	20141004	20141004	PVT	None	None	G3	S3		SSC	USFS_S	204	Reptiles
81302	Anniella stebbinsi	Southern California legless lizard	ARACC01060	64	A9121	110955	3311882	South Gate	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Poor	N	19390529	19390529	UNKNOWN	None	None	G3	S3		SSC	USFS_S	204	Reptiles
81299	Anniella stebbinsi	Southern California legless lizard	ARACC01060	60	A9117	110951	3311873	Torrance	LAX	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	20121207	20121207	UNKNOWN	None	None	G3	S3		SSC	USFS_S	201	Reptiles
3046	Phrynosoma blainvillii	coast horned lizard	ARACF12100	207	1796	28018	3311873	Torrance	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G4	S4		SSC	BLM_S; IUCN_LC	204	Reptiles
49731	Phrynosoma blainvillii	coast horned lizard	ARACF12100	764	81926	82897	3311863	San Pedro	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19300819	19300819	UNKNOWN	None	None	G4	S4		SSC	BLM_S; IUCN_LC	204	Reptiles
3059	Phrynosoma blainvillii	coast horned lizard	ARACF12100	150	2093	28066	3311872	Long Beach	LAX	1/5 mile	Extirpated	Natural/Native occurrence	None	N	19510317	19510317	UNKNOWN	None	None	G4	S4		SSC	BLM_S; IUCN_LC	204	Reptiles

10 MILE

Object ID	Scientific Name	Common Name	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
6342	Phrynosoma blainvillii	coast horned lizard	ARACF12100	151	2213	28061	3311871	Los Alamitos	LAX	1/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19570414	19570414	UNKNOWN	None	None	G4	S4		SSC	BLM_S; IUCN_LC	204	Reptiles
3057	Phrynosoma blainvillii	coast horned lizard	ARACF12100	152	2079	28063	3311882	South Gate	LAX	1/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G4	S4		SSC	BLM_S; IUCN_LC	204	Reptiles
3054	Phrynosoma blainvillii	coast horned lizard	ARACF12100	130	1965	28078	3311882	South Gate	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19520415	19520415	UNKNOWN	None	None	G4	S4		SSC	BLM_S; IUCN_LC	804	Reptiles
11168	Southern Coastal Bluff Scrub	Southern Coastal Bluff Scrub	CTT31200CA	23	17053	9609	3311874	Redondo Beach	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19900901	19900901	UNKNOWN	None	None	G1	S1.1				303	Scrub

10 MILE UNIQUE

Object ID	Scientific Name	Common Name	Taxon Group	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
85791	Spea hammondii	western spadefoot	Amphibians	AAABF02020	1046	B3948	116862	3311874	Redondo Beach	LAX	1/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19660425	19660425	UNKNOWN	None	None	G2G3	S3S4		SSC	BLM_S; IUCN_NT	204	Amphibians
72842	Agelaius tricolor	tricolored blackbird	Birds	ABPBXB0020	774	99707	101254	3311883	Inglewood	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19400510	19400510	UNKNOWN	None	Threatened	G1G2	S2		SSC	BLM_S; IUCN_EN; USFWS_BCC	204	Birds
21716	Athene cunicularia	burrowing owl	Birds	ABNSB10010	571	51258	51258	3411812	Los Angeles	LAX	5 miles	Presumed Extant	Natural/Native occurrence	Unknown	N	19210505	19210505	UNKNOWN	None	None	G4	S2		SSC	BLM_S; IUCN_LC; USFWS_BCC	804	Birds
6341	Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	ABNRB02022	72	2238	13009	3311871	Los Alamitos	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	19120622	19120622	PVT	Threatened	Endangered	G5T2T3	S1			BLM_S; USFS_S	203	Birds
91017	Coturnicops noveboracensis	yellow rail	Birds	ABNME01010	23	A5268	106991	3311884	Venice	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19981020	19981020	UNKNOWN	None	None	G4	S2		SSC	IUCN_LC; USFS_S; USFWS_BCC	204	Birds
27021	Empidonax traillii extimus	southwestern willow flycatcher	Birds	ABPAE33043	42	1965	59152	3311882	South Gate	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	18950629	18950629	UNKNOWN	Endangered	Endangered	G5T2	S3				804	Birds
38475	Polioptila californica californica	coastal California gnatcatcher	Birds	ABPBJ08081	34	1865	21796	3311863	San Pedro	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Good	N	20120514	20120514	CITY OF RANCHO PALOS VERDES	Threatened	None	G4G5T3Q	S2		SSC		203	Birds
52992	Riparia riparia	bank swallow	Birds	ABPAU08010	3	84452	85481	3311872	Long Beach	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19190629	19190629	CITY OF LONG BEACH, UNKNOWN	None	Threatened	G5	S3			BLM_S; IUCN_LC	204	Birds
9846	Sternula antillarum browni	California least tern	Birds	ABNNM08103	78	1942	14719	3311873	Torrance	LAX	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19770803	19770803	CITY OF LOS ANGELES	Endangered	Endangered	G4T2T3Q	S2		FP		202	Birds
62547	Vireo bellii pusillus	least Bell's vireo	Birds	ABPBW01114	561	91988	93062	3311882	South Gate	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	18950523	18950523	UNKNOWN	Endangered	Endangered	G5T2	S3				204	Birds
62625	Streptocephalus woottoni	Riverside fairy shrimp	Crustaceans	ICBRA07010	67	39583	93129	3311873	Torrance	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	201007XX	2003XXXX	CITY OF TORRANCE	Endangered	None	G1G2	S2			IUCN_EN	803	Crustaceans
12667	Aphanisma blitoides	aphanisma	Dicots	PDCHE02010	5	17565	11724	3311874	Redondo Beach	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	193004XX	193004XX	UNKNOWN	None	None	G3G4	S2	1B.2		SB_CRES; SB_SBBG	804	Dicots
89300	Astragalus hornii var. hornii	Horn's milk-vetch	Dicots	PDFAB0F421	28	B4592	117528	3311871	Los Alamitos	ORA	5 miles	Extirpated	Natural/Native occurrence	None	N	189607XX	189607XX	UNKNOWN	None	None	GUT1	S1	1B.1		BLM_S	104	Dicots
76566	Astragalus tener var. titi	coastal dunes milk-vetch	Dicots	PDFAB0F8R2	4	23784	42744	3311883	Inglewood	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19030412	19030412	UNKNOWN	Endangered	Endangered	G2T1	S1	1B.1		SB_CalBG/RSABG	804	Dicots
71940	Atriplex coulteri	Coulter's saltbush	Dicots	PDCHE040E0	102	99025	100548	3311874	Redondo Beach	LAX	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20120601	20120601	CITY OF PALOS VERDES ESTATES	None	None	G3	S1S2	1B.2		SB_CalBG/RSABG; SB_CRES	102	Dicots
98291	Atriplex pacifica	south coast saltscale	Dicots	PDCHE041C0	119	B1438	113346	3311874	Redondo Beach	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	20141230	20141230	UNKNOWN	None	None	G4	S2	1B.2		SB_CalBG/RSABG; SB_CRES	103	Dicots
11471	Atriplex parishii	Parish's brittlescale	Dicots	PDCHE041D0	9	1700	1401	3311874	Redondo Beach	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G1G2	S1	1B.1		SB_CRES; USFS_S	804	Dicots
11779	Atriplex serenana var. davidsonii	Davidson's saltscale	Dicots	PDCHE041T1	3	34592	253	3311863	San Pedro	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19060602	19060602	UNKNOWN	None	None	G5T1	S1	1B.2		SB_CalBG/RSABG	804	Dicots
13033	Centromadia parryi ssp. australis	southern tarplant	Dicots	PDAST4R0P4	30	28742	30040	3311883	Inglewood	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	190507XX	190507XX	UNKNOWN	None	None	G3T2	S2	1B.1		SB_CalBG/RSABG; SB_CRES; SB_SBBG	804	Dicots
83456	Centromadia pungens ssp. laevis	smooth tarplant	Dicots	PDAST4R0R4	143	34592	113213	3311863	San Pedro	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19200420	19200420	UNKNOWN	None	None	G3G4T2	S2	1B.1		SB_CalBG/RSABG	804	Dicots
46456	Chaenactis glabriuscula var. orcuttiana	Orcutt's pincushion	Dicots	PDAST20095	20	79025	47545	3311884	Venice	LAX	80 meters	Presumed Extant	Natural/Native occurrence	Fair	N	20100513	20100513	CITY OF MANHATTAN BEACH	None	None	G5T1	S1	1B.1		SB_CalBG/RSABG; SB_CRES	101	Dicots
12876	Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	Dicots	PDSCR0J0C2	13	26479	6167	3311872	Long Beach	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	1980XXXX	19010525	UNKNOWN	Endangered	Endangered	G4?T1	S1	1B.2		BLM_S; SB_CalBG/RSABG; SB_CRES; SB_SBBG	804	Dicots
82917	Crossosoma californicum	Catalina crossosoma	Dicots	PDCRO02020	20	58910	58946	3311863	San Pedro	LAX	specific area	Presumed Extant	Natural/Native occurrence	Good	N	20090416	20090416	CITY OF RPV, PVT	None	None	G3	S3	1B.2		SB_CalBG/RSABG	102	Dicots
12352	Dithyrea maritima	beach spectaclepod	Dicots	PDBRA10020	2	1655	20545	3311874	Redondo Beach	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	19980701	19020525	UNKNOWN	None	Threatened	G1	S1	1B.1		SB_SBBG	104	Dicots
56650	Dudleya virens ssp. insularis	island green dudleya	Dicots	PDCRA040S2	3	17598	47066	3311863	San Pedro	LAX	specific area	Presumed Extant	Natural/Native occurrence	Good	N	20100507	20100507	PVT, UNKNOWN	None	None	G3?T3	S3	1B.2			102	Dicots
66849	Eryngium aristulatum var. parishii	San Diego button-celery	Dicots	PDAPI0Z042	120	95346	96484	3311884	Venice	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	19010720	19010720	UNKNOWN	Endangered	Endangered	G5T1	S1	1B.1		SB_CalBG/RSABG; SB_CRES	104	Dicots
71543	Horkelia cuneata var. puberula	mesa horkelia	Dicots	PDROS0W045	67	17565	100201	3311874	Redondo Beach	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19310326	19310326	UNKNOWN	None	None	G4T1	S1	1B.1		SB_CalBG/RSABG; USFS_S	804	Dicots
74754	Isocoma menziesii var. decumbens	decumbent goldenbush	Dicots	PDAST57091	101	26479	103371	3311872	Long Beach	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	18970817	18970817	UNKNOWN	None	None	G3G5T2T3	S2	1B.2		BLM_S; SB_CRES	804	Dicots
12773	Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Dicots	PDAST5L0A1	25	23784	25094	3311883	Inglewood	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19010410	19010410	UNKNOWN	None	None	G4T2	S2	1B.1		BLM_S; SB_CalBG/RSABG; SB_SBBG	804	Dicots
83887	Lycium brevipes var. hassei	Santa Catalina Island desert-thorn	Dicots	PDSOL0G0N0	6	99959	101506	3311874	Redondo Beach	LAX	specific area	Presumed Extant	Natural/Native occurrence	Good	N	20180304	20180304	CITY OF PALOS VERDES ESTATES	None	None	G5T1Q	S1	3.1			102	Dicots
47945	Nama stenocarpa	mud nama	Dicots	PDHYD0A0H0	21	80349	81336	3311873	Torrance	LAX	4/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	192407XX	192407XX	UNKNOWN	None	None	G4G5	S1S2	2B.2			804	Dicots
19202	Navarretia fossalis	spreading navarretia	Dicots	PDPLM0C080	40	28742	47436	3311883	Inglewood	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	19060719	19060719	UNKNOWN	Threatened	None	G2	S2	1B.1		SB_CalBG/RSABG; SB_CRES	804	Dicots
66641	Navarretia prostrata	prostrate vernal pool navarretia	Dicots	PDPLM0C0Q0	14	47545	47955	3311884	Venice	LAX	3/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19440415	19440415	UNKNOWN	None	None	G2	S2	1B.2			104	Dicots

10 MILE UNIQUE

Object ID	Scientific Name	Common Name	Taxon Group	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
12945	Nemacaulis denudata var. denudata	coast woolly-heads	Dicots	PDPGN0G011	21	27996	22217	3311863	San Pedro	LAX	3/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	1905XXXX	1905XXXX	UNKNOWN	None	None	G3G4T2	S2	1B.2		SB_CalBG/RSABG; SB_CRES	104	Dicots
20047	Pentachaeta lyonii	Lyon's pentachaeta	Dicots	PDAST6X060	2	34591	48785	3311863	San Pedro	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	1994XXXX	188407XX	UNKNOWN	Endangered	Endangered	G1	S1	1B.1		SB_CalBG/RSABG	804	Dicots
60622	Phacelia stellaris	Brand's star phacelia	Dicots	PDHYD0C510	3	90351	1726	3311882	South Gate	LAX	1/5 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19230319	19230319	UNKNOWN	None	None	G1	S1	1B.1		SB_CalBG/RSABG	104	Dicots
20092	Suaeda esteroa	estuary seablite	Dicots	PDCHE0P0D0	17	34592	48871	3311863	San Pedro	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19040906	19040906	UNKNOWN	None	None	G3	S2	1B.2			804	Dicots
46086	Symphyotrichum defoliatum	San Bernardino aster	Dicots	PDASTE80C0	76	78718	79628	3311872	Long Beach	LAX	1/10 mile	Extirpated	Natural/Native occurrence	None	N	19320707	19320707	UNKNOWN	None	None	G2	S2	1B.2		SB_CalBG/RSABG; SB_CRES; USFS_S	104	Dicots
15548	Southern Dune Scrub	Southern Dune Scrub	Dune	CTT21330CA	1	1534	26328	3311884	Venice	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	1983XXXX	1983XXXX	CITY OF LOS ANGELES	None	None	G1	S1.1				804	Dune
6336	Siphateles bicolor mohavensis	Mohave tui chub	Fish	AFCJB1303H	5	1666	28635	3311873	Torrance	LAX	1/5 mile	Extirpated	Transplant Outside of Native Hab./Range	None	N	1976XXXX	1976XXXX	LAX COUNTY	Endangered	Endangered	G4T1	S1		FP	AFS_EN	204	Fish
89429	Bombus crotchii	Crotch bumble bee	Insects	IIHYM24480	314	B6396	119453	3311863	San Pedro	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	20170715	20170715	CITY OF LOS ANGELES	None	Candidate Endangered	G2	S2			IUCN_EN	204	Insects
97138	Brennania belkini	Belkin's dune tabanid fly	Insects	IIDIP17010	2	B8182	14453	3311884	Venice	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Fair	N	202206XX	202206XX	CITY OF LOS ANGELES	None	None	G1G2	S1S2			IUCN_VU	203	Insects
17759	Cicindela hirticollis gravida	sandy beach tiger beetle	Insects	IICOL02101	11	36918	758	3311874	Redondo Beach	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	1979XXXX	XXXXXXXX	LAX COUNTY	None	None	G5T2	S2				203	Insects
94041	Cicindela latesignata	western beach tiger beetle	Insects	IICOL02110	5	60935	121049	3311872	Long Beach	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	1979XXXX	189508XX	UNKNOWN	None	None	G2G3	S1				803	Insects
16890	Cicindela senilis frosti	senile tiger beetle	Insects	IICOL02121	4	1609	22657	3311884	Venice	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	1979XXXX	XXXXXXXX	LAX COUNTY-MANHATTAN BEACH	None	None	G2G3T1T3	S1				203	Insects
28164	Coelus globosus	globose dune beetle	Insects	IICOL4A010	16	59331	60666	3311884	Venice	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19730830	19730830	CITY OF LOS ANGELES	None	None	G1G2	S1S2			IUCN_VU	803	Insects
71244	Danaus plexippus plexippus pop. 1	monarch - California overwintering population	Insects	IILEPP2012	409	98324	99745	3311873	Torrance	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19851103	19851103	CITY OF TORRANCE	Candidate	None	G4T1T2Q	S2			IUCN_EN; USFS_S	203	Insects
27967	Eugnosta busckana	Busck's gallmoth	Insects	IILEM2X090	4	1534	60416	3311884	Venice	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19581119	19581119	CITY OF LOS ANGELES	None	None	G1G3	S2S3				804	Insects
36881	Euphilotes allyni	El Segundo blue butterfly	Insects	IILEPG201B	4	70052	70908	3311874	Redondo Beach	LAX	1/10 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	2007XXXX	2007XXXX	CITY OF TORRANCE	Endangered	None	G5T1	S1				204	Insects
17742	Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	Insects	IILEPG402A	10	1838	23017	3311863	San Pedro	LAX	non-specific area	Possibly Extirpated	Natural/Native occurrence	None	N	1988XXXX	1983XXXX	PVT	Endangered	None	G5T1	S1				203	Insects
55632	Habroscelimorpha gabbii	western tidal-flat tiger beetle	Insects	IICOL02080	8	60935	87727	3311872	Long Beach	LAX	non-specific area	Possibly Extirpated	Natural/Native occurrence	None	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G2G4	S1				803	Insects
8882	Onychobaris langei	Lange's El Segundo Dune weevil	Insects	IICOL4W010	1	1535	13171	3311884	Venice	LAX	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19380928	19380928	CITY OF LA-LA/EL SEGUNDO DUNES	None	None	G1	S1				802	Insects
8883	Pelochrista hennei	Henne's eucosman moth	Insects	IILEM0R390	1	1535	14461	3311884	Venice	LAX	specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	1984XXXX	1984XXXX	CITY OF LA-LA/EL SEGUNDO DUNES	None	None	G1	S1				802	Insects
101444	Rhaphiomidas terminatus terminatus	El Segundo flower-loving fly	Insects	IIDIP05022	1	65035	65118	3311874	Redondo Beach	LAX	1/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	Y	200107XX	200107XX		None	None	G1T1	S1				999	Insects
27908	Trigonoscuta dorothea dorothea	Dorothy's El Segundo Dune weevil	Insects	IICOL51021	2	59331	14454	3311884	Venice	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19540312	19540312	PVT-LAX AIRPORT, CITY OF LA	None	None	G1T1	S1				803	Insects
32206	Eumops perotis californicus	western mastiff bat	Mammals	AMACD02011	65	66308	66394	3311883	Inglewood	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19870401	19870401	UNKNOWN	None	None	G4G5T4	S3S4		SSC	BLM_S	204	Mammals
34408	Lasionycteris noctivagans	silver-haired bat	Mammals	AMACC02010	50	68566	68930	3311872	Long Beach	LAX	80 meters	Presumed Extant	Natural/Native occurrence	Unknown	N	19861118	19861118	UNKNOWN	None	None	G3G4	S3S4			IUCN_LC	201	Mammals
26929	Microtus californicus stephensi	south coast marsh vole	Mammals	AMAFF11035	2	1722	58981	3311884	Venice	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19570414	19570414	UNKNOWN	None	None	G5T2T3	S2		SSC		804	Mammals
10411	Neotoma lepida intermedia	San Diego desert woodrat	Mammals	AMAFF08041	11	33547	29698	3311863	San Pedro	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Poor	N	19910826	19910826	UNKNOWN	None	None	G5T3T4	S3S4		SSC		203	Mammals
34238	Nyctinomops femorosaccus	pocketed free-tailed bat	Mammals	AMACD04010	15	68461	68716	3311873	Torrance	LAX	4/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19851018	19851018	UNKNOWN	None	None	G5	S3		SSC	IUCN_LC	204	Mammals
27335	Nyctinomops macrotis	big free-tailed bat	Mammals	AMACD04020	5	27997	59564	3311872	Long Beach	LAX	1 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	19831007	19831007	UNKNOWN	None	None	G5	S3		SSC	IUCN_LC	804	Mammals
16820	Perognathus longimembris pacificus	Pacific pocket mouse	Mammals	AMAFD01042	2	39858	34860	3311884	Venice	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	193806XX	193806XX	UNKNOWN	Endangered	None	G5T2	S2		SSC		203	Mammals
27043	Taxidea taxus	American badger	Mammals	AMAJF04010	291	51258	57504	3411812	Los Angeles	LAX	5 miles	Presumed Extant	Natural/Native occurrence	Unknown	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G5	S3		SSC	IUCN_LC	804	Mammals
92736	Glyptostoma gabrielense	San Gabriel chestnut	Mollusks	IMGASB1010	19	B5925	118937	3311872	Long Beach	LAX	1 mile	Possibly Extirpated	Natural/Native occurrence	None	N	19530522	19530522	UNKNOWN	None	None	G2	S3				204	Mollusks
87822	Gonidea angulata	western ridged mussel	Mollusks	IMBIV19010	153	B6054	119087	3411812	Los Angeles	LAX	non-specific area	Extirpated	Natural/Native occurrence	None	N	1993XXXX	XXXXXXXX	UNKNOWN	None	None	G3	S2			IUCN_VU	203	Mollusks
53803	Tryonia imitator	mimic tryonia (=California brackishwater snail)	Mollusks	IMGASJ7040	42	85175	86194	3311873	Torrance	LAX	1/5 mile	Presumed Extant	Natural/Native occurrence	Unknown	N	20071205	20071205	CITY OF LOS ANGELES	None	None	G2	S2			IUCN_DD	204	Mollusks

10 MILE UNIQUE

Object ID	Scientific Name	Common Name	Taxon Group	Element Code	Occ Number	MAPNDX	EONDX	Key Quad Code	Key Quad Name	Key County Code	Accuracy	Presence	Occ Type	Occ Rank	Sensitive	Site Date	Elm Date	Owner Management	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank	CDFW Status	Other Status	Symbology	Taxon Group
8771	Orcuttia californica	California Orcutt grass	Monocots	PMPOA4G010	13	47232	47232	3311871	Los Alamitos	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	XXXXXXXX	XXXXXXXX	UNKNOWN	Endangered	Endangered	G1	S1	1B.1		SB_CalBG/RSABG; SB_CRES	104	Monocots
46733	Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	16	79246	80225	3311873	Torrance	LAX	80 meters	Presumed Extant	Natural/Native occurrence	Poor	N	20090222	20090222	PVT	None	None	G3	S3		SSC	USFS_S	201	Reptiles
3046	Phrynosoma blainvillii	coast horned lizard	Reptiles	ARACF12100	207	1796	28018	3311873	Torrance	LAX	1 mile	Extirpated	Natural/Native occurrence	None	N	XXXXXXXX	XXXXXXXX	UNKNOWN	None	None	G4	S4		SSC	BLM_S; IUCN_LC	204	Reptiles
11168	Southern Coastal Bluff Scrub	Southern Coastal Bluff Scrub	Scrub	CTT31200CA	23	17053	9609	3311874	Redondo Beach	LAX	non-specific area	Presumed Extant	Natural/Native occurrence	Unknown	N	19900901	19900901	UNKNOWN	None	None	G1	S1.1				303	Scrub

THIS PAGE INTENTIONALLY LEFT BLANK

ScientificName	CommonName	Family	Lifeform	CRPR	CRPRChangeDate	GRank	SRank	OtherStatus	CESA	FESA	BloomingPe	Habitat	Microhabita	Microhabita	ElevationLo
Abronia maritima	red sand-verbena	Nyctaginace	perennial he	4.2		G4	S3?	SB_CalBG/R	None	None	Feb-Nov	Coastal dunes			0
Aphanisma blitoides	aphanisma	Chenopodia	annual herb	1B.2		G3G4	S2	SB_CRES; SB	None	None	Feb-Jun	Coastal bluff scrub, Coas		Gravelly (so	1
Astragalus hornii var. hornii	Horn's milk-vetch	Fabaceae	annual herb	1B.1	11/28/2006 0:00	GUT1	S1	BLM_S	None	None	May-Oct	Meadows and seeps, Pla		Alkaline, Lal	60
Astragalus pycnostachyus var. lanosissimus	Ventura Marsh milk-vetch	Fabaceae	perennial he	1B.1		G2T1	S1	SB_CalBG/R	CE	FE	(Jun)Aug-Oc	Coastal dunes, Coastal scrub, Marshe			1
Astragalus tener var. titi	coastal dunes milk-vetch	Fabaceae	annual herb	1B.1		G2T1	S1	SB_CalBG/R	CE	FE	Mar-May	Coastal bluff scrub (sand		Mesic (ofte	1
Atriplex coulteri	Coulter's saltbush	Chenopodia	perennial he	1B.2		G3	S1S2	SB_CalBG/R	None	None	Mar-Oct	Coastal bluff scrub, Coas		Alkaline (so	3
Atriplex pacifica	south coast saltscale	Chenopodia	annual herb	1B.2		G4	S2	SB_CalBG/R	None	None	Mar-Oct	Coastal bluff scrub, Coastal dunes, Co			0
Atriplex parishii	Parish's brittlescale	Chenopodia	annual herb	1B.1		G1G2	S1	SB_CRES; US	None	None	Jun-Oct	Chenopod scrub, Playas,		Alkaline	25
Atriplex serenana var. davidsonii	Davidson's saltscale	Chenopodia	annual herb	1B.2		G5T1	S1	SB_CalBG/R	None	None	Apr-Oct	Coastal bluff scrub, Coas		Alkaline	10
Calochortus catalinae	Catalina mariposa lily	Liliaceae	perennial bu	4.2		G3G4	S3S4	SB_CalBG/R	None	None	(Feb)Mar-Ju	Chaparral, Cismontane woodland, Co			15
Calystegia peirsonii	Peirson's morning-glory	Convolvulac	perennial rh	4.2		G4	S4		None	None	Apr-Jun	Chaparral, Chenopod scrub, Cismonta			30
Camissoniopsis lewisii	Lewis' evening-primrose	Onagraceae	annual herb	3		G4	S4		None	None	Mar-May(Ju	Cismontane woodland, (		Clay (somet	0
Centromadia parryi ssp. australis	southern tarplant	Asteraceae	annual herb	1B.1		G3T2	S2	SB_CalBG/R	None	None	May-Nov	Marshes and swamps (margins), Valle			0
Centromadia pungens ssp. laevis	smooth tarplant	Asteraceae	annual herb	1B.1		G3G4T2	S2	SB_CalBG/R	None	None	Apr-Sep	Chenopod scrub, Meadc		Alkaline	0
Chaenactis glabriuscula var. orcuttiana	Orcutt's pincushion	Asteraceae	annual herb	1B.1		G5T1	S1	SB_CalBG/R	None	None	Jan-Aug	Coastal bluff scrub (sandy), Coastal d			0
Chenopodium littoreum	coastal goosefoot	Chenopodia	annual herb	1B.2	6/1/2011 16:28	G1	S1	SB_SBBG	None	None	Apr-Aug	Coastal dunes			10
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	Orobanchac	annual herb	1B.2		G4?T1	S1	BLM_S; SB_(	CE	FE	May-Oct(No	Coastal dunes, Marshes and swamps			0
Chorizanthe parryi var. fernandina	San Fernando Valley spineflower	Polygonacea	annual herb	1B.1		G2T1	S1	SB_CalBG/R	CE	None	Apr-Jul	Coastal scrub (sandy), Valley and foot			150
Cistanthe maritima	seaside cistanthe	Montiaceae	annual herb	4.2		G3G4	S3	SB_CalBG/R	None	None	(Feb)Mar-Ju	Coastal bluff scrub, Coas		Sandy	5
Convolvulus simulans	small-flowered morning-glory	Convolvulac	annual herb	4.2		G4	S4	SB_CRES	None	None	Mar-Jul	Chaparral (openings), Co		Clay, Seeps,	30
Crossosoma californicum	Catalina crossosoma	Crossosoma	perennial de	1B.2		G3	S3	SB_CalBG/R	None	None	Feb-May	Chaparral, Coastal scrub		Rocky	0
Deinandra paniculata	paniculate tarplant	Asteraceae	annual herb	4.2	10/29/2012 0:00	G4	S4		None	None	(Mar)Apr-No	Coastal scrub, Valley and		Sandy (som	25
Dichondra occidentalis	western dichondra	Convolvulac	perennial rh	4.2		G3G4	S3S4		None	None	(Jan)Mar-Jul	Chaparral, Cismontane woodland, Co			50
Dithyrea maritima	beach spectaclepod	Brassicaceae	perennial rh	1B.1		G1	S1	SB_SBBG	CT	None	Mar-May	Coastal dunes, Coastal scrub (sandy)			3
Dudleya virens ssp. insularis	island green dudleya	Crassulacea	perennial he	1B.2		G3?T3	S3		None	None	Apr-Jun	Coastal bluff scrub, Coas		Rocky	5
Eryngium aristulatum var. parishii	San Diego button-celery	Apiaceae	annual/pere	1B.1		G5T1	S1	SB_CalBG/R	CE	FE	Apr-Jun	Coastal scrub, Valley and		Mesic	20
Erysimum insulare	island wallflower	Brassicaceae	perennial he	1B.3		G3	S3	SB_CalBG/R	None	None	Mar-Jul	Coastal bluff scrub, Coastal dunes			0
Erysimum suffrutescens	suffrutescent wallflower	Brassicaceae	perennial he	4.2		G3	S3	SB_SBBG	None	None	Jan-Jul(Aug)	Chaparral (maritime), Coastal bluff sc			0
Hordeum intercedens	vernal barley	Poaceae	annual herb	3.2	9/4/2013 0:00	G3G4	S3S4	SB_CalBG/R	None	None	Mar-Jun	Coastal dunes, Coastal scrub, Valley a			5
Horkelia cuneata var. puberula	mesa horkelia	Rosaceae	perennial he	1B.1		G4T1	S1	SB_CalBG/R	None	None	Feb-Jul(Sep)	Chaparral (maritime), Cis		Gravelly (so	70
Isocoma menziesii var. decumbens	decumbent goldenbush	Asteraceae	perennial sh	1B.2		G3G5T2T3	S2	BLM_S; SB_(	None	None	Apr-Nov	Chaparral, Coastal scrub (often distur			10
Juglans californica	Southern California black walnut	Juglandacea	perennial de	4.2		G4	S4	IUCN_NT; SE	None	None	Mar-Aug	Chaparral, C	alluvial		50
Juncus acutus ssp. leopoldii	southwestern spiny rush	Juncaceae	perennial rh	4.2		G5T5	S4	SB_CalBG/R	None	None	(Mar)May-Ju	Coastal dunes (mesic), Coastal scrub,			3
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Asteraceae	annual herb	1B.1		G4T2	S2	BLM_S; SB_(	None	None	Feb-Jun	Marshes and swamps (coastal salt), P			1
Lycium brevipes var. hassei	Santa Catalina Island desert-thorn	Solanaceae	perennial de	3.1	3/1/2016 18:30	G5T1Q	S1		None	None	Jun(Aug)	Coastal bluff scrub, Coastal scrub			65
Lycium californicum	California box-thorn	Solanaceae	perennial sh	4.2		G4	S4	SB_CalBG/R	None	None	Mar-Aug(De	Coastal bluff scrub, Coastal scrub			5
Nama stenocarpa	mud nama	Namaceae	annual/pere	2B.2	6/12/2013 16:46	G4G5	S1S2		None	None	Jan-Jul	Marshes and swamps (lake margins, r			5
Navarretia fossalis	spreading navarretia	Polemoniace	annual herb	1B.1		G2	S2	SB_CalBG/R	None	FT	Apr-Jun	Chenopod scrub, Marshes and swam			30
Navarretia prostrata	prostrate vernal pool navarretia	Polemoniace	annual herb	1B.2	8/27/2019 0:00	G2	S2		None	None	Apr-Jul	Coastal scrub, Meadows		Mesic	3
Nemacaulis denudata var. denudata	coast woolly-heads	Polygonacea	annual herb	1B.2		G3G4T2	S2	SB_CalBG/R	None	None	Apr-Sep	Coastal dunes			0
Orcuttia californica	California Orcutt grass	Poaceae	annual herb	1B.1		G1	S1	SB_CalBG/R	CE	FE	Apr-Aug	Vernal pools			15
Pentachaeta lyonii	Lyon's pentachaeta	Asteraceae	annual herb	1B.1		G1	S1	SB_CalBG/R	CE	FE	(Feb)Mar-Au	Chaparral (openings), Co		Clay, Rocky	30
Phacelia ramosissima var. austrolitoralis	south coast branching phacelia	Hydrophylla	perennial he	3.2	9/28/2011 0:00	G5?T3Q	S3		None	None	Mar-Aug	Chaparral, Coastal dunes		Rocky (som	5
Phacelia stellaris	Brand's star phacelia	Hydrophylla	annual herb	1B.1		G1	S1	SB_CalBG/R	None	None	Mar-Jun	Coastal dunes, Coastal scrub			1
Potentilla multijuga	Ballona cinquefoil	Rosaceae	perennial he	1A		GX	SX		None	None	Jun-Aug	Meadows and seeps (brackish)			0
Sidalcea neomexicana	salt spring checkerbloom	Malvaceae	perennial he	2B.2	6/12/2013 17:05	G4	S2	USFS_S	None	None	Mar-Jun	Chaparral, Coastal scrub		Alkaline, Me	15
Suaeda esteroa	estuary seablite	Chenopodia	perennial he	1B.2		G3	S2		None	None	(Jan-May)Ju	Marshes and swamps (coastal salt)			0
Suaeda taxifolia	woolly seablite	Chenopodia	perennial ev	4.2		G4	S4	SB_CRES	None	None	Jan-Dec	Coastal bluff scrub, Coastal dunes, M			0
Symphyotrichum defoliatum	San Bernardino aster	Asteraceae	perennial rh	1B.2	8/20/2004 0:00	G2	S2	SB_CalBG/R	None	None	Jul-Nov	Cismontane	near ditches	Streambank	2

ElevationLo	ElevationHig	ElevationHig	CAEndemic	States	Counties	Quads	EOTotal	EOA	EOB	EOC	EOD	EOX	EOU	EOHistorical	EORecent	EOExtant	EOPossiblyE	EOExtirpate	EOThreatLis	ThreatListTc
0	100	330	FALSE	BA, CA	LAX, ORA, S	Anacapa Isl	0	0	0	0	0	0	0	0	0	0	0	0		0
5	305	1000	FALSE	BA, CA, GU	LAX, ORA, S	Anacapa Isl	82	1	5	6	0	1	69	39	43	81	1	0	17	8
195	850	2790	FALSE	CA, NV	INY, KNG, K	Anaheim (3	28	0	3	2	0	5	18	22	6	23	0	5	6	3
5	35	115	TRUE	CA	LAX, ORA, V	Beverly Hills	7	0	0	0	1	6	0	6	1	1	3	3	1	6
5	50	165	TRUE	CA	LAX, MNT, S	Beverly Hills	6	0	1	0	0	3	2	5	1	3	3	0	4	6
10	460	1510	FALSE	BA, CA	LAX, ORA, S	Anacapa Isl	121	0	2	5	2	4	108	72	49	117	1	3	20	12
0	140	460	FALSE	AZ, BA, CA,	LAX, ORA, S	Anacapa Isl	109	0	2	7	2	3	95	50	59	106	2	1	19	8
80	1900	6235	FALSE	BA, CA	LAX, ORA, R	Anaheim (3	15	1	1	0	0	3	10	12	3	12	2	1	4	7
35	200	655	FALSE	BA, CA	LAX, ORA, R	El Casco (33	27	0	2	1	1	4	19	19	8	23	4	0	8	8
50	700	2295	TRUE	CA	LAX, ORA, R	Beverly Hills	0	0	0	0	0	0	0	0	0	0	0	0		0
100	1500	4920	TRUE	CA	KRN, LAX, V	Agua Dulce	26	5	14	3	0	0	4	26	0	26	0	0	2	1
0	300	985	FALSE	BA, CA	LAX, ORA, S	Alpine (321	0	0	0	0	0	0	0	0	0	0	0	0		0
0	480	1575	FALSE	BA, CA	LAX, ORA, S	Anaheim (3	94	3	17	11	4	10	49	56	38	84	4	6	43	16
0	640	2100	TRUE	CA	LAX, RIV, SB	Alberhill (33	137	2	13	25	9	14	74	65	72	123	8	6	77	15
0	100	330	FALSE	BA, CA	LAX, ORA, S	Bonsall (331	36	0	1	6	0	9	20	24	12	27	9	0	20	7
35	30	100	TRUE	CA	LAX, SBA, SI	Casmalia (3	13	0	0	0	0	1	12	8	5	12	0	1	6	1
0	30	100	FALSE	BA, CA	LAX, ORA, R	Aguanga (3	30	0	8	3	1	12	6	16	14	18	10	2	19	16
490	1220	4005	TRUE	CA	LAX, ORA, V	Black Star C	21	1	2	9	0	9	0	10	11	12	9	0	17	9
15	300	985	FALSE	BA, CA	LAX, MRN, (	Anacapa Isl	0	0	0	0	0	0	0	0	0	0	0	0		0
100	740	2430	FALSE	BA, CA	ALA, CCA, F	Alberhill (33	0	0	0	0	0	0	0	0	0	0	0	0		0
0	500	1640	FALSE	CA, GU	LAX	San Clemen	80	4	4	2	1	0	69	27	53	80	0	0	6	8
80	940	3085	FALSE	BA, CA	KRN, LAX, C	Aguanga (3	0	0	0	0	0	0	0	0	0	0	0	0		0
165	500	1640	FALSE	BA, CA	LAX, MRN, (	Bolinas (371	0	0	0	0	0	0	0	0	0	0	0	0		0
10	50	165	FALSE	BA, CA	LAX, SBA, SI	Arroyo Gran	28	2	4	0	1	3	18	18	10	25	0	3	13	8
15	300	985	TRUE	CA	LAX, VEN	Redondo Be	23	0	4	0	0	0	19	19	4	23	0	0	4	4
65	620	2035	FALSE	BA, CA	IMP, LAX, O	Del Mar (32	83	2	14	8	13	12	34	44	39	71	2	10	60	19
0	300	985	TRUE	CA	SBA, VEN	Anacapa Isl	14	0	0	0	0	0	14	14	0	14	0	0	0	0
0	150	490	TRUE	CA	LAX, SBA, SI	Casmalia (3	0	0	0	0	0	0	0	0	0	0	0	0		0
15	1000	3280	FALSE	BA, CA	FRE, KRN, L	Alberhill (33	0	0	0	0	0	0	0	0	0	0	0	0		0
230	810	2660	TRUE	CA	LAX, ORA, R	Alberhill (33	103	0	4	2	1	24	72	81	22	79	14	10	45	7
35	250	820	FALSE	BA, CA	LAX, ORA, S	Alpine (321	126	2	14	3	3	2	102	40	86	124	1	1	28	10
165	900	2955	TRUE	CA	ALA, CCA, F	Acton (3411	0	0	0	0	0	0	0	0	0	0	0	0		0
10	900	2955	FALSE	AZ, BA, CA,	IMP, LAX, M	Agua Calien	0	0	0	0	0	0	0	0	0	0	0	0		0
5	1220	4005	FALSE	BA, CA	COL, KRN, L	Alpaugh (35	111	7	8	4	2	15	75	69	42	96	14	1	43	15
215	300	985	TRUE	CA	LAX, ORA	Redondo Be	7	0	1	1	0	2	3	2	5	5	0	2	3	3
15	150	490	FALSE	AZ, BA, CA,	LAX, ORA, S	Dana Point	0	0	0	0	0	0	0	0	0	0	0	0		0
15	500	1640	FALSE	AZ, BA, CA,	IMP, KNG, L	Yuma East	22	0	1	2	2	3	14	18	4	19	2	1	4	2
100	655	2150	FALSE	BA, CA	LAX, RIV, SD	Bachelor M	82	6	14	11	7	10	34	33	49	72	5	5	50	18
10	1210	3970	TRUE	CA	ALA, FRE, LA	Arena (3712	61	3	9	2	0	9	38	29	32	52	6	3	45	16
0	100	330	FALSE	BA, CA	LAX, ORA, S	Del Mar (32	42	0	5	5	1	0	31	13	29	42	0	0	12	9
50	660	2165	FALSE	BA, CA	LAX, ORA, R	Bachelor M	39	0	9	6	3	7	14	21	18	32	3	4	25	13
100	690	2265	TRUE	CA	LAX, VEN	Long Beach	45	3	19	10	3	6	4	25	20	39	5	1	38	14
15	300	985	FALSE	BA, CA	LAX, ORA, S	Dana Point	0	0	0	0	0	0	0	0	0	0	0	0		0
5	400	1310	FALSE	BA, CA	LAX, ORA, R	Baldwin Par	15	0	3	0	0	6	6	11	4	9	6	0	6	8
0	2	5	TRUE	CA	LAX	Venice (331	1	0	0	0	0	1	0	1	0	0	0	1	1	1
50	1530	5020	FALSE	AZ, CA, CO,	KRN, LAX, C	Alamo Mou	30	0	1	0	0	8	21	27	3	22	7	1	10	1
0	5	15	FALSE	BA, CA	LAX, ORA, S	Del Mar (32	39	0	2	0	0	0	37	17	22	39	0	0	8	4
0	50	165	FALSE	BA, CA, GU	LAX, ORA, S	Anacapa Isl	0	0	0	0	0	0	0	0	0	0	0	0		0
5	2040	6695	TRUE	CA	IMP, KRN, L	Alberhill (33	102	1	6	1	1	16	77	59	43	86	3	13	28	11

ThreatList	Notes	Threats	Taxonomy	FullScientifi	Synonyms	ElementCod	USDAPlants	CBRReason	DateAdded	LastUpdate
	Nearly extirpated in southern CA; mor			Abronia maritima		PDNYC010E(	ABMA2		1/1/1994 0:00	5/26/2021 0:00
Developme	In steep decline on mainland, and also			Aphanisma blitoides		PDCHE0201(	APBL		1/1/1980 0:00	12/6/2022 0:00
Agriculture,	Subject to eradication efforts in early			Astragalus hornii var. hor		PDFAB0F421			12/1/2006 0:00	8/25/2021 0:00
Developme	Rediscovered near Oxnard in 1997; no			Astragalus pycnostachyu		PDFAB0F7B3	ASPYL		1/1/1974 0:00	6/6/2023 0:00
Developme	Known from fewer than 10 occurrenc			Astragalus tener var. titi		PDFAB0F8R2	ASTET		1/1/1974 0:00	6/8/2022 0:00
Biocides, De	Can flower a	Threatened	Closely allied	Atriplex coulteri		PDCHE040E(	ATCO5		1/1/1994 0:00	4/5/2022 0:00
Developme	Can grow as	Greatly redu	Similar to&n	Atriplex pacifica		PDCHE041C(	ATPA		1/1/1994 0:00	12/6/2022 0:00
Agriculture,	Threatened by development, agricultu			Atriplex parishii		PDCHE041D	ATPA2		1/1/1988 0:00	8/25/2021 0:00
Altered floo	Is plant extirpated from LAX Co.? Kno			Atriplex serenana var. da		PDCHE041T3	ATSED		1/1/1994 0:00	8/25/2021 0:00
	Threatened by development.			Calochortus catalinae		PMLIL0D080	CACA5		1/1/1974 0:00	5/26/2021 0:00
Grazing	Threatened by grazing and developme			Calystegia peirsonii		PDCON040A	CAPE18		1/1/1974 0:00	5/26/2021 0:00
	Move to List 4? Location	Dried mater		Camissoniop	Camissonia	PDONA030X0			1/1/1994 0:00	9/27/2021 0:00
Agriculture,	Need confirmation of SCT Isl. occurrer			Centromadia	Hemizonia p	PDAST4R0P4	CEPAA		1/1/1994 0:00	5/26/2021 0:00
Agriculture,	Many historical occurrences may be e			Centromadia	Hemizonia p	PDAST4R0R4	CEPUL		1/1/1994 0:00	10/4/2021 0:00
Developme	Threatened by development, foot traf			Chaenactis glabriuscula v		PDAST20095	CHGLO		1/1/2001 0:00	9/5/2023 0:00
Non-native	Possibly threatened by recreational ac			Chenopodium littoreum		PDCHE091Z(	CHLI11		6/1/2011 0:00	12/6/2022 0:00
Altered floo	Threatened by vehicles, road construc			Chloropyron	Cordylanthu	PDSCR0J0C2			1/1/1974 0:00	5/26/2021 0:00
Agriculture,	Rediscovered in 1999. Most historical			Chorizanthe parryi var. fe		PDPGN040J3	CHPAF		1/1/1974 0:00	5/26/2021 0:00
				Cistanthe m	Calandrinia	PDPOR0902(	CIMA4		1/1/1980 0:00	11/5/2021 0:00
	Rare in southern CA. Threatened by c			Convolvulus simulans		PDCON05060			1/1/1994 0:00	11/5/2021 0:00
Developme	Threatened by development. Recover			Crossosoma californicum		PDCRO0202(	CRCA4		1/1/1980 0:00	11/5/2021 0:00
	Some historical occurrences extirpate			Deinandra paniculata		PDAST4R0N0			1/1/2001 0:00	12/9/2021 0:00
	Records for MRN Co. are questionable			Dichondra occidentalis		PDCON0806(	DIOC2		1/1/1974 0:00	5/26/2021 0:00
Erosion/run	Extirpated from half of its historical ra			Dithyrea maritima		PDBRA1002(	DIMA6		1/1/1980 0:00	5/26/2021 0:00
Developme	Threatened by development. See Bul			Dudleya virens ssp. insula		PDCRA040S2	DUVII		1/1/2001 0:00	12/9/2021 0:00
Agriculture,	Threatened	Threatened by agricultur		Eryngium aristulatum var		PDAPI0Z042	ERARP		1/1/1974 0:00	12/9/2021 0:00
	Last seen on SCZ Isl. in 1966.			Erysimum in	Erysimum ir	PDBRA160D	ERIN8		1/1/1974 0:00	5/26/2021 0:00
	Threatened by coastal development, v			Erysimum su	Erysimum ir	PDBRA160D2			1/1/1980 0:00	5/26/2021 0:00
	Move to CRPR 1B or 4? Many herbari			Hordeum intercedens		PMPOA380E	HOIN2		1/1/1994 0:00	5/26/2021 0:00
Developme	Many histor	Possibly thre	ntergrades v	Horkelia cur	Horkelia cu	PDROS0W045			1/1/2001 0:00	12/6/2022 0:00
Developme	Need quads for SCM and SCT islands.			Isocoma menziesii var. de		PDAST57091	ISMED		1/1/1994 0:00	12/6/2022 0:00
	Walnut forest is a much fragmented, r			Juglans calif	Juglans calif	PDJUG0202(	JUCA		1/1/1994 0:00	1/5/2022 0:00
	Threatened by urbanization and flood			Juncus acutu	Juncus acut	PMJUN0105	JUACL		1/1/1988 0:00	12/6/2022 0:00
Agriculture,	Known to have declined significantly b			Lasthenia glabrata ssp. co		PDAST5L0A1	LAGLC		1/1/1994 0:00	1/5/2022 0:00
Developme	Previously CRPR 1B.1; taxonomic disti			Lycium brev	Lycium hass	PDSOL0G0N0			1/1/1974 0:00	5/26/2021 0:00
	Threatened by development. Possibly			Lycium californicum		PDSOL0G05(	LYCA		1/1/2001 0:00	6/3/2021 0:00
Developme	See Proceedings of the American Acad			Nama steno	Nama stenc	PDHYD0A0H0			1/1/1994 0:00	5/26/2021 0:00
Agriculture,	Threatened by urbanization, agricultu			Navarretia fossalis		PDPLM0C08	NAFO		1/1/1980 0:00	5/26/2021 0:00
Altered floo	Threatened by development, vehicles			Navarretia prostrata		PDPLM0C0C	NAPR2		1/1/2001 0:00	6/8/2022 0:00
Biocides, Di	Much reduced by coastal developmer			Nemacaulis denudata var		PDPGN0G01	NEDED		1/1/1994 0:00	5/26/2021 0:00
Agriculture,	Seriously threatened by agriculture, d			Orcuttia cali	Orcuttia cal	PMPOA4G03	ORCA		1/1/1974 0:00	5/26/2021 0:00
Agriculture,	Threatened by development, alteratic			Pentachaeta lyonii		PDAST6X060	PELY4		1/1/1974 0:00	6/8/2022 0:00
	Previously on List 4.2. Occurrences fr			Phacelia ramosissima var		PDHYD0C41	PHRAA		5/17/2007 0:00	6/8/2022 0:00
Developme	Known from approximately ten occur			Phacelia stellaris		PDHYD0C51	PHST7		1/1/1994 0:00	5/26/2021 0:00
Developme	Known only from one occurrence nea			Potentilla multijuga		PDROS1B12(	POMU5		1/1/1974 0:00	5/26/2021 0:00
Developme	See University of Washington Publicat			Sidalcea neomexicana		PDMAL110J(	SINE3		1/1/1994 0:00	6/8/2022 0:00
Developme	Potentially threatened by developmer			Suaeda esteroa		PDCHE0P0D	SUES		1/1/1984 0:00	5/26/2021 0:00
	Possibly threatened by urbanization, i			Suaeda taxifolia		PDCHE0P0L(	SUTA2		1/1/1994 0:00	5/26/2021 0:00
Agriculture,	Possibly threatened by non-native pla			Symphyotrichum defoliat		PDASTE80C(	SYDE		1/1/2004 0:00	6/8/2022 0:00

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

NOT FOR CONSULTATION

Location

Los Angeles County, California



Local office

Carlsbad Fish And Wildlife Office

(760) 431-9440
(760) 431-5901

2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

NOT FOR CONSULTATION

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Pacific Pocket Mouse Perognathus longimembris pacificus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8080	Endangered

Birds

NAME	STATUS
California Least Tern Sterna antillarum browni Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8104	Endangered
Coastal California Gnatcatcher Polioptila californica californica Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo Vireo bellii pusillus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered

Western Snowy Plover Charadrius nivosus nivosus — Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/8035

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found	Candidate

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/9743

Crustaceans

NAME	STATUS
Riverside Fairy Shrimp Streptocephalus woottoni Wherever found	Endangered

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/8148

NOT FOR CONSULTATION

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

There are no documented cases of eagles being present at this location. However, if you believe eagles may be using your site, please reach out to the local Fish and Wildlife Service office.

Additional information can be found using the following links:

- Eagle Managment https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/ documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

NOT FOR CONSULTATION

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Allen's Hummingbird Selasphorus sasin This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Belding's Savannah Sparrow Passerculus sandwichensis beldingi This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Black Oystercatcher Haematopus bachmani This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9591	Breeds Apr 15 to Oct 31
Black Skimmer Rynchops niger This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5234	Breeds May 20 to Sep 15
Black Tern Chlidonias niger This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3093	Breeds May 15 to Aug 20
Black-chinned Sparrow Spizella atrogularis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9447	Breeds Apr 15 to Jul 31

Bullock's Oriole Icterus bullockii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Gull Larus californicus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
Clark's Grebe Aechmophorus clarkii This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
Common Yellowthroat Geothlypis trichas sinuosa This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Lawrence's Goldfinch Carduelis lawrencei This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20
Marbled Godwit Limosa fedoa This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9481	Breeds elsewhere
Nuttall's Woodpecker Picoides nuttallii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Olive-sided Flycatcher Contopus cooperi This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Short-billed Dowitcher Limnodromus griseus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Western Grebe aechmophorus occidentalis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743	Breeds Jun 1 to Aug 31
Willet Tringa semipalmata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere

NOT FOR CONSULTATION

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

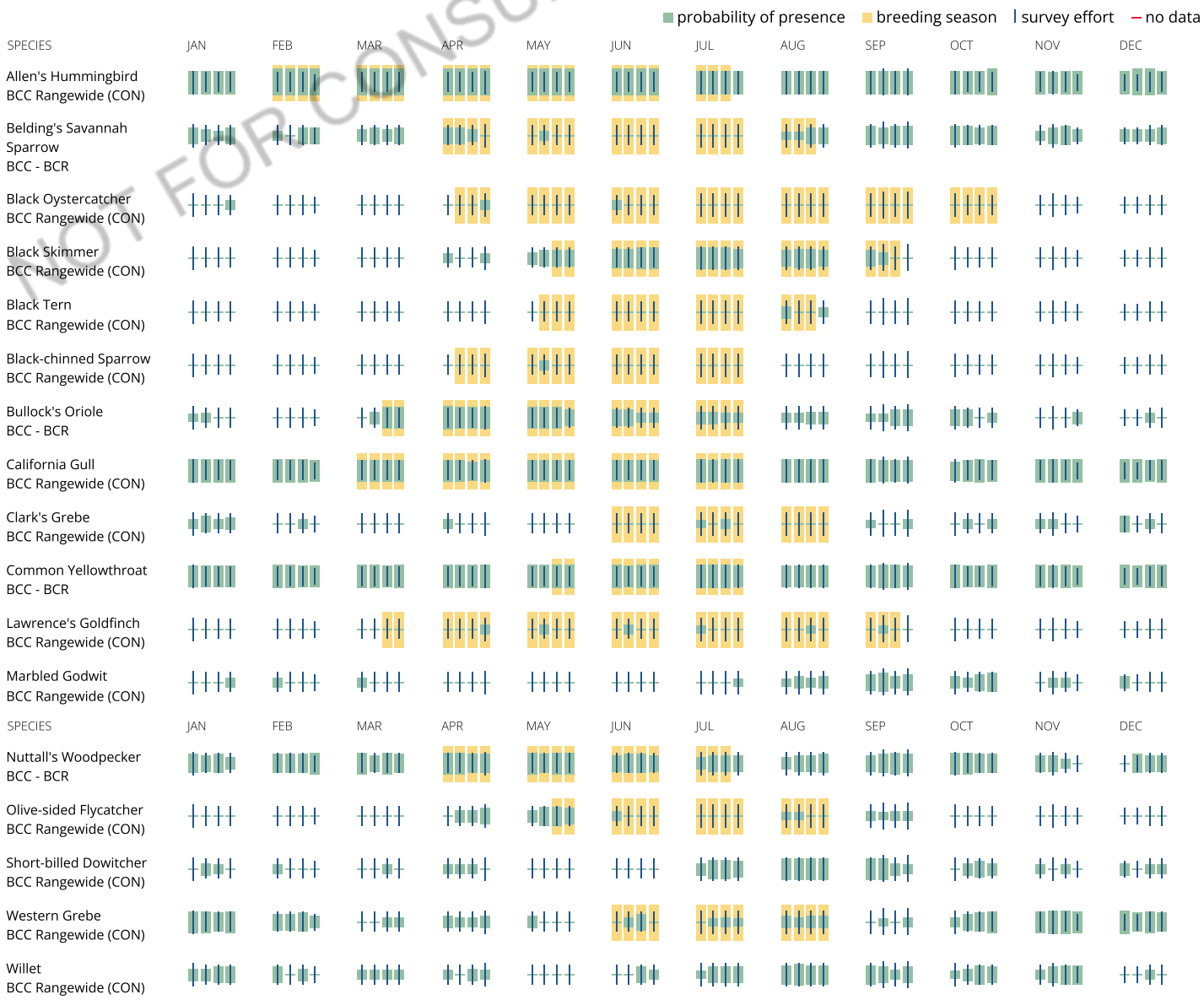
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

NOT FOR CONSULTATION



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project

area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

NOT FOR CONSULTATION

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

This location did not intersect any wetlands mapped by NWI.

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

NOT FOR CONSULTATION

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

THIS PAGE INTENTIONALLY LEFT BLANK

FCS
An ADEC Innovation

Attachment B:
Noise Report

3615 MAIN STREET, SUITE 103
RIVERSIDE, CALIFORNIA 92501

MEMORANDUM

To:	VESI 27 LLC (applicant)
From:	Mark Storm, INCE Bd. Cert. (Dudek)
Subject:	Griffith Energy Storage Project -- Operational Noise Analysis and Construction Noise Study
Date:	October 5, 2025
cc:	Bradley Cole (Dudek)
Attachments:	Figure 1 – Noise Level Contours / Receptor Noise Level Results Attachment A -- Construction Noise Prediction Model Worksheets

Dudek has prepared the following summary of predictive noise analyses for proposed operation associated with the proposed Griffith Energy Storage Project (project) and offers a discussion with respect to relevant City of Carson (City) Noise Ordinance and General Plan 2040 Noise Element standards.

Project Background

The proposed project site is located on a parcel of land at 18800 S. Broadway Street, Carson, California, currently designated as a Heavy Manufacturing Zone per the City's Zoning Map (City of Carson 2017). The project will consist of modular battery energy storage enclosures, inverters, medium-voltage (MV) transformers, and a high-voltage (HV) transformer.

Site Operation Noise Limits

Noise sources affecting outdoor sound levels on the project site and in the vicinity include industrial operations and electrical generation facility operations. Operational noise levels from the project are expected to be compatible with existing outdoor sound environment in the area, which includes the adjacent Southern California Edison Nola Substation. The following noise standards apply at nearby off-site noise-sensitive receptors such as the existing residential homes east and southeast of the project site, across South Main Street.

City of Carson Noise Ordinance

Chapter 5, Noise Control Ordinance, of the City's Municipal Code adopts, with some specific amendments, Chapter 12.08 from the Los Angeles County Code (City of Carson 2021). Section 12.08.390 of the Los Angeles County Code (County of Los Angeles 2009) establishes "Standard No. 1" exterior noise thresholds for residential properties (i.e., "Noise Zone" type II land uses) at 45 dBA during nighttime half-hour periods (from 10:00 p.m. to 7:00 a.m.) and 50 dBA for daytime half-hour periods (from 7:00 a.m. to 10:00 p.m.). For industrial-type receptors (Noise Zone IV) such as the heavy and light manufacturing zones that are adjacent to the proposed project site, the noise threshold is 70 dBA during any half-hour period. These quantified limits may not be exceeded for more than fifteen (15) cumulative minutes within any half-hour period. Because the proposed project is an energy storage facility featuring electrical equipment and ventilation/cooling systems that tend to operate in a steady-state manner and thus produce relatively continuous sources of noise, demonstrated compliance with these Standard No. 1 thresholds—as predictively assessed herein—can be reasonably interpreted to mean that compliance with Standard No. 2, 3, 4, and 5 would also be met.

With respect to construction activity not undertaken by the City, the applicable noise thresholds refer to Section 12.08.440 of the Los Angeles County Code and vary with the type of receiving property, time of day, and day of the week. Including some City adjustments on the durations of construction activity, these construction noise limits are interpreted as follows for assessment at the nearest receiving single-family residential properties on the eastern side of W. Main Street:

- Mobile equipment (<20 days duration) – 75 dBA from 7 a.m. to 8 p.m. daily (except Sundays and legal holidays); and
- Stationary equipment or mobile equipment (>20 days duration) – 65 dBA from 7 a.m. to 8 p.m. daily (except Sundays and legal holidays).

Furthermore, Section 12.08.440.A from the County's noise ordinance states: "operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between weekday hours of 7:00 p.m. and 7:00 a.m., or at any time on Sundays or holidays, such that the sound therefrom creates a noise disturbance across a residential or commercial real-property line, except for emergency work of public service utilities or by variance issued by the health officer is prohibited."

City of Carson General Plan Noise Element

According to Table 9-3 (Noise Generation Performance Standards for Non-Transportation Sources) in the recently revised Chapter 9 (i.e., the Noise Element) of the City's 2040 General Plan Noise Element, the exterior noise thresholds "as measured at the edge of the property line" (City of Carson 2023) and attributed to the aggregate of project operational noise sources would be as follows:

- Daytime (7 a.m. to 10 p.m.) = 55 dBA hourly L_{eq}, 75 dBA L_{max}; and
- Nighttime (10 p.m. to 7 a.m.) = 45 dBA hourly L_{eq}, 65 dBA L_{max}.

Despite the preceding summary of the City's Noise Ordinance, the revised General Plan Noise Element states: "In case of any discrepancies between the General Plan and the Noise Ordinance standards, standards in the General Plan prevail" (City of Carson 2023); thus, the above hourly L_{eq} and L_{max} limits would apply to project operation.

Prediction Model Methodology

Operation

Using DataKustik's CadnaA software, which models three-dimensional outdoor sound propagation based on International Organization for Standardization (ISO) 9613-2 algorithms and relevant reference data, an operational scenario of the proposed project was modeled for purposes of this analysis. The modeled scenario included the following operating assumptions for the anticipated noise sources: 132 battery energy storage enclosures, 33 inverters, and one (1) substation transformer operating nominally at 200 MVA. Proposed project facilities are expected to operate as often as 24 hours a day, 365 days a year. The predictive analysis assumes that all the above equipment is operating under a charging or discharging condition that may last up to a full continuous hour. For purposes of this preliminary analysis, the overall A-weighted levels appearing in Table 1 were used to define the individual project sound sources.

Table 1. Reference Sound Levels for the Modeled Individual Sources of Onsite Major Equipment Noise Emission

Source	Reference Sound Power Level (dBA) per 1/3-OBCF (Hz)									Overall Sound Level (dBA)
	31.5	63	125	250	500	1,000	2,000	4,000	8,000	
Battery Container (4-hour, 5-fan, 20% cooling capacity)*	37.3	50.5	58.4	57.3	57.0	59.3	56.2	50.5	39.3	70.0
Battery Container (4-hour, 5-fan, 40% cooling capacity)*	37.7	50.9	55.3	69.2	63.0	67.0	64.5	61.8	48.2	76.9
Substation Transformer	30	49	61	63	69	66	62	57	48	72.4
Medium Voltage (MV) Transformer	30	49	61	63	69	66	62	57	48	72.4

Notes: 1/3-OBCF = One-third Octave Band Center Frequency; dBA = A-weighted decibels; BESS = battery energy storage system.
*Operational equipment reference noise levels used for the project noise study are based upon project-specific information provided by the currently proposed battery vendor (Tesla Energy 2024).

Construction

The predictive analysis herein evaluates project construction noise emission with two approaches: 1) it locates multiple sound-emitting sources (i.e., operating stationary and mobile equipment) associated with each distinct project construction phase as a collective idealized single point at the approximate geographic centroid of the project construction area; and 2) it locates a set of equipment for the phase as a point source just within the project construction area boundary position nearest to the offsite representative noise-sensitive receptor of interest (i.e., the existing single-family homes on the eastern side of W. Main Street). The first method is comparable to that of the Federal Transit Administration (FTA) "general assessment" technique that locates the two loudest expected equipment at the acoustic center of a work zone, which represents a time-averaged position of the studied heavy equipment when their actual locations moment to moment are uncertain. The second method assumes, more conservatively, that the equipment could be active at the construction site boundary and thus closer to the same studied noise-sensitive receiver position.

Using a Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) emulator that relies upon reference sound levels as shown in Table 1 of the RCNM User's Guide (FHWA 2006), aggregate construction noise exposure levels can be predicted at the noise-sensitive receptor position for each studied sequential project construction phase. The model inputs appear in Attachment 1, and assume the inclusion of the existing 6.5'-tall solid privacy wall that separates W. Main Street from the backyards of the single-family homes.

Prediction Results

Operation

Figure 1 displays the predicted aggregate project operational noise level as an hourly L_{eq} value, which is consistent with the assessment metric per the City's Noise Element, for what is anticipated to be a "loudest hour" of operation with respect to the operation of battery container thermal management systems (a.k.a., cooling fans). The

concentric bands of different colors appearing in Figure 1 representing 5-decibel-wide ranges of sound pressure level, consistent with the color band legend appearing at the bottom right of the image. The predicted operational noise emission displayed in Figure 1 includes the effects of the following project features and offsite surroundings:

- An existing offsite building southeast of the project site.
- An onsite 10-ft tall precast masonry fence near the project's eastern, northern, and southern property lines, and a 3.5-ft tall rod iron fence near the west side of the project.
- 22 feet east of the above-referenced western rod iron fence is a 10-ft tall masonry fence in which there are two openings for onsite driveway access gates (assumed to be closed with solid sound-blocking materials and assembly).
- An existing offsite 8-ft tall barrier on the east side of SCE Nola Substation, and an existing 6.5 ft barrier on the east side of Main Street. These existing barriers would help reduce operational noise levels generated by the proposed project at the noise-sensitive residential receptors located east of the project site, across South Main Street. Table 2 provides the predicted sound pressure levels at the modeled receptors (NSR1-3) surrounding the project site.
- The battery containers are currently modeled as parallel side-by-side pairs, so that air intakes are facing north and south (not east or west).

Table 2. Predicted Project Operation Sound Pressure Levels at Modeled Receptors

Modeled Receptor (as abbreviated on Figure 1)	Predicted Aggregate Operation Noise Level (dBA hourly L_{eq})	General Plan Noise Element Nighttime Threshold at Project Property Line (dBA hourly L_{eq})	Compliance? (yes or no)
NSR1	37.3	n/a	yes*
NSR2	32.6	n/a	yes*
NSR3	31.8	n/a	yes*
Northern PL, west (PLNW)	41.6	45	yes
Northern PL, east (PLNE)	36.1	45	yes
Eastern PL, south (PLES)	35.4	45	yes
Eastern PL, north (PLEN)	33.3	45	yes
Southern PL, west (PLSW)	40.7	45	yes
Southern PL, east (PLSE)	38.4	45	yes
Western PL, north (PLWN)	44.5	45	yes
Western PL, south (PLWS)	43.3	45	yes

Notes: dBA = A-weighted decibels; L_{eq} = energy-equivalent level. *compliance is with respect to the City's noise ordinance, which is also 45 dBA at night but applied at the receiving land use—not the project property line as the Noise Element requires.

As shown in Table 2, the predicted aggregate sound emission from an hour-long period of all operating battery energy storage enclosures, inverters, and the collector substation transformer is as high as 44.5 dBA L_{eq} at the

project site boundary line. Therefore, and as depicted in the adjoining predicted color-coded decibel bands ("contours") of Figure 1, project operation is expected to comply with the nighttime hourly L_{eq} value of 45 dBA as applied at the project property line as required by the General Plan 2040 Noise Element.

While the City's Noise Element includes an accompanying 65 dBA L_{max} standard that must also be satisfied at the project property line, its magnitude is twenty decibels greater than the 45 dBA hourly L_{eq} criterion. For electro-mechanical equipment like the onsite battery containers, MV inverters, and collector substation transformer that feature rotating, reciprocating, or oscillating components that operate in a generally steady-state manner when active, the decibel variance between a measured L_{max} and the hourly L_{eq} is expected to be much smaller; hence, predicted compliance with the latter as shown in Table 2 and in Figure 1 logically implies compliance with the former acoustical metric.

Construction

Construction noise emission from a well-defined area typically attenuates at approximately 6 decibels (dB) per doubling of distance. Project construction would take place as close as 395 feet to the nearest existing noise-sensitive uses (single-family residences east of the project site); or, the distance between the Project site geographic centroid and these same nearest receptors would be approximately 720 feet. The results in Table 3 display the predicted noise levels for each anticipated construction phase with respect to these different evaluation distances. The prediction results and the corresponding construction activity noise model input parameters appear in Attachment A.

Table 3. Predicted Construction Noise Levels per Activity Phase

Construction Phase	Hourly L_{eq} (dBA) at Nearest Noise-Sensitive Receptor to Construction Site Boundary (CSB) 395 *ft*	Hourly L_{eq} (dBA) at Nearest Noise-Sensitive Receptor to Acoustical Centroid of Site (ACS) 720 *ft*
Access Road Site preparation, Grading, and Paving	58.7	53.2
Site Preparation	61.7	56.1
Switchyard site Preparation	56.9	51.4
Grading	64.0	58.5
Switchyard grading	59.8	54.2
Wall Earthwork and Installation	59.7	54.2
Battery/Container installation	60.4	54.9
Switchyard Installation	63.6	58.1
Loop-in Transmission Foundation and a Tower Erect	56.3	50.8
Loop-in Transmission Stringing and Pulling	57.7	52.2
Stormwater Structure and Waterline Installation and landscaping installation	59.6	54.1
Decommissioning	63.0	57.4

Notes: L_{eq} = equivalent noise level; dBA = A-weighted decibels.

Potholing operations are anticipated to occur at six different locations along West Griffith Street as part of the construction activities. These operations will take place as close as 250 feet from the nearest sensitive receptor. Equipment expected to be used includes a concrete saw and a vacuum truck. Based on this distance and equipment type, the calculated hourly L_{eq} at the nearest receptor is approximately 63.5 dBA.

Although nearby off-site residences would be exposed to elevated construction noise levels, the increased noise levels would be temporary and conclude upon completion of Project construction activities. Noise levels associated with construction noise are predicted to be below the City noise limit of 65 dBA hourly L_{eq}. It is also anticipated that construction activities associated with the proposed project would take place primarily within the allowable hours per the City Code. Therefore, construction noise is not anticipated to adversely affect the nearest offsite noise-sensitive receptors.

References

City of Carson. 2021. City of Carson Municipal Code; Chapter 5: Noise Control Ordinance. Accessed August 2021. https://www.codepublishing.com/CA/Carson/html/Carson05/Carson050500.html

City of Carson. 2017. City of Carson Zoning Map. August. Accessed August 2021. https://gis.carson.ca.us/pdfs/mapgallery/Zoning_11x17.pdf

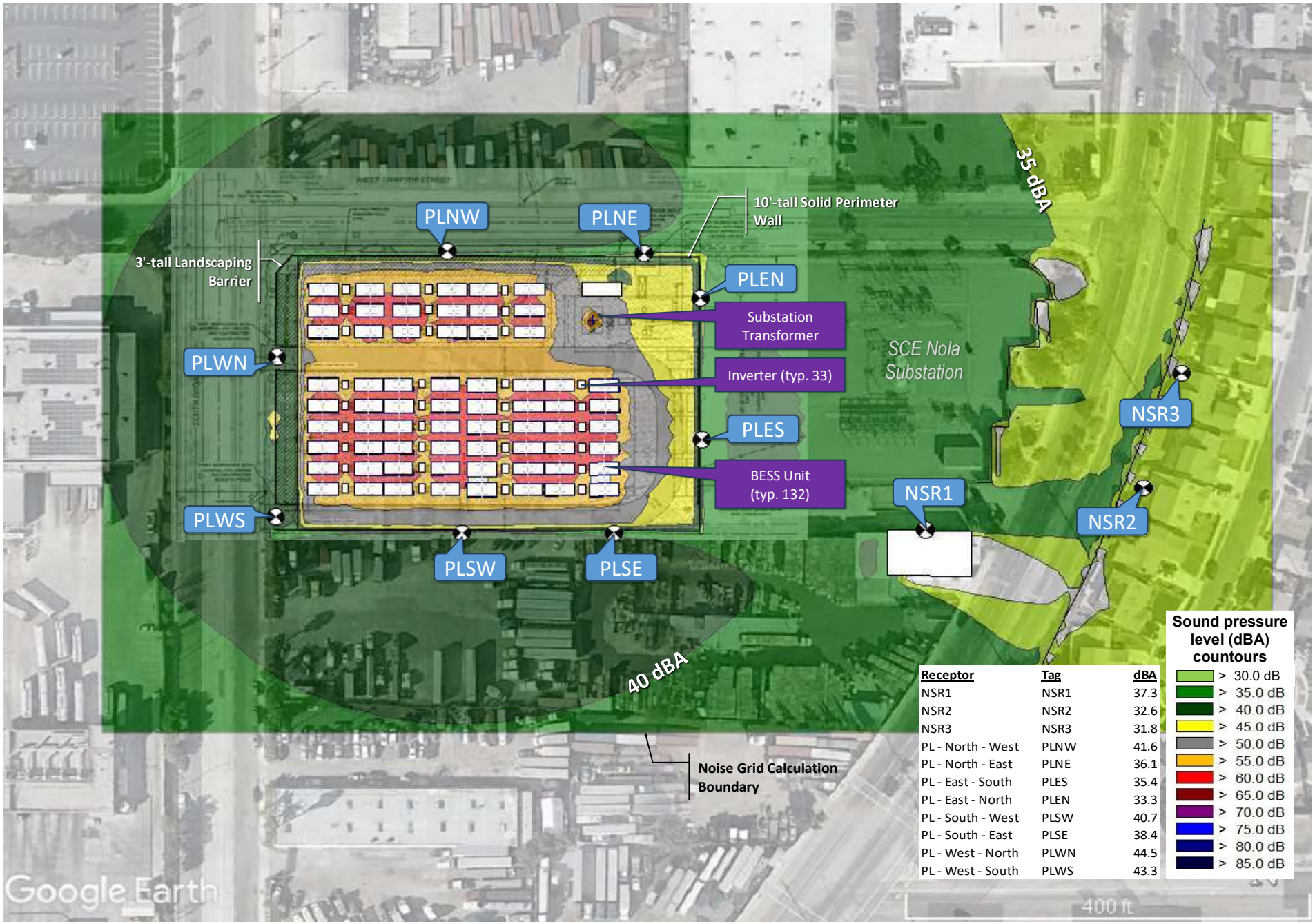
City of Carson. 2023. Chapter 9 in *Carson General Plan 2040*. Adopted April. Accessed January 3, 2024 at https://www.dropbox.com/s/q923ahszefj24h8/9%20Noise.pdf?dl=0

County of Los Angeles. 2009. *Los Angeles County Code, Title 12, Chapter 12.08 Noise Control*. Accessed August 2021 at https://library.municode.com/ca/los_angeles_county/codes/code_of_ordinances?nodeId=TIT12ENPR_CH12.08NOCO_PT4SPNORE_12.08.470NODINONSZO

Federal Highway Administration (FHWA). 2006. FHWA Roadway Construction Noise Model: User's Guide. Final Report. FHWA-HEP-06-015. DOT-VNTSC-FHWA-06-02. Cambridge, Massachusetts: DOT, Research and Innovative Technology Administration. August. Accessed January 25, 2022 at https://rosap.ntl.bts.gov/view/dot/8895.

Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. FTA Report No. 0123. John A. Volpe National Transportation Systems Center. September. Accessed January 25, 2022 at https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf

Tesla Energy 2024. Personal communication via email, Wanning Lyu (Tesla Energy Staff Engineer), April 18.



