CITY OF LOMA LINDA
PLANNING COMMISSION AGENDA

Wednesday, July 15, 2026, 6:00 PM
Council Chambers
25541 Barton Road
Loma Linda, CA 92354

1. Call to Order

1.A. Call to Order

1.B. Roll Call

1.C. Pledge of Allegiance

1.D. Items to be Added or Deleted

1.E. Conflict of Interest Disclosure

2. Public Comments on Non-Agenda Items (LIMITED TO 30 MINUTES; 3 MINUTES ALLOTTED FOR EACH SPEAKER)

2.A. Public Comments

This portion of the agenda provides an opportunity to speak on an item that is NOT on the agenda. Pursuant to the Brown Act, the Planning Commission can take no action at this time; however, the Commission may refer your comments/concerns to staff, or request the item be placed on a future agenda.

3. Public Hearing Items

3.A. Consideration of Minor Modification No. MOD-2026-0031 to Precise Plan of Design No. PPD-2024-0002 for the Review of Architectural Elevations for a Proposed Four-Story, 126-Room WoodSpring Suites Extended-Stay Hotel Located at the Northeast Corner of Mountain View Avenue and Business Center Drive.

Staff recommends that the Planning Commission:

— Approve Minor Modification No. MOD-2026-0031 to Precise Plan of Design No. PPD-2024-0002 for the proposed architectural elevations for the WoodSpring Suites extended-stay hotel, based on the findings contained in this Staff Report and subject to the Conditions of Approval adopted on March 18, 2026.

3.B. Consideration of Conditional Use Permit No. CUP-2025-0006, Tentative Parcel Map No. 2025-0005, and Precise Plan of Design No. 2026-0016 for the establishment of the Loma Linda Adventist Spanish Community Services and Worship Center at 11055 New Jersey Street (APN 0292-163-09)

Staff recommends that the Planning Commission take the following actions:

— Determine that the project is exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15332, Class 32 (In-Fill Development Projects), based on the findings provided in this Staff Report;

— Approve Tentative Parcel Map No. 2025-0005 to split the 8.98 acre project site into four (4) separate parcels;

— Approve Conditional Use Permit No. CUP-2025-0006 to allow the operation of a place of religious worship, including gathering, worship, Bible study, prayer meetings, and related community-service activities, and to authorize the existing 52-foot-tall geodesic dome shell;

— Approve Precise Plan of Design No. 2026-0016 for the site layout, parking, landscaping, architectural design, and related site and street improvements for the proposed 19,604-square-foot Loma Linda Adventist Spanish Community Services and Worship Center located at 11055 New Jersey Street (APN 0292-163-09) within the Low Density Residential Land Use Designation and Zone.

4. Approval of Minutes

4.A. Approval of Minutes 06-17-2026

5. Reports

5.A. Commissioners' Reports

5.B. Director's Reports

6. Adjournment

6.A. Adjournment

Reports and documents relating to each agenda item are on file in the Department of Community Development and are available for public inspection during normal
business hours, Monday through Thursday, 7:00 a.m. to 5:30 p.m.

Notice to the Public:
Reports and documents relating to each agenda item are on file with the Community Development Department and are available for public inspection during normal business hours, Monday through Thursday, 7:00 a.m. to 5:30 p.m. In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the City Clerk at (909) 799-2819. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting. Later requests will be accommodated to the extent feasible.

Tiffany Colwell

Tiffany Colwell, Administrative Assistant II

City of Loma Linda, California



Date Posted: July 9, 2026

City of Loma Linda

Planning Commission Staff Report

A. Consideration of Minor Modification No. MOD-2026-0031 to Precise Plan of Design No. PPD-2024-0002 for the Review of Architectural Elevations for a Proposed Four-Story, 126-Room WoodSpring Suites Extended-Stay Hotel Located at the Northeast Corner of Mountain View Avenue and Business Center Drive.

Staff recommends that the Planning Commission:

Meeting	Agenda Group
Wednesday, July 15, 2026, 6:00 PM	Public Hearing Items Item: 3A.

From
Lorena Matarrita, Community Development Director

RECOMMENDATION:

Staff recommends that the Planning Commission:

Approve Minor Modification No. MOD-2026-0031 to Precise Plan of Design No. PPD-2024-0002 for the proposed architectural elevations for the WoodSpring Suites extended-stay hotel, based on the findings contained in this Staff Report and subject to the Conditions of Approval adopted on March 18, 2026.

BACKGROUND:

On March 18, 2026, the Planning Commission considered the Mountain View Business Center project, a multi-use commercial development located at the northeast corner of Mountain View Avenue and Business Center Drive (APN: 0292-451-14). At that meeting, the Planning Commission recommended approval of a General Plan Amendment, Zone Map Change, Tentative Parcel Map, Conditional Use Permit, Master Sign Program, and Precise Plan of Design for the overall development project, which includes two fast food restaurants with drive-throughs, a convenience store with gas station, and a four-story hotel.

During the March 18, 2026 hearing, the Planning Commission expressed interest in further reviewing the proposed architectural design of the hotel component of the project before finalizing its recommendation on that element. Accordingly, the item is being brought back before the Commission for the specific purpose of reviewing and acting upon the hotel's architectural elevations. All other entitlements associated with the project were considered and acted upon at the March 18, 2026 meeting. The item was brought before the Planning Commission at the April 16th public hearing, but due to some changes in the hotel use brand, the item was continued to a future public hearing.

PROJECT SUMMARY

The applicant, Tony Dehbozorgi of Creative Development Management (CDM) Inc., in collaboration with Choice Hotels International, is proposing to develop the hotel use on the previously approved Parcel 4 of the Mountain View Business Center. The proposed hotel brand is WoodSpring Suites, an extended-stay concept operating under the Choice Hotels International family of hotel brands. The hotel is proposed as a 59,712 sq. ft. building and will contain 126 guest rooms across four stories and with the room amount, amenities, and support spaces being consistent with what was previously approved at the March 18th public hearing.

PERTINENT DATA

Applicant: Tony Dehbozorgi, Creative Development Management (CDM) Inc.

Owner: Tony Dehbozorgi

Hotel Developer: Choice Hotels International

Hotel Brand: WoodSpring Suites

General Plan/Zoning: General Commercial (C-2) (approved per GPA-2024-0002 and ZMC-2024-0001)

Site: The hotel parcel is located on the east portion of the Mountain View Business Center site, at the northeast corner of Mountain View Avenue and Business Center Drive.

APN: 0292-451-14 (Parcel 4 per TPM-2024-0002)

Topography: Relatively flat with minimal vegetation

Case Number: PPD-2024-0002; MOD-2026-0031

ANALYSIS:

WoodSpring Suites is an economy extended-stay hotel brand designed to serve guests requiring lodging for longer durations, including essential workers, construction and trades professionals, distribution and manufacturing employees, government and military personnel, students, displaced and relocating families, and medical workers. WoodSpring Suites is part of the Choice Hotels International hotel system and has more than 7500 hotels across 46 countries. Choice Hotels International offers a variety of brands such as WoodSpring Suites, Comfort Inn & Suites, Quality Inns, Cambria, and Radisson.

WoodSpring Suites is Choice's prominent extended stay hotel brand which operates 275 hotels across 38 states. The brand focuses on offering a clean, comfortable, and affordable lodging experiences for guests needing long-term accommodations versus nightly or short-term stays. Each suite is designed with a full kitchen, including a full-sized refrigerator, full sized microwave, and 2 burner cooktops.

Operations and Management

Although the hotel will be owned by Amanda Bui and Harpreet Dhaliwal, day-to-day operations will be managed by Hotel Management and Consulting (HMC), an approved Choice Hotels management company specializing exclusively in extended-stay hotels. HMC manages more than 100 extended-stay hotels in 27 states and has over 100 years of combined executive experience. HMC managed five of the top ten and eleven of the top twenty-five highest revenue WoodSpring Suites hotels during 2025.

The hotel will operate in accordance with Choice Hotels and WoodSpring Suites brand standards. Operational measures include 24-hour staff presence, controlled guest access, security cameras covering common areas and parking lots, routine housekeeping and maintenance inspections, staff training, emergency response procedures, quality assurance reviews, and coordination with local police and fire agencies. Guests are required to provide valid identification and payment at check-in, and extended-stay guests pay in advance on a recurring basis.

Architectural Style

The submitted WoodSpring Suites proposal features a contemporary architectural design with a neutral material palette consisting of fiber cement-style panels, stucco, masonry veneer at the building base, metal accent panels, and articulated vertical and horizontal massing. The building base incorporates zinc-colored El Dorado Stone veneer that provides a durable pedestrian-scale foundation, while Dover White and Windy Blue fiber cement siding establishes visual contrast across the upper floors. Conservative Gray stucco accents further distinguish building sections and create a layered appearance throughout the elevations. Architectural detailing includes varied parapet forms, vertical corner elements, accent towers displaying the WoodSpring Suites branding, recessed entry features, decorative metal canopies, and consistent window spacing that establishes rhythm across each elevation.

Although the WoodSpring Suites prototype reflects a standardized national hotel brand, staff finds that the proposed architectural treatment provides sufficient variation in form, materials, and façade articulation to create an attractive commercial building that is compatible with the surrounding commercial development and consistent with the City's expectations for quality architectural design.

Comparison to Previously Reviewed Hotel Design

The March 18, 2026 staff report described the hotel as being designed with sandblasted wall panels in colors including natural white, peppercorn gray, jadite green, and Kings Gray. The revised plans presented herein reflect the WoodSpring Suites brand prototype design, which replaces those panel colors with the material palette described above. Staff has reviewed the revised design and finds it to be of equivalent or superior architectural quality to what was originally presented at the March 18th public hearing.