Receptor	Tag	dBA
NSR1	NSR1	37.3
NSR2	NSR2	32.6
NSR3	NSR3	31.8
PL - North - West	PLNW	41.6
PL - North - East	PLNE	36.1
PL - East - South	PLES	35.4
PL - East - North	PLEN	33.3
PL - South - West	PLSW	40.7
PL - South - East	PLSE	38.4
PL - West - North	PLWN	44.5
PL - West - South	PLWS	43.3

FIGURE 1 -- Noise Level Contours / Receptor Noise Level Results

DUDEK

0 53.5 107 Feet

Predicted BESS Operations, Loudest Hour Leq (battery container cooling at 40% capacity, modeled with area sources; 10'-tall wall)

Griffith Energy Storage (Dudek Project No. 12782.05)

To User: bordered cells are inputs, unbordered cells have formulae
enter "0" to turn off air or grnd absorption terms, "1" to turn on

air abs? 1
grnd abs? 1

magnitude of threshold (dBA) = 65
allowable hours over which Leq is to be averaged = 1

Source, receptor, and barrier all share same reference grade elevation; unless otherwise noted)
= Barrier of input height inserted between source and receptor

Project Phase No.	Project Phase Description	Comparable FHWA RCNM Construction Equipment Type	Quantity	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Source to NSR Distance (ft.)	*Temporary Barrier Insertion Loss (dB)*	*Additional Noise Reduction*	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 1-hour Leq	Source Elevation (ft)	Receiver Elevation (ft)	Barrier Height (ft)	Source to Barr. ("A") Horiz. (ft)	Rcvr. to Barr. ("B") Horiz. (ft)	Source to Rcvr. ("C") Horiz. (ft)	"A" (ft)	"B" (ft)	"C" (ft)	Path Length Diff. "P" (ft)	Abarr (dB)	Heff (with barrier)	Heff (wout barrier)	G (with barrier)	G (without barrier)	ILbarr (dB)
1	Access road site preperation, grading and paving	grader	1	40	85	720	3		53.6	1	60	50	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		tractor	1	40	84	720	3		52.6	1	60	49	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		front end loader	1	40	79	720	3		47.6	1	60	44	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		front end loader	1	40	79	720	3		47.6	1	60	44	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
									Total Aggregate Noise Exposure from Access road site preperation, grading and paving Phase			**53.2**																
2	Site preperation	grader	2	40	85	720	3		53.6	1	60	53	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		tractor	1	40	84	720	3		52.6	1	60	49	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		backhoe	1	40	78	720	3		46.6	1	60	43	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		dozer	2	40	82	720	3		50.6	1	60	50	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		front end loader	2	40	79	720	3		47.6	1	60	47	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
									Total Aggregate Noise Exposure from Site preperation Phase			**56.1**																
3	Switchyard site preperation	front end loader	2	40	79	720	3		47.6	1	60	47	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		dozer	2	40	82	720	3		50.6	1	60	50	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
									Total Aggregate Noise Exposure from Switchyard site preperation Phase			**51.4**																
4	Grading	grader	4	40	85	720	3		53.6	1	60	56	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		dozer	2	40	82	720	3		50.6	1	60	50	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		tractor	2	40	84	720	3		52.6	1	60	52	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		compactor (ground)	2	20	80	720	3		48.6	1	60	45	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		roller	2	20	80	720	3		48.6	1	60	45	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		front end loader	2	40	79	720	3		47.6	1	60	47	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
									Total Aggregate Noise Exposure from Grading Phase			**58.5**																
5	Switchyard grading	roller	2	20	80	720	3		48.6	1	60	45	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		dozer	2	40	82	720	3		50.6	1	60	50	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		tractor	2	40	84	720	3		52.6	1	60	52	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
									Total Aggregate Noise Exposure from Switchyard grading Phase			**54.2**																
6	Wall earthwork and installation	excavator	2	40	81	720	3		49.6	1	60	49	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		rock drill	2	20	81	720	3		49.6	1	60	46	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		tractor	2	40	84	720	3		52.6	1	60	49	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		man lift	2	20	75	720	3		43.6	1	60	40	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
									Total Aggregate Noise Exposure from Wall earthwork and installation Phase			**54.2**																
7	Battery/container installation	compressor (air)	4	40	78	720	3		46.6	1	60	49	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		crane	2	16	81	720	3		49.6	1	60	45	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		excavator	2	40	81	720	3		49.6	1	60	49	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		generator	4	50	72	720	3		40.6	1	60	44	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		roller	2	20	80	720	3		48.6	1	60	45	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		man lift	2	20	75	720	3		43.6	1	60	40	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		front end loader	2	40	79	720	3		47.6	1	60	47	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		compactor (ground)	2	20	80	720	3		48.6	1	60	45	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
									Total Aggregate Noise Exposure from Battery/container installation Phase			**54.9**																
8	Switchyard installation	man lift	4	20	75	720	3		43.6	1	60	43	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		compressor (air)	2	40	78	720	3		46.6	1	60	46	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		drill rig truck	2	20	79	720	3		47.6	1	60	44	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		crane	1	16	81	720	3		49.6	1	60	42	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		excavator	1	40	81	720	3		49.6	1	60	46	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		generator	2	50	72	720	3		40.6	1	60	41	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		roller	2	20	80	720	3		48.6	1	60	45	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		man lift	2	20	75	720	3		43.6	1	60	40	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		dozer	2	40	82	720	3		50.6	1	60	50	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		front end loader	2	40	79	720	3		47.6	1	60	47	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		tractor	4	40	84	720	3		52.6	1	60	55	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		rock drill	2	20	81	720	3		49.6	1	60	46	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
									Total Aggregate Noise Exposure from Switchyard installation Phase			**58.1**																
9	Loop-in transmission foundation and tower erection	compressor (air)	2	40	78	720	3		46.6	1	60	46	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		crane	1	16	81	720	3		49.6	1	60	42	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		man lift	2	20	75	720	3		43.6	1	60	40	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		generator	2	50	72	720	3		40.6	1	60	41	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		pumps	2	50	77	720	3		45.6	1	60	46	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		Welder / Torch	2	40	73	720	3		41.6	1	60	41	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
									Total Aggregate Noise Exposure from Loop-in transmission foundation and tower erection Phase			**50.8**																
10	Loop-in transmission stringing and pulling	man lift	2	20	75	720	3		43.6	1	60	40	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		tractor	2	40	84	720	3		52.6	1	60	52	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		generator	2	50	72	720	3		40.6	1	60	41	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
									Total Aggregate Noise Exposure from Loop-in transmission stringing and pulling Phase			**52.2**																
11	Stormwater structure and waterline installation and landscaping installation	excavator	2	40	81	720	3		49.6	1	60	49	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		rock drill	2	20	81	720	3		49.6	1	60	46	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		tractor	2	40	84	720	3		52.6	1	60	52	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
									Total Aggregate Noise Exposure from Stormwater structure and waterline installation and landscaping installation Phase			**54.1**																
12	Decommissioning	crane	2	16	81	720	3		49.6	1	60	45	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		tractor	2	40	84	720	3		52.6	1	60	52	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		concrete saw	2	20	90	720	3		58.6	1	60	55	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
		dozer	2	40	82	720	3		50.6	1	60	50	6	5	6.5	710	10	720	710.0	10.1	720.0	0.11	4.3	12.0	5.5	0.5	0.7	3.0
									Total Aggregate Noise Exposure from Decommissioning Phase			**57.4**																

To User: bordered cells are inputs, unbordered cells have formulae
enter "0" to turn off air or grnd absorption terms, "1" to turn on

air abs? 1
grnd abs? 1

magnitude of threshold (dBA) = 65
allowable hours over which Leq is to be averaged = 1

Source, receptor, and barrier all share same reference grade elevation; unless otherwise noted)
= Barrier of input height inserted between source and receptor

Project Phase No.	Project Phase Description	Comparable FHWA RCNM Construction Equipment Type	Quantity	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Source to NSR Distance (ft.)	*Temporary Barrier Insertion Loss (dB)*	*Additional Noise Reduction*	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 1-hour Leq	Source Elevation (ft)	Receiver Elevation (ft)	Barrier Height (ft)	Source to Barr. ("A") Horiz. (ft)	Rcvr. to Barr. ("B") Horiz. (ft)	Source to Rcvr. ("C") Horiz. (ft)	"A" (ft)	"B" (ft)	"C" (ft)	Path Length Diff. "P" (ft)	Abarr (dB)	Heff (with barrier)	Heff (wout barrier)	G (with barrier)	G (without barrier)	ILbarr (dB)
1	Access road site preperation, grading and paving	Grader	1	40	85	395	3		59.1	1	60	55	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		tractor	1	40	84	395	3		58.1	1	60	54	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		front end loader	1	40	79	395	3		53.1	1	60	49	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		front end loader	1	40	79	395	3		53.1	1	60	49	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
								Total Aggregate Noise Exposure from Access road site preperation, grading and paving Phase				**58.7**															
2	Site preperation	grader	2	40	85	395	3		59.1	1	60	58	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		tractor	1	40	84	395	3		58.1	1	60	54	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		backhoe	1	40	78	395	3		52.1	1	60	48	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		dozer	2	40	82	395	3		56.1	1	60	55	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		front end loader	2	40	79	395	3		53.1	1	60	52	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
								Total Aggregate Noise Exposure from Site preperation Phase				**61.7**															
3	Switchyard site preperation	front end loader	2	40	79	395	3		53.1	1	60	52	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		dozer	2	40	82	395	3		56.1	1	60	55	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
								Total Aggregate Noise Exposure from Switchyard site preperation Phase				**56.9**															
4	Grading	grader	4	40	85	395	3		59.1	1	60	61	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		dozer	2	40	82	395	3		56.1	1	60	55	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		tractor	2	40	84	395	3		58.1	1	60	57	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		compactor (ground)	2	20	80	395	3		54.1	1	60	50	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		roller	2	20	80	395	3		54.1	1	60	50	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		front end loader	2	40	79	395	3		53.1	1	60	52	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
								Total Aggregate Noise Exposure from Grading Phase				**64.0**															
5	Switchyard grading	roller	2	20	80	395	3		54.1	1	60	50	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		dozer	2	40	82	395	3		56.1	1	60	55	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		tractor	2	40	84	395	3		58.1	1	60	57	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
								Total Aggregate Noise Exposure from Switchyard grading Phase				**59.8**															
6	Wall earthwork and installation	excavator	2	40	81	395	3		55.1	1	60	54	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		rock drill	2	20	81	395	3		55.1	1	60	51	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		tractor	2	40	84	395	3		58.1	1	60	57	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		man lift	2	20	75	395	3		49.1	1	60	45	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
								Total Aggregate Noise Exposure from Wall earthwork and installation Phase				**59.7**															
7	Battery/container installation	compressor (air)	4	40	78	395	3		52.1	1	60	54	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		crane	2	16	81	395	3		55.1	1	60	50	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		excavator	2	40	81	395	3		55.1	1	60	54	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		generator	4	50	72	395	3		46.1	1	60	49	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		roller	2	20	80	395	3		54.1	1	60	50	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		man lift	2	20	75	395	3		49.1	1	60	45	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		front end loader	2	40	79	395	3		53.1	1	60	52	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		compactor (ground)	2	20	80	395	3		54.1	1	60	50	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
								Total Aggregate Noise Exposure from Battery/container installation Phase				**60.4**															
8	Switchyard installation	man lift	4	20	75	395	3		49.1	1	60	48	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		compressor (air)	2	40	78	395	3		52.1	1	60	51	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		drill rig truck	2	20	79	395	3		53.1	1	60	49	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		crane	1	16	81	395	3		55.1	1	60	47	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		excavator	1	40	81	395	3		55.1	1	60	51	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		generator	2	50	72	395	3		46.1	1	60	46	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		roller	2	20	80	395	3		54.1	1	60	50	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		man lift	2	20	75	395	3		49.1	1	60	45	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		dozer	2	40	82	395	3		56.1	1	60	55	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		front end loader	2	40	79	395	3		53.1	1	60	52	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		tractor	4	40	84	395	3		58.1	1	60	60	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		rock drill	2	20	81	395	3		55.1	1	60	51	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
								Total Aggregate Noise Exposure from Switchyard installation Phase				**63.6**															
9	Loop-in transmission foundation and tower erection	compressor (air)	2	40	78	395	3		52.1	1	60	51	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		crane	1	16	81	395	3		55.1	1	60	47	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		man lift	2	20	75	395	3		49.1	1	60	45	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		generator	2	50	72	395	3		46.1	1	60	46	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		pumps	2	50	77	395	3		51.1	1	60	51	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		Welder / Torch	2	40	73	395	3		47.1	1	60	46	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
								Total Aggregate Noise Exposure from Loop-in transmission foundation and tower erection Phase				**56.3**															
10	Loop-in transmission stringing and pulling	man lift	2	20	75	395	3		49.1	1	60	45	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		tractor	2	40	84	395	3		58.1	1	60	57	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		generator	2	50	72	395	3		46.1	1	60	46	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
								Total Aggregate Noise Exposure from Loop-in transmission stringing and pulling Phase				**57.7**															
11	Stormwater structure and waterline installation and landscaping installation	excavator	2	40	81	395	3		55.1	1	60	54	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		rock drill	2	20	81	395	3		55.1	1	60	51	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		tractor	2	40	84	395	3		58.1	1	60	57	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
								Total Aggregate Noise Exposure from Stormwater structure and waterline installation and landscaping installation Phase				**59.6**															
12	Decommissioning	crane	2	16	81	395	3		55.1	1	60	50	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		tractor	2	40	84	395	3		58.1	1	60	57	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		concrete saw	2	20	90	395	3		64.1	1	60	60	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
		dozer	2	40	82	395	3		56.1	1	60	55	6	5	6.5	385	10	395	385.0	10.1	395.0	0.11	4.3	12.0	5.5	0.5	0.7	3.3
								Total Aggregate Noise Exposure from Decommissioning Phase				**63.0**															
13	Potholing	concrete saw	1	20	90	250	4		68.4	1	60	61	6	5	6.5	240	10	250	240.0	10.1	250.0	0.11	4.3	12.0	5.5	0.5	0.7	3.5
		Vacuum Excavator (Vac-truck)	1	40	85	250	4		63.4	1	60	59	6	5	6.5	240	10	250	240.0	10.1	250.0	0.11	4.3	12.0	5.5	0.5	0.7	3.5
								Total Aggregate Noise Exposure from Potholing Phase				**63.5**															

THIS PAGE INTENTIONALLY LEFT BLANK

FCS
An ADEC Innovation

Attachment C:
Air Quality Supporting Documents

Griffith Energy Storage Project
Project Information and CalEEMod Modeling Inputs

PROPOSED PROJECT - SITE PLANS Date May 5, 2021				
LandUse Category	**Modeled Land Use**	**Footprint SF**	**Building SF**	**Lot Acreage**
Substation Area (87 x 108)	User Industrial	9,233	NA	0.21
Storwater Treatment Area	Industrial/Stormwater Treatment	10,810	NA	0.25
Equipment Area	Other Non-Asphalt Surfaces	83,532	NA	1.92
Access Road Area	Other Asphalt Surfaces	19,130	NA	0.44
Subtotal		122,705		
Easement/Landscaped Buffer	Industrial/Landscaping	7,782	NA	0.18
	Total Site Area	130,487		2.996
Landscaping Area = total pervious area = 18,592 sq ft				
Special landscaping = stormwater treatment area = 10,810 sq ft				

MATERIAL REQUIREMENTS/IMPORTED QUANTITIES			
Site Breakdown:	**SF**	**CY Asphalt**	**CY Gravel/ Aggregate**
Substation	5,960	0	294
Eqpt Areas	38,220	0	1416
Gravel Pad (w/o Substation)	50,572	0	2498
Access Road	19,538	181	724
Total	**114,290**	**181**	**4932**
Construction Materials:	4208	CY Asphalt /Gravel/Aggregate	
Paving Materials:	905	CY = 113.1	trips @ 16 CY per truck

Griffith Battery Energy Storage System (BESS) Project Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

2. Emissions Summary

2.2. Construction Emissions by Year, Unmitigated

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

3.3. Grading (2024) - Unmitigated

3.5. Grading/Foundation (2024) - Unmitigated

3.7. Building Construction (2024) - Unmitigated

3.9. Building Construction (2025) - Unmitigated

3.11. Paving (2025) - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Griffith Battery Energy Storage System (BESS) Project
Construction Start Date	6/3/2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	17.4
Location	18800 S Broadway, Gardena, CA 90248, USA
County	Los Angeles-South Coast
City	Carson
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4670
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

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
User Defined Industrial	1.00	User Defined Unit	0.64	0.00	18,592	10,810	—	—

Other Non-Asphalt Surfaces	83.5	1000sqft	1.92	0.00	0.00	0.00	—	—
Other Asphalt Surfaces	19.1	1000sqft	0.44	0.00	0.00	0.00	—	—

2. Emissions Summary

2.2. 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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.31	3.63	32.8	37.1	0.05	1.45	3.67	5.11	1.33	1.54	2.87	—	6,078	6,078	0.25	0.14	3.67	6,115
2025	2.38	1.98	15.3	23.2	0.03	0.62	1.39	2.01	0.57	0.33	0.91	—	5,058	5,058	0.22	0.19	6.37	5,126
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.58	3.00	25.7	29.9	0.04	1.13	4.11	5.24	1.04	1.66	2.70	—	6,086	6,086	0.26	0.18	0.17	6,147
2025	1.34	1.14	8.15	11.9	0.02	0.34	0.78	1.12	0.31	0.18	0.49	—	2,573	2,573	0.11	0.04	0.08	2,589
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.05	0.88	7.79	8.80	0.01	0.35	1.29	1.64	0.32	0.55	0.87	—	1,652	1,652	0.07	0.04	0.63	1,667
2025	0.30	0.25	1.86	2.74	< 0.005	0.08	0.17	0.25	0.07	0.04	0.11	—	592	592	0.03	0.01	0.31	597
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.19	0.16	1.42	1.61	< 0.005	0.06	0.24	0.30	0.06	0.10	0.16	—	274	274	0.01	0.01	0.10	276
2025	0.05	0.05	0.34	0.50	< 0.005	0.01	0.03	0.05	0.01	0.01	0.02	—	98.1	98.1	< 0.005	< 0.005	0.05	98.9

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.61	15.6	16.0	0.02	0.67	—	0.67	0.62	—	0.62	—	2,494	2,494	0.10	0.02	—	2,502
Demolition	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.43	0.44	< 0.005	0.02	—	0.02	0.02	—	0.02	—	68.3	68.3	< 0.005	< 0.005	—	68.6
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.3	11.3	< 0.005	< 0.005	—	11.3
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	0.14	2.26	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	424	424	0.02	0.01	1.67	430
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	106	106	0.01	0.02	0.24	111
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.2	11.2	< 0.005	< 0.005	0.02	11.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.90	2.90	< 0.005	< 0.005	< 0.005	3.04
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.85	1.85	< 0.005	< 0.005	< 0.005	1.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.48	0.48	< 0.005	< 0.005	< 0.005	0.50

3.3. Grading (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.08	1.75	16.7	16.4	0.02	0.77	—	0.77	0.71	—	0.71	—	2,595	2,595	0.11	0.02	—	2,604

Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.26	2.52	2.48	< 0.005	0.12	—	0.12	0.11	—	0.11	—	391	391	0.02	< 0.005	—	392
Dust From Material Movement	—	—	—	—	—	—	0.42	0.42	—	0.20	0.20	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.46	0.45	< 0.005	0.02	—	0.02	0.02	—	0.02	—	64.7	64.7	< 0.005	< 0.005	—	65.0
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	0.14	2.26	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	424	424	0.02	0.01	1.67	430
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	35.9	35.9	< 0.005	0.01	0.08	37.7

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.30	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	61.4	61.4	< 0.005	< 0.005	0.11	62.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.41	5.41	< 0.005	< 0.005	0.01	5.68
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.2	10.2	< 0.005	< 0.005	0.02	10.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.90	0.90	< 0.005	< 0.005	< 0.005	0.94

3.5. Grading/Foundation (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.96	1.65	15.9	15.4	0.02	0.74	—	0.74	0.68	—	0.68	—	2,454	2,454	0.10	0.02	—	2,462
Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.96	1.65	15.9	15.4	0.02	0.74	—	0.74	0.68	—	0.68	—	2,454	2,454	0.10	0.02	—	2,462
Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.34	3.26	3.17	< 0.005	0.15	—	0.15	0.14	—	0.14	—	504	504	0.02	< 0.005	—	506
Dust From Material Movement	—	—	—	—	—	—	0.57	0.57	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.60	0.58	< 0.005	0.03	—	0.03	0.03	—	0.03	—	83.5	83.5	< 0.005	< 0.005	—	83.8
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	0.14	2.26	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	424	424	0.02	0.01	1.67	430
Vendor	0.01	< 0.005	0.21	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	147	147	0.01	0.02	0.33	155
Hauling	0.04	0.01	0.62	0.24	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	494	494	0.03	0.08	1.14	520

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	0.17	1.91	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	401	401	0.02	0.01	0.04	406
Vendor	0.01	< 0.005	0.22	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	147	147	0.01	0.02	0.01	155
Hauling	0.04	0.01	0.64	0.24	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	495	495	0.03	0.08	0.03	519
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.41	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	83.7	83.7	< 0.005	< 0.005	0.15	84.9
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	30.3	30.3	< 0.005	< 0.005	0.03	31.8
Hauling	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	102	102	0.01	0.02	0.10	107
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.08	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.9	13.9	< 0.005	< 0.005	0.02	14.1
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.01	5.01	< 0.005	< 0.005	< 0.005	5.26
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.8	16.8	< 0.005	< 0.005	0.02	17.7

3.7. Building Construction (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	0.94	8.44	8.44	0.02	0.38	—	0.38	0.35	—	0.35	—	1,786	1,786	0.07	0.01	—	1,792
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.27	1.27	< 0.005	0.06	—	0.06	0.05	—	0.05	—	269	269	0.01	< 0.005	—	270
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.23	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	44.6	44.6	< 0.005	< 0.005	—	44.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.27	0.34	3.83	0.00	0.00	0.78	0.78	0.00	0.18	0.18	—	803	803	0.04	0.03	0.09	813
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.61	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	123	123	0.01	< 0.005	0.22	124
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	20.3	20.3	< 0.005	< 0.005	0.04	20.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.05	0.88	7.86	8.35	0.02	0.34	—	0.34	0.31	—	0.31	—	1,786	1,786	0.07	0.01	—	1,792
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.05	0.88	7.86	8.35	0.02	0.34	—	0.34	0.31	—	0.31	—	1,786	1,786	0.07	0.01	—	1,792
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.18	1.60	1.70	< 0.005	0.07	—	0.07	0.06	—	0.06	—	364	364	0.01	< 0.005	—	365
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.29	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	60.2	60.2	< 0.005	< 0.005	—	60.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.26	0.26	4.17	0.00	0.00	0.78	0.78	0.00	0.18	0.18	—	830	830	0.04	0.03	3.04	842
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.25	0.29	3.54	0.00	0.00	0.78	0.78	0.00	0.18	0.18	—	786	786	0.04	0.03	0.08	796
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.76	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	162	162	0.01	0.01	0.27	165
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.9	26.9	< 0.005	< 0.005	0.04	27.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.83	0.70	6.13	8.21	0.01	0.27	—	0.27	0.25	—	0.25	—	1,244	1,244	0.05	0.01	—	1,248
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.17	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	34.1	34.1	< 0.005	< 0.005	—	34.2
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.64	5.64	< 0.005	< 0.005	—	5.66
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.13	2.09	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	415	415	0.02	0.01	1.52	421
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.06	0.01	0.96	0.37	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	783	783	0.04	0.12	1.82	822
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	0.02	11.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.5	21.5	< 0.005	< 0.005	0.02	22.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.81	1.81	< 0.005	< 0.005	< 0.005	1.83
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.55	3.55	< 0.005	< 0.005	< 0.005	3.73

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	6/3/2024	6/15/2024	5.00	10.0	—
Grading	Grading	6/3/2024	8/16/2024	5.00	55.0	—
Grading/Foundation	Grading	8/17/2024	11/30/2024	5.00	75.0	—
Building Construction	Building Construction	10/16/2024	4/14/2025	5.00	129	—
Paving	Paving	4/1/2025	4/14/2025	5.00	10.0	—

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	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73

Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading/Foundation	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading/Foundation	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading/Foundation	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	7.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	30.0	18.5	LDA,LDT1,LDT2

Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	1.50	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	30.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.51	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Grading/Foundation	—	—	—	—
Grading/Foundation	Worker	30.0	18.5	LDA,LDT1,LDT2
Grading/Foundation	Vendor	4.00	10.2	HHDT
Grading/Foundation	Hauling	7.01	20.0	HHDT
Grading/Foundation	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	60.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	0.00	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	30.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	0.00	10.2	HHDT,MHDT
Paving	Hauling	11.3	20.0	HHDT
Paving	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)

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	0.00	0.00	0.00	57.0	—
Grading	0.00	220	55.0	0.00	—
Grading/Foundation	4,208	0.00	75.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Industrial	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O

2024	0.00	532	0.03	< 0.005
2025	0.00	532	0.03	< 0.005

8. User Changes to Default Data

Screen	Justification
Land Use	Site plan.
Construction: Construction Phases	Applicant-provided schedule.
Construction: Off-Road Equipment	Added excavator to grading phase to accomplish 220 cy of cut/fill. Added trencher to building construction phase to accomplish electrical trenching.
Construction: Trips and VMT	Applicant provided asphalt and aggregate haul quantities. Applicant provided worker counts.

THIS PAGE INTENTIONALLY LEFT BLANK

FCS
An ADEC Innovation

Attachment D:
Cultural Resources Supporting Documents

19-000088

ARCHEOLOGICAL SURVEY OF SOUTHERN CALIFORNIA

LAn-88

RACER'S MISC. SITES #1

SITE LA-88 LAT. ____ ALT. ____ LOS ANGELES CO.

LONG. ____ QUAD. ____ SECTION ____ T ____ R ____ B&M ____

TYPE: artifact area[1] house[2] burial[3] cremation[4] shell midden[5] midden[6] workshop[7] fire[8] mourning cer.[9] effigy[10] trail.[11]
maze[12] bedrock mortars[13] do. metates[14] pictographs[15] petroglyphs[16] village site[17] quarry[18] other[19] ____

Area of site: ____ Deep deposit[1] shallow[2] surf. only[3] overburden?[4] ____

Water source: spring[1] stream[2] lake[3] tank[4] lagoon[5] ____ Location: ____

Location of site: beach[1] terrace[2] bluff[3] shore[4] mesa[5] cave[6] rock shelter[7] dune[8] alluv. fan[9] ____[10]

Access to site: "MISC. SMALL SITES AROUND THE BORDERS OF LAGUNAS DE LOS DOMINGUEZ (NIGGER SLOUGH)." (SOUTH OF GARDENA) Dist. from road: ____

Condition: wind eroded[1] water eroded[2] cultivated[3] overgrown[4] construction[5] pitted[6] ____

Owner: gov't[1] private[2] ____ Permission[3] ____

Artifacts: pottery[1] bone[2] shell[3] asphaltum[4] pigment[5] vegetal[6] European[7] food remains[8] other[9] ____

Chipped Stone: points[1] knives[2] scrapers[3] drills[4] ornaments[5] other.[6] ____

Pecked: metates[1] manos[2] mortars[3] pestles[4] bowls[5] other.[6] ____ ground?[7] polished?[8]

Loc. of coll: L.A.[1] SB[2] SD[3] SW[4] KH[5] AV[6] SH[7] PS[8] other[9] ____ Photos.[10] ____ Report.[11]

Date: RACER - Apr., 1939 Recorded by: F.H. RACER (4/39) LOMITA, CALIF. (ROZAIRE - 2/51) Excavation? ____

REMARKS: THESE SITES "ARE HARD TO LOCATE AND VERY FEW ARTIFACTS CAN BE FOUND."

"NO DOUBT THERE ARE MANY OTHER SMALL SITES THAT I HAVE NOT YET DISCOVERED IN THIS DISTRICT."

m. -11. RACER, F.H. - Apr., 1939. "INDIAN CAMP SITES IN THE HARBOR DISTRICT." LOMITA, CALIF. (mss.)

LAn-102

ARCHEOLOGICAL SURVEY OF SOUTHERN CALIFORNIA

RACER'S SITE #19

SITE LA-102 LAT. ____ ALT. ____ LOS ANGELES CO.

LONG. ____ QUAD. ____ SECTION ____ T ____ R ____ B&M ____

TYPE: artifact area[1] house[2] burial[3] cremation[4] shell midden[5] midden[6] workshop[7] fire[8] mourning cer.[9] effigy[10] trail.[11]
maze[12] bedrock mortars[13] do. metates[14] pictographs[15] petroglyphs[16] village site[17] quarry[18] other[19] ____

Area of site: ____ Deep deposit[1] shallow[2] surf. only[3] overburden?[4] ____

Water source: spring[1] stream[2] lake[3] tank[4] lagoon[5] ____ Location: ____

Location of site: beach[1] terrace[2] bluff[3] shore[4] mesa[5] cave[6] rock shelter[7] dune[8] alluv. fan[9] BANK OF SLOUGH[10]

Access to site: "SMALL SITE ON BANK OF SLOUGH BETWEEN VERMONT AND MAIN STREET AND SOUTH OF 190TH STREET." Dist. from road: ____

Condition: wind eroded[1] water eroded[2] cultivated[3] overgrown[4] construction[5] pitted[6] ____

Owner: gov't[1] private[2] ____ Permission[3] ____

Artifacts: pottery[1] bone[2] shell[3] asphaltum[4] pigment[5] vegetal[6] European[7] food remains[8] other[9] ____

Chipped Stone: points[1] knives[2] scrapers[3] drills[4] ornaments[5] other.[6] ____

Pecked: metates[1] manos[2] mortars[3] pestles[4] bowls[5] other.[6] ____ ground?[7] polished?[8]

Loc. of coll: L.A.[1] SB[2] SD[3] SW[4] KH[5] AV[6] SH[7] PS[8] other[9] ____ Photos.[10] ____ Report.[11]

Date: RACER - APR. 1939 Recorded by: F.H. RACER (4/39), LOMITA, CALIF. (ROZAIRE - 2/51) Excavation? ____

C. "SEA SHELLS. FLINT CHIPS."

I. "BROKEN MANOS."

m. 11. RACER, F.H. - APR., 1939. "INDIAN CAMP SITES IN THE HARBOR DIST." LOMITA, CALIF. (mss.)

MAPPED

19-000088

University of California

ARCHAEOLOGICAL SITE SURVEY RECORD

1. Site LAn 88 2. Map Torrance & Inglewood 7.5' 3. County L.A.

4. Twp. 3S Range 13?14W; ____ 1/4 of ____ 1/4 of Sec. ____

5. Location "Misc. small sites around the borders of Lagunas de los Dominguez (Nigger Slough) [Sic]." South of Gardena.

6. On contour elevation ____

7. Previous designations for site LA-88 (Racer's Misc. Sites #1)

8. Owner ____ 9. Address ____

10. Previous owners, dates ____

11. Present tenant ____

12. Attitude toward excavation ____

13. Description of site "These sites are hard to locate and very few artifacts can be found." "No doubt there are many other small sites that I have not yet discovered in this district."

14. Area ____ 15. Depth ____ 16. Height ____

17. Vegetation ____ 18. Nearest water ____

19. Soil of site ____ 20. Surrounding soil type ____

21. Previous excavation ____

22. Cultivation ____ 23. Erosion ____

24. Buildings, roads, etc. ____

25. Possibility of destruction ____

26. House pits ____

27. Other features ____

28. Burials ____

29. Artifacts ____

30. Remarks ____

31. Published references Racer, F.H. (Apr. 1939): "Indian Camp Sites in the Harbor District" Lomita, Calif. (Mss)

32. Accession No. ____ 33. Sketch map ____

34. Date April, 1939 35. Recorded by F.H. Racer 36. Photos ____

19-000088

University of California

MAPPED

ARCHAEOLOGICAL SITE SURVEY RECORD

1. Site LAn ~~102~~ 88 2. Map Torrance 7.5' 3. County L.A.

4. Twp. 35 - 45 line Range 14W ; 1/4 of 1/4 of Sec.

5. Location "Small site on bank of slough between Vermont Ave. and Main St. and S. of 190th St."

6. On contour elevation

7. Previous designations for site LA-102 (Racer's Site #14)

8. Owner 9. Address

10. Previous owners, dates

11. Present tenant

12. Attitude toward excavation

13. Description of site Shell midden; workshop. Sea Shells. Flint chips. Bank of slough.

14. Area 15. Depth 16. Height

17. Vegetation 18. Nearest water

19. Soil of site 20. Surrounding soil type

21. Previous excavation

22. Cultivation 23. Erosion

24. Buildings, roads, etc.

25. Possibility of destruction

26. House pits

27. Other features

28. Burials

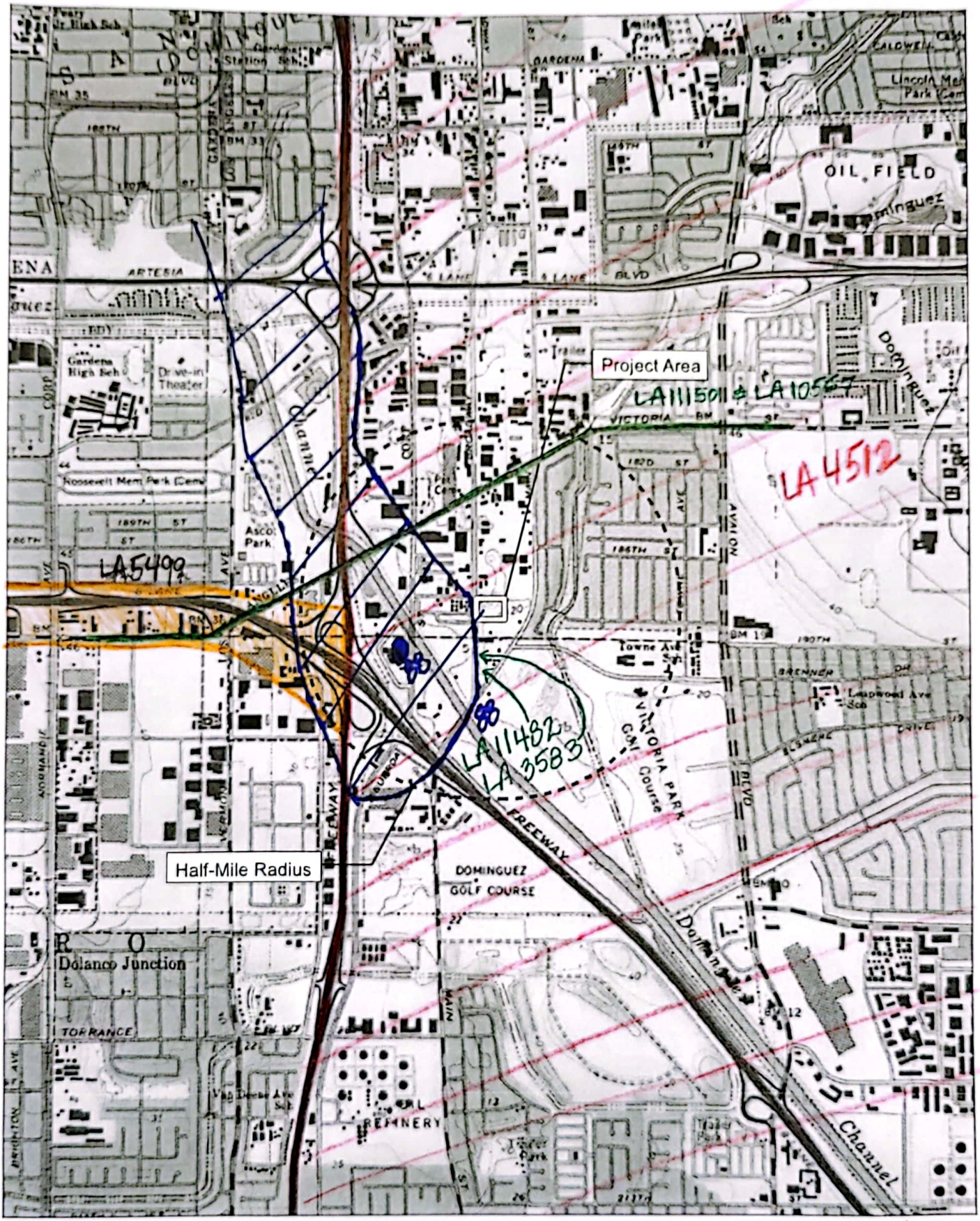
29. Artifacts Broken manos

30. Remarks

31. Published references Racer, F.H. (April, 1939): "Indian Camp Sites in the Harbor District" Lomita, Calif. (Mss)

32. Accession No. 33. Sketch map

34. Date April, 1939 35. Recorded by F.H. Racer 36. Photos



Source: USGS Torrance 7.5' Quadrangle / San Pedro (Dominguez).
Project Site Source: USGS Torrance 7.5' Quadrangle / San Pedro (Dominguez).

map #1

FIRSTCARBON SOLUTIONS™

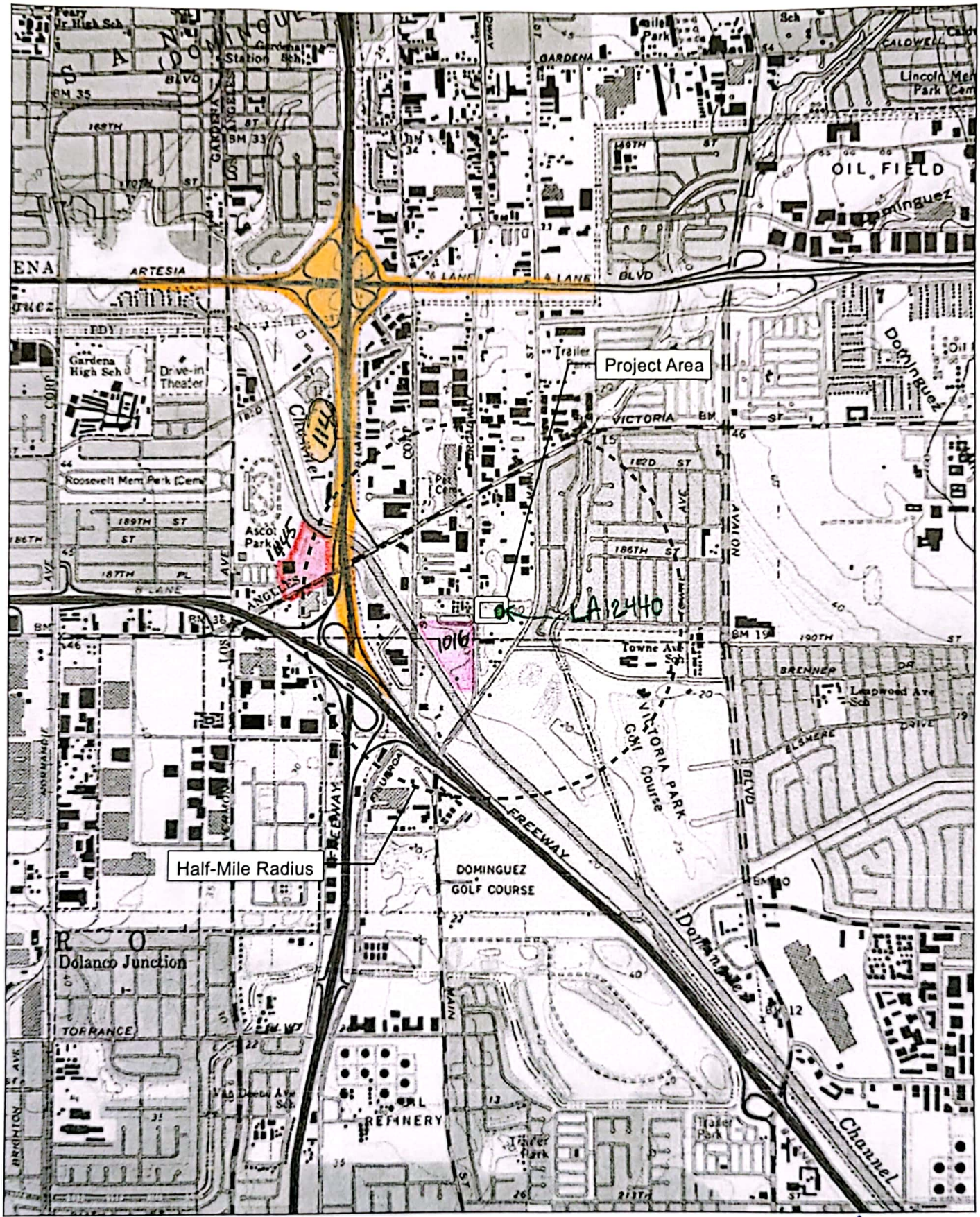
2,000 1,000 0 2,000 Feet

Exhibit A
Record Search Map

11900011 • 09/2023 | 11900011_record_search.mxd

CITY OF CARSON
GRIFFITH ENERGY STORAGE PROJECT
PHASE I CULTURAL RESOURCES ASSESSMENT

CamScanner



Source: USGS Torrance 7.5' Quadrangle / San Pedro (Dominguez).
Project Site Source: USGS Torrance 7.5' Quadrangle / San Pedro (Dominguez).

map #2

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000 Feet

Exhibit A
Record Search Map

11900011 • 09/2023 | 11900011_record_search.mxd

CITY OF CARSON
GRIFFITH ENERGY STORAGE PROJECT
PHASE I CULTURAL RESOURCES ASSESSMENT

CamScanner

Resource Detail: P-19-000088

Identifying information

Primary No.: P-19-000088
Trinomial: CA-LAN-000088
Name: Racer's Misc Sites #1 and Racer's Site #14
Other IDs:

Type	*Name*
Resource Name	Racer's Misc Sites #1 and Racer's Site #14
Other	LA-88 (Racer's Misc Sites #1)
Other	LA-102 (Racer's Site #14)

Cross-refs:

Attributes

Resource type: Site
Age: Prehistoric
Information base: Unknown
Attribute codes: AP01 (Unknown); AP15 (Habitation debris)
Disclosure: Not for publication
Collections: No
Accession no(s):
Facility:

General notes

Site appears to have been incorrectly plotted - it is much smaller than the shape that has been recorded on quad map. Prior recordation appears to follow historical boundaries of the Lagunas de los Domonguez (Nigger Slough).

Recording events

Date	*Recorder(s)*	*Affiliation*	*Notes*
4/1/1939	RACER		

Associated reports

Report No.	*Year*	*Title*	*Affiliation*
LA-00114	1974	Evaluation of the Archaeological Resources and Potential Impact of Proposed New Freeway Construction on the Harbor Freeway (route 11) And	University of California, Los Angeles Archaeological Survey
LA-01964	1974	(Duplicate of LA-114) Evaluation of the Archaeological Resources and Potential Impact of Propsed New Freeway Construction on the Harbor Freeway (route 11) and the Artesia Freeway (route 91)	University of California, Los Angeles Archaeological Survey
LA-03095	1993	A Cultural Resources Assessment of the Hansen Dam Flood Control Basin, City of Los Angeles, California	Archaeological Advisory Group
LA-03583	1974	The Los Angeles Basin and Vicinity: a Gazetteer and Compilation of Archaeological Site Information	Archaeological Research, Inc.
LA-04512	1977	Cultural Resources Inventory of the City of Carson, California	
LA-07826	2001	Cultural Resources Records Search and Constraints Analysis Report: LAX/South (Orange County) High Speed Ground Access Study, Los Angeles and Orange Counties, California	Chambers Group, Inc.
LA-08780	2007	Cultural Resources Study of the Gardena Department Store Project Sprint-nextel Site No. La70xc303g, 1106 W. Gardena Boulevard, Gardena, Los Angeles County, California 90247	Historic Resource Associates
LA-11482	1939	Camp Sites in Harbor District - F.H. Racer	
LA-12440	2013	Cultural Resources Records Search and Site Visit Results for AT&T Mobility, LLC Candidate LA0573 (NOLA Substation) 125 Griffith Street,	EAS

Resource Detail: P-19-000088

			Carson, Los Angeles County, California	
	OR-03267	2001	Cultural Resources Records Search and Constraints Analysis Report: LAX/South (Orange County) High Speed Ground Access Study, Los Angeles and Orange Counties, California	Chambers Group, Inc.

Location information

County: Los Angeles
USGS quad(s): INGLEWOOD, TORRANCE
Address:
PLSS:
UTMs:

Management status

Database record metadata

	Date	*User*	
Entered:	5/1/2008	jay	
Last modified:	9/4/2019	sstjames	
IC actions:	*Date*	*User*	*Action taken*
	5/1/2008	jay	Appended records from Encodent database.

Record status: Verified

Report Detail: LA-00114

Identifiers

Report No.: LA-00114
Other IDs:
Cross-refs:

Citation information

Author(s): Clewlow, William C. Jr.
Year: 1974
Title: Evaluation of the Archaeological Resources and Potential Impact of Proposed New Freeway Construction on the Harbor Freeway (route 11) And
Affliliation: University of California, Los Angeles Archaeological Survey
No. pages: 9
No. maps:
Attributes: Archaeological, Field study
Inventory size: 25 ac
Disclosure: Not for publication
Collections:

General notes

Associated resources

Primary No.	*Trinomial*	*Name*
P-19-000088	CA-LAN-000088	Racer's Misc Sites #1 and Racer
P-19-000100	CA-LAN-000100	RACER'S SITE #12
P-19-000101	CA-LAN-000101	RACER'S SITE #13

No. resources: 3
Has informals:

Location information

County(ies): Los Angeles
USGS quad(s): TORRANCE
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	5/5/2008	jay
Last modified:	10/3/2016	rmoritz

IC actions:	*Date*	*User*	*Action taken*
	5/6/2008	jay	Appended records from old Surveys database.

Record status: Verified

Report Detail: LA-01016

Identifiers

Report No.: LA-01016
Other IDs:
Cross-refs:

Citation information

Author(s): Schroth, Adella
Year: 1981
Title: Archaeological Resources Assessment of Replacement Bus Operations and Maintenance Facility for Division 18 in the City of Carson, California
Affliliation: Archaeological Resource Management Corp.
No. pages: 36
No. maps:
Attributes: Archaeological, Field study
Inventory size: 14 ac
Disclosure:
Collections:

General notes

Associated resources

No. resources: 0
Has informals:

Location information

County(ies): Los Angeles
USGS quad(s): TORRANCE
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	5/5/2008	jay
Last modified:	10/3/2016	rmoritz

IC actions:	*Date*	*User*	*Action taken*
	5/6/2008	jay	Appended records from old Surveys database.

Record status: Verified

Report Detail: LA-01445

Identifiers

Report No.: LA-01445
Other IDs:
Cross-refs:

Citation information

Author(s): Dillon, Brian D.
Year: 1984
Title: An Archaeological Survey and Impact Assessment of 9.99 Acre Parcel at 190th Street and the Harbor Freeway, City of Los Angeles, California
Affliliation:
No. pages:
No. maps:
Attributes: Archaeological, Field study
Inventory size: 10 ac
Disclosure:
Collections:

General notes

Associated resources

No. resources: 0
Has informals:

Location information

County(ies): Los Angeles
USGS quad(s): TORRANCE
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	5/5/2008	jay
Last modified:		

IC actions:	*Date*	*User*	*Action taken*
	5/6/2008	jay	Appended records from old Surveys database.

Record status:

Report Detail: LA-03583

Identifiers

Report No.: LA-03583
Other IDs:
Cross-refs:

Citation information

Author(s): Bucknam, Bonnie M.
Year: 1974
Title: The Los Angeles Basin and Vicinity: a Gazetteer and Compilation of Archaeological Site Information
Affliliation: Archaeological Research, Inc.
No. pages: 289
No. maps:
Attributes: Other research
Inventory size: QC
Disclosure: Not for publication
Collections: Yes

General notes

Also OR-4034 and VN-2983 - Mapped as Other Report to quads listed.

Associated resources

Primary No.	*Trinomial*	*Name*
P-19-000001	CA-LAN-000001	Tank Site; LA-36
P-19-000002	CA-LAN-000002	Lower Tank Site, Treganza's Tan
P-19-000003	CA-LAN-000003	Tank Site 3
P-19-000004	CA-LAN-000004	Tank Site 4
P-19-000005	CA-LAN-000005	Tank Site 5
P-19-000007	CA-LAN-000007/H	UNION STATION; LA CHINATO
P-19-000009	CA-LAN-000009	Topanga #9; LA-41
P-19-000010	CA-LAN-000010	Topanga #10; LA-42
P-19-000011	CA-LAN-000011	Topanga #11; LA-43
P-19-000012	CA-LAN-000012	Topanga #12; LA-44
P-19-000013	CA-LAN-000013	Topanga #13; LA-45
P-19-000015	CA-LAN-000015	LA-184; LAN-51
P-19-000016	CA-LAN-000016	LA-47
P-19-000017	CA-LAN-000017	LA-48; TOPANGA #17
P-19-000018	CA-LAN-000018	LA-115
P-19-000019	CA-LAN-000019	Croasdale's Metate Site; LA-108;
P-19-000023	CA-LAN-000023	UPPER CAVE SITE; LA-51; Top
P-19-000024	CA-LAN-000024	LA-52; Topanga #24
P-19-000027	CA-LAN-000027	Topanga #27
P-19-000028	CA-LAN-000028	Lachuza
P-19-000029	CA-LAN-000029	Shell Midden Settlement
P-19-000030	CA-LAN-000030	Winding Way West; Ramirez Sit
P-19-000031	CA-LAN-000031	
P-19-000033	CA-LAN-000033	
P-19-000037	CA-LAN-000037	Iny 111; LA-25 (Triunfo Canyon)
P-19-000038	CA-LAN-000038	Crest Site; LA-126
P-19-000039	CA-LAN-000039	Crags Site; LA-124
P-19-000040	CA-LAN-000040	Zuma Creek "C"; LA-15; Dume P
P-19-000044	CA-LAN-000044/H	
P-19-000045	CA-LAN-000045	
P-19-000046	CA-LAN-000046	
P-19-000047	CA-LAN-000047	Sa' anga
P-19-000048	CA-LAN-000048	Salisbury #1
P-19-000049	CA-LAN-000049	Salisbury #2
P-19-000050	CA-LAN-000050	Smith's 162Pc
P-19-000051	CA-LAN-000051	

Report Detail: LA-03583

P-19-000052	CA-LAN-000052	Arroyo Sequit, Village of Lisiqshi
P-19-000053	CA-LAN-000053	Farragut Drive School Site
P-19-000054	CA-LAN-000054/H	Deane's Broken Mortar Site
P-19-000055	CA-LAN-000055	Shulene #1
P-19-000056	CA-LAN-000056	Rozaire #1
P-19-000057	CA-LAN-000057	Lindberg Park Site
P-19-000058	CA-LAN-000058	Machado Site
P-19-000059	CA-LAN-000059	Malcolm Farmer's Playa del Rey
P-19-000060	CA-LAN-000060	Malcolm Farmer's Playa del Rey
P-19-000061	CA-LAN-000061	Malcolm Farmer's Playa del Rey
P-19-000062	CA-LAN-000062	Malcolm Farmer's Playa del Rey
P-19-000063	CA-LAN-000063	Malcolm Farmer's Playa del Rey
P-19-000064	CA-LAN-000064	Malcolm Farmer's Playa del Rey
P-19-000065	CA-LAN-000065	Malcolm Farmer's Playa del Rey
P-19-000066	CA-LAN-000066	Malcolm Farmer's Playa del Rey
P-19-000067	CA-LAN-000067	Malcolm Farmer's Baldwin Hills s
P-19-000068	CA-LAN-000068	Malcolm Farmer's Baldwin Hills s
P-19-000069	CA-LAN-000069	Malcolm Farmer's Baldwin Hills s
P-19-000070	CA-LAN-000070	Malcolm Farmer's Baldwin Hills s
P-19-000071	CA-LAN-000071	Malcolm Farmer's Baldwin Hills s
P-19-000072	CA-LAN-000072	Malcolm Farmer's Baldwin Hills s
P-19-000073	CA-LAN-000073	Malcolm Farmer's Baldwin Hills s
P-19-000074	CA-LAN-000074	Malcolm Farmer's Baldwin Hills s
P-19-000078	CA-LAN-000078	
P-19-000080	CA-LAN-000080	
P-19-000088	CA-LAN-000088	Racer's Misc Sites #1 and Racer
P-19-000090	CA-LAN-000090	
P-19-000091	CA-LAN-000091	RACER'S SITE #3
P-19-000092	CA-LAN-000092	
P-19-000094	CA-LAN-000094	RACER'S SITE #6A (2 SITES M
P-19-000096	CA-LAN-000096	RACER'S SITE #7
P-19-000097	CA-LAN-000097	RACER'S SITE #8
P-19-000098	CA-LAN-000098	RACER'S SITE #10, Suangna In
P-19-000099	CA-LAN-000099	RACER'S SITE #11
P-19-000100	CA-LAN-000100	RACER'S SITE #12
P-19-000101	CA-LAN-000101	RACER'S SITE #13
P-19-000102	CA-LAN-000102	
P-19-000103	CA-LAN-000103	RACER'S SITE #17
P-19-000104	CA-LAN-000104	RACER'S SITE #18; 18A, 18B (
P-19-000105	CA-LAN-000105	RACER'S SITE #19
P-19-000106	CA-LAN-000106	Racer's Site #21
P-19-000107	CA-LAN-000107	RACER'S SITE #20
P-19-000108	CA-LAN-000108/H	Indian Hill
P-19-000109	CA-LAN-000109	Eberhart #14
P-19-000110	CA-LAN-000110	Eberhart #13
P-19-000112	CA-LAN-000112	
P-19-000113	CA-LAN-000113	Eberhart #10
P-19-000114	CA-LAN-000114	Cottontail Lane Site; Broad Beac
P-19-000115	CA-LAN-000115	Eberhart #8
P-19-000116	CA-LAN-000116	Eberhart #7
P-19-000117	CA-LAN-000117	Eberhart #6
P-19-000118	CA-LAN-000118	Eberhart #5
P-19-000119	CA-LAN-000119	Eberhart #4
P-19-000120	CA-LAN-000120	Eberhart #3
P-19-000121	CA-LAN-000121	Eberhart #2
P-19-000122	CA-LAN-000122	Eberhart #1
P-19-000123	CA-LAN-000123	Anaheim Street Site #1
P-19-000124	CA-LAN-000124	
P-19-000125	CA-LAN-000125	

P-19-000126	CA-LAN-000126	
P-19-000127	CA-LAN-000127	Palmer-Redondo
P-19-000131	CA-LAN-000131	
P-19-000133	CA-LAN-000133	SBMNH-127; Topanga Canyon s
P-19-000134	CA-LAN-000134	Nelson #2
P-19-000135	CA-LAN-000135	Nelson's #3
P-19-000136	CA-LAN-000136	
P-19-000137	CA-LAN-000137	Nelson #5 Refuse Heap
P-19-000138	CA-LAN-000138	MALAGA COVE
P-19-000139	CA-LAN-000139	Nelson #7
P-19-000140	CA-LAN-000140	Nelson #8 Camp Site
P-19-000141	CA-LAN-000141	Nelson #9 Refuse Heap
P-19-000142	CA-LAN-000142	Nelson #10 Refuse Heaps
P-19-000143	CA-LAN-000143/H	Nelson's #11 Camp Site
P-19-000144	CA-LAN-000144/H	Nelson's #12 Camp Site
P-19-000145	CA-LAN-000145/H	Nelson #13 Traces of Camp Site
P-19-000146	CA-LAN-000146	Nelson's #14 Refuse Heap
P-19-000147	CA-LAN-000147	Nelson #15 Refuse Heap
P-19-000148	CA-LAN-000148	Nelson #16 Refuse Heap
P-19-000149	CA-LAN-000149	Nelson #17 Refuse Heap
P-19-000150	CA-LAN-000150	Nelson #18 Refuse Heap
P-19-000151	CA-LAN-000151	Nelson #19 Traces of Camp Site
P-19-000152	CA-LAN-000152/H	Nelson #10 Refuse Heaps
P-19-000153	CA-LAN-000153	
P-19-000154	CA-LAN-000154	
P-19-000155	CA-LAN-000155/H	Stunt Ranch
P-19-000156	CA-LAN-000156	Stunt [5
P-19-000159	CA-LAN-000159/H	La Brea Tar Pits
P-19-000161	CA-LAN-000161	
P-19-000162	CA-LAN-000162	Biencourt
P-19-000170	CA-LAN-000170	
P-19-000171	CA-LAN-000171	Angeles Mesa Find
P-19-000172	CA-LAN-000172	LOS ANGELES MAN
P-19-000174	CA-LAN-000174	Zuma Creek "A"
P-19-000175	CA-LAN-000175	Voided
P-19-000178	CA-LAN-000178	
P-19-000179	CA-LAN-000179	
P-19-000180	CA-LAN-000180	
P-19-000181	CA-LAN-000181	Campsite
P-19-000182	CA-LAN-000182	Village of Sejat (multiple possibl
P-19-000183	CA-LAN-000183	El Nido Site
P-19-000184	CA-LAN-000184H	San Gabriel Mission Archaeologi
P-19-000185	CA-LAN-000185H	VOIDED
P-19-000187	CA-LAN-000187	Small Gathering Camp
P-19-000189	CA-LAN-000189	Escondido Canyon; Perro Feroz
P-19-000190	CA-LAN-000190	
P-19-000191	CA-LAN-000191/H	Cypress Street Water Reservoir,
P-19-000193	CA-LAN-000193/H	Nelson #4 Refuse Heap
P-19-000194	CA-LAN-000194	Hammack St Site
P-19-000195	CA-LAN-000195	Burial; Calavera Site
P-19-000196	CA-LAN-000196	Zuma Creek "B"
P-19-000197	CA-LAN-000197	Trancas Cemetery; Trancas Can
P-19-000198	CA-LAN-000198	Zuma Creek "D"
P-19-000199	CA-LAN-000199	Zuma Creek "E"
P-19-000200	CA-LAN-000200	Zuma Creek "F"
P-19-000201	CA-LAN-000201	Zuma Creek Site "G"
P-19-000202	CA-LAN-000202	
P-19-000203	CA-LAN-000203	Metates
P-19-000204	CA-LAN-000204	

P-19-000205	CA-LAN-000205	Dume Point
P-19-000206	CA-LAN-000206	William Deane's site #6
P-19-000207	CA-LAN-000207	
P-19-000210	CA-LAN-000210	Solstice Canyon Site; Sapo Ron
P-19-000211	CA-LAN-000211	William Deane's Site #l
P-19-000212	CA-LAN-000212	
P-19-000213	CA-LAN-000213	LA-31
P-19-000214	CA-LAN-000214	
P-19-000215	CA-LAN-000215	
P-19-000216	CA-LAN-000216	
P-19-000217	CA-LAN-000217	City of Malibu Planning
P-19-000219	CA-LAN-000219	
P-19-000220	CA-LAN-000220	Ridge Mandeville
P-19-000222	CA-LAN-000222	
P-19-000224	CA-LAN-000224	Temescal Canyon
P-19-000225	CA-LAN-000225	Century Ranch
P-19-000226	CA-LAN-000226	Mariscos Site
P-19-000227	CA-LAN-000227	
P-19-000229	CA-LAN-000229	Restaurant Site
P-19-000231	CA-LAN-000231	
P-19-000232	CA-LAN-000232	
P-19-000233	CA-LAN-000233	
P-19-000234	CA-LAN-000234	Puvunga Indian Village Site
P-19-000235	CA-LAN-000235	Puvunga Indian Village Site
P-19-000236	CA-LAN-000236	
P-19-000245	CA-LAN-000245	
P-19-000255	CA-LAN-000255	
P-19-000263	CA-LAN-000263	DUPLICATE OF LAN-19
P-19-000264	CA-LAN-000264/H	MALIBU SITE, HUMALIWO (CH
P-19-000265	CA-LAN-000265	
P-19-000266	CA-LAN-000266	
P-19-000267	CA-LAN-000267	Sweetwater Mesa site, Winnikoff
P-19-000268	CA-LAN-000268	
P-19-000269	CA-LAN-000269	
P-19-000270	CA-LAN-000270	Los Altos
P-19-000271	CA-LAN-000271	
P-19-000272	CA-LAN-000272	
P-19-000273	CA-LAN-000273	Margo Street Site
P-19-000274	CA-LAN-000274	
P-19-000275	CA-LAN-000275	
P-19-000276	CA-LAN-000276	Racer's Site #5
P-19-000277	CA-LAN-000277	Tor. 2
P-19-000278	CA-LAN-000278	Tor. 3
P-19-000279	CA-LAN-000279	Racer's Site #4
P-19-000280	CA-LAN-000280	Eberhart #11
P-19-000281	CA-LAN-000281	Tor. 6
P-19-000282	CA-LAN-000282	Duplicate of LAN-94
P-19-000283	CA-LAN-000283	Barton Hill and Knoll Hill Extensi
P-19-000284	CA-LAN-000284	Tor. 9
P-19-000285	CA-LAN-000285	Racer's Site #1
P-19-000286	CA-LAN-000286	Tor.11
P-19-000287	CA-LAN-000287	Eberhart #9
P-19-000288	CA-LAN-000288	Racer's Site #2
P-19-000289	CA-LAN-000289	Tor. 14
P-19-000291	CA-LAN-000291	San Pedro 1
P-19-000292	CA-LAN-000292	
P-19-000303	CA-LAN-000303	The Little Big Horn Indian Camp
P-19-000306	CA-LAN-000306	Puvunga Indian Village Site / Lo
P-19-000307	CA-LAN-000307	

P-19-000308	CA-LAN-000308	Cheese Rock
P-19-000309	CA-LAN-000309	
P-19-000310	CA-LAN-000310	Cima Site
P-19-000311	CA-LAN-000311	Barbacoa Site
P-19-000316	CA-LAN-000316	
P-19-000317	CA-LAN-000317	
P-19-000319	CA-LAN-000319	
P-19-000322	CA-LAN-000322	
P-19-000330	CA-LAN-000330	Shelter Complex 2, Topanga Sur
P-19-000331	CA-LAN-000331	Topanga #31
P-19-000332	CA-LAN-000332	Topanga #32
P-19-000333	CA-LAN-000333	Complex II
P-19-000335	CA-LAN-000335	Morning View Site
P-19-000340	CA-LAN-000340	Santa Maria Creek
P-19-000341	CA-LAN-000341	Topanga #28
P-19-000344	CA-LAN-000344	Hollywood Riviera Site
P-19-000350	CA-LAN-000350	
P-19-000352	CA-LAN-000352	San Nicholas Canyon Site
P-19-000353	CA-LAN-000353	
P-19-000354	CA-LAN-000354	
P-19-000356	CA-LAN-000356	
P-19-000382	CA-LAN-000382/H	Serra Springs, Unihi Site
P-19-000383	CA-LAN-000383	
P-19-000385	CA-LAN-000385	
P-19-000386	CA-LAN-000386	
P-19-000387	CA-LAN-000387H	TADIA RANCH
P-19-000388	CA-LAN-000388	Highland Cave, Five Shelters
P-19-000389	CA-LAN-000389	DOMINGNEZ HILLS #2
P-19-000390	CA-LAN-000390	DOMINGNEZ HILLS #1
P-19-000398	CA-LAN-000398	
P-19-000400	CA-LAN-000400	
P-19-000401	CA-LAN-000401	
P-19-000403	CA-LAN-000403	
P-19-000404	CA-LAN-000404	
P-19-000406	CA-LAN-000406	
P-19-000415	CA-LAN-000415	Ramirez Canyon #1
P-19-000423	CA-LAN-000423	VOID
P-19-000424	CA-LAN-000424	
P-19-000425	CA-LAN-000425	
P-19-000448	CA-LAN-000448	Old Santa Susana Stage Road /
P-19-000454	CA-LAN-000454	Point Dume Site
P-19-000468	CA-LAN-000468	The Guess Who, Not Bernie Neu
P-19-000469	CA-LAN-000469	The Garden Site
P-19-000470	CA-LAN-000470	
P-19-000472	CA-LAN-000472	JOHN'S ROCKSHELTER
P-19-000478	CA-LAN-000478	
P-19-000483	CA-LAN-000483	AVC-1
P-19-000484	CA-LAN-000484	AVC-2
P-19-000494	CA-LAN-000494	JZ-1
P-19-000495	CA-LAN-000495	EC-2
P-19-000496	CA-LAN-000496	EC-3
P-19-000497	CA-LAN-000497	EC-4
P-19-000499	CA-LAN-000499	T-1
P-19-000500	CA-LAN-000500	T-2
P-19-000501	CA-LAN-000501	Kybo
P-19-000505	CA-LAN-000505	Monte Nido #1
P-19-000506	CA-LAN-000506	Monte Nido #2
P-19-000512	CA-LAN-000512	
P-19-000513	CA-LAN-000513	

Report Detail: LA-03583

P-19-000514	CA-LAN-000514	
P-19-000515	CA-LAN-000515	
P-19-000516	CA-LAN-000516/H	Lake Vineyard Ranch Site
P-19-000517	CA-LAN-000517	
P-19-000519	CA-LAN-000519	
P-19-000520	CA-LAN-000520	
P-19-000523	CA-LAN-000523	
P-19-000525	CA-LAN-000525	
P-19-000526	CA-LAN-000526	DUPLICATE OF LAN-477
P-19-000527	CA-LAN-000527	T-1 or T-2
P-19-000528	CA-LAN-000528	Montgomery/Brookins House
P-19-167019		Avila Adobe
P-19-179270		Rancho Los Cerritos

No. resources: 285

Has informals:

Location information

County(ies): Los Angeles

USGS quad(s): ANAHEIM, BALDWIN PARK, BEVERLY HILLS, EL MONTE, HOLLYWOOD, INGLEWOOD, LA HABRA, LONG BEACH, LOS ALAMITOS, LOS ANGELES, MALIBU BEACH, NEWPORT BEACH, POINT DUME, REDONDO BEACH, SAN PEDRO, SEAL BEACH, SOUTH GATE, TOPANGA, TORRANCE, TRIUNFO PASS, VENICE, WHITTIER

Address:

PLSS:

Database record metadata

	Date	*User*
Entered:	5/5/2008	jay
Last modified:	12/4/2014	agarcia

IC actions:	*Date*	*User*	*Action taken*
	5/6/2008	jay	Appended records from old Surveys database.
	12/4/2014	agarcia	GIS QC

Record status:

Report Detail: LA-05499

Identifiers

Report No.: LA-05499

Other IDs:	*Type*	*Name*
	Caltrans	

Cross-refs:

Citation information

Author(s): Smith, Philomene C.
Year: 2000
Title: Negative Archaeological Survey Report: to Cold Plane the Existing Pavement on Route 405 and Overlay With 30mm of Rubberized Asphalt Concrete at Selected On/off-ramps From Vermont Ave. to Manchester Blvd.
Affliliation: Caltrans District 7
No. pages: 5
No. maps:
Attributes: Literature search
Inventory size: 4 li mi
Disclosure:
Collections:

General notes

Associated resources

No. resources: 0
Has informals:

Location information

County(ies): Los Angeles
USGS quad(s): INGLEWOOD, TORRANCE
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	5/5/2008	jay
Last modified:	10/3/2016	rmoritz

IC actions:	*Date*	*User*	*Action taken*
	5/6/2008	jay	Appended records from old Surveys database.

Record status: Verified

Report Detail: LA-10567

Identifiers

Report No.: LA-10567
Other IDs:
Cross-refs:

Citation information

Author(s): Hogan, Michael, Bai "Tom" Tang, Josh Smallwood, Laura Hensley Shaker, and Casey Tibbitt
Year: 2005
Title: Identification and Evaluation of Historic Properties - West Basin Municipal Water District Harbor- South Bay Water Recycling Project Proposed Project Laterals
Affliliation: CRM Tech
No. pages: 43
No. maps:
Attributes: Archaeological, Field study
Inventory size:
Disclosure: Not for publication
Collections: No

General notes

Map of Project incomplete

Associated resources

No. resources: 0
Has informals:

Location information

County(ies): Los Angeles
USGS quad(s): INGLEWOOD, LONG BEACH, REDONDO BEACH, TORRANCE
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	8/17/2010	agarcia
Last modified:	8/7/2014	agarcia

IC actions:
Record status:

Report Detail: LA-11150

Identifiers

Report No.: LA-11150
Other IDs:
Cross-refs:

Citation information

Author(s): Maxwell, Pamela
Year: 2003
Title: West Basin Municipal Water District Harbor/ South Bay Water Recycling Project
Affliliation: U.S. Army Corps of Engineers
No. pages: 27
No. maps:
Attributes: Archaeological, Field study
Inventory size:
Disclosure: Not for publication
Collections: No

General notes

Associated resources

Primary No.	*Trinomial*	*Name*
P-19-000094	CA-LAN-000094	RACER'S SITE #6A (2 SITES M
P-19-000098	CA-LAN-000098	RACER'S SITE #10, Suangna In
P-19-000103	CA-LAN-000103	RACER'S SITE #17
P-19-000140	CA-LAN-000140	Nelson #8 Camp Site
P-19-000276	CA-LAN-000276	Racer's Site #5
P-19-000277	CA-LAN-000277	Tor. 2
P-19-000278	CA-LAN-000278	Tor. 3
P-19-000279	CA-LAN-000279	Racer's Site #4
P-19-000280	CA-LAN-000280	Eberhart #11
P-19-000281	CA-LAN-000281	Tor. 6
P-19-000282	CA-LAN-000282	Duplicate of LAN-94
P-19-000389	CA-LAN-000389	DOMINGNEZ HILLS #2
P-19-000390	CA-LAN-000390	DOMINGNEZ HILLS #1
P-19-000709	CA-LAN-000709	
P-19-000794	CA-LAN-000794	Carson l
P-19-000822	CA-LAN-000822	
P-19-000844	CA-LAN-000844	
P-19-000845	CA-LAN-000845	
P-19-000847	CA-LAN-000847	
P-19-000848	CA-LAN-000848	
P-19-000999	CA-LAN-000999/H	Eggers' Areas A, B, and C
P-19-001735	CA-LAN-001735	PTV-1

No. resources: 22
Has informals:

Location information

County(ies): Los Angeles
USGS quad(s): INGLEWOOD, LONG BEACH, REDONDO BEACH, SOUTH GATE, TORRANCE
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	10/24/2011	agarcia
Last modified:	8/7/2014	agarcia

IC actions:

Record status:

Report Detail: LA-11482

Identifiers

Report No.: LA-11482

Other IDs:

Type	*Name*
Other	Racer's sites

Cross-refs:

Citation information

Author(s): Racer, F.H.
Year: 1939
Title: Camp Sites in Harbor District - F.H. Racer
Affliliation:
No. pages: 8
No. maps: 0
Attributes: Other research
Inventory size:
Disclosure: Not for publication
Collections:

General notes

Mapped on SCCIC basemaps, but no maps included with records or reports. Map locations may not be exact and may be estimates based on other source material.

Associated resources

Primary No.	*Trinomial*	*Name*
P-19-000057	CA-LAN-000057	Lindberg Park Site
P-19-000060	CA-LAN-000060	Malcolm Farmer's Playa del Rey
P-19-000088	CA-LAN-000088	Racer's Misc Sites #1 and Racer
P-19-000091	CA-LAN-000091	RACER'S SITE #3
P-19-000094	CA-LAN-000094	RACER'S SITE #6A (2 SITES M
P-19-000096	CA-LAN-000096	RACER'S SITE #7
P-19-000097	CA-LAN-000097	RACER'S SITE #8
P-19-000098	CA-LAN-000098	RACER'S SITE #10, Suangna In
P-19-000099	CA-LAN-000099	RACER'S SITE #11
P-19-000100	CA-LAN-000100	RACER'S SITE #12
P-19-000101	CA-LAN-000101	RACER'S SITE #13
P-19-000103	CA-LAN-000103	RACER'S SITE #17
P-19-000104	CA-LAN-000104	RACER'S SITE #18; 18A, 18B (
P-19-000105	CA-LAN-000105	RACER'S SITE #19
P-19-000106	CA-LAN-000106	Racer's Site #21
P-19-000107	CA-LAN-000107	RACER'S SITE #20
P-19-000138	CA-LAN-000138	MALAGA COVE
P-19-000276	CA-LAN-000276	Racer's Site #5
P-19-000279	CA-LAN-000279	Racer's Site #4
P-19-000285	CA-LAN-000285	Racer's Site #1
P-19-000288	CA-LAN-000288	Racer's Site #2

No. resources: 21
Has informals:

Location information

County(ies): Los Angeles
USGS quad(s): BEVERLY HILLS, INGLEWOOD, REDONDO BEACH, SAN PEDRO, TORRANCE, VENICE
Address:
PLSS:

Report Detail: LA-11482

Database record metadata

	Date	*User*
Entered:	2/7/2012	lnoyes
Last modified:	6/6/2018	sstjames
IC actions:		
Record status:		

Report Detail: LA-12440

Identifiers

Report No.: LA-12440
Other IDs:
Cross-refs:

Citation information

Author(s): Bonner, Wayne
Year: 2013
Title: Cultural Resources Records Search and Site Visit Results for AT&T Mobility, LLC Candidate LA0573 (NOLA Substation) 125 Griffith Street, Carson, Los Angeles County, California
Affliliation: EAS
No. pages: 12
No. maps:
Attributes: Archaeological, Field study
Inventory size:
Disclosure: Not for publication
Collections:

General notes

Associated resources

Primary No.	*Trinomial*	*Name*
P-19-000088	CA-LAN-000088	Racer's Misc Sites #1 and Racer

No. resources: 1
Has informals:

Location information

County(ies): Los Angeles
USGS quad(s): TORRANCE

Address: *Address*	*City*	*Assessor's parcel no.*	*Zip code*
125 Griffith St	Carson, CA		

PLSS:

Database record metadata

	Date	*User*
Entered:	2/18/2014	lnoyes
Last modified:	10/4/2016	rmoritz

IC actions:
Record status: Verified

LA4512 File

1) Archaeological Survey
13) Management Plan

NOT FOR PUBLIC DISTRIBUTION

Suangna Villas-I
LAn 88
LAn 89
LAn 106
Carson 1 - LAn 794
Carson 2 - LAn 795
Carson 3 - LAn-98

22) General/specific Plan

CULTURAL RESOURCES INVENTORY OF THE CITY OF CARSON, CALIFORNIA

torrance (904)
LONG BEACH (893)

PREPARED FOR THE COMMUNITY PLANNING DEPARTMENT
CITY OF CARSON, CALIFORNIA

SOUTHGATE (892)
INGLEWOOD (901)

LOS ANGELES Co.

By A. V. Eggers
Consulting Archaeologist

February 18, 1977

292 pages

TABLE OF CONTENTS

		Page
	Preface	i
I.	Introduction - Scope and Purpose of the Study	1
	Methods Used to Inventory Cultural Heritage Resources	3
	a. Record Search	4
	b. Field Survey	6
	c. Data Evaluation and Report Preparation	7
	Areas and Sources Not Included in the Inventory	8
II.	The Significance of Cultural Heritage Resources	10
III.	The City of Carson's Environmental & Historical Setting	14
	Geology and Environmental Setting	15
	The Cultural Background	19
	1. The Native American Period	20
	The Early Man Phase	20
	The Millingstone Phase	21
	The Intermediate Phase	22
	The Canalino Phase	23
	2. The Hispanic Period	25
	3. The American Period	29
IV.	The Cultural Heritage Resources of Carson	35
	Results of the Field Survey	35
	Recorded Cultural Heritage Resources in Carson	35
	Summary of Existing Cultural Heritage Resources & Sensitive Areas	42
	Native American Cultural Heritage Resources	42
	1. Suangna Village	42
	2. LAn 88	45
	3. LAn 99	47
	4. LAn 106	49
	5. Carson 1	51
	6. Carson 2	54
	7. Carson 3	58
	Hispanic Period Cultural Heritage Resources (1770-1849)	63
	1. Eastern Road From San Pedro Harbor to Los Angeles and San Gabriel Mission	64
	2. Rancho Los Palos Verdes Boundary Line	68
	American Period Cultural Heritage Resources (1850-1976)	69
	1. The Old German Church	73
	2. Dominguez Water Company	74
	3. The Dominguez United Methodist Church	75
	4. Dominguez Elementary School	77
	5. Carson Elementary School	78
	6. Henri's Lariat	79
	7. First City Hall of Carson	81

Sensitive Areas 82

Area 1 83
Area 2 85
Area 3 86
Area 4 89
Area 5 90

V. Recommendations on CHR Policy & Conservation 91

A. Existing Policies & Guidelines for Cultural Heritage Resources 91

1. Federal Laws, Policies & Guidelines 91
2. State Laws, Policies & Guidelines 95
3. Regional and Local CHR Preservation Measures
4. Existing Policies & Program for the City of Carson

B. Proposals For A CHR Program For The City Of Carson

1. Establish a Formal Policy For CHR Management
2. Include CHR Management Programs in Development or Improvement Projects
3. Include CHRs and Sensitive Areas in Parks & Open Space
4. Promote a Public Awareness of the City's Heritage
5. Enforce Strict Compliance With Current Environmental Laws
6. Establish Interim Guidelines and Procedures for Projecting and Conserving Identified CHRs and Sensitive Areas
7. Establish Penalties for Failure to Observe Interim/Permanent Guidelines for CHR Conservation
8. Seek Determinations of Eligibility of Certain CHRs for the National Register of Historic Places

Bibliographic Sources Consulted

Groups, Agencies & Organizations Consulted

Persons Contacted

Figures

Maps

Appendices:

Appendix I. Glossary of Terms

Appendix II. Cultural Overview of Los Angeles County

Appendix III. Types of Archaeological Sites

Appendix IV. Reports on Surveys and/or Subsurface Tests at Carson 1, 2 & 3

PREFACE

This report contains data on existing and pre-existing cultural heritage resources of local, statewide and national significance located within the City of Carson. Because of the information included on the location of Native American sites and the possibility of disturbance to these resources from vandalism and unsystematic collecting, this report and the maps and other materials accompanying it, should not be made available to the general public or published in its present form. The historical information and precise locational data for the sites should be provided to persons demonstrating a justifiable need for or right to the material as described in the last section of the text.

I. INTRODUCTION

Scope & Purpose of the Study

The present study consists of an inventory and evaluation of the Cultural Heritage (ie., Prehistoric and Historic) resources located within the boundaries of the City of Carson. The study has been conducted in three parts, some of which were carried out concurrently. First, the history of human settlement on the Carson area was researched from documentary sources and informed persons. An attempt was also made to investigate the geologic and climatic environment of the area.

Second, a walkover survey of the undeveloped portions of the City was conducted by the Consultant and a trained crew. Archaeological and historical sites or structures were identified and mapped and, in one instance, systematic field tests were carried out as well. In the course of the walkover, attempts were also made to locate and assess resources identified from the background data. The methods employed are described in the following section and were designed to permit a more accurate and complete evaluation of the resources discovered. However, as will be seen, field tests and evaluations could not be made in all cases.

Thirdly, a set of policies and protective measures has been provided to the City for the conservation of its cultural heritage resources. These measures and policies are intended as guidelines for assessing and conserving such resources and for the preparation of environmental documents and grant applications. Procedures are also presented for the investigation of 'sensitive' areas (i.e., those adjacent to or containing, or known to have contained cultural heritage resources) prior to and/or during the introduction of changes in existing features or terrain so as to produce an adverse effect upon historical remains.

At the time that the survey was contracted and carriedout, the methodology, format and content of such inventories had only recently been conceived and the ultimate uses to which such data could be put were not clearly established. However, within the last few months, the State Coastal Zone Plan has been formally adopted by the Legislature, CEQA (California Environmental Quality Act) has been amended, the State Governmental Code (Section 65303) has been revised

to provide for the preparation of a special historical preservation element for general plans and the Office of Planning & Research (OPR) has issued guidelines to aid in preparing this element. Numerous Federal and State Grant-in-Aid Programs for cultural heritage resource protection and conservation have been instituted recently to facilitate the implementation of such elements as well as local ordinances and preservation programs.

Many federal assistance programs which involve the redevelopment of urban areas, the construction of housing or other programs (airports, highways, community land and water conservation assistance, water treatment, etc.) presently require archaeological/historical surveys or inventories to be conducted in the affected areas prior to the filing of applications. Plans for the adequate utilization of adverse impacts to entities of historical value must be presented to the granting or responsible agencies (in most cases) before such applications can be considered favorably. As a further aid to historical preservation, programs involving federal agencies can utilize a percentage of construction money, to survey affected areas and carry out effective investigation measures (P.L. 93-291)

Although many of these policies and laws were not in effect or formally established when the present inventory was begun, it was anticipated that governmental agencies were moving rapidly in these directions and the inventory was carried out with the aim of satisfying such requirements when formally approved. The third (final) section of the report deals with these subjects in greater detail.

In preparing this report, it has been necessary to utilize phrases and terminologies which are technical in nature or which have restricted definitions. Although a complete list of definitions is not possible given the nature of this report, a brief glossary of important terms which have been used repeatedly in text is presented in the Appendices. A brief table depicting major periods of history dating from the earliest known human occupation in recent times is also presented along with a general overview of major historic events which have affected the South Bay region.

Before proceeding to the body of the report, it should be noted in particular that the Consultant has tried to the extent possible to assess the current status of existing cultural heritage resources. The report to be

presented is evaluative in nature and is not intended to be a comprehensive history of the City of Carson or the adjacent area. Historical data is included only to the degree necessary to assess the scientific and commemorative value of cultural resources located within the city boundaries and to place them in general perspective. For more complete discussions of the history of the area, the reader is directed to the list of sources consulted which follows the text.

It should also be observed that the term 'cultural heritage resources' (or 'cultural resources') is gaining currently in environmental documents and scientific circles and reflects a change in the way in which archaeologists have come to view their data. Cultural Heritage Resources (referred to as 'CHR' in the text) include all sites, features, inscriptions, objects or remains which commmemorate, represent or relate to the activities of human beings previously occupying or utilizing a specific area. This term is preferable in many instances to previously current terms such as 'archaeological sites' or historical since it is more comprehensive and avoids the distinction between 'historic' and 'prehistoric' events.

The terms 'historic' and 'prehistoric/archeological', make an artificial distinction between peoples and events of the past based on the presence or absence of literacy and written documentation and also overstress differences in investigative techniques used by 'historians' (i.e, the students of written history) and 'prehistorians (i.e., 'archaeologists' who depend largesly on non-documentary data and excavation techniques to study man's past). Today's researchers are combining both techniques of study to investigate human history by means of reconstructing the cultural pattern(s) existing at a particular time. The term 'history', therefore, will refer to developmental changes in the cultural patterns occurring in an area from the earliest known time of occupation up to the present generation of inhabitants. Specific periods or patterns will be referred to in cultural terms (e.g., the Canalino Period, The Mission Period, the American Period) and the term 'prehistoric' will be avoided in the text of the report.

Methods Used To Inventory Cultural Heritage Resources

As stated above, the inventory of CHRs for the City of Carson was carried out in three stages each employing different data sources and investigative

techniques. A complete list of all sources consulted will be found following the text of this report.

a. Record Search

The initial stage of the inventory involved an investigation of existing data relating to CHRs within or near the City limits. Books, documents and records containing historical data on the South Bay Region were consulted and archival materials were located. Chief among these were the archives maintained by the Dominguez Water Company and presently housed in the Special Collections Room of the California State College, Dominguez Hills (CSCDH) Library, maps and papers in the Huntington Library, Southwest Museum, Title Insurance Company, and the Research Library and Archeological Survey at UCLA. Contacts were also established with the Los Angeles County Historical Commission, The Historical Society of Southern California, The California Historical Landmarks Commission and the History and Anthropology Departments of Regional Universities and Colleges. Archival materials housed at local museums and historical buildings, including the Dominguez Memorial Seminary, the Rancho Los Cerritos Adobe, the Los Angeles County Museum, the Los Angeles City Library, the Federal Records Center (Laguna Niguel) and the Bancroft Library, University of California, Berkeley.

In addition to consulting documentary sources, attempts were made to contact persons and organizations knowledgeable about the history and development of the South Bay Region. This was deemed to be of special importance to the record search because of the lack of written data available for the area and the need for specific information on recent history. Especially helpful in this regard were Mr. Arthur Reeves, Vice President of the Dominguez Water Company, Ms. Thelma Strelitz, Mr. William Snuddow, Mr. Richard Albertoni, Mr. Manuel Gonzalez, Mr. Cy Andrews, Mr. Randolph Carr, former attorney for the Southern Pacific Transportation Company, and his mother, Mrs. Franklin Carr, all of whom either gave freely of their knowledge or directed the Consultant to various data sources. Dr. R. C. Gillingham, author of the authoritative book The Rancho San Pedro, also generously gave of his time and provided valuable maps and photographs.

It is extremely unfortunate that one source, whose help would have been invaluable, was not available to the project. Mr. Victor Carson, grandson of

George Henry Carson and a relative of the Dominguez family who had lived in the Carson area since 1893 was terminally ill with cancer and could not be interviewed. A vigorous man who had a vivid and detailed knowledge of local history, Mr. Carson's recollections would have been of considerable aid in reconstructing the settlement patterns and environment of the region. It is fortunate that a portion of his recollections were obtained and recorded by Dr. Judd Grenier (Grenier, 1971).

As the study progressed, it became necessary to accumulate data on the extent of environmental change that had occurred in the Carson area as a preliminary step to the field survey. Grading and landfill permits and reports housed at Carson City Hall, the Los Angeles County Sanitation Department and the Los Angeles County Department of Regional Planning were examined and the data were plotted on large scale maps. Aerial photographs of the area dating to the 1920's (Spence-Fairchilde Collection) were examined and compared and surveyors, topography, land use and soil maps dating to 1896 were obtained or copies from the Los Angeles County Department of Regional Planning, the Los Angeles County Recorder's Office, the Huntington Library, UCLA Map Library and CSCDH Geography Department. Again Dr. R. C. Gillingham made available for the project his personal set of aerial photos of the Carson-Compton area taken in 1941. A very useful copy of the 1916 Soil Survey Map was obtained from the U.S. Soil Conservation Service office in Lancaster, California.

Extensive information concerning climate, terrain, vegetation and settlement patterns in the North Carson area was accumulated from flood records and well logs. The Los Angeles County Flood Control District, U.S. Army Corps of Engineers and especially the UCLA Water Resources Library, and the Dominguez Water Company were extremely cooperative in providing records and locating reports.

Similar cooperation was obtained from the Shell Oil Company and Atlantic Richfield (ARCO) Refining Company in providing locational maps and information regarding the placement of pipelines outside of street rights-of-way and in searching for historical data.

Following the collection of data and prior to the beginning of fieldwork, base maps were prepared for the Carson area showing the location and dimensions

of graded and filled areas, cultural heritage sites and undeveloped, unaltered property. Areas with extensive grading and which contained no known CHRs were to be avoided in the field survey phase of the project and inspections and walkovers were to be confined to the relatively undeveloped and unaltered portions of the City.

b. Field Survey

Following the accumulation of a sufficient amount of data and the preparation of the base maps, a systematic walkover survey of potential and known sensitive areas of the City was begun. Since the area north of the San Diego Freeway and surrounding Dominguez Hill was the least developed, the initial surveys were conducted here and then extended south and west as far as the city limits.

All surveys were conducted in the same manner. The Consultant and a crew of trained assistants (mostly students from CSCDH and Long Beach State University) obtained written or verbal permission to investigate a particular parcel from the owner, leaseholder or other responsible agent. When the owner or responsible agent could not be located or contacted, surveys were carried out only on portions of the property which could be observed from public access areas, rights of way or easements or adjoining private property for which permission could be obtained.

Once access to a property was obtained, the soil surface of the parcel or lot was examined on foot by the Consultant and field crew in a systematic and thorough fashion. The subject property was apportioned into areas which were then walked over in a series of roughly parallel transects by 2-3 crew persons. The transects varied slightly according to the requirements of terrain and existing structures but were usually spaced 10 meters apart. Each crewperson followed the line of a particular transect in a zig-zag fashion in order to insure a visual inspection of at least 50-70% of the ground.

Prior to surveying large tracts, sketch maps were prepared locating all boundaries, structures and major features of the terrain. These maps were used to record features observed during walk-overs and were incorporated into the field notes. Smaller properties or individual lots did not require the prior preparation of maps but such were drawn in the field and included in the records as circumstances dictated. In some cases, especially those in which significant remains had been identified, a Transit, Brunton Compass and Stadia Rod were

employed in order to obtain exact dimensions and locations of features or collected objects.

Extensive field notes were kept for each property surveyed and special attention was paid to describing structures of potential historical value (e.g., Keystone Baptist Church, etc.). Residents or lessors on or adjacent to a subject property also were contacted in such instances in order to acquire additional background data where available. Observations on the appearance of the soil, vegetation patterns and extent of cover, climate and degree of disturbance of the terrain were also recorded. Parcels were also examined for streambeds, roadcuts or erosion features which would provide clues as to buried features and subsurface soils not otherwise detectable from the surface alone.

Attention was focused primarily on the location, distribution, associations and context of shellfish, faunal and aboriginal (pre-European) cultural remains. Whenever such items were encountered along a transect, the remains were plotted and tentatively identified. In certain instances, as described in the text below and in the appended test excavation report, it was necessary to remove items of particular scientific interest from the surface for further study and such items were mapped in place and described in the field notes prior to collection.

Because of the need for close, detailed and accurate visual observation, the field survey phase was carried out during winter daylight hours (8-4 A.M.) on days when ground fog and rainfall were not an obstructing factor. In some instances, dense vegetation or man made structures prevented observation of the native soil surface and special procedures were required. In areas of thick grass or dense shrubbery, the distances between the transects were proportionately reduced and the area was covered more intensively. Greater attention was paid to natural and man-caused features which partially exposed the soil surface (e.g., rodent burrows, footpaths and trans, plowed or disked areas, etc.) as indicators of the presence of remains.

c. Data Evaluation and Report Preparation

Following the completion of the data collection and field survey phases, the material recovered was analyzed and evaluated for the area as a whole. In some cases, the data obtained was incomplete and further research was necessary

before a conclusion could be reached or the subject matter could be incorporated. This was especially true for the historical data for the Americanization period for the Carson area.

The complete data was then assessed in light of emerging and existing legislation and the General Plan in order to designate immediate and long range policies and goals for the City. Existing and proposed ordinances and policies for other communities and governmental entities also were reviewed and examples were selected for inclusion in the report as models. A series of recommendations were generated which would enable the City to meet its present and future obligations for CHR identification and conservation.

Maps and figures prepared prior to the beginning of the field phase were updated and redrawn for inclusion in the final report. Also included as an Appendix is a report on test excavations conducted at one aboriginal site (Carson 1) which was identified during the survey.

It should be noted that the text of the report on the results of the record search and survey focuses on data which either extend existing knowledge or else add new information not otherwise available. Material which is already well known or easily obtainable from existing sources is not treated in detail but may be summarized or referenced in the text or included as an Appendix. It is hoped that the deletion or abridgment of such data will reduce the bulk of the report, make it more readable and spotlight the conclusions and recommendations presented. In this way, the report will serve as a source document on local history and as a basis for considering and formulating future civic actions.

AREAS & SOURCES NOT INCLUDED IN THE INVENTORY

Because of time limitations, the inaccessibility of necessary data of persons or the denial of permission to enter private property, not all of the city area could be researched or surveyed, including some portions of the city which were suspected to contain valuable resources. The majority, however, consisted mainly of areas now severely altered by grading or landfill operations or by residential, commercial or industrial development. Also included are several properties which had been surveyed previously by the Consultant although the results obtained from these surveys have been consulted and presented below where pertinent.

The areas excluded from the survey are listed as follows:

1. The Shell Chemical Company plant located between Chico and Perry Streets on the west, Del Amo Boulevard on the north, Wilmington Avenue on the east, and Martin & 213th Streets on the south. Permission to survey was denied (see text below).

2. The Campus of California State College, Dominguez Hills located between Victoria Street on the north, Avalon Boulevard on the west, Del Amo Boulevard on the south and Central Avenue on the east. The property belongs to the State of California.

3. The Arco Refinery bounded by 223rd Street on the north, Wilmington Avenue on the west, Sepulveda Boulevard on the south and the Southern Pacific Railroad tracks on the east. Previous research (Eggers 1974, Williams 1971) showed that the area had been heavily modified to accommodate and support the existing facilities; however, data from test cores and well logs on the property were consulted during the record search and evaluation phases of the inventory.

4. The Shell Oil Refinery located south of Sepulveda Boulevard and east of Wilmington Boulevard up to the city limits. See comment on Arco Refinery above.

5. Landfill Areas. Nos. 1-21 located north and south of the San Diego Freeway (see Map 4). All existing records and files on these areas were examined at the Los Angeles County Engineer's Offices. However, records on landfills #1, 3, 12, 13, 14, 16 & 17 could not be located and were reported as having been discarded. (Mr. Ken Harvey, personal communication). A study of the existing records showed that prior to raising the elevation of the lava in a project area, the ground was excavated to a depth of 10-20 feet below the original surface and soil removed was replaced and compacted along with the fill materials. The grading of the original surface would have effectively removed and destroyed any cultural remains or data present on the project area.

Note: Landfills No. 20 and 21 are not shown or Map 4. Number 20 (M.H. Brown Dump Site) is northwest of No. 12 between 190th and Figueroa Streets and The Dominguez Channel. Number 21 (Mar-Glo Paint Company) is an irregularly shaped area located between Broadway and Main west of the paint factory (Sanitary Landfill File I-981; See Map). Additional grading operations have also

recently been carried out on areas adjacent to the site of the Carson Mall located between Del Amo and Avalon Boulevards, the Perry Street extension and the San Diego Freeway. Areas were surveyed only where grading operations had only begun or had not progressed to the point where fill materials were being deposited. The margins of landfills 18 & 19 were examined since the adjoining areas had been plowed but not otherwise significantly altered (see Eggers 1976a).

6. The San Diego and Harbor Freeways Rights-of-Way had previously been examined for archaeological remains prior to construction by Caltrans. Data from these surveys were examined during the inventory.

7. Specific Portions of Properties and Land Surfaces Where the Original Land Area(s) Was Obscured by Existing Structures or Features (other than fill materials; see above, No. 5). Unobscured land surfaces adjacent to the structures or features were examined and were considered as a (non-random) sampling of the whole area.

8. Rights-of-Way of Flood Control Channels had undergone considerable modifications and also contain extensive structures which prevent examination of the ground surface.

THE SIGNIFICANCE OF CULTURAL HERITAGE RESOURCES

CHRs have only recently been recognized as valuable resources by governmental entities. Until 1970-72 when the restrictive interpretation of CEQA was expanded to include private projects and environmental concerns were more precisely defined on both the State and Federal level, historical resources and remains were considered to be the special province of scholars, amateur collectors and special interest groups. Cultural heritage resources received little recognition from planners or formulators of policies and conservation was either

ignored or else carried out in a haphazard or arbitrary way.

Although major events and personages were often commemorated by plaques and structures such as birthplaces of important figures (e.g., Presidents, Generals, Inventors, Founders and Explorers, etc.) or early structures of historical significance have been preserved or restored (e.g., Dominguez Adobe Heritage Park [L.A.], Banning House, the Drum Barracks, etc.), such actions were often taken independently and many were privately financed. Some were included in parks maintained by governmental agencies (e.g., Pt. Fermin Lighthouse, Los Angeles Arboretum [Hugo Reed Adobe], Los Cerritos Adobe, etc.) or given special protection (e.g., Avila House, San Gabriel Mission). Despite such actions, a large number of significant remains have been lost or purposely destroyed (e.g., San Fernando Mission) to make way for urban development. In some cases, the loss has occurred because a structure has deteriorated through lack of upkeep and funds have not been available to restore it and maintain it in accordance with safety and building codes.

The greatest loss has been felt in the case of CHRs dating to aboriginal times. Although once numerous in the South Bay area, habitation sites of peoples such as the Tongva ("Gabrielino") have been rapidly disappearing, as the present report will clearly demonstrate. Much of the loss can be attributed to the effects of urbanization but the greatest single factor is a lack of public awareness both of the existence and significance of such sites. 'Indian' artifacts have tended to be highly perishable and even the living structures ("wickiup ") were made of materials such as tule reeds, branches and hides which decayed rapidly. Artifacts were also largely made from oceanic materials except for stone ('lithic') tools and vessels and are rarely preserved. Cultural behavior and institutions (religion, political practices, ethics, etc.) are now extinct, along with the Tongva themselves, and have only been partially noted and recorded by European and American observers. As a result, an estimated 50-80% of aboriginal remains in the Los Angeles area have been destroyed, in most instances without having been recognized or recorded (Moratto 1973, State Task Force Status Report 1973).

In recent years public and governmental awareness of the significance and value of CHRs has greatly increased. Organizations, agencies and civic officials have realized that systematic CHR preservation and conservation programs

can bring a variety of benefits to a community or region. Most of these benefits have been itemized and discussed in State and Federal documents which have been widely distributed (e.g., California Historic Preservation Element Guidelines 1976, the California History Plan, Volume 1, 1973; Publication '11593', Office of Archaeology & Historic Preservation, Department of the Interior) and will be presented here in summary form:

Cultural Identity. A knowledge and understanding of the history of the peoples and developmental events and processes of an area provide its inhabitants with a sense of identity and place. By increasing civic pride, the inhabitants of an area are encouraged to commit themselves to improving standards of life and to become involved in civic projects. Such increased pride helps to reduce crime, relieve urban blight, attract new residents and provide ethnic groups (e.g., native Americans, Hispanic speakers, Asian-Americans, etc.)

Reconstructing the Past. Many people have a curiosity about and interest in the past both of their own and other areas. Museums housing objects of historic value and rehabilitated historic structures and landmarks develop and expand this interest.

Economic Benefits. These are many and varied, including raising the value of property, cutting the costs of redevelopment of innercity areas, provide interest and variety to blighted areas, and reducing the costs of upkeep and costs by utilizing recently enacted tax laws (e.g., the Tax Reform Act of 1976) which provide for depreciation allowances, reconstruction cost deductions and charitable deductions on historic property. A major economic benefit accrues from increased tourism to an area (e.g., Avila Adobe and Olvera Street in Los Angeles, Oldtown in San Diego, Ghiradelli Square in San Francisco) which will often lead to increased employment and development.

Benefits to Long Range Planning. An inventory and understanding of cultural heritage resources and their place in local history can promote a more effective appraisal of prospects for future development and of community needs and limitations. Such long range prospects can be formalized and incorporated into General Plans as a means of gaining public cooperation

and involvement (see California Government Code, Section 65860).

Southern California has a history of development that is colorful and worthy of pride and a sense of accomplishment. Its population is ethnically diverse and widely distributed, lacking a definite and tangible focal point such as a large metropolitan center and compact communities. Many cities and towns have developed recently and lack a unified theme in architecture or general layout. Some, such as Torrance, began as industrial cities and have diversified into residential and commercial centers or vice-versa. By drawing on the past and incorporating it into present day life, many of the decentralizing forces can be mitigated, and a sense of community and permanence can be encouraged.

The Los Angeles region contains one of the largest Native American populations in the nation. These people have a rich and varied cultural heritage which dates back more than 25,000 years in the Southwestern and Pacific Coast region. With the European exploration and colonization of the area, these peoples suffered a rapid and disastrous decline and their traditional culture underwent extensive modification. Since they were illiterate themselves and the European population was primarily interested in the prospects of Native Americans as laborers and converts to Christianity, few records were made of their life styles, beliefs or social systems. The existance of peoples ancestral to those encountered by the Spanish is not documented by written records of any type. Many groups which were present during the Spanish and Mexican periods (e.g., the Tongva, Serrano, Luiseno, etc.) have recently become extinct or so reduced in numbers and modified by European culture that they no longer remember aboriginal life patterns and ideologies.

The study and reconstruction of Native American cultural heritage in Southern California requires a combination of documentary research and archaeological techniques. The general outlines of the latest period of aboriginal history can be construed from explorers' diaries, Missionairies' reports and settlers' descriptions and observations. However, the bulk of the detailed information can only be reconstructed from sites which have been carefully excavated and analyzed under controlled conditions. Such sites are the only

repositories of historical information for aboriginal culture(s) predating the first European contacts and the loss of these resources might permanently prevent a meaningful study of cultural patterning and development for large periods of time.

To carry out a meaningful reconstruction of non-literate, extinct cultures not only is it necessary to carefully excavate existing remains and to extract as much data as possible, but such sites as are dug must be as little damaged or disturbed as possible. If the artifacts and traces of human activity are in their original contexts, much can be deduced from their associations and stratographic positions. However, once these positions are disturbed or the materials removed unsystematically, such deductions are difficult or impossible to make and the loss of data is irremediable. In view of the large number of sites which have already been damaged or destroyed, the scientific and historical value of those remaining is very much greater than before and special efforts must be taken to prevent further unnecessary uses of information and existing remains.

The 'unlocking' and recovery of data from archaeological sites can only be done at the present time through excavation utilizing specialized tools and techniques. Such procedures are time-consuming and costly and involve trained personnel. In order to successfully excavate a site, time is required to uncover, record and remove the remains so as to permit a meaningful interpretation of the patterning and a reconstruction of the culture of the inhabitants. Since excavation is itself destructive, however much controlled, it is preferable to delay digging a site until it can be done properly and in such a way as to insure the recovery of a representative sample of the data content. If this is not possible then effective measures should be taken to insure the protection and preservation of the CHR in its present state until it can be properly examined.

THE CITY OF CARSON'S ENVIRONMENTAL AND HISTORICAL SETTING

Before presenting the results of the CHR inventory, a brief review of the physical environment and history of the Carson area is necessary. Numerous books and documents exist which focus on or include these subjects (e.g., Jerrills 1972, Gillingham 1961, Fink 1966, Woodring, et al, 1946, Poland et al, 1956, Johnston 1962, Cleland 1951, Ludwig 1927, Gales 1974, Thacker 1923,

Bates 1963, Bancroft 1886, Banning & Banning 1930, Robinson 1939 etc.) and a complete summary of all the data will not be attempted here. Instead, the present section will be concerned with data that will compliment and expand existing accounts and which will provide background material for later discussions. It will also demonstrate some of the difficulties encountered in compiling a comprehensive and detailed history of the City area.

GEOLOGY AND ENVIRONMENTAL SETTING

The City of Carson is located on an alluvial coastal plain (the Torrance Plain, Reagan 1915b) extending north from the present Los Angeles and Long Beach Harbors. The plain is flat and marshy and is dominated by two prominences; Dominguez Hill in the north with an elevation of 179 feet above sea level and the Palos Verdes Hill to the southwest which rise over 1400 feet a.s.l. Except for these landmarks and for the existance of several small marshy lakes (Harbor Lakes), channelized streams (Dominguez Slough, Compton Creek) and rivers (Los Angeles River) the plain is featureless and reaches a maximum elevation of 35-40 feet a.s.l.

The region has a mild climate with an annual mean temperature of 62° Farenheit and a single season (November-April) of moderate (c. 12-15 inches) rainfall (U.S. Weather Bureau Statistics; Bates 1963). Vegetation is presently sparse over much of the area but varies according to elevation, degree and orientation of slope and the availability of water. Marshy soils and lake shores support growths of Alder (Alnus rhombifolia), Willow (Salix sp.), Rushes (Juncus sp.), Cottonwood (Populus trichocarpa), Bulrushes (Scirpus sp.), and Cat-Tail (Typha sp.). Scrub, Valley and Coastal Live Oak are found in canyons and drainages and on the higher, northern elevations of Palos Verdes Hills. Cactus (Cholla, Prickly Pear), Toyon, Yucca, Coastal Sagebrush and Sugarbush (Rhus Ovata) occur on the drier and sunnier slopes. The remainder of the coastal plain supports a variety of grasses (Deergrass, Giant Rye Grass, Pepper Grass), Buckwheat, Sagebrush and Chia as well as occasional groves of Eucalyptus and other non-indigenous trees and shrubs (Butler 1974, Curtis 1959, Bates 1963).

Domesticated livestock (cattle, sheep, etc.) presently make up the bulk of the (land) animal life and indigenous fauna includes only small populations of Coyote, Gray Fox, Mule Deer, Skunk, Weasel, Badger, Snakes, Lizards, numerous rodents (mice, gopher, squirrel) and rabbit. Offshore and littoral marine environments still contain large seasonal populations of fish, sea

mammals and shellfish as well as birds that feed off of them and which inhabit the lagoons and terrestrial marshes.

The geologic structure and lithology of the region is complex and has developed over a period of 20 million years. In Miocene times, the coastal plain, especially in the Carson area, was submerged by the sea. Only the Palos Verdes Hills were above sea level and formed a part of an extensive seacoast highlands including the Santa Monica Hills (Woodring et al 1946). At this time volcanos were very active, depositing extensive beds of lava on the floor of the Los Angeles Basin which was also beginning to form as the result of subsidence (Yerkes et al. 1965). By Pliocene times, the floor of the Basin contained stratified layers of lavas and sediments over 10,000 feet thick. However, continuing periods of deformation (folding and tilting) and subsidence of the surface kept the area below sea level.

From late Miocene times until the Upper Pleistocene period, marine sediments continued to accumulate in the Carson area. However, during the latter period deformation and uplift occurred which raised the Palos Verdes Hills nearly to its present elevation (A.S.L.) and created the geologic dome now called Dominguez Hills (Poland et al, 1956). Much of the surface of Los Angeles Basin was then above sea level and terrestrial alluvial sediments began to accumulate on top of the older marine deposits (Poland et al, 1956, Yerkes et al 1965). Many of these late Pleistocene and recent deposits which consist of interbedded clays, gravels, silts and sands trapped or directed the flow of ground water and created the aquifers and artesian flows which at the beginning of the 20th century constituted the major source of water for the Carson area (Poland et al 1956, Reagan 1915, Board of Engineers Flood Control Report 1915). These deposits have produced several 'perched' fresh water tables which have been fed by runoff and by underground flows from highlands located to the north. However, recent demands for water by residents, farmers and industrial companies have depleted these tables and have caused the intrusion of sea water.

As the land rose during late Pleistocene, deformation caused a considerable amount of faulting and folding. A roughly parallel series of anticlines, synclines and faultlines formed in the Torrance Plain which, in turn, were crossed by the Los Angeles River following its present course. The uplift of Dominguez

Hill and the formation of the Wilmington syncline with its NW-SE axis created a small swale in the Carson area (Poland et al 1956, Yerkes et al 1965). This, combined with the creation of offshore coastal sand bars in San Pedro Harbor, resulted in the formation of marshes and shallow lakes (e.g., Watson Lakes, Habor Lakes; see maps) in the lowlying portions of the landscape which were fed by artesian springs and overflow from the partly impeded Los Angeles River. Periodic flooding greatly increased both the amount of the overflow and the extent of the lakes. During the 1914 flood it has been estimated that as much as 3000 acres were under water in the area of the Dominguez Slough (also known as Laguna Dominguez [See Maps], Reagan 1915a, Grenier 1976, Jerrills 1972).

The formation of the coastal bar, besides creating Watson Lakes, also established a wide delta at the mouth of the southward flowing Los Angeles River. The delta area accumulated large quantities of sands and silts, some derived from terrestrial sources, others (mainly sand) from the ocean which over time has made periodic incursions. Consequently, the mouth of the Los Angeles River has alternated between being a salt water (tidal) and fresh water marsh for at least the last few thousand years B.P. (before A.D. 1950) which has extended from the present San Pedro Bay shoreline northwards to Sepulveda Boulevard.

Stream and river flow in the Los Angeles area has been intermittent and has undergone several major shifts over time. Geologic and geomorphological studies (see Reagan 1915, Poland et al 1956, etc.) of the Los Angeles River indicate that while having changed course drastically and repeatedly over the centuries, it has occupied only three main river beds. The major bed appears to be that which it currently occupies and which has recently been channelized by the U.S. Army Corps of Engineers. However, historical records and accounts (Guinn 1914) show that prior to 1824 (1815-1824?) the river flowed westwards from the vicinity of the former Pueblo de Los Angeles into Ballona Creek and Ballona Lagoon (now Playa del Rey). The flood of 1825 was of such magnitude that the river jumped its bed and occupied its present course until 1889 when two floods occurring in the same year (possibly the heaviest on record; See Reagan 1915b) caused a shift eastwards through the present city of Vernon and then back into its old channel north of its junction with the Rio Hondo. However, the latter shift was only temporary and the river had reestablished its present bed by the 1890s. The San Gabriel River has also changed its course

in its lower reaches, fluctuating between its original bed flowing into Alamitos Bay and an intermittent channel connecting with the Los Angeles River below Dominguez Junction on the Southern Pacific Railroad. Whenever such a merger occurred, extensive flooding was observed in the area of Dominguez Slough and the Los Angeles River Delta (Reagan 1915a).

The flatness of the coastal plain and the proximity of inland highlands and mountain ranges have combined to make flooding a recurring phenomena in the Carson area. During the years 1811-1954 at least 21 major floods have been reported for an average of one every 15-16 years (Bigger 1959). By adding in the dozen or so smaller floods that have had only localized impact, the rate is reduced to one flood per decade. Much of the damage from these events has been greatly reduced by the construction of check dams and flood channels along the major river systems, but accumulations of water due to runoff continue to inundate lowlying and marshy areas within the city at the present time.

These floods and the shifts in the drainage patterns had major consequences for local environments. Guinn (1914) has collected and published accounts of observers of the 1832 flood which relate how the flow of streams so changed that a number of lakes and ponds in the vicinity of Wilmington, which until then had been permanent, became nearly dry after a few years and 'forests' of Willow and Alder disappeared. Heavy deposits of silt also accumulated in the delta areas in back of Rattlesnake (i.e., Terminal) Island. Although many of these effects may indeed have been due to changes in drainage patterns, it should be noted that the years 1833-1862 were 'dry' years during which little or no flooding occurred. The effects produced by man, especially as a result of ranching and raising livestock, also must have reinforced natural trends and could certainly account for much of the 'deforestation' (see acounts of O. E. Elftman, C. W. Caseboom, Edward Carson in Reagan 1915a). These effects will be discussed in greater detail in the sections to follow.

Soils in the Carson area, as stated earlier, consist mainly of alluvial sediments including loams and adobe/clays with intermixtures of sand and silt. Small pockets of beach sand containing shell and wind-deposited dune sands occur on the flanks of Dominguez Hill and immediately south of the San Diego

Freeway in the downtown area (Nelson et al, 1919). Most of the loams and clays are of Pleistocene age and were laid down as the ocean shoreline retreated westward and south. These include the Ramona and Montezuma series which cover Dominguez Hill and the area south of Dominguez Slough. In Post-Pleistocene times, recent sediments; i.e., the Hanford, Yolo, Chino and Tujunga series, were deposited along the Los Angeles River drainage and were extended into the Dominguez Slough by flooding.

Most of these soils are extremely fertile and have been the basis of a thriving truck farming and livestock raising industry since the latter part of the 19th century (Nelson et al, 1919, Jerrills 1972, Gillingham 1961). Crops included sugar beets, grains, alfalfa, beans, potatoes, lima beans, lettuce, strawberries, and deciduous fruits continue to be major staples grown on the well drained, moisture-retaining Pleistocene and recent soils, most of which could be dry-farmed or only minimally irrigated. The marshier and more saline soils at the foot of Dominguez Hill and east of Dominguez Slough were used primarily to graze cattle and sheep until the 1930's (Grenier 1976, Jerrills 1972).

THE CULTURAL BACKGROUND

Recent archaeological evidence and historical records demonstrated that human populations have inhabited the Carson area and vicinity for at least 8000 years. This long record of habitation can be divided into three major periods; i.e., the Native American ('Indian') period, the Hispanic Period and the American Period, each of which can, in turn, be subdivided into phases distinguishable by particular ethnic and cultural characteristics. These periods and phases have been described in detail for the Los Angeles Region in numerous works (see Bibliography) and will not be presented in the text of this report. However, a summary of the various distinguishable phases of the Native American Period is included in the Appendices along with a chronological chart and reference should be made to this Summary to supplement the material discussed below. The purpose of the discussion to follow is to relate regional history to the Carson area and to extrapolate from the data an understanding of the cultural heritage of the city from earliest times.

As stated in the section on Methods above, historical information for the Carson area is limited in scope and content. Historians have focused mainly on the development of the city of Los Angeles and of the San Pedro-Wilmington areas because of their importance as centers of industry, commerce and residential growth. Until recently, the Carson area was used primarily for ranching and farming and was unable to support urban development because of periodic flooding. As a result, the history of the city has had to be extrapolated from the regional data and from secondary sources.

1. THE NATIVE AMERICAN PERIOD

Although 95% of the time of human habitation of the South Bay area is included in the Native American ('Indian') period, only the cultural practices of the latest phase; i.e., the Canalino, are known. Kroeber (1953), Johnston (1962), Wallace (1955) and others have supplemented archaeological evidence (e.g., Walker 1951, Meighan 1954a, Bates 1963) with gleanings from ethnographic studies and the accounts and descriptions of explorers, missionaries and settlers in order to reconstruct the basic life styles of these people and research continues to close the gaps in the existing record.

Phases pre-dating the Canalino Phase have been reconstructed solely from evidence derived from excavations of archaeological sites in the Los Angeles area. Most of the excavation sites are located in Santa Monica, Ventura County and Orange County but a number of significant finds have also been made in San Pedro, Redondo Beach, Marina del Rey (Ballona Creek) and the Palos Verdes Peninsula. However, only a few of these sites have as yet been extensively studied.

THE EARLY MAN PHASE

The earliest dated evidence of human presence in the Los Angeles Basin was found in the Ballona Creek-Angeles Mesa (Baldwin Hills) area. Here in 1936 a skeleton was recovered from a depth of 12-13 feet below the surface of the ground along with remains of an extinct mammoth elephant (Lapotin 1936). Radiometric analyses have demonstrated recently that the human remains date to 23,600 years B.C. The six skeletons recovered from Angeles Mesa under similar circumstances have not yet been dated but they also appear to be of great antiquity.

It is unfortunate that no artifacts of other cultural remains were recovered from either site.

The oldest cultural remains from the Los Angeles Basin were found in the La Brea Tar Pits. Two pits dug to a depth of 6-10 feet produced the skeletal remains of a woman, animal bones showing knife cuts and a total of 15 artifacts including a type of projectile point rarely found in coastal sites (Woodward 1937, Stock 1942). The finds have been dated to between 5-13,000 years B.C.

Although lacking in skeletal material and as yet poorly dated, remains of early man have been recovered on Palos Verdes Peninsula. In 1936, Mr. E. F. Walker of the Southwest Museum and a group of volunteers excavated a deeply stratified site on a sand dune on the bluff overlooking Malaga Cove. Known to be the location of the Canalino phase village of Chowingna at the time of Spanish exploration, the site proved also to be a succession of four occupations, the oldest of which may have an antiquity of nearly 8,000 years. The four cultural layers (I-IV) contained quantities of artifacts and evidence of human occupation and, at present, the site represents the longest continuously inhabited site in the Los Angeles area (Walker 1951). If geological evidence can be borne out by radiometric testing, it is possible that the oldest occupation (Level I) may date to the late Pleistocene Period (Woodward et al, 1946).

The cultural remains from Level I were not as numerous as those from overlying levels but they do provide insight into the cultural patterns of the Millingstone era. Stone artifacts include scrapers, microliths, knives, several hollow-based projectile points, atlatl darts, hammerstones and flaking debris. Tools of shell (abalone shells plugged with asphaltum), shell disc beads, incised stones and bone implements including points and harpoons, grinding stones also were found. Most notably, Level I contained large quantities of fish, shellfish, bird and land/sea mammal remains indicating that the occupants had been skilled exploiters of native marine and terrestrial food resources. However, food processing artifacts especially stone grinding tools (manos, metates, mortars, etc.) were conspicuously absent from the assemblage although the presence of tar-coated pebbles indicates that the art of basketry was known (Walker 1951).

THE MILLINGSTONE PHASE

Level II was a thin layer overlying Level I and representing the beginning

of post-Pleistocene (recent) dune sand accumulation at the site. The layer yielded small cairns of stone with re-interred human remains (i.e., 'reburials'), manos, metates, a single small mortar and pestle, and several soapstone (steatite) specimens (Walker 1951). The steatite is significant since a major source of this material is found in Catalina Island implying that the inhabitants of Malaga Cove were capable of long range trade in sea-going boats. The contents of Level II closely resemble those from sites in the Santa Monica mountains, the San Fernando Valley, Santa Barbara and San Diego, and Wallace and others describe the assemblage as belonging to the Millingstone Phase of Southern California (Wallace 1955, Kowta 1969, Treganza and Biermian 1955).

Other sites in the South Bay area have yielded remains dating from this period. The best studied of those is the "San Pedro Harbor Site" (LAn 283), situated just north of the intersection of Gaffey Street and the Harbor Freeway. Although once a large shell midden covering more than 5 city blocks, recent urban and highway development had disturbed or destroyed much of the site and had caused a mixing of stratographic levels. However, the recovery of large projectile points, discoids, a variety of Millingstones and a cogged stone, (an artifact unique to Los Angeles and Orange County), from the site along with artifacts representative of later phases indicates that the site had been occupied from late in the Millingstone Phase until the early part of the Canalino Phase. The site evidently had been abandoned prior to the arrival of the first Spanish explorer in 1542.

As described in the Appendix, the Millingstone Phase is characterized by artifacts indicative of increased specialization in hunting and food collecting practices with the beginnings of systematic exploitation of marine and littoral resources. It was also a time during which populations became less nomadic and began to establish centrally-based settlement patterns (cf. Beardsley et al. 1956). These were the precursors of the village-based patterns that characterized succeeding phases although villages as such are not known to have existed during the Millingstone Phase. The San Pedro Harbor site is indicative of this period and is similar to Malaga Cove, Level II and a coastal site at Lunada Bay (PV 8) excavated and described by Bates (1963).

THE INTERMEDIATE PHASE

Level III assemblage shows considerable development over that of the preceding layer. Well made mortars and pestles were the dominant food processing

artifacts while manos and metates were absent. Large quantities of fishing implements including shellfish hooks and bone harpoon barbs were recovered along with a variety of fish and large sea mammal remains and large asphalt coated stones. Although remains of actual boats have not yet been found at any site, the evidence in Level III strongly suggests that the inhabitants had made the 'Tomolo'; i.e., the large ocean-going plank canoe lashed with rawhide thongs and caulked with asphaltum described by early Spanish explorers (Walker 1951). The presence of broken ('killed') artifacts and reburied charred human bone indicates that cremation and the 'mourning' ceremony were practiced.

Precise dating of the level is not possible on the basis of present data but various researchers have considered it to belong either to the late Intermediate or early Canalino Phase (Wallace 1955, Treganza & Bierman 1955, Kowta 1969, Warren 1969). Other sites dating to the Intermediate Phase includes LAn 709, 844, 845 in Rolling Hills Estates, Lan 283 (San Pedro Harbor Site) and several located in Long Beach. The increased number of sites known for this phase is indicative of the establishment of the vallage based settlement pattern with the specialized seasonal exploitation of land and sea resources.

THE CANALINO PHASE

The majority of the sites known from the Palos Verdes Peninsula and surrounding area belong to the Canalino Phase of the Native American period. Accounts by early Spanish explorers and settlers arriving in Los Angeles describe the many villages that occupied the area although few felt impelled to carry out detailed investigations of Canalino life styles and cultural patterns, their long distance trade systems, religious beliefs and social institutions.

At least twelve sites dating to this phase are located within or adjacent to the Carson City Limits (See Maps 1-3). Those depicted by solid circles (e.g., LAn 88, 96, 99 & 106) have been heavily damaged or destroyed while those marked by a triangle are intact or only partially disturbed. They belonged to a large complex of semi-autonomous villages and satellite sites which ringed San Pedro and Long Beach Harbors from A.D. 1000 until A.D. 1800 (Johnston 1962, Kroeber 1953). The people occupying the area were the Tongva, a Shoshone-speaking population which gradually replaced the earlier Hokan-speakers who occupied the coast during the Intermediate Phase. The Tongva were

called the "Gabrielino' by the Spanish since they were placed under the jurisdiction of the San Gabriel Mission during the Hispanic Period. A summary of their culture is given in the Appendix and a more detailed description can be found in Johnston (1962) and Fink (1966). They had a complex system of religious beliefs involving elaborate funerary practices and vision quests (see Moriarity 1969, Harrington 1934, DuBois 1908) and kinship networks as well as advanced techniques of stone working and polishing. However, within forty years of the establishment of the Mission at San Gabriel the villages and sites within the Los Angeles Basin were abandoned or destroyed.

2. THE HISPANIC PERIOD

European exploration and settlement of California officially begins with Juan Cabrillo's voyage to Monterey Bay in 1542-43. Although he was not the first citizen of the Old World to reach the Pacific Coast of North America (the Chinese had preceded him perhaps 1000 years earlier; Moriarity, personal communication), he was the earliest to record his observations for written history.

As one of the Conquistadors who in 1521 participated in the capture of Mexico City, his interests in sailing northward were the same as those which motivated most of the explorers of his time; i.e., nationalism, religious fervor, ambition, as well as a desire to discover a 'Northwest Passage' connecting the Atlantic and Pacific Oceans across North America. He is reported to have sailed into San Pedro Bay (actually so named by Vizcaino in his voyage of 1602) but made no landing. However, he did make contact with Tongva 'Indians' in a canoe and he recorded his observations of the coastal area. The quantity of smoke he saw eminating from the campfires and signal fires of the many villages along the harbor and on the slope of Palos Verdes Hills led him to refer to the area as 'Bahia de los Humos' (Bay of Smokes) (Bancroft 1886). It is unfortunate that he died on San Miguel Island in 1543, after discovering Monterey Bay, since he was an interested and accurate observer of all he saw and was fascinated by the Chumash Culture which at the time was very similar, except for language and religion, to that of the Tongva (Forbes 1969, Kroeger 1953, Johnston 1962).

Although California, in particular Cape Mendocino, served as a major landfall for the 'Manila Galleons' plying between Mexico and the Philippines, no further voyages of discovery were launched along the coast until 1602 when Sebastian Vizcaino rediscovered and named Monterey Bay (Cabrillo's 'Bahia de los Pinos'). Along the way, according to journals kept by various clerics and chroniclers (e.g., Fray Francisco Palou and Fray Antonio de las Ascension) who accompanied the explorer, Vizcaino put in at the 'Bahia de los Humos' (which he renamed San Pedro Bay) and sent a small boat to investigate the coast and to search for water. However, again no attempt was made to explore the coastal plain or to investigate the peoples living there although other areas were

visited by Vizcaino (e.g., Catalina Island where Viscaino made personal contact with the Native Americans at Avalon Harbor). No further exploration of Carson/San Pedro area was conducted until after the establishment of the San Gabriel Mission in 1771 (Bancroft 1886, Johnston 1962, Bolton 1916).

The earliest record of prolonged Hispanic contact with the Carson area is contained in the Register of the San Gabriel Mission. Beginning in 1780, one year before the founding of the "Pueblo de Nuestra Senora de Los Angeles", the Missionaries began converting the 'Indians' in the vicinity of San Pedro Harbor. The common practice was to remove converts from their villages ('Rancherias') and establish them in barrack-like domiciles at the Mission where the conversion process continued and where they served as laborers (Englehardt 1927). By 1813 a total of 110 neophytes had been removed from six villages in the South Bay including the Village of Suangna (Suavit) presently located in the Watson Industrial Center (see Map 1, LAn 98). However, perusal of copies of Mission San Gabriel records (1972, courtesy of the late Thomas Workman Temple II) failed to reveal any recorded descriptions of the villages or of the local environment.

In 1784 Juan Jose Dominguez received the first private land grant in Alta California. The grant known as Rancho San Pedro included more than 75,000 acres (118 square miles) and extended to the coast from the west bank of the Los Angeles River, Rosecrans Avenue and the Northern boundary of the City of Redondo Beach (near King Harbor).

The troubled history of the development and various partitions of Rancho San Pedro has been extensively researched and discussed by several authors (i.e., Cleland 1951, Gillingham 1961, Robinson 1939, Bancroft 1886, etc.). Reference will be made here to events and data which pertain to the area within or adjacent to the Carson city limits.

With the granting of the permit for the Rancho San Pedro, Juan Dominguez occupied the land bringing a herd of cattle and some horses. He built a small adobe northwest of Compton Creek on the northeast side of Dominguez Hill but occupied it only sporadically until the time of his death in 1809. During the time of his ownership, the Rancho was managed by Manuel Gutierrez who served as Trustee for the property until 1825 following its regrant to Juan Dominguez' nephew, Cristobal, and the physical occupation of the property by Cristobal's

son and main heir Manuel Dominguez.

Prior to Manuel Dominguez' arrival, the Rancho had been developed by Gutierrez who also granted grazing and habitation rights to others, the most prominent of which was Jose Dolores Sepulveda. Establishing himself and his family, circa 1810, near San Pedro Harbor in the vicinity of the present intersection of Gaffey and Channel Streets, he became a successful rancher during the 15 years prior to the arrival of Manuel Dominguez. As a result of this long period of occupancy Jose Sepulveda was able to obtain a partition of the original Rancho and to obtain ownership of 31,629 acres of land including the Palos Verdes Peninsula and portions of the present cities of Torrance and Redondo Beach. The property became known as Rancho Los Palos Verdes after a large canyon named by Vizcaino in his voyage of 1602 for its dense growth of trees.

During the first three decades of the 19th century, the livestock herds on the two ranchos and elsewhere on the coastal plain underwent considerable expansion and ranching became a way of life. Gillingham (1961) notes that the need for labor led the Dominguez family to recruit 'Indians' living at the village of Suangna as vaqueros indicating that at least a few of the Rancherias survived the effects of European contact and Missionary zeal. However, by 1850 most of the Indian population in the vicinity of Los Angeles including the village of Yangna had died out and it is doubtful that the fate of Suangna was much different (Robinson 1952). On the Rancho Los Cerritos located immediately east of the Los Angeles River, Native American domestics and ranch hands occupied small wickiups close to the main house away from their original village (Dr. K. Dixon, personal communication; Bixby-Smith, 1925) and it is possible that a similar practice was followed in other ranches. If Suangna was abandoned at this time it must follow that the smaller and more temporary sites (e.g., LAn 88, 106, 99, Carson 1 & 2, See Map 1) also were no longer occupied.

A major part of the rapid decline in Native American populations must have resulted from the dramatic increase in cattle ranching which caused a marked change in the local environment. The foraging of the large herds rapidly reduced the dense 'forests' of Alder, Sycamore, Willow, vines and shrubs which covered much of the coastal plain at the time of Portola's first expedition

leaving instead a barren, grass covered landscape (DuHaut-Cilly 1929, Gillingham 1961, Fages 1972, Dana 1968). Not only did this seriously reduce the sources of vegetable and animal food on which a hunting and gathering life depends but the reduction of vegetation also helped to promote extensive flooding over much of the Harbor and low lying areas (Reagan 1915, Guinn 1895).

If the overgrazing of the landscape drastically effected the Native American populations in the Carson area, the effect was only slightly less pronounced on the ranchers themselves. By 1850, the end of the Hispanic period, the South Bay area was divided between several large land owners whose holdings were devoted to the raising of cattle and horses as well as the grain to support them. While appearing to be a romantic and easy-going lifestyle (Ludwig 1927), large scale cattle ranching was an expensive and precarious existance. Outwardly living in an opulent and hospitable fashion, the 'Rancheros' were forced to spend heavily for feed and material goods in dry years and many of the larger holdings were heavily mortgaged to Los Angeles bankers and to those with good cash reserves. Although Manuel Dominguez was able to hold the Rancho San Pedro intact through this period, the same was not true for the Sepulveda family, the Nietos or the other ranchers in the vicinity (Cleland 1951, Cleland & Putnam 1965, Gillingham 1961). The Pueblo was viewed as a lawless town with yearly 'revolutions' and as existing mostly in a state of anarchy (Cleland 1951). Americans were immigrating in increasing numbers and sentiment favoring a break with Mexico and annexation to the U.S. was growing.

Major political changes were also occurring in the Los Angeles area at this time although their effects on the Carson area were not felt directly. In 1822 Mexico became independent of Spanish rule and took over administrative control of Alta California. The new government required that all land grants issued by the Spanish be reconfirmed, which greatly complicated the legal actions already pending between the Dominguez and Sepulveda families regarding the ownership of the Palos Verdes Peninsula. It was not until 1834 that an arbitration decree was issued confirming the permit for Rancho San Pedro while at the same time awarding to the Sepulvedas the land which became Rancho Los Palos Verdes (Gillingham 1961).

San Pedro Bay developed during this period into a port for the transfer

of goods and passengers. By 1800 it was known as the Embarcadero of San Gabriel and was a principal means of transporting supplies brought from Mexico to the Mission by sea (Guinn 1900, 1905). A dirt road connecting the port with the Pueblo of Los Angeles (San Pedro Road) was established which approximated the present route of the Harbor Freeway. A second road leading more directly to the Mission bypassed the Harbor Lakes on the east and parallelled the present route of Wilmington Avenue. Oxcart was the principle means of travel for man and goods (Rolfe 1953, Dana 1840) which had been put ashore by means of lighters ferrying between the anchored ships and the shore.

Since both routes passed through areas used primarily for cattle raising, travelers often sought and received hospitality and rest from one of the ranchos (e.g., Sepulveda Adobe, Rancho Dominguez, Rancho de los Cuervos,[Rancho Tajauta]) located along the route. Eventually a permanent halfway house was established along the San Pedro Road in the vicinity of the present city of Gardena.

With the outbreak of war in 1846 between Mexico and the U.S. that was to end the Hispanic period, the road passing east of the lakes was used by Stockton's troops at the battle of Dominguez Hill (Guinn 1905). A vivid description is given by the soldiers of the dusty road crossing the hot coastal plain (then known as 'Punta de la Laguna') with its dense cover of grass and mustard plants, the latter over six feet tall (Guinn 1905, 1915b).

3. THE AMERICAN PERIOD

With the capitulation of the Mexican forces both in Mexico and California in 1848 and the admittance of California as a State in 1850, statehood created or encouraged major changes in the Los Angeles area, some of which directly affected the Carson area. The Land Act of 1851 required that patents be obtained by land owners who had received title to their property from the Spanish or Mexican governments. Before the patent to the Rancho San Pedro was finally issued in 1869, the holdings had undergone several partitions and some 6000 acres of land had been sold to developers. One of the sales involved 2400 acres of property bordering San Pedro Bay which were acquired by Phineas Banning to found the town of Wilmington.

The gold rush of 1849 had stimulated a great influx of Americans into the

state and Los Angeles was expanding as a center of trade and agriculture (Cleland 1951, 1918; Guinn 1915a, Robinson 1939, McWilliams 1973). A formal postal service was established in 1851 to replace the Indian runners and private conveyances used previously, and steamships and stagecoach lines were established to connect San Francisco and San Pedro Harbor with Los Angeles. The two roads leading from the city to San Pedro were designated Public Highways in 1851 (Guinn 1905) and by 1872, Manuel Dominguez had converted nearly 300 acres of Rancho land into "highways and sideroads" (Gillingham 1961).

In 1864, after three years of only trace rainfall, the era of cattle ranching came to an end. Many of the largest ranchos were mortgaged to buy feed and supplies or to support business ventures and later were sold or partitioned when the mortgages were foreclosed. In the Carson area, the Rancho Los Palos Verdes, Rancho Los Cerritos and the voluminous holdings of Abel Stearn (Rancho Los Alamitos, Rancho Los Coyotes, Rancho Las Bolsas, etc.) were in the hands of new owners or were in the process of being subdivided for development by 1868 (Cleland 1951, 1962; Gillingham 1961, Fink 1966).

Although not forced into the sale of Rancho lands, the shortage of water on the Rancho San Pedro required Manuel Dominguez to shift from cattle to sheep which caused a further degradation of the vegetation cover in the area of Dominguez Slough and Dominguez Hill (Gillingham 1961, Reagan 1915). Also mechanized farm implements led to an increased amount of acreage being put under cultivation for grain and hay much of which was exported to foreign countries. In order to clear more land for this purpose, even the Willows growing onthe west bank of the Los Angeles River were cut down and sold. At this time, however, no other crops were raised on Rancho land except for a small orchard and scattered vineyards located near the Dominguez Home (Gillingham 1961).

After 1851, with the expansion of trade and the establishment of public roads connecting Los Angeles with San Pedro Harbor, Phineas Banning and others (e.g., Tomlinson, Alexander, etc.) established regular stagecoach lines which flourished until 1869 (Cleland 1918; Guinn 1900, Newmark 1930, Jackson 1974). This led to the development of the town of Wilmington and prompted the development of neighboring areas. This trend was greatly accelerated in 1869 when the first transcontinental railroad to Los Angeles was completed (Guinn 1915). In

1870 the Los Angeles and San Pedro railroad linking the city with the Harbor was constructed on land provided by Manuel Dominguez and the era of land development and competing railroad companies began (Gillingham 1961, Guinn 1911, Hoyt 1953, Dumke 1944)

In 1867 the City of Compton was founded and settlers bought land in 45 acre lots. Much of the city land consisted of property sold by Pedro Dominguez to satisfy debts and various claims. In 1870 two thousand acres of land south of Dominguez Hill and west of the Los Angeles River (Dominguez Colony Tract) was subdivided into forty acre lots with the railroad running through the center. A second area located between the present Sepulveda and Lomita Boulevards and west of Wilmington Avenue (then known as the County Road) had been transferred to Antonio Rocha and was subsequently subdivided. The remainder of the Rancho, approximately 24,000 acres, was held intact until the partition of 1885 (Gillingham 1961).

Following the death of Don Manuel Dominguez in 1882, the Rancho San Pedro was resurveyed prior to distribution to his six daughters. An appraisal of the Rancho showed that slightly more than half (13,000 acres) of the Rancho was used as pasture while approximately 7,000 acres located mainly along the riverbed were utilized as farmland. Estuary land, marshes and sand dunes accounted for an additional 3,700 acres but this did not include more than 2,000 acres in the Dominguez Slough and Watson Lakes areas. indicating that the latter were inundated at the time of the survey but were not as extensive as during the 1914-16 floods (see Reagan 1915). Both areas are depicted on the Partition Map (Gillingham 1961; also originals housed at the Huntington Library).

The partition map shows the major areas of settlement at the time of Manuel Dominguez' death. Only the Wilmington and Dominguez Colony areas (Davidson City) show signs of development and much of the latter remained farmland until recent times. Except for the sale and subdivision of the ocean tracts in the vicinity of the present city of Redondo Beach, no major transactions or developments occurred for several decades to alter the allocations made in 1885.

However, despite the slow rate of change within the Rancho, the outlines of future development were already evident. In 1887 a total of 13 streets were dedicated to the County all of which represent segments of presently existing

thoroughfares. Included among these were Tomlinson Street (Normandie Avenue), Victoria Street, Dominguez Street, Carson Street, Los Angeles Street (Del Amo Boulevard), Railroad Avenue (Alameda Street), Wilmington Avenue, Dolores Street, Wilmington Street (223rd Street), Ocean Street (228th Street), Rocha Street (Sepulveda Boulevard) and Reyes Street (Lomita Boulevard).

Since Victoria Street marked the northern boundary of the Rancho San Pedro at the time of the partition of 1885, the present city of Carson includes lands acquired by J. G. Downey, Isaias W. Hellman, F. B. Hayes, and Antonio Aguirre between 1855 and the time of Manuel Dominguez' death (Gillingham 1961). Much of the Aguirre Tract in the Carson area was eventually bought by Ms. Prudent Beaudry in 1866. In 1881 the holdings of Downey, Hellman, Hayes and the Farmers & Merchants Bank were surveyed and a subidivision map of the 392 acre tract north-west of the Victoria Street dogsleg was prepared in 1883 (Huntington Library archives). However, the bursting of the 'boom of the eighties' prevented development of the area for several decades (Dumke 1944, Cleland and Putnam 1965).

By 1900 the settlements of Gardena, Strawberry Park, Rosecrans and Compton were growing and coalescing, with the areas in between undergoing cultivation as farmland. Main Street, Figueroa Street and Avalon Boulevard extended southwards as far as the northward branching areas of Dominguez Slough but did not cross the lake area.

Between 1883 and 1910 the land in the southwest portion of the Rancho were leased to subtenants who carried out dairy farming operations. In 1893, Mr. Fiesel arrived from Chicago and by 1896 was an established farmer and dairyman in the present area of the Watson Industrial Center. His children and their families also established farms in the vicinity and were joined by other farming families many of which were of German descent. The focus of the so-called German Settlement (North Wilmington) situated on the former Antonio Rocha Tract was the German church near the intersection of Lomita Boulevard and Neptune Avenue and 'picnic celebrations' were held at the Eucalyptus Grove formerly at the corner of Main Street and Sepulveda Boulevard. At the turn of the century the only school in the area was Lincoln (Rocha) District School Number 5 (Jerrills 1972).

At the turn of the century the Carson area was still a dry, dusty land with little vegetation cover. Except for the Dominguez and Bixby Sloughs, surface water was scarce and even the Los Angeles River ran dry except for winter rain and flood periods. Early residents recall the clouds of dust, silt and sand that would be raised each afternoon by the onshore breezes from Redondo Beach, the legacy of a century of overgrazing by cattle and sheep (Gillingham 1961; Ms. Frances Carr, personal communication). Photographs taken of the South Bay between 1900-1911 clearly show the large stretches of open ground with the occasional lines of Eucalyptus trees acting as windbreaks or boundary markers. The only other vegetation was the trees and shrubs that were grown in protective groves around farm houses and dwellings (Dominguez Water Company archives; Title Insurance and Trust archives; Dominguez Hills Library Special Collections).

In 1911 the need for a regular water supply to support expanding agriculture and the proposed development, the future industrial city of Torrance, led to the formation of the Dominguez Water Company as a subsidiary of Dominguez Estates Company. This action along with increased sales of land by the latter company, which had been created the previous year to protect the real estate holdings of the surviving daughters of Manuel Dominguez, greatly promoted development of the southwest portion of the present city. The Water Company set out to tap artesian sources in the Los Angeles riverbed and to drill wells into the subterranean semi-perched water tables and "200 foot sand" of the Silverado Zone (Poland et al. 1956; Gillingham 1961; Grenier 1976) and to pipe it to the surrounding regions. It was at this time that sale of Rancho lands to private persons increased and farming activities developed in the area south of Dominguez Slough (Gillingham 1961, Jerrills 1972).

Heavy flooding in 1914-16 led to the extensive inundation of the Dominguez Slough-Watson Lakes area with considerable damage to farms and crops in the vicinity. Much of the flooding was the result of the rapid growth of farming activity which had resulted in the infilling of gullies and natural drainages and the construction of levees and raised roadways and railroad tracks (Reagan 1915 a & b, Grenier 1976, Dominguez Water Company Archives). The problem of overflow and ponding in the Dominguez Slough was partially alleviated by the dredging of a small channel in 1917 which also freed additional areas for

farming and grazing. However, it was not until after 1958 that effective flood control measures were taken and the problem was removed with the channelization of the Los Angeles River and Compton Creek (U.S. Army Corps of Engineers Records, Federal Record Center).

The years 1920-1925 were a time of change and growth in the Carson area which set the pattern for future development. Farming for crops other than grain or hay increased greatly and some produce was marketed outside the area (Jerrills 1972). Shell Oil Company began prospecting for oil on Dominguez Hill and refineries were built on land along Sepulveda Boulevard and Wilmington Avenue in the vicinity of Watson Lakes (which were filled in; Grenier 1976, Gillingham 1961). Southern California Edison and Southern California Gas Company established utilities in 1923 to supply the area including a subdivision of 5 acre lots recently established (1922) along 220th Street between Figueroa and Dolores Streets. The subdivision, which by 1926 had a general store, lumber yard, and Baptist Church, was originally known as Keystone and formed the nucleus for the future city (Jerrills 1972; C. Andrews, personal communication). In 1932 commercial businesses had been started at the Carson Street and Avalon Boulevard intersection including a bar and cafe. By the time of the outbreak of World War II virtually all of the Carson city area was developed, under cultivation or producing and refining oil (see Jerrills 1972; WPA 1936-39 Los Angeles County Land Use Survey Map in the Archives of the County Land Use Planning Division). Only the area of Dominguez Slough was not in use, being too marshy for anything but occasional fishing or livestock grazing during dry periods (Gillingham 1961, Grenier 1976; see also Spence-Fairchild collection of aerial photographs for 1920-1957).

The post-war years were a time of urbanization with a changeover to residential, commercial and 'clean' industrial development. Farming was phased out in all areas except Dominguez Hill and even the dairies were replaced by tract housing and shopping centers (e.g., Wilmington Manor Tract, Avalon Village, Victoria Park, Scottsdale, etc.). With the addition of the Harbor-San Diego Freeways and the commencement of large scale landfill operations in the Dominguez Slough area the city began to assume its present form and was finally incorporated in 1968 (Jerrills 1972).

IV. THE CULTURAL HERITAGE RESOURCES OF CARSON

Results of The Field Survey

The walkover survey of the City area required two months (December, January 1975-76) for completion by the Consultant and a field crew of 1-4 persons. As stated in the section on Method (above) all open, undeveloped and minimally disturbed land was examined for historical remains from any of the periods previously discussed. In addition, each street was examined by vehicle or on foot for structures which appeared to predate World War II and which might have been a part of one of the original settlements. All such remains and structures were recorded for further investigation.

Over the next four months (February-June) the data collected was examined and compared by the Consultant and one assistant to archival records, maps and photographs and the owners or previous owners of the buildings or properties were contacted (wherever living and available). Limited subsurface tests were also conducted at one Native American site (Carson 1) as previously described. Preparation of this report was begun when the data was in hand and evaluated.

Recorded Cultural Heritage Resources in Carson

A total of eight Native American sites were identified from records and by visual inspection as existing within the Carson area. Of this number only four (LAn 91, Carson 1-3) are still in existance and only one of these (Carson 1) is relatively undisturbed at the time of this report. Examination of the locations of the sites and a reconstruction of the environment at the time of their occupation indicates that at least three times this number existed prior to modern day alteration of the region (see field notes of Van Valkenburg, F. H. Racer 1939). However, they were difficult to identify even at the time of the earliest reconnaissance of the area.

The sites described below were located as a result of at least three reconnaissances conducted in the Carson area including the present study. However, only one of the previous studies (Eberhart) was carried out by a trained archaeologist. In addition to the three reconnaissances, the South Bay has been a favorite hunting ground for pothunters and amateur collectors who located many of the sites listed for the area but kept few, if any, records of their finds.

Mr. John Sevier and Mr. R. Irwin of Long Beach have each visited many sites in the San Pedro Harbor area and have collected numerous artifacts and human remains which are still in their possession. A third collector, Mr. Joseph Cote, recovered artifacts from South Bay sites and especially from LAn 98 for more than 30 years. Unfortunately, he is not known to have kept any records of his finds and he disposed of many of the items he collected during his lifetime.

The first known collections in the Carson area were made by the late Dr. F. H. Racer, formerly of Lomita. He located 22 sites in the South Bay and adjacent areas, four of which were situated within the present City limits of Carson (Racer 1939) Dr. Racer's collections are important since he visited the sites during the years 1910-1939 when they were being exposed by agricultural activities but were still intact. He also was able to examine the shorelines of the Dominguez Slough before they were altered by flood control measures and urbanization. Unfortunately, at his death his collection of artifacts was sold by his heirs to dealers in antiquities and is no longer in existence. Copies of his notes are on file at UCLA Archaeological Survey and with this Consultant.

Three of the sites recorded by Dr. Racer (LAn 88, 98 & 106) no longer can be identified. According to his notes (Racer1939) they were temporary camps and food processing sites situated along the shoreline of Dominguez Slough for the convenience of small hunting and food collecting parties from nearby villages (see below). No trace of the sites could be found during the present survey.

The earliest known survey of the South Bay area by a trained Archaeologist was conducted by Mr. N. C. Nelson in 1912-1916 as a part of his study of the California coast. During the 1930's Mr. J. P. Harrington, Mrs. B. E. Johnston and Mr. E. F. Walker carried out research to locate the Tongva villages listed by Hugo Reid in his letters to the Los Angeles Star (Johnston 1962, Heizer 1968). The attention of these investigators was directed mainly towards the San Pedro Harbor (Bixby Slough) and the Palos Verdes Peninsula (see Walker 1951) although it is probable that they knew of the CHRs in the Carson area (Dr. Racer was one of the volunteers who aided Mr. Walker in the excavation of LAn 138 at Malaga Cove).

During the years 1950-1969 the South Bay was periodically investigated in a non-systematic fashion by students from UCLA, USC, Los Angeles State University and Long Beach State University, and numerous sites were recorded as existing

in the region. Most were situated in the vicinity of Bixby Slough but Dr. H. Eberhart and J. Chartkoff conducted limited surveys in Torrance and the city strip (Eberhart 1957, 1970). Chartkoff located two small Tongva sites (LAn 387, 390) on the southeast side of Dominguez Hill overlooking Alameda Street just outside the Carson city limits (see Map 1).

In 1962, E. Bates, under the supervision of Dr. William Wallace (then at the Department of Anthropology, University of Southern California, conducted a comprehensive and systematic survey of the Palos Verdes Peninsula but did not include the Carson area.

Few excavations have been carried out in the South Bay. Several sites located on the south coast of the Palos Verdes Peninsula were sampled by several organizations and institutions during the 1960's and brief reports were published in some cases (Bates 1963). In 1968, a team of researchers from Long Beach State and the California Department of Parks and Recreation conducted salvage operations at LAn 283 located at the Gaffey Street and Harbor Freeway intersection (Butler 1974). The excavators recovered numerous artifacts and food remains but the site had been too badly disturbed by residential development and use to provide data on cultural patterns. Small exploratory excavations were also conducted at Indian remains located near the Rancho Los Cerritos Adobe over a period of years (W. Evans, K. Dixon; personal communications).

In 1968, grading was begun in the Watson Industrial Center near LAn 98 and the operations were observed by a volunteer student archaeological team from Los Angeles State University. Surface collections and limited subsurface tests were made in an attempt to recover artifacts and to locate burials before they were disturbed or damaged by grading (Los Angeles Times 1968). The field notes describing the recovery procedures and the details of the tests have been lost but the artifacts are currently housed in the Anthropology Lab at California State College, Dominguez Hills.

Between 1970-1972, a series of subsurface tests were made at LAn 98 by A. V. Eggers and K. Kuykendall (California State College Dominguez Hills) in an attempt to locate undisturbed cultural deposits. The excavations and the results were summarized in a report submitted to the Carson City Council (Eggers 1972) which is included in the Appendix. Further systematic probes were made

at the site in 1972-73 by Mr. Charles Irwin of the Bowers Museum, Santa Ana, but while the recovered items are housed at the Museum, no report was prepared on the findings.

In January 1975, test excavations were conducted at a site (Carson 1) discovered during the present survey. A total of 6 1x1 meter test units were systematically excavated in order to determine the depth and extent of the cultural deposits. A description of the tests and an analysis of the artifacts is appended to this report.

Although a total of seven State landmarks have been recorded for the area surrounding Carson, none are listed for the city itself. This is a reflection of both the newness of the city and the history of the area as part of the Rancho San Pedro. Officially registered landmarks of Statewide significance include the Drum Barracks (State Landmark No. 169) and Banning House (No. 147) in Wilmington, the Adobes of Jose Delores and Diego Sepulveda (Nos. 380 & 383) and Timms Point (No. 384) in San Pedro, the Dominguez Ranch House (No. 152) and the site of the 1910 Air Meet (No. 718) on the east side of Dominguez Hill (Los Angeles County). Three of these sites (the Dominguez Ranch House, Drum Barracks, and Banning House) as well as the Osgood-Farley Battery in Fort MacArthur are also recorded in the National Register of Historic Places and are afforded the protection of Federal laws (Federal Register 1975, 1976).

Only one site of local historical importance is recorded within the City of Carson. The Tongva village of Suangna (LAn 98) has been officially designated as a point of local historical interest (No. LAn 013) and a commemorative plaque has been installed south of the intersection of 223rd Street and Utility Way (dedicated October 20, 1972). The site of the village is currently being developed as part of the Watson Industrial Park. A commemorative plaque erected by the Native Daughters of the Golden West for the 1910 Air Meet and originally placed south of the site was rededicated in 1975 on the Mall of Dominguez Hills State College. However, as noted above, the site of the Air Meet itself is located outside the Carson City Limits. A State historical marker for the event is presently located on the east side of Wilmington Avenue near the Long Beach water storage tanks.

In addition to the sites described above, the Consultant received data from several individuals that an Indian skeleton had been discovered intact while digging trenches for a pipeline in the Shell Chemical Company plant on

Wilmington Avenue south of Del Amo Boulevard. The date of the reported find could not be stated exactly but was said to have occurred in 1970-71. There were conflicting statements that the remains had been checked by the Police (Sheriff?) and had been identified by either the County Coroner's Office or by persons at UCLA (where, by some reports, the bones were taken and presently reside).

In an attempt to verify this information and to find the location of the site and of the remains, the Consultant contacted the Firestone Sheriff's substation (Compton), the Los Angeles County Coroner's Office and Laboratory, the UCLA Archaeological Survey and the Public Relations Office at the Shell Chemical Company. The Public Relations Director at Shell Chemical recalled having heard of the incident but could not remember the time and place of its occurrence. Further checking failed to provide additional information from company files and none of the workmen present at the trenching operation were in the area or could be located. The records of the Sheriff's substation, UCLA and the Coroner's Office also provided no corroborating or additional data, and a check of the files of local newspapers failed to locate any stories or notices regarding the finds.

Permission to survey the Chemical Company grounds for historical remains was denied.

It is quite probable that human skeletal remains could have been found on the Shell Chemical Company property as reported. Two Indian campsites (LAn 389 & 390) were known to have existed on Dominguez Hill overlooking Del Amo Boulevard (see above) and two more Indian sites (LAn 696 & 697) existed bordering the Los Angeles River near 56th Street in Long Beach. One of these sites (LAn 698) contained Indian burials. The village of Suangna (LAn 98) was located only 2-1/2 miles south of the Chemical Plant and was known to contain several Indian graves (see below). However, there is too little data available at this time pertaining to the finds at the chemical plant site to ascertain the exact nature of the remains or to determine their age and cultural affiliation.

An additional site containing a lens of shellfish remains "4-5 feet thick" was reported to have been uncovered and then destroyed during the construction of the Harbor Freeway in the vicinity of the 220th Street off-ramp. The depth of the lens below the original surface is uncertain and other pertinent details

on the location and nature of the finds are lacking but the fact that late Pleistocene beach deposits are known to exist in the area and that no cultural remains were mentioned leads to the assumption that the finds were solely Paleontological in nature and not of historical significance.

Several sites and landmarks in the Carson area of local historical significance and dating to the Hispanic and American Periods have been removed or destroyed as a result of expansion and urbanization. When Maria Dolores Dominguez Watson received her share of the 1885 partition of the Rancho, her sons established themselves on several of the tracts along the Los Angeles River and Compton Creek south of Wilmington Road (223rd Street) in the vicinity of the lakes which bore their name. Today both Watson Lakes and the homesteads of three of the brothers form the foundation for the Arco and Shell Oil Refineries east of Wilmington Avenue while Robert Watson's house near the corner of 223rd Street and Wilmington Avenue was destroyed by fire in 1913. The site of his house and the lake which was adjacent to it (i.e., "Bob Watson Lake") are now filled in as part of the Watson-Industrial Center (Redevelopment Project No. 2; see Gillingham 1961, pp. 297-9).

Although the rest of the descendents did not live in the present city of Carson area, their homes served as local landmarks for many years. In 1826, Manuel Dominguez established himself in a house built to replace the Old Adobe of his uncle Juan Jose (no longer standing although attempts are now under way by faculty and students of CSCDH to locate the site). Manuel's house is still preserved as a State and National landmark and as part of the Claretian Seminary. The houses of Manuel's brothers Pedro and Nasario were located north of Victoria Street and east of the present Wilmington Avenue. No trace of these structures remains today.

Circa 1890, George Henry Carson built a two-story Victorian-style house immediately north of the Dominguez Homestead. This house continued to be occupied until 1968 when it was dismantled and placed in storage (Gillingham 1961, Jerrills 1972). George Carson's son, Juan Manuel, built a new residence in Torrance but in 1902 moved it to the vicinity of Carson Street and Normandie Boulevard. The house was moved so as to be in the center of the then developing farming and dairying area (see above) and the new communities of 'German Town' (North Wilmington) and what was to become Nestoria/Keystone. In 1959, the home was dismantled to make way for tract homes and a shopping center (Carson Plaza), and much of it was preserved and put into storage in Compton where it remains today (Jerrills 1972; Grenier, personal communication).

Most of the farms which existed in the Carson area prior to and following 1900 had disappeared by 1968 or had been replaced by development. Although truck-farming still is a major industry in the area between Wilmington Avenue and Alameda Street south of Dominguez Hill, most of the original residents are gone, although in some cases their names (e.g., Elftman, Bangle) are still in use to designate loading stations on the Southern Pacific Railroad just as they were when George Henry Carson used them to ship Rancho sheep and wool to market. Most of the residents of the area at the time of the 1914-16 floods also have died or moved away because of the floods (e.g., C. W. Caseboom, C. H. Eilers, J. P. Hoeptner, Jesus Cruz, E. E. Wilson, etc; See Reagan 1915 a & b).

A few of the old farmsteads still survive in spite of recent landfill operations and urban development. Portions of Leonardi's Dairy which was in operation at the time of John M. Carson's relocation of the family home on Normandie Street in 1902, still exists east of the intersection of Main Street and Torrance Boulevard (formerly East Street) although much of the original property now lies under 10-25 feet of fill soils and the San Diego Freeway. The Larronde Sheep Ranch (recently used for cattle) established circa 1926 by John Larronde on an 80 acre parcel on the northwest corner of Victoria Street and Avalon Boulevard is presently part of the 70 acre Tract 3461 and some of the original farm buildings still stand. The property is shown in detail on the 1936-39 Land Use Survey Map and it still includes one of the north arms of the former Dominguez Slough (Laguna Dominguez) which branches prior to passing under the Artesia Freeway and Avalon Boulevard. As is shown in the report appended to the text, the original land surface is intact and contains the remains of an Indian campsite only slightly disturbed by plowing operations.

Most of the landmarks of the early communities in the southern portion of the present city have also been replaced. The original Lincoln School building was torn down in 1940 to make way for a newer structure on the same site (Jerrills 1972) and most of the original commercial buildings in the

Keystone Area at 220th and Main Streets (e.g., The Gardena Grocery) recently have been torn down. The few buildings that remain from that period will be discussed below.

SUMMARY OF EXISTING CULTURAL HERITAGE RESOURCES & SENSITIVE AREAS.

The list provided below contains all of the Cultural Heritage Resources identified by the inventory of the city as conducted by the Consultant. It should be noted that some of the sites included in the listing had not been recorded previously at any of the data depositories contacted during the inventory and that they have only local significance.

The individual sites are described in terms of their location, historical significance, present status and their susceptibility to damage or destruction. Recommendations for conservation procedures will be discussed in a separate section to follow. A major element in any conservation program is a well formulated and enforced municipal policy regarding the handling of CHRs and recommendations as to the nature and contents of such a policy are presented in the final section of this report.

It should be noted that, as discussed above, significant portions of the city area could not be investigated directly and that the existing records are incomplete. However, because of the possibility that significant CHRs may exist in certain areas, these areas have been designated as 'sensitive' and have been delineated on Map 5 and are discussed separately below.

NATIVE AMERICAN CULTURAL HERITAGE RESOURCES

1. Suangna Village (LAn 98, Local Point of Historical Interest No. LAn-013)

   Location: Approximately 20 acres of Watson Industrial Center South (Redevelopment Area No. 2) bounded by Wilmington Avenue on the east, the Southern Pacific Railroad Spur on the north, the southward extension of the centerline of Utility Way on the west and 233rd Street on the south. Portions of the margins of the site are covered by fill soils, buildings and roads and it is possible that the cultural deposits extend farther west and south than described

above (see below, Sensitive Areas). However, the eastern boundary is well defined and was determined by previous fieldwork (Eggers, 1972) and by first-hand investigations of storm drain trenches excavated on Wilmington Avenue immediately east of the site.

STATUS: LAn 98 has been greatly disturbed by a series of trenching and grading operations carried out over a period of 20 years. Prior to 1968 several 10-20 foot deep trenches were excavated in a north-south direction through the site for the placement of water and petroleum pipelines. Several of these trenches were re-excavated in 1974 in order to place new lines and to remove damaged pipes. In 1968, the site and surrounding area was extensively graded and compacted in preparation for future construction. At that time, grading operations removed the upper 2-3 feet of cultural deposits from the site and redistributed them as fill in adjacent lots. The remaining portions were harrowed and recompacted to a depth of several feet below the present surface. Additional grading and compaction operations have been carried out on portions of the site since 1971 for the construction of roads (233rd Street) and the placement of building pads.

Pot-hunting, farming activities and motorcycling have also adversely impacted LAn 98 since 1910. The area had been in use as a part of the Struikman Dairy Ranch prior to 1939 (Racer 1939) and many of the corrals and ranch structures were located on or near the site, portions of which had been plowed periodically for beets and potatoes (see Figure 2). However, the farming activities had not seriously disturbed the site except for a slight mixture of the topmost 18 inches (0.46 meters).

It should be noted that the village of Suangna (also known as Shua, Soavit, Soabit & Suanga; see Merriam 1968, Bates 1963) has been placed at various locations by various authors and researchers. Fink (1966) has it located on a hill overlooking Machado (Harbor) Lake while Kroeber places it "near Long Beach" and shows it as east of the Los Angeles River (1953, p. 621 & Plate 57). However, the

majority of researchers now agree with Johnston's placement of the village at the site denoted above and this concurs with the data obtained by this Consultant from several sources. It is recorded as "site No. 10" in Racer's manuscript (1939).

Significance: The village of Suangna (LAn 98) was one of a group of villages which ringed San Pedro Harbor at the time of Cabrillo's voyage (A.D. 1542) and perhaps the largest (Johnston 1962, personal communication; Kroeber 1953, Bancroft 1886). It represents one of the few remaining vestiges of this village complex and one of the last major Tongva sites in the South Bay area. The village name with a variety of spellings (see above) is recorded in the San Gabriel Mission Records and fifteen of the inhabitants were converted to Catholicism during 1788-1813.

Although no radiometric age determinations have been made for the site, there is a general consensus that it was occupied for approximately six hundred years (ca. A.D. 1200-1800) during the Canalino Phase (see Eggers 1972; Los Angeles Times, 1968; C. Irwin, personal communications). This estimate is based upon a comparison of artifacts recovered from test excavations with those from sites of known age (Eggers 1972).

The site has yielded an abundance of cultural remains most of which are in private collections. Although a photographic record has been made of one of these collections (Sevier) most are as yet unrecorded and some have been sold or otherwise dispersed (Racer, Cote). A small number of artifacts collected by Joseph Cote and by a student archaological team have been donated to Cal State Dominguez Hills' Department of Anthropology where they are presently houses. Additional artifacts collected from the site have been placed on indefinite loan to the college by Watson Land Company.