The overall building footprint, massing, floor plan configuration, height, and site placement remain unchanged from the plans previously reviewed by the Planning Commission.

Setting and Access

The hotel parcel is situated on the east portion of the Mountain View Business Center site at the northeast corner of Mountain View Avenue and Business Center Drive. The primary hotel entrance and vehicular drop-off area is positioned to allow convenient access from the internal drive network, with connections to both access points on Business Center Drive. The hotel's surface parking surrounds the building on all sides, with pedestrian pathways connecting the parking areas to the building entries.

The overall site circulation, access, and parking configuration remain as reviewed and conditioned under the previously approved Precise Plan of Design. No changes to the site plan, parking layout, access points, or landscaping are proposed under this amendment.

FINDINGS

The Precise Plan of Design findings pursuant to LLMC §17.30.300 are as follows:

Finding No. 1:	**The proposal complies with the provisions within the municipal code and is consistent with the general plan and any applicable specific plan.**

Finding of Fact:	The proposed hotel architectural design, as modified to reflect the WoodSpring Suites brand prototype, continues to comply with the applicable provisions of the Loma Linda Municipal Code. The building height of 48 feet 6 inches was previously authorized under Conditional Use Permit No. CUP-2024-0002. The proposed exterior materials, color palette, and architectural articulation comply with the development standards of the General Commercial (C-2) zone established under Title 17.40.040. No changes to the site layout, setbacks, parking, or landscaping are proposed.

Finding No. 2:	**The site layout and design is of high quality, architecturally and aesthetically pleasing, and is compatible with the character of the neighborhood and general community.**
Finding of Fact:	The proposed WoodSpring Suites utilizes a contemporary architectural design with articulated wall planes, varied parapet, an a cohesive neutral color palette and durable materials, including stucco finishes, metal panel accents, stone veneer treatments for the base, and contrasting trim. The project will result in a project that is compatible with the surrounding uses and the overall franchise branding from Choice Hotels International.

Finding No. 3:	**The proposal will result in an efficient, safe and desirable project that is not materially detrimental to public health, safety, or welfare, or injurious to persons, property, or improvements in the vicinity and zoning district in which the property is located.**
Finding of Fact:	The architectural revisions presented under this minor modification are limited to exterior material and color changes consistent with the WoodSpring Suites brand prototype. The building footprint, height, site layout, parking, and access remain unchanged. The project continues to comply with all previously reviewed safety, access, and public works requirements, and the previously adopted Conditions of Approval and Mitigation Measures remain in full force and effect.

Finding No. 4:	**The project will not be detrimental to the harmonious and orderly growth of the city.**

Finding of Fact:	The WoodSpring Suites hotel, as designed, provides a modern and compatible commercial use on a highly visible gateway site adjacent to the I-10 freeway. The extended-stay hotel use supports the City's economic development goals by providing lodging options for essential workers, medical professionals, and other long-term visitors in a clean, modern, and appropriately designed facility. The architectural design is consistent with the contemporary commercial character of the area and will enhance the visual quality of the freeway corridor.

CONCLUSION:

The Planning Commission previously reviewed and recommended approval of the Mountain View Business Center project, including the hotel component, on March 18, 2026, and requested a focused review of the hotel's architectural elevations. The proposed WoodSpring Suites design reflects a contemporary extended-stay hotel aesthetic and remains consistent with the previously approved site plan, building footprint, and overall project design.

Based on the analysis and findings contained in this Staff Report, staff recommends approval of Minor Modification No. MOD-2026-0031 to Precise Plan of Design No. PPD-2024-0002, subject to the Findings and the Conditions of Approval adopted on March 18, 2026.

Attachments

Attachment A - Vicinity Map.pdf

Attachment B - Hotel Architecture Plans

Attachment C - WoodSpring Suites Operations

Attachment D - Conditions of Approval MDA-2024-0014

Attachment A

Vicinity Map





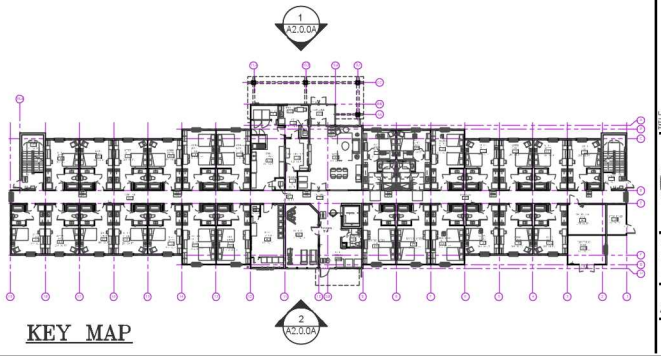
1 FRONT ELEVATION (WEST)
1/8" = 1'-0"



2 REAR ELEVATION (EAST)
1/8" = 1'-0"

ITEM	DESCRIPTIONS	COLOR
1	STUCCO MANUFACTURE: SHERWIN WILLIAMS COLOR: "DOVER WHITE" SW 6385	
2	STUCCO MANUFACTURE: SHERWIN WILLIAMS COLOR: "CONSERVATIVE GRAY" SW 6183	
3	STUCCO MANUFACTURE: SHERWIN WILLIAMS COLOR: "WINDY BLUE" SW 6240	
4	MANUFACTURE: ELDORADO STONE COLOR: "ZINC EUROPEAN-LEDGE"	
5	CEMENT BOARD LAP SIDING COLOR TO MATCH WITH DOVER WHITE	
6	CEMENT BOARD LAP SIDING COLOR TO MATCH WITH WINDY BLUE	

NOTE:-
THIS IS FOR GRAPHICAL REPRESENTATION ONLY.
PLEASE REFER TO DETAILED EXTERIOR ELEVATION A2.0.0 SHEET.



KEY MAP

REVISIONS:

NO.	REVISION ISSUE	DATED
1		

ACE Design LLC
1024 Iron Point Road, SUITE 1046
Folsom, CA 95630
Phone: (702) 396-5113, Fax: (702)446-8155
Land Planning • Civil Engineering • Architectural Design • Structural Engineering

TITLE: COLORED EXTERIOR ELEVATIONS

PROJECT: WOODSPRING SUITES
81 ORANGE ST.
PERRIS, CA 92571.

REGISTERED PROFESSIONAL ENGINEER
MARK GIESEN
06/30/2027
CIVIL
STATE OF CALIFORNIA

DATE: 07/25/2025
JOB : 22-45
DWG. BY: JSC
CHK. BY: MG

A2.0.0A
SHEET
6 OF 10



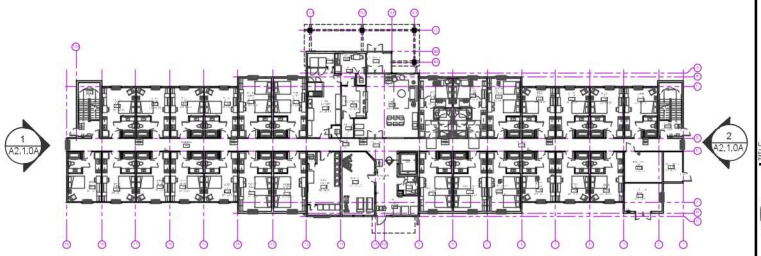
1 RIGHT ELEVATION (SOUTH)
1/8" = 1'-0"



2 LEFT ELEVATION (NORTH)
1/8" = 1'-0"

ITEM	DESCRIPTIONS	COLOR
1	STUCCO MANUFACTURE: SHERWIN WILLIAMS COLOR: "DOVER WHITE" SW 6385	
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KEY MAP

REVISIONS:

	REVISION ISSUE	DATED
1		
2		
3		
4		
5		

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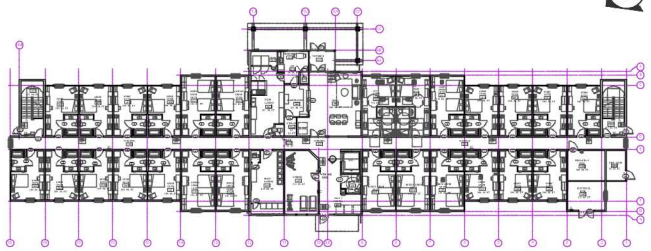
REGISTERED PROFESSIONAL ENGINEER
CIVIL
07/25/2025
STATE OF CALIFORNIA

DATE: 07/25/2025
JOB : 22-45
DWG. BY: JSC
CHK. BY: MG

A2.1.0A
SHEET
7 OF 10



1 3D RENDER
N.T.S.



KEY MAP

REVISIONS:

	REVISION ISSUE	DATED
A		

ACE Design LLC
1024 Iron Point Road, SUITE 1046
Folsom, CA 95630
Phone: (702) 396-5113, Fax: (702)446-8155
Land Planning • Civil Engineering • Architectural Design • Structural Engineering

TITLE: 3D RENDER

PROJECT: WOODSPRING SUITES
81 ORANGE ST.
PERRIS, CA 92571.

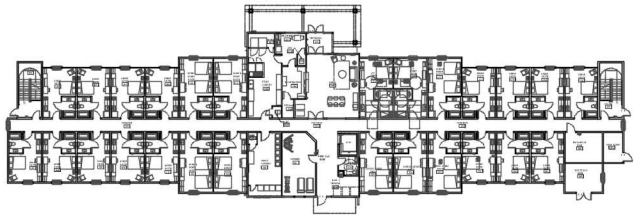
REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA — CIVIL — EXP 06/30/2027

DATE: 07/25/2025
JOB : 22-45
DWG. BY: HS
CHK. BY: MG

A8.0.0
SHEET
8 OF 10



1 3D VIEW
N.T.S.