Remains from LAn 98 include numerous human skeletal remains (Coffin 1955), large stone mortars, pestles, bowls, grinding stones and cooking implements, large clay pots (ollas), incised steatite (grave markers?) and siltstone slabs, shell and glass (trade) beads, and a wide variety of chipped stone artifacts and projectile points. The remains are all of types associated with the Canalino Phase of the Native American Period.

Wheras the village site was once of great scientific value, that value has been much diminished by adverse impacts over a long period of time. However, it is probable that some intact areas exist in portions of the site situated between the buried utility lines (Figure 2) and that traces of cultural patterning may be observed. Such areas are presently obscured by fill and disturbed soils 1-1/2 - 2 feet (0.45 - 0.60 meters) thick which would have to be removed prior to excavation.

Prospects For Preservation: The area containing the site is currently undergoing development as an industrial park wherein land is sold or leased for the construction of warehouses and light manufacturing plants. Although the type of buildings which might be constructed will depend on the ultimate developer of the parcel in question, structures existing elsewhere in the center are built above ground on raised pads and are surrounded by surface parking facilities.

While the construction of buildings on the site (LAn 98) would prevent further excavation or subsurface testing of a large portion of the remaining cultural deposit, the impacts would not be adverse in all cases. Structures of the type described above would only minimally disturb the buried intact soils and would also provide a covering of the site surface which would prevent further damage. In this way the intact portions of the cultural deposit could be protected and preserved for possible future investigation when and if ever the proposed structures are no longer present.

2. LAn 88

Location: This site is located in the vicinity of the intersection of the Harbor and San Diego Freeways within the city limits (see Map 1). Its precise location, however, cannot be determined since it was only one of a large number ("more than one hundred") small sites which formerly existed along the areas of Dominguez Slough (Racer 1939). LAn 88 was described as being situated on "the bank of the slough between Vermont Avenue and Main Street south of 190th Street" but even in 1939 was "hard to locate" because of pothunting

and collecting prior to 1939 (Racer 1939). It was recorded as "site No. 14" in Racer's manuscript (1939).

Status: Virtually all of the area along Figueroa Street between the San Diego Freeway and 190th Street has been extensively modified by road construction and industrial/commercial development, and the shorelines of the arm of the former Dominguez Slough are no longer visible on the surface.

Data as to the extent and depth of the cultural deposit is nonexistant, but some approximations are possible from other sources. Sites of the type described by Racer for this location tend to be 1-3 feet (0.30-0.91 meters) in depth and less than 100 feet (30 meters) in diameter (see below; Carson No. 1). Since the eastern portion of LAn 88 extends into the right of way of Figueroa Street it is likely that most of that portion was destroyed by road grading. The western portion is located partly within the developed lots between Figueroa Street and Anelo Avenue and may be only partially disturbed.

Examination of the surface of the existing lots failed to reveal any traces of the cultural deposit. It is possible that the remains have been obscured since the site may have been covered over with the materials. However, no grading permit is recorded as having been issued for the lots and the extent to which the surface has been altered from its original state thereby making an exact determination of status impossible. Portions of the site might still be in existance under the parking area for the Datson although grading records indicate scarification to a depth of at least 12 inches (30 centimeters) over much of the area of Tract #4671 (data obtained from grading permits on file at Carson City Hall unless noted otherwise). Such operations might disturb the context but would not necessarily destroy tne scientific value of the affected cultural deposits. It is possible, therefore, that portions of LAn 88 or of similar sites in the vicinity of the former slough may still be preserved in part.

Significance: Racer (1939) describes LAn 88 in the briefest of terms saying only that he observed surface traces of "sea shells, broken mano (hand grinding) stones and flint (sic) chips" and that sites in the area had been extensively collected. The data indicates that LAn 88 was a temporary campsite used for food processing along the shore of an arm of the Dominguez Slough (see Maps 1-3). Such sites were often used by small groups on food gathering or hunting expeditions from 'base-villages' (see Hudson 1971, Fink 1966, Kroeber 1953, Rice & Cooley 1976, C. D. King et al 1974, Wallace 1968). Although small and limited in cultural content, such sites often provide important data on the range and scope of activities of a particular group at a particular time and significantly extend the data obtained from villages and other types of CHRs. Such sites are today given as much attention by professional archaeologists as the larger, more complex remains or those with deep midden and stratified components. Without an understanding of these resources and their relationship to other sites in an area, it would not be possible to reconstruct the cultural pattern for a particular group at a particular time

Prospects For Preservation: Since any remaining portions of LAn 88 are probably buried under fill or surface structures, the prospects of preserving existing cultural deposits (if present) are good if recommended procedures are followed (see below).

3. LAn 99

Location: Dr. Racer (1939) describes the site as situated "just east of Vermont Avenue between Carson Street and East Road (sic) on the edge of the [Dominguez] Slough" (see Maps 1-3). The placement of the site follows the records on file at UCLA but may not be accurate since Dr. Racer's notes place it south of East Road (Torrance Boulevard). In that case the site might have been located in the area of the oil tank farm south of Torrance Boulevard between Main and Figueroa Streets instead of as shown. Existing data does not permit a more exact positioning.

Status: Until the location of LAn 99 can be determined more exactly, a precise assessment of its status is not possible. If it was located north of Torrance Boulevard, it has been destroyed by landfill operations (Carien Landfill No. 5, see Map 6) which excavated at least 10 feet below the former surface before filling with recompacted soils (Los Angeles County File #I-3727-22). The fill area is presently the site of the El Camino Shopping Center (new Colton Piano and Organ Supermarket). However, if it was located south of Torrance Boulevard, its status is uncertain and several possibilities exist.

a. The site may have been situated in the area occupied by the tank farm in which case it has probably been destroyed by cut and fill operations for the placement of the storage tanks;
b. The site may have been located east of the tank farm in the area of Carson Landfill No. 7. Although the County files are incomplete, a map of previous and finished grades shows that any site of the type described by Racer (see below) would have been destroyed by cut and fill grading.
c. The site may have been located on Lots 28, 29, 30 & 31 south of the tank farm or along 212th Street, in which case there is a possibility that portions of the cultural deposit may still exist. However, the chances of the deposit existing in an undisturbed state is very slight given the extent of industrial and residential development that has occurred in the area.

Racer (1939) notes that at the time of his investigations, the site was under cultivation and that artifacts (?) removed during plowing were tossed into a ravine in the present right of way of Vermont Avenue.

Given these alternatives, LAn 99 must be considered as extensively damaged or destroyed.

Significance: Racer's notes (1939) state that LAn 99 (his No. 11) contained "broken mortars and mano stones" similar to those from LAn 98 and that it was 'small' in size. From the description it would

appear that the site was a contemporary of Suangna and LAn 88 and was similar in type to the latter. Any remaining portions of the site should be given the same value as LAn 88 (above) and Carson 1 (below).

Prospects For Preservation: Given the extent of the adverse impacts to the area in which the site was located, the prospects for preservation of any portion of LAn 99 are remote.

4. LAn 106

Location: The site was located in the present right of way for Moneta Street immediately south of Carson Street (see Maps 1-3). Designated "site No. 21" by Racer (1939), it was described in his notes as "about six acres" in size and situated "east of the sulphur plant". The exact location of the 'sulphur plant' could not be determined from map data or other records during the inventory and the position of the site as shown is based upon Dr. Racer's information. At the time of his investigation the area was under cultivation by a Japanese farmer and the area was still in agricultural use at the time of the 1936-39 land-use survey.

Status: An extensive and detailed field examination was made of Moneta Street north and south of Carson Street and south to 220th Street and of the lots bordering the street right of way. All of the lots or fields south of Carson between Figueroa Street and Avalon Boulevard also were investigated for traces of the site or any other remains of historical value. Aside from fragments of marine shellfish and occasional pieces of fused shale and Palos Verdes chert with 1-2 flake scars in several of the lots, no signs of LAn 106 could be found in the area designated in Racer's notes and the site is presumed destroyed by urban development. Any surviving portions of the cultural deposit are not visible on the surface and would have to be buried under the road bed, fill soils or the foundations of houses fronting on Moneta Street. Grading permits issued for tracts in the vicinity of LAn 106 indicate that much of the former

land surface has been covered with 1-6 feet of fill soils which would have the effect of obscuring the cultural deposits while at the same time protecting surviving portions from further disturbance (see below). In the absence of information to the contrary, LAn 106 must be classified as 'status undetermined - at least partly destroyed'.

Significance: Given the sketchiness of Dr. Racer's notes and the absence of other data, the scientific value of LAn 106 cannot be determined precisely. The site is described as containing "many seashells, flint (sic) chips, a few arrowheads and shell beads". In addition, "several mortars" were found by the Japanese gardener (Racer 1939). The site is described in the UCLA survey records as a shell midden/workshop (see copy attached to text) but the density of shell, the presence of stone mortars and shell beads, and the extent of the cultural deposits raises the possibility of it being a small village site instead (compare to artifact list for Carson 1 and LAn 98; see Appendix). The quantity of flakes indicates that stone tool manufacturing was a major activity at the site but large quantities of chipping debris have also been recovered from LAn 98 and village sites on Palos Verdes Peninsula (Eggers 1972, Butler 1974, Bates 1963).

The shells were not in sufficient quantity to indicate a shell 'midden' and appeared to have been derived from late Pleistocene marine sand deposits widely represented in that area. The pieces of shale and chert were worked in the fashion of aboriginal artifacts but did not appear to be in situ and were insufficient in quantity to indicate a site. They are presumed to have been brought into the area by the Tongva or earlier peoples but could not be associated with LAn 106 per se. The area containing shell and chert/shale remains, however, has been designated as 'sensitive' (see below) and may yield significant historical remains especially of the American period.

Prospects For Preservation: The fact that Dr. Racer estimated the size of LAn 106 as "about six acres" and that some undeveloped areas still exist along Moneta Street south of Carson Street raises the possibility of the continued existance of a portion of the site. Even allowing for some degree of dispersal of cultural remains by agricultural activities and urban development, the site must have extended some distance east and west of the right-of-way of Moneta Street and that some of the deposit underlies the fill soils of Tracts 28220 and 24823 (Map 4229 on file at the City of Carson). The presence of the various structures and the fill soils would act to protect any such remaining deposits from future disturbance providing deep trenching operations (buried cables, gas mains, etc.) do not occur outside of the street right-of-way or in previously undisturbed native soils.

5. Carson 1

Location: This previously unrecorded site is situated on the west bank of an existing channel and fresh water marsh on the former sheep and cattle ranch on the northwest corner of Avalon Boulevard and Victoria Street (see Maps 1-3 and Figure 3). A detailed description of the farm and of the site location is given in the report on test excavations at Carson 1 included in the Appendices to this text.

Briefly stated, Carson 1 lies immediately east of a northward extension of Wall Street at a straightline distance of 539 meters (1768 feet) from its intersection with Victoria Street. The site is located on the bank of a channel which represents a segment of an area of the former Dominguez Slough (Sauze de la Bolsita). The cultural deposits as represented by surface remains extend over an area measuring 120 x 65 meters (394 x 213 feet) or 0.80 hectares (1.9 acres) between the 20 and 23 foot contour lines (see Figure 3). The area is due west of the former milking barn of the farm established by John Larronde in 1926.

Status: Although situated in the middle of a working ranch, adverse impacts to the site have been few and limited in scope. The area was used primarily as grazing land for cattle and sheep but had been plowed to

promote the growth of grass in recent years. Some crops may also have been grown on the property but at present there is no definite evidence of such usage since 1936. Disking has occurred at the site in recent years as part of a weed abatement program and has affected the surface soil to a depth of 6-12 inches (15-30 cms.). Although some mixing of cultural and soil levels may have occurred as a result of the disking and some of the shellfish remains have been fragmented and dispersed laterally, the overall adverse effect has been minimal.

Aerial photographs taken in 1941 and 1971 (Fairchild Aerial Survey Project No. C-6972 and American Aerial Survey Film No. 71136) show that oil pumping and storage structures existed near the site circa 1930-1970 but they were not placed in close enough proximity to cause any disturbance of the soil and its contents.

Test excavations conducted at the site in January, 1976 showed that despite extensive incursions of small burrowing animals in some areas, Carson 1 has remained virtually intact and has the potential of yielding valuable scientific data.

At present, the property containing Carson 1 is in escrow and is being purchased by Colony Group Development Corporation of Newport Beach. Until the sale is completed, ownership is being held in trust by Union Bank and Title Insurance & Trust Company of Los Angeles for the Godchildren and heirs of John Larronde. Colony Group Development Corporation has received approval to develop the property as a Mobile Home Park as soon as title is transferred. The proposed development is expected to have minimal adverse impact on Carson 1 (see below).

Significance: A detailed description of the artifacts recovered from the six test units excavated at Carson 1 is given in the report appended to the text and their significances (and that of the site itself) are discussed at length. A total of 671 stone tools, projectile points, fragments of ground stone artifacts and flakes were recovered, and the types and dimensions of the remains indicate that the site was used as a temporary camp/workshop during the Canalino Phase. Although no C^{14} dates have been

obtained for the cultural deposits, typological comparisons show that Carson 1 was a close contemporary of LAn 98 and probably of LAn 106. However, no Hispanic trade goods were recovered from any of the test units indicating that the site may have been abandoned prior to A.D. 1770.

The relatively intact status of Carson 1, the nature of the artifacts and organic remains recovered and the potential for the existance of cultural patterning strongly indicate that the site has good potential for yielding valuable data regarding the cultural affiliations of the former occupants, their relationship to other known sites in the South Bay area and beyond, and the nature and extent of seasonal hunting/gathering and resource exploitation practices. Carson 1 appears to meet the requirements of criteria 4 of the criteria of evaluation (36 CFR Part 800) for inclusion in the National Register of Historic Places. Most important, the site is one of the few intact Native American sites of any type left in the South Bay.

The artifact assemblage and especially the point types found in the test units closely resemble those from Malaga Cove, Level 4 (Walker 1951) and firmly place the site in the Canalino Phase.

Prospects For Preservation: Despite the projected development of the 70+ acres containing Carson 1 as a Mobile Home Park, the prospects for preservation of the site in its present condition are very good. Development plans call for the inclusion of the site in open space which will be left in a 'natural' state and various protective measures, including a conditioning of the use permit for the project, are being instituted. Some channelization of the stream (slough) bordering the site will occur but it will be monitored by a qualified professional archaeologist in order to prevent disturbance of the site and to recover materials unearthed accidentally. With the site unencumbered by surface and subsurface structures and infrastructures, the cultural deposits would also be readily available for future study should the opportunity arise. This is especially significant due to the increasing rarity of relatively undisturbed Native American CHRs in the South Bay area.

6. Carson 2

Location: Carson 2 is situated in the southeast corner of a 5.28 acrea parcel in Watson Industrial Center south (see Maps 1-3, Site No. 2; Figure 1). The site is bordered on the south by an east-west spur of the Southern Pacific Railroad and inventory building No. 12, on the west by the DWP power line easement and on the east by the Winona Pacific Facility.

Although occasional chert flakes and pieces of marine shell occur on the surface of both the subject parcel and the 5.63 acre parcel located immediately south of the railroad tracks (Inventory Building No. 12), the latter are widely dispersed over an area which has been extensively graded and recompacted and on which a building pad had been constructed. Bone and shell fragments, stone flakes and shaped artifacts were observed on and near the surface of the building pad itself (see below). However the great majority of remains were found in an area measuring approximately 300 x 360 feet (92 x 110 meters) or 2.45 acres (one hectare) adjoining the railroad spur and the parking lot to the Winona Pacific Facility (see Figure 5). The artifact concentration has designated as 'Locus A'.

A second concentration of 'Indian' artifacts was discovered in the DWP easement in the vicinity of Central Wilmington Line #2 pole 1369 in the southwest corner of the parcel containing Building Inventory #12. Although the cultural remains consisted of approximately a dozen flakes and a core, the latter was of an unusual type, being flat and subrectangular in form and having been used to produce long, parallel-sided blade-like flakes. Because of the impacts to the surface of the area separating this concentration from Locus A, its relationship to the latter could not be determined but it would appear to be an extension of the artifact concentration located north of the railroad tracks. For this reason both have been considered as belonging to a single site (i.e., Carson 2) and the concentration at pole 1369 has been designated 'Locus B'.

Status: Carson 2 was discovered during the citywide inventory of CHRs and had not been recorded previously either by Dr. Racer or the UCLA survey.

It is situated on a parcel which records, and aerial photographs show, has been in cultivation at least since 1936 and probably the turn of this century (Spence - Fairchild collection, WPA 1936-39 Land-Use Survey, etc.). In 1967-68, the area was undergoing development as an industrial park and the parcels appear to have been scarified and the pad for Building Inventory No. 12 was constructed after 1971.

Grading (cut and fill) and earth compaction operations have extensively modified the surface soils of the Inventory Building parcel but at the time of this study had not greatly affected the area of the site per se. Disking and weed abatement measures have somewhat dispersed the cultural deposit on the surface and have fragmented much of the exposed shellfish remains but the damage appears to be slight. Some indiscriminate dumping (asphalt, bricks, concrete blocks) and littering (scattered recent trash) have occurred (see Figure 5) but the intrusive materials are ver localized and appear to be confined to the surface.

Portions of the site may have extended southward and eastward at one time but the original dimensions could not be determined at the time of the survey. The eastern portion presently is covered by the asphalt-surfaced parking lot of the Winona Pacific Facility making inspection of the native soil impossible. To the south, the gravel bed for the railroad tracks has been laid in a narrow cut which has exposed a portion of the native subsoils but, while occasional shell fragments were noticed in and on top of the earth embankment, no traces of cultural remains could be observed in the exposed area near the track bed. It would appear that grading operations preceding the laying of the track had removed the cultural deposit to a depth of several feet below the original surface.

Carson 2 (A & B) has been impacted by natural as well as human agencies. Burrows of ground living animals were abundant throughout the area of the cultural deposit and have further intermixed the stratigraphic context. The exact extent of this mixing cannot be determined without conducting test excavations on the site. Permission to conduct such tests was requested of Watson Land Company (letter dated January 9, 1976) but was denied. In the absence of data to the contrary, Carson 2 (A & B) must be classified

as a site which has been partially disturbed by natural and human agencies but which is still largely intact within the areas of Loci A & B.

Significance: In order to determine the approximate age and cultural affiliations of the cultural deposit, a sampling (non-random) of artifacts was made from Locus A which was analyzed and compared to materials from other South Bay area sites. A more detailed discussion of the artifacts and the analysis is presented in an appendix to this report. It should be noted that only materials exposed on the surface of Locus A were examined; no attempt was made to recover artifacts from subsurface cultural deposits.

The materials analyzed included a fragment of a large mano, a fragment of the rim of a stone mortar (bowl?), a small corescraper, a spoke shave, two broken projectile points, a backed chert knife, two flakes with retouched edges, an unworked and unmodified flake fragment and a piece of heat fractured rock. All of the artifacts had been fashioned from local varieties of stone including Monterey chert, yellow and gray siltstone, volcanic tuff, granite and rhyolite. The rhyolite is not native to the coastal plain but is a common element of the buttes in Antelope Valley. All the other materials have a local origin.

Of the items analyzed (see Appendix), the artifact of greatest interest is the rhyolite point. Elongate and thin-sectioned, the artifact is almost an exact duplicate of a type found at the Little Harbor site (Type 3; see Figure 4 g, Meighan 1959b) on Catalina Island, at Santa Barbara (Harrison and Harrison 1966), Big Tujunga Wash (Walker 1951) and elsewhere in central and northern California. It is side-notched with a concave base and slightly protruding tangs, and it represents a type associated with sites dating to 5000-3000 B.P.

The second point also is side-notched but is smaller, thicker in section and is made on a flake of local chert. The chipping technique differs considerably from the rhyolite point. The basal portion has been broken off and cannot be reconstructed but the overall shape of the artifact and the placement of the notches strongly suggests that it also is of Meighan's Type 3 (see Figure 4 f, Meighan 1959).

Of the Native American artifacts observed on the surface or analyzed in the sample, none are of types which would contradict the age suggested by the two projectile points so that Carson 2 would appear to be a small village or temporary camp dating to the late Millingstone or early Intermediate Phase. The age factor is very significant since Carson 2 definitely predates both LAn 98 (which is located approximately 1/2 mile [1 kilometer] to the south; see Figure 1) and Carson 1. Its relationship to the other sites described earlier cannot be established due to lack of data although the presence of shell disc beads at LAn 106 would make it appear to belong to a later phase. Side-notched points were recovered from the San Pedro Harbor site (LAn 283; Figure 12, Butler 1974) but those were more irregular in form and workmanship than the Carson 2 specimens and a mixing of the cultural deposits in the former site prevents a clear picture of the assemblage or the date.

The projectile points also are of special interest from another standpoint. Sidenotched large points of this type are not especially common in South Bay sites and the type has rarely been found even on the Palos Verdes Peninsula (see Bates 1963, Walker 1951). The occurrence of a finely made point of this kind made on an exotic lithic material and the irregularity of those made on local rock suggests that the type is intrusive to the area and was being imitated by local toolmakers. It is possible that the point was introduced into the South Bay from the Santa Barbara area either by way of the San Fernando Valley or the Channel Islands along with other trade items (e.g., obsedian, steatite, etc.).

The fact that Carson 2 dates to an early phase of the Native American period, for which few local sites now exist that it is at least partially intact and that it has a high potential for yielding significant scientific data strongly indicates that it is eligible for inclusion on the National Register of Historic Places in satisfaction of criteria 4 (see 36 CFR Part 800).

Prospects For Preservation: Although the scientific and historical potential of Carson 2 is well demonstrated by the analysis of surface remains, the chances for preservation appear to be slight. The parcel located immediately to the south of the site has already been graded and partially

developed. The parcel containing the cultural remains fronts on a major commercial street (223rd Street) and also is supplied by railroad in the rear. When the parcel is prepared for occupancy, cut and fill grading and soil compaction will greatly disturb if not totally remove the cultural deposit and will largely destroy its scientific value.

In 1973, an Environmental Impact Report was prepared for Redevelopment Project Area No. 2 which includes the Watson Industrial Center South (Area 3) and, therefore, Carson 2 as well (Brock 1974). One of the expected benefits of the project is the promotion of "compatible development" of vacant lots (Brock 1974, p. 14) although no specific development plans of this type are proposed for Watson Center during Phase I (pp. 3-4). The archaeological sections of the EIR (pp. 12, 15, 16) refers only to the Suangna Village site (LAn 98) and ignores the possibility of other significant sites existing in the Project Area. The inadequacy of this document and of the mitigation measures it proposes for CHRs couples with the stated unwillingness of the Watson Land Company to conduct test excavations at the site places Carson 2 in considerable and immediate jeopardy of being damaged or destroyed prior to the mounting of systematic investigations to recover the data.

7. Carson 3

Location: The site is located in the Watson Industrial Center on a 5.95 acre lot fronting on 230th Street slightly south and east of the utility way intersection. The parcel is bounded on the south by a spur of the Southern Pacific Railroad, on the east by the Wilshire Foam Plant and on the west by the Hoyne Industries Division of Royal Crown Cola Company. Carson 3 occupies the western half of the parcel (Figure 1) beginning immediately south of the marker commemorating LAn 98 and extending into and under the railroad tracks. The presence of thick, yellow fill deposits on the surface of the parcel situated south of the spur prevented a determination of the limits of the darker colored cultural deposit (Ramona Loam) in that area. Yellow fill deposits placed on the surface of the 5.95 acre parcel also prevented a determination of the eastern margin of the site. The visible area of Carson 3 is estimated at 2-2-1/2 acres (0.80 - 1.0

hectares) although the cultural deposits may be much more extensive than is indicated by visible evidence.

The 5.95 acre parcel was once included in the northern portion of Struikman's Dairy Ranch referred to in Racer's notes (1939) and discussed above in connection with LAn 98 which lies circa 1/2 kilometer (1/4 mile) to the southeast. Aerial photographs dating to 1941 and earlier (Spence-Fairchild collection) suggest that, following periods of flooding, an arm from the former Dominguez Slough once extended southward from the area of the present San Diego Freeway across 223rd Street in the vicinity of the Lucerne Street intersection and curved around the west side of the site to flow into Watson Lakes just north of the intersection of Sepulveda Boulevard and Wilmington Avenue. During arid periods, however, the channel probably ran dry.

Status: Conditions at this site closely resemble those described for Carson 2 (above) and will only be summarized briefly. The parcel was under cultivation at least from 1936 until the late 1960's after which grading and scarification operations were begun. The degree to which these activities affected the cultural deposits cannot be stated at this time in the absence of test excavation data (permission to investigate the subsurface deposits was denied by Watson Land Company). It is expected that some disturbance of the original context has resulted from deep plowing, grading operations and weed abatement measures (the site had been disked recently at the time of the present survey). However, the deeper portions of the cultural deposit as exposed in the railroad cutting may have excaped damage to a significant extent. This would be especially probable if the deposit extended to depths of 1 meter (3.281 feet) or more. As in the case of Carson 2 above, the portions of the site visible on the surface and below the margins of the fill must be considered as at least partially intact according to information available at this time.

Significance: Carson 3 bears a superficial resemblance to Carson 2 both in size and context but cannot be so easily assigned to a particular occupation date or cultural phase. Chert flakes, heat-fractured rock and fragments of marine shell are scattered over the surface but the site

lacks any noticeable concentrations of these items. It is probable that such concentrations as may have existed have been dispersed as a result of grading and agricultural activities.

Stone tools and retouched or shaped artifacts appeared rarely on the surface of Carson 3. At least six fragments or large stone vessels were observed, representing at least three individual items, along with an edge trimmed artifact with unifacial retouch classified as a scraper. The vessel fragments were mostly found within a circular area roughly 10 meters (32.8 feet) in diameter and represented the only semblance of an artifact concentration or cultural pattern observed. However, the size and thickness of the fragments is such that they could also have been moved around considerably by disking and scarification operations. As an indication of this it should be noted that one bowl fragment was recovered from the surface of the railroad cut near the southeast corner of the parcel at some distance from both the visible edge of the midden and the location of the other fragments.

The stone vessel fragments are too small to give a precise or complete indication of the shape and type of the items they belonged to but the thickness of the pieces and the degree of curvature demonstrates that the vessels were of considerable size and weight. They appear to represent the remains either of large mortars or deep bowls of the type recovered from LAn 98 (see Racer 1939, R. Irwin collection). Some of these vessels measure over 18 inches (59 cms.) in diameter at the mouth and are more than 8 inches (26 cms.) thick at the base, weighing more than 40-50 pounds (88-110 kilograms). Vessels of this size and type are associated with the Canalino Phase of the Native American period.

The lithic material from which the vessel fragments were made is of some interest. Most consisted of the dense dark sandstone or metamorphic rock found locally in the Palos Verdes Hills but one rim fragment was from a bowl made of a yellow/buff colored sandstone (arkosic) not often seen in the area. A second fragment was made of granite of a type found near Pasadena and the San Gabriel foothills. It closely resembles the ballast

rock used in the railroad bed and both may have been derived from the same source (but at different times!). A metate made from much the same material is part of the Watson Land Company collection housed at Cal State College, Dominguez Hills and both specimens indicate trade contacts between the coastal interior areas in prehistoric times.

Non-lithic cultural remains in the midden consisted solely of unworked marine shellfish remains including Pecten sp.(scallop), Tivela sp. (Pismo Clam), Protothaca sp. (clam) and Haliotis sp. (abalone), the last-named being too badly fragmented to identify as to species. Shell fragments were also observed in the yellow fill soils in the eastern half of the parcel. Some were discolored by dark loamy soil and appeared to have been derived from the midden while most contained the fine, yellow, sandy loam (i.e., the fill soil) and were fossilized. The fill appears to be a composite of several soil types, including late Pleistocene beach or littoral deposits imported from areas surrounding the South Bay region, and should not be considered a midden or cultural deposit in the same sense as was the shelly dark loam.

The scientific value of Carson 3 is difficult to determine without data from test excavations. The stone vessel fragments indicate that the topmost deposits date to the Canalino Phase but it is possible that older components are buried at depth below the surface. No attempt was made to obtain C^{14} dates since the original remains on the surface may not be in primary context.

The nature of the site and relationship to LAn 98 1/4 mile (1/2 kilometer) to the south is also problematical. It is very likely that the two cultural deposits are (or were) continuous and formerly represented a single midden. It is also possible that Carson 3 represents only a part of the 600+ year sequence at LAn 98 or that is a distinct and separate site altogether. In the latter case, it should be assigned a separate number in the UCLA survey records; otherwise it should not be identified separately but should be considered an extension of LAn 98.

The distance between the two sites is not a telling factor in support of either hypothesis. Gabrielino wickiups were small structures which were

quickly constructed from reed (tule) mats or thatch on a framework of poles bent and tied together (Kroeber 1953). Wickiups forming a village large or small were not aligned any particular pattern but were closely grouped around a 'yoba' (open air ceremonial enclosure) by clan. The continuous existance of an individual wickiup, based on the experiences of this Consultant with structures in other cultures, might be 5-7 years or less.

Fire was a constant hazard which could occur at any time. The construction of a wickiup was so easy, that it was easier to construct a new one at the same place or in a different area rather than make major repairs on the old one. The Tongva also had a deep awe of and reverence for deceased persons, especially members of one's own clan or family, and were known to move whole villages to escape the attentions of a powerful returning spirit (Coffin 1955, Moriarity 1969). As a result, wickiups could be abandoned or moved at any time for a variety of reasons around a particular site, and the cumulative effect would be to create a midden over a much larger area than was actually occupied at any one time. In the case of Suangna, such a dispersal of the occupants could have been encouraged by factors such as flooding and the switching of river beds as has been known to occur even in recent periods (Reagan 1915 a, b).

It is probable that Carson 3 represents a particular period of the habitation sequence at LAn 98 when a sizeable portion of the village was located slightly north of the present main concentration of the midden. This northward shift would most likely occur during a succession of years with less than average precipitation, as occurred between 1833-1862 and 1889-1912, during which the Dominguez Slough and its outflow channels were greatly reduced in extent (see Reagan 1915b). At such times, the 'cienaga' that existed on three (?four) sides of Suangna would have dried out and expansion of the village would be a possibility.

Although the lack of data on Carson 3 and on the extent and status of its deposits makes an assessment of its scientific value impossible, the site is of great potential significance for two reasons:

i. It may be one of the few portions of LAn 98 which is still largely intact or only minimally disturbed;

ii. The excavation of the site may yield important information on Tongva

settlement patterns as well as support or modify current theories on village structure.

Either of these prospects may be sufficient to make Carson 3 eligible for inclusion in the National Register of Historic Places and it could be so nominated, perhaps in association with LAn 98.

Potential For Preservation: Except for the fact that Carson 3 appears to have been disturbed to a greater degree, the prospects for its preservation are similar to those stated for Carson 2 (above). However, the fact that the site is so close to and may even be a part of LAn 98, which was specifically mentioned as significant in the EIR for Redevelopment Project Area No. 2, much improves the chances that the site will be investigated prior to the construction of surface or subsurface facilities on the parcel. The fact that the Suangna site has been officially declared to be a point of historical interest (LAn 013) provides little protection for either site since LAn 98 is not preserved against destruction or damage by this designation.

In short, there exists at present no reliable mechanism for the conservation of the cultural deposit at Carson 3.

HISPANIC PERIOD CULTURAL HERITAGE RESOURCES (A.D 1770-A.D. 1849)

The Hispanic Period begins in the Carson area with the establishment of the Rancho San Pedro in 1784 and the arrival of Juan Jose Dominguez with his horses and herd of cattle that same year. From that time until the beginning of the American period, the city area served primarily as grazing land for the Dominguez family and its descendants along with other parties and required de facto priviledges to forage and wventually \to settle (e.g., Manuel Gutierrez, Jose Diego Sepulveda, Felipe Talamantes, etc.).

Although contact with the area was established by the priests and soldiers from San Gabriel Mission prior to 1788, the only effects of th is contact were the development of San Pedro Harbor and of the two dirt roads to connect it with the interior. Except for the 'Indian' village(s), there is no evidence of settlement or other major structures existing within the present City

boundaries until after the beginning of the American period (A.D. 1050). For this reason, surviving traces of the Hispanic Period in Carson are virtually non-existant except as map lines and boundaries.

1. Eastern Road From San Pedro Harbor to Los Angeles & San Gabriel Mission Location: Although maps for the Rancho San Pedro area during the late 18th and early 19th centuries are vague and not drawn to scale or from survey data, the accounts of early travellers and the sketches available demonstrate that the eastern road of the two connecting the harbor with the Pueblo closely parallelled the routing of the present Wilmington Avenue as it passed through the Carson area. The closeness of the parallel cannot be determined exactly but both the recorded data and circumstantial evidence strongly suggest a considerable degree of exactitude.

   J. M. Guinn (1900) has described the opening of the harbor to sea traffic and the existance of the two roads which in 1851 became Public Highways (1905), as well as the conditions which determined the route of each. These routes were also noted by travellers through the area (DuHant-Culy 1929, Ludwig 1927, Gillingham 1961) prior to the introduction of stage and railroad transportation.

   The major factor in establishing the roadways was the location and extent of the various lakes and swamps (Cienagas) on the Torrance Plain, which during the Hispanic Period was known as the 'Punta de la Laguna' (Plain of the Lake). From the data it is uncertain which Laguna is being referred to but only two bodies of water existed on the plain which could have been of concern in laying out a road; i.e., Dominguez Slough and Bixby Slough (also called Machano Lake and, recently, Harbor Lake). The location and maximum extent of Dominguez Slough is shown on Map 1 while Bixby Slough is only partially indicated. It should be noted that the former is to be found on most of the older maps of the area and is usually labelled 'Laguna', 'Lake', or even 'Lagoon' (see Figures 6) and as a major feature of the landscape (especially on large scale maps). Bixby Slough does not appear as regularly and is often only partially depicted or else is shown as a marshy area.

Both bodies of water, regardless of how depicted, were sizeable enough to prevent travel through their respective areas, and were positioned so as to permit access to the Harbor area by only two routes. The major and most direct of these (i.e., the 'western road') is described as extending south from the Pueblo (San Pedro Street) through the Gardena area and immediately in front of the adobes of the Sepulveda family (above Gaffey Street), bypassing both Domingues Slough and Bixby Slough on the west (Gillingham 1961, Dana 1840, Guinn 1905, etc.). This road became the principle route used by the 'carretas' (oxcarts) and later (1852) by stagelines (Banning & Alexander, Wells Fargo, etc.) and even by the Pony Express (Guinn 1900, 1905, 1907; Robinson 1954, Cleland 1918, Jackson 1974, Gillingham 1961; see also the Rancho San Pedro partition map 1855). The route also bypassed Dominguez Hill on the west and was forced to pass Palos Verdes Hills on the west upon reaching San Pedro Harbor.

The eastern route is not as well documented although it may have been the more important thoroughfare in supplying the Mission prior to A.D. 1800. The swampy conditions of the Harbor before A.D. 1900 and of Bixby Slough immediately to the north and feeding into the Bay provided only a small strip of dry land from Palos Verdes Peninsula northeastwards through the central part of the future site of Wilmington. The road then angled more sharply northward to pass between the marshes of the Los Angeles River estuary and Watson Lakes on the east and Dominguez Slough on west until it reached the foot of Dominguez Hill. A second road branched off near the west boundary of the Wilmington Tract in 1855 and swung due east to cross the estuary south of Watson Lakes (see Partition Map of 1855).

The route followed northward from the base of the south slope of Dominguez Hill is uncertain. The 'official' route is depicted on the several survey maps for the 1855 partition of the Rancho San Pedro as proceeding up the hill in a north-northeasterly direction and passing west of the homestead of Pedro Dominguez. The latter (no longer existing) was located several hundred meters northwest of Manuel Dominguez' adobe but east of Jose Navario's house. At this point, the road took a more northerly course approximately that of Alameda Street today and close parallelling the bed of

Compton Creek and the future right of way of the Pacific Electric (now Southern Pacific) Railroad. A subdivision map (1866) of the Temple and Gibson Tract (central and southern Compton) shows the road crossing the present-day Wilmington Avenue at the intersection of the boundaries of Ranchos Tajauta (Los Cuevos), San Antonio and San Pedro (intersection of Wilmington and Rosecrans Avenues). A halfway house was located at this point on the west bank of Compton Creek. This agrees with the field notes for the 1856 survey (Gillingham 1961) wherein the north boundary crosses the "Los Angeles to San Pedro" road "57.52 chains" (3,796 feet) from the eagle tree (now at the corner of Poppy and Short Streets in Compton) slightly east of the present Alameda Street.

It is interesting to note that while several small tracks led from Don Manuel's adobe to the Los Angeles river bed and also to the house of his brother, none extended southward along the eastern flank of Dominguez Hill at this time (Hancock & Hansen 1856). Apparently, this was due to the proximity of Compton Creek at that time to the hill which would have made the road impassable during heavy rains and flood. Compton Creek represents a former bed of the Los Angeles River and was the cause of serious flooding near the Dominguez Ranch House as late as the 1930's (Dominguez Water Company archives; Reagan 1915 a & b). However, some type of roadway may have existed at the base of the slope since the battle of Dominguez Hill (1846) was fought on its 'eastern side of the hill'. The commander of the Mexican forces ambushed the American contingent advancing on Los Angeles by placing men along the sides of the road and his cannon piece in the center. The action occurred, according to published accounts (Guinn 1899, Gillingham 1961, Fink 1966), in the vicinity of the Dominguez Ranch House where the Americans had camped.

A realtor's map published ca. 1868-69, while not to scale, shows the whole of the route of the eastern road from San Pedro Harbor to Los Angeles, depicting various features and landmarks along the way (Figure 6). Despite its sketchiness, the data agrees well with that given on the survey maps except that the road is depicted as passing in front of Jose Navario's home several hundred meters northwest of Pedro's house.

In 1882, Manuel Dominguez willed the eastern road to the County of Los Angeles but by this time the road had been straightened out to correspond with the present alignment of Wilmington Avenue. Also, the Los Angeles and San Pedro Railroad track had been installed in 1869-70 down the center of Railroad Avenue (Alameda Street) and at the time of the 1885 partition had become the main road connecting the city with San Pedro Harbor.

Status: Virtually all visible traces of the original roadway have been obliterated by urban development and changes in the landscape. Parts of the route may lie underneath the present Wilmington Avenue but the fact that the earlier roadway was never paved makes the chances of it being discovered very unlikely. The portion of the road extending up the south slope of Dominguez Hill from the intersection of Wilmington Avenue and Del Amo Boulevard was still being shown on maps as late as the 1890's and may have been used for transporting farm equipment or private servicing of the Rancho. Agricultural development of the hilltop and the installation of oil drilling equipment obliterated this last segment after 1920.

Significance: Although the original roadway is gone and probably cannot be recovered by excavation, the evidence indicates that it followed closely the present alignment of Wilmington Avenue. Known at various times as the San Pedro - Los Angeles Road, the County Road and finally as the Los Angeles-Wilmington Road, it was not as much used as the western roadway along Normandie Avenue but served as a major artery for the Rancho San Pedro and Rancho San Antonio in transporting livestock, hay and hides to San Pedro Bay and finished goods from the incoming ships. For many years it was the only way for the families on the Ranchos bordering the west bank of the Los Angeles River to travel to Los Angeles or to reach their neighbors.

In view of the absence of development on the Rancho San Pedro until late in the 19th century, the precursor to the present Wilmington Avenue was the first roadway to be located within the city of Carson. It was probably first established in the 1780's (or before) and has remained in continuous use since that time.

Prospects For Preservation: There is very little chance that the original road still exists in manner that could involve a directed program of preservation at this time. However, in the event that construction or development activities uncover traces of the original route, appropriate measures should be taken to see that such traces or remains are competently investigated and documented and that recoverable artifacts or data are preserved.

2. Rancho Los Palos Verdes Boundary Line

Location: A portion of the grant boundary line separating the Ranchos San Pedro and Los Palos Verdes passes through the southwest corner of the present city of Carson. Beginning at the harbor, the line extended northward along Figueroa Street to Sepulveda Boulevard (See Map 3) and then turned westward to Anita Street and King Harbor (Sausal Redondo) in Redondo Beach.

Status: The boundary line was established by survey following the settlement of the Sepulveda family's claim to the Palos Verdes Peninsula in 1841 and again with the granting of the U.S. Patent for the Rancho in 1853. However, the line was based on arbitrary criteria and on landmarks which have been altered or removed in recent times and the streets cited above are the only tangible traces existing today. The grant boundary is still shown on present day U.S.G.S. topographic maps (Torrance Quadrangle, 1964; Revised 1972).

Significance: The boundary line is of historical value in that it represents the first partition of the original (1784) Dominguez grant. It is significant that a portion of the boundary is demarcated today by Figueroa Street since it was Governor Jose Figueroa who negotiated and signed the arbitration decree of 1834 which was a major step in the establishment of Rancho Los Palos Verdes. The line was utilized in 1854 to locate the southwest corner of the tract purchased by Banning and Wilson for development of the city of Wilmington and remained as the southeastern boundary of Rancho San Pedro through the partition of 1885 and into the first decades of the 20th century. The line passed out of use as the harbor area was developed and as portions of the two ranchos were sold.

Prospects For Preservation: Except for the erection of fences to separate the cattle belonging to the two ranchos, there is no evidence that the boundary was identified by any distinctive or significant features which have survived the passage of time. Since the grant line is demarcated on existing maps and is represented by the rights-of-way of two major thoroughfares there is little chance that the location of the line will be 'lost' or forgotten. At the same time there are no tangible remains to preserve and no special program is required for this purpose.

AMERICAN PERIOD CULTURAL HERITAGE RESOURCES (1850-1976).

In 1850, the area occupied by the present city of Carson was still either swamp or grazing land and was still owned by the Dominguez family. In 1854-55 the sale of the Wilmington and the first partition of the Rancho San Pedro among family members led to the beginnings of the development of the Carson area. By 1870, major portions of the Rancho lands north of Victoria Street had been acquired by persons outside the family who were influencial bankers, realtors and financiers, including P. H. Downing, T. B. Hayes, I. W. Hellman and E. N. McDonald. Some of this land was subdivided and sold during the 1880's for farming and residential development (Gillingham 1961). Much of the land sold to McDonald and Downey are now part of Gardena and the Los Angeles strip but the area between Alondra, Figueroa and Victoria Streets was not affected appreciably at that time. Downey's holdings between the present Main, Victoria and Figueroa Streets & Artesia Boulevard (approximately 504 acres) were subdivided (Lakedale Tract) but development was delayed until after the turn of the century by the collapse of the 'land boom'.

In 1869, Manuel Dominguez established the Dominguez colony. A tract of 2000 acres was subdivided into 40 acre 'blocks' and sold individually. However, sales were slow and by 1885 less than one quarter of the properties had been sold (Gillingham 1961; 1885 partition map). At about the same time, the Rocha property north of Wilmington was also undergoing subdivision and was being sold as farmland. By 1900 this area had become known as the 'German Settlement' and was an established community. The area along the present day Main Street and Avalon Boulevards was being parcelled out in a similar fashion after 1885 (Jerrills 1972).

Following 1910 and the formation of the land companies to manage the holdings of the heirs of Manuel Dominguez and the Dominguez Water Company, the nucleus of the present city of Carson was formed. By 1930, the area was being serviced by utilities and three railroads (Pacific Electric, Southern Pacific and Santa Fe), and contained several oil refineries and six small communities (Jerrills 1972, Gillingham 1965; A. Moyne, Personal Communication). The latter included (See Map 2):

1. Davidson City, developed in 1923 by the Davidson Investment Company from portions of the original Dominguez colony previously being used mainly for truck farming as part of the 160 acre Elftman Ranch (1889-1923). Initial development involved a 40 acre 'block' of lawn situated north of Carson Street and east of Alameda Street (Jerrills 1972, Waters 1948). Today the area, now known as Dominguez, extends eastward to Santa Fe Avenue and northward to Del Amo Boulevard, approximately 2/3 of the area of the original 'colony';
2. Watsonville, located in the vicinity of the former Watson Lakes and Watson Crossing at Alameda Street and along Sepulveda Boulevard. This small community consisted mainly of families of workers employed by the various oil refineries located nearby (Pan American, Associated Oil, Shell Oil, etc.) on land formerly owned and occupied by the Watson and Rocha families. Much of this area is today given over to industrial use.
3. German Settlement/Factory Center, located mainly between Avalon Boulevard and Main Street south of Sepulveda Boulevard on the former Antonio Jacinto Rocha Tract. Subdivision and sale of this land began prior to 1885 and perhaps as early as 1870. By 1900 a small farming community had been established complete with schools, a church (not within the city of Carson) and small commercial enterprises (Jerrills 1972; A. Moine, (Ms.) K. Beck, T. Hilliard personal communications);
4. Keystone, situated along Main Street between Carson and 220th Streets on land developed for farming at the turn of the century. The community itself formally originated in 1922 when the land was subdivided into five acre lots and in subsequent years the town had acquired a lumber yard, feed store, grocery store, hardware store and other commercial establishments (A. Moine, C. Andrews; personal communications). During the

Depression, a small 'town' ('Hooverville') was created at 220th and Figueroa Streets for families unable to obtain work;

5. Nestoria, a small development (ca. 70 acres) located on Main Street north of 213th Street and later known as 'North Keystone'. Originally subdivided by Thomas Nestor, a developer, in 1924, the community extended north and south of East Road (Torrance Boulevard) along Main Street and by 1936 included a restaurant and several stores (A. Moine, personal communication; see 1937 map of Dominguez Estate in Gillingham 1961).
6. Alondra Boulevard, a small rural community including several commercial establishments existed in North Carson between Main and Figueroa Streets prior to 1920. Precise information on the development of this area could not be obtained except that it was situated partly on the former J. G. Downey 504 acre tract and partly on the Downey, Beaudry and Hayward Tract as surveyed in 1881 and that by 1900 the area supported a dozen farms as well as several roads (Main Street, Walnut Street. Figueroa). The roads did not extend south beyond Victoria Street and the north area of Dominguez Slough but connected instead to the Gardena area, indicating that the Alondra Boulevard 'community' was a 'suburb' of the latter. It was not until the 1920's that the Dominguez Slough was sufficiently drained to permit construction of Main Street (Harbor Boulevard) southwards to connect with the Nestoria area.

Each of these communities underwent considerable expansion and change during the 'housing boom' of the post-World War II and today are coalescing to form the nucleus for the city of Carson. Although most of the 'new' areas of the city encourage tract development, the original character and composition of the nuclear areas are still visible today and many of the structures built in the 1920's still are in use. However, a large number of buildings which once served as landmarks to the growing community were destroyed or greatly modified during the post-World War II expansion and later periods. In addition, many of the original features of the landscape, especially the former vegetation and waterways (e.g., Dominguez Slough, Watson Lakes, The Peterson Gum Grove), either no longer exist or lie beneath 10-25 feet of fill and the physical modification of the area is continuing at the present time.

While many structures and features date to the initial period of development of the Carson area, few have been formally documented and little has been done to preserve or protect them from destruction. At the time of this study, no sites or structures within the city of Carson are listed on the National Register or with the California State Historical Landmarks Commission (with the sole exception of the Suangna Indian Village Site [LAn 98]; see above). At present, a total of seven sites in the vicinity of Carson have been designated State landmarks (see above). But none of these are located within the city itself and no properties or resources of historic significance were included in a recent (1975) statewide inventory conducted locally by the Los Angeles County Museum of Natural History.

A check of the holdings and data of the LACMNH, including the Works Progress Administration Survey of 1936-9 and other archival materials, also revealed no listed CHR's for the city of Carson pertaining to any of the periods discussed in this report. The same results were obtained from the files on local history maintained at the Los Angeles City & County Libraries as well as at most of the local universities. The sole exception to the above is the Harbor College Library which contains some data on Carson sites collected by the late Camille Baxter. Local and regional historical societies (e.g., Native Sons & Daughters of the Golden West, San Pedro Bay Historical Society, Los Angeles Cultural Heritage Board, Historical Society of Southern California, etc.) also have access to historical data but very little of it has been documented for the Carson area.

As will be explained below in greater detail, this seeming 'neglect' is due partly to the formal criteria used to judge the historical resources of the area and the fragmented nature of the Carson community. Until recently, most sites have been considered significant if they are identified with historical events or personages of national, state or regional importance. Because of this many old or relict structures or landmarks of interest to a particular locale or community are not considered historically significant and are modified, lost or destroyed unless preserved by the local inhabitants or organizations. In some cases, locally based and oriented groups have been formed within communities (e.g., Pasadena, Los Angeles City, San Pedro) to identify buildings or locations which reflect local events or aesthetic trends. No such group has yet been established for specifically this purpose

for the city of Carson. As will be shown in following sections of this report, an organization of this type with the active support of the City Council and special ordinances can be extremely effective in identifying and preserving surviving traces of local history.

In the course of the present survey of historical resources, the following were identified as significant to the development of the city of Carson during the American Period:

1. The Old German Church

Location: 319 East Lomita Boulevard, on the northwest corner of the Lomita Boulevard-Bayview Avenue intersection (see Map 3). Both the parsonage and the Sunday School building are still standing with the latter to the rear of the former. However, the church itself was torn down ca. 1923 to make way for the present poultry ranch. It formerly stood where the packaging plant and office (A&A Poultry) is today.

Status: Currently occupied by the Richard Schultz family as part of the A & A Poultry Ranch. The former parsonage is in use as a residence and is in good repair. It has undergone some modification in recent years with the enclosing of the front porch and the addition of indoor plumbing facilities (a picture of the building in its earlier state is on file at the Harbor College Library). The Sunday School building itself currently is not occupied and is serving as a storehouse for household items. It also is in good repair at the time of this report and appears to be in its original condition with only slight changes.

Significance: The Sunday School and parsonage date to approximately 1882 when the first minister was installed. Prior to th at time church services had been held at the Congregational College on Lecouvreur Street in Wilmington. The church was the first to be established within the present city limits and it served as the main focus of social and religious life in the German settlement until 1923 when it was sold. It later became part of the A & A Poultry Ranch. Both buildings are excellent examples of religious and secular architectural styles of rural buildings in the South Bay area at the turn of the century.

Prospects For Preservation: At the time of this survey both buildings are in private ownership and being maintained in good repair. However, they are not listed formally with any governmental or private organization

or agency involved in historic preservation, and therefore are subject to sale, modification or even demolition at any time. There is also considerable danger from neighborhood vandalism. The property is located within a half-block of a Junior High School and is on a major thoroughfare. The front windows of the enclosed porch of the parsonage were broken repeatedly by vandals and have been boarded up in recent years. Both the parsonage and the meeting house Sunday School building are wholly constructed of wood and are subject to destruction by fire. As a result, the future preservation of these structions, perhaps the oldest still existing within the city limits, is not assured and there is a need for further measures to be taken on their behalf.

2. Dominguez Water Company

Location: 21718 South Alameda Street on the south side of intersection with Carson Street (See map 3).

Status: The pumping plant and reservoir constructed in 1911 (Gillingham 1961, Grenier 1961) are still in existance but the former has been remodelled following extensive damage caused by the 1933 earthquake (A. Reeves, personal communication). Although the pumping plant has been modernized and strengthened, it still retains the form of the original structure.

Significance: Originally built in 1911 the pumping plant and reservoir were the core elements in a water distribution system that not only permitted irrigation farming on a large scale and the cultivation of a wide range of crops that previously had been limited to river bottom land but also prompted the urbanization of the South Bay area. The original distribution system was composed of unique pipes made from redwood slats due to the shortage of steel in the South Bay area, especially during Work War I. The slats were fit together in a tongue-in-groove fashion by coopers hired for this purpose. These pipes have now been removed from service and many of the slats have been used to panel the reception room of the new office building.

The early development of much of Carson and surrounding areas (i.e., Torrance, Compton) was directly the result of the formation of Dominguez Water Company along with the formation of real estate holding companies

by the Dominguez heirs for the sale and subdivision of large tracts within the Rancho San Pedro. The pumping plant has served as a major landmark of the area for over 65 years.

Prospects For Preservation: Although threatened by large scale flooding and heavily damaged by the 1933 earthquake, the pumping station and reservoir have been greatly strengthened, modernized and protected against future mishaps without extensive change in their original plan and form. The construction of extensive flood control structures to control the flow of the Los Angeles and San Gabriel Rivers and Compton Creek has sharply reduced the danger of flood damage. Modernization of the facilities was recently completed with the construction of the new office building in 1973-74 and no major changes in the pumping plant are presently contemplated (A. Reeves, personal communication). Although the history and signicance of these structures has been well delineated in writings on the Carson area (see Billingham 1961, Jerrills 1972, Grenier 1976), no formal recognition of this has been made by the city and responsibility for the preservation of the plant lies solely in the hands of the Dominguez heirs and the Board of Directors.

3. The Dominguez United Methodist Church

Location: 21503 Prospect Avenue, in the southeast portion of Dominguez (corner of Adams and Prospect Streets; see Map 3).

Status: Originally built in 1929, the church itself was extensively remodeled in 1968 resulting in the removal of the original roof and of the balcony on the south side over the entrance. New stained glass windows also were added to the west wall and the interior of the church was extensively modernized. However, despite the changes the church still retains the basic form and external appearance of the original structure. A social hall was built in 1950 immediately to the south of the church and in 1961 a kitchen and Sunday School room were added. All buildings are in good repair and are being well maintained by the membership. (Data supplied from church files by D. Baker).

Significance: Prior to 1929, church and Sunday School services for Davidson City were conducted first (1924) in a real estate tent and later

(1926) in a house (garage?) in the rear of a lot on Jefferson Street, after which they were transferred to the first Community Hall located on Tyler Street west of Prospect Street (2600 block). At that time the church was incorporated as the Community Methodist Episcopal Church of Davidson City. The property on which the Community Hall stood was sold by the Dominguez Estate Company in 1939 and the building was torn down. Today the site contains a trailer park (Waters, nd; D. Baker, J. Vanie, personal communications).

The present church was constructed from publicly donated funds on the present site in 1929 and was the first to be built in the community of Dominguez (Davidson City). Originally intended as a non-denominational institution, it soon became a Methodist Church and a member of the United Methodist Conference (D. Baker, J. Vanie, personal communications). The sanctuary building itself was reputed to have been designed from generalized plans originally drawn by Frank Lloyd Wright (P. Bleich, Harbor College, personal communication) but data provided from church files do not support this contention, indicating instead that the designer was Reginald Inwood, later a prominent church architect for the Los Angeles area. His father became pastor of the church in 1933 (Temple & McKinney, nd).

The subject building, despite its remodeling, is unique in its architectural style and has served as a focal point for community action for nearly half a century. Structural modifications and the fact that it has not been associated with persons or event who have played a major role in national, statewide or regional history may make the church ineligible for inclusion on the National Register of Historic Places or the list of State Historical Landmarks. However, it has played a major role in the development of the Dominguez Community and has served as a local landmark. In addition, the church has served as the training ground for ministers who have since assumed important positions in the United Methodist Conference in major cities throughout the nation. For these reasons the church has great historical significance to the community of Dominguez and to the present city of Carson.

Prospects For Preservation: Barring damage from a major national catastrophe, the present structure has been upgraded by modernization and alterations to the exterior to the point where it should not be subject to further changes or to hazards such as fire and structural decay. However, it is unfortunate that efforts to upgrade the building have resulted in the loss of some distinguishing architectural features, such as the balcony which formerly overshadowed the entry and which played a role in seasonal festivities.

In general, the church is a recognized and valued landmark for the community and is in little danger at the present time of being demolished or further modified to an appreciable extent.

4. Dominguez Elementary School

Location: 21250 South Santa Fe Avenue in the former community of Dominguez (Davidson City, see Map 3).

Status: The need for increased space and for the structural remodeling of portions damaged in the 1933 earthquake so as to meet present standards have resulted in substantial changes to the original school building. At the time of this study the lower floor of the present school building is all that remains of the structure originally built on the lot. The property itself has also been expanded to encompass a total of 8.8 acres including two lots acquired on Jackson Street to accommodate a pedestrian overpass. The effect of these changes and additions has been to greatly alter the interior and exterior appearance of the school building and facilities through time (J. Vanie, M. Waters, B. Kimball, Ms. A. Kitzerow; personal communications).

Significance: Dominguez School District was first established in 1909 and the first school building was located on the lot located on Tyler and Dominguez Streets near Prospect Street (see Map 2). The building also served as the location of the Dominguez Chamber of Commerce from 1923 to 1929 (M. Waters, nd.) and also as a temporary meeting place for the United Methodist Episcopal Church and Sunday School from 1926-1929 (Temple & McKinney, nd). In 1924, the new school was erected on Lot 3,

Block E, of the former Dominguez Colony and belonging to the Dominguez Estate Company and the former school building became a Community Hall until it was torn down in 1939-40 (Ms. A. Kitzerow, M. Waters; personal communications; Temple & McKinney, nd.).

At the time Dominguez School was first established only one other school existed within be present city boundaries; namely, Lincoln (later Rocha) School located at the southeast corner of Main Street and Sepulveda Boulevard (formerly Rocha Street). Both were established the same year (1909) but the Lincoln School was closed and reopened several time between 1929-1950. Today the school no longer exists and the site is presently occupied by the American Can Company Plant (B. Kimball, Los Angeles Unified Board of Education files). As a result of the final closing of Lincoln (then Rocha) School in 1950 and the removal of the buildings, Dominguez Elementary School is the oldest institution of learning in the city. However, the remaining portions of the original building are surpassed in age by the Carson Street Elementary School which were constructed in 1921 (see below).

In addition to its longevity and historical value, Dominguez Elementary School was attended by several generations of local residents, many of whom are still living in or have ties to the community.

Prospects For Preservation: Most of the original building has undergone modification and modernization to the point that only a portion is now left for preservation and much of this is considerably altered as well.

5. Carson Street Elementary School

Location: 161 East Carson Street, east of the Carson Branch of the Los Angeles County Library at the intersection of Orrick and Carson Streets (see Map 2).

Status: At the time of this survey little data could be obtained regarding the history of the 'old building' which served as the original school and which still stands near the intersection of Orrick and Carson Streets.

Interviews with former students who attended school in that building during the 1920's and 1930's (e.g., Ms. Jean Rayner, Anthony Moine) indicate that the structure has been maintained in its original form without major alteration. This is verified by Los Angeles City Board of Education Records (B. Kimball, personal communication) and by photographs dating to 1928-30. The present building is in good condition and its classrooms are still in service (R. Clark, Vice Principal, personal communication).

Significance: Carson Street Elementary while not as old as Dominguez Elementary is significant for much the same reasons as cited above. It was first constructed in 1927 and was a focal point of the developing communities later to be called Keystone and Nestoria. It was built on 4 acres of land formerly called Boulevard Acres, although at the time Carson Street was little more than a country road extending only as far as Alameda Street (Jerrills 1972· B. Kimball, personal communication; see photograph taken 1927 belonging to Ms. Jean Rayner), and was annexed to the Los Angeles School District in 1929.

Prospects For Preservation: Information available at the time of the survey from the offices of the school itself and from Educational Housing office of the Los Angeles City Board of Education indicates that there are no plans to modify the old school building in the near future.

6. Henri's Lariat

Location: 21922 South Main Street near northeast corner of 220th and Main Street intersection.

Status: One of two remaining buildings, of a commercial 'complex' established on the corner during the early 1920's, Henri's Lariat has been 'modernized' somewhat and has had several rooms added in the rear but has otherwise retained the basic floor plan and exterior of the original structure. However, a stuccoed external surface has replaced the original wood planking of the exterior of the main portion.

Significance: Information on the building and its uses is incomplete and much of it has been obtained from long-time residents of the Keystone area. However, due to the passage of time memories have faded and data concerning the early uses of the building are at present inexact.

According to informants living in the area at the time (G. Schwartz, A. Moine) the building itself was first constructed on farmland circa 1922 by volunteered labor (including Carl Jentsch) as a community hall and was used as such until at least 1929. The hall was used for social purposes and meeting hall for community organizations including the Keystone Boosters Club (Jerrills 1972). According to one source, the building may have also served as a temporary church although this could not be confirmed by the Consultant. Sometime after 1930 the building was closed down for a number of years and was not reoccupied until 1945-6 (A. Moine, personal communication).

Immediately after World War II, the structure was acquired by Mr. Denver Hilliard. Mr. Hilliard had previously owned and operated the Wayside Inn and Gilmore/Red Lion Filling Station located on the southeast corner of 220th and Main Streets but had gone out of business prior to the war and the Inn was torn down. He converted the former Booster Club building into a 'nightclub' called 'Denver's Place' which soon became well known as the local night spot. It also was a periodic meeting place for the newly organized Keystone-Avalon Chamber of Commerce during 1949 (Jerrills 1972). In 1960, Denver's Place was sold to Mr. H. Falce and is today known as 'Henri's Lariat'. It is presently owned by Ms. Darlene Falce.

The building itself is one of the few remaining structures of the early Keystone community and precedes by nearly a decade those constructed by Mr. J. R. Black and J. J. Dunlop during the 1930's. With the exception of Henri's Lariat all the other commercial buildings which occupied the four corners of Main and 220th Street have been demolished to make way for later structures (Keystone Liquor, Wilson Texaco Station, Lupita's Mexican Restaurant, etc.) erected after 1937. In some cases, e.g., Beck's Home Center, the newer post-war structures and businesses have maintained names dating back to that period (e.g., Beck's Home Center). However, both as a community 'center' and as a place of entertainment the building now called Henri's Lariat has served and continues to serve as a landmark for the Carson area and is, therefore, of significance both to local history and as an example of the style of construction practiced in the Carson (Keystone) area during the post-

World War I period.

Prospects For Preservation: According to sources available at the time of this study, there are no present plans to modify or demolish the subject building or to change ownership. However, the building is in private hands and has not previously been included in lists of structures of historical value and, therefore, requiring protective measures. Despite the absence of current threats to its existance, there is a strong possibility that under present conditions the edifice could be extensively altered or even totally demolished as have other former structures (e.g., Day's Market, The Wayside Inn, etc.)

7. First City Hall of Carson

Location: 625 East Carson Street near the Avalon Boulevard intersection and less than an eighth of a mile from the present City Hall.

Status: The house in question has been leased to several tenants since it served as City Hall and has undergone considerable modification. During 1970-1973, it served as a residence and office of Mr. and Mrs. P. Pollack who operate the Carson ambulance service at which time the interior was modernized and somewhat remodelled. The front porch also was enclosed at this time and a portion of the roof which formerly extended over the driveway from the porch was removed (see painting of the building circa 1969-70 by Sandy Moss; reproduced in Jerrills 1972; original hanging in CarsonCity Hall). During the present survey the house was repainted and much of the trees and shrubs were taken out. At the time of this report the house is being offered for sale by Cale Realty.

Significance: The house is of wood frame construction and is a single storey, typical of those build during the pre-World War II period in the Los Angeles area. Data provided by Mr. B. G. Kidwell, a former owner, indicate that the present building was one of two moved onto the original five acre lot on the corner of Carson Street and Avalon prior to 1943 by Mr. Mace, who owned the property conjointly with Mr. James Irvin. Mr. Kidwell acquired the land and the house circa 1944 and maintained it as a residence until it was sold to Dr. C. Houske in 1967. During December of that year the building was made available to the

Dominguez-Carson Citizens Committee For Incorporation (D-C CCI) and became a committee headquarters until incorporation was approved (February 20, 1968). It then served as the first City Hall of the City of Carson until August 20, 1968 when new city offices were established at 22805 South Avalon Boulevard (Jerrills 1972) after which it was again leased as a residence until 1977 when it was vacated pending sale.

Except that the building is one of the few residential structures of the pre-World War II era remaining in the vicinity of the intersection of Avalon Boulevard and Carson Street, its historical value is derived from its period of service as headquarters for the D-CCCI and as temporary City Hall immediately following incorporation.

Prospects For Preservation: Given the rapid rate of development of the area surrounding the building, it is only a matter of time before it is replaced by commercial or community-oriented establishments and at such time the present structure most probably will be torn down.

Sensitive Areas

In addition to the specific cultural heritage resources identified in the preceding sections, the City also still contains numerous structures which, while not historically significant per se, are relics of the early developmental periods and reflect the ethnic and cultural heritage of the region. Their architecture is typical of the period in which they were designed and reflect the character of the community of which they were an integral part. Many are 'tract' or farm houses which date to the 1920's and 1930's and which today appear to be very little modified from their original condition except for the modernization of plumbing and heating facilities. Some of these are still occupied by descendants of the original occupants who have withstood the growth of the settlement into the present city.

A list of these 'relics' would be lengthy and an itemization of each such structure is a task which is beyond the scope of the present study. However, it is feasible to identify certain areas of the City which contain numerous structures of this type and to designate these as 'sensitive areas'.

In addition to structural remains, there also are certain areas of the city which have the potential for yielding information on the Native American inhabitants who preceded the Hispanic explorers and settlers in the region. Although no sites as such have been identified in such areas to date, the on-foot surveys conducted in 1975-76 revealed data or features which indicated that CHRs either have existed or continue to exist there. It is very probable that remnants of sites, partially or wholly intact are likely to be found in the future and planners and developers should be aware of this so that appropriate measures can be implemented to ensure the protection of these resources (see below). Areas which are considered likely to produce CHRs of this type also have been designated as 'sensitive'.

As revealed by the data search and field survey conducted within the City by this Consultant, the following 'sensitive areas' have been identified (Map 5).

Area 1. This includes most of the former community of Keystone dating from circa 1919 and including portions of Nestoria (North Keystone). The area is bounded by 228th Street in the south, Dolores Street to the east, Torrance Boulevard to the north and Figueroa Street to the west (see Maps 2, 3 & 5). Special attention should be paid to Moneta, Main and Dolores Streets between 223rd and Carson Streets since this was the focus of the Keystone Community and one of the first to be subdivided. Many of the houses along the alley extending west from Main Street immediately north of Keystone Liquor Store at 220th Street were constructed by J.R. Black during the early 1930's including the liquor store building itself. Some informants have stated that the house on the northeast corner of the intersection of the alley with Main Street was built and occupied by Mr. Black as his residence. Some residences in the area are so old that they were built before present 'setback' restrictions were in effect and as a result the lots on which they stand extend into the street right-of-way. One example is a house (21823 Moneta) reportedly dating back to the late 1920's which is fronted by large palm trees which prevent the construction of a sidewalk.

Several lots to the south of the residence just described contain structures and items which are relics of the old Keystone Community. One residence located at 21829 Moneta Street, has a wine press which along with the house dates to a time when the fields in back contained vineyards. The neighboring lot contains buildings which served as outbuildings to a farm dating to the same period and which are reported to include a barracks for braceros, an old barn and the remains of a cook-house/winery. Portions of the old boiler and bricks from the original oven still are in existance on the property although the remaining buildings have been remodeled to serve as a plant nursery.

In an area that in 1936 supported nine dairy farms, none remain intact today. However, at least one of the houses, from the Leonards Dairy Farm formerly east of East Road (Torrance Boulevard) is still in existance. The dairy itself was replaced by a landfill project (No. 2; see Map 4) in 1960 but the house was moved to the corner of 211th and Main Street prior to that time.

Portions of the former Nestoria Tract still contain wood frame houses erected by the original occupants although in most instances the latter are no longer in residence. Some of the older tract houses have fallen into disrepair while others have been well maintained or renovated.

The Keystone area is significant since it was one of the nuclei of the city as it formed and provided much of the momentum for incorporation. Several Native American sites also have been recorded in the area (see above; LAn 99, LAn 100). Although no traces of these sites could be found during the survey there is a possibility that portions could still exist at the locations cited and that the area may contain some sites not as yet obscured by fill deposits and landscaping or structures and would therefore not be visible to surface inspection. It would be advisable to have construction or grading projects in the area monitored by a qualified professional archaeologist who could identify such remains and recommend protective measures.

Area 2. The second sensitive area is the portion of the former Dominguez Colony which in 1923-4 was subdivided to become Davidson City and later (1935) the community of Dominguez (Maps 3 & 5) bounded on the south by Carson Street, on the east by Santa Fe Avenue, on the north by Dominguez Street and on the west by Alameda Street, Davidson City was a viable community by 1930 with its own school, church, commercial establishments and Chamber of Commerce. Reminders of this period are numerous, although again many of the original occupants are no longer present, and it was estimated that at least 20% of the present residences pre-date 1935. These can be identified by the fact that they are of wood frame construction with one story, a low peaked roof and a small roofed porch over the entrance. They are usually narrow in front due to the narrowness of the lots (25 x 110 feet). The plan form varied slightly from one house to the next and one later variation including a 'hacienda style' with 'Spanish' features (e.g., 2534 Adams Street; see also photographs in the possession of M. Waters). Generally, the older structures tend to be located in the southern and western portions of the tract while the other areas developed later.

A large proportion of the original houses have been modernized, expanded or extensively remodelled (e.g., the former McKinney House at Jefferson Street and Harbor View Avenue and a recently vacated house at Adams Street and Harbor View Avenue [southwest corner]). One home, at 2767 Jackson Street, was built circa 1938 and served as the first library until it became a residence in 19 .

During the late 1920's and early 1930's, Monroe Street was planned as a commercial thoroughfare and businesses were established along the western half of the 2600 block. However, in 1934 the area was rezoned as a residential and further business development was forestalled. Maciel's (formerly Burrance's) Market is all that remains of the original commercial development and is still operating at the time of this report. Other businesses were replaced by houses or as in the case of Doc's Variety Store, by community service

organizations (Dominguez Bible Chapel).

Like the Keystone area Davidson City/Dominguez was one of the first cohesive communities to form in the city and it provided much of the impetus of the movement towards incorporation. It still retains much of the atmosphere and appearance of the earlier period, although many of the businesses along Carson and Alameda Streets have fallen into disrepair. It is also the only community within the city to have adopted the name and heritage of the Dominguez family and the Rancho San Pedro.

Area 3. The third area is more diffuse than 1 & 2 and is more difficult to identify in terms of specific boundaries or tracts. It encompasses the area between Victoria Street. Avalon Boulevard and the northern and eastern city limits (see Map 5). As stated above, this part of Carson contained mostly farms except for Alondra Boulevard until industrialized and commercialized during the post-World War II period. Despite this recent and rapid development, some farms continue to exist interspersed between industrial plants, storehouses and outlets, and several still possess residences and structures dating to the pre-1930 period.

One such farm is located near the northwest corner of Walnut Street and Broadway at the point where Walnut turns to the southwest (South Gardena Tract, Lot 9, Map Book 43, page 39). The 'farmhouse' is a two-story, wood frame house with gabled roof. Records and data relating to its construction could not be located during the present study but topographic and land use maps for the period 1900-1936 indicate the presence of a structure at that location prior to 1919 (see Map 2). It could not be determined if the present structures date to that period but the investigation is continuing and the prospects for acquiring supplemental data are reasonably good.

A second example, although dating to a slightly later period, is the Larronde farm located north and west of the Victoria Street-Avalon Boulevard intersection (see Maps 2 & 3). The farm is

bisected by a branching arm of the Dominguez Slough and also contains the Carson 1 Site (see above, Native American CHR section).

The land was purchased in 1926 by John Larronde and ten years later contained a farmhouse and two out buildings. In 1933, an oil exploration lease was purchased by Union Oil Company which eventually established at least three wells on the property. At Larronde's death, the property was divided between the two godchildren and each share was held in trust. The property is currently in the process of being sold for development as a trailer park.

Although the farm has not been in use since 1970 and many of the buildings have fallen into disrepair, it still provides a good model for a working dairy farm in the Carson area. The residence is a one-story wood-frame house with peaked roof and a porch extending across the front as well as an enclosed porch in back. It has been on that location for more than 50 years according to map and aerial photo information. To the south and west nearer to the bank of the slough arm there are three out-buildings (two in fair repair) including a storage shed and a large, concrete-floored milking barn. Adjacent to the latter are the remains of a picturesque octagonal, 2-story windmill/water pump also constructed of wood. Several other structures are also present including a 2-stage cattle/sheep loading ramp and a large wood platform which represents either the remains of a large storage barn or portion of an uncompleted building. A 'three-hole' out-house with 'modern' fixtures is located immediately to the rear (west end) of the platform and a collapsed shed adjoins the northwest corner.

All the intact buildings contain debris and broken furniture and have suffered from vandalism. The residence and windmill have suffered the most and the former has been scavenged to the point of having its brick fireplace removed. It had been occupied by migrants as late as 1975-6 but is now deserted except for the

presence of an out-of-state hunter and his trailer. A large grove of Eucalyptus which once enclosed all the out-buildings except the milking barn has recently been greatly depleted, probably for use as firewood.

Area 3 is significant not only for the remains of one of the few farms dating to the pre-World War II era but also for the fact that portions of the land itself are still in their original state (having been used for pasture and not agriculture. The stream that bisects the Larronde property from southwest to northeast is one of the last remaining portions of the Dominguez Slough which was a major feature of the local landscape and which today abounds with wildlife and plants. Other arms of the Slough extended northward from the farm and also through the area between Main and Figueroa Streets. Most of these streams have been channelized or filled in and one of the arms now lies beneath the right-of-way for Broadway (see Maps 2 & 3).

The fact that some of Area 3 is still in its 'original' state raises the possibility that additional Native American sites, in part or in whole, may still exist there. As noted earlier in this report, the margins of the slough and its inflowing streams contained 'dozens' of sites which were observable during the 1930's and 1940's. Many of these were described as small (e.g., LAn 88, LAn 99) but would today be valuable indicators of economic and cultural behavior patterns. [It should be noted that the same early observers would have classified Carson 1 as 'small' although it has a potential for yielding major cultural information]. Some of these sites may still be partly or wholly intact even in areas which have been built up or covered with uncompacted fill and special consideration should be given to the areas bordering Main Street, Broadway and Figueroa Street south of Walnut. Only 75% of the land surface could be inspected visually during the survey (see survey map accompanying this report) and portions had to be excluded (including the farm at Walnut and Broadway) because the owner could not be contacted for permission to enter the property. It is important, therefore, that such areas be examined prior to issuing permits or approving

actions that would encourage or allow their modification. Such investigation should be required as part of the environmental documentation for such actions.

Area 4. This encompasses the area extending from Annalee Avenue on the west to the eastern boundary of the city on the east and from Del Amo Boulevard to Dominguez Street on the south.

As reported above, this area lies at the base of the south slope of Dominguez Hill, adjacent to and including the flood plain of both the Los Angeles River and Compton Creek (see Maps 3 & 5). Two Native American sites (LAn 389, LAn 390 were formerly located on the bluff overlooking the Alameda Street-Del Amo Boulevard intersection but have recently been destroyed by grading operations (Eggers 1973, 1974). Two other sites (LAn 695, LAn 696) also were located east of the Los Angeles River Flood Control Channel adjacent to Area 4, one of which was reported to have contained burials. This lends credance to reports of a burial site found but never recorded on the Shell Chemical Company property on Wilmington Boulevard (see above). For these reasons plus the fact that it could not be surveyed during the current study, this property has been flagged as sensitive and detailed surveys should be carried out before projects which would modify or disturb the existing land surface.

Remains of a potential site were also observed on a parcel located south of Del Amo Boulevard (2400 block) and immediately west of Fordyce Avenue adjacent to Pic 'n Save Variety Store. Fragments of marine shell including Chione, Pelten, Ostrea and Tivela were observed on the surface to a depth of one meter and in the sides of a drainage ditch cut into the native soil. A Native American artifact, namely a chalcedony flake, also was recovered in the shell area. Although much of the parcel was covered with dumped debris and dense grass the artifact and shell remains were all located within an 800 square meter area in the center portion.

The fact that these items were recovered does not in itself prove the existance of a site. Scatters of marine shell were noted throughout Area 4 in the open fields bordering Dominguez and Alameda Streets but all except the above lacked any trace of lithic cultural remains. It is this fact plus the cohesiveness and relative density of the shell that are the best indicators that more cultural remains are to be found on the parcel if and when subsurface tests are conducted. Such tests should precede the approval of development plans or the issuance of any construction or grading permits for the property or any further disturbance of the native soil occurs.

It should be noted that, according to a billboard advertisement, the subject parcel is presently being offered for sale by Majestic Realty.

Area 5. Portions of Redevelopment Area Number 2, specifically those including the undeveloped lots containing CArson 2 (a & b), Carson 3 & LAn 98. These CHRs are located in the area bounded on the north by 223rd Street on the east by Wilmington Boulevard, on the south by 236th Street and on the west by Bonita Street and its southward extension.

At present, only surface surveys have been conducted on the undeveloped lots in this area and there is a distinct possibility that subsurface cultural deposits may exist which have not yet been detected or which have been covered over by fill deposits. All trenching or grading operations in this portion of Redevelopment Area No. 2 should be carefully monitored by an observer capable of recognizing and evaluating native American CHRs.

V. RECOMMENDATIONS ON CHR POLICY AND CONSERVATION

In order to preserve, manage and perhaps restore its cultural heritage resources in an effective, productive way, it is important that the city be aware of actions and alternatives that are presently available or which could be established on a local level. In this section, this consultant intends briefly to set out existing laws, guidelines and sources of information or assestance which could be tapped to establish the basis and implementing force for an effective CHR conservation program. Recommendations will also be made as to the types of policies and measures the city shows exist and the ways in which they could be implemented.

It should be noted that in the discussion to follow, all references pertain to measures enacted as of December 31, 1976 unless otherwise stated. Some enacted measures had not been implemented as of that date where others had been implemented for only a short time. Although the listing is extensive, it is not exclusive and measures may exist in governmental codes or laws which could be applied to CHRs but which are outside of the expertise of this consultant; however, the data presented is sufficiently complete to permit city personnel to research and locate other sources of aid that would be appropriate to a particular situation.

A. EXISTING POLICIES AND GUIDELINES FOR CULTURAL HERITAGE RESOURCES

1. Federal Laws, Policies and Guidelines

Although most apply to land or property owner or controlled by the Federal Government, they also in many cases apply to projects or transactions in which the government takes an active partnership or plays an indirect role (e.g., guaranteeing a loan, rendering assessments, etc.). Some laws are reasonably old but have been recently ammended and strengthened; others have appeared only in the last ten years and are in the process of refinement and clarification. However, the interest in the recent Bicentennial Celebrations, the increasingly active concern for conservation of natural resources and the environment, and the need for establish ing guidelines for planned and orderly urban growth have contributed a major concern for the conservation of CHRs at all levels

of the federal bureauocracy and has provided for the fudning of protective actions.

Major Federal Policies, Guidelines and Laws affecting CHRs include the following:

a. The Federal Antiquities Act of 1906 (P.L. 59-209:34 Stat. 225). Prohibits the disturbance of historic (including Native American) resources located on lands owned or controlled by the Federal Government without a permit from the responsible government agency. Also establishes conditions for conducting research or CHR expansion in Federal Laws.

b. The Historic Sites Act of 1935 (P.L. 74-593: 49 Stat. 666). Provides for the edentification, preservation and management of buildings and sites of "national, historical and archaeological significance." It provides for the development of an educational program and service for the collection and dissemination to the public of information as to the significance and value of such resources. It also encourages active research and documentation of CHRs and establishes procedures to restore, memorialize, protect, manage or acquire CHRs. It further established an advisory board on national parks, historic sites, buildings and monuments to administer these provisions through the Department of Interior and the National Park Services.

c. Charter for National Trust for Historic Preservation (P.L. 81-408: 63 Stat. 927). Establishes and funds the National Trust for Historic Preservation (NTHP) in order to promote the conservation of Cultural Heritage Resources. Implements P.L. 74-593, section 2 (d-j).

d. The Historic Preservation Act of 1966 (P.O. 89-665: 80 Stat. 915). Expands and further defines the 1935 act by establishing a Historic Properties Preservation Program including (i) A National Register of Historic Places and (ii) procedures for providing money for establishing statewide historic surveys and plans for preservation of significant sites through matching

grants-in-aid to the National Trust for Historic Preservation and/or through state agencies. Sites could qualify if they are deemed "significant in American history, architecture, archaeology (or) culture." Also, the head of any federal agency "having direct or indirect jurisdiction over a proposed federal or federally assisted undertaking" is required to determine the effect of such project on sites included in or eligible for inclusion in the National Register of Historic Places. The law further establishes an Advisory Council on Historic Preservation to advise on matters related to historic preservation, to encourage cooperation between the NTHP and governmental and private agencies, and to aid in preparing appropriate laws and guidelines for CHR conservation. (See 1, m. below).

e. Preservation of Historical and Archaeological Data at Dam Sites (P.L. 86-523 74(Stat.220). Provides for the appropriation of federal funds for the identification, removal and/or preservation of any area to be affected by the construction of a dam, flood-water facility or reservoir and related structures.

f. Executive Order 11593; Protection and Enhancement of The Cultural Environment (May 13, 1971). Directs all federal agencies to locate, identify and inventory all CHRs "under their control" and to establish procedures for "preserving, restoring or maintaining" them for future generations. It furthermore directs the Secretary of The Interior to play an active role in coordinating and implementing such procedures and to make determinations of properties eligible for preservation.

g. National Environmental Protection Act of 1969 (P.L. 91-190: 83 Stat. 852). Establishes national environmental policy in which "Historical and Cultural Aspects of our National Heritage" are specifically cited (Section 101 b, 4). Provides for the evaluation of impacts of proposed projects to such resources and the exploration of all measures for mitigating or avoiding adverse effects. (Section 102). Also establishes the Council

on Environmental Quality (CEQ) to oversee the implementation of NEPA and to document the effectiveness of the Act.

h. Archaeological and Historical Preservation Act of 1974 (P.L. 93-291: 88 Stat. 174). Amends and enlarges the scope of P.L. 86-523 (see above) by providing up to 1% of construction funds appropriated for federal or federally assisted projects for tax identification, recovery and preservation of CHRs adversely affected by such projects. Also provides the Secretary of the Interior with authority to initiate survey and cause to be conducted survey and recovery operations, to compensate persons, agencies or associations for damages or losses resulting from such actions, and to permit when necessary expenditures in excess of stated limits for survey and/or recovery operations.

i. Tax Reform Act of 1976 (Section 2124). Provides numerous incentives to encourage the preservation of CHRs, including amortization of expenditures for the rehabilitation of designated historic properties, deductions for contributions of historical property to charitable organizations for conservation purposes. The Act also disallows deductions for the demolition of certified historic structures as well as accelerated depreciations for properties erected on sites previously occupied by such structures.

j. Public Buildings Cooperative Uses Act of 1976 (Implementation Guidelines set for 1977) Directs administrator of the General Services Administrations (GSA) to utilize, where feasible, "buildings of historic, architectural or cultural significance" for the housing of federal offices. Such structures may include but are not limited to those eligible to be listed on the National Register.

k. Coastal Zone Management Act of 1976 Establishes grant funding procedures for the protection and management of public coastal areas of environmental, recreational, historical, aesthetic, ecological or cultural value. Supplements the California Coastal Act of 1976 (See below).

l. Rail Transportation Act of 1976 (P.L. 94-555: Stat.). Similar to Public Buildings cooperative Uses Act of 1976 (above) except that it provides for use of historical structures to house rail facilities.

m. Land and Water Conservation Fund Act of 1976 (P.L. 94-422). Amends P.L. 89-665 (see 1, d. above) to establish an Historical Preservation Fund in the U. S. Treasury and increases the federal share for matching grants to 70% for eligible projects.

n. Housing Authorization Act of 1976 Directs HUD to allocate Section 8 funds in accordance with Block Grant Communities' Housing Assistance Plans, which include activities such as surveys of CHRS, development of historic preservation or easement programs, studies of regulatory or protective ordinances, and the acquisition, rehabilitation or disposition of historical properties.
Note: There are many HUD programs which can be directed to CHR conservation (see below

The above listing of existing Federal laws covers those which are regulatory in nature or which establish or amend guidelines or procedures for locating, evaluating, protecting or managing CHRs. However, there also exist a number of Federal or federally assisted programs and services which can be used to fund CHR surveys or preservation measures. These will be listed in a subsequent section of this report (see Section on 'funding') and should be consulted in regard to the preparation of civic programs and grant applications. Other existing statutes not applicable to the Carson area are omitted (e.g., BLM Programs) here.

2. State Laws, Policies and Guidelines

California statutes and codes relating to CHRs are less extensive than the Federal statutes, are much less direct in their application and are more difficult to implement or enforce. Attempts to upgrade state policies and laws in recent years have met with failure or the resulting statutes have been weakened or compromised. One bill to establish a State Archaeological Survey (A.B. 1788) was passed by both branches of the State Legislature in 1971 only to be

vetoed by then Governor Reagan. Recently, a set of policies recommended for the preservation of coastal CHRs after extensive study by the Regional and Statewide Coastal Zone Commissions was drastically reduced in last minute negotiations preceding the adoption of the California Coastal Act of 1976 (see below). The Policies (Nos. 151 & 152) originally proposed in the California Coastal Plan (December 1975) were comparable to those of the National Coastal Zone Management Act of 1976 (see above). However, recent amendments to the California Environmental Quality Act have strengthened it considerably as regards CHRs. Additonal laws and actions taken during the 1975-76 session of the Legislature have laid the groundwork for future protective measures to be enacted.

Existing State laws, codes and guidelines include the following:

a) California Public Resources Code, Division 5 (Parks & Monuments), Chapter 1, Article 1, Section 5001.5(c). Provides the purposes for which a state park may be established including the preservation of outstanding cultural (including historical and archaeological) 'values' whether located on land or under water.

b) CPR Code (Cont.), Article 1, Sect. 5001.5(e) Defines historical and archaeological resources and describes types of facilities that may be constructed or permitted on or near CHRs in park areas.

c) CPR Code (Cont.), Articles 2 & 3, Sections 5020-5033. Established the State Historical Landmarks Advisory Commission and defines powers and nature of duties, including the evaluation recording and marking of qualified CHRs of statewide or regional interest. Also identifies certain CHRs (e.g., Governor's Mansion, Donner Party Trail) for which special actions are required.

d) CPR Code (Cont.), Division 5, Chapter 1.6, Sections 5096.1 - 5096-28; Cameron-Unruh Beach, Park, Recreation & Historical Facilities Bond Act of 1964 Authorized issuance and sale of bonds for acquisition of land for parks and to provide grants to counties and/or cities for such acquisition and/or development. Such parks may be established to include archaeological and historical resources.

e) CPR Code (Cont.), Division 5, Chapter 1.68, Sections 5096.111 - 5096.131. Established the State Coastal Conservancy (see Coastal Act of 1976 below) to include historical resources and directs cities, counties and districts to exercise 'constant vigilance' to see that existing historical and recreational preserves or parks 'are not lost to other uses'. It also urges the acquisition of additional lands and authorizes the sale of $288,000,000 worth of bonds to facilitate such acquisitions, effective January 1, 1977). The priorities for acquisition are also established and all counties and cities are directed to consult in order to draw up a priorty plan for the expenditure of county-by-county allocations of the fund. Specific statements dealing with existing deficiencies in preserving historical resources must be included in each plan submitted.

f) CPR Code (Cont.), Division 5, Chapter 1.70, Sections 5097-5097.6. Establishes procedures for identifying and preserving CHRs prior to commencing the construction of any major public works project on any state lands. Designates the Department of Parks and Recreation to review all such plans and to conduct CHR surveys in the project areas. The Department can also recommend procedures for recording, excavating or preserving CHRs located in such areas. The code also designates penalties for the willful destruction or damaging of CHRs as specified in Section 5097.5 and which are located on Public Land by any person except by permission of the controlling public agency.

g) CPR Code (Cont.), Division 5, Chapter 1.75, Sections 5097.9-5097.97; Native American Historical, Cultural & Sacred Sites. Prohibits interference with Native American religious practices or the inflicting of 'severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine located on public property except as such property is located within city and/or county limits and is in excess of 100 acres. CEQA requirements also are exempted. The code establishes a Native American Heritage Commission appointed by the Governor to inventory such sites,

to recommend means to encourage the preservation of sites on private land and to bring court actions to penalize persons violating this code. Penalties for such violations are described in 5097.97, including the issuance of a court injunction against desacratory acts.

h) CPR Code (Cont.), Division 5, Chapter 2, Sections 5101-5109 (Article 1); Monuments to California Pioneers. Establishes procedures for accepting monies for the erection of a monument to California pioneers, or for levying taxes for this purpose.

i) CPR Code (Cont.), Division 5, Chapter 2, Article 2, Section 5161; Sale or Exchange of Public Lands Within Limits of an Historical Monument Area. Stipulates that land containing or identified as an historical monument and owned by a city and/or county, or the state may be sold or exchanged only when it is determined that such a transaction will facilitate the development of the monument.

j) CPR Code (Cont.), Chapter 6, Section 25527; Power Facility & Site Certification. Requires that the Public Utilities Commission give the greatest consideration to need for protecting unique and irreplaceable archaeological and historical sites before certifying the location of new facilities.

k) California Penal Code, Title 14, Part 1, Sections 622.5 & 19; Injury, etc., to Objects of Archaeological or Historical Interest. Prohibits any person not the owner thereof from willfully injuring, disfiguring, defacing or destroying CHRs wherever located, and establishes such acts as misdemeanors.

l) California Administrative Code, Title 14, Section 4306-9; Division of Beaches and Parks. Prohibits the disturbance, removal or destruction of features of caves, monuments or CHRs located on any property of the state park system without the permission of the department director.

m) California Public Resources Code, Division 13, Sections 21000-21176; California Environmental Quality Act declares that it is the policy of the state to "develop and maintain a high-quality environment now and in the future and to... protect, rehabilitate and enhance the environmental quality of the state" including the enjoyment of aesthetic, natural, scenic and historic environmental qualities..." (Section 21001, a & b). Requires that all projects requiring the approval of public agencies should be avaluated for individual or cumulative adverse effects to environmental qualities of the project area and should establish means for mitigating or avoiding such effects prior to issuing approvals or permits.

n) California Administrative Code, Title 14, Division 6, Chapter 3, Sections 15000-15180; Guidelines For Implementation of the California Environmental Quality Act of 1970 (as amended 9/30/76). Establishes the form and procedure for evaluating the significant adverse effects of a proposed project on the environmental quality of the project area. Requires a "mandatory finding of significance" when the project "has the potential to...eliminate important examples of the major periods of California History or Prehistory "(Section 15082[a]). It also provides that the Initial Study shall be upgraded to identify the potential adverse effects of a project and to propse effective mitigation measures.

o) CPR Code (Cont.), Division 20, Sections 3000-30900; The California Coastal Act of 1976. Establishes a California Coastal Commission and six regional commissions to assure the preservation, protection and public access to portions of the California coastline. Requires "reasonable mitigation measures" where "development would adversely impact CHRs as identified in the California Coastline and Recreation Plan or by the State Historic Preservation Officer" (Section 30244). Applies to areas within 1000 yards of the mean high tide line except in certain instances when it extends inland to the first major ridgeline or 5 miles, whichever is less (Section 30103).

p) CPR Code (Cont.), Division 21, Sections 31000-31400; State Coastal Conservancy. Establishes coastal conservancy to apply for grants and solicit funds for acquisition, restoration and maintenance of coastal zone and to otherwise implement aspects of the coastal act of 1976. Charges the Department of Parks & Recreation to ensure that CHR sites designated in certified local coastal plans or programs are reserved and ultimately used for such public purposes.

q) California Penal Code, Title 14, Section 623; Destruction of Caves. Prohibits willful destruction or disfigurement of CHRs located in caves on public parks or on private land without the prior consent of the owner.

r) Marks - Historical Rehabilitation Act of 1976 (SB 2128). Provides for the issuance of bonds and notes by a city and/or county or redevelopment agency to finance the rehabilitation of historical sites. Requires the adoption by ordinance or resolution of a historical rehabilitation financing program to establish criteria for the selection of eligible CHRs or areas and for standards for carrying out restoration.

s) California Public Resources Code, Division 6, Sections 6320-6378; Development of State Lands. Requires that the State Lands Commission be responsible for inventorying state school, tide and submerged lands and for identifying those possessing or containing significant CHRs of statewide interest. Requires the commission to adopt such regulations as would assure permanent protection of CHRs on these lands.

t) California History Plan. Established in 1972 on the recommendation of the Cultural Heritage Task Force for the purpose of inventorying CHRs in the state and to set forth proposals for their study and conservation. Two proposals (Nos. 23 & 24) recommended that all county and city governments enact ordinances and establish advisory boards to inventory and preserve local CHRs.

u) California Government Code, Section 65303; Historical Preservation Element. Amends the regulations governing the contents of general plans to provide for the writing of an historical preservation element. Such an element would provide for the "identification, establishment and protection of sites and structures of architectural, historical, archaeological, or cultural significance" and would include a program for implementing CHR conservation policies.

v) California Government Code, Sections 25373 & 37361; Historic Districts. Permits cities and counties to establish historic districts and to regulate land use within such districts. However, set limits on the nature and scope of such regulations and standards and their applications.

w) California Administrative Code (Title 24) Part 8; Building Code Adjustments For Historic Structures. Establishes a commission to set up alternative codes for historic structures owned by the State. Section 18954 permits city or county building departments to apply alternate building regulations when developed by State agencies (as permitted by Section 104[j] of the Universal Building Code) for "repairs, alterations and additions necessary for the preservation, rehabilitation, moving or continued use of a historical structure." See pp. 36-38 of Historic Preservation Element Guidelines for a more detailed discussion of the application and scope of these adjustments. Enacted by SB 927 (Mills; 1976).

x) Amendment of Article XIII, Section 8 of the State Constitution. Originally passed without a dissenting vote by both houses of the Legislature and later approved by the voters in the election primary of June 1976 (Proposition 7), the amendment permits historically significant property to be defined by the Legislature as being enforceably restricted in its use and, therefore, taxable at a lower value. This would promote the preservation of historical structures by reducing the property taxes paid on them and making it less attractive for the owners to demolish them in favor of constructing newer buildings whose use is more

consistent with the tax valuation. See also Sections 50280-50289 of the California Government Code.

3. Regional and Local CHR Preservation Measures

City and County governments as well as private organizations and associations have become increasingly active in Southern California in establishing means for identifying, restoring and preserving CHRs within a particular region or community. At present there are more than 45 historical societies and associations in Los Angeles County and some cities possess several. However, action on the local governmental level has been slow and mixed and is in many cases ineffective. In certain instances, attempts to form a governmental agency responsible for conserving CHRs or to pass ordinances and regulations preventing the destruction of sites have been defeated by pressure and special interest groups (e.g., Huntington Beach) while in parts of the County existing state and regional regulations have been ignored and poorly enforced.

In recent years an increasing number of counties have adopted resolutions and ordinances promoting CHR conservation. Some are proving to be extremely effective (e.g., Mendocino, San Diego, San Luis Obispo, Santa Cruz, and Marin Counties) while others are not. A number of counties, including Los Angeles, have yet to recognize the need for such measures.

However, incorporated towns and cities in Orange and Los Angeles Counties have taken the initiative to establish their own CHR regulations and guidelines and some have met with considerable success. Most of these have been established by a combination of ordinances, resolutions and amendments to general plans. In some cases they have emulated Federal guidelines and laws or have responded to the

need for conservation measures in order to receive government grants for redevelopment, water treatment, housing or recreation programs.

The approaches taken or attempted in each city or county have varied greatly. In some cases, citizen advisory groups have been formed to oversee the inventorying of CHRs and to recommend measures for the protection of the data (e.g., Santa Cruz, Mendocino County, Irvine). In other instances, specific departments within the local governmental bureauocracy have been expanded to carry out these tasks (e.g., San Diego, Santa Barbara, Simi). In several instances, limited ordinances have been effected which control some potentially destructive activities but fail to address some of the larger issues such as rehabilitation and reconstruction of CHRs, or the carrying out of master surveys of incorporated areas. However, it is an unfortunate fact that despite the urging of state and federal agencies, the majority of cities in Los Angeles County do not have a cohesive policy for CHR conservation and the tasks of identification and preservation is left to concerned citizens and organizations.

Examples of some enacted ordinances and conservation elements have been attached to this report (Appendix IV) to illustrate various approaches described above. Reference should be made to these before considering proposals for the city of Carson.

A brief summary of actions taken by other cities in Southern California includes:

a) Huntington Beach: The city contracted for an archaeological survey and inventory of the municipal area and attempted to pass an antiquities ordinance which would have amended the Municipal Code in order to restrict grading and excavation activities in the vicinity of known resources, require special use permits for reconnaissance-type surveys and archaeological excavations, establish procedures for protecting CHRs discovered during construction operations and set legal processes and penalties for handling violations (see Appendix IV). The ordinance failed passage through the City Council in 1974 due to opposition from development-oriented groups and the Chamber of Commerce.

b) City of Irvine. The situation in Irvine somewhat parallels that of Carson since both cities originally were contained in large private land grants (i.e., The Irvine Ranch and Rancho San Pedro) the remaining segments of which are still owned by holding companies (i.e., The Irvine Company, Carson Estates Company, Watson Land Company). The present city of Irvine maintains close ties with the Irvine Company which is rapidly developing its holdings for residential use. However, in spite of (or rather because of) this, the city was one of the first to develop a cohesive CHR policy and to establish guidelines for CHR management, all of which was done with the active participation of The Irvine Company.

Examination of the attached copy of the Historical, Archaeological and Paleontological Policy (Appendix IV) shows that it is set up to closely reflect the goals and procedures used for CEQA with a stress both on site preservation and on advance planning to incorporate CHRs into parks and recreation areas or to find means of utilizing historic buildings. These policies and objectives are monitored by an advisory committee (HAP) in which knowledgeable citizens, representatives of developers and commercial interests, and city staff are directly involved.

An unusual feature of Irvine's policy is the fact that it contains a specific formula for sharing the costs of archaeological salvage excavations between the developer/project sponsor and the city or other responsible public agency.

c) City of Thousand Oaks. This city is an example of those which have chosen to establish policy by ordinance, in this instance by rewriting the grading ordinance. Since grading operations almost always precede other types of construction activities, such an ordinance could be used to prevent site destruction in cases where the CHRs of the city are known, are few in number and will not require extensive management. However, in order to be effective, the adopted grading ordinance would require a diligent and knowledgeable planning director and a detailed, updated general plan with a comprehensive conservation element. It is notable that the ordinance glosses

over such matters as integrating CHR preservation with community and recreational development projects or rehabilitating historic structures, and is lacking in goals or value statements which would establish planning objectives.

d) Rancho Palos Verdes. Since RPV is a new city and has been incorporated for only five years, it has had the advantage of establishing its goals and objectives in concert with the development of federal and state environmental conservation measures. It also was able to base its General Plan on a relatively detailed and complete resources inventory which was useful in focussing on the positive as well as the negative (e.g., hazards, areas of excessive density, loss of aesthetic properties, etc.) aspects of the community.

Although CHRs were dealt with in a superficial manner in the resource inventory and no field studies were carried out at that time, the Planning Department went to some length to research the (then) existing approaches to CHR conservation. The final result has been to rely mainly on CEQA guidelines and procedures to identify and evaluate CHRs while also enforcing the implementation of the objectives of the General Plan. The city has not yet written an Historical Preservation Element, although the abundance of existing CHRs within the Peninsula would make such an element both desirable and useful, but it has included a Cultural Resources Overlay in the zoning ordinance. The Overlay zone areas have been identified based on the location of known sites and sensitive areas as of 1974, and the Planning Department now routinely requires a detailed, on-site CHR survey of all proposed project areas within the zone.

e) Pasadena. Although at the time this survey was being carried out, the City of Pasadena was still in the process of formulating policies and ordinances regarding CHRs, it had already possessed a very knowledgeable Planning Department and citizenry which for a long time had been actively involved in CHR preservation and management. The city has established a Cultural Heritage Commission (one of only three cities in the County to do so) and also possesses several concerned Historical Societies (e.g., The Pasadena Historical Society,

San Marino Historical Society), The Southwest Indian Museum, The Huntington Library and Museum and numerous designated historic structures, most of which are privately maintained. As of 1976, more than a dozen sites had been included in the National Register of Historic Places.

Recently, various members of the Planning Department directly participated in the preparation of the State Historic Preservation Element Guidelines (November 1976) and were also preparing such an element for inclusion in the city's own General Plan. It is expected that new ordinances relating to CHR protection will also be enacted in the near future.

f) City of Los Angeles. At present, the city is in the process of researching and preparing an archaeological, paleontological and historical preservation and management program and the City Council has had a first reading of a report recommending specific actions in this regard (Holt 1976). The Council has already adopted a conservation element for the General Plan which sets as objectives the identification and conservation of 'worthy' CHRs, the education of the public as to their 'intrinsic' value and the scientific recovery of CHRs where preservation is not possible.

In 1962 the city passed an ordinance (No. 121971) creating the Cultural Heritage Board for the purpose of advising and assisting the Municipal Arts Commission in the preservation of structures, buildings and sites of historical and cultural significance. The city Planning Department also requested from the Society For California Archaeology a map of archaeological sites within its boundaries for use in preparing environmental documents. However, the Planners misunderstood the nature of the data and were not able to use it effectively so that it was withdrawn in 1976

A copy of recommendations for a CHR Management Program is attached to this report (Appendix IV). It proposes the creation of a CHR Management Commission composed of CHR experts and planners which would then be subdivided into specific advisory committees. The latter

would provide expertise needed to identify and designate local landmarks, create historic districts and establish policies, guidelines and regulations which would be accomplished by the full Commission. The Committees also would review permit applications for private and city projects.

At present these proposals have not been acted upon and their future is uncertain. This is reflected by the fact that one such advisory committee to the Los Angeles Department of Parks has been in existance for three years yet has never in that time been called to a departmental meeting or given any matters upon which to advise. However, the Cultural Heritage Board (CHB) has been effective in salvaging and restoring historical buildings, especially those reflecting architectural styles of the 19th and early 20th centuries (Heritage Park). In addition, Los Angeles is headquarters for several active and respected historical socieites, including the Historical Society For Southern California and the Pacific Palisades Historical Society, and other groups which have similar interests (e.g., The Junior League of Los Angeles) as well as several museums (Los Angeles County Museum of Natural History, Lummis House) major universities and colleges which are involved in local research (UCLA, CSU Northridge, CSU Los Angeles Harbor College). Yet until there is a central guiding governmental force in the form of a well defined, active policy, a historical preservation element and some centralized, inclusive coordinating croup able to tap local, state and national funds, much of Los Angeles' heritage will be lost or only partly reconstructed.

Outside of the Southern California region numerous cities across the country have developed ordinances or CHR management programs which have been effectively used to protect local resources as well as to gain public support and attract funding grants. Examples of those which have been particularly effective or which served as models for similar actions elsewhere (Port Townsend, Washington; Savannah, Georgia; Charleston, South Carolina) have been included in Appendix IV in order to demonstrate the range and various degrees of complexity of such programs.

4. Existing Policies & Programs For the City of Carson

At present, the City of Carson lacks a locally oriented, coordinated CHR management policy or program with which to work. The General Plan, at the time the data research for this project was carried out, did not make reference to such policies and no formal procedures or ordinances exist for the Departments of Public Works, Community Development or Parks for the maintenance or protection of CHRs. The City possesses a State College and is in the vicinity of other similar institutions which contain scholars and students interested in local research. There are also citizens who belong to groups and associations which are interested in local and regional history (e.g., Native Sons & Daughters of the Golden West, Carson Women's Club, etc.) and there are locally oriented groups outside the City in the nearby areas of San Pedro, Long Beach and Compton which have been active in protecting and restoring landmarks and sites.

The City presently contains three major archaeological sites, one of which has been designated as a point of local historical interest (LAn-013) and numerous structures which have served or continue to serve as local landmarks. Many of these have been adversely affected by changes in the area in recent decades and are not protected against further changes in the future. Even official designation as landmarks and points of interest or inclusion in the National Register is not sufficient to protect and maintain these resources.

B. Proposals for a CHR Program for the City of Carson

Memory of the early stages of the City of Carson is still alive but is fading rapidly. In the course of gathering data for this report, the Consultant became aware of the presence of a great source of information about the past which exists in the recollections of longtime residents. However, it was extremely difficult within the constraints of this project to gather all the information available. It was noted, also, that informants were finding it difficult to recall the Keystone period during the 1920's and 1930's, and that the number of persons who had a direct involvement in that period was diminishing.

It was further noted that many of the long time residents of older areas of Carson, especially of the Keystone and Dominguez areas, expressed a deep, personal interest in their community and were very aware of their heritage. Many showed an interest in the present project and stated the hope that more would be done with the City's history. Many stated that they possessed photographs and other relics of the earlier periods which could be made available for historical research.

In order to tap these resources and to protect and preserve both the CHRs identified in this report and those which may be discovered in the future, the following actions are recommended:

1. Establish a Formal Policy For CHR Management. Steps should be taken in the immediate future to institute formal policies and programs for the protection, preservation and/or rehabilitation of CHRs within the City which reflect its history and development. As can be seen from data presented in preceding sections, there are several alternative methods by which this can be accomplished and the final selection is left to the City staff and residents to decide. Actions that would be effective towards this end would include:

   a) Addition of an Historical Preservation Element to the General Plan. Many cities and counties (including Los Angeles County) either have prepared or are considering the preparation of an amendment to their General Plan in the form of an Historical Preservation Element as permitted by Section I, 65303 of the California Government Code (see above). The purposes of such an element and guidelines for its construction are presented in detail in a recent publication of the State Resources Department (Historic Preservation Guidelines) and will not be described in this report. However, it should be noted that such an element would serve as a basic statement of the value of the community's heritage as well as of the types of ordinances, policies and programwhich are necessary if preservation is to be effective. The element also should provide direction and objectives for future planning of city growth and the development of recreational and public facilities.

b) Establishment of Formal Controls. To date most cities have sought to protect CHRs by amending certain codes or by conditioning permits issued for grading and construction, efforts that have been only partially effective. It is proposed, therefore, that the City Council consider the creation of a single CHR ordinance which would carry out the following actions:

i) Amend Sections of The Municipal Code Pertaining to Project Grading to require special consideration and review of application for grading permits in sensitive areas or within a specified distance (e.g., 100 feet) of a known CHR. The ordinance could stipulate that a special use permit is issued for all such projects which would require close, expert monitoring of grading activities. It would also set out the procedure to be followed in the event that a previously unknown CHR is discovered in the project area or a known CHR is damaged.

ii) Amend Sections of The Municipal Code Pertaining to Zoning to require a special review of all applications for zone changes in the vicinity (e.g., one block radius) of a known CHR or within a sensitive area. Such a review would give detailed consideration to the effect(s) of such changes on present status of the CHR(s) in question and on its prospects for future management. The code could be amended further to permit the establishment of a Scientific/Cultural Resource Overlay or classification which would apply to all CHRs and sensitive areas and which would place restrictions on the types of construction or land surface modifications permitted within them or in close proximity.

iii) Amend Sections of The Municipal Code Pertaining To Standards For Remodeling or Rehabilitating Existing Structures to incorporate state and federal provisions for buildings and structures of historic or aesthetic value where use is restricted. Special standards could be established for structures which were not to be used as residences or as offices in order to reduce the costs of historical restoration.

iv) Establish a CHR Review Board or Committee to monitor the effectiveness of a CHR Management/Preservation Program in all its aspects and to advise the City and interested parties on all matters pertaining to CHR protection. Such a committee could be appointed by the City Council and would meet on a regular basis with a minimum 2-3 times a year. It would consist of a member of the Community Development Planning Staff, at least one qualified representative of the scientific community knowledgeable and interested in the history of the area, at least one representative of a local historical society or group involved with the Carson area, a representative of a community service organization or group, a representative of the County Library, a representative of the business community or the Industrial Council, and at least one a citizen at large. Such a committee might also be charged with planning and organizing community-oriented celebrations of the City's heritage and for this purpose, as well as to insure a reflection of all aspects of the community, it is recommended that the Board be representative of the various ethnic groups residing in Carson.

The Review Board could also be requested to oversee the establishment of a program for rehabilitating historical structures or portions of the City which are representative of one of the early communities. Such a program could also be combined with other projects to redevelop or improve blighted or commercially oriented areas (see below).

2. Include CHR Management Programs in Development or Improvement Projects

Recent changes in State and Federal laws have been made to encourage CHR preservation and management as part of community improvement programs and funds are available through such programs for the rehabilitation and even the acquisition of historic properties through matching grants or insured loans. The list of such programs is too lengthy to discuss in detail in this report but a brief summary of sources is attached instead as an Appendix (see Appendix V). Such funds should be used in conjunction with those obtained locally.

3. Include CHRs and Sensitive Areas in Parks and Open Space. Parks and recreation programs also are eligible for grants to preserve CHRs (see Appendix V), especially through recent changes to the Land and Water Conservation Fund Act (P.L. 94-422) in which funds from mineral leases on public land and offshore areas are put into a Historic Preservation Fund. Other sources include the State Department of Parks and Recreation which because of recent legislation is providing grants-in-aid and matching funds to support local programs.

   CHRs could also be put into open space or preserves within the city and funds are available from State and Federal agencies for this purpose. The City could consider inclusion of sites in agricultural preserves or zones in such a way as to minimize disturbance to subsurface deposits.

4. Promote a Public Awareness of the City's Heritage. Every effort should be made by elected or appointed persons, agencies and departments of the City to inform the inhabitants of their heritage and to promote an increased awareness of its value to the community. Exhibits of photographs, relics and memorabilia in public buildings and libraries and public celebrations of historically significant events should be encouraged (e.g., Battle of Dominguez Hills, Ranchero Days).

5. Enforce Strict Compliance With Current Environmental Laws. Virtually all of the current laws and codes dealing with the environment as a whole (e.g., CEQA, Coastal Act, NEPA) recognize CHRs as environmental resources which must be protected and preserved. In the past, damage and destruction of Carson's historical sites has occurred through a lack of understanding of these laws and a lack of awareness of their applicability. Every effort should be made to see that existing regulations are complied with before projects are approved.

6. Establish Interim Guidelines & Procedures for Protecting & Conserving Identified CHRs & Sensitive Areas. Until permanent and detailed policies, guidelines and procedures are established, the city should direct that the Office of Community Development be charged with the responsibility for ensuring that existing CHRs are not endangered by programs

or actions proposed or approved during the interim. The Director of Community Planning should be asked to designate an appropriate and knowledeable member of his staff to become familiar with the nature and location of CHRs and sensitive areas withinthe city and to review applications for permits, zoning changes and all internally or externally, originated actions, programs or proposals, whether from a private citizen or institution or a public agency or institution, for aspects which might have a potentially adverse effect on these resources. Such a staff person would be asked to comment on all environmental documents prepared or reviewed by the City acting as either a Lead or Responsible Agency. Such person would have access to all pertinent maps and documents relative to the location and nature of the City's CHRs and would be responsible for their maintenance and annual updating. In addition, the designated person should also be responsible for monitoring all projects or actions which had been conditioned with regard to CHRs or which required mitigation measures to ensure the protection and conservation of such resources to see that such conditions and measures are respected by all parties involved.

7. Establish Penalties for Failure to Observe Interim/Permanent Guidelines for CHR Conservation. Once permanent ordinances, policies and guidelines have been established they should include penalties for persons, agencies, groups or institutions failing to observe them. In cases where such measures have been created by local, regional or state governments, infractions generally are considered misdemeanors when committed by an individual and are punishable by fine and/or imprisonment. However, this may not be sufficient penalty in cases where corporations, institutions, agencies or groups are involved. It is proposed, therefore, that, in such instances, the violator be fined the dollar amount equal to the cost of the total excavation and recovery of the CHR or any portion thereof which is knowlingly or willfully damaged or destroyed by said actions; such costs to be determined by information supplied by at least two qualified sources

not involved directly or indirectly with the project or with any concerned public or private agencies, and which would not be recipients of such funds. Fines so levied could then be put into a public fund established exclusively for the rehabilitation or management or acquisition of CHRs within the City's jurisdiction, or for some other public service.

During the interim period prior to the enactment of penalties or statutes, it is recommended that the City withhold approvals for the projects that do not appropriately provide for the protection of known or potentially existing CHRs. The City should also establish procedures for protecting CHRs discovered within a project area during grading or construction activities in order to ensure that appropriate evaluative and mitigation measures are carried out before work is resumed in the immediate vicinity (e.g., within 100 feet of the resource). No penalties shall be inflicted in this case upon the persons, agencies or corporations responsible for the partial damaging or destruction of a CHR provided that its existance was not known prior to the commencement of work, that its discovery was reported at the earliest possible time and that all work in the vicinity of the resource was halted until appropriate mitigation measures, if needed, have been completed. A condition outlining the above procedure should be included in all permits for grading and/or construction projects located partly or wholly within a specified distance (e.g., 100 feet) of a known or recorded CHR, within sensitive areas and within previously undeveloped portions of the City.

NOTE: In cases where work must be delayed or rescheduled on a project as a result of the discovery of a CHR within or immediately adjacent to the project area, the costs of such delays in many instances may be borne by State and/or Federal agencies which are directly or indirectly involved (see above and Appendix V). The City might consider sharing such costs, as a public service, in cases where other sources of funding (State, Federal or private) are not available, and might establish a local fund for this purpose. Orange County is presently

considering a measure whereby a formula for the amount to be contributed by the County could be determined and percentages of property taxes, and/or development, grading permit or building permit fees could be applied to the establishment of a fund for the purpose (Draft 1976, pp. 34-36).

8. Seek Determinations of Eligibility of Certain CHRs for the National Register of Historic Places. In the opinion of this Consultant Archaeological Sites Carson 1 and 2 may qualify for inclusion in the National Register of Historic Places and should be so nominated. Carson 3 also might qualify but more data is needed in order to make a determination. Of the structures described in the text, the parsonage and meeting house of the Old German Church would seem to be a likely nominee for the Register and should be proposed for inclusion. All of these CHRs also could be nominated as Points of Local Historical Interest to the State Historic Landmarks Commission.

   NOTE: Inclusion of these CHRs in National or State Registries will not be effective in preserving them unless supported by local ordinance and action programs.

BIBLIOGRAPHIC SOURCES CONSULTED

Archives of The Dominguez Water Company. Special Collections Room, California State College Dominguez Hills Library.

Bada, J. L. 1974. "New Evidence For The Antiquity of Man in North America Deduced From Aspartic Acid Racimization." Science, Vol. 176

Bancroft, H. H. 1886. The Works of H. H. Bancroft; The History of California, Volume 1. The History Company, San Francisco.

Bates, Eleanor H. 1972. "Los Altos (LAn 270): A Late Horizon Site in Long Beach, California." Pacific Coast Archaeological Society Quarterly, Vol. 8 (No. 2); pp. 1-56.

Bates, Eleanor H. 1963. The Cultural & Temporal Setting of Palos Verdes Prehistory. Masters Thesis For The Department of Anthropology, University of Southern California.

Beardsley, Richard K. 1948. "Culture Sequences in Central California Archaeology." American Antiquity, Vol. 14, pp. 1-28. Reprinted in R. F. Heizer & M. A. Whipple (Eds.), 1970.

Beck, Warren A. & Ynez D. Haase 1975. Historical Atlas of California (2nd Printing). University of Oklahoma Press, Norman.

Bettinger, Robert & R. E. Taylor nd. "Suggested Revisions in Interior Southern California Sequences." Manuscript Prepared With The Partial Support of NSF Grant GA 24781; Department of Anthropology, University of California, Riverside.

Bixby Smith, Sarah. 1925. Adobe Days, Cedar Rapids.

Bolton, H. E. 1916. Spanish Explorations in The Southwest, 1542-1706. New York.

Brainerd, G. W. 1948. "Topanga Canyon Archaeology." Masterkey, Vol. 22; p. 195

Brock, Jane. 1974. City of Carson Redevelopment Agency Environmental Impact Report; Redevelopment Project Area No. 2. Report Prepared For The Carson Redevelopment Agency.

Brothers, Lynda L. 1975. "Preserving Archaeological Sites Through The California Environmental Quality Act." Golden Gate University Law Review, Vol. 6 (1), pp. 1-21

Browne, J. Ross. 1864. The California Indians. New York. Harper Bros.

Butler, William B. 1974. The San Pedro Harbor Site: A Primary Subsistence Village on the Southern California Coast. Pacific Coast Archaeological Society Quarterly, Vol. 10 (3&4), pp. 1-98.

Dana, Richard Henry. 1840. Two Years Before The Mast. Lancer Books, New York. (1968 Edition).

Davis, E. L. 1974. "Paleo-Indian Land Use Patterns At China Lake, California." Pacific Coast Archaeological Society Quarterly, Vol. 10 (2), pp. 1-19.

Davis, Emma Lou. 1963. "The Desert Culture of The Western Great Basin: A Lifeway of Seasonal Transhumance." American Antiquity, 29 (2): 202-212.

Davis, E. L., C. W. Brott & D. L. Weide. 1969. The Western Lithic Co. L. C. Tradition. San Diego Papers No. 6.

Davis, James T. 1974. Trade Routes & Economic Exchange Among The Indians of California. Ballena Press Publications in Archaeology, Ethnology & History, No. 3.

Dixon, Keith A. 1971. "Archaeological Site Preservation: The Neglected Alternative to Destruction." Pacific Coast Archaeological Society Quarterly, Vol. 7 (No. 4); pp. 51-70.

DuBois, C. G. 1908. "The Religion of The Luiseno Indians of Southern California." Publications in American Archaeology & Ethnology, Vol. 8 (No. 3); pp. 69-186.

Duhaut-Cilly, Auguste B. 1929. "A Voyage To California in 1827-28." California Historical Society, Vol. 8, No. 2.

Dumke, Glenn S. 1944. The Boom Of The Eighties In Southern California. San Francisco.

Dumke, Glenn S. 1940. "Early Interurban Transportation In The Los Angeles Area." Historical Society of Southern California Quarterly, Vol. 22; pp. 131-149.

Eberhart, Hal H. 1970. "Published Archaeological Sites & Surveys in Southern California." Archaeological Survey Association of Southern California, Vol. 17 (No. 2); pp. 4-21.

Eberhart, Hal H. 1961. "The Cogged Stones of Southern California." American Antiquity, Vol. 26, No. 3; pp. 361-370y

Eberhart, Hal H. 1951. Time Markers In Southern California. Doctoral Dissertation Submitted to UCLA.

Eggers, A. V. 1976a. Preliminary Report to the U.S. Army Corp of Engineers (L.A. District) on Excavations Carried Out At EFB-6, Edwards Air Force Base, California. Final Report in Preparation.

Eggers, A. V. 1976b. Report On An Archaeological Survey Conducted On Parcels 3 & 5 of Tract 28669, Carson, California. Submitted to Sukut Construction, Inc., Santa Ana, California.

Eggers. A. V. 1975. Archaeological Impact Report For The Park Villa Project, Carson, California. Submitted to Planning Consultants Research, Santa Monica.

Eggers, A. V. 1972. "Report to the Carson City Council and to the Watson Land Company Concerning the Historical Significance of Indian Village Remains in the Area of the Watson Industrial Center, Carson, California." Unpublished Report Submitted to the City of Carson by The Indian Historical Advisory Committee of Carson.

Eggers, A. V., R. W. Robinson & C. F. Forbes. 1973. "A Preliminary Archaeological Investigation of the Proposed Site for the Palmdale Intercontinental Airport, Los Angeles County, California." Archaeological Survey Report Submitted to Arthur D. Little, Inc., San Francisco.

Eggers, A. V., & R. W. Robinson. 1974. "An A chaeological Investigation of The Antelope Valley-East Kern (AVEK) Dawn Project: First Phase." Archaeological Survey Report Submitted to Antelope Valley-East Kern Water Agency, Lancaster, California.

Englehardt, Charles A. 1913. Missions & Missionaries of California (4 Volumes). San Francisco.

Englehardt, Zephrin. 1927. San Gabriel Mission & The Beginnings of Los Angeles. Mission San Gabriel, San Gabriel.

Fages, Pedro. 1972. A Historical, Political & Natural Description of California By Pedro Fages; Written For The Viceroy in 1775. Translated by Herbert F. Priestly. Ballona Press, Ramona.

Fink, Augusta. 1966. Time & The Terraced Land; The Story of California's Unique Palos Verdes Peninsula. Howell-North Books, Berkeley.

Forbes, Alexander. 1839. California: A History of Upper & Lower California Thomas C. Russell, San Francisco.

Forbes, Jack D. 1966. "The Tongva of Tujunga to 1801." UCLA Archaeological Survey Annual Report, Appendix II, Vol. 8 (No. 94); pp. 137-150.

Galdikas-Brindamour, Birute. 1920. "Trade & Subsistance at New-Holland: A Site Report on LAn 246. UCLA Archaeological Survey Annual Report Vol. 12; pp. 120-161.

Gales, Donald N. 1974. Handbook of Wildflowers, Weeds, Wildlife & Weather of The Palos Verdes Peninsula. Caligraphics, San Pedro.

Gillingham, R. C. 1961. The Rancho San Pedro. Cole Holmquist Press, Los Angeles.

Glennan, William S. 1971 A Glimpse At The Prehistory of Antelope Valley: Archaeological Investigations At The Sweetser Site (Ker-302). The Kern-Antelope Historical Society, Inc., Publication.

Green, W. R., et al. 1973. "The Status of California's Heritage: A Report To The Governor & Legislature of California."

Greenwood, Roberta S. 1969. "The Browne Site: Early Millingstone Horizon in Southern California." Memoirs of The Society For American Archaeology, No. 23.

Grenier, J. 1976. Reminiscences Of The Dominguez Ranch & The Carson Family, An Oral History By John Victor Carson. Dominguez Archives Committee, California State College, Dominguez Hills.

Guinn, James M. 1915a. A History of California & An Extended History of Los Angeles. (3 volumes.) Los Angeles.

Guinn, James M. 1915b. Los Angeles & Environs. 2 Volumes. Los Angeles

Guinn, James M. 1911. "The Pioneer Railroad of Southern California." Historical Society of Southern California Publications, Vol. 8; pp. 188-92.

Guinn, J. M. 1907. "Early Postal Service of California." Historic Society of Southern California Publications, Vol. 4 (Part 3); pp. 18-26.

Guinn, James M. 1905. "Old Highways of Los Angeles." Historic Society of Southern California Publications, Vol. 6, (Part 3); pp-253-7.

Guinn, J. M. 1904. Coast Counties & History of California. Chicago.

Guinn, J. M. 1901a. Historical & Biographical Record of Los Angeles. Chicago.

Guinn, James M. 1901b. "The Passing Of The Old Pueblo." Historical Society of Southern California Papers, Vol. 5, Part 2; pp

Guinn, James M. 1900. "Historic Seaports of Los Angeles." Historical Society of Southern California Publications, Vol. 5 (Part 1). pp. 60-69.

Guinn, James M. 1893. "1884-91; The Exceptional Years" Historical Society of California Publications, Vol. 1; pp. 32-39.

Hancock, Henry & George Hanson. 1856. Survey Map of Rancho San Pedro. Original Housed at The Huntington Library, San Marino.

Harrington, John P. 1934. "A New Original Version of Boscana's Historical Accounts of San Juan Capistrano Indians." Smithsonian Miscellaneous Collections, Vol. 92 (No. 4); pp 1-62.

Harrison, William & Edith S. Harrison. 1966 An Archaeological Sequence For The Hunting People of Santa Barbara, California. UCLA Archaeological Survey Annual Report, Vol. 10; pp. 1-90.

Heizer, Robert F. (Ed.) 1968. The Indians of Los Angeles County: Hugo Reid's Letters of 1852. Southwest Museum Papers No. 21

Heizer, R. F. & C. W. Clewlow. 1973. Prehistoric Rock Art of California (2 Vols.) Ballena Press.

Heizer, Robert F. and M. A. Whipple (Eds.) 1970 The California Indians: A Source Book. University of California Press, Berkeley & Los Angeles.

Hittell, Theodore H. 1897. History of California. N. J. Stone & Company, San Francisco.

Hogt, Franklyn. 1953. "Influence Of The Railroads In The Development Of Los Angeles Harbor." Historical Society of Southern California Quarterly, Vol. 35; pp. 195-212.

Hudson, Dee Travis. 1976. Marine Archaeology Along The Southern California Coast. San Diego Museum Papers, No. 9.

Hudson, Dee T. 1971. "Proto-Gabrielino Patterns of Terretorial Organization In South Coastal California." Pacific Coast Archaeological Society Quarterly, Vol. 7 (No. 2); pp. 49-76.

Hume, Ivor Noel. 1969. Historical Archaeology; A Comprehensive Guide. New York.

Jackson, W. T. 1974 "Wells Fargo & Company In Southern California." Historical Society of Southern California Quarterly, Vol. 56; pp. 233-72.

Jennings, Jesse D. & E. Norbeck. 1964. Prehistoric Man In The New World. University of Chicago Press.

Johnston, F. E. 1962. California's Gabrielino Indians. Southwest Museum.

King, C. D. 1967. "The Sweetwater Mesa Site (LAn 267) & Its Place In Southern California Prehistory." UCLA Archaeological Survey Annual Report, Vol. 9; pp. 25-76.

King, C. D. With T. Blackburn. 1975. "The Names And Locations Of Historic Chumash Villages." The Journal of California Anthropology, Winter, 1975.

King, C. D., Thomas Blackburn & E. Chandonet 1968. "The Archaeological Investigation Of Three Sites On The Century Ranch, Western Los Angeles County, California." UCLA Archaeological Society Annual Report, Vol. 10; pp. 12-107.

King, C. D. With Charles Smith & T. F. King. 1974. Archaeological Report Related To The Interpretation Of Archaeological Resources Present At Vasquez Rocks County Park. Report Submitted to Los Angeles County Department of Parks & Recreation.

King, Linda. 1969. "The Medea Creek Cemetery (LAn 243): An Investigation of Social Organization From Mortuary Practices." UCLA Archaeological Survey Annual Report, Vol. 10; pp. 23-68.

King, Thomas F. 1968. County Antiquities Legislation, New Hope For Archaeological Preservation. American Antiquity, Vol. 33 (4), pp. 505-6.

King, T. F., M. Moratto and N. Leonard, 1974. "Recommended Procedures For Archaeological Impact Evaluation." UCLA Archaeological Survey & Society For Calif. Archaeology.

Kowta, Makota. 1969. "The Sayles Compex, A Late Milling Stone Assemblage From Cajon Pass & The Ecological Implications Of Its Scraper Planes." University of California Publications in Anthropology, Vol. 5, pp. 35-69.

Krieger, Alex D. 1964. "Early Man In The New World". In J. D. Jennings & E. Norbeck (Eds), 1964.

Kroeber, A. L. 1953. Handbook Of The Indians Of California. California Book Company, Ltd. Berkeley.

Land & Water Conservation Fund Program. 1976. Bureau of Outdoor Recreation, Department of The Interior.

Landberg, Leif C. 1965. The Chumash Indians Of Southern California. Southwest Museum Papers, No. 19.

Leonard, N. Nelson, III. 1971. "Natural & Social Environments Of The Santa Monica Mountains (6000 B.C. to 1800 A.D.)". Annual Report Of The Archaeological Survey, UCLA.

Lopatin, I. 1939. "Fossil Man In The Vicinity Of Los Angeles." Proceedings of The Sixth Pacific Coast Science Congress, Vol. 4; pp. 177-181.

Lovejoy, Ora. 1918. "A Study Of California Place Names." Historical Society of Southern California Quarterly, Vol. 11; pp. 44-51.

Ludwig, Ella A. 1927. History Of The Harbor District Of Los Angeles. Historic Record Company, Los Angeles.

Lynch, H. B. 1931. Rainfall & Stream Run-Off In Southern California Since 1769. The Metropolitan Water District Of Los Angeles.

Martinez, Jose L. 1938. California in 1792. (Translated by L. B. Simpson). Huntington Library, San Marino.

McGimsey, Charles R., III. 1972. Public Archaeology. Seminar Press.

McWilliams, Carey. 1973. Southern California: An Island On The Land. Peregrine Smith, Inc., Santa Barbara.

Meighan, Clement W. 1965. "Pacific Coast Archaeology." In Wright, H.F. & D. G. Frey (Eds.), The Quaternary Of The United States, Part III, pp. 709-720, Princeton.

Meighan, C. W. 1959a. "California Cultures & The Concept Of An Stage." American Antiquity, Vol. 24 (No. 3); pp. 289-305.

Meighan, C. W. 1959b. "The Little Harbor Site, Catalina Island: An Example of Ecological Interpretation in Aichaeology." American Antiquity, Vol. 24 (No. 4); pp. 383-405.

Meighan, C. W. 1954a. "A Late Complex in Southern California Prehistory." Southwestern Journal of Anthropology, Vol. 10; pp. 215-27.

Meighan, C. W. 1954b. "Archaeological Survey of Arroyo Sequit, Los Angeles County, California." MJ. No. 171 on file at The Archaeologocal Research Facility, Department of Anthropology, U.C. Berkeley.

Merriam, C. H. 1968. "Village Names In Twelve California Mission Records.' University of California (Berkeley) Archaeological Survey Report, No. 74.

Merriam, J. C. 1915. "Preliminary Report On The Discovery Of Human Remains In An Asphalt Deposit At Rancho La Brea." Science, Vol. 40; pp. 198-203

Meratto, Michael J. 1973. The Status Of California Archaeology. Society For California Archaeology, Special Report No. 3.

Moriarity, James R. 1969a. "The San Dieguito Complex: Suggested Environmental & Cultural Relationships." Anthropological Journal Of Canada, Vol. 7(3); pp. 2-18.

Moriarity, James R. 1969b. Chinigchinix; An Indigenous California Religion. Southwest Museum.

Moriarity, James R. 1967. "Transitional Pre-Desert Phase In San Diego County." Science, Vol. 155, pp. 553-6.

Moriarity, James R. 1966. "Cultural Phase Divisions Suggested By Typological Change Coordinated With Stratigraphically Controlled Radiocarbon Dating In San Diego." Anthropological Journal Of Canada, Vol. 4(4), pp. 20-30.

"National Register of Historic Places." Federal Register, Vol. 41(28), p. 5922.

Morrow, William W. 1923. Spanish & Mexican Private Land Grants. San Francisco & Los Angeles.

Nelson, J. W., C. J. Zinn, A. T. Strathern, E. B. Watson & J. E. Dunn. 1919. Soil Survey Of The Los Angeles Area, California. U. S. Department of Agriculture, Bureau of Soils, Washington, D.C.

Nelson, N. C. 1912. "Site Survey Of The Southern California Coast From Topanga Canyon To San Diego Bay." MS. No. 141. On file at the Archaeological Research Facility, Department of Anthropology, U.C. Berkeley.

Newmark, Harris. 1930. My Sixty Years In California. H. Mifflin Co., New York.

Newmark, M. H. & M. R. Newmark. 1929. Census Of City & County Of Los Angeles in 1850. Los Angeles Times-Mirror Press.

Northrup, Marie E. 1960. "The Los Angeles Padron Of 1844." Historical Society Of Southern California Quarterly, Vol. 42; pp. 360-417.

Office Of Planning & Research. 1976. Historic Preservation Element Guidelines. State of California, Sacramento.

Palmer, F. M. 1906. "Researches At Redondo Beach, California." American Journal Of Archaeology, Series 2, Vol. 10; pp. 21-26

Pastron, Allen G., Patrick Hallinan & C. William Clewlow, Jr. 1973. The Crisis In North American Archaeology. The Kroeber Anthropological Society (Berkeley), Special Publication No. 3.

Pourade, Richard F. 1966. Ancient Hunters Of The Far West. The Union-Tribune Publishing Co.

Racer, R. F. 1939. "(Indian) Campsites In The Harbor District." Manuscript on File at UCLA Archaeological Survey.

Reagan, J. W. 1915a. A Report On Floods, River Phenomena & Rainfall In The Los Angeles Region, California. Typescribed copy of Report Housed at the UCLA Research Library.

Reagan, J. W. 1915a. "Report Upon Extent Of Area & Location Of Menaced Lands Of Los Angeles County." In Report Of The Board Of Engineers Of Flood Control To The Board Of Supervisors, Los Angeles County, California; pp. 271-

Rice, G. & T. Cooley. 1976. Test Excavations At CA-LAn 844 & CA-LAn-845. (Rolling Hills Estates). Report Prepared For Cayman Development Company By Archaeological Research, Inc., Costa Mesa, California.

Riddell, F. A. 1972. "Resume Of The State's Archaeological Activities." Unpublished Manuscript, State Archaeological Task Force. (of Moratto, 1973. Status of Calif. Arch.)

Robinson, W. W. 1957. "The Story Of Rancho Los Cerritos." Historical Society Of Southern California Quarterly, Vol. 39; pp. 302-8.

Robinson, W. W. 1954. "Rancho Los Palos Verdes.' Typewcript Of Talk Delivered September 30, 1954 At a 1st Century Families Luncheon, Los Angeles.

Robinson, W. W. 1952. The Indians Of Los Angeles, Story Of The Liquidation Of A People. Los Angeles.

Robinson, W. W. 1939. Ranchos Become Cities. Pasadena.

Robinson, W. W. 1937. San Pedro & Wilmington: A Calendar Of Events In The Making Of Two Cities & The Los Angeles Harbor. Title Guarantee & Trust Company. Los Angeles.

Rogers, Malcolm J. 1939. "Early Lithic Industries Of The Lower Basin Of The Colorado River & Adjacent Desert Areas." San Diego Museum Papers, No. 3 May, 1939.

Rogers, D. B. 1929. Prehistoric Man On The Santa Barbara Coast. Santa Barbara Museum Of Natural History.

Rolfe, Frank 1953. "Early Days Of Los Angeles, A Wagon Train Center" Historical Society Of Southern California Quarterly, Vol. 35; pp. 305-18

Rozaire, Charles E. 1969. "Archaeology & Government." Society For California Archaeology Special Report, No. 1.

Rozaire, C. 1960. The Archaeology At Encino, California. UCLA Archaeological Survey Annual Report, Vol. 2; pp. 307-330.

Rozaire, C. 1958. "Archaeology In Los Angeles County". Archaeological Survey Association Of Southern California Newsletter, Vol. 5 (No. 2); pp. 3-6

Sawyer, E. 1959. "Remarkable Relics Of Aborigines Found At Redondo." Archaeological Survey Association Of Southern California Newsletter, Vol. 6 (No. 4); pp. 5-7

Scott, H. M. & Associates, Inc. nd. Map of Watson Industrial Center "South", Carson, California. Fifth Edition.

Simpson, Ruth DeEtte & T. Clements, 1968. "Archaeological Excavations In The Calico Mountains, California; Preliminary Report." Science, Vol. 130, pp. 1022-1023.

Simpson, Ruth DeEtte, 1958. "The Manix Lake Archaeological Survey." Masterkey, Vol. 32(1), pp. 4-10.

Stafford, Jean, M. Farley & R. Edwards, 1975. "Cultural Resource Management: The Santa Cruz County Model" Paper Presented At The Cultural Resources Management Symposium, Society For California Archaeology Annual Meetings, Santa Cruz.

Stock, Chester. 1942. "Rancho La Brea: A Record Of Pleistocene Life In California." Science Series, Los Angeles County Museum. No. 4, Paleontology, No. 4

Stock, Chester. 1924. "A Recent Discovery Of Ancient Human Remains In Los Angeles, California." Science (N.S.), Vol. 60, pp. 2-5. (Angeles Mesa Site).

Thacker, Mary Eva. 1923. A History Of Los Palos Verdes Rancho, 1542-1923. Master's Thesis, U.C. Berkeley.

Thomas, David B. and John Beaten. 1968. "The Trancas Canyon Cemetery Site (LAn-197); An Analysis Of Mortuary Customs." Annual Report, UCLA Archaeological Survey.

Toney, James T. nd. "Report On Salvage Excavations At Lake Los Angeles (LAn-192)" Manuscript on File at UCLA Archaeological Survey.

Treganza, A. E. & C. G. Malammo. 1950. LAn-1; The Topanga Culture: The First Season's Excavation of The Tank Site. University of California Anthropological Records, Vol. 12(4); pp. 129-152.

Van Valkenburgh, Richard. nd. "Archaeological Survey Of (The) Palos Verdes Section Of Los Angeles County, California." Typescript Of Original Manuscript in UCLA Archaeological Survey Files.

Van Valkenburgh, Richard and Malcolm Farmer, nd. "Notes On The Hamenot Indians." Typescript of Field Notes, Circa 1933.

Walker, Edwin F. 1951. "Five Prehistorical Sites In Los Angeles County, California." Publications Of The Frederick Webb Hodge Anniversary Publication Fund, Vol. VI. Southwest Museum.

Walker, E. F. 1937. "Sequence Of Prehistoric Material Culture At Malaga Cove, California." Masterkey, Vol. 11; pp. 210-14.

Wallace, W. J. 1968. "Prehistoric Seasonal Campsites In Southern California." Masterkey, Vol. 42; pp. 134-141.

Wallace, W. J. 1966. "Hollywood Riviera: An Early Milling Stone Horizon Site In Los Angeles, County, California." American Antiquity, Vol. 31; pp. 422-427.

Wallace, W. J. 1955. "A Suggested Chronology For Southern California Coastal Archaeology." Southwestern Journal Of Anthropology, Vol. 11(No. 3); pp. 214-230.

Warner, J. J., Benjamin Hayes & J. P. Widney. 1876. An Historical Sketch Of Los Angeles County. Los Angeles

Warren, Claude N. 1968. "Cultural Tradition and Ecological Adaptation On The Southern California Coast." In Archaic Prehistory In The Western United States. Eastern New Mexico Contributions in Anthropology, Portales 1(3); 1-14.

ADDITIONAL BIBLIOGRAPHIC REFERENCES:

Clay, Grady 1972. Close-Up: How To Read The American City. Praeger, New York

Cultural/Scientific Resources Policy Task Force. 1976. Draft of a Report on Cultural/Scientific Resources for County of Orange. Prepared for the Director of the Environmental Management Agency.

Dorland, Chester P. 1893. "The Los Angeles River; Its History & Ownership." Historical Society of Southern California Publications, pp. 31-5.

Eggers, A.V. 1976. Preliminary Report to the U.S. Army Corps of Engineers (L.A. District) on Excavations Carried Out at EFB-6, Edwards Air Force Base, California. Final Report in Preparation.

Eggers, A. V. 1975. Archaeological Impact Report For The Park Villa Project, Carson, California. Submitted to Planning Consultants Research, Santa Monica.

Eggers, A. V. 1974. Archaeological Impact Report on Land Areas to be Developed by Arco Oil Refining Company in Carson, Torrance & Redondo Beach. Submitted to URS Research Company (Project No. 7434), San Mateo, California.

Eggers, A. V. 1973. Archaeological Impact Report on a 44-Acre Tract (Parcel Map No. 4127) Between Gladwick Road & Alameda Street in Los Angeles County. Submitted to Ervin Engineering & JED Development, Incorporated.

Eggers, A. V., R. W. Robinson & C. F. Forbes 1973. "A Preliminary Archaeological Investigation of the Proposed Site for the Palmdale Intercontinental Airport, Los Angeles County, California." Archaeological Survey Report Submitted to Arthur D. Little, Inc., San Francisco.

Gammage, Grady, P. N. Jones & S. L. Jones, 1975. Historic Preservation in California: A Legal Handbook. Sacramento

Guinn, James M. 1894. "The Plan of Old Los Angeles; The Story of Its Highways & Byways." Historical Society of Southern California Publications, pp. 40-50.

Latta, F. F. 1949. Handbook of Yokuts Indians. Bear State Books. Oildale.

Hoover, M. B., Rensch, H. E. & Rensch, E. G. 1953. Historic Spots in California. Stanford University Press. Revised by R. Teiser

Magnuson, T. A. 1918. "History of the Beet Sugar Industry in California." Historical Society of Southern California Publications, Vol. 11; pp. 68-79.

Neal, J. Wesley. 1961. "America's First International Air Meet." Historical Society of Southern California Quarterly, Vol. 43; pp. 369-414.

Temple, Marion & J. McKinney. "Early History of The Dominguez United Methodist Church." Typed Manuscript Dated 1945 on File at Church.

McKinney, Joyce & Ruth McKinney nd. "Reminiscences on the Dominguez United Methodist Church." Typescript of Talk Delivered June 12, 1964. Copy in Church Files.

Waters, Marguerite (Nixon). nd. "History of The Dominguez Chamber of Commerce." Typescript of Manuscript Prepared circa 1963.

Waters, Marguerite (Nixon). 1948. "Legend of the Dominguez Area". Published in the 1948 Dominguez Area Business Directory & Street Guide;Published by Marguerite Nixon (Waters) & J. C. Nixon.

Warren, Claude N. 1967. "The San Dieguito Complex: A Review & Hypothesis." American Anthropologist, 32(2): 168-185.

Warren, Claude N. 1966. The San Dieguito Type Site: M. J. Roger's 1938 Excavation On The San Dieguito River. San Diego Museum Of Man Papers, No. 6.

Warren, Claude N. & D. L. True, 1961. "The San Dieguito Complex & Its Place In California Prehistory. UCLA Survey Annual Report, pp. 246-348.

Warren, Claude N., D. L. True & A. R. Eudey. 1961. Early Gathering Complexes Of Western San Diego, California: Results & Interpretation Of An Archaeological Survey. UCLA Archaeological Survey, Annual Report, 1960-1

Whitehill, Walter M. 1966. "Historic Sites Archaeology In The Study Of Early American History." In Ray A. Billington (Ed.), 1966.

Wilson, B. D. 1852. The Indians Of Southern California. Report Submitted To The Superintendent Of Indian Affairs, December 20, 1852.

Woodward, A. 1937. "Atlatl Dart Foreshafts From The LaBrea Pits." Bulletin, Southern California Academy of Sciences, Vol. 36, Part 2; pp. 41-60.

Yerkes, R. F., T. H. McCulloch, J. E. Schoellhamer, and J. G. Vedder, 1965. Geology Of The Los Angeles Basin; An Introduction. Geological Survey Professional Paper 420-A, Washington, D.C.

Ziegler, A., Leopold Adler & W. Kidney. 1975. Revolving Funds For Historic Preservation: A Manual of Practice. Ober Park & Associates, Pittsburgh.

... California, a Guide To The Golden State. Federal Writers Project of the Works Progress Ad.

... California Historical Landmarks. The Resources Agency. State of California, Department of Parks & Recreation.

... West's Annotated California Codes; Public Resources Code, Vol. 56. West Publishing Co.

Maps (Cont'd.)

Geologic Map to the Safety Element, City of Carson General Plan (1:24000), Prepared by City Engineer; November, 1975.

Aerial Photographs of Carson Area (Project No. C-6972; I.D. No. W.O. 8340), Scale 1:12000; Flown by Fairchild Aerial Surveys, Inc.; March 6, 1941.

The California History Plan. 1973-76. Vol. I-III. Department of Parks & Recreation, State of California.

California Inventory of Historic Resources. State of California. The Resources Agency, Department of Parks & Recreation. March, 1976.

Campbell, Elizabeth W. C., W. H. Campbell, E. Antevs, C. A. Amsden, J. P. Barbieri & F. D. Dode. 1937. The Archaeology of Pleistocene Lake Mohave: A Symposium. Southwest Museum Papers No. 11.

Catalog of Federal Domestic Assistance. Executive Office of the President, Office of Management & Budget; Washington, D.C.

Caughey, John W. 1952. The Indians of Southern California in 1852. Huntington Library, San Marino.

Chace, Paul. 1965. "Suggested Reading List of Southern California Indians." Pacific Coast Archaeological Society Quarterly, Vol. 1 (No. 1); p. 12.

Chartkoff, Joseph L. & Kerry K. Chartkoff. 1972. "Archaeological Research Potential in Urban Los Angeles." Pacific Coast Archaeological Society Quarterly, Vol. 8 (No. 2); pp. 57-66

Cleland, Robert Glass. 1975. The Cattle On A Thousand Hills: Southern California, 1850-1880.

Cleland, Robert G. 1962. From Wilderness To Empire, A History of California. Alfred Knopf, New York.

Cleland, Robert G. 1918. "Transportation in California Before The Railroad, With Especial Reference To Los Angeles". Historical Society of Southern California Publications, Vol. 11, pp. 60-68.

Cleland, Robert G. & Frank B. Putnam. 1965. Isaac W. Hellman & The Farmers & Merchants Bank. Huntington Library, San Marino.

Clements, Thomas. 1938. "The Age Of The 'Los Angeles Man' Deposits" American Journal of Science, Series 5, Vol. 36; pp. 137-141.

Cochran, Glen E. 1965. Shoshonean Migration Into Southern California; A Hypothesis & Its Treatment. Senior Thesis, Department of Anthropology, U.C. Davis.

Coffin, C. C. 1955. "Grave Finds Made By Joseph P. Cote At Wilmington, California." Missouri Archaeological Newsletter, No. 83; p. 5.

Cutter, Donald C. (Ed.). 1969. The California Coast: Documents From The Sutro Collection (Bilingual Edition). Originally translated & edited by George Butler Griffin (1891).

Maps Consulted

Los Angeles County, 1877 (1 inch = 2 miles); J. H. Wildy, Deputy County Surveyor & A. J. Stahlberg, County Engineer.

Map of a Part of Southern California, 1886 (1 inch = 4 miles); Howland & Koeberle, Surveyors.

USGS Topographic Map of Southern California (6 minutes), Sheet No. 1 (1:250000) Edition of 1901; Surveyed 1893-1900.

USGS Topographic Map, Compton Quadrangle (1:24,000), Edition of 1930; Surveyed ca. 1923.

USGS Topographic Map, San Pedro Quadrangle (1:24,000), Edition of 1930 Surveyed in 1923.

Map of Los Angeles County, California; J. Stevenson, Surveyor, 1881; C. L. Smith & Co., Oakland.

Land Use Map of Los Angeles County; Works Progress Administration Project, 1936-1939; 4 Books.

Western Oil & Gas Association Oil Handling Facility Map, Sheets 1 & 2.

Map of Part of Rancho San Pedro, Los Angeles County; Surveyed by Wm. Moore for P. H. Downing, T. B. Hayes and George Carson, Oct. 1881; Filed with County Recorder, November 12, 1881.

Map of Hellman Tract; Recorded March 19, 1874 in Book 2, pages 524-525 of Miscellaneous Records.

Partition Map of Rancho San Pedro of 1885 (10 chains/inch), Surveyed by George Hansen & H. Hancock.

Partition Map of Rancho San Pedro of 1855 (5 chains/inch), Surveyed by George Hansen, filed December 11, 1857.

Soil Map of Los Angeles County, 1919; on file at UCLA Map Library

Soil Map of Los Angeles County, (?)1904, Surveyed ca. 1897.

USGS Topographic Map, San Pedro Quadrangle (15 minutes), 1896.

USGS Topographic Map, San Pedro, Quadrangle (30 minutes); U.S. Army Corps of Engineers, 1943.

USGS Topographic Map, Wilmington Quadrangle (6 minutes), 1925.

USGS Topographic Map, Compton Quadrangle (6 minutes), 1924.

Properties Map of the Watson Industrial Center 'South', Carson, California (no scale); H. M. Scott & Associates, Inc. (5th edition).

Sources Consulted

California State College Library (Dominguez Archives).
California State College, Departments of Anthropology, History & Geography.
Carson City Hall, Department of Community Planning.
Carson City Hall, Department of Public Works
Watson Land Company
Carson Estates Company
Dominguez Water Company
Shell Oil Refining Company (Los Angeles Relocation Office)
Shell Oil Refining Company, Wilmington
Shell Chemical Company, Office of Public Relations
Western Oil & Gas Association
Southwestern Pipelines
Western Laboratories, Gardena
Dominguez Memorial Seminary
Dominguez Ranch House
Union Oil Company, Carson
Los Angeles County Sheriffs, Firestone Sub-Station
Los Angeles County Sheriffs, Carson Sub-Station
Los Angeles County Sheriffs, Record Bureau
Los Angeles
Los Angeles County Coroner's Office
Los Angeles County Mapping Division
Los Angeles County Assessors Office
Los Angeles County Sanitation Department
Los Angeles County Flood Control District
Los Angeles County Health Department
Los Angeles County Agricultural Commission
Los Angeles County Regional Planning
Los Angeles County Department of Building & Safety
Los Angeles County Citizens Advisory Board
Los Angeles County Recorder's Office
Los Angeles County Engineers
Los Angeles County Law Library

Sources Continued

Los Angeles County Regional Library, Carson Branch
Los Angeles City Board of Education, Office of Educational Housing
Los Angeles City Library
Huntington Library, San Marino
Rancho Palos Verdes Public Library
Dominguez Public Library
Los Angeles County Museum of Natural History, Department of History, Anthropology and Archaeology
Southwest Museum, Highland Park
U.S. Army Corps of Engineers. Los Angeles District
Federal Records Center, Laguna Niguel
California Division of Mines and Geology
Caltrans, District 07 Office (Los Angeles)
California Department of Parks & Recreation, Sacramento
State Historical Preservation Office, Sacramento
State Office of Planning & Research
University of California, Los Angeles, Department of Geography
University of California, Los Angeles, Spence-Fairchild Collection of Aerial Photographs
University of California Research Library
University of California Powell Library
University of California Map Annex
University of California, Los Angeles Water Resources Library
University of California, Los Angeles Archaeological Survey
University of California, Los Angeles Special Collections Department
University of California, Berkeley Bancraft Library
California State University, Los Angeles, Department of Anthropology
California State University, Long Beach, Department of Anthropology
City of Pasadena Planning Department
City of Huntington Beach Planning Department
City of Long Beach Planning Department
City of Long Beach Engineering Department
Historical Society of Southern California

Sources Continued

Historical Society of San Pedro
Native Sons & Daughters of the Golden West
Los Angeles City Cultural Heritage Board
National Trust for Historic Preservation Western Regional Office, San Francisco
Los Cerritos Adobe Archives
Harbor College History Department
Harbor College Library
Southern California School of Theology, Claremont, Califrnia
United Methodist Church of Dominguez
Carson Street Elementary School, Office of the Vice Principal
Dominguez Elementary School
Office of State Assemblywoman Marilyn Ryan, Redondo Beach
Office of State Senator Robert Beverly, Redondo Beach
State Historic Landmarks Commission
Los Angeles County Historic Landmarks Commission
Guide Task Force History Team, City of Los Angeles Bicentennial Committee
The Irvine Company
Orange County Planning Department
Pacific Coast Archaeological Society
Society for California Archaeology
Office of Archaeological & Historical Preservation, Washington, D.C.
The Daily Breeze
The Long Beach Independent-Press Telegram
Title Insurance & Trust Company, Los Angeles

Persons Consulted

Mr. Arthur L. Reeves, Dominguez Water Company
Mr. Robert Brown, Carson Estate Company
Mr. Michael Genewick, Watson Land Company
Mr. Richard Gunnarson, City of Carson Community Development Department
Mr. Jack E. Jerrills
Dr. R. C. Gillingham, PhD.
Dr. Judd Grenier, California State College Dominguez Hills
Dr. David Cady, California State College Dominguez Hills
Dr. J. Robert Stinson, California State College Dominguez Hills
Dr. Frederick Reinman, California State
Dr. Hal Eberhart,
Dr. William Wallace, Professor Emeritus, University of Southern California
Dr. Keith Dixon, California State University, Long Beach
Father Patrick McPolin, Dominguez Seminary
Father F. Bossi, Dominguez Seminary
Mrs. Bernice Johnston, Southwest Museum, Pasadena
Mr. Keither Foster, Curator, Rancho Los Cerritos
Mrs. Roberta Nichols, Former Curator, Rancho Los Cerritos
Mr. William Evans, Santa Monica College
Ms. Pamela Bleich, Harbor College
Mr. Thomas Sitton, Los Angeles County Museum of Natural History
Dr. Charles Rozaire, Los Angeles County Museum of Natural History
Mr. William Mason, Los Angeles County Museum of Natural History
Mr. Ira Alexander, Los Angeles County Historian
Mr. Thomas F. King, Office of Archaeological and Historical Preservation, Washington, D.C.
Mr. Raymond Ristic, Los Angeles County Regional Planning Department
Mr. Lawrence Charness, Los Angeles County Regional Planning Department, Land Use Division
Mr. Lawrence Derr, Los Angeles County Regional Planning Department, Mapping Section
Mr. George Marr, Los Angeles County Regional Planning Department, Historical Census Data

Persons Consulted (Cont'd.)

Mr. Gary Hartley, Los Angeles County Regional Planning Department, Flood Control District
Mr. Robert Perrin, Los Angeles County Regional Planning Department,
Mr. William Goodfellow, Los Angeles County Regional Planning Department, Road Department
Mr. Kenneth Harvey, Los Angeles County Engineers, Engineering Services
Mr. Shim Iguchi, Los Angeles County
Mr. Richard Harrell, Los Angeles County Dairy Inspector
Mr. Matthews, Los Angeles County Recorders Office
Mr. William Seidel, State Historical Preservation Office, Sacramento
Mr. Gene Itogawa, State Historical Preservation Office, Sacramento
Dr. Knox Mellon, State Historical Preservation Office, Sacramento
Mr. William Caughey, Regional Coastal Zone Commission Office, Long Beach
Mr. William Sugaya, National Trust for Historic Preservation, Western Regional Office, San Francisco
Ms. Nancy Woodward, Office of Assemblywoman Ryan, Redondo Beach
Dr. Wiseley, Los Angeles County Coroner's Office
Ms. Yee, Los Angeles County Sheriffs Department, Firestone Station
Lieutenant Elliot, Los Angeles County Sheriffs Department, Homicide Office
Mr. Brian Kimball, Los Angeles Unified Board of Education, Office of Educational Housing
Ms. Elena Welch, Coordinator, Los Angeles City Cultural Heritage Board
Mr. Roger Holt, Deputy City Attorney, Los Angeles
Mr. John Merritt, Community Planning Department, City of Pasadena
Mr. Robert Caso, Planning Department, City of Long Beach
Ms. Dolores Nariman, Librarian, Title Insurance & Trust Company
Mr. Randolph Carr, Former General Attorney, Southern Pacific Transportation Company
Mr. Francis Carr
Mr. Robert Pence, Society For California Awchaeology
Mr. Keith Reynolds, Environmental Consultant
Mr. Charles Irwin, Archaeologist
Mr. C. M. Crawford, Dominguez Estate Co.
Reverend Paul C. Estebo, Dominguez United Methodist Church

Persons Consulted (Cont'd.)