KEY MAP

1
A8.0.1

REVISIONS:

	REVISION ISSUE	DATED
1		
2		
3		
4		
5		

ACE Design LLC
1024 Iron Point Road, SUITE 1046
Folsom, CA 95630
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TITLE: 3D RENDER

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81 ORANGE ST.
PERRIS, CA 92571.

REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA
CIVIL
EXP.06/30/2027

DATE: 07/25/2025
JOB : 22-45
DWG. BY: HS
CHK. BY: MG

A8.0.1
SHEET
9 OF 10

WoodSpring Suites – Loma Linda, CA Operations Overview

Key Areas for Efficient Hotel Management

Introduction

WoodSpring Suites is part of the Choice Hotels International hotel system. Choice Hotels franchises more than 7500 hotels in 46 countries with nearly 650,000 rooms globally spanning 22 hotel brands ranging from economy to upscale properties. This includes brands like Comfort Inn & Suites, Quality Inns, Cambria, and Radisson.

WoodSpring Suites is Choice's prominent extended stay hotel brand operating 275 open hotels across the United States in 38 states. The WoodSpring brand operates with a focus on providing guests with clean, comfortable, and affordable lodging experience focused on guests needing longer-term accommodations vs. a nightly or short-term 2 or 3-night stay. Each guest room suite has a full kitchen including a full-sized refrigerator, full-sized microwave, and 2-burner cooktops.

Effective operations are crucial to maintaining high standards and ensuring guest satisfaction. The following points outline essential operational aspects for WoodSpring Suites properties.

1. Front Desk and Guest Services

- The on-property guest experience begins at the front desk. WoodSpring Suites is focused on ensuring front desk staff are trained to offer efficient check-in and check-out processes.
- There will always be a minimum of one staff member on property.
- The brand sets clear standards and provides specific information about hotel amenities, local attractions, and extended stay policies.
- The brand's goal is to set up and maintain systems focused on delivering a welcoming and professional experience. This is partially accomplished by having uniformed staff members with nametags to clearly identify property staff to property guests.
- Registered guests are required to show valid identification at check-in and provide payment in advance for the first week of their stay. Subsequent weeks are also required to be paid for in advance. Guests staying for shorter durations are required to provide a valid credit card for charges incurred.

- Each WoodSpring Suites is required to have processes in place for handling guest requests and complaints in a prompt and efficient manner. This has resulted in the WoodSpring Suites Brand earning the #1 rating in guest experience by J.D. Power in 2024 for the second year in a row among economy extended stay hotel brands.

2. Housekeeping and Cleanliness

- Each WoodSpring Suites hotel must follow a strict housekeeping schedule, focusing on guest rooms and common areas, including the building exterior.
- Hotels are required to use brand-approved cleaning products and adhere to health and safety guidelines. Hotel staff members are to be trained in the effective use of these cleaning products.
- WoodSpring Suites team members inspect rooms regularly to ensure consistent quality and readiness for new guests. Each room is to be cleaned and inspected following the cleaning prior to renting guest rooms.
- Offer weekly housekeeping services for extended stay guests, with options for additional cleaning upon request.
- Hotels are all subject to the annual Quality Assurance Review conducted by the brand. These reviews focus on property condition, overall cleanliness, ensuring staff members are fully trained and a review of guest experience scores.

3. Maintenance and Safety

- Each WoodSpring Suites is required to conduct routine inspections of HVAC, plumbing, and electrical systems to help prevent breakdowns.
- The goal for each hotel is to respond quickly to maintenance requests to minimize guest inconvenience.
- The staff is also trained in helping ensure all safety equipment, including smoke detectors, fire extinguishers, and emergency lighting are operational and regularly tested.
- WoodSpring staff are trained in emergency response procedures including conducting regular safety drills.

4. Security Measures

- Hotels are required to maintain secure key/card access systems for all guest rooms and restricted areas.
- Security cameras are placed in common areas and parking lots around the hotel and have recording capabilities to help ensure guest and staff safety.

- The hotel provides adequate lighting in hallways, entrances, and outdoor spaces. Lighting is 100% LED helping ensure functionality while managing energy efficiency.
- All staff are trained to be vigilant and focused on how to handle security incidents.
- WoodSpring Suites properties are strongly encouraged to develop and maintain strong working relationships with local police and fire department personnel.

5. Guest Experience and Comfort

- WoodSpring offers complimentary Wi-Fi and convenient in-room amenities like kitchenettes and workspaces. Each guest room also has a land-line telephone.
- The brand regularly reviews guest feedback scores to identify any hotel deficiencies and opportunity areas for improvement.
- Each WoodSpring Suites provides on-site guest laundry facilities (coin operated washers and dryers) and vending options for extended stay convenience. Most hotels also provide on-site fitness rooms for guest usage with convenient access.
- Each hotel strives to maintain a quiet environment by enforcing property rules and addressing disturbances promptly.

6. Staff Training and Development

- WoodSpring Suites hotels invest in ongoing training for all team members to uphold brand standards and customer service excellence. On-line training is available to all WoodSpring hotel owners, management companies and hotel staff to supplement in-hotel training sessions.
- Hotel staff members are cross trained to ensure operational flexibility and coverage.
- Developing a solid workplace, team-oriented culture is paramount to reducing staff turnover and enhancing guest interactions and satisfaction.
- Choice Hotels require hotel ownership and management company representatives to attend the annual Choice Hotels Convention. This event is held each Spring allowing attendees to take advantage of ongoing training opportunities focused on overall hotel performance and maintaining brand standard and guest experience consistency across each of Choice's 22 hotel brands.

7. Financial Controls and Reporting

- Hotels are trained to implement accurate inventory and expense tracking systems.

- WoodSpring Suites hotels use Choice Hotels' proprietary ChoiceAdvantage property management software system to monitor property metrics such as reservation activities, occupancy rates, average lengths of stay, and hotel revenues.
- WoodSpring Suites hotels provide monthly financial reporting to Choice Hotels International. These reports, along with daily business metrics from the ChoiceAdvantage property management software system, are reviewed by an assigned Choice Hotels Regional Director.
- Choice Hotels' Extended Stay Regional Director group has more than 100 collective years of extended stay experience. This group is dedicated to working with hotel ownership and management entities to ensure operational efficiencies, guest experience and adherence to ongoing brand standard requirements.

Conclusion

WoodSpring Suites can ensure consistently high-quality experience for guests while maximizing efficiency and profitability by focusing on these key operational points. Regular Quality Assurance evaluations and adaptation of procedures help maintain the brand's reputation and support long-term success for the WoodSpring franchise system.

WoodSpring Suites – Owners' Franchising & Hotel Experience – Loma Linda, CA

Amanda Bui and Harpreet Dhaliwal are the managing principals of the future corporation which will own the WoodSpring Suites in Loma Linda. WoodSpring Suites is a Choice Hotels product. They currently own the land for two (2) Choice Hotel properties which are the WoodSpring Suites, Perris CA and WoodSpring Suites, Murrieta CA. These hotels are currently in the entitlement process and are on schedule to commence construction in 2026.

Ms. Bui and Mr. Dhaliwal previously owned and operated a high volume ARCO am/pm for more than twelve (12) years with more than 15 employees and a separate, large and high volume express car wash in Perris, California. Mr. Dhaliwal has extensive hotel management experience, managing and operating a Sleep Inn in Palm Coast, Florida. This hotel was losing money and after two years under the helm of Mr. Dhaliwal, it was able to pay all of its bills, retain employees and made a substantial profit. Due to Mr. Dhaliwal's experience and business acumen, this hotel was subsequently sold at a profit.

The operation of WoodSpring Suites, Loma Linda, will be managed by Hotel Management and Consulting (HMC), a professional hotel management company approved by Choice Hotels. HMC is an award-winning, full service hotel property management company operating 100+ extended-stay hotels across 27 states. HMC managed 5 of the top 10, and 11 of the top 25 revenue hotels in the WoodSpring Suites chain for 2025.

City of Loma Linda

25541 Barton Rd, Loma Linda, CA 92354 ☎ 909-799-2830 ✉ commdev@lomalinda-ca.gov

Community Development Department

CONDITIONS OF APPROVAL

PROJECT DESCRIPTION Commercial development for two fast food restaurants with drive-throughs (1,650 sq. ft. and 2,467 sq. ft., respectively), a 6,900 sq. ft. convenience store with gas station, and a four-story 51,570 sq. ft. hotel with an associated subdivision under Parcel Map No. 20665, a Master Sign Program, and associated landscaping and street improvements. The project is located on a 4.3-acre vacant site. The project will be rezoned from Business Park (BP) to General Commercial (C-2).

COMMUNITY DEVELOPMENT/PLANNING DIVISION (909) 799-2827

General

1. The project shall be constructed and operated in accordance with the authorized use as described in the approved application materials and plans provided to the City Council.

2. Within 24 months (two years) of the entitlement approval date, the project shall be exercised by substantial construction or the approval shall become null and void. In addition, if after commencement of construction, work is discontinued for a period of one year, the approval shall become null and void.

PLANNING CASE NUMBERS	EXPIRATION DATE
MDA-2024-0014; GPA-2024-0002, ZMC-2024-0001, TPM-2024-0002, CUP-2024-0002 PPD-2024-0002 MSP-2025-0032, PPD-2026-0017	**May 12, 2028**

3. The review authority may, upon application being filed 30 days prior to the expiration date and for good cause, grant a one-time extension not to exceed 12 months. The review authority shall ensure that the project complies with all current Development Code provisions.