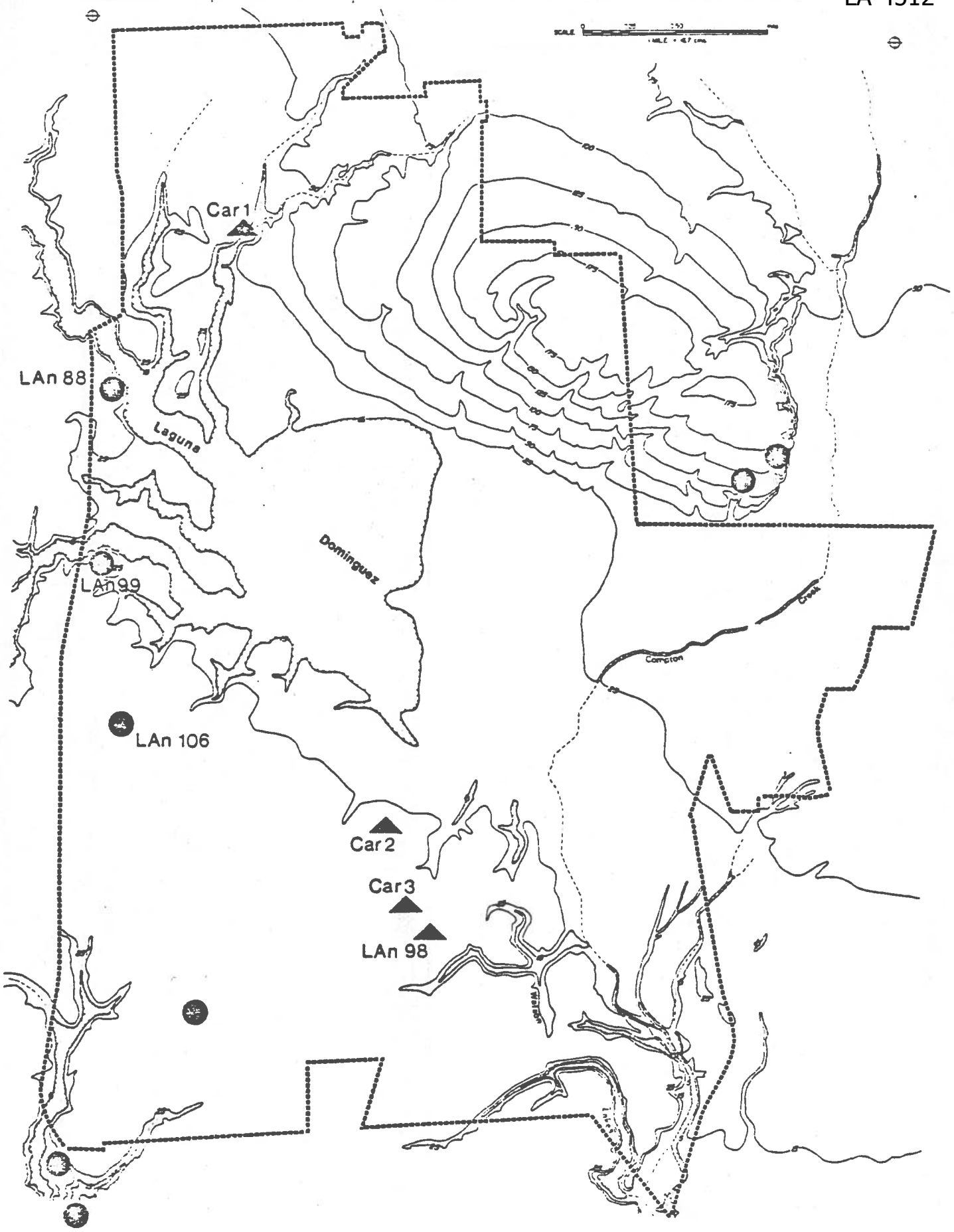
Reverend Jesse Davison, First Christian Church, Dominguez
Reverend Gary Van Boening, Glendale
Reverend Robert Kessler, Long Beach
Ms. Pauline Ellis, Long Beach
Mr. William R. Denton, Library, Southern California School of Theology, Claremont College
Mr. Roger Underwood, Relocation Department, Shell Oil Company
Mr. Burl Freeman, Ultramar Refinery, Carson
Mr. James Brummet, Union Oil Pumping Facility, Dominguez Hills
Ms. Thelma Strelitz
Mr. Arsenio Gonzalez
Mr. Manuel Gonzalez
Ms. Gertrude Schwartz
Ms. Marguerite Waters
Mr. William Salyers
Ms. Dorothy Baker
Ms. Wallace
Mr. Harry Toy
Mr. Maas Nakaoka
Ms. Keith Beck
Mr. Denver Hilliard
Mr. Anthony Moine
Mr. Joseph Vanie
Mr. L. Stump
Ms. Kathy Michael, Dominguez Elementary School
Ms. A. Kitzerow, Dominguez Elementary School
Ms. Jean Rayner, PTA, Carson Street Elementary School
Ms. Tillie Lawson
Ms. Joyce McKinney
Mr. Richard Schultz
Mr. John Sevier
Mr. Joseph Cote

Persons Consulted (Cont'd.)

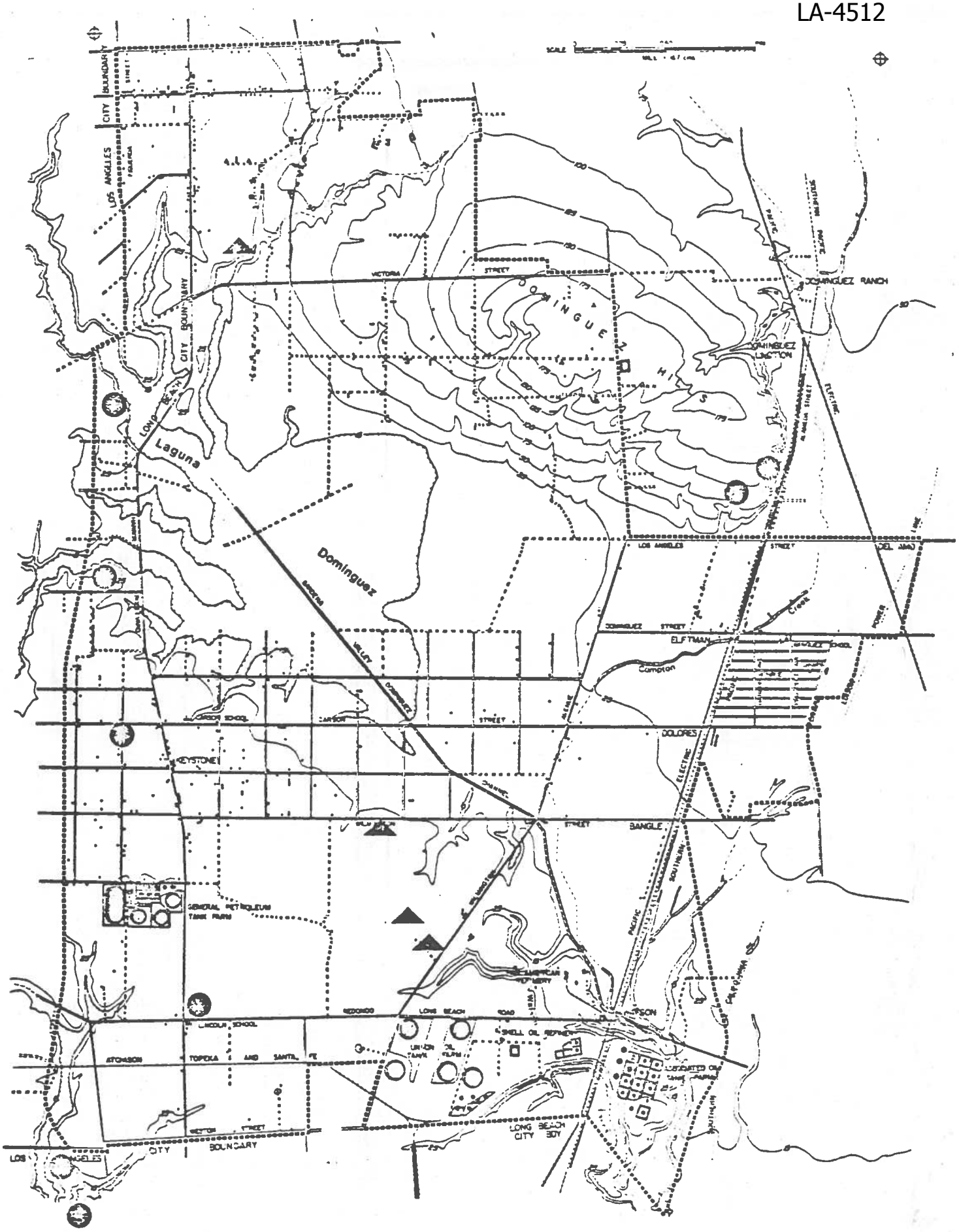
Ms. Lucy Brimer
Mr. B. E. Kidwell
Dr. C. Houske
Mr. Cale
Mr. Gilbert Scrivens
Mr. Cy Andrews
Mr. William Snudden
Ms. Darlene Falce
Ms. A. Elliott

Personnel:

Jr. Jack Hunter, Project Assistant
Mr. Terrence Schuster, Survey/Field Crew-Person
Mr. Nick Moore, Research/Field Crew Person
Mr. Brian Feuer, Research/Field Crew Person
Ms. Mary Brown, Survey/Field Crew Person
Mr. Roger Brookes, Researcher
Ms. Rosalyn Brookes, Cartographer
Ms. Barbara Jahn, Typist

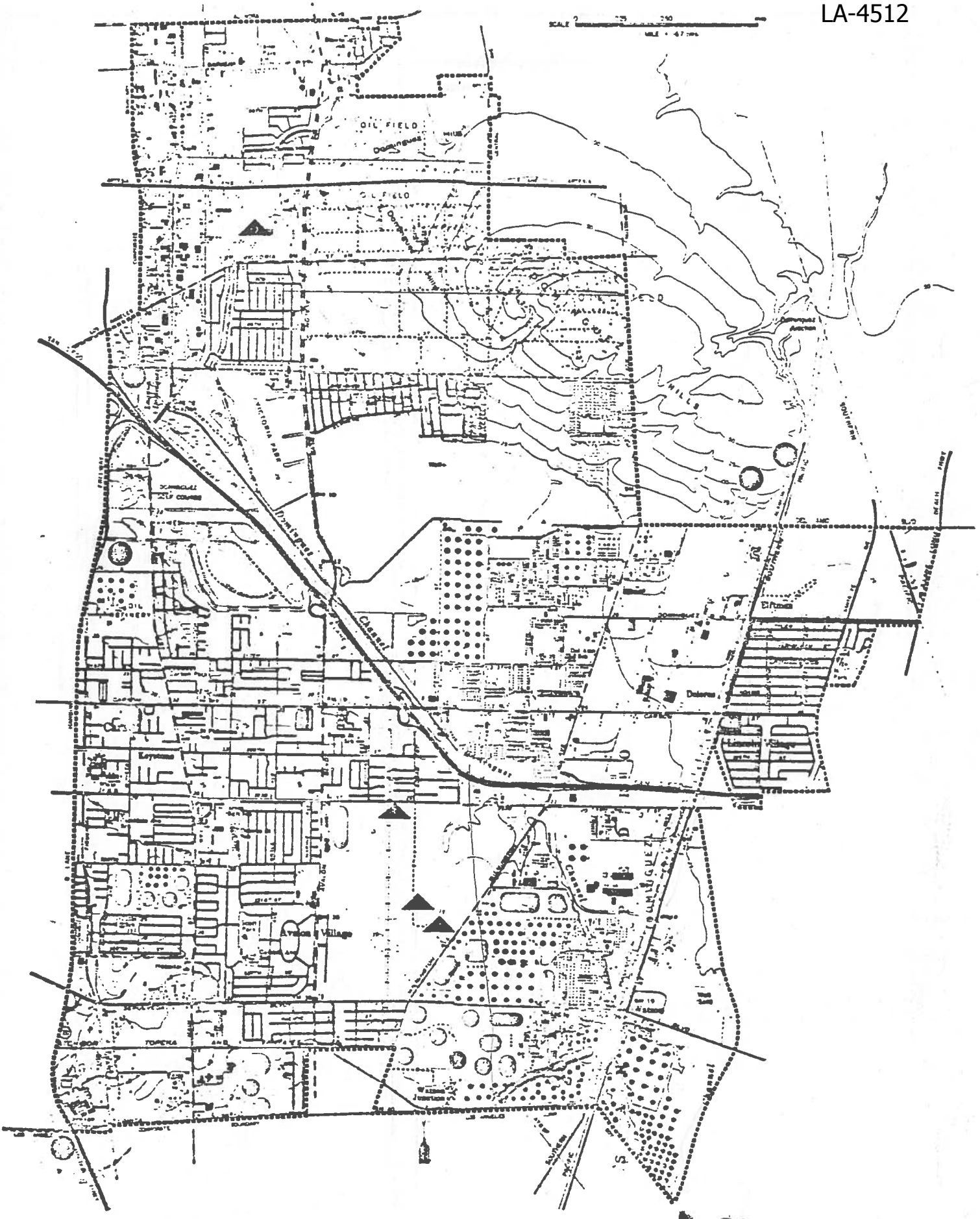


Map 1. Topographic Features of Carson (1900) Showing Existing (▲) and Unlocatable (○) Native American Sites.



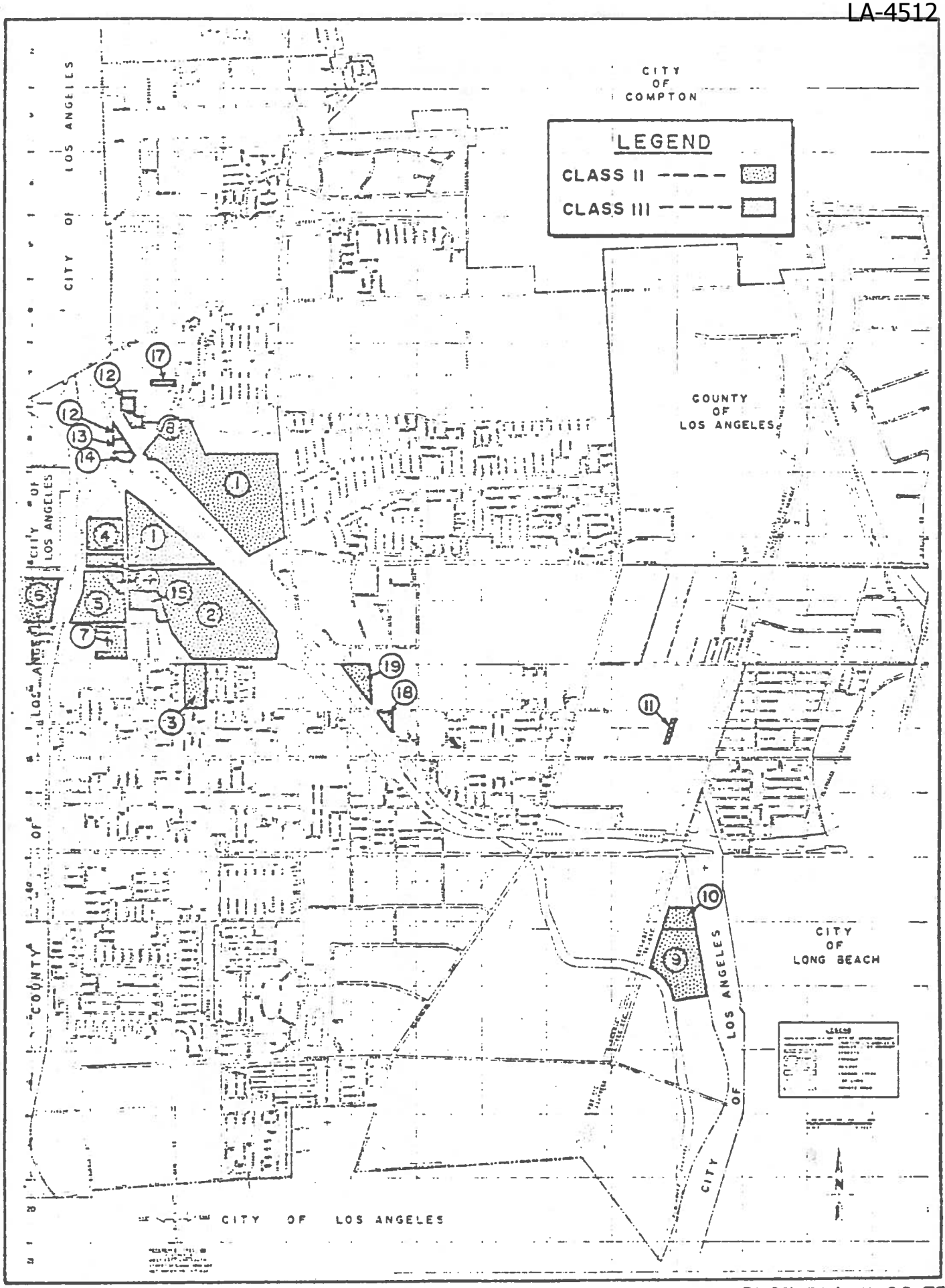
Map 2. Carson Area Circa 1925-1930.

LA-4512



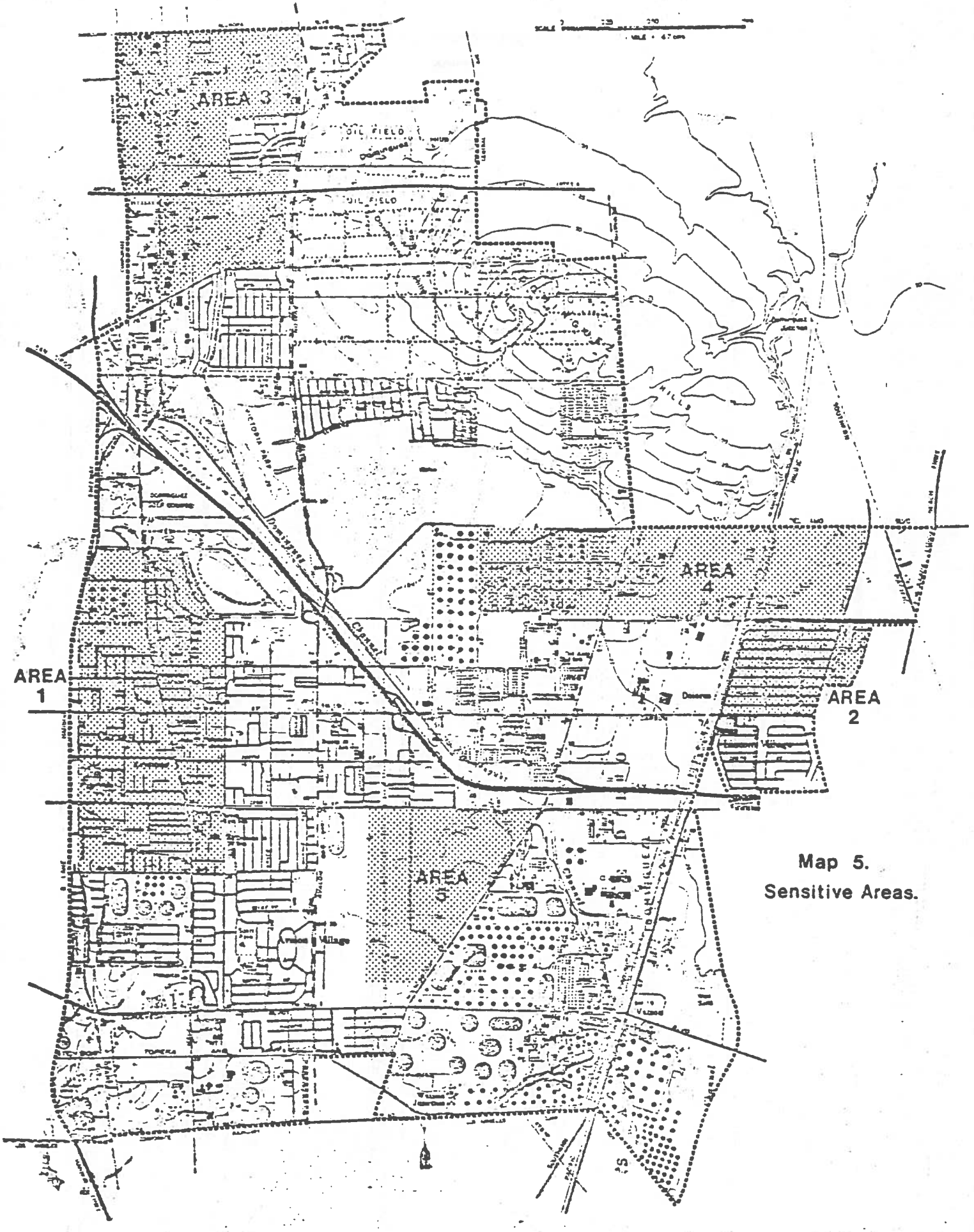
LA-4512

Map 3. Carson Area Circa 1965.



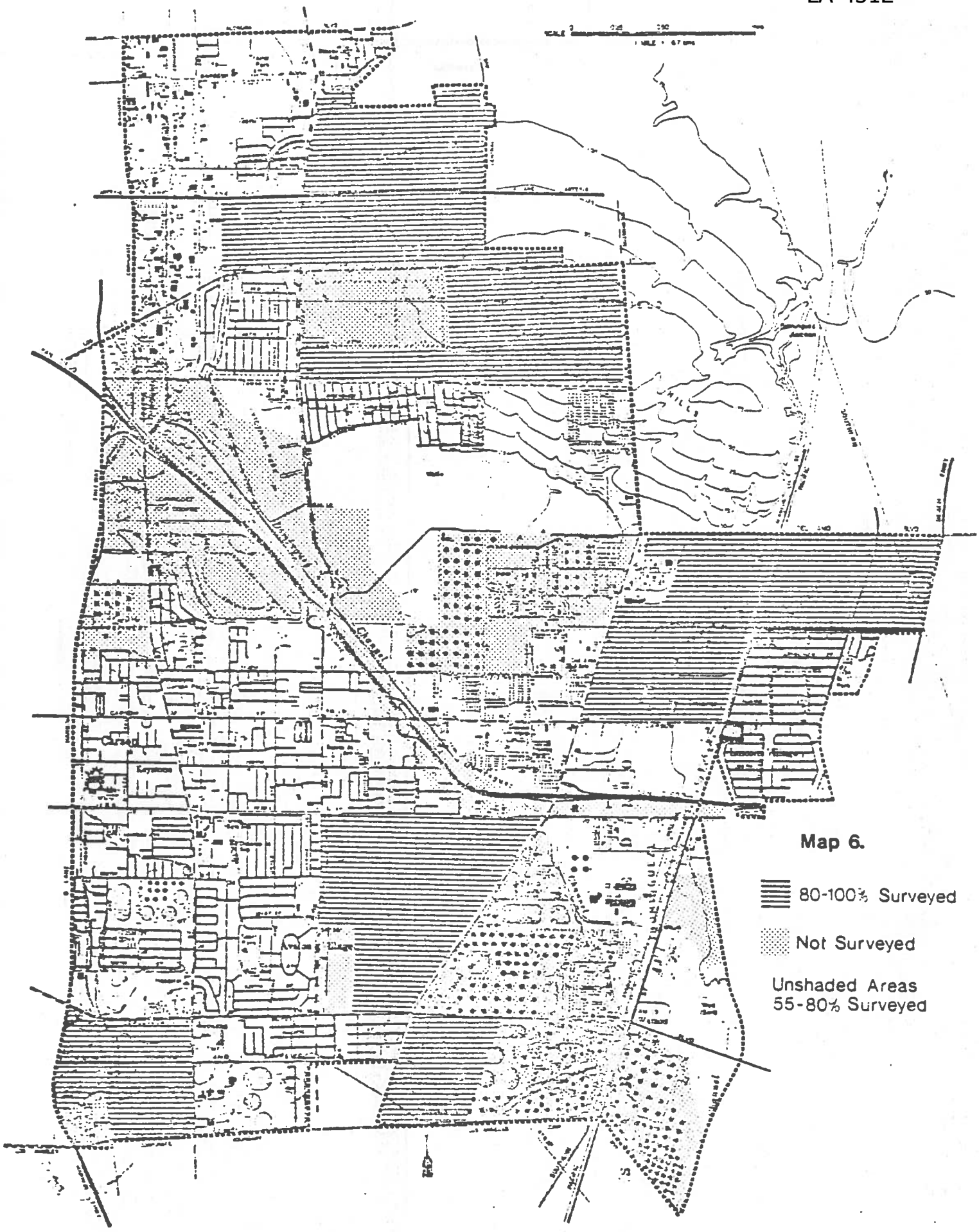
Map 4
LOCATION OF SANITARY LANDFILLS
CITY OF CARSON

PLAN. DIV. 11-26-75



Map 5.
Sensitive Areas.

LA-4512



Map 6.

80-100% Surveyed

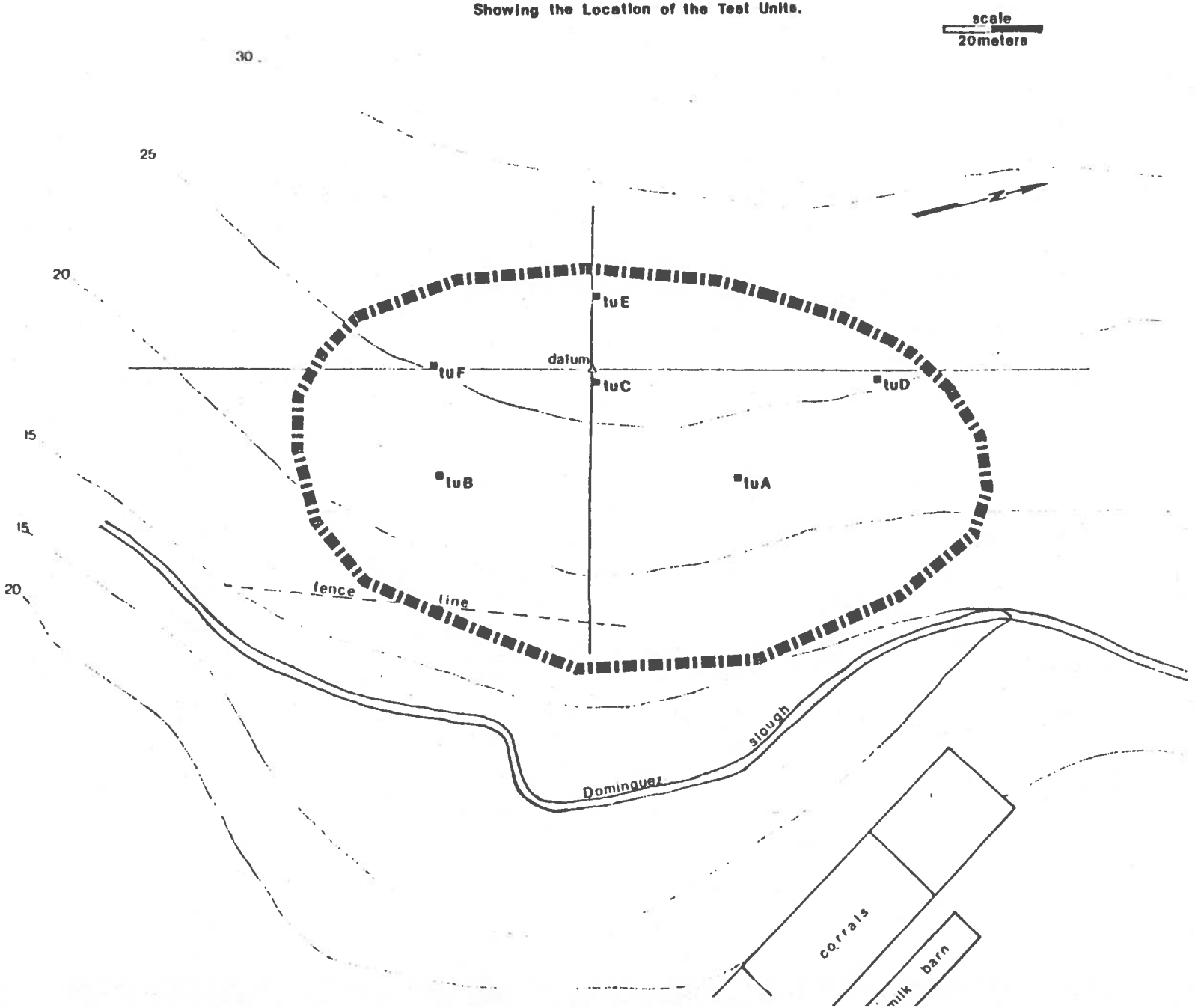
Not Surveyed

Unshaded Areas
55-80% Surveyed

LA-4512

Figure 2.

Plot Map of the Carson 1 Site
Showing the Location of the Test Units.



LA-4512

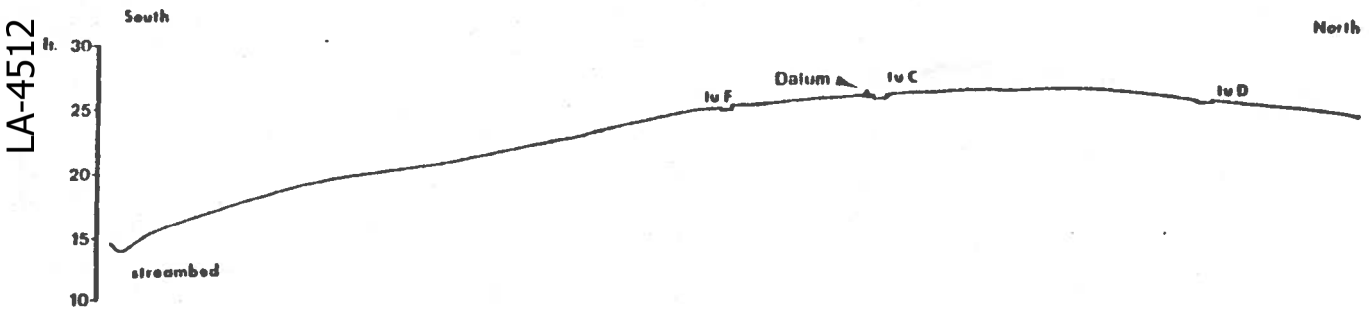
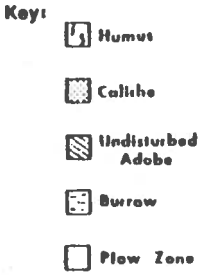


Figure 3.
Soil Sections for Test Units at the Carson I Site



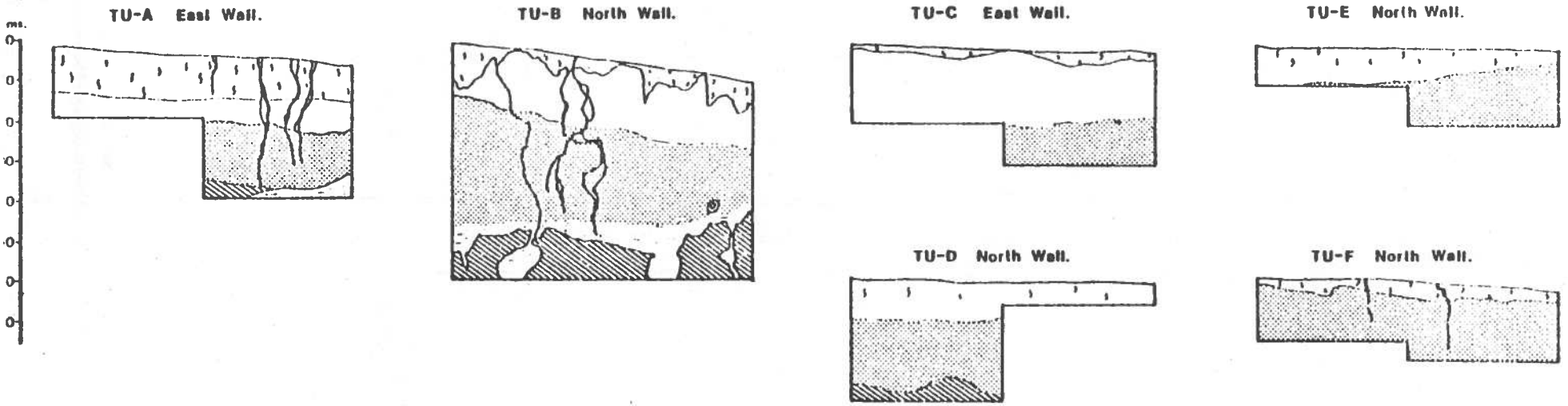
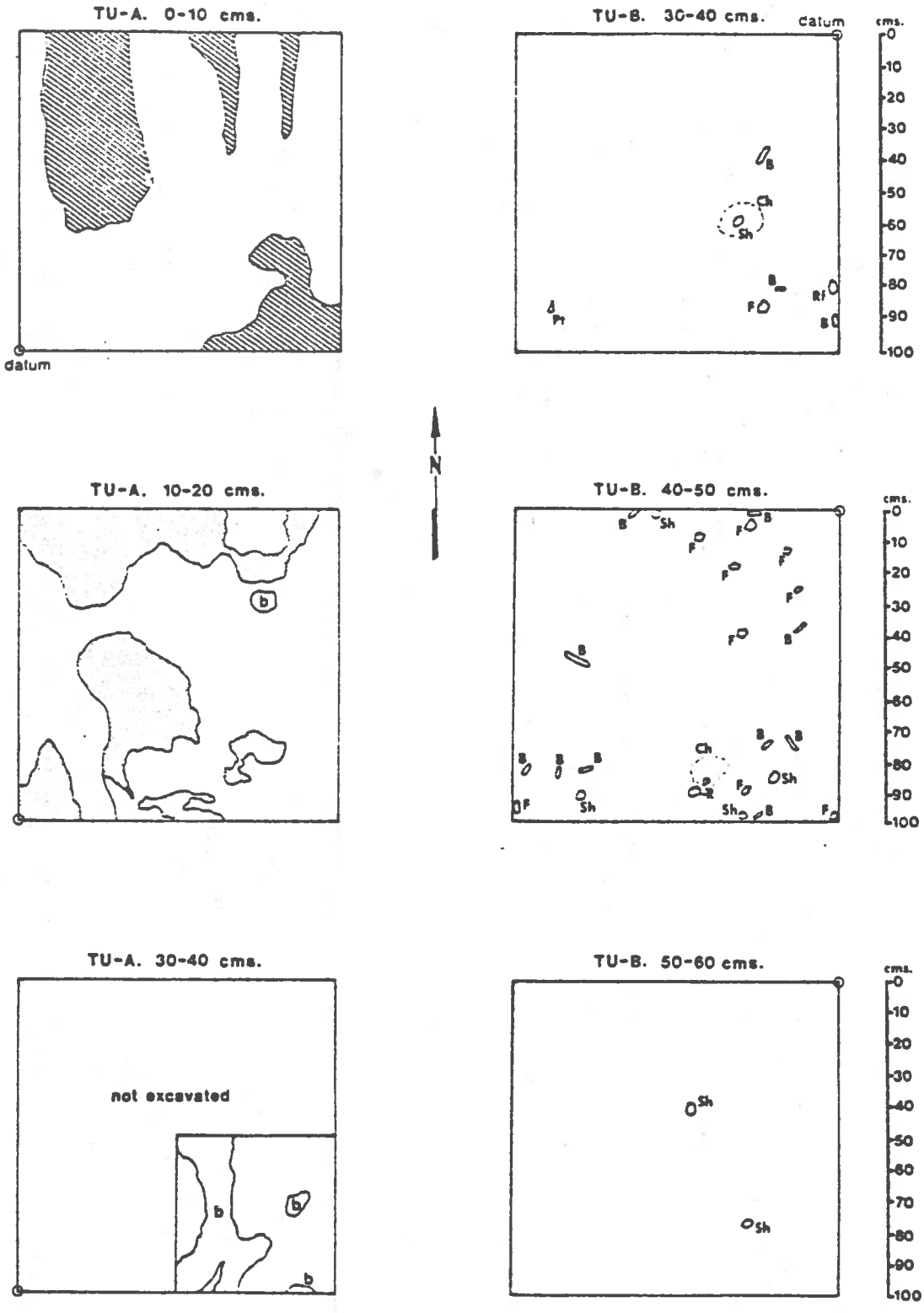


Figure 4.

Floor Plots of Test Units A & B.



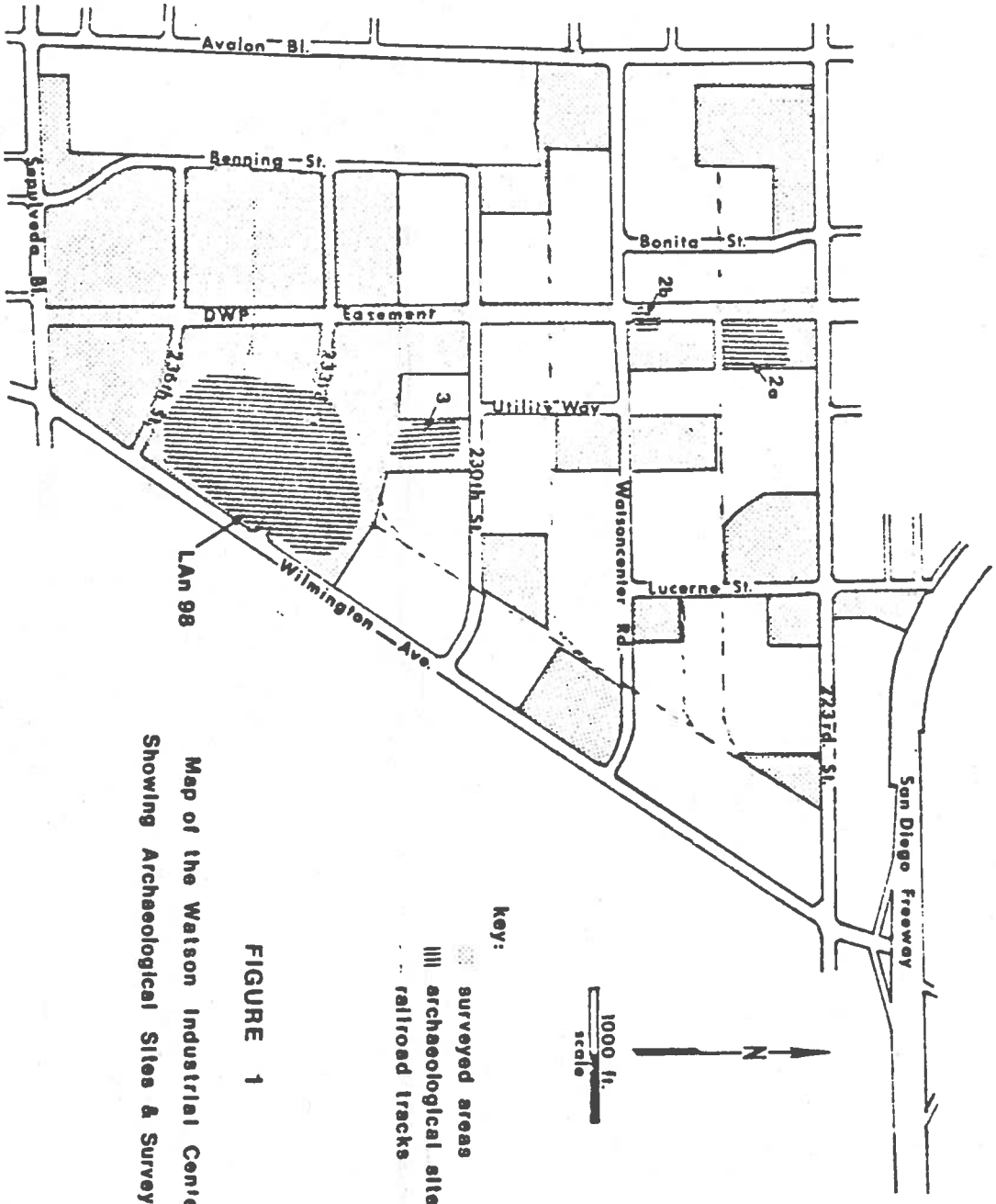
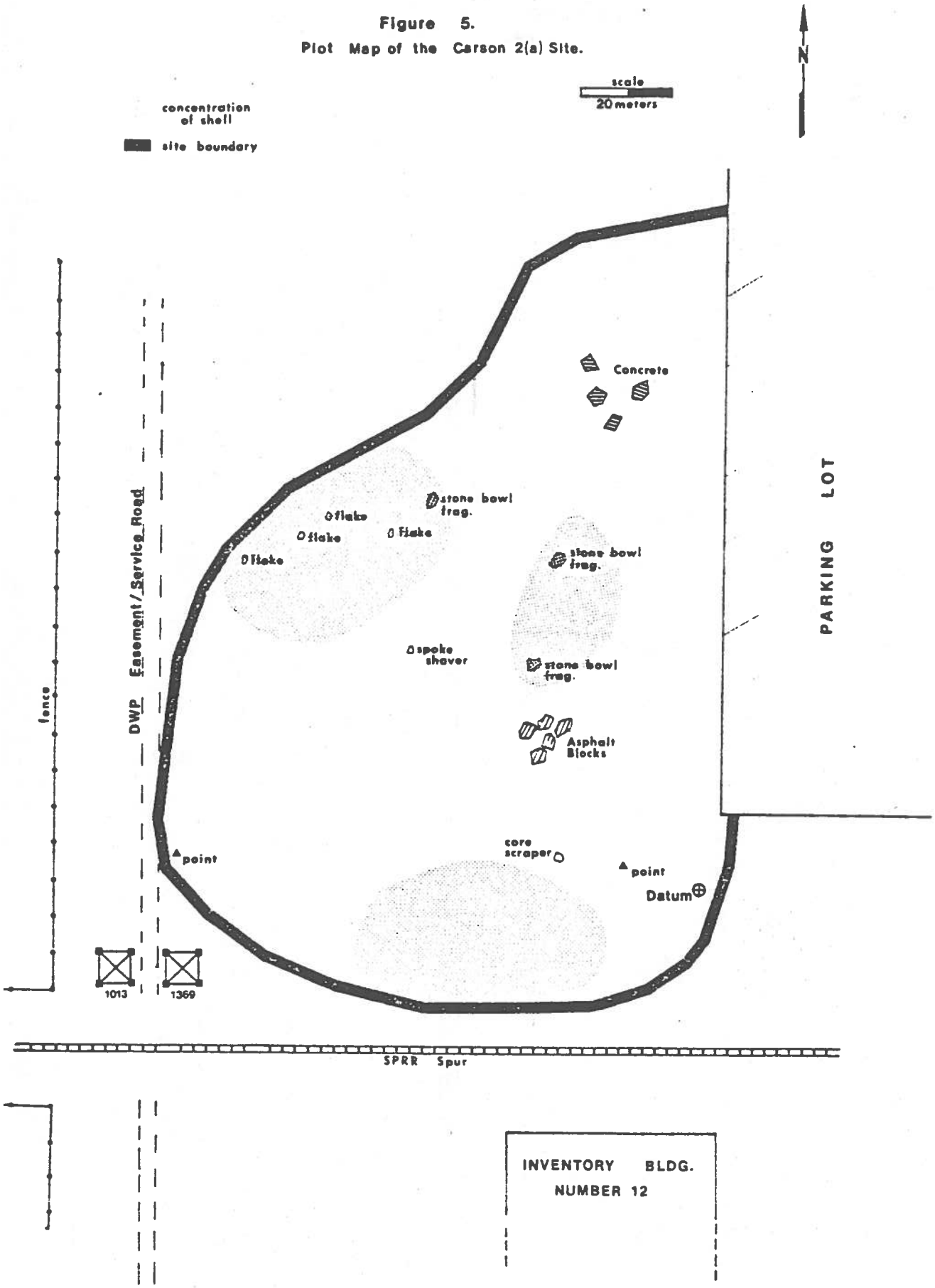


FIGURE 1

Map of the Watson Industrial Center South.
Showing Archaeological Sites & Surveyed Areas.

Figure 5.
Plot Map of the Carson 2(a) Site.



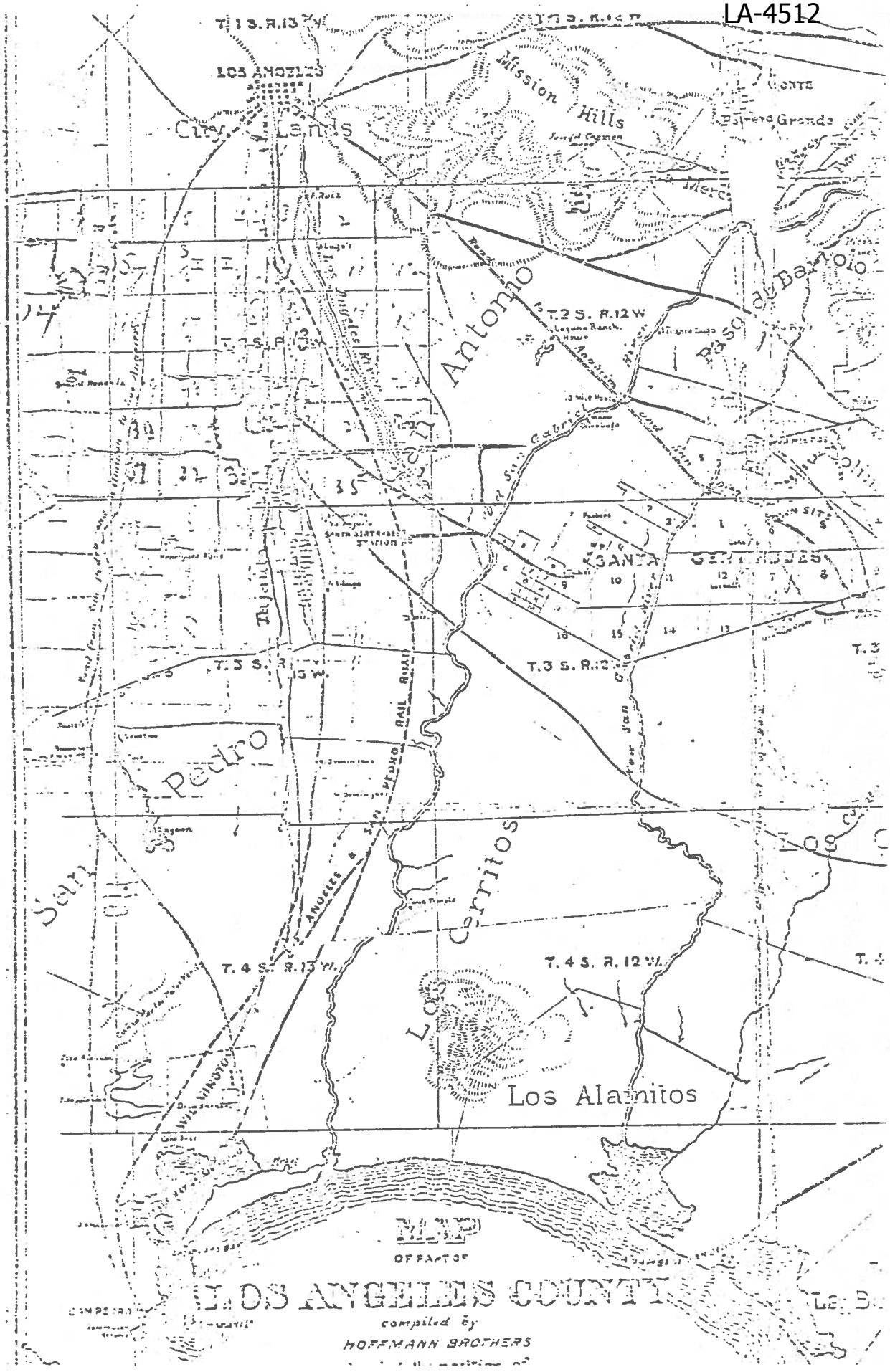
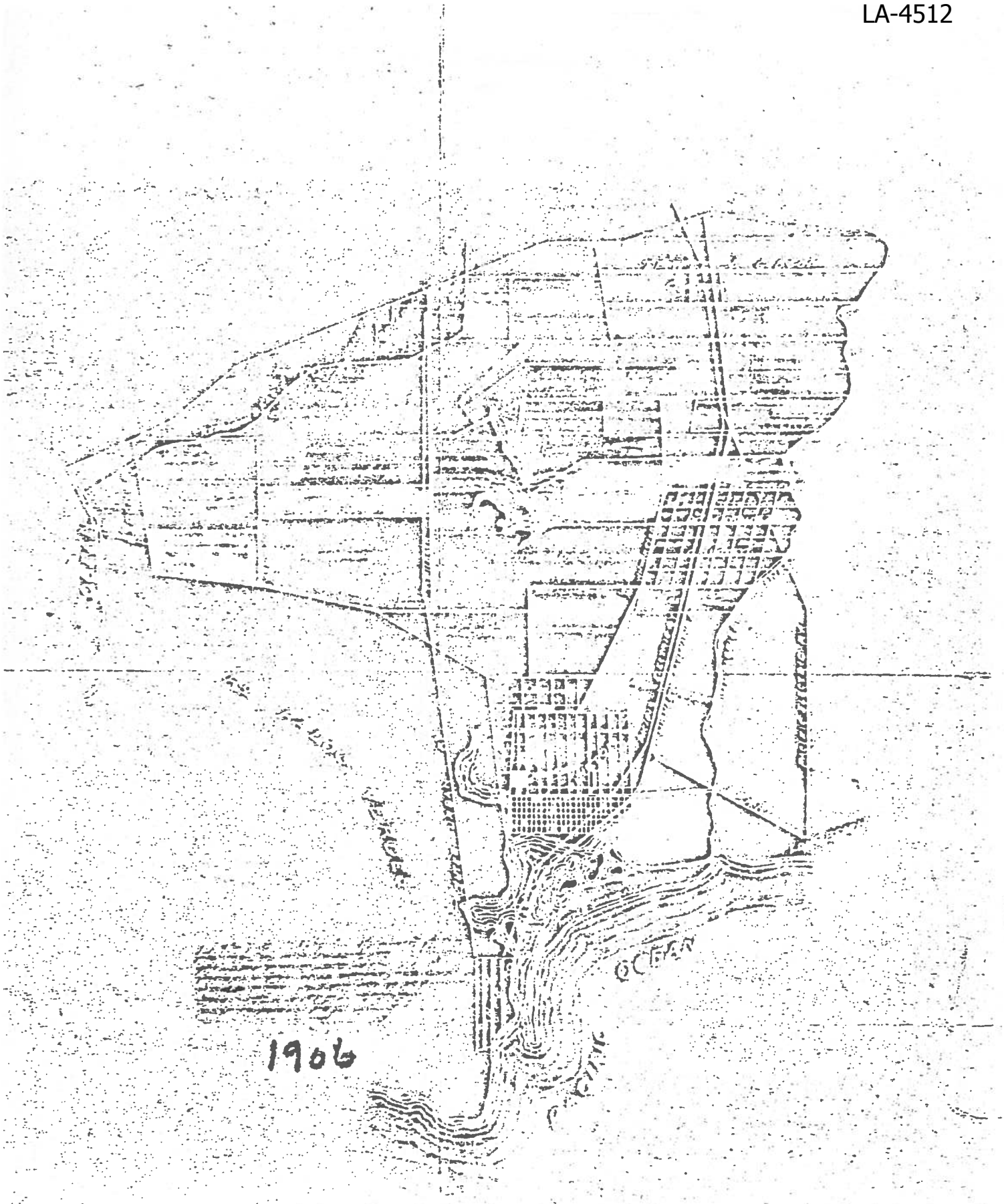
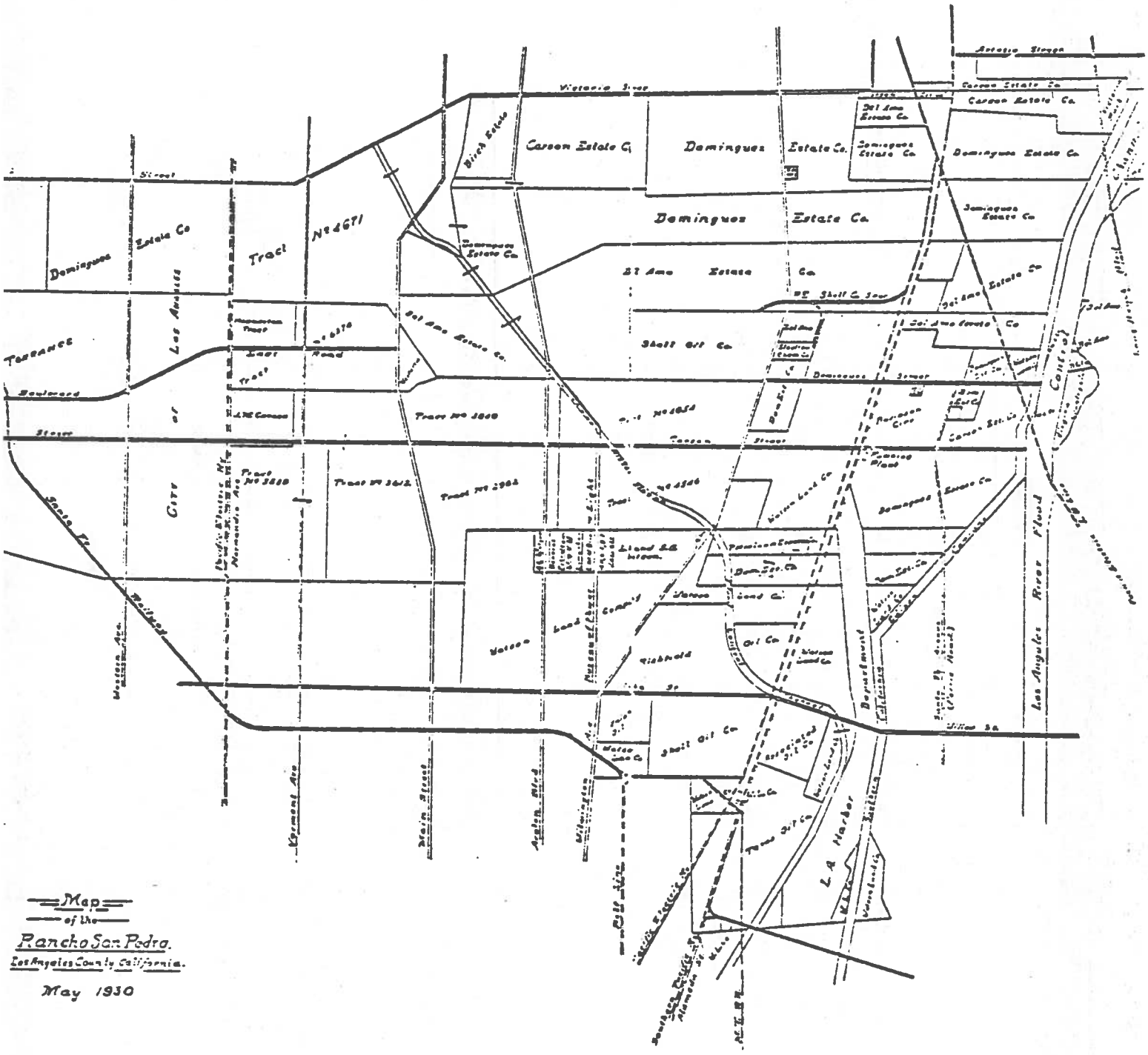


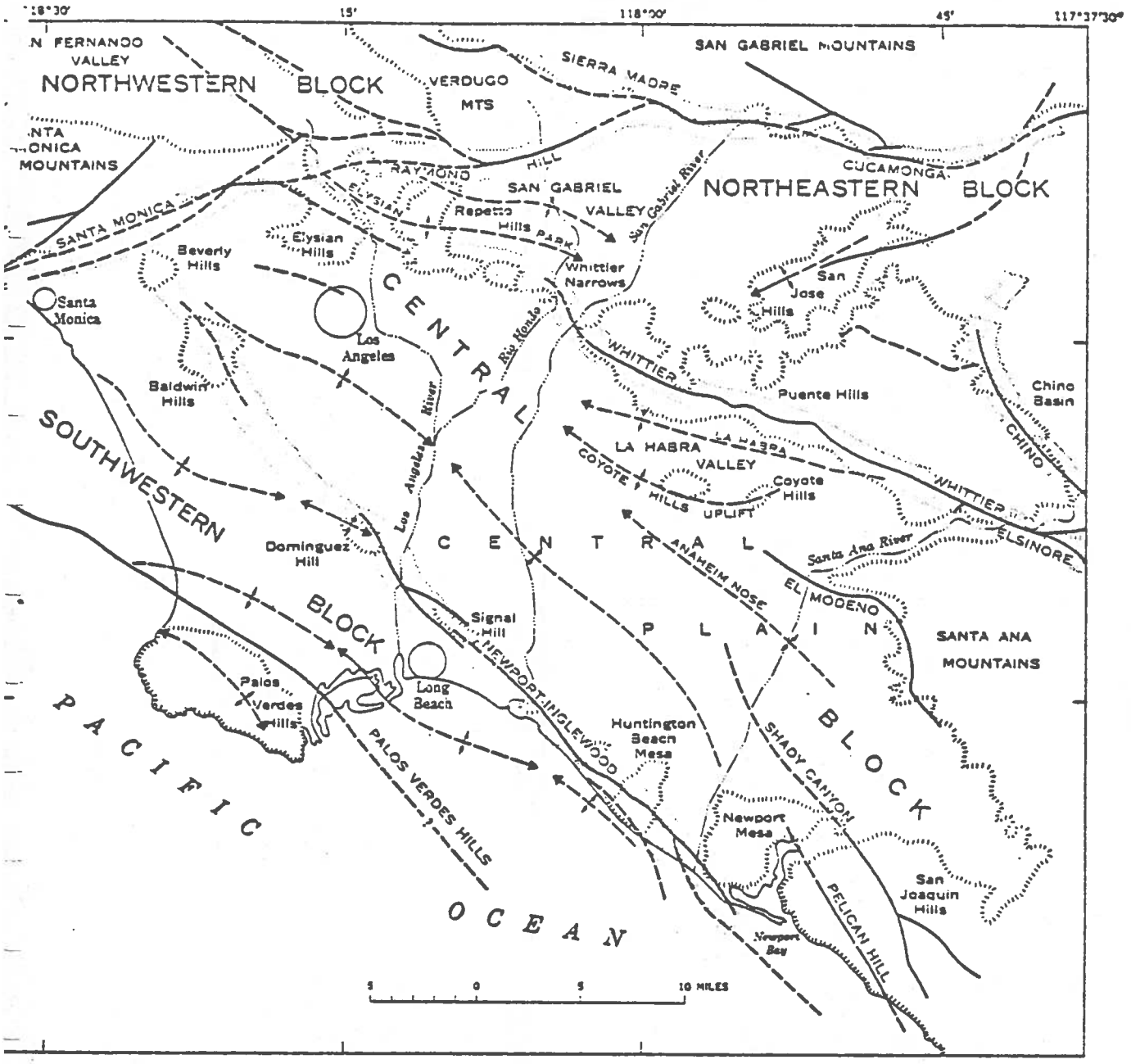
Figure 6. Promotional Map Circa 1868-1869.
(not for publication.)



915

LA-4512


Carson Estate Co.
Dominguez Estate Co.
Tract No. 4671
Torrance
Los Angeles
City of
Boulevard
Street
Railroad
Vermont Ave.
Main Street
Avalon Blvd.
Dept. of Harbors
L.A. Harbor
Los Angeles River Flood
Map
of the
Rancho San Pedro.
Los Angeles County California.
May 1930



EXPLANATION

WHITTIER

Fault or fault zone
hed where approximately located; queried where doubtful

Anticline
Dashed where approximately located

Syncline
Dashed where approximately located

Boundary of structural block

LA-4512

E78
LAN-TMP
.H6
1977

LA4454

APPENDIX I

DEFINITIONS OF TERMS USED IN TEXT

FEBRUARY 18, 1977

Definitions

Before discussing the status of archaeological and historical resources in the County, the following definitions of terms and concepts are necessary:

Cultural Heritage Resources (CHR)

Cultural Heritage Resources include all sites, features, burials, examples of rock art; structures, ruins, artifacts, remains, chemical traces and other data pertaining to or derived from the activities and presence of pre-existing and/or extinct populations at a locality, whether above, on or below the surface of land or water. The value of such resources lies both in the items themselves, which are tangible representatives of bygone cultural practices and/or populations, and in the data that can be derived from them, either singly or in aggregate, for the reconstruction of pre-existing societies and life patterns.

Cultural Heritage Resources include remains of both an archaeological and historical nature (see below). Such resources, especially sites, are extremely fragile and perishable, and once destroyed cannot be reconstructed or replaced. This fact also applies to archival materials as well as to historical structures for which documentation is inadequate.

Culture

The term culture is employed throughout this paper in its anthropological sense (i.e., as meaning the patterned, learned behavior of human beings living in social groups through time).

Archaeology

Archaeology is the science of recovering data about pre-existing or extinct cultures and peoples. Previously, it has dealt primarily with the study and reconstruction of cultures for which documents and written records were

lacking. However, today there is an increasing use of archaeological techniques to supplement, verify and even correct documentary data of an historical nature. As a result, it is more appropriate to consider archaeology as a means of recovering data from CHRs by way of specialized techniques (i.e., excavation, systematic collection of physical remains, etc.) rather than a study of ancient, non-civilized and non-literate societies.

History

Like archaeology, the term history has often been used in a restricted sense to refer to the study of objects and/or events related to literate, civilized societies for which written documentation exists. In California, history is considered by many to deal with the post-European Contact period (after A.D. 1542) and with the activities of peoples of European descent. In this sense, history is studied mainly through the writings, documents and literary records of the ancestors of today's Anglo and Hispanic populations. As a result, little attention is paid to "prehistoric" (i.e., Native American) societies whose heritage comprises over 98% of the period of time that man has occupied North America. Therefore, in this report the term "history" will rarely be used except in its broadest sense (i.e., as pertaining to the past or to the study of the past as a whole). In most other instances, the term "historical resource(s)" will be replaced by the term "cultural heritage resource(s)" except when specific reference is being made to the post-European Contact period.

Artifact

An artifact is anything made, used or modified by the hand of man.

Excavation

An excavation is the systematic, scientific recovery of cultural heritage resources from below the surface of the ground or of a body of

water so as to permit the reconstruction of the cultural activities of pre-existing peoples. The main goal of an excavation is not the physical remains per se but rather the recovery of cultural data both from the objects themselves and from their relationship to each other (i.e., their context). Excavation results in the physical destruction of all or a portion of the site being investigated and, consequently, must be conducted so as to permit the fullest possible recovery of data so that a record of the original context can be preserved.

Site

"Site" is a term used in this report to refer to any locality at which cultural heritage resources occur, regardless of whether or not such a locality is under scientific study or has been identified officially.

Native American

Any person or descendant of a person, living or dead, who inhabited any region of the Western Hemisphere prior to the coming of European explorers and colonists will be referred to as a Native American. Where known, social groups or populations will be designated by their aboriginal name (e.g., "Chumash") or by the name of their language (e.g., "Hokan-Speakers").

APPENDIX II

OUTLINE OF
NATIVE AMERICAN CULTURE HISTORY
FOR LOS ANGELES COUNTY.

Cultural Heritage of Los Angeles Basin

Having discussed the development of historical research in the County, a brief summation can be made of the major stages of history identified to date. In compiling this section, a large number of publications have been consulted, most of which are listed in the Bibliography (see above). Only the most important of these sources will be cited here, and reference should be made to the section on Method for the complete citation (Appendix A).

Native American Culture History (Pre-Contact)

As stated by Wallace (1955), the history of Native American culture can be divided into four phases or stages. These have been variously named by other researchers but, basically, all can be referred, in order of decreasing age to the Early Man Phase (also Paleo-Indian, San Dieguito, or Millingstone Phase), the Millingstone Phase (also Oak Grove, Topanga I/II, Encinitas or La Jolla I Phase), the Intermediate Phase (also Hunting Culture, Early Canalino, Topanga III or Campbell Tradition) and the Canalino Phase (also Chumash, Digueno, Shoshonean or San Luis Rey Phase). It should be noted in the following discussion that precise dates cannot be given for the beginning and termination of each phase. This is due to the graduality of the changes that occur through time to distinguish successive cultural periods, the latter being identifiable mainly through a shift in emphasis rather than through epocal or cataclysmic events. Therefore, in the figures accompanying this report the phases are separated by dotted rather than solid lines and these should be understood as approximate and not absolute chronological boundaries.

A. Early Man Phase (Pre-9,000 B.C. - 6,000 B.C.)

The origins of man in Southern California are obscure at present, and

initial dates for this phase are lacking. The earliest known dated remains in the Los Angeles County are those of Los Angeles Man (23,600 B.C.) but postulated dates for skeletal and cultural remains in San Diego County and outlying desert regions may exceed this by a factor of two or more (Simpson 1974, Personal Communication; Bada, et al. 1974). Although it is commonly assumed that man did not originate on this continent, due to the lack of appropriate ancestral fossils, and that he migrated from Northeastern Asia by way of the Bering Straits (then a dry land area of considerable size) during the Pleistocene (Ice) Age, estimates vary as to the actual beginning of that immigration. At present, most scholars would agree on figures in the range of 25,000 - 70,000 years B.P. (before the present) with some opting for as early as 100,000 B.P. (Krieger 1964, Simpson 1968).

The migration route(s) taken by early man is also in doubt. Some (Leakey 1967, Personal Communication; Simpson 1974, Personal Communication) have felt that he occupied the dry margins of the Pacific continental shelf with a gradual southward movement until forced inland south of Point Concepcion. Others (Krieger 1964) support the inland route along the east flank of the Cordilleran Mountain Range as far as the Texas Panhandle with further dispersion westward from there. The very early dates postulated by Bada (Bada, et al. 1974) for sites clustered along the Southern California coast and interior desert have been used to support the Continental Shelf theory while the typological similarities in artifacts and site types throughout the Southwest and California suggests the possibility of the interior migration route (cf. Davis 1974; Davis, et al. 1969).

Little information is available for cultural patterning for the Early Man phase. Mostly, this is due to the rarity of sites in the Los Angeles

Basin; to date only one site can be assigned to the period in the Santa Monica Mountains but that is based mainly on typology, not concrete evidence (Leonard 1971). The rarity of sites may be the result of the nomadic way of life of the people, who may have consisted of small bands of migratory hunters with a low population density. This argument supports the westward dispersal theory stated above in that the shift of interior climates towards drier, hotter conditions may have encouraged the seeking of more attractive environments.

Sites dating to the Early Man phase in San Diego (i.e., the San Dieguitan) contain knives, scrapers and leaf-shaped projectile points as well as unspecialized pounding, griding and chopping tools made of stone. Pottery, stone mortars, pestles, grinding slabs (metates) and hand grinding tools (manos), shell beads or side-notched projectile points, all elements associated with later cultures, are rare or absent, as are base villages or semi-permanent campsites.

The distribution of sites and the types of artifacts found are suggestive of a culture characterized by small roving bands of hunters of large game mammals, using javelins or darts, and gatherers of plant foods in riverine environments (Davis, et al. 1969, Davis 1974, Donnan 1964).

B. Millingstone Phase (6,000 B.C. - 1,500 B.C.)

Evidence from the San Diego and Santa Barbara area suggests that there was a gradual change in the economic and dietary practices of the coastal populations of Southern California approximately 9,500 years ago (Moriarity 1967) which extended over a 2,000 year period. During this time the frequency of sites increased and new types of artifacts began to appear, the most notable of which were notched projectile points, grinding stones (manos and metates) and shell beads, while plane-scrapers increased in

number. Evidence of this transition can be found along all of the coastal and adjacent areas between Santa Barbara and Baja California at approximately the same time, and the change coincides with a corresponding increase in the frequency of sites and the first appearance of flexed and occasionally extended human burials (Moriarity 1967; C.D. King 1967; Leonard 1971). Moreover, sites began to appear in clusters or groups both along the coast and in the interior and most contained larger quantities of cultural remains. Coastal sites also are usually located on low elevations at the mouths of canyons and streams while those inland occurred on grassy low knolls or on stream terraces with scattered live oaks.

There was definite evidence of a shift in hunting, gathering and food preparation techniques which became pronounced after 2,000 B.C. The quantity of mammal remains dropped substantially at sites dating to this period, indicating a marked decline in animal hunting. Coastal sites contained small quantities of shellfish remains which pointed to the beginning of the seasonal exploitation of marine food resources. Shell was altogether absent from sites in the interior, a fact which when coupled with the decline in hunting indicated a heavy dependence on seeds and plant foods, perhaps concentrating on yucca and agave. This would account for the appearance and/or increased use of slab and hand grinding stones and plane-scrapers which would be used to prepare such food for eating. The absence of shellfish remains in the inland sites strongly suggests that trade and contacts between the two areas were minimal at that time (Leonard 1971; Kowta 1969).

The larger size of sites and the greater depth of cultural deposit implies that such sites were semi-permanent villages and were occupied by larger populations over a longer period of time compared to earlier periods,

although it is doubtful that any group was larger than 60-80 individuals. The stress on plant food collection and processing suggests that much of the routine labor was performed by women and that the exploitative range of any group was restricted to within a half-day's walk from camp. It also appears that the acorn and pinon nut which served as major staples in later periods were not being utilized at this time.

Although explanations for the changes and trends just described differ in detail, most agree that the major cause is regional adaptation. As inland and coastal sites begin to become differentiated in the Santa Monica Mountains, so are both differentiated from sites in the more arid interior regions. There, milling and grinding stones also first appear ca. 8,000 B.P. but the association is with elements of the Pinto Basin Industry, which contains short, squat, thick-stemmed projectile points and other artifacts which more closely resemble the archaic period materials from the Great Basin areas east of the Colorado River (Moriarity 1962a; Davis, et al. 1969). The main difference between the coastal and desert areas would appear to be that the practice of hunting continued through the Millingstone Period in conjunction with an increased emphasis on the gathering of vegetal foods. A preliminary analysis of excavation materials from a site in Antelope Valley on the Kern-Los Angeles County line indicates that the Pinto Basin Industry extended into the Western Mojave Desert and the Los Angeles Region.

C. The Intermediate Phase (1,500 B.C. - A.D. 500)

Approximately 3,500 years ago the tempo of change and regionalization observed to have begun in the preceding phase increased noticeably. Village sites proliferated and became more permanently established (Leonard 1971), while burials began to appear outside of settlement areas in true cemeteries (Moriarity 1966). Stone tools included a greater number

and variety of projectile points and ornamental artifacts as well as an occasional "cogstone" (Meighan 1959, C.D. King, et al. 1968), an artifact unique to Los Angeles and Orange Counties.

Analysis of dietary remains at sites dating to this period demonstrates a sharply increased exploitation of marine and fresh water resources such as fish, sea mammals, and shellfish in coastal areas while interior sites contain evidence of a resurgence in hunting. People ranged farther afield in search of food and resources than in previous periods and temporary (seasonal) food collecting and processing camps have been found in both areas. For the first time the collection and processing of acorns can be noted in the archaeological evidence (Leonard 1971). Shell bead manufacture increased and contacts between coastal sites and those in the interior were established during this period.

At this time Shoshone (Tongva) speaking groups moved into the Western peripheries of the Great Basin and became established in the Mojave Desert (north Los Angeles County) by 2,000 B.P. (0 A.D.) (Robinson 1976, Personal Communication). By A.D. 500, these peoples had reached the coast of Los Angeles and Orange Counties and had become assimilated into the cultural traditions of these areas. They also added new elements to the indigenous local complexes (Donnan 1964; Kroeber 1953).

D. The Canalino Phase (A.D. 500 - 1,800)

The last phase of the pre-Contact Native American cultural sequence saw a major elaboration of many of the trends of the previous phases and the development and spread of elaborate social and religious practices. Chief among the trends evidenced at this time is a marked increase in the size and social diversity of coastal village sites, and in the size of the area exploited for food and other resources (C.D. King 1974; Leonard 1971; Johnston 1962). Many villages in adjoining areas formed close

social and political ties with one another while maintaining their individual autonomy.

Trade relations between groups in different regions proliferated at this time and long-range contacts with the offshore islands, Santa Barbara, and the desert areas were established. The development of the plank outrigger canoe not only permitted oceanic trade, but also led to a greater exploitation of salt water fish (yellow fin, albacore, etc.) and sea mammals.

In the interior, villages tended to remain small while the range of seasonal migrations increased. Virtually all of the sub-zones of the ecosystems were exploited for food, lithic and other resources resulting at certain times of the year in major dislocations of populations. Rock shelters and caves were utilized at this time as temporary camps and bedrock mortars were found in association with major oak groves. The latter fact, taken in conjunction with the increased presence of mortars and pestles relative to metates and manos, shows that acorns had become the major vegetal staple.

Although the features given above are found through the County area during the subsequent Canalino Phase, not all regions exhibit them to the same degree. Most of the County was inhabited by the descendents of the Tongva/Shoshone-spearing peoples who immigrated from the desert regions while only the extreme eastern portion of the Santa Monica Mountains and the North County area were relatively unaffected. The areas of Ventura and Santa Barbara Counties were occupied by the descendents of the peoples of the earlier phases (i.e., the Hokan-speaking Chumash).

Although the Gabrielino quickly adopted the basic cultural elements, they maintained some of their original practices albeit in a modified

form (Moriarity 1969). This was particularly true for their religion, which quickly spread to neighboring areas, and for their practice of cremation instead of or, occasionally, along with flexed burial. Pottery was traded for as far away as the desert regions and Arizona (Walker 1951), but was not made locally until post-Contact times.

The Canalino Phase reached its peak of development in the Seventeenth Century, A.D., in the period following initial contact with the first Spanish explorers, and terminated a few decades after the founding of the Spanish missions. By A.D. 1800, the local Native American population had been greatly reduced and their culture was greatly destroyed in all but the outlying regions. By the time Kroeber began his survey in 1908, only a handful of "Gabrielino" (Tongva) or Chumash were available to act as informants and none was still living in a traditional fashion.

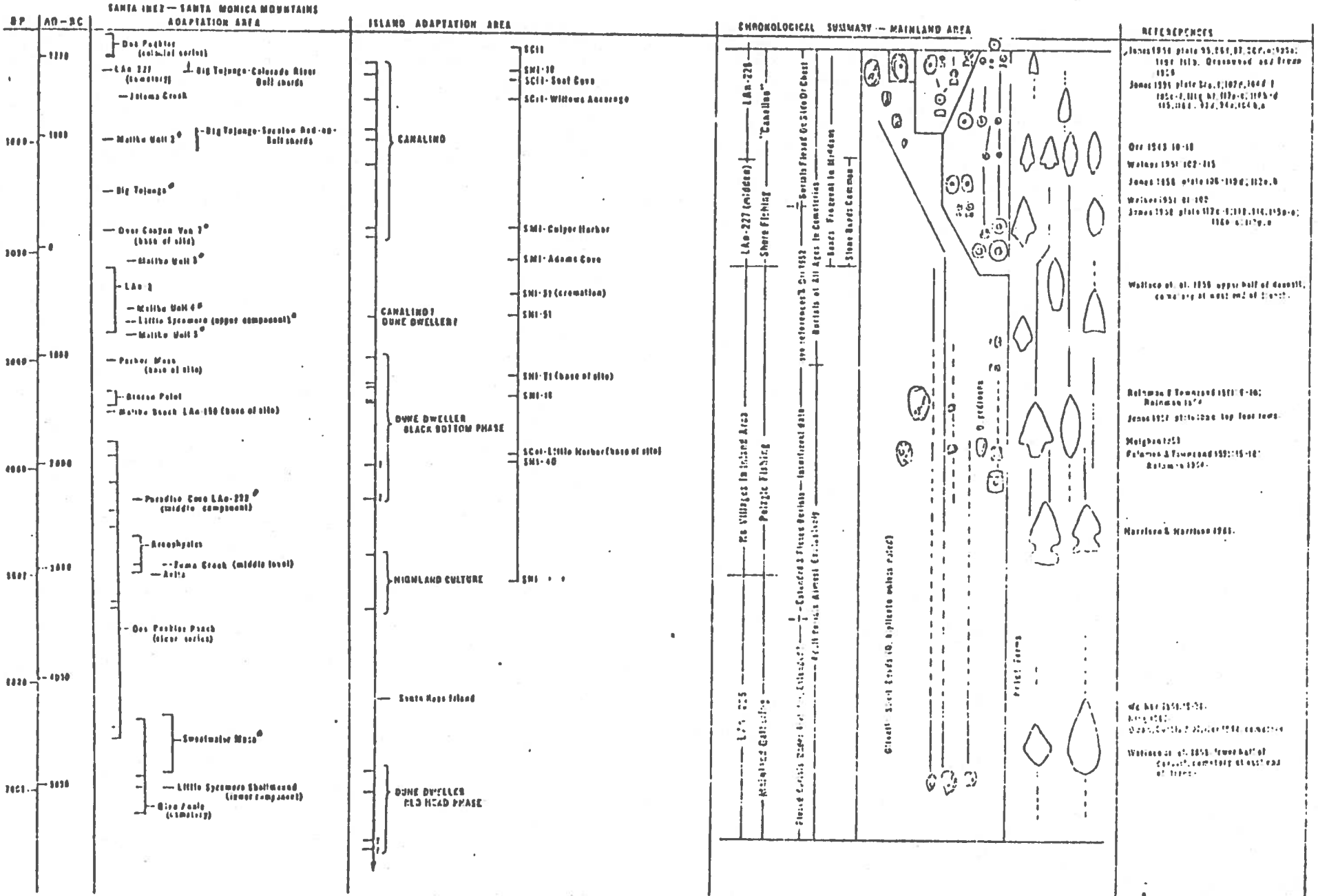
COMPOSITE CULTURAL DEVELOPMENT SCHEME FOR LOS ANGELES COUNTY
& ADJACENT AREAS SHOWING LOCAL PHASES AND TERMINOLOGIES

YEARS B.P.	SAN DIEGO[1]	LOS ANGELES[2]	VENTURA[2]	SANTA BARBARA[2]	MOJAVE DESERT[3]	PERIOD
200	American Hispanic	American Hispanic	American Hispanic	American Hispanic		Historic
					Marana	Canalino Phase
500	Digueno/San Luis Rey	Canalino	Canalino	Canalino	Haiwee	
		Malaga Cove III/IV				
1000		Big Tujunga			Newberry	- - - -
	La Jolla III					Intermediate Phase
2000						
	La Jolla II	Malaga Cove II	Sand Dune Culture	Hunting Cultures		
3000				Oak Grove		- - - -
4000			Little Sycamore Canyon			
					Little Lake	Millingstone Phase
5000		Malaga Cove I				
6000	[Transitional]	La Brea				
7000						- - - -
	San Dieguito					
8000						
9000					Mojave	
10,000						
11,000						Early Man Phase
>11,000	Yuha Man	Los Angeles Man				

(1) After Warren 1968, Kowta 1969; (2) After Wallace 1955, Leonard 1971; (3) After Bettinger-Taylor, nd.