4. The applicant shall indemnify, protect, defend, and hold harmless the City, and any agency or instrumentality thereof, and officers, officials, employees, or agents thereof, from any and all claims, actions, suits, proceedings, or judgments against the City, or any agency or instrumentality thereof, and any officers, officials, employees, or agents thereof to attack, set aside, void, or annul, an approval of the City, or any agency or instrumentality thereof, advisory agency, appeal board, or legislative body, including actions approved by the voters of the City, concerning the project and the approvals granted herein, including without limitation the Conditions of Approval. Furthermore, the applicant shall indemnify, protect, defend, and hold harmless the City, or any agency or instrumentality thereof, against any and all claims, actions, suits, proceedings, or judgments against another governmental entity in which the applicant's project is subject to that other governmental entity's approval and a condition of such approval is that the City indemnify and defend such governmental entity.

5. In the event that this approval is legally challenged, the City will promptly notify the applicant of any claim or action and will cooperate fully in the defense of the matter. Once notified, the applicant agrees to defend, indemnify, and hold harmless the City, their affiliates,

officers, agents and employees from any claim, action or proceeding against the City of Loma Linda. The applicant further agrees to reimburse the City of any costs and attorney's fees, which the City may be required by a court to pay as a result of such action, but such participation shall not relieve applicant of his or her obligation under this condition.

6. During the lifetime of the permit, the applicant must comply with all applicable laws and regulations of every local, state, and federal entity; and all such requirements and enactments will be incorporated by reference as conditions of this permit. The duty of inquiry as to such requirements and any amendments thereto will be upon the applicant and his or her transferees or successor in interest.

7. The applicant, including successors, shall be responsible for compliance with all the Conditions of Approval, mitigation measures, and any recommendations contained in any submitted and approved technical report at his/her sole cost and expense, subject to review and approval of the City of Loma Linda.

8. Violation of any term, condition, or project description associated with this approval, or any applicable law, statute, or ordinance, shall constitute a violation of the Loma Linda Municipal Code and is strictly prohibited. The City reserves the right to initiate civil and/or criminal enforcement and abatement proceedings or, after notice and public hearing, to modify or revoke this approval if such violations occur or if the project operates as or causes a public nuisance. Additionally, the Community Development Department may revoke this permit if the applicant fails to correct a violation within 30 days of receiving written notice. Nothing in this condition shall limit the City's authority to take immediate enforcement action as deemed necessary.

9. A copy of the Action (approval) letter and Conditions of Approval shall be signed by the project applicant, attached to each set of permit plans submitted to the appropriate City department for the project, and made available at the project job site at all times.

10. Construction shall be in conformance with the plan(s) approved by the Planning Commission and/or City Council. Minor modification to the plan(s) shall be subject to approval by the Director through a minor administrative variation process. Any modification that exceeds 10% of the following allowable measurable design/site considerations shall require the refilling of the original application(s) and a subsequent hearing by the appropriate hearing review authority. Modifications may include:

    a. On-site circulation and parking, loading and landscaping;
    b. Placement and/or height of walls, fences and structures;
    c. Reconfiguration of architectural features, including colors, and/or modification of finished materials that do not alter or compromise the previously approved theme; and,
    d. A reduction in density or intensity of a development project.

11. No vacant, relocated, altered, repaired or hereafter erected structure shall be occupied or no change of use of land or structure(s) shall be inaugurated, or no new business commenced as authorized by this permit until a Certificate of Occupancy has been issued by the Building Division. A Temporary Certificate of Occupancy may be issued by the Building Division subject to the conditions imposed on the use, provided that a deposit is filed with the Community Development Department prior to the issuance of the Certificate, if necessary. The deposit or security shall guarantee the faithful performance and completion of all terms, conditions and performance standards imposed on the intended use by this permit.

12. Any future construction or application submitted for development shall meet the requirements of the California Building Code and the California Fire Code as adopted and amended from time to time by the City of Loma Linda and legally in effect at the time of issuance of building permits.

13. Any future grading, construction or submittal of a development application shall comply with all provisions and requirements of the applicable development standards found in the Loma Linda Municipal Code as amended from time to time.

14. This approval, along with future grading and construction, is subject to all the applicable provisions of the Loma Linda Municipal Code, Title 17, which includes development standards and requirements relating to: dust and dirt control during construction and grading activities; emission control of fumes, vapors, gases and other forms of air pollution; glare control; exterior lighting design and control; noise control; odor control; screening; signs, off-street parking and off-street loading; and, vibration control. Screening and sign regulations compliance are important considerations to the developer because they will delay the issuance of a Certificate of Occupancy until compliance is met. Any exterior structural equipment, or utility transformers, boxes, ducts or meter cabinets shall be architecturally screened by wall or structural element, blending with the building design and include landscaping when on the ground.

15. Signs are not approved as a part of this permit. Prior to establishing any new signs, the applicant or future tenants shall apply, and receive approval, for a sign permit from the Planning Division (pursuant to LLMC, Chapter 17.18) and a building permit for construction of the signs from the Building Division, as applicable. All proposed signage shall follow the development standards established by the Master Sign Program on file. Hotel signage will be processed via a separate permit and is not included as part of the Master Sign Program for the development.

16. Any proposed walls, fence, and/or accessory structures will require a separate review and permit from the Planning and Building and Safety Divisions. Submit the applications, along with plans, during the Plan Check process.

17. If it is determined that hazardous wastes are or will be generated by the proposed operation of the facility, all hazardous waste shall be managed in accordance with the California Hazardous Waste Control Law and the Hazardous Waste Control Regulations.

18. The applicant shall work with the City's franchised solid waste hauler, CR&R, to follow a debris management plan to divert the material from landfills by the use of separate recycling bins (e.g., wood, concrete, steel, aggregate, glass) during demolition and construction to minimize waste and promote recycle and reuse of the materials.

19. The applicant may be required to cover the full costs of independent third-party technical review as may be undertaken by City and City monitoring and inspection, including without limitation, special inspector(s)/inspection(s) during times of extensive or specialized plan check review or construction, and inspections of potential violations of the Conditions of Approval. The applicant shall establish a deposit with the Community Development Department, if directed by the Director or designee, prior to the issuance of a construction-related permit and an on-going as-needed basis.

20. Prior to the issuance of building permits, the Development Impact Fees shall be paid to the City of Loma Linda. The fees shall cover 100 percent of the established amount at the time it is due. The impact fees cover public infrastructure, facilities, services, park, traffic fair share, etc. Additionally, the applicant shall either pay the in-lieu fee for the Art in Public Places

program or install a public art feature in compliance with Chapter 17.26 of the Loma Linda Municipal Code.

21. Prior to issuance of building permits, the applicant shall submit to the Building and Safety Division proof of payment or waiver from the City of San Bernardino for sewer capacity fees and the Redlands Unified School District for school fees.

22. In the event that the number of vehicles waiting at the service window exceeds the length of the stacking lanes, personnel from the fast-food restaurants shall manage the queue to ensure that no vehicles block or interfere with on-site vehicular or pedestrian circulation.

23. Menu boards shall be a maximum of 30 square feet, with a maximum height of seven feet, and shall face away from the street and be screened from public view.

24. The operation of the drive-throughs shall be restricted to the hours between 5:00am and 11:00pm. The applicant shall separately file a Conditional Use Permit for late night operations past these hours.

25. All loading/unloading activities including but not limited to the handling of boxes, crates, containers, building materials, or similar objects in such a manner to cause a noise disturbance shall not be permitted between 10:00 p.m. and 7:00 a.m.

26. The property owner shall remove any graffiti on the Subject Property within 24 hours of discovery. The paint utilized to cover the graffiti must substantially match the existing structure. In the event that the paint finish of the abated area is noticeably distinguishable from the rest of the structure, the property owner shall paint additional portions of the building to minimize the disparity, subject to the approval of the Planning Division. Original surface materials installed and designed to not accept paint material such as stone, metal, veneers, etc. shall be restored to original finish with methods accepted and agreed to by the Planning Division.

27. The proposed structure(s) shall adhere to any and all utility easements.

28. Tentative Parcel Map No. 20665 shall be recorded with the San Bernardino County Recorder’s Office prior to issuance of the building permits. A copy of the final map shall be submitted to the City Engineer for record keeping.

29. The Community Development Director shall reserve the right to impose restrictions on hours of operation or require additional parking if parking issues arise with the development.

30. All tenants shall conform to all Business license regulations and maintain a current city license at all times.

31. Any future tenants shall obtain a Land Use Permit with the City prior to obtaining their business license.

32. Delivery of fuel shall not impede or disrupt any primary internal drive aisles.

33. Applicant shall install directional signage at intersection points of the drive-through lanes and internal drive aisles (i.e. yield signs, stop signs, pavement markings, one-way directional signage).

34. Pursuant to State Law AB 827, all businesses are required to have indoor and outdoor trash containers in all common areas. There shall be proper labeling for trash, organic, and recyclables.

35. The applicant shall enhance the architectural elevations for the Starbucks shell and gas station convenience store shell. Special attention shall be given to the west-facing façades

visible from Mountain View Avenue, incorporating additional design articulation, materials, and/or architectural features, to the satisfaction of City staff.

Landscaping

36. During the Plan Check process, the applicant shall submit a digital and one printed set of the Final Landscape Plan prepared by a state licensed Landscape Architect, for review and approval by the Planning and Building Divisions and the Public Works Department. Plans shall cover front yards, parkways, and public right-of-way areas.

37. The Final Landscape Plan shall demonstrate the location of the speakers and menu board locations and shall be screened from the public street.

38. The Final Landscape Plan shall demonstrate how internal pedestrian access areas between the hotel and the commercial components will be treated and marked to facilitate convenience, accessibility, and safety.

39. On the Final Landscape Plan, identify an area near the hotel for a pet relief area for the hotel users.

40. The Final Landscape Plan shall comply to the City's landscape regulation and the State Model Water Efficient Landscape Ordinance, as adopted by the City (LLMC, Ch. 8.12 and Ch. 17.74).

41. The Final Landscape Plan shall be in substantial conformance with the approved Preliminary Landscape Plan on file.

42. All fencing or walls shall be illustrated on the Final Landscape Plan.

43. Separate Landscape and Irrigation Plans for the required Landscape Maintenance District shall be submitted to the Public Works Department during Plan Check. These plans shall include landscaping and irrigation in the public right-of-way, as well as utility laterals, concrete improvements, and tree locations.

44. Any modifications to the Final Landscape Plan or Irrigation Plan shall be reviewed and approved by the Public Works Department and the Planning and Building Divisions prior to issuance of permits.

45. The applicant shall maintain the property and landscaping in a clean, orderly manner and ensure a 14-foot vertical clearance for emergency access at all times.

46. For the lifetime of this permit, the applicant shall replace all dead or missing plants and trees in parkways and public right-of-way areas per the approved Landscape Plan, using similar or equivalent vegetation.

MITIGATION MONITORING REPORTING PROGRAM (MMRP)

47. The applicant shall review and adhere to the adopted Mitigation Monitoring and Reporting Program (MMRP), as approved, for the project site, and as described below in conditions 46 through 66. Compliance with all applicable mitigation measures is required, including but not limited to those addressing biological resources, cultural resource investigations, geology and soils, hazards and hazardous materials, noise, tribal cultural resources, and transportation/traffic impacts. The applicant shall ensure that all mitigation measures are

properly implemented throughout the project's duration and shall provide necessary documentation or reports as required by the City.

Mitigation Measures

48. **MM BIO-1** To the greatest extent feasible, the project will avoid construction activities during the peak nesting season (January 15 through September 15). Regardless of the time of year, nesting bird surveys shall be performed by a qualified avian biologist no more than 3 days prior to vegetation removal or ground-disturbing activities. Pre-construction surveys shall focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior. The qualified avian biologist will make every effort to avoid potential nest predation as a result of survey and monitoring efforts. If active nests are found during the pre-construction nesting bird surveys, a qualified biologist shall establish an appropriate nest buffer to be marked on the ground. Appropriate nest buffer distances shall be determined by the qualified biologist based upon the nesting species, observed behavior of the nesting individuals and their sensitivity to disturbance, nesting phenology, and intensity and duration of disturbance. Construction activities may not occur inside the established buffers, which shall remain on-site until a qualified biologist determines the young have fledged or the nest is no longer active. Active nests and adequacy of the established buffer distance shall be monitored daily by the qualified biologist until the qualified biologist has determined the young have fledged or the project has been completed. The qualified biologist has the authority to stop work if nesting pairs exhibit signs of disturbance.

49. **MM CUL-1** A Monitoring and Treatment Plan that is reflective of the project mitigation ("Cultural Resources" and "Tribal Cultural Resources") shall be completed by the archaeologist and submitted to the Lead Agency for dissemination to the Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN, also known a s San Manuel Band of Mission Indians). Once all parties review and approve the plan, it shall be adopted by the Lead Agency - the plan must be adopted prior to permitting for the project. Any and all findings will be subject to the protocol detailed within the Monitoring and Treatment Plan.

50. **MM CUL-2** Due to the heightened cultural sensitivity of the proposed project area, an archeological monitor with at least 3 years of regional experience in archaeology shall be present for all ground-disturbing activities that occur within the proposed project area (which includes, but is not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation [benches, signage, boulders, walls, seat walls, fountains, etc.], and archaeological work). A sufficient number of archaeological monitors shall be present each work day to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage.

51. **MM CUL-3** Prior to project initiation, a qualified archaeologist should be retained to conduct a Worker's Environmental Awareness Program (WEAP) training on archaeological sensitivity for all construction personnel prior to the commencement of any ground-disturbing activities. The training should be conducted by an archaeologist who meets or exceeds the Secretary of Interior's Professional Qualification Standards for archaeology. Tribal representatives from the Consulting Tribes, such a s Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN, also known as San Manuel Band of Mission Indians) will be allowed to attend and/or participate in the WEAP training should they elect to and will be given ten days' notice prior to the training. Archaeological

sensitivity training should include a description of the types of cultural material that may be encountered, cultural sensitivity issues, regulatory issues, and the proper protocol for treatment of the materials in the event of a find.

52. **MM GEO-1** Stored backfill material shall be covered with water resistant material during periods of heavy precipitation to reduce the potential for rainfall erosion of stored backfill material. If covering is not feasible, then measures such as the use of straw bales or sand bags shall be used to capture and hold eroded material on the project site for future cleanup.

53. **MM GEO-2** All exposed, disturbed soil (trenches, stored backfill, etc.) shall be sprayed with water or soil binders twice a day, or more frequently if fugitive dust is observed migrating from the site within which the project is being constructed.

54. **MM GEO-3** The Applicant shall retain the services of a Qualified Paleontologist meeting the standards of the Society of Vertebrate Paleontology (SVP). The Qualified Paleontologist shall determine the determine that the depth at which the transition to high sensitivity occurs and monitoring becomes necessary, by taking into account: a) the most recent local geologic mapping, b) depths at which fossils have been found in the vicinity of the project area, as revealed by the museum records search, and c) the geotechnical study prepared for the project site. Should the project require excavation that will exceed the depth of low sensitivity surficial sediments as determined by a Qualified Paleontologist, a project-specific paleontological resources monitoring and mitigation plan (PRMMP) shall be developed and adhered to for the duration of ground disturbance activities during construction or as otherwise determined by the Qualified Paleontologist. This plan will address specifics of monitoring and mitigation for the development project, and will take into account updated geologic mapping, geotechnical data, updated paleontological records searches, and any changes to the regulatory framework. This PRMMP shall meet the standards of the SVP.

55. **MM GEO-4** In the event of any fossil discovery, regardless of depth or geologic formation, construction work will halt within a 50-foot radius of the find until its significance can be determined by a Qualified Paleontologist. Significant fossils will be recovered, prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and deposited in a designated paleontological curation facility in accordance with the standards of the SVP and Bureau of Land Management (BLM). A repository will be identified and a curatorial arrangement will be signed prior to collection of the fossils. Any accredited institution may serve as a repository.

56. **MM HAZ-1** All spills or leakage of petroleum products during construction activities will be remediated in compliance with applicable state and local regulations regarding cleanup and disposal of the contaminant released. The contaminated waste will be collected and disposed of at an appropriately licensed disposal or treatment facility. This measure will be incorporated into the SWPPP prepared for the project development.

57. **MM NOI-1** As necessary, the project applicant shall use supplemental measures to reduce the construction noise levels to comply with requirements specified in the Municipal Code. These measures may include, but are not limited to, the erection of noise barriers/curtains, use of advanced or state-of-the-art mufflers on construction equipment, and/or reduction in the amount of equipment that would operate concurrently at the construction site.

58. **MM NOI-2** As feasible, noise and groundborne vibration-generating construction activities whose specific location on the construction site may be flexible (e.g., operation of compressors and generators, cement mixing, general truck idling) shall be placed as far as possible from the - sensitive residential land uses located west of Mountain View Avenue.

59. **MM NOI-3** As necessary, and to the extent feasible, minimize the effects of equipment with the greatest peak noise generation potential via shrouding or shielding. Examples include the use of drills, pavement breakers, and jackhammers.

60. **MM NOI-4** As necessary, provide noise shielding and muffling devices on construction equipment per the manufacturer's specifications.

61. **MM NOI-5** Identify a construction liaison for surrounding residents and property owners to contact with concerns regarding construction noise, vibration and other issues. The liaison's telephone number(s) shall be prominently displayed on the project site during all construction activities. All landowners and occupants of properties adjacent to the project site shall be notified of the anticipated construction schedule at least two weeks prior to groundbreaking. Such notice should outline the estimated duration of construction by phase, the permitted hours and days of construction activities, and shall provide contact information for the designated project construction liaison and contact information for City staff to whom construction related complaints can be made.

62. **MM NOI-6** The City shall require the Applicant's construction contractor(s) to implement the following measures:

    a. Ensure that the operation of construction equipment that generates high levels of vibration including, but not limited to, large bulldozers, loaded trucks, pile-drivers, vibratory compactors, and drilling rigs, is minimized to below 80 vibration decibels (VdB), within 45 feet of existing residential structures and 35 feet of institutional structures (e.g., schools) during construction. Use of small rubber-tired bulldozers shall be enforced within these areas during grading operations to reduce vibration effects.

63. **MM NOI-7** If construction activities with heavy equipment are anticipated to occur within 125 feet of occupied residences, vibration field tests shall be conducted at the property line closest to the nearest occupied residences. If vibrations exceed 80 VdB, the construction activities shall be revised to reduce vibration below this threshold. Such measures may include but are not limited to the following: use of different construction methods, slowing down of construction activity, or other mitigating measures to reduce vibration at the sensitive receptor location.

64. **MM TRAN-1** The project Developer shall pay its fair share (in the amount of $360) to the City of Loma Linda towards intersection improvements at Mountain View Avenue and Redlands Boulevard, in the percentages detailed in Table XVII-4.