LA-4512

*CHART 1: SUMMARY OF RADIOCARBON DATES AND THEIR RELATIONSHIP TO THE CULTURAL SEQUENCE IN THE SANTA INEZ—SANTA MONICA MOUNTAINS AND ISLAND ADAPTATION AREAS IN SOUTHERN CALIFORNIA



*From C.D. King 1969.

LA-4512

APPENDIX III

TYPES OF ARCHAEOLOGICAL SITES

1. Types of Cultural Heritage Resources

Recent research has led to the discovery and identification of various types of sites in Los Angeles County. These range in size and complexity from large permanent villages to sites which were used briefly and for very specific purpose(s), but it should be noted that size, complexity and the duration of use are not the major criteria for defining the scientific value or significance of particular remains. Sites, like artifacts, exhibit patterning which is vital to the reconstruction of a culture and it is the interrelationship of sites to one another within a geographic context that makes this reconstruction possible. The range and nature of the activities in which the occupants of a village site may have participated cannot be discovered through the study of that site alone but only through the study of all sites relating to that area and time period. The excavation of a minor satellite site may be as likely to yield important information as a major village to which it may be culturally linked. The loss of the satellite site without recovery of the data it contained may result in a gap in knowledge concerning the activities in which a people were engaged and may prevent a full reconstruction of their cultures. For these reasons it is difficult to rank CHRs in terms of importance or scientific value since even the smallest chipping station may yield valuable data and so requires protection.

In the analysis of data for this report, the consultant has identified ten categories of sites. These categories are used most commonly by archaeologists involved in local research, although terminology may vary according to personal preferences.

The site categories are as follows:

Occupation Site (OCC)*

Sites in which the artifact assemblage includes a full range of tool types usually in association with a cultural deposit ('midden') containing food, debris, charcoal, ashes, fire-cracked rock, ornamental objects and other remains indicative of long-term occupation. Occupation sites may vary in size from small (i.e., occupied by a single family unit) to large, as in the case of major villages with a population range of 200 - 2,000 persons. Human burials, including large cemeteries, may be associated with the latter along with a wide range of satellite sites representing specific activities conducted by the village occupants outside of the village itself.

Temporary Camps (TC)

A site briefly occupied for the purpose of accomplishing a special task, ceremony or activity such as the procurement of water, the mourning of the dead, the processing of particular food plants or the butchering of game animals, or the quarrying of a particular type of stone. Temporary camps often lack midden deposits.

Chipping Station (CS)

A special activity site utilized for a brief period of time for the purpose of preparing stone tools or tools involving the use of stone. Such sites often contain only the chips and other waste products resulting from the fashioning of the tools themselves.

---

*The letter(s) in parentheses following the category name refers to abbreviations used in describing mapped survey areas.

Quarry (Q)

A place where a natural outcropping or vein of rock has been used as a source of raw material for tool manufacturing. In many instances quarry sites resemble chipping stations since some shaping of the rock may occur in order to facilitate transporting the material to another site for final retouching.

Rock Shelter (RS)

A site located in a cave or under a rock overhang which has served as a temporary camp or chipping station. Rock shelters often contain middens and may also have pictographs or petroglyphs (see below).

Bedrock Mortars (BRM)

A site used for the processing of special plant foods, such as acorns, by pounding them in deep holes ground into large boulders or a rock outcrop; such mortars might also occur in association with other site types such as temporary camps, rock shelters, and even occupation sites.

Shellmound (SM)

A site in which the cultural deposit usually consists of concentrations of marine and/or freshwater shells. Such deposits are also referred to as 'shell-middens' and may contain varying quantities of artifacts, animal bone and other cultural items.

Burial (B)

A site consisting of one or more graves containing human or animal remains. Human remains may occur singly or as mass burials with several individuals in one grave. Burials are often found near occupation sites and usually contain artifacts of a personal or ceremonial nature.

Rock Art (P)

A site containing pictographs (paintings on the rock surface) or

petroglyphs (engravings on the rock surface) which may be naturalistic depictions of persons or animals or schematic engravings whose meaning is often undetermined. Rock art sites may contain other types of cultural remains or may be associated with 'structures' such as 'stone circles' or cairns.

Historical Sites

Historical sites (i.e., those relating to the lives and activities of Europeans and Americans in southern California) are not categorized by type due to the large number of possible categories and the relatively small number of occurrences included in this study. Routes of explorers, missions, adobes, hydroelectric stations, stage stations, railroad depots, air meets, battle sites, forts, natural formations and trees associated with events and persons have been designated as historically significant on a local, regional or natural scale. Although classification systems have been devised for such sites (see the Californi History Plan, Volume I), places of historical importance located within the study areas are listed individually (below). On maps prepared as part of this study, historical sites are identified by a number preceded by an "H" (e.g., H-15).

APPENDIX IV

REPORTS ON SURVEYS AND/OR SUBSURFACE TESTS AT CARSON 1, 2 & 3.

APPENDIX V.

SOURCES OF FUNDING

Enclosed in this Appendix is a listing of sources of monies which could be applied or are currently applicable to projects seeking to identify, evaluate, recover, sample, protect, manage, restore, rehabilitate or otherwise conserve or memorialize CHRs. It should be noted that this listing is not presumed to be complete but is focused mainly on funds which are available from State and Federal programs and agencies. Local and private sources may also exist with which this Consultant is not personally familiar but which may be known to City personnel. If so, the list should be expanded to included these additions.

1. Historical Preservation Fund. Created by Land & Water Conservation Fund Bill of 1976 (P.L. 92-422) to establish an HPF in the U.S. Treasury with revenues from mineral leasing on public lands and the outer continental shelf. Total national amount in the fund for fiscal years 1978 and 1979 is $100 million which is to be used for National Park Service grants for planning activities including CHR surveys and statewide historic preservation plans. However has very limited application to CHR projects on a purely local scale.

2. Tax Reform Act of 1976 (Section 2124). Provides various tax incentives to encourage the preservation of historic structures which can be depreciated as provided by Section 167 of the tax code and which is "located in a historic district designated under a statute of the appropriate state or local government" and "certified by the Secretary of the Interior as containing criteria that will substantially achieve the purpose of preserving and rehabilitating buildings of historic significance to the district" (Section 2124,a).

3. National Trust for Historic Preservation Programs. Include Consultant Service Grants provided on a matching basis to non profit or public member organizations on a matching basis to pay for consultants on preservation and historic district/property feasibility studies as well as low-interest loans to establish revolving funds for improving properties listed in or eligible for the National Register of Historic Places.

4. Local Public Works Capital Development & Investment Program. A total of $3.2 billion was appropriated by the Local Public Works Employment

Act of 1976 to be administered by the Economic Development Administration (U.S. Department of Commerce) in areas of high unemployment on an emergency basis through regional offices. Applicable to the rehabilitation of state and locally owned structures or of neighborhood conditions.

5. Title I Home Improvement Loan Programs. Provide FHA insurance for loans up to $10,000 made by private financial institutions to individuals in order to finance property improvements that protect or increase the "livability or utility" of residential or other properties. Program is administered by HUD. Such loans (up to $30,000) can also be applied to finance the preservation, restoration or rehabilitation of residential properties listed in or eligible for listing in the National Register

6. Community Development Block Grant Program. Federal funds supplied directly to communities for projects that will improve urban living conditions through housing and environmental changes can also be used for preservation-related activities such as surveys of cultural resources, development of an historic preservation plan, studies for the adoption of regulatory or protective ordinances, establishment of financial programs (e.g., low-interest loans and rehabilitation grants for historically and architecturally significant structures), easement programs and revolving funds for the acquisition, rehabilitation and disposition of historic properties, administered by HUD as a result of the Housing and Community Development Act of 1974.

7. Housing Authorization Act of 1976, Section 8. Directs HUD to allocate funds in accordance with Block Grant Communities Housing Assistance Plans and encourages the provision of lower income housing through rent payment contracts with property owners "made on behalf of eligible families occupying new, substantially rehabilitated or existing rental units."

8. HUD Comprehensive Planning Assistance ('701') Program. '701 Funds' can be used for CHR evaluation, CHR survey, identification of CHRs subject to destruction and/or deterioration, determination of cost estimates of rehabilitation/restoration of CHRs or the relationship of

CHRs to elements of a comprehensive plan, preparation of district legislation, model preservation contracts, administrative and budgetary measures, and the preparation of an historic preservation action program. Generally used in connection with Community Development Block Grant programs.

9. HUD Rehabilitation Loans (Section 312). A total of $50-$80 million should be available nationally for loans for the repair and improvement of privately owned property to bring it into compliance with local building codes.

10. Property Release Option Program (PROP). Enables HUD to sell properties owned by it with value of less than $5,000 to local governments for $1 (one dollar). Properties so sold can be rehabilitated, demolished or sold at the discretion of the acquiring agency or government.

11. Urban Renewal Programs. Where unexpended funds are left over from uncompleted Urban Renewal Programs, it is possible for local agencies to 'write down' the cost of historic properties to as little as $1 (one dollar) where circumstances permit, to write down cleared land around historic properties and to provide $90,000 for restoration and/or $50,000 for moving properties listed on or eligible for the National Register.

12. HUD Housing for the Elderly & Handicapped Program (Section 202). Provides for new construction or major rehabilitation of properties. Also, through the Seed Money Loan Program, Section 202 provides no-interest loans to incorporated private, non-profit organizations and will underwrite up to 80% of planning costs of qualifying projects, including design, site engineering, legal assistance and consultations.

13. HUD Urban Homesteading Progam. Provides for conditional transfer of unoccupied residential property to an individual or family.

14. Housing Authorization Act of 1976, Section 235. Provides subsidies to low and moderate-income families to purchase new or substantially rehabilitated single-family houses or condominiums.

Note: The Housing Authorization Act of 1976 also amends the Flood Disaster Protection Act of 1973 to allow certain types of loans

to be exempted from the flood insurance requirement (does not apply to properties funded through National Park Service Historic Preservation Grants). Can be used to encourage rehabilitation of historic structures located in designated special hazard areas.

15. Urban Reinvestment Task Force Neighborhood Housing Services and Preservation Program. Provides technical help and grants to assist neighborhoods to fight deterioration and disinvestment, and to establish model programs.

16. Revenue Sharing Act of 1976. Provides Federal funds to state and local governments to be used as permitted as a match for other federal programs.

17. National Urban Neighborhood Revitalization Program. Recent amendment to the regulations of the Small Business Administration permits loans for the acquisition and rehabilitation of residential and commercial properties where cost of rehabilitation is greater than 1/3 of the purchase price and is carried out within specific time limits and on the condition that the property will be sold immediately. Combines SBA Section 502 loans, Section 7A loans and Economic Opportunities loans.

18. Tax Increment Financing. State legislation presently permits property taxes collected above a specified amount in a particular district to be set aside for use only within the designated area. Such moneys as are so collected can be used to pay for special needs (including historic structure preservation) or invested for future needs.

19. Revolving Funds. Permits the return and reuse of funds derived from certain programs and grants (e.g., Block Grants, National Trust Grants, Urban Reinvestment Task Force Funds, etc.) for other projects (see Ziegler, et al. 1975). Can be used by private organizations as well as local and state agencies.

20. Additional Federal Programs. See listing of more than 200 Federal programs which provide financial and/or technical assistance for historic conservation/preservation published by The National Trust for Historic Preservation (A Guide to Federal Programs).

APPENDIX VI

STATUTES AND POLICIES RELATING TO CULTURAL HERITAGE RESOURCE PRESERVATION.

Local Government Tribal Consultation List Request

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Type of List Requested

■ **CEQA Tribal Consultation List (AB 52)** – ***Per Public Resources Code § 21080.3.1, subs. (b), (d), (e) and 21080.3.2***

☐ **General Plan (SB 18)** - ***Per Government Code § 65352.3.***

Local Action Type:

☐ **General Plan** ☐ **General Plan Element** ☐ **General Plan Amendment**

☐ **Specific Plan** ☐ **Specific Plan Amendment** ☐ **Pre-planning Outreach Activity**

Required Information

Project Title: Griffith Energy Storage Project

Local Government/Lead Agency: City of Carson

Contact Person: Stefanie Griffin

Street Address: 967 Kendall Drive #A-537

City: San Bernardino **Zip:** 92407

Phone: 209.608.0028 **Fax:**

Email: sgriffin@fcs-intl.com; smacias@fcs-intl.com

Specific Area Subject to Proposed Action

County: Los Angeles County **City/Community:** Carson

Project Description:

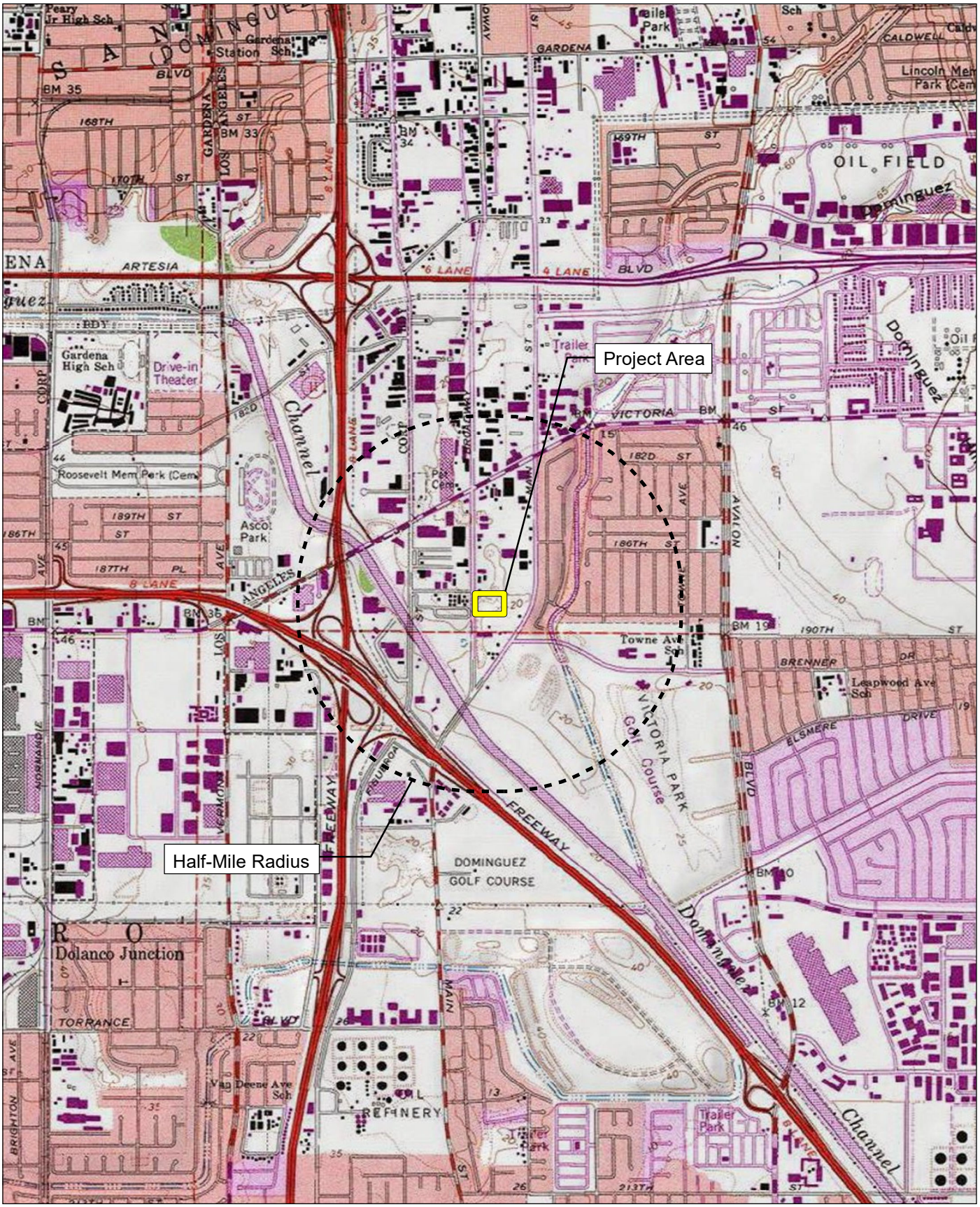
The project site is a utility scale battery energy storage system (BESS). Located on Assessor's Parcel Number 7339-014-009, approximately 3 acres of developed land in the City of Carson, California.

Additional Request

■ **Sacred Lands File Search** - ***Required Information:***

USGS Quadrangle Name(s): Torrance

Township: **Range:** **Section(s):**



Source: USGS Torrance 7.5' Quadrangle / San Pedro (Dominguez).
Project Site Source: USGS Torrance 7.5' Quadrangle / San Pedro (Dominguez).

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000
Feet

Exhibit A
Record Search Map

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Vacant

EXECUTIVE SECRETARY
Raymond C. Hitchcock
Miwok, Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

November 20, 2023

Stefanie Griffin
FirstCarbon Solutions

Via Email to: sgriffin@fcs-intl.com & smacias@fcs-intl.com

Re: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, Griffith Energy Storage Project, Los Angeles County

Dear Ms. Griffin:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
- Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

    - Any report that may contain site forms, site significance, and suggested mitigation measures.

      All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was negative.

4. Any ethnographic studies conducted for any area including all or part of the APE; and

5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Los Angeles County
11/20/2023

Tribe Name	Fed (F) Non-Fed (N)	Contact Person	Contact Address	Phone #	Fax #	Email Address	Cultural Affiliation	Counties	Last Updated
Gabrieleno Band of Mission Indians - Kizh Nation	N	Andrew Salas, Chairperson	P.O. Box 393 Covina, CA, 91723	(844) 390-0787		admin@gabrielenoindians.org	Gabrieleno	Los Angeles,Orange,Riverside,San Bernardino,Santa Barbara,Ventura	8/18/2023
Gabrieleno Band of Mission Indians - Kizh Nation	N	Christina Swindall Martinez, Secretary	P.O. Box 393 Covina, CA, 91723	(844) 390-0787		admin@gabrielenoindians.org	Gabrieleno	Los Angeles,Orange,Riverside,San Bernardino,Santa Barbara,Ventura	8/18/2023
Gabrieleno/Tongva San Gabriel Band of Mission Indians	N	Anthony Morales, Chairperson	P.O. Box 693 San Gabriel, CA, 91778	(626) 483-3564	(626) 286-1262	GTTribalcouncil@aol.com	Gabrieleno	Los Angeles,Orange,Riverside,San Bernardino,Ventura	
Gabrielino /Tongva Nation	N	Sandonne Goad, Chairperson	106 1/2 Judge John Aiso St., #231 Los Angeles, CA, 90012	(951) 807-0479		sgoad@gabrielino-tongva.com	Gabrielino	Los Angeles,Orange,Riverside,San Bernardino,Ventura	3/28/2023
Gabrielino Tongva Indians of California Tribal Council	N	Christina Conley, Cultural Resource Administrator	P.O. Box 941078 Simi Valley, CA, 93094	(626) 407-8761		christina.marsden@alumni.usc.edu	Gabrielino	Los Angeles,Orange,Riverside,San Bernardino,Santa Barbara,Ventura	3/16/2023
Gabrielino Tongva Indians of California Tribal Council	N	Robert Dorame, Chairperson	P.O. Box 490 Bellflower, CA, 90707	(562) 761-6417	(562) 761-6417	gtongva@gmail.com	Gabrielino	Los Angeles,Orange,Riverside,San Bernardino,Santa Barbara,Ventura	3/16/2023
Gabrielino-Tongva Tribe	N	Sam Dunlap, Cultural Resource Director	P.O. Box 3919 Seal Beach, CA, 90740	(909) 262-9351		tongvatcr@gmail.com	Gabrielino	Los Angeles,Orange,Riverside,San Bernardino,Ventura	5/30/2023
Gabrielino-Tongva Tribe	N	Charles Alvarez, Chairperson	23454 Vanowen Street West Hills, CA, 91307	(310) 403-6048		Chavez1956metro@gmail.com	Gabrielino	Los Angeles,Orange,Riverside,San Bernardino,Ventura	5/30/2023
Santa Rosa Band of Cahuilla Indians	F	Lovina Redner, Tribal Chair	P.O. Box 391820 Anza, CA, 92539	(951) 659-2700	(951) 659-2228	lsaul@santarosa-nsn.gov	Cahuilla	Imperial,Los Angeles,Orange,Riverside,San Bernardino,San Diego	
Soboba Band of Luiseno Indians	F	Joseph Ontiveros, Tribal Historic Preservation Officer	P.O. Box 487 San Jacinto, CA, 92581	(951) 663-5279	(951) 654-4198	jontiveros@soboba-nsn.gov	Cahuilla Luiseno	Imperial,Los Angeles,Orange,Riverside,San Bernardino,San Diego	7/14/2023
Soboba Band of Luiseno Indians	F	Jessica Valdez, Cultural Resource Specialist	P.O. Box 487 San Jacinto, CA, 92581	(951) 663-6261	(951) 654-4198	jvaldez@soboba-nsn.gov	Cahuilla Luiseno	Imperial,Los Angeles,Orange,Riverside,San Bernardino,San Diego	7/14/2023

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed Griffith Energy Storage Project, Los Angeles County.

Record: PROJ-2023-005567
Report Type: AB52 GIS
Counties: Los Angeles
NAHC Group: All



Photo 1: Overview of project area from NW corner. View E.



Photo 2: Overview of project area from NW corner. View S



Photo 3: Overview of project area from NE corner. View S.



Photo 4: Overview of project area from NE corner. View W.



Photo 5: Overview of project area from SE corner. View W.



Photo 6: Overview of project area from SE corner. View N.



Photo 7: Overview of project area from SW corner. View W.



Photo 8: Overview of project area from SW corner. View N.



Photo 9: Overview of fill piles from center of project area. View NW.



Photo 10: Overview of soil from SE corner. View Plan.

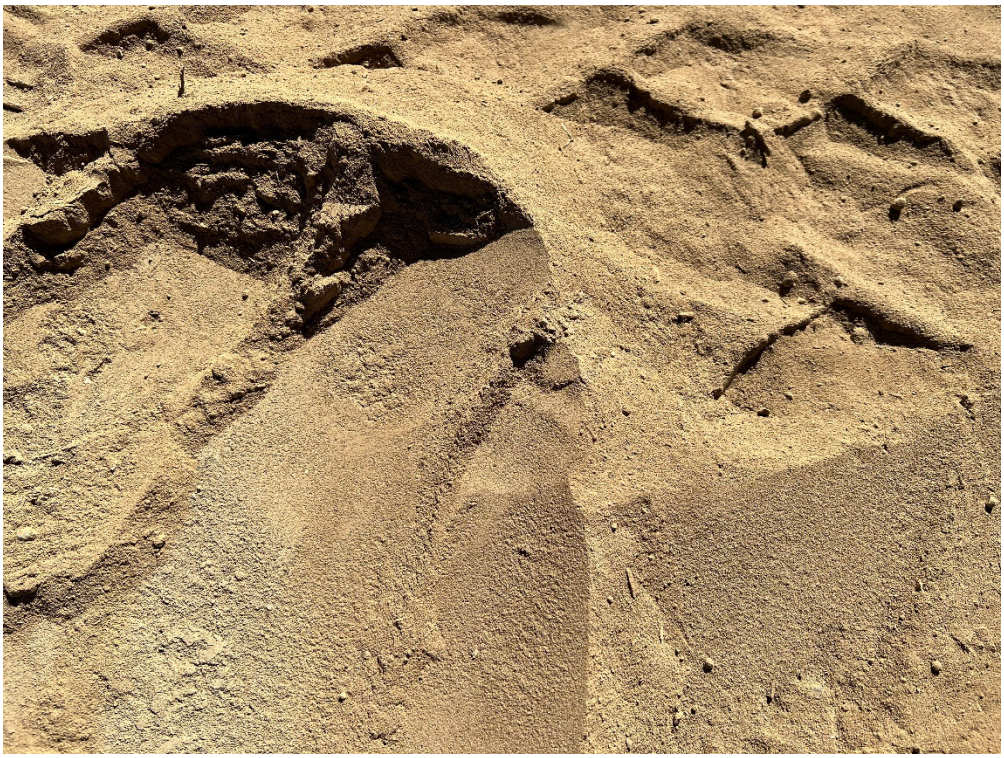


Photo 11: Overview of soil from center of project area. View Plan.



Photo 12: Overview of soil from northern section project area. View Plan.

THIS PAGE INTENTIONALLY LEFT BLANK

RECORDING REQUESTED BY AND
WHEN RECORDED MAIL TO:

City of Carson
701 E Carson Street
Carson, CA 90745
Attn: Planning Manager

SPACE ABOVE THIS LINE RESERVED FOR RECORDER'S USE

DEVELOPMENT AGREEMENT NO. 33-23

This Development Agreement ("Agreement") is entered into on the ____ day of _____, 2026 ("**Execution Date**"), by and between the City of Carson, a charter city in the State of California ("**City**"), and VESI 27 LLC, a Delaware limited liability company ("**Developer**"). The City and Developer shall be referred to jointly within this Agreement as the "Parties" and individually as a "Party."

RECITALS

A. *The Development Agreement Statute.* California Government Code Sections 65864 *et seq*. ("**Development Agreement Law**") authorizes cities to enter into binding development agreements with persons having a legal or equitable interest in real property for the development of such property, all for the purpose of strengthening the public planning process, encouraging private participation, and comprehensive planning and identifying the economic costs of such development.

B. *Orderly Development; Public Benefits.* The City Council finds that this Agreement is in the best public interest of the City and its residents, adopting this Agreement constitutes a present exercise of the City's police power, and this Agreement is consistent with the City's General Plan. This Agreement and the proposed Project will achieve a number of City objectives, including the orderly development of the Property and the provision of public benefits, or funds therefor, to the City and its residents.

C. *The Property.* The 3.00-acre property is currently vacant and is surrounded by other mixed industrial uses, and is located at 18800 South Broadway Avenue in the City of Carson, County of Los Angeles, State of California (Assessor's Parcel Number 7339-014-009), legally described in Exhibit "A" and depicted in Exhibit "B" attached hereto, which exhibits are incorporated herein (the "**Property**"). The General Plan land use designation for the Property is Heavy Industrial and the Property is zoned MH-D (Manufacturing Heavy – Design Overlay). The Southern California Edison ("**SCE**") Nola Substation is located directly adjacent to the east of the Property, in the City of Carson.

D. *The Project.* Developer will demolish the existing industrial/topsoil supplier facility and construct a utility-scale, 100-megawatt Battery Energy Storage System (BESS) and associated infrastructure. Lithium-ion batteries will be stored within modular outdoor enclosures, and power that is released or captured by the batteries will be transferred to and from the SCE Nola Substation via an underground 66-kilovolt generation transmission ("**gen-tie**") line as further detailed below.

The facility will provide a service by receiving energy (charging) from the SCE transmission system, storing the energy, and then later delivering energy (discharging) back to SCE Nola Substation. In general, the California Independent System Operator ("**CAISO**") will dispatch the system to both place energy onto the grid (discharge) during times of high load and to take energy off the grid (charge) in times of low load relative to generation. However, SCE may have different requirements for when to dispatch the system, potentially dictated by the status of critical equipment that comprises the grid.

The project consists of (i) the batteries installed in racks located in prefabricated outdoor enclosures, each housing internal racks and system control modules, thermal management, and communication systems, (ii) inverters, (iii) medium-voltage transformers, (iv) switchgear, (v) a collector substation, and (vi) other associated equipment, as further detailed below. The battery modules will be delivered to the site preassembled and moved into place by forklifts or cranes. These modules will be connected in parallel to aggregate the required energy capacity.

More specifically, the project will include the following components: (i) an energy storage facility that will provide energy storage capacity and dispatch for the electric grid; (ii) a battery management system to control the charging/discharging of the batteries, along with temperature monitoring and control of the individual battery cell temperature with an integrated cooling system; (iii) power inverters to convert between AC and DC, along with transformers that will step up the voltage; (iv) telecommunication equipment, including underground and overhead fiber optics or Supervisory Control and Data Acquisition ("**SCADA**"); (v) on-site access driveways, perimeter security fencing, and nighttime directional lighting; (vi) a gen-tie line to transfer power between the SCE Nola Substation and the project, as detailed below.

The medium-voltage transformers, inverters, switchgear, electronic switchboards, and additional electrical equipment will be installed outside the BESS enclosures. Underground wires and cabling will run from the battery enclosures to a concrete head, housing the inverters and medium-voltage transformers. All electrical equipment will be housed in appropriately rated National Electrical Manufacturers Association enclosures. All outside electrical cabling will run underground. Underground wires and cabling will run from the medium-voltage transformers to the collector substation. The collector substation will be located on the northeastern portion of the parcel on approximately 9,400 square feet (approximately 0.22 acre) of ground. Components will include a main power transformer, control house, and switchgear.

Industry-standard nationally (and internationally) recognized inverter equipment will be used for the project. The inverters will be stand-alone units that will operate in all conditions in a charge mode and discharge mode. The inverters will be controlled and monitored remotely. On-site disconnects will be installed in case of an emergency or unscheduled maintenance. The inverters will be designed to last for no less than the full Term of this Agreement with proper preventive maintenance, scheduled maintenance, and occasional minor equipment overhauls.

The project's above-referenced telecommunication facilities will meet the communication requirements for interconnection and communication with the SCE/CAISO facilities and

will support remote monitoring of project operations. To facilitate communication with SCE facilities, a fiber-optic cable will connect the project site switchyard with the SCE Nola Substation. Per utility interconnection regulations, a second, separate, redundant fiber-optic cable will be installed within the project site boundaries.

The project will use local exchange carrier services for telecommunication to support remote monitoring requirements. The project will connect to telecommunication fiber-optic lines owned and managed by local telecommunication providers.

The location of the project fiber optic cable lines (underground and overhead) will be substantially as shown in Exhibit "C." Installation of the underground fiber optic cable lines will require trenching and earthmoving activities within the West Griffith Street public right-of-way and will be contingent upon City granting an easement or license to SCE or Developer, as applicable, for the location of the fiber optic cable lines in the West Griffith Street public right-of-way in exchange for fair market value consideration pursuant to a written agreement, and all required City encroachment and excavation permits. Per the Conditions of Approval, no building permits shall issue for the project unless and until such easement or license agreement has been entered into.

The SCADA system, which uses (i) proprietary software, (ii) a fiber-optic transmission system, (iii) a telephone, radio, and/or microwave communication network, and (iv) other means of communication such as radio links and phase loop communication systems, will function as a remote start, stop, reset, and tag out for the facility, thus minimizing the labor and site diagnostic information generated from the panels. The SCADA system will also control the substation, allowing for fully-centralized operation of the project to meet all CAISO and utility interconnection requirements.

The proposed gen-tie line will start at the northeast portion of the project site, run east along the West Griffith Street frontage, and connect to the SCE Nola Substation located approximately 165 feet east of the project site, on the SCE Nola Substation property. Construction and installation of the gen-tie line will require trenching and earthmoving activities across West Griffith Street. SCE will construct, own, and operate the gen-tie line. To the extent the gen-tie line will be located in the West Griffith Street public right-of-way, SCE's construction and operation of the gen-tie line will be subject to SCE's existing franchise agreement with the City (City Ordinance No. 20; the "**Franchise Agreement**"). SCE will be also responsible for obtaining any and all required City and third party approvals and permits (including City encroachment and excavation permits, and easements from third parties as needed for areas outside the public right-of-way) for construction and operation of the gen-tie line. The final gen-tie line routing will be determined by SCE during its interconnection review process, subject to SCE obtaining all required permits and approvals and provided that if the final gen-tie line routing necessitates any modifications to this Agreement, the Project Development Approvals, the Subsequent Development Approvals and/or the Development Plan, such modifications shall be subject to processing and approval as provided in applicable provisions of this Agreement.

The project site will be accessed from existing project site driveways off South Broadway. A perimeter wall will be installed around the project site for safety and security purposes. Security cameras will be placed on-site and monitored 7 days per week, 24 hours per day.

Permanent motion-sensitive, directional security lights will be installed to provide adequate illumination around the substation area and points of ingress and egress. Additional lighting will provide operations and maintenance personnel with illumination for both normal and emergency conditions. Lighting on-site will be designed to provide the minimum illumination needed to achieve safety and security objectives. The lighting will be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties.

Stormwater treatment areas will be constructed along the northern and western boundaries of the project site (along South Broadway and West Griffith Street) to collect and treat all stormwater generated on the project site prior to being discharged into the adjacent municipal stormwater system, as detailed in the Stormwater Plan approved as part of the Development Plan.

Landscaping will be installed on the project site in accordance with the approved landscaping plan as part of the Development Plan. Landscaping will be provided along the northern and western boundaries of the project site.

The design of the BESS facility will comply with the National Fire Protection Association ("**NFPA**") 855 Code, which dictates specific fire access, protection, and suppression requirements to ensure the safe operation of the facility, and the applicable edition of the Los Angeles County Fire Code, as adopted by the City pursuant to Carson Municipal Code Section 3100, except as otherwise approved by the Los Angeles County Fire Department ("**LACFD**") pursuant to a request for modifications or alternative materials and methods ("AMMR") review. Additionally, the BESS will be Underwriters Laboratories Inc. (UL) certified and include built-in failsafe and cooling systems designed to prevent thermal runway (i.e., uncontrollable temperature increase) and the spread of fire. The site plan will be reviewed and approved by LACFD to ensure that the project meets applicable codes as referenced above, and any conditions of approval imposed or recommended by LACFD will be complied with. Without limitation of the foregoing, the project will comply with the LACFD AMMR Results Update issued on December 11, 2025, and as may be amended, for the subject project which is identified therein as EPIC-LA Plan Number FEPC2023-3504.

The physical construction/site activities of the project will last up to 10 months, not including commissioning. Construction activities will consist of: (1) demolition; (2) site preparation; (3) system installation; and (4) testing, commissioning, and cleanup. All existing structures within the project site will be demolished including a small building residing in the northwest portion of the site, and removal of several concrete soil bunkers scattered throughout the site. The on-site construction workforce will peak at several dozen individuals; however, the average daily workforce on-site during construction will be one to two dozen individuals, comprising construction, supervisory, support, and construction management personnel. Construction will be limited to the days/hours of Monday through Saturday between 7:00 a.m. and 7:00 p.m.

Once developed, the project will be monitored by a remote management system at all times. Remote access to battery status, meters, schedules, and other telemetry data will be available to off-site personnel. The facilities will operate year-round and will be available to receive or deliver energy 24 hours per day, 365 days per year.

Typical operations and maintenance activities that will occur on the project site will include liaison and remote monitoring administration and reporting; semi-annual and annual services; remote operations of batteries, inverters, substation, and site security and management; additional communication protocols; and repair and maintenance of the BESS, electrical transmission lines, and other project facilities. The electrical equipment and security will be automated and monitored remotely. The project site will mostly be unoccupied but will be visited periodically for equipment inspections, monitoring and testing, and maintenance as needed. Periodically, batteries and various components will be replaced or renewed to ensure optimal performance. Replaced batteries and other hazardous waste will be disposed of in accordance with applicable state and federal laws and regulations.

(this Recital collectively, the "**Project**").

E. On April 13, 2023, Developer filed a development permit application with the City seeking Conditional Use Permit No. 1128-23 ("the **CUP**"), Design Overlay Review No. 1935-23 ("the **DOR**") and Development Agreement No. 33-23 (the "**DA**"), along with a project description for applicable CEQA review (collectively, the "**Development Application**").

F. City finds and determines that all actions required of City precedent to approval of this Agreement have been duly and regularly taken. In accordance with the requirements of the California Environmental Quality Act (Public Resources Code § 21000, *et seq*. ("**CEQA**"), appropriate studies, analyses, reports and documents were prepared and considered by the Planning Commission and the City Council. The City's Planning Commission, after a duly noticed public hearing on _____ ___, 2026, recommended approval of a Categorical Exemption finding for the Project pursuant to CEQA Guidelines Section 15332 and a finding that the Project is not subject to CEQA pursuant to CEQA Guidelines Section 15061(b)(3), based on a memorandum prepared by the City's environmental consultant and independently reviewed by the City's Planning Division staff and Planning Commission (the "**CatEx Memo**"). On the same day, the Planning Commission, after giving notice pursuant to Government Code §§ 65090, 65091, 65092 and 65094, held a public hearing on the Development Application for approval of this Agreement, the CUP, and the DOR (collectively the "**Entitlements**"), including the associated CEQA review, and adopted Resolution No. ___ recommending that the City Council make the above-referenced City finding and approve the Entitlements (subject to the Project conditions of approval attached to said resolution).

G. On _____ , 2026, the City Council, after provision of the public notice required by law, held a public hearing to consider the Development Application and the Planning Commission's recommendation for approval of the Entitlements. The City Council independently reviewed the proposed CEQA analysis and findings (including but not limited to the CatEx Memo) and the Project as a whole, and following the hearing, adopted Ordinance No. 26-___, approving this Agreement, and Resolution No. 26-___, approving

the CUP and DOR subject to the Project conditions of approval attached to said Resolution. The Planning Commission and the City Council have found on the basis of substantial evidence based on the entire administrative record, that this Agreement is consistent with all applicable plans, rules, regulations and official policies of the City.

H. *Adoption of DIF Program.* On April 16, 2019, the City Council adopted Ordinance No. 19-1931 to implement the City's Interim Development Impact Fee Program ("**DIF Program**") to establish an interim Development Impact Fee ("**DIF**") schedule applicable to new development within the City. DIFs are valuable tools to fund infrastructure needs associated with new/additional development within the City pursuant to Government Code Sections 66000 *et seq*. DIFs serve the purpose of allowing the City to recover from each new development project a reasonable and proportional share of the cost of public facilities and infrastructure improvements that serve or will benefit that development.

I. *Agreed-Upon Payment of DIF Amount.* City staff and its rate consultants have analyzed the draft "Development Impact Fee Study" and currently-available fee study data, and potential impacts upon public facilities and infrastructure attributable to the Project, in order to accurately estimate the DIFs that would be applicable to the Project. Project DIF amounts in this Agreement were estimated by reviewing the individual Project and its direct relationship to the impacts created by the Project, and the fees collected, and it was determined that the amounts of the fees are roughly proportional to the Project's specific impacts. Based on such analyses, the parties hereto mutually agree that Project impacts warrant a one-time DIF payment of $189,093.12, calculated at $3.68 per square foot for all square footage of Project battery enclosures (51,384 square feet), which amount is to be paid on or prior to the date of the final inspection or the date the certificate of occupancy is issued for the Project , whichever occurs first, and is subject to adjustment as set forth in Section 3.1 below depending on the timing of payment. All payments for DIFs pursuant to this Agreement are hereinafter referred to as the "**DIF Amount.**" The parties agree that such DIF Amount is (1) directly related to the impacts of the Project, and (2) roughly proportional to the specific impacts upon public facilities and infrastructure attributable to the Project.

J. *CFD Formation.* On November 7, 2018, the City formed a Master CFD entitled City of Carson Community Facilities District No. 2018-01 (Maintenance and Services) (the "**Citywide CFD**"). Developer is not and will not be required to annex the Property into the Citywide CFD or to pay the special taxes that are imposed on properties which are annexed into the Citywide CFD.

K. *Developer's Interest in the Property*. Developer has a current leasehold interest in the Property, with the lease term having begun on September 1, 2022, commencing with an Initial Term which ends on September 1, 2026, followed by an Operational Term, with a duration of up to 27 years (consisting of a 12-year Term, plus options for three (3) five (5) year Extension periods) and any amendments thereto extending the Lease Term. As such, Developer possesses the requisite legal or equitable interest in the Property under Government Code Section 65865 that allows the Parties to enter into this Agreement.

COVENANTS

NOW, THEREFORE, in consideration of the above recitals and of the mutual covenants hereinafter contained and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. GENERAL DEFINITIONS.

In addition to those terms defined within the above Recitals and elsewhere within this Agreement, the following terms shall bear the meanings set forth below:

1.1 "**Adopting Ordinance**" means Ordinance No. _____ approving this Agreement, introduced on _____, 2026, and adopted on _____, 2026.

1.2 "**Agreement**" means this Development Agreement, including all of its exhibits.

1.3 "**Annual Review**" means the annual review of the Developer's performance under this Agreement in accordance with Article 6 of this Agreement.

1.4 "**Applicable Laws**" means, collectively, the following:

a. The Project Development Approvals (including the Conditions of Approval).

b. The Existing Land Use Regulations**.**

c. Subsequent Development Approvals.

d. Those Subsequent Land Use Regulations to which Developer has agreed in writing.

1.5 "**Approval Date**" means the date on which the City Council adopted the Adopting Ordinance. That date is _____, 2026.

1.6 "**CDTFA**" means the California Department of Tax & Fee Administration.

1.7 **"Citywide CFD"** shall have the meaning set forth in Recital J.

1.8 **"City**" means the City of Carson, a California charter city.

1.9 "**City Council**" means the City Council of the City of Carson.

1.10 "**CMC**" means the Carson Municipal Code.

1.11 "**Conditions of Approval**" means all conditions imposed on the Project by the City, including (without limitation) those recommended by the Los Angeles County Fire Department, as part of the approval of the Project.

1.12 "**Confirmed Sales Tax Revenue**" means all Sales Tax revenue collected by the City from the purchase or sale of Project batteries that City can reasonably confirm, pursuant to Section 3.3 of this Agreement, was generated for and collected by the City.

1.13 "**Developer**" means VESI 27 LLC, a Delaware limited liability company, and its successors and assigns to all or any part of the Property.

1.14 "**Developer's Vested Right**" means Developer's right to complete the Project in accordance with, and to the full extent of, the Project Development Approvals in accordance with the Existing Land Use Regulations.

1.15 **"Development"** means the improvement of the Property for the purposes of completing the structures, improvements, and facilities comprising the Project including, but not limited to: grading; the construction of infrastructure related to the Project whether located within or outside the Property; the construction of buildings and structures; and the installation of landscaping and other facilities and improvements necessary or appropriate for the Project, and the maintenance, repair, or reconstruction of any building, structure, improvement, landscaping or facility after the construction and completion thereof.

1.16 "**Development Plan**" means Developer's plan for completion of the Project in compliance with and to the full extent of the Project Development Approvals and Applicable Laws.

1.17 **"DIF(s)"** means Development Impact Fees agreed to by Developer pursuant to Section 3.1 hereof.

1.18 "**Director**" means the City's Community Development Director, or his or her designee.

1.19 "**Effective Date**" means the date on which the Adopting Ordinance becomes effective, typically thirty (30) days after the second reading of the Adopting Ordinance.

1.20 "**Entitlements**" means this Agreement, the CUP, and the DOR, including the associated CEQA review.

1.21 "**Exhibit**" means an exhibit to this Agreement, unless otherwise specifically referenced to a different agreement or document. The following exhibits are incorporated into the Agreement by reference as though set forth in full:

Exhibit A	Legal description of the Property
Exhibit B	Depiction of the Property
Exhibit C	Detail of fiber optic cable line routes

1.22 "**Existing Land Use Regulations**" means (i) all Land Use Regulations in effect on the Approval Date and (ii) any changes to Land Use Regulations enacted on or after the Approval Date and before the Effective Date for which Developer has provided its written consent to allow those changes to apply to the Project.

1.23 "**Land Use Regulations**" are laws and regulations enacted through legislative actions of the City Council. Land Use Regulations include ordinances, laws, resolutions, codes, rules, regulations, policies, requirements, guidelines or other actions of City, including but not limited to the City's General Plan and the CMC (including the Carson Zoning Ordinance, Chapter 1 of Article IX of the CMC), which affect, govern or apply to the development and use of the Property, including, without limitation, the permitted use of land, the density or intensity of use, subdivision requirements, the maximum height and size of proposed buildings, the provisions for reservation or dedication of land for public purposes, and the design, improvement, and construction standards and specifications applicable to the Project. "Land Use Regulations" do not include (i) Project Development Approvals, (ii) regulations relating to the conduct of business, professions, and occupancies generally, (iii) taxes and assessments, (iv) regulations for the control and abatement of nuisances, (v) health and safety regulations, or (vi) any other matter reserved to the City pursuant to Article 5 of this Agreement.

1.24 **"Mortgage**" means a mortgage, deed of trust, or other security instrument encumbering the Property.

1.25 "**Mortgagee**" means a mortgagee of a mortgage, a beneficiary under a deed of trust or any other security device, a lender, or each of their respective successors and assigns.

1.26 "**Project**" as described this Agreement, means the development of the Property as described in Recital D, consistent with and to the full extent of the Project Development Approvals and all applicable Land Use Regulations.

1.27 "**Project Development Approvals**" means all Project-specific approvals, including, but not limited to, the Entitlements (minus this Agreement), the Conditions of Approval, Project-specific plans, maps, permits, site plans, design guidelines, variances, conditional use permits, grading, building, and other similar permits, environmental findings and assessments, and any amendments, addenda or modifications to those matters, which were applied for by Developer and are approved by City as required or permitted by the Applicable Laws in order for Developer to complete the Project, provided that those Project Development Approvals are consistent with Developer's Vested Right, this Agreement, and the Applicable Laws. The Entitlements (minus this Agreement), as examples of Project Development Approvals, have been or are anticipated to be approved, subject to the Conditions of Approval, prior to or in conjunction with the approval of this Agreement. "Project Development Approvals" do not include (i) rules, regulations, policies, and other enactments of general application within the City, (ii) legislative enactments, including this Agreement, or (iii) Land Use Regulations.

1.28 "**Property**" means the real property described in Exhibit "A" and shown in Exhibit "B."

1.29 "**Reservation of Authority**" means the limitations, reservations, and exceptions to Developer's Vested Right set forth in Article 5 of this Agreement.

1.30 "**Sales Tax**" means and includes both (i) the sales and use tax referenced in Chapter 1 of Article VI of the CMC and (ii) the transaction and use tax referenced in Chapter 1.5 of Article VI of the CMC.

1.31 "**Subsequent Land Use Regulations**" means those Land Use Regulations which are both adopted and effective on or after the Approval Date and which are not included within the definition of Existing Land Use Regulations.

1.32 **"Subsequent Development Approvals"** means all Project-specific approvals issued subsequent to the Effective Date in connection with development of the Property, which shall include, without limitation, any changes to the Project Development Approvals.

1.33 "**Term**" shall have the meaning ascribed to it in Section 2.1, unless earlier terminated as provided in this Agreement.

2. TERM & GENERAL COVENANTS.

2.1 **Term; Extensions**.

a. **Initial Term.** The term of this Agreement (the "**Term**") starts on the Effective Date and unless extended pursuant to subsection (b) below, shall expire on either (i) March 1, 2047, or (ii) the date of expiration or termination of Developer's leasehold interest in the Property, whichever occurs sooner, subject to any early termination provisions described in this Agreement.

b. **Extensions.** Subject to any early termination provisions described in this Agreement and subject to expiration pursuant to clause (ii) of subsection (a) above, Developer shall have the option to extend the expiration date stated in clause (i) of subsection (a) above, to the extent it applies, in one-year increments (each, an "**Annual Extension Option**"), for a total of up to five (5) years (i.e., to as late as March 1, 2052). In order to exercise any Annual Extension Option, Developer must, no less than 30 days prior to the then-applicable stated expiration date: (i) give City written notice of Developer's intent to exercise the applicable Annual Extension Option; and (ii) make a lump sum payment to the City in the amount of $128,562.00 corresponding to the applicable Annual Extension Option ("the **Annual Extension Fee**"). For the avoidance of doubt, any Annual Extension Fee that may be paid by Developer pursuant to this subsection shall not be subject to refund or proration in the event this Agreement expires pursuant to clause (ii) of subsection (a) above or is terminated pursuant to any early termination provisions of this Agreement at any time after the corresponding Annual Extension Option period has begun.

2.2 **Project Completion**. Developer shall complete the Project, including passing final inspection, by no later than five (5) years from the Effective Date.

2.3 **Binding Effect of Agreement**. From and following the Effective Date, actions by the City and Developer with respect to the development of the Property for completion of the Project, including actions by the City on applications for Subsequent Development Approvals affecting the Property shall be subject to the terms and provisions of this Agreement.

2.4 Agreement Runs with the Land. This Agreement shall be recorded and shall run with the land. Pursuant to Government Code Section 65868.5, the burdens of this Agreement and each of its provisions shall be binding upon, and the benefits of this Agreement shall inure to, all successors in interest to the Parties, including, but not limited to, all parties that enter into lease agreements with Developer for possession of any part of the Property.

2.5 Covenant Against Discrimination. The Developer covenants that, by and for itself, its heirs, executors, assigns, and all persons claiming under or through them, that there shall be no discrimination against or segregation of, any person or group of persons on account of race, color, creed, religion, sex, marital status, sexual orientation or gender preference, national origin, or ancestry in the performance of this Agreement. The Developer shall take affirmative action to ensure that employees are treated during employment without regard to their race, color, creed, religion, sex, marital status, sexual orientation or gender preference, national origin, or ancestry.

3. DEVELOPER'S OBLIGATIONS.

As consideration for the granting of Developer's Vested Right in accordance with Article 4 below and subject to the City's Reservation of Authority set forth in Article 5 below, Developer shall do the following:

3.1 Development Impact Fees. Developer shall make a one-time payment to the City for the DIF Amount of $189,093.12, calculated at $3.68 per square foot for all square footage of battery enclosures (51,384 square feet), which DIF Amount shall be adjusted as described in Section 3.1(a)-(b) below depending on the timing of payment. The Parties agree that the DIF Amount is (1) directly related to the impacts of the Project, and (2) roughly proportional to the specific impacts upon public facilities and infrastructure attributable to the Project. Developer agrees to release, defend, indemnify and hold the City harmless from any and all claims, costs (including attorneys' fees) and liability for any damages, which may arise, directly or indirectly, from the City's determination, calculation, or imposition of, or Developer's agreement to pay, the DIF Amount.

a. **Timing of Payment of DIF Amount.** The DIF Amount is payable in full prior to issuance of a certificate of occupancy or up to twelve (12) months following the issuance of the building permit for the Project, whichever occurs first.

b. **DIF Amount Adjustments.** All DIF Amounts shall be adjusted annually in accordance with the State of California Construction Cost Index (prior March to current March adjustment) on July 1st of each year.

3.2 O&M Payment. Developer agrees to pay City a lump sum amount of $357,006 (the "O&M Payment") for general operations and maintenance expenses of the City. Developer shall make the O&M Payment in one lump sum to City prior to issuance of any building permits for the Project, and such payment is a condition precedent to such permit issuance. For the avoidance of doubt, the O&M Payment does not constitute and is not intended to pay the Citywide CFD special taxes.

3.3 Battery Fee. Developer shall pay City a "Battery Fee" in an amount equal to the sum of $1,487,500 (the "**Maximum Battery Fee Amount**") less the total amount of Confirmed Sales Tax Revenue collected by the City, subject to a guaranteed minimum of $250,000 (the "**Minimum Battery Fee Amount**"). Within thirty (30) days of the Effective Date, Developer shall pay City the Minimum Battery Fee Amount via wire transfer. Prior to the issuance of any demolition, grading or building permits, Developer shall provide City with a bond, on a form reasonably acceptable to the Director and City Attorney, securing payment of the Battery Fee, in an amount equal to the Maximum Battery Fee Amount less the Minimum Battery Fee Amount (the "**Bond**"), and the issuance and effectiveness of such Bond shall be a condition precedent to such permit issuance. The Bond shall contain the original notarized signature of an authorized officer of the surety and affixed thereto shall be a certified and current copy of his/her power of attorney. The Bond shall be unconditional and remain in force during the entire term of this Agreement until released pursuant to Section 3.3(a), below, and shall be binding on the successors-in-interest of the obligor/principal (i.e., Developer) and surety. The Bond shall be issued by a company qualified to do business in California, rated "A" or better in the most recent edition of Best's Rating Guide, The Key Rating Guide or in the Federal Register, and having a financial category Class VII or better, and shall provide for the City to receive at least 30 days' prior notice from the surety, via the means specified in Section 13.2, below, of any impending cancellation or lapse in effectiveness of the Bond due to nonpayment of premiums or any other reason.

a. **Confirmed Sales Tax Revenue; Effect on Battery Fee**. No later than sixty (60) days after the expiration of time for Developer to provide City comments on the Confirmed Sales Tax Revenue Determination pursuant to subsection (b) below, City shall calculate the amount of the Battery Fee by subtracting the Confirmed Sales Tax Revenue from the Maximum Battery Fee Amount (except that in no event shall the Battery Fee be reduced below the Minimum Battery Fee Amount) and notify Developer in writing of same (the "**Battery Fee Notice**"). If the Battery Fee in the Battery Fee Notice is equal to the Minimum Battery Fee Amount, then no later than thirty (30) days following the date the Battery Fee Notice is delivered to Developer and Developer's subsequent written request, City shall release or authorize cancellation of the Bond. If the Battery Fee in the Battery Fee Notice is greater than the Minimum Battery Fee Amount, within sixty (60) days of receipt of the Battery Fee Notice, Developer shall pay to City the amount of the Battery Fee less the Minimum Battery Fee Amount. Notwithstanding any other provision of this Agreement, in the event Developer fails to timely pay said amount, City shall have the right to immediately call and receive the proceeds of the Bond in an amount reflective of the Confirmed Sales Tax Revenue. No final Certificate of Occupancy shall issue until the Battery Fee has been paid in full. A temporary Certificate of Occupancy ("TCO") may issue prior to the Battery Fee being paid in full provided (without limitation as to other applicable requirements for issuance of a TCO or payment of the Battery Fee) Developer demonstrates to the satisfaction of the Director that the Bond is and will be effective and binding on Developer and any premiums are paid for at least one year beyond the date of issuance of the TCO. If a TCO issues prior to the Battery Fee being paid in full pursuant to this paragraph, then the maximum cumulative term (i.e., total duration) of effectiveness of the TCO shall not exceed one year;

if one year of cumulative effectiveness of the TCO elapses without issuance of a final Certificate of Occupancy and the Battery Fee has not been paid in full, then (i) the City may immediately revoke Developer's business license and not reinstate it until the Battery Fee is paid in full, and (ii) the TCO will immediately and automatically lapse and terminate and full payment of the Battery Fee shall be required as a pre-requisite to any further, extended or renewed effectiveness of the TCO or any issuance of a final Certificate of Occupancy. No later than thirty (30) days following such payment by Developer and Developer's written request, City shall release or authorize cancellation of the Bond.

b. **Tracking of Battery Fee**. No later than forty-five (45) days following the filing with the CDTFA of the Sales Tax return that reports sales tax on the sale of the Project batteries to Developer, Developer will provide City with copies of all information that Developer considers reasonably relevant to determining the Confirmed Sales Tax Revenue, which shall include, without limitation, (i) invoices for the purchase of the Project batteries reflecting the amount of Sales Tax charged, (ii) evidence of payment of the invoice amount to the retailer of the Project batteries, (iii) all Sales Tax returns filed with the CDTFA related to the sale and purchase of Project batteries, (iv) identification of the accounts that are or will be reporting the Sales Tax related to the sale and purchase of the Project batteries, and (v) evidence of remittance to the CDTFA of the amount reflected as due on the Sales Tax Returns (provided Developer shall have the right to first redact any portions of such documents which are privileged or which are not relevant to determining the Confirmed Sales Tax Revenue). Within one hundred eighty (180) days of receipt of such information from Developer, City, with cooperation from Developer as may be reasonably requested by City, will undertake a reasonable and good faith analysis of the Sales Tax returns and other information provided by Developer, together with any other information reasonably deemed relevant by City, and will thereby ascertain the Confirmed Sales Tax Revenue and notify Developer in writing of such determination (the "**Confirmed Sales Tax Revenue Determination**"). In the event the Confirmed Sales Tax Revenue is less than the Maximum Battery Fee Amount, such Confirmed Sales Tax Revenue Determination shall describe in detail the information relied upon by the City in calculating the Confirmed Sales Tax Revenue and, upon request by Developer, City shall provide such information to Developer (to the extent such information was not provided to City by Developer and such disclosure is not prohibited by law). Developer shall have thirty (30) days following the later of (i) receipt of the Confirmed Sales Tax Revenue Determination, or (ii) receipt of the information requested from City pursuant to this subsection (b), to provide any comments or additional information to City regarding the determination of the Confirmed Sales Tax Revenue, which information the City shall consider in good faith.

c. For the avoidance of doubt, the foregoing relates only to the determination of the amount of the Battery Fee; in all circumstances, in addition to the

Battery Fee, City shall be entitled to all Sales Tax revenue generated to the City from the Project, irrespective of the amount of Confirmed Sales Tax Revenue and/or the amount of the Battery Fee.

4. DEVELOPMENT OF THE PROPERTY.

4.1 Scope of Developer's Vested Right. Subject to the Reservation of Authority set forth in Article 5, Developer shall have the vested right to develop the Project to the full extent permitted under the Applicable Laws and this Agreement ("**Developer's Vested Right**").

4.2 Effect of Agreement on Land Use Regulations. Except as otherwise provided under the terms of this Agreement, the rules, regulations and official policies governing permitted uses of the Property, the density and intensity of use of the Property, the maximum height and size of proposed buildings and structures, and the design, improvement and construction standards and specifications applicable to the Development of the Property, shall be as set forth in the Existing Land Use Regulations which were in full force and effect as of the Effective Date of this Agreement, subject to the terms of this Agreement.

4.3 Rights under State and Federal Law. Developer shall retain all rights it has under state and federal law, including, but not limited to, Developer's rights under Government Code Section 65865.2.

4.4 Apportionment. Developer shall have the right to apportion the uses and intensities of the Project between itself and any subsequent owners, upon the sale, transfer, or assignment of all or any portion of the Property, so long as such apportionment is consistent with the Applicable Laws and this Agreement.

4.5 Lesser Development. Without amending this Agreement, Developer shall have the right to elect to develop and construct upon all or any portion of the Property a Project of lesser height or building or structure size than that permitted by the Project Development Approvals provided that the Project otherwise complies with the Project Development Approvals and this Agreement.

4.6 Project Development Approvals; Subsequent Development Approvals. The Project Development Approvals for the Project may require the processing of Subsequent Development Approvals. Subject to the provisions of Section 4.7 below, the City shall accept for processing, review and action, all applications for Subsequent Development Approvals, and such applications shall be processed in the normal manner for processing such matters in accordance with the Existing Land Use Regulations. The parties acknowledge that subject to the Existing Land Use Regulations, under no circumstances shall City be obligated in any manner to approve any Subsequent Development Approval, or to approve any Subsequent Development Approval with or without any particular condition. However, unless otherwise requested by Developer, City shall not, without authority pursuant to the Existing Land Use Regulations, amend or rescind any Subsequent Development Approvals respecting the Property after such approvals have been granted by the City. Processing of Subsequent Development Approvals or changes in the Project Development Approvals made pursuant to Developer's application shall not require an amendment to this Agreement. This Agreement shall not prevent City from denying or conditionally approving any application for a Subsequent Development Approval on the basis of the Existing Land Use Regulations.

4.7 Role of Project Development Approvals. Except as provided within this Agreement, the Project Development Approvals shall exclusively control the uses of the Property, the density or intensity of use, the maximum height and size of proposed buildings or structures, the provisions for reservation or dedication of land for public purposes, and the design, improvement, and construction standards and specifications applicable to the Project.

4.8 Moratorium. Notwithstanding any other provision of this Agreement, no future amendment of any existing City ordinance or resolution or any subsequent ordinance, resolution or moratorium, enacted either by the City Council or by voter approved initiative, that purports to impose or result in a limitation on the Project, imposed by City, shall apply to govern, or regulate the Project or development or use of the Developer Property during the Term. In the event of any such subsequent action by City, Developer shall continue to be entitled to apply for and receive Project Development Approvals or Subsequent Development Approvals in accordance with the Existing Land Use Regulations, subject only to the exercise of the City's Reservation of Authority set forth herein.

4.9 Maintaining Property. The Property must at all times be maintained and generally kept in a clean condition, in accordance with the City's Code Enforcement regulations.

5. CITY'S RESERVATION OF AUTHORITY.

Notwithstanding Developer's Vested Right, the Project is subject to the following Subsequent Land Use Regulations:

5.1 City's Discretion Under Applicable Laws. In considering future applications, if any, for a Subsequent Development Approval, the City may exercise its regulatory discretion to the extent permitted by the Applicable Laws.

5.2 Uniform Codes. Changes adopted by the International Conference of Building Officials, or other similar body, as part of the then most current versions of the Uniform Building Code, Uniform Fire Code, Uniform Plumbing Code, Uniform Mechanical Code, or National Electrical Code, or other such Uniform Codes, and also adopted by City as Subsequent Land Use Regulations, but only if applicable City-wide as of the date a complete application is submitted for City plan check for each required Project building permit.

5.3 Emergencies. Emergency rules, regulations, laws, and ordinances within the City's police power that would limit the exercise of Developer's Vested Right ("**Conflicting Emergency Regulations**"), provided that the Conflicting Emergency Regulations:

a. Result from a sudden, unexpected emergency declared by the President of the United States, Governor of California, County Board of Supervisors and applicable to incorporated areas, including the City, or the City Council;

b. Address a clear and imminent danger, with no effective reasonable alternative available that would have a lesser adverse effect on Developer's Vested Right;

c. Do not primarily or disproportionately impact the development of the Project; and

d. Are based upon findings of necessity established by a preponderance of the evidence at a public hearing.

5.4 Laws of Other Jurisdictions. Other public agencies not subject to control by City may possess authority to regulate aspects of the Project. This Agreement does not limit the authority of such other public agencies. Therefore:

a. Federal, state, county, and multi-jurisdictional laws and regulations (the "**Additional Regulations**"), including regional impact fees, which City is required to enforce against the Property or the Project.

b. If an Additional Regulation is enacted after the Effective Date and prevents or precludes compliance with one or more of the provisions of this Agreement, those provisions shall be modified or suspended as may be necessary to comply with the Additional Regulation. In that event, this Agreement shall remain in full force and effect to the extent it is not inconsistent the Additional Regulation and to the extent that the suspension or modification necessitated by the Additional Regulation does not deny one of the Parties its primary benefits under this Agreement.

c. Developer shall apply in a timely manner for such other permits and approvals that are lawfully required by other governmental or quasi-governmental agencies in order to allow the Project to be constructed. City shall provide Developer reasonable cooperation in Developer's efforts to obtain such permits and approvals. The Parties shall cooperate and use reasonable efforts in coordinating the implementation of the Development with other public agencies, if any, having jurisdiction over the Property or the Project.

5.5 Modification or Suspension by Federal or State Laws. In the event that Federal or State laws or regulations, enacted after the Effective Date of this Agreement, prevent or preclude compliance with one or more of the provisions of this Agreement, such provisions of this Agreement shall be modified or suspended as may be necessary to comply with such Federal or State laws or regulations, and this Agreement shall remain in full force and effect to the extent it is not inconsistent with such laws or regulations and to the extent such laws or regulations do not render such remaining provision impractical to enforce.

5.6 Energy Efficient and Sustainable Building Design. All Project buildings shall promote sustainable and energy efficient practices through compliance with California Code of Regulations, Title 24.

5.7 Employment Outreach for Local Residents. A goal of the City with respect to this Project and other major projects within the City is to foster employment opportunities for Carson residents. To that end, Developer covenants that with respect to the construction, operation and maintenance of the Project, the Developer shall make reasonable efforts to cause all solicitations for full or part-time, new or replacement, employment relating to the construction, operation and maintenance of the Project to be advertised in such a manner as to target local City residents and shall make other reasonable efforts at local employment outreach as the City shall approve. Developer shall also notify the City of jobs available at the Project

such that the City may inform City residents of job availability at the Project. Developer will inform its purchasers and lessees of the provisions of these requirements. Nothing in this paragraph shall require Developer to offer employment to individuals who are not otherwise qualified for such employment. Without limiting the generality of the foregoing, the provisions of this Section 5.7 are not intended, and shall not be construed, to benefit or be enforceable by any person whatsoever other than City.

5.8 Prevailing Wages. Developer's cost of developing the Project and constructing all of the on-site and off-site improvements, if any, at or about the Property required to be constructed for the Project shall be borne by Developer. Developer is aware of the laws of the State governing the payment of prevailing wages on public projects and will comply with same and will defend, hold harmless, and indemnify City in the event Developer fails to do so. As the City is not providing any direct or indirect financial assistance to Developer, the Project should not be considered to be a "public work" "paid for in whole or in part out of public funds," as described in California Labor Code Section 1720. Accordingly, it is believed by the parties that Developer is not required to pay prevailing wages in connection with any aspect of the Development or the construction of the Project. However, to the extent that (contrary to the parties' intent) it is determined that Developer was required to pay prevailing wage and has not paid prevailing wages for any portion of the Project, Developer shall defend, indemnify, and hold the City (which, for purposes of this section, shall include its related agencies, officers, employees, agents and assigns) harmless from and against any and all increase in construction costs, or other liability, loss, damage, costs, or expenses (including reasonable attorneys' fees and court costs) arising from or as a result of any action or determination that Developer failed to pay prevailing wages in connection with the construction of the Project. City shall reasonably cooperate with Developer regarding any action by Developer hereunder challenging any determination that the Project is subject to the payment of prevailing wages. Notwithstanding the foregoing, the City retains the right to settle or abandon the matter without Developer's consent as to the City's liabilities or rights only, but should it do so, City shall waive the indemnification herein provided such waiver occurs prior to the issuance of any judgment in the matter.

5.9 Fees, Taxes, and Assessments.

a. **Processing Fees**. The Developer shall pay all processing fees and charges of every kind and nature imposed by City to cover the estimated actual costs to City of processing applications for Project Development Approvals, including but not limited to, City Attorney fees incurred by City for the review, preparation and negotiation of the Entitlements, inclusive of this Agreement, and for monitoring compliance with any Project Development Approvals granted or issued, in accordance with the Reimbursement and Indemnification Agreement entered into by and between the Parties effective April 13, 2023 ("**Reimbursement Agreement**"), and as the same may be amended from time to time by mutual agreement of the Parties.

b. **Permit Fees**. Except as expressly provided in this Agreement, Developer shall pay all standard permit fees and other fees and charges which are standard and uniformly-applied to similar projects in the City.

c. **General Charges**. Nothing herein shall prohibit the application of the following, if lawfully imposed upon the Property, excluding the Citywide CFD special taxes:

(i) Additional Taxes, Fee, and Charges. Developer, or Developer's Project occupants, shall pay all normal and customary taxes, fees, and charges applicable to all permits necessary for the Project, and any taxes, fees, and charges hereafter imposed by City, which are standard and uniformly-applied to similar properties in the City.

(ii) Developer, or Developer's Project occupants, shall be obligated to pay any fees or taxes, and increases thereof, imposed on a City-wide basis such as business license fees or taxes, sales or use taxes, transient occupancy taxes, utility taxes, and public safety taxes;

(iii) Developer, or Developer's Project occupants, shall be obligated to pay any existing or future fees or assessments imposed on an area-wide basis (such as landscape and lighting assessments and community services assessments other than Citywide CFD special taxes);

(iv) Developer, or Developer's Project occupants, shall be obligated to pay any fees imposed pursuant to any Uniform Code.

(v) Developer, or Developer's Project occupants, shall be obligated to pay any utility fees and charges, including amended rates thereof, for City services such as electrical utility charges, water rates, and sewer rates.

5.10 Inconsistencies. It is expressly agreed that in the event of any clear and explicit conflict between the provisions or conditions of the Existing Land Use Regulations, this Agreement, and the Project Development Approvals, then the provisions or conditions of the following shall prevail in this order: (a) this Agreement; (b) Project Development Approvals, except that any more restrictive Conditions of Approval shall prevail over any conflicting provisions of this Agreement; (c) Existing Land Use Regulations that are subject to Developer's Vested Right.

6. ANNUAL REVIEW.

6.1 Timing of Annual Review. Pursuant to Government Code Section 65865.1, at least once during every twelve (12) month period of the Term, City shall review the good faith compliance of Developer with the terms of this Agreement ("**Annual Review**"). No failure on the part of City to conduct or complete an Annual Review as provided herein shall have any impact on the validity of this Agreement, nor shall it be deemed a breach on the part of City or Developer. The cost of the Annual Review shall be borne by Developer and Developer shall pay the actual and reasonable costs incurred by the City for such review.

6.2 Special Review. The City Council may, in its sole and absolute discretion, order a special review of compliance with this Agreement at any time at City's sole cost

("**Special Review**"). Developer shall cooperate with the City in the conduct of such Special Reviews.

6.3 Standards for Annual Review. During the Annual Review, Developer shall demonstrate good faith compliance with the terms of this Agreement. "**Good faith compliance**" shall be established if Developer is in substantial compliance with the material terms and conditions of this Agreement.

6.4 Procedure. Each party shall have a reasonable opportunity to assert matters which it believes have not been undertaken in accordance with the Agreement, to explain the basis for such assertion, and to receive from the other party a justification of its position on such matters. The procedure for an Annual Review or Special Review shall be as follows:

a. As part of either an Annual Review or Special Review, within ten (10) days of a request for information by the City, the Developer shall deliver to the City all information and supporting documents reasonably requested by City (i) regarding the Developer's performance under this Agreement demonstrating that the Developer has complied in good faith with the terms of this Agreement, and (ii) as required by the Existing Land Use Regulations.

b. The City Manager, or his/her designee, shall prepare and submit to Developer a written report on the performance of this Agreement and identify any perceived deficiencies in Developer's performance of this Agreement. The Developer may submit written responses to the report and Developer's written response shall be included in the City Manager's report. If the City Manager determines that the Developer has substantially complied with the terms and conditions of this Agreement, the Annual or Special Review shall be concluded.

c. If any deficiencies are noted, or if requested by a Councilmember, a public hearing shall be held before the City Council at which the Council will review the City Manager's report. The report to Council shall be made at a regularly-scheduled City Council meeting occurring as soon as possible, subject to the requirements of the Brown Act, after the commencement of the Annual or Special Review process outlined in this Section 6.4. If the City Council finds and determines, based on substantial evidence, that the Developer has not substantially complied with the terms and conditions of this Agreement for the period under review, the City may declare a default by the Developer in accordance with Article 7.

d. Neither party hereto shall be deemed in breach if the reason for non-compliance is due to a "force majeure" as defined in, and subject to the provisions of, Section 13.10.

6.5 Certificate of Agreement Compliance. If, at the conclusion of an Annual Review or a Special Review, Developer is found to be in compliance with this Agreement, City shall, upon written request by Developer, issue a Certificate of Agreement Compliance ("**Certificate**") to Developer stating that after the most recent Annual Review or Special Review

and based upon the information known or made known to the City Manager, Planning Commission, and City Council that (i) this Agreement remains in effect and (ii) Developer is in compliance. The Certificate, whether issued after an Annual Review or Special Review, shall be in recordable form, shall contain information necessary to communicate constructive record notice of the finding of compliance. Developer shall at its cost record the Certificate with the County Recorder. Additionally, Developer may at any time request from the City a Certificate stating, in addition to the foregoing, which obligations under this Agreement have been fully satisfied with respect to the Property, or any lot or parcel within the Property.

6.6 Review Process Not a Prerequisite to Declaring a Default. Neither the Annual Review nor Special Review procedure is a prerequisite to either party declaring a default and initiating the default and cure procedure in Article 7. In other words, either party may declare a default at any time without first undertaking the Annual Review or Special Review process.

6.7 Public Hearings. The public hearing prescribed by Section 6.4 is independent of, and in addition to, any further hearing procedures relating to defaults and remedies prescribed in Article 7 below. Thus, if the City Council finds that the Developer has not substantially complied with the terms and conditions of this Agreement as part of a review process pursuant to Section 6.4 and determines to declare a default, the City Council is still required to follow the notice/cure process (Section 7.2) and the termination hearing process (Section 7.4) before terminating this Agreement.

7. DEFAULTS AND REMEDIES.

7.1 Remedies. Developer shall not bring an action against City nor obtain any judgment for damages for a regulatory taking, inverse condemnation, unreasonable exactions, reduction in value of property, delay in undertaking any action, or asserting any other liability for any matter or for any cause which existed or which the Developer knew of or should have known of prior to the time of entering into this Agreement. Neither Party hereto shall be liable, whether in contract, tort or otherwise, for payment of any special, indirect, punitive, incidental, consequential, or exemplary damages arising out of this Agreement, including but not limited to loss of business opportunity or profit, loss of use, loss of goodwill or business stoppage, even if a Party knew or should have known of the possibility of such damages, except nothing in this sentence shall be construed to limit or curtail in any way Developer's obligations pursuant to Articles 8 or 9 of this Agreement. Developer acknowledges its remedies are adequate to protect Developer's interest hereunder and the waiver made herein is made in consideration of the obligations assumed by the City hereunder.

7.2 Declaration of Default & Opportunity to Cure.

a. Rights of Non-Defaulting Party after Default. The parties acknowledge that both parties shall have hereunder all legal and equitable remedies as provided by law following the occurrence of a default or to enforce any covenant or agreement herein except as provided in Section 7.1. Before this Agreement may be terminated or action may be taken to obtain judicial relief the party seeking relief ("**Non-Defaulting Party**") shall comply with the notice and cure provisions of this Section 7.2.

b. Notice and Opportunity to Cure. A Non-Defaulting Party in its discretion may elect to declare a default under this Agreement in accordance with the procedures hereinafter set forth for any failure or breach of the other party ("**Defaulting Party**") to perform any material duty or obligation of the Defaulting Party under the terms of this Agreement. However, the Non-Defaulting Party must provide written notice to the Defaulting Party setting forth the nature of the breach or failure and the actions, if any, required by the Defaulting Party to cure such breach or failure (the "**Default Notice**"). The Defaulting Party shall be deemed in Default under this Agreement, if the breach or failure can be cured, but the Defaulting Party has failed to take such actions and cure such default within thirty (30) days after the date of such notice or ten (10) days for monetary defaults (or such lesser time as may be specifically provided in this Agreement). However, if such non-monetary Default cannot be cured within such thirty (30) day period, and if and, as long as the Defaulting Party does each of the following:

(i) Notifies the Non-Defaulting Party in writing with a reasonable explanation as to the reasons the asserted default is not curable within the thirty (30) day period;

(ii) Notifies the Non-Defaulting Party of the Defaulting Party's proposed cause of action to cure the default;

(iii) Promptly commences to cure the default within the thirty (30) day period;

(iv) Makes periodic reports to the Non-Defaulting Party as to the progress of the program of cure; and

(v) Diligently prosecutes such cure to completion.

Then the Defaulting Party shall not be deemed in breach of this Agreement.

7.3 Termination Notice. Upon receiving a Default Notice, should the Defaulting Party fail to timely cure any default, or fail to diligently pursue such cure as prescribed above, the Non-Defaulting Party may seek termination of this Agreement, in which case the Non-defaulting Party shall provide the Defaulting Party with a written notice of intent to terminate this Agreement ("**Termination Notice**"). The Termination Notice shall state that the Non-defaulting Party will elect to terminate this Agreement within thirty (30) days and state the reasons therefor (including a copy of any specific charges of default or a copy of the Default Notice) and a description of the evidence upon which the decision to terminate is based. Once the Termination Notice has been issued, the Non-Defaulting Party's election to terminate this Agreement will only be rescinded if so determined by the City Council pursuant to Section 7.4.

7.4 Hearing Opportunity Prior to Termination. If Developer is the Defaulting Party pursuant to Section 7.3, then the City's Termination Notice to Developer shall additionally specify that Developer has the right to a hearing prior to the City's termination of any Agreements ("**Termination Hearing**"). The Termination Hearing shall be scheduled as an open public hearing item at a regularly-scheduled City Council meeting within thirty (30) days of the

Termination Notice, subject to any legal requirements including but not limited to the Ralph M. Brown Act, Government Code Sections 54950-54963. At said Termination Hearing, Developer shall have the right to present evidence to demonstrate that it is not in default and to rebut any evidence presented in favor of termination. Based upon substantial evidence presented at the Termination Hearing, the Council may, by adopted resolution, act as follows:

a. Decide to terminate this Agreement; or

b. Determine that Developer is innocent of a default and, accordingly, dismiss the Termination Notice and any charges of default; or

c. Impose conditions on a finding of default and a time for cure, such that Developer's fulfillment of said conditions will waive or cure any default.

Findings of a default or a conditional default must be based upon substantial evidence supporting the following two findings: (i) that a default in fact occurred and has continued to exist without timely cure, and (ii) that such default has caused or will cause a material breach of this Agreement and/or a substantial negative impact upon public health, safety and welfare, the environment, or such other interests that the City and public may have in the Project.

7.5 Rights and Duties Following Termination. Upon the termination of this Agreement, no party shall have any further right or obligation hereunder except with respect to (i) any obligations to have been performed prior to said termination, (ii) any default in the performance of the provisions of this Agreement which has occurred prior to said termination, or (iii) the indemnification provisions of Article 8. Termination of this Agreement shall not affect either party's rights or obligations with respect to any Development Approval granted prior to such termination.

7.6 Waiver of Breach. By not challenging any Development Approval within ninety (90) days of the action of City enacting the same, Developer shall be deemed to have waived any claim that any condition of approval is improper or that the action, as approved, constitutes a breach of the provisions of this Agreement.

7.7 Interest on Monetary Default. In the event Developer fails to perform any monetary obligation under this Agreement, Developer shall pay interest thereon at the rate of six and one-half percent (6.5%) per annum from and after the due date of said monetary obligation until payment is actually received by City.