65. **MM TCR-1** Due to the heightened cultural sensitivity of the proposed project area, at the discretion of the consulting tribe(s), Tribal monitor(s) authorized to represent YSMN shall be present for all ground-disturbing activities that occur within the proposed project area (which includes, but is not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation [benches, signage, boulders, walls,

seat walls, fountains, etc.], and archaeological work). At the discretion of the consulting tribes, a sufficient number of Tribal monitors shall be present each work day to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage. A Monitoring and Treatment Plan that is reflective of the project mitigation ("Cultural Resources" and "Tribal Cultural Resources") shall be completed by the archaeologist, as detailed within CUL-1, and submitted to the Lead Agency for dissemination to the Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN). Once all parties review and agree to the plan, it shall be adopted by the Lead Agency - the plan must be adopted prior to permitting for the project. Any and all findings will be subject to the protocol detailed within the Monitoring and Treatment Plan.

66. **MM TCR-2** If a pre-contact and/or historic-era cultural resource is discovered during project implementation, ground-disturbing activities shall be suspended 60 feet around the resources), and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. The Project Archaeologist shall develop a research design that shall include a plan to evaluate the resource for significance under CEQA criteria. Representatives from YSMN, the Archaeologist, and the Lead Agency shall confer regarding the research design, as well as any testing efforts needed to delineate the resource boundary. Following the completion of evaluation efforts, all parties shall confer regarding the resource's archaeological significance, its potential as a Tribal Cultural Resource (TCR), and avoidance (or other appropriate treatment) of the discovered resource. Removal of any cultural resource(s) shall be conducted with the presence of a Tribal monitor representing the Tribe, unless otherwise decided by YSMN. All plans for analysis shall be reviewed and approved by the applicant and YSMN prior to implementation, and all removed material shall be temporarily curated on-site. It is the preference of YSMN that removed cultural material be reburied as close to the original find location as possible. However, should reburial within/near the original find location during project implementation not be feasible, then a reburial location for future reburial shall be decided upon by YSMN, the landowner, and the Lead Agency, and all finds shall be reburied within this location. Additionally, in this case, reburial shall not occur until all ground-disturbing activities associated with the project have been completed, all monitoring has ceased, all cataloguing and basic recordation of cultural resources have been completed, and a final monitoring report has been issued to Lead Agency, CHRIS, and YSMN. All reburials are subject to a reburial agreement that shall be developed between the landowner and YSMN outlining the determined reburial process/location and shall include measures and provisions to protect the reburial area from any future impacts. Should it occur that avoidance, preservation in place, and on-site reburial are not an option for treatment, the landowner shall relinquish all ownership and rights to this material and confer with YSMN to identify an American Association of Museums (AAM)-accredited facility within the County that can accession the materials into their permanent collections and provide for the proper care of these objects in accordance with the 1993 C A Curation Guidelines. A curation agreement with an appropriately qualified repository shall be developed between the landowner and museum that legally and physically transfers the collections and associated records to the facility. This agreement shall stipulate the payment of fees necessary for permanent curation of the collections and associated records and the obligation of the Project developer/applicant to pay for those fees. All draft records/reports containing the significance and treatment findings and data recovery results shall be prepared by the archaeologist and submitted to the Lead Agency and YSMN for their review and comment. After approval from all parties, the final reports and site/isolate records are to be submitted to the local CHRIS Information Center, the Lead Agency, and YSMN.

67. **MM TCR-3** If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code $7050.5 and that code enforced for the duration of the project.

BUILDING AND SAFETY DIVISION (909) 799-2836

68. Upon approval, applicant shall submit professionally prepared plans to the Building and Safety Division's online portal for Plan Check. Plans must comply with the adopted California Building and Fire Code as adopted and amended by the City of Loma Linda and legally in effect at the time of issuance of building permit.

69. The applicant shall also submit the structural calculations and Title 24 documentation.

70. The applicant shall comply with the LLMC, Chapter 17.24.310 and the California Green Building Standard Code, Section 5.106 to reduce light pollution.

71. During construction of the site, the project shall comply with Section 9.20 (Prohibited Noises) which limit construction activities to the hours between 7:00 a.m. to 8:00 p.m. Monday through Friday, with no heavy construction occurring on weekends or national holidays. Additionally, all equipment is required to be properly equipped with standard noise muffling apparatus. Adhering to the City's noise ordinance would ensure impacts from construction noise would be less than significant.

72. The applicant shall implement SCAQMD Rule 403 and standard construction practices during all operations capable of generating fugitive dust, which will include but not be limited to the use of best available control measures and reasonably available control measures such as:

    a. Water active grading areas and staging areas at least twice daily as needed;
    b. Ensure that landscaped areas are installed as soon as possible to reduce the potential for wind erosion;
    c. Suspend grading activities when wind gusts exceed 25 mph;
    d. Sweep public paved roads if visible soil material is carried off-site;
    e. Enforce on-site speed limits on unpaved surface to 15 mph; and
    f. Discontinue construction activities during Stage 1 smog episodes.

73. To reduce emissions, all equipment used in grading and construction must be tuned and maintained to the manufacturer's specification to maximize efficient burning of vehicle fuel.

74. The operator shall maintain and effectively utilize and schedule on-site equipment in order to minimize exhaust emissions from truck idling.

75. The applicant shall ensure that existing power sources are utilized where feasible via temporary power poles to avoid on-site power generation during construction.

76. The applicant shall ensure that construction personnel are informed of ride sharing and transit opportunities.

77. The applicant shall provide infrastructure for the Loma Linda Connected Community Program (LLCCP), which includes providing technologically enabled development for each future unit in the development. Plans for the location of the infrastructure shall be provided with the precise grading plans and approved by the city's Technology Services Department prior to

issuance of grading permits. LLCCP info: http://www.lomalinda-ca.gov/asp/Site/LLCCP/AboutLLCCP/Introduction/index.asp

78. The applicant shall comply with all existing and future CARB and SCAQMD regulations related to diesel-fueled trucks, which may include among others: (1) meeting more stringent emission standards; (2) retrofitting existing engines with particulate traps; (3) use of low sulfur fuel; and (4) use of alternative fuels or equipment.

79. Site development and grading shall be designed to provide access to all entrances and exterior ground floor exits and access to normal paths of travel, and where necessary to provide access. Paths of travel shall incorporate (but not limited to) exterior stairs, landings, walks and sidewalks, pedestrian ramps, curb ramps, warning curbs, detectable warnings, signage, gates, lifts and walking surface material. Accessible route(s) of travel shall be the most practical direct route between accessible building entrances, site facilities, accessible parking, public sidewalks, and the accessible entrance(s) to the site. California Building Code 11A and 11B.

FIRE DEPARTMENT (909) 799-2853

80. All construction shall meet the requirements of the 2025 California Building Code (CBC) and the California Fire Code (CFC)/International Fire Code (IFC) as adopted and amended by the City of Loma Linda and legally in effect at the time of issuance of building permit.

81. On-site civil engineering improvement plans shall be submitted to Fire Prevention for review and approval prior to construction.

82. Applicant shall obtain approval of the Fire Access Plan prior to issuance of Building Permits. Significant modifications to the project plans due to the Fire Access Plan shall require an Amendment to Approved Plans Application.

83. CFC Chapter 33 shall be maintained at all times during construction/demolition.

84. National Association of State Fire Marshal (NASFM) Construction Fire Safety training is required for PM and site supervisors.

85. No lumber drops until fire underground is installed and tested, and fire department access points and road have been established.

86. All driveways over 150' shall be engineered to withstand fire trucks.

87. Deferred submittals for a NFPA 13 sprinkler system. Pursuant to CFC Section 903, as amended in Loma Linda Municipal Code (LLMC) Sections 15.28.230-450, the building(s) shall be equipped with automatic fire sprinkler system(s). Pursuant to CFC Section 901.2, plans and specifications for the fire sprinkler system(s) shall be submitted to Fire Prevention for review and approval prior to installation. Fire flow test data for fire sprinkler calculations must be current within the last 6 months. Request flow test data from Loma Linda Fire Prevention.

88. Deferred submittals shall be required for an NFPA 72 Fire alarm system.

89. Deferred submittals required for underground fire utilities.

90. Deferred submittals required for Hazardous Materials Disclosure.

91. Builder must submit the fire safety and prevention plan to the Authority Having Jurisdiction for authorization prior to starting work.

92. Illuminated address for each structure per LLMC 15.28.190 section 505.1. A new address shall be provided by the Fire Department once the project has received entitlement.

93. Comply with Section 503.2.4 Turning Radius**.** The required turning radius of a fire apparatus access road shall be determined by the fire code official.

94. Provide hydrants for fire flow requirements per CFC Annex B and BB.

95. All fire hydrants shall be installed and tested for review and approval by the Fire Department.

96. Fire lines and signage, as indicated on the approved FD access plan, shall be maintained at all times.

97. Structures under construction shall be provided with not less than one approved portable fire extinguisher in accordance with §906 of the CFC.

98. Combustible waste material shall be removed from buildings at the end of each shift of work.

99. Builder must have an all-weather driving surface, and the fire loop and hydrants must be in installed, inspected, and tested prior to any lumber drop.

100. B-107.2 Specifics: Any development within the City of Loma Linda that consists of more than a single structure on a commercially developed site; multiple floor commercial structures; multi-family commercial residences or fire flow requirements in excess of 2000 gpm will require a two point of connection full looped fire supply to the development. All required onsite fire hydrants will be supplied from this looped system and will be private to the development. When there are practical difficulties involved in carrying out the provisions of this ordinance the Fire Code Official is authorized to grant modifications for individual cases on application in writing by the owner or a duly authorized representative. The code official shall first find that a special reason makes enforcement of the strict letter of the ordinance impractical and any modification or change does not lessen any fire protection requirements. If so changes or modifications may be approved by the Fire Code Official or Fire Chief.(Deferred Submittal)

101. For all notes, guidelines and FD apparatus specifications for plan submittal: http://www.lomalindaca.gov/our_city/departments/fire/fire_prevention/fire_plan_check_application

PUBLIC WORKS DEPARTMENT (909) 799-4407

102. Prior to issuance of a grading permit, the Applicant must submit improvement plans on 24" x 36" sheets having the City's standard signature blocks. All plans must be drawn in ink and must be signed by a California State Registered Civil Engineer at the time of first submittal. Applicant must submit improvement plans for the entire project as one package and must include all project improvements shown on the approved project exhibits and those to be designed per these Conditions. Piecemeal submittal of plans is not acceptable. Plans and studies must be signed by a California State Registered Civil Engineer at the time of first submittal. This package must include all supporting studies. For Title Block information, please reach out to Henry Reed at Hreed@lomalinda-ca.gov.

103. The precise grading plan with hydrology study, hydraulic calculations, and soils report for the project shall be approved by the City of Loma Linda Public Works Department prior to issuance of any building permits.

104. The Applicant shall submit final grade certifications, by the grading engineer, to the Public Works Department prior to issuance of any Certificate of Occupancy.
105. Any damage to existing improvements as a result of this project shall be repaired by the Applicant to the satisfaction of the City Engineer.
106. National Pollutant Discharge Elimination System (NPDES) requirements apply, including SWPPP and WQMP.
107. The project shall comply with the Low Impact Development (LID) Principles and LID Best Management Practices (BMPs) for Southern California.
108. The Applicant shall comply with City adopted policies and ordinance regarding the reduction of construction and demolition (C&D) materials, including a required solid waste management plan (SWMP). Coordinate with Public Works.
109. The City of Loma Linda shall be the water and sewer purveyor.
110. The Applicant must provide utilities and design improvements such that all existing and proposed utilities are underground and meeting city specifications, including location, distance and separation requirements, and away from driveways and trees.
111. The Applicant shall pay for the relocation of any power poles or other existing public utilities as necessary.
112. Improvement plans shall include all connections and locations to the City mains for onsite irrigation, including all meter and backflow prevention devices.
113. No commencement of public street work shall be permitted except rough grading, until dedication for that street has been recorded. The Applicant shall obtain a permit prior to any construction within the City's right-of-way.
114. Any abandoned wells on the property or similar structures shall be destroyed in a manner approved by the Public Works Department in accordance with the State of California Department of Health Services or other appropriate oversight agency.
115. All underground structures, except those desired to be retained, shall be broken in, backfilled, and inspected before covering
116. Should future/subsequent project construction require soil excavation or filling in certain areas, soil sampling may be required. If soil is contaminated, it must be properly disposed. Land Disposal Restrictions (LDRs) may be applicable to such soils. Soil sampling shall also be conducted on any imported soil.
117. The Applicant shall comply with the prevailing City standards and requirements at the time of construction.
118. The Applicant shall install improvements (including off-site) to transition traffic and drainage flows from proposed to existing.
119. Comply with state law regarding waste management and the City’s Refuse Collection, Recycling and Disposal Ordinance. The applicant shall coordinate with CR&R.
120. Pay appropriate fees for plan check, inspection, GIS map plan update, and microfilming and storage of maps and plans, and other required fees.
121. Prior to occupancy, the Applicant must complete all improvements per the accepted plans and approved conditions and obtain acceptance for the improvements from the Public Works Department.

122. The Applicant must install root barriers, adjacent to the back side of sidewalk, when planting on-site tree(s) within 10 feet from the public rights-of-way and public sidewalk.
123. Project shall be allowed a single right-in-only access point from Mountain View Avenue. No right-out shall be permitted onto Mountain View Avenue
124. All off-site improvements shall be per the approved plans.
125. The project shall be annexed into the City's LMD prior to Certificate of Use and Occupancy. The applicant shall work with the City Engineer on this item.
126. The applicant shall obtain approval from the City of San Bernadino Wastewater Treatment Department for the review of the on-site uses.

END OF CONDITIONS

Applicant Statement

I have read and accept responsibility for the Conditions of Approval. I agree to abide by and conform to the Conditions of Approval, as well as the mitigation measures listed in the adopted Mitigation Monitoring Reporting Program and the provisions of the Loma Linda Municipal Code pertaining to the project.

_____
Printed Name of Project Applicant

_____
Signature of Project Applicant

_____
Date

City of Loma Linda

Planning Commission Staff Report

B. Consideration of Conditional Use Permit No. CUP-2025-0006, Tentative Parcel Map No. 2025-0005, and Precise Plan of Design No. 2026-0016 for the establishment of the Loma Linda Adventist Spanish Community Services and Worship Center at 11055 New Jersey Street (APN 0292-163-09)

Staff recommends that the Planning Commission take the following actions:

Meeting	Agenda Group
Wednesday, July 15, 2026, 6:00 PM	Public Hearing Items Item: 3B.

To	From
Planning Commission	Lorena Matarrita, Community Development Director

Via
Gabriel Rivera, Associate Planner

RECOMMENDATION:

Staff recommends that the Planning Commission take the following actions:

1. **Determine** that the project is exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15332, Class 32 (In-Fill Development Projects), based on the findings provided in this Staff Report;

2. **Approve** Tentative Parcel Map No. 2025-0005, under Map No. 21053, to split the 8.98 acre project site into four (4) separate parcels;

3. **Approve** Conditional Use Permit No. CUP-2025-0006 to allow the operation of a place of religious worship, including gathering, worship, Bible study, prayer meetings, and related community-service activities, and to authorize the existing 52-foot-tall geodesic dome shell;

4. **Approve** Precise Plan of Design No. 2026-0016 for the site layout, parking, landscaping, architectural design, and related site and street improvements for the proposed 19,604-square-foot Loma Linda Adventist Spanish Community Services and Worship Center located at 11055 New Jersey Street (APN: 0292-163-09) within the Low Density Residential Land Use Designation and Zone.

Approval is based on the Findings contained in this Staff Report and subject to the Conditions of Approval.

BACKGROUND:

The applicant, David Lackyard on behalf of the Loma Linda Spanish Seventh Day Adventist Church, has submitted entitlement plans for the construction of a new place of worship utilizing an existing dome shell called the Loma Linda Adventist Spanish Community Services and Worship Center at 11055 New Jersey Street. Following the submission, the Administrative Review Committee reviewed the proposal, identified corrections and provided comments to the applicant. Upon deeming the project complete, staff then review the project for compliance with the California Environmental Quality Act (CEQA), in which it was determined the project was exempt from CEQA. The Fire Department also reviewed and approved the Fire Access Plan, with a deferred submittal being required for the fire loop underground system plan. The project was also submitted for plan check with the Building division in December of 2025 and therefore qualifies for review under the 2022 California Building and Fire Code. The project is still in review under the Building division as of date.

The project proposes to complete the interior build-out of an existing dome shell, which was constructed approximately around 2010-2015. The applicant provided a permit number from San Bernardino County for the dome shell under permit No. B200901455.

The Planning Commission is being asked to evaluate the proposed lot layout and design of the development, to ensure compliance with all applicable city codes and requirements, and to determine whether the Findings support the project's approval. The project is also being proposed with a Conditional Use Permit to allow for the specific use within the Low Density Residential (R-1) zone, and a Tentative Parcel Map to subdivide the lot into four separate parcels.

PERTINENT DATA

Applicant: David G. Lackyard Planning Services

Owner: Southeastern California Conference of Seventh Day Adventists

Project: Loma Linda Adventist Spanish Community Services & Worship Center

Address: 11055 New Jersey Street, Loma Linda, CA 92373

APN: 0292-163-09

General Plan/Zoning: Low Density Residential / R-1

Lot Size: Approximately 8.98 acres

Development Area: Parcel 2 is identified as 4.982 acres

Existing Condition: Existing dome shell and associated site improvements; portions of the site contain existing orange grove and undeveloped areas.

General Plan, Zoning and Existing Land Uses

	General Plan	**Zoning**	**Existing Use**
Project Site	Low Density Residential (R-1)	Low Density Residential (R-1)	Existing dome shell; orange grove/undeveloped portions
North	Low Density Residential (R-1)	Low Density Residential (R-1)	Undeveloped/open area

South	Institutional-Healthcare (I-HC)	Institutional-Healthcare (I-HC)	Undeveloped land, citrus groves, future location of the Loma Linda Rehabilitation Hospital
East	City of Redlands Jurisdiction	City of Redlands Jurisdiction	Undeveloped land, single family residences
West	Low Density Residential (R-1)	Low Dens	Street frontage and nearby low-density residential/open lands

ANALYSIS:

Project Description

The applicant requests approval of a Conditional Use Permit, Tentative Parcel Map/Map Application, and Precise Plan of Design to construct the 19,604 sq. ft place of worship. The project would complete the interior build-out of the existing dome shell and authorize the property to be used for religious worship, religious education, bible study, prayer meetings, and related community-service functions. The existing dome shell had already existed on the site as far back as 2015, when the site existed in the unincorporated San Bernardino County Area prior to the City's annexation in 2017.

Operations

The proposed operational schedule shown on the operations plan includes Saturday religious worship service and bible study from 8:00 a.m. to 1:00 p.m., followed by prayer meetings from 1:00 p.m. to 5:00 p.m. The operations also include bible study sessions and prayer meetings from 5:00 p.m. to 9:00 p.m for Wednesdays. Also, there will be office hours available from 9:00 a.m to 5:00 p.m.. For employees, there will be 1-2 pastoral staff, 1-2 administrative staff, and approximately 5-10 volunteers depending on services and community programs. Lastly, there will be religious education classes on Saturdays from 8:00 a.m to 10:00 a.m., with occasional youth programs occurring on weekends. The Conditions of Approval may further regulate operational details, including special events, noise, parking management, and compliance with applicable building and fire requirements.