8. THIRD PARTY LITIGATION.

8.1 Indemnity Obligations on Third-Party Claims

a. Developer hereby agrees to indemnify, defend, and hold City, its officers, agents, employees, members of its City Council and any commission, partners and representatives ("**City Indemnitees**") harmless from any and all claims, actions, suits, damages, liabilities, and any other actions or proceedings (whether legal, equitable, declaratory, administrative, or adjudicatory in nature) (collectively, "**Claims**"), asserted against City or

City Indemnitees arising out of or in connection with this Agreement, including, without limitation, (i) City's approval of this Agreement as provided in Section 1.1 and all documents related to any of the Project Development Approvals, Conditions of Approval, permits, or other entitlements for the Project and issues related thereto (including, City's determinations regarding CEQA compliance and/or any other development incentives granted to the Project), (ii) the development or operation of the Project, and (iii) liability for damage or claims for damage for personal injury including death and claims for property damage which may arise from, or are attributable to, Developer's (or Developer's contractors, subcontractors, agents, employees or other persons acting on Developer's behalf ("**Developer's Representatives**")) performance of its obligations under this Agreement and/or the negligence or misconduct of Developer or of Developer's Representatives which relate to the Project or the Property.

b. The City shall provide the Developer with notice of the pendency of such Claims within ten (10) days of being served or otherwise notified of such Claims and shall request that the Developer defend such action. The Developer may utilize the City Attorney's office or use legal counsel of its choosing, but shall reimburse the City for any necessary legal cost incurred by City. In all cases, City shall have the right to utilize the City Attorney's office in any legal action. The Developer shall provide a deposit in the amount of 100% of the City's estimate, in its sole and absolute discretion, of the cost of litigation, including the cost of any award of attorney's fees, upon receipt of an itemized invoice/statement from the City showing such estimate. If the Developer fails to provide the deposit, and after compliance with the provisions of this Section 8.1, the City may abandon the action and the Developer shall pay all costs resulting therefrom and City shall have no liability to the Developer. The Developer's obligation to pay the cost of the action, including judgment, shall extend until judgment. After judgment in a trial court, the parties must mutually agree as to whether any appeal will be taken or defended. City agrees that it shall fully cooperate with the Developer in the defense of any matter in which the Developer is defending and/or holding the City harmless.

8.2 Hold Harmless: Developer's Construction, and Other Activities. The Developer shall defend, save and hold the City and its elected and appointed boards, commissions, officers, agents, and employees harmless from any and all claims, costs (including attorneys' fees) and liability for any damages, personal injury or death, which may arise, directly or indirectly, from the Developer's or the Developer's agents, contractors, subcontractors, agents, or employees' Project construction activities and operations under this Agreement, whether such Project construction activities and operations be by the Developer or by any of the Developer's agents, contractors or subcontractors or by any one or more persons directly or indirectly employed by or acting as agent for the Developer or any of the Developer's agents, contractors or subcontractors. Nothing herein shall be construed to mean that the Developer shall hold the City harmless and/or defend it from any claims arising from, or alleged to arise from, the sole negligence or gross or willful misconduct of the City's officers, employees, agents, contractors or subcontractors.

8.3 Loss and Damage. City shall not be liable for any damage to property of Developer or of others located on the Property, nor for the loss of or damage to any property of Developer or of others by theft or otherwise. City shall not be liable for any injury or damage to persons or property resulting from fire, explosion, steam, gas, electricity, water, rain, dampness or leaks from any part of the Property or from the pipes or plumbing, or from the street, or from any environmental or soil contamination or hazard, or from any other latent or patent defect in the soil, subsurface or physical condition of the Property, or by any other cause of whatsoever nature. Nothing herein shall be construed to mean that the Developer shall bear liability for the sole negligence or gross or willful misconduct of the City's officers, employees, agents, contractors of subcontractors.

8.4 Non-liability of City Officers and Employees. No official, agent, contractor, or employee of the City shall be personally liable to the Developer, or any successor in interest, in the event of any default or breach by the City or for any amount which may become due to the Developer or to its successor, or for breach of any obligation of the terms of this Agreement.

8.5 Conflict of Interest. No officer or employee of the City shall have any financial interest, direct or indirect, in this Agreement nor shall any such officer or employee participate in any decision relating to this Agreement which affects the financial interest of any corporation, partnership or association in which he or she is, directly or indirectly, interested, in violation of any state statute or regulation.

8.6 Survival of Indemnity Obligations. All indemnity provisions set forth in this Agreement shall survive expiration or sooner termination of this Agreement for any reason other than a default by City.

8.7 If a Claim covered by this Article 8 also constitutes a "Claim or Liability" for which Developer is obligated to indemnify, defend and hold harmless the City pursuant to Article 9 of the Reimbursement Agreement, then the provisions of this Article 8 shall supersede and prevail over said Reimbursement Agreement provisions to the extent of any conflict related to the required procedures for defense or indemnification of the Claim.

9. INSURANCE.

9.1 Types of Insurance.

a. **General Liability Insurance**. Prior to commencement and until completion of construction of improvements by Developer on the Property, Developer shall, at its sole cost and expense, keep or cause to be kept in force, for the mutual benefit of City and Developer, commercial general liability insurance against claims and liability for bodily injury or death arising from the use, occupancy, disuse or condition of the Property, improvements or adjoining areas or ways, affected by such use of the Property or for property damage. Such policy shall provide protection of at least $5,000,000 per occurrence, and at least $5,000,000 for Products and Completed Operations, and $10,000,000 in the general aggregate and Products and Completed Operations Aggregate. Limits can be attained with the purchase of an excess/umbrella policy.

b. **Worker's Compensation**. To the extent Developer and its contractors utilize employees for any portion of the Project, Developer and such contractors shall also furnish or cause to be furnished to City evidence reasonably satisfactory to it that Developer and any contractor with whom Developer has contracted for the performance of any work for which Developer is responsible hereunder carries workers' compensation insurance as required by law.

c. **Automobile Liability Insurance**. Developer shall ensure that all contractors with whom Developer has contracted for the performance of any work for which Developer is responsible hereunder maintains automobile insurance at least as broad as Insurance Services Office form CA 00 01 covering bodily injury and property damage for all activities of the Developer arising out of or in connection with work to be performed under this Agreement, including coverage for any owned, hired, non-owned or rented vehicles, in an amount not less than $5,000,000 combined single limit for each accident. Limits can be attained with a combination of primary policy and excess/umbrella.

d. **Pollution Liability Insurance**. Environmental Impairment Liability Insurance shall be written on a Pollution Liability form or other form acceptable to City's Risk Manager providing coverage for liability arising out of sudden, accidental and gradual pollution and remediation. The policy limit shall be no less than $5,000,000 dollars per claim and $5,000,000 in the aggregate. All activities contemplated in this Agreement shall be specifically scheduled on the policy as "covered operations." The policy shall provide coverage for the hauling of waste from the project site to the final disposal location, including non-owned disposal sites.

e. **Builder's Risk Insurance.** Builder's Risk (Course of Construction) insurance utilizing an "All Risk" (Special Perils) coverage form, with limits equal to the completed value of the project and no coinsurance penalty provisions or provisional limit provisions. The policy must include: (1) coverage for any ensuing loss from faulty workmanship, nonconforming work, omission or deficiency in design or specifications; (2) coverage against machinery accidents and operational testing; (3) coverage for removal of debris, and insuring the buildings, structures, machinery, equipment, materials, facilities, fixtures and all other properties constituting a part of the project; (4) ordinance or law coverage for contingent rebuilding, demolition, and increased costs of construction; (5) transit coverage (unless insured by the supplier or receiving contractor), with sub-limits sufficient to insure the full replacement value of any key equipment item; (6) coverage with sub-limits sufficient to insure the full replacement value of any property or equipment stored either on or off the project site or any staging area**.** The City and Developer shall each be included as Loss Payee for their respective insurable interest.

f. **Marine Insurance**. The insurance shall cover physical loss or damage to the materials, equipment, machinery, supplies and other items for incorporation or consumption in the Project occurring during transportation thereof to the Property or its vicinity, from warehouse to warehouse. Up to $40,000,000 each and every loss any one conveyance and/or interim storage location as per "storage" extension within the policy. From the commencement date of the first shipment of property to the Site until the completion of all shipments of property to the Site, including materials, equipment, machinery, spares, supplies and other items for the Plant and the Interfaces.

g. **Commercial General and Professional Liability Insurance; Contractors.** Developer represents and warrants it will contract out all Project design work. Developer further represents and warrants that all of its contractors and consultants are and will continue to be, until completion of their respective work/services and for such period thereafter as may be reasonably required by the City's Risk Manager, insured through their own Commercial General and Professional liability insurance policies appropriate to the relevant profession for all Project design work, with limits no less than (i) $2,000,000 per claim and in the aggregate for Professional liability, and (ii) $1,000,000 each occurrence (combined single limit for bodily injury and property damage) and $2,000,000 general aggregate for Commercial General liability. This coverage may be written on a "claims made" basis, and must include coverage for contractual liability. The insurance required by this Agreement shall be applicable to claims based upon, arising out of or related to services performed under this Agreement.

h. **Other Insurance**. Developer may procure and maintain any insurance not required by this Agreement, but all such insurance shall be subject to all of the provisions hereof pertaining to insurance and shall be for the benefit of City and Developer.

i. **Contractors/Subcontractors.** Developer shall ensure that all contractors and sub-contractors maintain the required minimum insurance coverages, or shall include the contractors and subcontractors under its insurance. Notwithstanding the foregoing, the City's Risk Manager may waive Professional Liability or Pollution Liability insurance requirements for a given subcontractor if the Risk Manager determines the subcontractor's scope of work does not necessitate such insurance requirements.

9.2 Insurance Policy Form, Sufficiency, Content, and Insurer. All insurance required by express provisions hereof shall be carried only by responsible insurance companies licensed and admitted to do business by California, rated "A" or better in the most recent edition of Best Rating Guide, The Key Rating Guide or in the Federal Register, and only if they are of a financial category Class VIII or better, unless waived by City. All such policies shall be non-assessable and shall contain language, to the extent obtainable, to the effect that (i) any loss shall be payable notwithstanding any act of negligence of City or Developer that might otherwise result in the forfeiture of the insurance, (ii) the insurer waives the right of subrogation against

City and against City's agents and representatives; (iii) the policies are primary and noncontributing with any insurance that may be carried by City; and (iv) the policies cannot be canceled except after thirty (30) days' written notice by the insurer to City or City's designated representative. Developer shall furnish City with copies of all such policies promptly on receipt of them or with certificates evidencing the insurance. City shall be named as an additional insured on all policies of insurance required to be procured by the terms of this Agreement, except Workers' Compensation and Professional Liability, and except for all insurance required by Developer's contractors, both City and Developer shall be named as an additional insured. Moreover, the insurance policy must specify that where the primary insured does not satisfy the self-insured retention, any additional insured may satisfy the self-insured retention. In the event the City's Risk Manager determines that the use, activities or condition of the Property, improvements or adjoining areas or ways, affected by such use of the Property under this Agreement creates an increased or decreased risk of loss to the City, Developer agrees that the minimum limits of the insurance policies required by Section 9.1 may be changed accordingly upon receipt of written notice from the City's Risk Manager; provided that Developer shall have the right to appeal a determination of increased coverage to the City Council of City within ten (10) days of receipt of notice from the City's Risk Manager.

9.3 Failure to Maintain Insurance and Proof of Compliance. Developer shall deliver to City, in the manner required for notices, copies of certificates of all insurance policies together with endorsements required hereunder together with evidence satisfactory to City of payment required for procurement and maintenance of each policy within the following time limits:

a. For insurance required above, within ninety (90) days after the Effective Date.

b. For any renewal or replacement of a policy already in existence, at least ten (10) days before the expiration or termination of the existing policy.

c. If Developer fails or refuses to procure or maintain insurance as required hereby or fails or refuses to furnish City with required proof that that insurance has been procured and is in force and paid for, such failure or refusal shall be a default hereunder.

9.4 Waiver of Subrogation. Developer agrees that it shall not make any claim against, or seek to recover from City or its agents, servants, or employees, for any loss or damage to Developer or to any person or property, except as specifically provided hereunder and Developer shall give notice to any insurance carrier of the foregoing waiver of subrogation, and obtain from such carrier, a waiver of right to recovery against City, its agents and employees.

9.5 Broader Coverages and Higher Limits. Notwithstanding anything else herein to the contrary, if Developer maintains broader coverages and/or higher limits than the minimums shown above, the City requires and shall be entitled to the broader coverages and/or higher limits maintained by Developer.

10. MORTGAGEE PROTECTION.

10.1 The parties agree that this Agreement shall not prevent or limit Developer, in any manner, at Developer's sole discretion, from encumbering the Property or any portion thereof or any improvement thereon by any mortgage, deed, of trust or other security device securing financing with respect to the Property. City acknowledges that the lenders providing such financing may require certain Agreement interpretations, modifications, and estoppel certificates and City agrees upon request, from time to time, to communicate and meet with Developer and representatives of such lenders to negotiate in good faith any such estoppel certificates and/or requests for interpretation or modification. Subject to compliance with applicable laws, City will not unreasonably withhold its consent to any such requested estoppel certificate, interpretation or modification provided City determines such estoppel certificate, interpretation or modification is consistent with the intent and purposes of this Agreement. Any Mortgagee of the Property shall be entitled to the rights and privileges set forth in this Article 10.

10.2 Neither entering into this Agreement nor a breach of this Agreement shall defeat, render invalid, diminish or impair the lien of any mortgage on the Property made in good faith and for value, unless otherwise required by law.

10.3 The Mortgagee of any Mortgage or deed of trust encumbering the Property, or any part thereof, where Mortgagee has submitted a request in writing to the City in the manner specified herein for giving notices, shall be entitled to receive written notification from City of any default by Developer in the performance of Developer's obligations under this Agreement.

10.4 If City timely receives a request from a Mortgagee requesting a copy of any notice of default given to Developer under the terms of this Agreement, City shall provide a copy of that notice to the Mortgagee within ten (10) days of sending the notice of default to Developer. The Mortgagee shall have the right, but not the obligation, to cure the default during the period that is the longer of (i) the remaining cure period allowed such party under this Agreement, or (ii) sixty (60) days.

10.5 Any Mortgagee who comes into possession of the Property, or any part thereof, pursuant to foreclosure of the Mortgage or deed of trust, or deed in lieu of such foreclosure, shall take the Property, or part thereof, subject to the terms of this Agreement.

11. ASSIGNMENTS.

11.1 The experience, knowledge, capability and reputation of Developer, its principals, employees and affiliates were a substantial inducement for the City to enter into this Agreement. The Developer may sell, transfer, lease or assign this Agreement, the Property, or any part thereof (such sale, transfer, lease or assignment shall be referred to as an "**Assignment**") with the prior written consent of the Director, which consent may not be unreasonably withheld, after providing reasonable documentation and evidence demonstrating that the person or entity to whom any of the rights or privileges granted herein are to be sold, transferred, leased, assigned, hypothecated, encumbered, merged, or consolidated, meets the following criteria: (i) the transferee has the financial strength and capability to perform its obligations under the Agreement, and (ii) reasonably satisfactory evidence that the transferee has the experience and expertise to operate the Project, including

reasonably satisfactory evidence that the transferee has experience with operations and projects with a similar scale of this Project. The proposed transferee shall execute and deliver to the City an assumption agreement assuming Developer's Project obligations, which assumption agreement shall be in a form approved by the City Manager and City Attorney. Notwithstanding the foregoing, if Developer should seek the Assignment prior to making the payments to City pursuant to Sections 3.1, 3.2 or 3.3, then Developer must make such payments to City prior to completion of the Assignment. Developer making these payments will be a condition precedent to the Director providing consent to the Assignment.

11.2 City Consideration of Requested Assignment. The City agrees that it will not unreasonably withhold, condition, or delay approval of a request for approval of an Assignment required pursuant to this Article 11, provided that:

a. Developer delivers written notice to the City requesting that approval prior to the completion of the Assignment (the "**Consent Request**"); and

b. The Assignment is not completed until either (i) City has provided its written consent or (ii) sixty (60) days have passed after delivery by Developer to City of the Consent Request without the City having rejected the Consent Request in writing.

c. The Consent Request shall be accompanied by (i) a proposed draft of the Assignment and Assumption Agreement described in Section 11.3, in a form reasonably acceptable to the City Attorney and City Manager, and (ii) evidence regarding the proposed assignee's development and/or operational qualifications and experience and its financial commitments and resources in sufficient detail to enable the City to evaluate the proposed assignee's ability to complete the Project.

11.3 Assignments Permitted Without City's Consent. Notwithstanding any other provision of this Agreement, Assignments related to the following property conveyances and other transactions shall not require City consent:

a. The granting of easements or permits to facilitate construction of the Project or any public improvements.

b. The granting of easements or permits for utility purposes.

c. Transactions for financing purposes, including the grant of a deed of trust to secure the funds necessary, but not to exceed the amounts reasonably required, for land acquisition, construction, and/or permanent financing of any portion of the Project.

d. The acquisition of some or all of the Property by a Mortgagee in its capacity as a Mortgagee, such as through foreclosure or a deed in lieu of foreclosure.

e. A sale or transfer resulting from, or in connection with, a reorganization as contemplated by the provisions of the Internal Revenue Code of 1986, as amended or otherwise, in which the ownership interests of a corporation are

assigned directly or by operation of law to a person or persons, firm or corporation which acquires the control of the voting capital stock of such corporation or all or substantially all of the assets of such corporation.

f. A sale or transfer between members of the same family, or transfers to a trust, testamentary or otherwise, in which the beneficiaries consist primarily of family members of the trustor, or transfers to a corporation or partnership in which the family members or shareholders of the transferor own at least ten percent (10%) of the present equity ownership and/or at least fifty percent (50%) of the voting control of Developer.

g. If Developer is a trust, corporation, real estate investment trust, or partnership, a transfer of stock or other interests, provided there is no material change in the actual management and control of Developer.

h. Transactions with any member, partner, officer, employee, or affiliate of Developer or any trust or family member, provided that, following the transaction, the management of Developer on the Effective Date shall, subject to normal and customary business practices and personnel changes, remain the primary Developer representative(s) for purposes of communication with the City.

11.4 Effect of Assignment. Unless otherwise stated within the Assignment, upon an Assignment:

a. The assignee shall be liable for the performance of all remaining obligations of Developer with respect to those portions of the Property which are transferred (the "**Transferred Property**"), but shall have no obligations with respect to any portions of the Property not conveyed (the "**Retained Property**").

b. The owner of the Retained Property shall be liable for the performance of all obligations of Developer with respect to the Retained Property, but shall have no further obligations with respect to the Transferred Property.

c. The Assignee's exercise, use, and enjoyment of the Transferred Property shall be subject to the terms of this Agreement to the same extent as if the Assignee were the Developer.

12. AMENDMENT AND MODIFICATION.

12.1 Initiation of Amendment. Either Party may propose an amendment to this Agreement or the Project Development Approvals.

12.2 Procedure and Requirements for Amendments to Development Agreement. The procedure for proposing and adopting an amendment to this Agreement shall be the same as the procedure required for entering into this Agreement in the first instance as set forth in Government Code Section 65867 and 65868. City will process any amendment to this Agreement consistent with state law and will hold public hearings thereon if so required by state

law, and the Parties expressly agree nothing herein is intended to deprive any party or person of due process of law. Except as expressly set forth in any such amendment, an amendment to this Agreement will not alter, affect, impair, modify, waive, or otherwise impact any other rights, duties, or obligations of either party under this Agreement.

12.3 Consent. Except as expressly provided in this Agreement, no cancellation of or amendment to all or any provision of this Agreement shall be effective unless set forth in writing and signed by duly authorized representatives of each of the parties hereto and recorded in the Official Records of Los Angeles County.

12.4 Administrative Minor Project Modifications. Notwithstanding any other provision and/or Condition of Approval contained in any Project Development Approvals, minor modifications to the Project Development Approvals, the Subsequent Development Approvals, and/or the Development Plan shall be made ministerially, with the approval of the Director. The determination of whether a requested or proposed modification constitutes a minor modification shall be made by the Director in his or her sole discretion, except that minor modifications shall not include any modifications that the Director determines extend beyond the intent of the original approval, and modifications meeting any of the following criteria shall not be deemed to constitute minor modifications: (i) modifications that change the proposed uses analyzed in the CatEx Memo; (ii) modifications that increase the total amount of battery enclosure square footage within the Project by more than ten percent (10%); (iii) modifications that increase building/structure heights within the Property in comparison to what was identified on the Development Plan; (iv) modifications that substantially deviate from the design, location or specifications of the fiber optic cable lines as set forth in the Development Plan or Exhibit "C"; or (v) other modifications that involve any deviation of architectural design or details that is not in substantial conformance with the Project Development Approvals.

13. MISCELLANEOUS PROVISIONS.

13.1 Recordation. The City Clerk shall cause a copy of this Agreement to be recorded against the Property with the County Recorder within ten (10) calendar days after the Execution Date. The failure of the City to sign and/or record this Agreement shall not affect the validity of this Agreement.

13.2 Notices. Notices and correspondence required or permitted by this Agreement shall be in writing and either personally delivered or sent by registered, certified, or overnight mail or delivery service, or email (for attorney copies if specified below). Notices shall be deemed received upon personal delivery or on the second business day after registered, certified, or overnight mailing or delivery, or email if such email notice is acknowledged as received by the receiving party. Notices shall be addressed as follows:

To City:	City of Carson 701 East Carson Street Carson, California 90745 Attn: Planning Manager
With copy to:	Aleshire & Wynder 1 Park Plaza, Suite 1000 Irvine, CA 92614

Fax: 949-223-1180
Attn: Sunny Soltani

To Developer: VESI 27 LLC
6884 Sierra Center Parkway
Reno, NV 89511

With copy to: Legal Department
ContractNotices@ormat.com

A Party may change its address by giving written notice to the other Party. Thereafter, Notices shall be addressed and transmitted to the new address.

13.3 Estoppel Certificates. Either Party (or a Mortgagee) may at any time deliver written notice to the other Party requesting an Estoppel Certificate stating:

a. The Agreement is in full force and effect and is a binding obligation of the Parties;

b. The Agreement has not been amended or modified or, if so amended, identifying the amendments; and

c. There are no existing defaults under the Agreement to the actual knowledge of the Party signing the Estoppel Certificate.

A Party receiving a request for an Estoppel Certificate shall provide a signed certificate to the requesting Party within thirty (30) days after receipt of the request. The City Manager may sign Estoppel Certificates on behalf of the City. An Estoppel Certificate may be relied on by assignees and Mortgagees.

13.4 Project as a Private Undertaking. It is specifically understood and agreed by the Parties that the Project is a private development, that neither Party is acting as the agent of the other in any respect, and that each Party is an independent contracting entity with respect to this Agreement. The only relationship between City and Developer is that of a government entity regulating the development of property owned by a private party. City agrees that by its approval of, and entering into, this Agreement that it is not taking any action which would transform this private Development into a "public work" project, and that nothing herein shall be interpreted to convey upon Developer any benefit which would transform Developer's private project into a public work project, it being understood that this Agreement is entered into by City and Developer upon the exchange of consideration described in this Agreement, including the Recitals to this Agreement, and that City is receiving by and through this Agreement the full measure of benefit in exchange for the burdens placed on Developer by this Agreement, including but not limited to Developer's obligation to provide the public improvements set forth herein.

13.5 Eminent Domain. No provision of this Agreement shall be construed to limit or restrict the exercise by City of its power of eminent domain.

13.6 Entire Agreement. This Agreement represents the entire agreement of the Parties with respect to the subject matter of this Agreement. No testimony or evidence of any such representations, understandings or covenants shall be admissible in any proceeding of any kind or nature to interpret or determine the terms or conditions of this Agreement.

13.7 Further Actions and Instruments. Each of the Parties shall cooperate with and provide reasonable assistance to the other to the extent necessary to implement this Agreement.

13.8 Severability. If any term, provision, covenant or condition of this Agreement shall be determined invalid, void or unenforceable, the remainder of this Agreement shall not be affected thereby to the extent such remaining provisions are not rendered impractical to perform taking into consideration the purposes of this Agreement.

13.9 Covenant Not To Sue. The parties to this Agreement, and each of them, agree that this Agreement and each term hereof is legal, valid, binding, and enforceable. The parties to this Agreement, and each of them, hereby covenant and agree that each of them will not commence, maintain, or prosecute any claim, demand, cause of action, suit, or other proceeding against any other party to this Agreement, in law or in equity, or based on any allegation or assertion in any such action, that this Agreement or any term hereof is void, invalid, or unenforceable.

13.10 Force Majeure. Neither Party shall be deemed to be in default where failure or delay in performance of any of its obligations under this Agreement is caused by earthquakes, other acts of God, fires, wars, terrorism, riots or similar hostilities, strikes, and other labor difficulties beyond the Party's control, government regulations, pandemics, government-ordered quarantine, court actions (such as restraining orders or injunctions), or other causes beyond the Party's reasonable control. If any such events shall occur, the term of this Agreement and the time for performance shall be extended for the duration of the impacts on the Project of each such event.

13.11 Waiver. All waivers of performance must be in a writing signed by the Party granting the waiver. Failure by a Party to insist upon the strict performance of any provision of this Agreement shall not be a waiver of future performance of the same or any other provision of this Agreement.

13.12 Time of Essence. Time is of the essence in the performance of the provisions of this Agreement as to which time is an element.

13.13 Governing Law and Venue. This Agreement shall be governed and interpreted in accordance with California law, with venue for any litigation concerning this Agreement in Los Angeles, California.

13.14 Interpretation. This Agreement shall be construed as a whole according to its fair language and common meaning to achieve the objectives and purposes of the parties hereto, and the rule of construction to the effect that ambiguities are to be resolved against the drafting party or in favor of City shall not be employed in interpreting this Agreement, all parties having been represented by counsel in the negotiation and preparation hereof.

13.15 Corporate Authority. The person(s) executing this Agreement on behalf of each of the parties hereto represent and warrant that (i) such party, if not an individual, is duly organized and existing, (ii) they are duly authorized to execute and deliver this Agreement on behalf of said party, (iii) by so executing this Agreement such party is formally bound to the provisions of this Agreement, and (iv) the entering into this Agreement does not violate any provision of any other agreement to which such party is bound.

13.16 Attorneys' Fees. If either party to this Agreement is required to initiate or defend litigation against the other party, the prevailing party in such action or proceeding, in addition to any other relief which may be granted, whether legal or equitable, shall be entitled to reasonable attorneys' fees. Attorneys' fees shall include attorneys' fees on any appeal, and, in addition, a party entitled to attorney's fees shall be entitled to all other reasonable costs for investigating such action, taking depositions and discovery and all other necessary costs the court allows which are incurred in such litigation. All such fees shall be deemed to have accrued on commencement of such action and shall be enforceable whether or not such action is prosecuted to a final judgment.

13.17 Recitals. The recitals in this Agreement constitute part of this Agreement and each party shall be entitled to rely on the truth and accuracy of each recital as an inducement to enter into this Agreement.

13.18 No Brokers. City and Developer represent and warrant to the other that neither has employed any broker and/or finder to represent its interest in this transaction. Each party agrees to indemnify and hold the other free and harmless from and against any and all liability, loss, cost, or expense (including court costs and reasonable attorney's fees) in any manner connected with a claim asserted by any individual or entity for any commission or finder's fee in connection with this Agreement arising out of agreements by the indemnifying party to pay any commission or finder's fee.

13.19 Joint and Several Liability. In the event Developer should sell, transfer, lease or assign this Agreement, the Property, or any part thereof, Developer shall bear ultimate responsibility for all obligations, conditions, and restrictions set forth under this Agreement, it being understood that both Developer and any transferee, assignee, or lessee shall be jointly and severally liable.

13.20 Compliance with Laws. Developer must comply with all federal, state and local laws and regulations, including the City's Municipal Code.

13.21 Warranty & Representation of Non-Collusion. No official, officer, or employee of City has any financial interest, direct or indirect, in this Agreement, nor shall any official, officer, or employee of City participate in any decision relating to this Agreement which may affect his/her financial interest or the financial interest of any corporation, partnership, or association in which (s)he is directly or indirectly interested, or in violation of any corporation, partnership, or association in which (s)he is directly or indirectly interested, or in violation of any State or municipal statute or regulation. The determination of "financial interest" shall be consistent with State law and shall not include interests found to be "remote" or "noninterests" pursuant to Government Code Sections 1091 or 1091.5. Developer warrants and represents that it has not paid or given, and will not pay or give, to any third party including, but not limited to, any City official, officer, or employee, any money, consideration, or other thing of value as a

result or consequence of obtaining or being awarded any agreement. Developer further warrants and represents that (s)he/it has not engaged in any act(s), omission(s), or other conduct or collusion that would result in the payment of any money, consideration, or other thing of value to any third party including, but not limited to, any City official, officer, or employee, as a result of consequence of obtaining or being awarded any agreement. Developer is aware of and understands that any such act(s), omission(s) or other conduct resulting in such payment of money, consideration, or other thing of value will render this Agreement void and of no force or effect.

13.22 Counterparts. This Agreement may be executed by the Parties in counterparts, which together shall have the same effect as if each of the Parties had executed the same instrument.

[SIGNATURES ON FOLLOWING PAGE(S)]

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on the day and year first set forth above.

CITY

CITY OF CARSON a municipal corporation

_____

Lula Davis-Holmes, Mayor

ATTEST

_____

Dr. Khaleah K. Bradshaw, City Clerk

APPROVED AS TO FORM
ALESHIRE & WYNDER, LLP

_____

Sunny K. Soltani, City Attorney
[brj]

DEVELOPER

VESI 27 LLC, a Delaware limited liability company

By:_____
Name:
Title:

By:_____
Name:
Title:

DEVELOPER SHALL PROVIDE CITY WITH COPIES OF APPROPRIATE DOCUMENTS EVIDENCING AUTHORITY OF SIGNATORIES TO EXECUTE AND BIND DEVELOPER. DEVELOPER'S SIGNATURES SHALL BE DULY NOTARIZED, AND APPROPRIATE ATTESTATIONS SHALL BE INCLUDED AS MAY BE REQUIRED BY THE BYLAWS, ARTICLES OF INCORPORATION, OR OTHER RULES OR REGULATIONS APPLICABLE TO DEVELOPER'S BUSINESS ENTITY.

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

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 LOS ANGELES

On _____, 2026, before me, _____, personally appeared _____, proved to me on the basis of satisfactory evidence to be the person(s) whose names(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.

Signature: _____

OPTIONAL

Though the data below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent reattachment of this form.

CAPACITY CLAIMED BY SIGNER

☐ INDIVIDUAL

☐ CORPORATE OFFICER

_____

TITLE(S)

☐ PARTNER(S) ☐ LIMITED

☐ GENERAL

☐ ATTORNEY-IN-FACT

☐ TRUSTEE(S)

☐ GUARDIAN/CONSERVATOR

☐ OTHER_____

_____

SIGNER IS REPRESENTING:

(NAME OF PERSON(S) OR ENTITY(IES))

_____

_____

DESCRIPTION OF ATTACHED DOCUMENT

_____
TITLE OR TYPE OF DOCUMENT

_____
NUMBER OF PAGES

_____
DATE OF DOCUMENT

_____
SIGNER(S) OTHER THAN NAMED ABOVE

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

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 LOS ANGELES

On _____, 2026, before me, _____, personally appeared _____, proved to me on the basis of satisfactory evidence to be the person(s) whose names(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.

Signature: _____

OPTIONAL

Though the data below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent reattachment of this form.

CAPACITY CLAIMED BY SIGNER

☐ INDIVIDUAL

☐ CORPORATE OFFICER

_____

TITLE(S)

☐ PARTNER(S) ☐ LIMITED

☐ GENERAL

☐ ATTORNEY-IN-FACT

☐ TRUSTEE(S)

☐ GUARDIAN/CONSERVATOR

☐ OTHER_____

_____

SIGNER IS REPRESENTING:

(NAME OF PERSON(S) OR ENTITY(IES))

_____

_____

DESCRIPTION OF ATTACHED DOCUMENT

_____

TITLE OR TYPE OF DOCUMENT

_____

NUMBER OF PAGES

_____

DATE OF DOCUMENT

_____

SIGNER(S) OTHER THAN NAMED ABOVE

EXHIBIT "A"

PROPERTY LEGAL DESCRIPTION

The land referred to herein below is situated in the City of Carson in the County of Los Angeles, State of California, and is described as follows:

The westerly 750.97 feet of Lot 119 of Tract 4671, in the City of Carson, County of Los Angeles, State of California, as per map recorded in Book 56, Pages 30 and 31 of Maps, in the office of the County Recorder of said County.

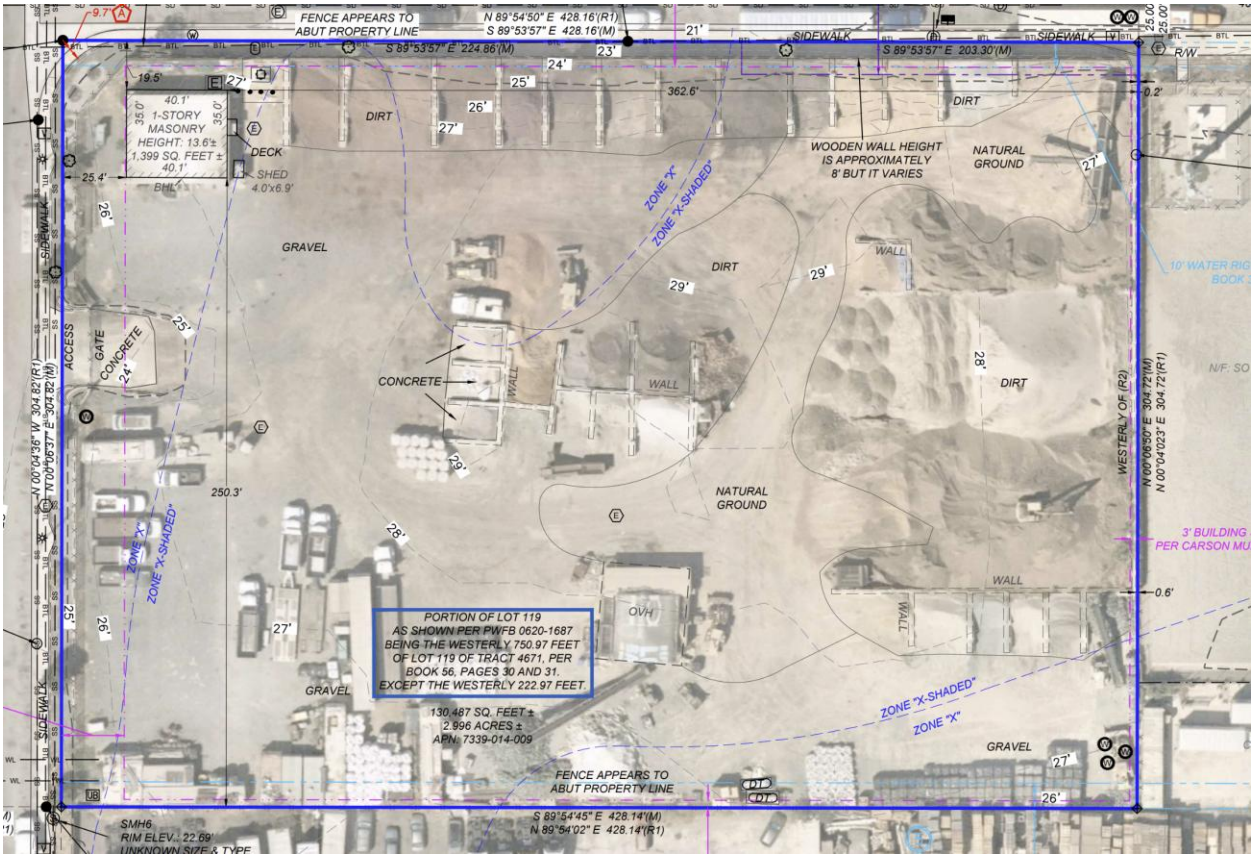
Except therefrom the westerly 222.97 feet thereof.

Also except therefrom the easterly 100 feet of the westerly 322.97 feet as per final judgment, Case No 274,177 recorded in Book 12339, Page 97 of official records in said County.

APN: 7339-014-009

EXHIBIT "B"

DEPICTION OF THE PROPERTY



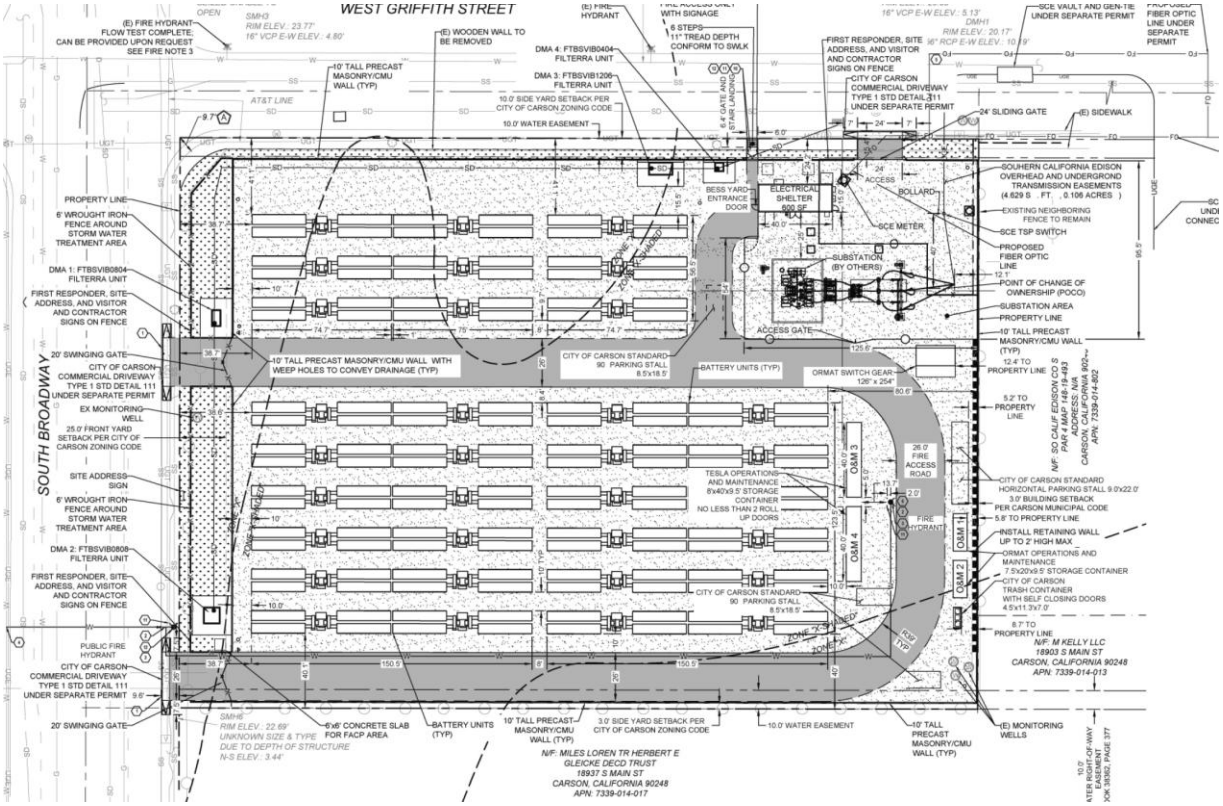
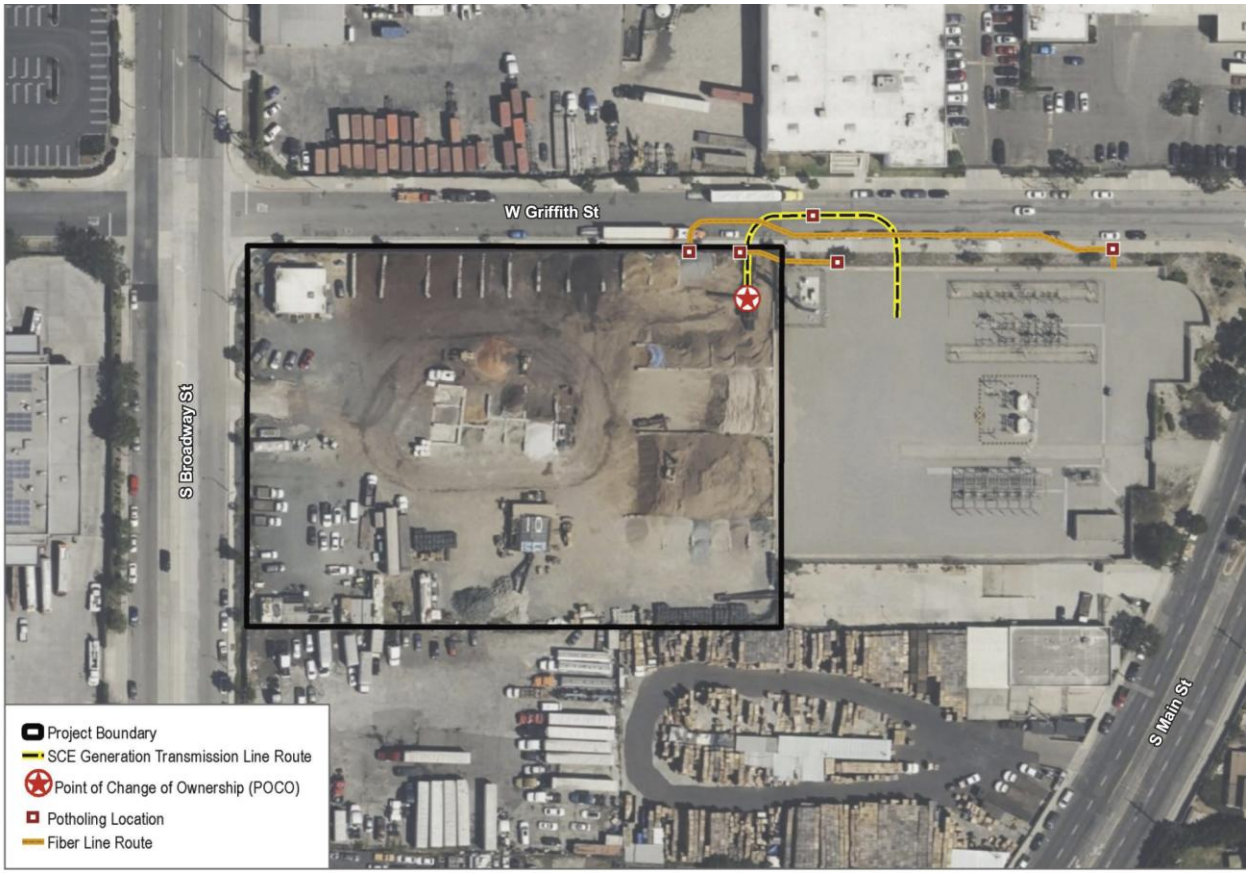

WEST GRIFFITH STREET
SOUTH BROADWAY
(E) FIRE HYDRANT FLOW TEST COMPLETE; CAN BE PROVIDED UPON REQUEST SEE FIRE NOTE 3
(E) WOODEN WALL TO BE REMOVED
10' TALL PRECAST MASONRY/CMU WALL (TYP)
AT&T LINE
10.0' SIDE YARD SETBACK PER CITY OF CARSON ZONING CODE
10.0' WATER EASEMENT
DMA 4: FTBSVIB0404 FILTERRA UNIT
DMA 3: FTBSVIB1206 FILTERRA UNIT
6 STEPS 11" TREAD DEPTH CONFORM TO SWLK
FIRST RESPONDER, SITE ADDRESS, AND VISITOR AND CONTRACTOR SIGNS ON FENCE
CITY OF CARSON COMMERCIAL DRIVEWAY TYPE 1 STD DETAIL 111 UNDER SEPARATE PERMIT
24' SLIDING GATE
(E) SIDEWALK
SCE VAULT AND GEN-TIE UNDER SEPARATE PERMIT
PROPOSED FIBER OPTIC LINE UNDER SEPARATE PERMIT
PROPERTY LINE
6' WROUGHT IRON FENCE AROUND STORM WATER TREATMENT AREA
DMA 1: FTBSVIB0804 FILTERRA UNIT
FIRST RESPONDER, SITE ADDRESS, AND VISITOR AND CONTRACTOR SIGNS ON FENCE
20' SWINGING GATE
CITY OF CARSON COMMERCIAL DRIVEWAY TYPE 1 STD DETAIL 111 UNDER SEPARATE PERMIT
EX MONITORING WELL
25.0' FRONT YARD SETBACK PER CITY OF CARSON ZONING CODE
SITE ADDRESS SIGN
6' WROUGHT IRON FENCE AROUND STORM WATER TREATMENT AREA
DMA 2: FTBSVIB0808 FILTERRA UNIT
FIRST RESPONDER, SITE ADDRESS, AND VISITOR AND CONTRACTOR SIGNS ON FENCE
PUBLIC FIRE HYDRANT
CITY OF CARSON COMMERCIAL DRIVEWAY TYPE 1 STD DETAIL 111 UNDER SEPARATE PERMIT
20' SWINGING GATE
10' TALL PRECAST MASONRY/CMU WALL WITH WEEP HOLES TO CONVEY DRAINAGE (TYP)
BESS YARD ENTRANCE DOOR
ELECTRICAL SHELTER 600 SF
24' ACCESS
BOLLARD
SCE METER
SUBSTATION (BY OTHERS)
ACCESS GATE
CITY OF CARSON STANDARD 90 PARKING STALL 8.5'x18.5'
BATTERY UNITS (TYP)
ORMAT SWITCH GEAR 126' x 254'
TESLA OPERATIONS AND MAINTENANCE 8'x40'x9.5' STORAGE CONTAINER NO LESS THAN 2 ROLL UP DOORS
26.0' FIRE ACCESS ROAD
FIRE HYDRANT
O&M 1
O&M 2
O&M 3
O&M 4
SOUTHERN CALIFORNIA EDISON OVERHEAD AND UNDERGROND TRANSMISSION EASEMENTS (4,629 S . FT. , 0.106 ACRES)
EXISTING NEIGHBORING FENCE TO REMAIN
SCE TSP SWITCH
PROPOSED FIBER OPTIC LINE
POINT OF CHANGE OF OWNERSHIP (POCO)
SUBSTATION AREA PROPERTY LINE
10' TALL PRECAST MASONRY/CMU WALL (TYP)
12.4' TO PROPERTY LINE
5.2' TO PROPERTY LINE
N/F: SO CALIF EDISON CO S PAR 4 MAP 148-19-493 ADDRESS: N/A CARSON, CALIFORNIA 903** APN: 7339-014-802
CITY OF CARSON STANDARD HORIZONTAL PARKING STALL 9.0'x22.0'
3.0' BUILDING SETBACK PER CARSON MUNICIPAL CODE
5.8' TO PROPERTY LINE
INSTALL RETAINING WALL UP TO 2' HIGH MAX
ORMAT OPERATIONS AND MAINTENANCE 7.5'x20'x9.5' STORAGE CONTAINER
CITY OF CARSON TRASH CONTAINER WITH SELF CLOSING DOORS 4.5'x11.3'x7.0'
8.7' TO PROPERTY LINE
N/F: M KELLY LLC 18903 S MAIN ST CARSON, CALIFORNIA 90248 APN: 7339-014-013
(E) MONITORING WELLS
10' TALL PRECAST MASONRY/CMU WALL (TYP)
10.0' WATER EASEMENT
3.0' SIDE YARD SETBACK PER CITY OF CARSON ZONING CODE
10' TALL PRECAST MASONRY/CMU WALL (TYP)
BATTERY UNITS (TYP)
6'x6' CONCRETE SLAB FOR FACP AREA
N/F: MILES LOREN TR HERBERT E GLEICKE DECD TRUST 18937 S MAIN ST CARSON, CALIFORNIA 90248 APN: 7339-014-017
10.0' WATER RIGHT-OF-WAY EASEMENT BOOK 38362, PAGE 377

EXHIBIT "C"

FIBER OPTIC CABLE LINE ROUTES



Board of Directors

Executive Committee

Chairman
Richard Chang
Premier Printing & Graphics

Treasurer
Andy Stanley
Morgan Stanley

Vice Chair, Government Affairs
Trini Jimenez
Watson Land Company

Vice Chair, Leadership Carson
Kubi Karul
SA Recycling

Vice Chair, Strategic Initiatives
Tamala Lewis
Dignity Health Sports Park

Vice Chair, Economic Development
Michael Stewart
M & B Associates

Vice Chair, Special Events
Lena Whittaker
Magnificent Events

Directors
Alwyne Barbee
Providence Health & Services

Jean Bell
CM Ministerial Consulting

Ben Brower
Ineos Polypropylene

Norwood Clark
Darrow's New Orleans Grill

Ralph Felix
California Water Service Co.

Julio Flores
DoubleTree by Hilton Carson

Lyman Fox
Kaiser Permanente, South Bay

Victor Ibarra
Marathon

Tami Lorenzen-Fanselow
Price Transfer, Inc.

Diana Medel
Boys & Girls Club of Carson

Derrick Mims
CSU Dominguez Hills

Shannon Moody
Air Products & Chemicals

Mariane Torhus
IKEA US West, Inc

McKina Alexander
City of Carson—Community Development Department
701 Carson Street
Carson, CA 90745

Re: Griffith Energy Storage Project

Dear Ms. Alexander,

The Carson Chamber of Commerce would like to express its strong support for the proposed Griffith Energy Storage Project located at 18800 Broadway St. in Carson. The Carson Chamber of Commerce is dedicated to making the City of Carson a stable, friendly community in which to work, shop, live, and play. The Griffith Energy Storage Project clearly aligns with and advances this mission.

Ormat's $150 million investment into the Carson economy will generate substantial tax revenue for the city. The Griffith Energy Storage Project will also foster grid resiliency and reliability, while at the same time maximizing the use of clean, renewable energy sources.

We have numerous manufacturing and entertainment companies in Carson that need extremely reliable power. Outages can be very costly, making system reliability a critical ingredient for our local businesses to thrive. The Ormat project is exactly the kind of investment we need to keep our industries moving forward.

Ormat has also done an excellent job engaging, informing, and generating excitement among Carson residents and stakeholders about the project. With a keen understanding of the critical role community members need to play in the project development process, Ormat has conducted extensive outreach through participation at community events, distribution of flyers, and meeting individually with residents to discuss the project.

Additionally, Ormat has fostered numerous community partnerships that invest in seniors, youth, and the overall well-being of our community. Whether it be with the Carson Sheriff's Station Support Foundation to sponsor a holiday gift card giveaway for seniors, investing in new sports equipment for Carson youth at the Boys & Girls Club, or being an engaged participant in our chamber, Ormat is already part of strengthening the fabric of Carson.

The Carson Chamber of Commerce is excited about the Griffith Energy Storage Project delivering economic, environmental, and community benefits to Carson residents and businesses. Thank you very much.

Sincerely,

Leah Skinner
President

January 24, 2025

McKina Alexander
City of Carson—Community Development Department
701 Carson Street
Carson, CA 90745

Re: Griffith Energy Storage Project Support

Dear Ms. Alexander,

We are the owners of Fresh and Meaty Burgers Carson Inc., at 21780 Avalon Blvd.

We are writing to express our strong support for Ormat's Griffith Energy Storage Project in Carson. As local business owners in the community, we believe this project will offer significant benefits to both our economy and the environment, and we urge the City of Carson to approve it.

We had the opportunity to learn more about this project when Ormat presented at the Carson Chamber's most recent Quarterly Breakfast. As business owners who rely on consistent and reliable power to operate effectively, we understand how crucial it is to have resilient energy infrastructure. This project will support Carson's renewable energy goals while providing a reliable source of clean energy, which will benefit businesses like ours.

Griffith will invest $150 million in the Carson community and generate substantial property tax benefits that will support crucial city services. The economic impact of this project, along with the benefits of attracting new investment to the area, will be a great asset to our community. Broadway Avenue near the Kaiser facility needs a boost. This project is exactly what the area needs to bring it more life.

Finally, and most importantly, we appreciated Ormat's direct engagement with residents and business owners like us. The opportunity to ask questions and learn about the opportunities and risks associated with new technology like this was critical in informing our decision to support this project. We need more companies like Ormat who recognize the critical role that residents and local businesses need to play in the project development process.

Thank you for your consideration of this important project. We look forward to the positive outcomes it will bring to our city.

Sincerely,

Emma Upshaw and Shaleah Upshaw-Johnson

January 27, 2025

McKina Alexander
City of Carson—Community Development Department
701 Carson Street
Carson, CA 90745

Re: Griffith Energy Storage Project Support

Dear Ms. Alexander,

My name is Ray Aldridge Jr., and I've been a resident of Carson for 50 years, residing at 1870 E. Kramer Dr. • Carson, CA 90746. I am also the owner of Expressions To Wear Custom Screen Printing and President of the Carson Bicycle Coalition.

The health, safety, and prosperity of our community are of utmost importance to me. That's why I'm writing today in strong support of Ormat's Griffith Energy Storage project. I believe this project represents a tremendous opportunity to enhance Carson's economic vitality and environmental sustainability.

2025 marks my company's 40th year in business in the City of Carson. This milestone was made possible in part through being a civically engaged, active member of the Carson community. Businesses that enmesh themselves in the fabric of the community foster connectivity with residents in a way that promotes longevity and holistic success. Ormat, as a renewable energy developer, wholeheartedly understands this and has consistently shown what it looks like to cultivate a community-rooted project development process.

Ormat has proactively engaged with community stakeholders at the Carson Chamber Quarterly Breakfast, January Town Hall meeting, and Boys & Girls Club Miracle on Main Street event, among others. Their willingness to involve local businesses and residents in meaningful discussions about the project's opportunities and challenges demonstrates a commendable commitment to transparency and collaboration. This approach fosters trust and ensures that the project aligns with the needs of the community.

The Griffith project itself promises to bring a $150 million investment to our community, generating significant property tax revenue to fund essential city services. It will also enhance our city's energy resilience, which is critical for residents and businesses alike. Griffith's location at 18800 Broadway Avenue is also significant. The area needs to be revitalized, and I believe a project like this will create opportunities for growth and improvement, right where it needs to be.

Ormat's Griffith Energy Storage Project represents a win for Carson's economy, environment, and community. I strongly encourage the City of Carson to approve it.

Thank you,

Ray Aldridge

March 5, 2025

McKina Alexander
City of Carson
701 Carson Street
Carson, CA 90745

Re: SUPPORT - Griffith Energy Storage Project

Dear Ms. Alexander,

As a longtime City of Carson staff member and former President of the Carson Chamber of Commerce, I am quite familiar with the city's challenges and opportunities. I have seen firsthand how Carson has grown and adapted to meet challenges. Looking toward the future, the city needs to continue supporting initiatives that enhance economic vitality, along with the health and wellbeing of all its residents. That is why I am writing today in strong support of the Griffith Energy Storage project.

I learned about the project at the Carson Chamber of Commerce's last quarterly breakfast. The Ormat team presented the environmental, economic, and community benefits of this project, while also addressing critical questions about battery energy storage safety. Energy reliability is an important to many businesses in the community, particular in the tech industries with high paying jobs. Projects like this support the resiliency, stability, and reliability of our electric grid, which has become ever more important with the increasing extreme weather events we've seen in recent years. These grid-stabilizing benefits have a regional impact that will be felt throughout the South Bay.

Ormat's community outreach efforts have given me confidence the firm is interested in working with the community. They have gone out of their way to meet people and hear their wishes and concerns. Ormat understands the critical role of engaging residents throughout the project development process. I appreciate that Ormat has been thoughtfully engaging local and regional stakeholders about Griffith, something we all know not every developer does.

The $150 million investment in the City of Carson is certainly significant. The region needs private investment to ensure that we're growing, particularly in our high-performing sectors. Griffith allows Carson to advance as a clean energy leader, while also supporting our other critical industries by helping keep the power on.

I urge your support for the Griffith Energy Storage project. I am happy to discuss further!

Sincerely,



Barry Waite

April 24, 2025

McKina Alexander
City of Carson
701 Carson St.
Carson, CA 90745

Re: Support for Ormat's Griffith Project

Dear Ms. Alexander,

As the Director of Central Plant Operations and Strategic Energy Projects at California State University, Dominguez Hills (CSUDH), I am writing to express my support for Ormat Technologies' proposed Griffith Energy Storage Project in the City of Carson.

At CSUDH, we have been recognized as a national leader in implementing clean energy and energy efficiency solutions on campus. One of the most impactful projects in recent years has been the installation of a 4-megawatt Tesla Megapack battery energy storage system. This system has proven to be an effective, efficient, and environmentally responsible solution for supporting our campus energy needs.

Based on our direct experience, I can confidently speak about both the safety and performance of the Tesla Megapacks. These systems are designed with multiple layers of safety protocols and advanced monitoring technologies. On our campus, the Megapack has been operationally quiet, seamlessly integrated into our infrastructure, and has generated zero onsite emissions, making it an ideal fit for urban and community environments like Carson.

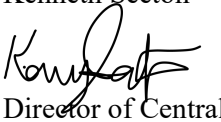
In addition to its technical strengths, battery energy storage provides critical environmental benefits. It enables us to shift toward cleaner energy sources by supporting the grid during peak periods, reducing reliance on fossil fuel peaker plants, and stabilizing renewable power delivery. These advantages directly align with the sustainability goals outlined in our CSUDH Climate Plan and the City of Carson's Climate Action Plan as well.

As the City of Carson continues to position itself as a leader in climate action and sustainability, it is essential that it supports forward-looking projects like the Griffith Energy Storage Project. Ormat Technologies' six decades of experience as a clean energy innovator makes them a trusted partner in building Carson's clean energy future.

Our campus is deeply connected to the Carson community and takes pride in being at the forefront of helping the city advance its goals. The Griffith Energy Storage Project is not just a step in the right direction—it is a vital investment in the health, resilience, and environmental integrity of Carson. I encourage you to support this project.

Sincerely,

Kenneth Seeton



Director of Central Plant Operations and Strategic Energy Projects

310-243-2206 kseeton@csudh.edu

COLLAB
COMMUNITY DEVELOPMENT CORPORATION

June 26, 2025

Re: Support for Ormat Technologies

To whom it may concern:

On behalf of Collab Community Development Corporation Inc., we are writing to express our support for Ormat Technologies.

Ormat has distinguished itself as more than just a clean energy provider. Their commitment to Carson is evident through their collaborative and thoughtful approach to community outreach and engagement. We were proud to participate in their recent tree-planting event at California State University, Dominguez Hills, which brought together students, local organizations, and residents for a project that both beautified and united our city.

Furthermore, we were grateful to partner with Ormat on our first small business pitch competition of this year, which demonstrated their understanding of the importance of local economic growth. Their support helped elevate emerging entrepreneurs and reflected a commitment to building a thriving ecosystem for small businesses here in Carson.

Ormat understands that being a good neighbor means more than simply operating in a community—it means investing in its future, listening to its residents, and creating opportunities for shared success. We are proud to have Ormat in Carson and fully support their continued efforts to uplift and empower the communities they serve.

Sincerely,

Collab Community Development Corporation, Inc. (Collab CDC)
A 501(c)3 Nonprofit Organization
Tax ID: 99-0701124

July 18, 2025

McKina Alexander
City of Carson
701 Carson Street
Carson, CA 90745

Re: Griffith Energy Storage Support

Dear Ms. Alexander,

My name is Mary Isiah and I am a proud Carson resident and business owner. I reside at 19720 Galway Avenue and my family has lived in Carson for over 50 years.

I strongly support the Griffith Energy Storage project because we need more clean energy investments in Carson. Our community has faced the negative impacts from the oil industry for decades. I still remember the horrific smell in the air from the refineries, devastating the air quality of our community.

Residents like me and my family have been on the frontlines of environmental harm for decades, which is exactly why we need to embrace projects like Griffith. Battery storage directly helps reduce our collective reliance on fossil fuels by maximizing the use of renewable energy sources such as solar and wind power. Not to mention, Griffith won't release any carbon emissions when operational.

I was a strong supporter of the Avocet Energy Storage project and was excited to hear about another project being proposed that will move our community forward in the right direction.

Griffith is exactly what Carson needs.

Sincerely,

Mary J. Isiah

CC: Mayor Lula Davis-Holmes
Councilmember Jawane Hilton
Council Aide Ravynne Staine
Council Aide KW Tulloss
City Manager David Roberts
Assistant City Manager Robert Lennox
Energy and Sustainability Officer Reata Kulscar
Kaneca Pompey

Officers
President: Jacquelyn R. Thomas
Community Volunteer

Vice President: Reese Johnson
Community Volunteer

Secretary: **Lori Henderson**[1]
Northrop Grumman

Treasurer: Roger von Ting[1]
Watson Land Company

Board of Directors:
Annie Benson
LAFC

Dr. Khaleah Bradshaw
Community Volunteer

Todd Burnight
Carson Companies

Ralph Felix
CAL Water

Shaina Freeman-Gonzalez
Raising Canes Restaurants

Tim Graves
Community Volunteer

Paula Kendrick
CMP- A Risk Services Company

Tamala Lewis
Dignity Health Sports Park

Sheri Repp Loadsman
Community Volunteer

Amy Lupo
Nascar

Luis Martinez
Marathon Petroleum

Megan McArdle, CIC, CISR
Aon Risk Services

Lisa Reddy
Prologis

Patricia Rothenberg
72andSunny

Dave Traughber
Mattel

Randy Wilson
Norm Wilson & Sons, Inc

CEO: Kim Richards
[1] Denotes Past President

BOYS & GIRLS CLUBS
OF CARSON

July 25, 2025

McKina Alexander
City of Carson
701 Carson Street
Carson, CA 90745

Dear Ms. Alexander,

The Boys & Girls Clubs of Carson is pleased to recognize Ormat Technologies as a valued partner whose support has made a meaningful difference for our youth and families. While our organization does not take positions on corporate projects or political matters, we believe it is important to highlight companies that show genuine care for the communities they serve.

Ormat's support of our Healthy Lifestyles Program has helped elementary and middle school students build healthy habits and gain the tools they need to thrive—physically, emotionally, and socially. Their partnership enhances our ability to provide programs that truly impact the lives of young people.

They also joined us for our Miracle on Main Street celebration, a joyful event that brings together families and youth from across Carson.

What stands out most is Ormat's hands-on involvement. Their team showed up, connected with our members, and took part in activities that made the experience special for the kids we serve. Their presence sent a simple but powerful message: they care about this community.

We are grateful for Ormat's partnership and look forward to continuing to work together in ways that uplift and support Carson families.

Sincerely,

Kim Richards
Chief Executive Officer

1950 E. 220th Street, Suite 207, Carson, CA 90810
(310) 522-0500 | bgccarson.org |Tax ID No. 33-0475452

From: [redacted] on behalf of Deveney Pula
To: Planning
Subject: I support the Griffith Energy Storage Project & a cleaner energy future for Carson
Date: Monday, March 2, 2026 4:49:27 PM

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear City of Carson Planning Commission,

I am writing to express my strong support for the Griffith Energy Storage Project proposed for Carson. This project will deliver cleaner air, economic opportunity, and a more reliable and affordable energy future for our community —and I urge the Commission and City Council to move it forward.

Carson residents deserve better when it comes to the air we breathe. Unlike nearby fossil fuel power plants, which spew harmful emissions and contribute to Carson being one of the most polluted regions in the state, energy storage produces no harmful emissions during operation. Approving Griffith is a meaningful step toward environmental justice for Carson's most impacted neighborhoods, who have shouldered this burden for too long.

The economic benefits are just as significant. Griffith will bring millions of dollars in local tax revenue—funds that flow to our public schools, roads, and vital community services. It will also create hundreds of good-paying construction jobs, including local union jobs that provide real livelihoods for working families. As Carson expands beyond the fossil fuels that have long defined its economy, projects like Griffith are the investments that will carry our community forward.

Energy reliability and affordability matter deeply to me. As heat waves become more frequent and intense, an unreliable grid means more blackouts and more risk to hospitals, schools, emergency services, and residents. But energy storage releases energy quickly when demand spikes, making our grid more resilient and stabilizing energy costs as the need for expensive fossil fuel "peaker" plants drops—no small thing for the many Carson households living below the poverty line.

We all know how important safety is to our community. Energy storage technology is well-tested and closely regulated, and incidents have become increasingly rare as technology has advanced. In the rare event of an issue, this facility is engineered to fully contain it onsite. The developer will also partner with local fire departments to train first responders so that our community is prepared.

The Griffith Energy Storage Project is the right choice for Carson—an investment that will usher in abundant economic opportunity, cleaner air, and a brighter future for all who call our city home. Thank you for your consideration and your commitment to our community.

Sincerely,
Ms. Deveney Pula
Long Beach, CA
dpula@la-ibew-neca.com

CARSON PLANNING COMMISSION
CITY OF CARSON
701 East Carson Street
Carson, CA 90745

2nd of March, 2026

Subject: Objection to Use of CEQA Categorical Exemption (Guidelines §15332) – BESS Project – DOR 1925-23 / CUP 1128-23 / DA 33-23

Honorable Chair and Members of the Carson Planning Commission:

Greetings to all.

We are comprised of small and large businesses, property managers, owners, residents and registered Carson voters who believe in economic equality, public safety, where common goals, mutual respect for all parties concerned are being met and where no one group or stakeholder is left behind. In the circle of equality, the circle is only complete when everyone is counted and included. To that end, we are ready to proceed and take action to protect all public safety, economic interests that may be materially, negatively impacted by the CEQA Categorical Exemption as referenced herein.

This letter is being submitted in formal opposition to the City's proposed reliance on the CEQA Class 32 Categorical Exemption (14 CCR §15332 – In-Fill Development Projects) for the proposed Battery Energy Storage System (BESS) associated with Design Overlay Review No. 1925-23, Conditional Use Permit No. 1128-23, and Development Agreement No. 33-23.

The City's determination that this project is categorically exempt under CEQA is legally and factually unsupported. The administrative record does not demonstrate compliance with the mandatory criteria of §15332, nor does it address the categorical exemption exceptions set forth in CEQA Guidelines §15300.2. The record further ignores substantial evidence demonstrating a reasonable possibility of significant environmental impacts.

-continued-

CARSON PLANNING COMMISSION 2nd of March, 2026
CITY OF CARSON

Subject: Objection to Use of CEQA Categorical Exemption (Guidelines §15332) – BESS Project – DOR 1925-23 / CUP 1128-23 / DA 33-23

I. FAILURE TO SATISFY CEQA GUIDELINES §15332 CRITERIA

Under CEQA Guidelines §15332, a project may qualify as a Class 32 exemption only if ALL five conditions are satisfied. Of particular importance here:

§15332(d): The project must not result in any significant effects relating to traffic, noise, air quality, or water quality.

The record contains no substantial evidence demonstrating that the proposed Tesla Megapack 2XL BESS facility will not result in significant impacts relating to:

1. Hazardous materials release
2. Fire and explosion risk
3. Toxic emissions from thermal runaway events
4. Noise from continuous cooling fan operations
5. Soil and water contamination risks
6. Public health impacts to nearby sensitive receptors

The burden is on the City to produce substantial evidence supporting exemption eligibility. *(Pub. Resources Code §21080; CEQA Guidelines §15332; Berkeley Hillside Preservation v. City of Berkeley (2015) 60 Cal.4th 1086.)*

II. UNUSUAL CIRCUMSTANCES EXCEPTION (§15300.2(c))

Even if the City attempts to claim compliance with §15332, the exemption cannot apply where there is a reasonable possibility that the activity will have a significant effect due to unusual circumstances.

CARSON PLANNING COMMISSION 2nd of March, 2026
CITY OF CARSON

Subject: Objection to Use of CEQA Categorical Exemption (Guidelines §15332) – BESS Project – DOR 1925-23 / CUP 1128-23 / DA 33-23

A. Extraordinary Concentration of Sensitive Receptors

Within 600 feet of the proposed site sits adjacent to 7,500 residents, including schools, daycare centers, parks, nursing homes, hospitals, clinics, and other sensitive land uses.

Sensitive receptors are defined in CEQA air quality practice and South Coast AQMD guidance as populations more susceptible to environmental hazards (children, elderly, medically fragile individuals).

The proximity and density of these receptors is materially greater than the previously approved Avocet BESS facility in Carson, which underwent full CEQA review (Initial Study/Mitigated Negative Declaration). The current project presents approximately six times the number of sensitive receptors within a comparable radius.

This disparity alone constitutes an “unusual circumstance” requiring environmental review.

B. Documented Thermal Runaway and Fire Events

The project proposes use of Tesla Megapack 2XL lithium-ion battery units. Utility-scale lithium-ion BESS facilities have experienced catastrophic thermal runaway events, including:

1. The Moss Landing BESS fire in California (2023), which resulted in emergency shelter-in-place orders and subsequent soil testing showing elevated levels of nickel, manganese, and cobalt.
2. Two documented runaway fire events in Australia involving similar lithium-ion storage systems, also requiring emergency response actions.

Thermal runaway in lithium-ion systems can release:

1. Hydrogen fluoride (HF)
2. Volatile organic compounds (VOCs)
3. Heavy metals (nickel, manganese, cobalt)
4. Fine particulate matter

These are hazardous materials with known toxicological impacts. The City's exemption finding contains no quantitative risk assessment, no plume modeling, no worst-case release analysis, and no cumulative exposure analysis for the adjacent residential population.

This constitutes substantial evidence supporting application of the unusual circumstances exception under CEQA Guidelines §15300.2(c).

III. NOISE IMPACTS – FAILURE UNDER §15332(d)

The combined operation of Megapack cooling fan units is projected to generate continuous mechanical noise.

If modeling demonstrates that sound levels will exceed municipal code limits or result in perceptible nighttime noise at 600 feet, the City cannot lawfully claim "no significant effect" under §15332(d).

The record contains no acoustical analysis demonstrating compliance with:

1. City of Carson Municipal Code noise standards
2. CEQA thresholds of significance

3. Cumulative industrial noise environment analysis

The absence of an acoustical technical study precludes reliance on a categorical exemption.

IV. HAZARDOUS MATERIALS AND FIRE RISK REQUIRE TECHNICAL ANALYSIS
CEQA requires analysis of hazardous materials impacts where a project involves storage of large quantities of flammable or toxic substances *(Appendix G Environmental Checklist).*

This project involves concentrated lithium-ion battery storage capable of high-energy release. The record does not contain:

1. Quantitative Risk Assessment (QRA)
2. Fire behavior modeling
3. Emergency evacuation modeling
4. Air dispersion modeling
5. Hazardous materials inventory and mitigation plan
6. Emergency response capacity analysis

Without such technical evidence, the City cannot support a finding of “no reasonable possibility of significant effect.”

V. INCONSISTENT TREATMENT COMPARED TO AVOCET BESS

The Avocet BESS facility in Carson underwent CEQA review and adoption of a Mitigated Negative Declaration.

The present project involves:

1. Greater surrounding residential density
2. More sensitive receptors
3. Similar lithium-ion battery technology
4. Comparable operational hazards

It is arbitrary and capricious for the City to conclude that a project with greater exposure risk requires less environmental review.

VI. FAIR ARGUMENT STANDARD

Under CEQA's "fair argument" standard, if substantial evidence supports a reasonable possibility of significant environmental impact, the agency must prepare at minimum an Initial Study and Negative Declaration, or an Environmental Impact Report if impacts cannot be mitigated.

The evidence presented regarding:

1. Proximity to sensitive receptors
2. Documented lithium-ion fire events
3. Toxic release potential
4. Noise exceedances
5. Lack of mitigation design

easily satisfies the fair argument threshold.

CARSON PLANNING COMMISSION 2nd of March, 2026
CITY OF CARSON

Subject: Objection to Use of CEQA Categorical Exemption (Guidelines §15332) – BESS Project – DOR 1925-23 / CUP 1128-23 / DA 33-23

VII. CONCLUSION

The City's reliance on the Class 32 categorical exemption is legally unsustainable. The Planning Commission must:

A. Rescind the categorical exemption determination;

1. Direct preparation of a full Initial Study under CEQA;
2. Evaluate hazardous materials, fire risk, air dispersion, and noise impacts;
3. Analyze impacts to sensitive receptors;
4. Consider cumulative impacts and unusual circumstances exceptions.

Failure to do so will constitute prejudicial abuse of discretion under Public Resources Code §21168.5.

For the foregoing reasons, I respectfully request that the Planning Commission reject the proposed CEQA exemption and require full environmental review prior to approval of Design Overlay Review No. 1925-23, CUP No. 1128-23, and Development Agreement No. 33-23.

Respectfully submitted,
Carson Economic Justice Alliance

Loren Miles
Managing Director LM/vp

cc:

Carson Planning Commission
Louie Diaz
Frederick Docdocil
Carlos Guerra
Del Huff
Leticia Wilson
Clarence Johnson
Dianne Thomas

Lula Davis-Holmes, Mayor
Cedric Hicks, Sr., Mayor Pro Tempore
Jawane Hilton, Council Member
Jim Dear, Council Member
Arleen Rojas, Council Member

Environmental Commission
Ezekiel Swayzer
Lillian Hopson
Brittney Ford
William Koons
Maribel Peralta
Joseph Hunt
Hourie Taylor

Public Safety Commission
Jeffrey Allen
Keith Arnold
Lawrence Flinton

cc:

Public Safety Commission (continued)
Samuel Dacus
Donnie Dorsey
Prentiss Lewis
Angela Rivers
Heidi Romero
Louis Cogut

Economic Development Commission
Jay Aldridge Jr.
Christopher Childers
Darren Embry
Blake Kelley
Trini Jimenez
Cylde Sparrow
Deborah Wallace

City Manager
David Roberts, Jr.

Senior Planner
McKina Alexander

City Attorney
Sunny K. Soltani

From: [redacted] on behalf of Joe Sullivan
To: Planning
Subject: I support the Griffith Energy Storage Project & a cleaner energy future for Carson
Date: Tuesday, March 3, 2026 12:50:00 PM

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear City of Carson Planning Commission,

Subject: Support for the Griffith Energy Storage Project

Honorable Members of the Planning Commission,

My name is Joe Sullivan, and I work with IBEW Local 11 and the Los Angeles County Chapter of the National Electrical Contractors Association (NECA), representing approximately 300 electrical contractors that partner with nearly 10,000 union electricians across Los Angeles County.

We respectfully urge your support for the Griffith Energy Storage Project.

This project will strengthen grid reliability by storing electricity and delivering it when demand is highest, helping prevent outages during extreme heat and peak usage. Energy storage is a critical component of modern infrastructure and plays an essential role in ensuring Carson's homes, businesses, schools, and essential services have reliable power when they need it most.

Equally important, projects like Griffith create local high-road careers that provide family-sustaining wages, full benefits, and retirement security. These are not temporary jobs — they are long-term career pathways in a growing clean energy sector.

Our contractors partner with IBEW Local 11 to provide a five-year, no-cost apprenticeship program where individuals earn while they learn, working under the supervision of experienced journey-level electricians and foremen while receiving the highest level of classroom and hands-on training in the industry. After just four months, apprentices receive full family medical and dental coverage and begin building toward stable, middle-class careers with pension and retirement benefits. Projects like Griffith create opportunities for new apprentices to enter the workforce, allow experienced electricians to advance their skills, and support long-term economic mobility and local workforce development in communities like Carson.

From a safety and technical standpoint, battery energy storage is not new to our industry. Our contractors and electricians are trained and experienced in building utility-scale energy storage systems in compliance with the California Fire Code and NFPA 855. These facilities are constructed with rigorous safety standards, monitoring systems, and coordination with local fire departments to ensure they operate safely and reliably.

The Griffith Energy Storage Project represents both critical infrastructure and meaningful economic opportunity for the region. We respectfully encourage the Planning Commission to support this important project.

Thank you for your consideration.

Sincerely,
Joe Sullivan
IBEW Local 11 / NECA Los Angeles County

The Griffith Energy Storage Project is the right choice for Carson—an investment that will usher in abundant economic opportunity, cleaner air, and a brighter future for all who call our city home. Thank you for your consideration and your commitment to our community.

Sincerely,
Mr. Joe Sullivan
Pasadena, CA
sullivan@la-ibew-neca.com

March 4, 2026

Lena Whittaker
[redacted]
Carson, CA 90746

McKina Alexander, Kaneca Pompey, and Nathan Freeman
City of Carson – Community Development Department
701 Carson Street
Carson, CA 90745

Dear Ms. Alexander, Ms. Pompey, and Mr. Freeman,

As both the Vice Chair of Special Events at the Carson Chamber of Commerce and a longtime Carson resident, I write today in strong support of Ormat's proposed Griffith Energy Storage project. I believe this project will offer significant benefits to both our economy and environment, and I urge the City of Carson to approve it.

Over the past several years, I have had the opportunity to engage with Ormat through numerous community organizations and events, including their active involvement with the Carson Chamber of Commerce, their close partnership with Towne Avenue Elementary School, and their volunteerism and sponsorship of initiatives with the Boys and Girls Club of Carson, among others. Additionally, Ormat hosted four community meetings, a few in which I attended, which offered further opportunities for community members to familiarize themselves with the project and the team. Through these efforts, they have demonstrated a genuine and consistent commitment to being an engaged and responsible member of the Carson community. We value organizations that go the extra mile to invest locally, and Ormat has proven that commitment time and time again.

Another aspect of the Griffith Project that I am excited about is its contribution of clean energy to Carson and the greater Los Angeles grid, which will enhance reliability while advancing our community's vision for a greener future. This site will power homes across the Carson community, reducing emissions and protecting Carson residents in the event of brown outs, black outs, and natural disasters. With Carson hosting major events in the near future, like the Olympics, this project will provide the additional support our community needs to continue to promote and power small and large businesses across Carson.

Thank you for your consideration of this important project. I look forward to the positive outcomes it will bring to our city and its residents.

Sincerely,

Lena Whittaker