Configuration of the Site/Layout

The site plan places the worship center within the existing central dome building and organizes vehicular access, parking, pedestrian circulation, and landscaping around the building. The proposed site plan retains existing undeveloped and orange grove areas, while concentrating the parking area to the east and southeast of the dome building. A circular drop-off and entry area is shown at the main entrance, with accessible parking spaces and accessible pedestrian routes located near the entry.

Access and Parking

Vehicular access is provided from Orange Street, with the site also fronting New Jersey Street. The preliminary street improvement plan identifies work along both New Jersey Street and Orange Avenue. The Loma Linda Muncipal (LLMC) Code Section 17.24.070 requires a parking ratio of 1 space per 5 persons for sites located within residential zones. The code requires that the project provide 173 spaces while the project will provide 196 parking spaces, with 7 spaces being accessible spaces. Therefore, the proposed project will have an excess of 23 parking spaces which is compliant with the LLMC. The site in existing condition had previously been improved with the parking lot under the prior San Bernardino County permit; therefore, the lot will require minor

Floor Plan

The floor plan includes a central sanctuary/worship area with a raised platform, baptism area, conference room, choir area, pastor office, administrative spaces, classrooms, children/youth rooms, multipurpose room, storage, sound rooms, janitor rooms, kitchen areas, and men's and women's restroom facilities. The floor plan is organized around the existing dome geometry, with the principal worship area located at the center of the building and support rooms arranged around the perimeter.

Architectural Design

The architectural design is defined by the existing dome shell. The proposed exterior design incorporates a prominent dome roof with roof-top panels, exterior plaster wall surfaces, articulated facade columns, fascia and roof ridge elements, and a primary entry feature. The submitted renderings show a contemporary dome structure with warm facade accents, a blue roof-top color, and landscape treatment around the building entry. The color and material palette shown on the plans includes LaHabra exterior plaster, LaHabra exterior facade column finish, Sherwin-Williams Butterscotch for fascia and roof ridges, and Sherwin-Williams Perfect Periwinkle for the roof top.

Landscape Plan

The preliminary landscape plan retains significant open and landscaped areas and shows landscape treatment around the building, parking lot, drive aisles, and perimeter areas. The plan preserves portions of the existing orange grove and incorporates parking lot trees, landscape islands, perimeter planting, and plantings near pedestrian areas. Additional trees not already existing on the lot will consist of drought tolerant trees such as the Chinese Elm, Crape Myrtle, Zelkova “Green Vase”, Holly Oak, and California Redbud. The LLMC Section 17.24.330 requires that one tree be placed for every 5 parking spaces. The applicant is providing 41 trees, which is 1 extra tree than is required by the code. The large majority of landscaping within the front setback area will largely consist of existing citrus orange groves that is considered Prime Farmland from the State, therefore will remain untouched.

Tentative Parcel Map/Map Application

The applicant requests approval of Tentative Parcel Map (Attachment C) in conjunction with the project. The subdivision of the 8.98 acre project site allows for the project to be exempt from conducting an Initial Study, as the subdivision allows for the development area to qualify as an in-fill exemption under CEQA and a large majority of the site remains unaffected by the proposed development. The submitted plans identify a parcel configuration consisting of Parcel 1 (1.77 acres), Parcel 2 (4.98 acres), Parcel 3 (.97 acres), Parcel 4 (1.25 acres). The worship center and primary parking improvements are located on Parcel 2. The map and related improvements have been reviewed in coordination with the entitlement plans and are subject to compliance with the Subdivision Map Act, the Loma Linda Municipal Code, Public Works requirements, and the Conditions of Approval.

Conditional Use Permit

The Conditional Use Permit is required to authorize the proposed place of religious worship and community-services operation within the R-1 zone. As conditioned, the proposed use can be operated in a manner compatible with the site and surrounding area. The proposed worship center is not expected to create continuous daily traffic larger than already exists in the area as the principal weekly activities are scheduled for Saturdays and Wednesday evenings. The applicant is requesting CUP approval for the operation of the proposed place of worship at the property subject to the attached Conditions of Approval (Attachment E). In addition to the operation, the applicant is also seeking a Conditional Use Permit for the allowance of the existing height of the structure, being 52 feet, and the request is consistent with the policies for non-residential structures in the General Plan. The height is also consistent with similar places of worship throughout the City.

ENVIRONMENTAL IMPACT:

The project qualifies for the Class 32 categorical exemption for In-Fill Development Projects under CEQA Guidelines Section 15332. The project is consistent with the applicable General Plan and zoning provisions, subject to approval of the requested CUP and related entitlements; the proposed development area is within City limits and the principal development area on Parcel 2 is identified as 4.982 acres, which is within the five-acre threshold for the Class 32 exemption; the site is substantially surrounded by urbanized and previously improved areas; the project site does not contain habitat for endangered, rare, or threatened species and is a previously disturbed site; and the project would not result in significant effects relating to traffic, noise, air quality, or water quality.

MEASURE V

The project was reviewed by Ganddini Group via a traffic analysis (Attachment D) for consistency with Measure V. The review concluded that the proposed project complies with Measure V. The project's operating profile is centered on weekend worship and midweek evening religious education/prayer activities, and the project is not anticipated to create a significant degradation of the circulation system. Any required frontage, access, or circulation improvements will be implemented through the Conditions of Approval and Public Works plan check.

PUBLIC HEARING NOTICE AND COMMENTS

The public notice for this project was duly posted on July 2, 2026, in three public places (City Hall, library, post office), and mailed to the owners of property within a radius of 300 feet of the exterior boundaries of the subject property as required by State law. Additionally, the notice was made available on the City's website and at the project site. As of date, staff has received an email regarding a question about the denomination and staff answered the resident.

FINDINGS

In an effort to ensure that the proposed project is consistent with the General Plan, compliant with the Loma Linda Municipal Code and other City requirements, compatible with the surrounding area, and appropriate for the site, findings have been made to support approval of the requested entitlements.

The Conditional Use Permit findings are as follows:

Finding No. 1:	**The proposed use is allowed within the applicable zone and complies with all other applicable provisions the municipal code, the general plan, and any applicable specific plan;**
Finding of Fact:	The proposed place of religious worship and community-services use may be authorized through the CUP process. The project has been reviewed for land use compatibility, access, parking, architecture, operations, public services, and public safety as it relates to the LLMC. As conditioned, the proposed use will comply with applicable provisions of the Loma Linda Municipal Code and the Loma Linda General Plan.
Finding No. 2:	**The proposed use will not be detrimental to the public health, safety, or welfare, or materially injurious to properties or improvements in the vicinity.**

Finding of Fact:	The project will complete an existing building shell and provide required parking, accessible paths of travel, fire access, landscaping, drainage, utilities, and street improvements. The Fire Department Access Plan was reviewed and approved by the Fire Department. The project has been reviewed by the City and its traffic consultant, and the traffic review found compliance with Measure V. Conditions of Approval will ensure that final building, fire, grading, utility, and operational requirements are satisfied.
Finding No. 3:	**The subject site is physically suitable for the type, density, and intensity of the proposed use including access, utilities, and services;**
Finding of Fact:	The site contains approximately 8.98 acres overall, with the principal development area located on Parcel 2, identified as 4.982 acres. The site plan provides the worship center building sufficient parking, accessible parking spaces, pedestrian access, emergency access, landscaping, and utility improvements. The dome shell and parking lot are already existing conditions on the site, which would only require a buildout of the dome and moderate work to the parking lot.
Finding No. 4:	**The proposed use is compatible with existing and planned land uses in the vicinity.**
Finding of Fact:	The proposed worship and community-services use is community-serving and has limited scheduled operations, primarily on Saturdays and Wednesday evenings. The existing dome shell and parking lot already exists on the property, and the project would complete the structure with architectural, landscape, parking, and circulation improvements. Conditions of Approval will regulate operations to maintain compatibility with surrounding land uses.

The Precise Plan of Design findings are as follows:

Finding No. 1:	**The proposal complies with the provisions within the municipal code and is consistent with the general plan and any applicable specific plan.**
Finding of Fact:	The project was reviewed by the Administrative Review Committee and found to be consistent with the General Plan and Compliant with the standards of the LLMC. The project will be required to satisfy all applicable Building and Safety, Fire, Public Works, accessibility, and landscape requirements prior to issuance of building permits.

Finding No. 2:	The site layout and design is of high quality, architecturally and aesthetically pleasing, and is compatible with the character of the neighborhood and general community;
Finding of Fact:	The project completes an existing dome shell with a cohesive architectural palette consisting of exterior plaster, facade columns, roof fascia and ridge accents, and a distinctive roof-top treatment. The primary entry is articulated, and the building is supported by landscaping and pedestrian improvements that improve the site's visual quality. The landscaping on the site will utilize large portions of existing citrus groves and incorporate it into the project site.
Finding No. 3:	**The proposal will result in an efficient, safe and desirable project that is not materially detrimental to public health, safety, or welfare, or injurious to persons, property, or improvements in the vicinity and zoning district in which the property is located.**
Finding of Fact:	The site plan provides sufficient parking, accessible parking near the entrance, pedestrian walkways, a drop-off/circular entry area, and emergency access. There is no expected impacts to public health, safety, or welfare to the surrounding community as the work will not require significant construction, outside of the buildout of the existing dome structure. Final grading, drainage, utility, public improvement, fire, and building details will be reviewed through plan check and the implementation of the Conditions of Approval.
Finding No. 4:	**The project will not be detrimental to the harmonious and orderly growth of the city.**
	If approved, the project will result in the completion of the incomplete dome shell, which has remained underutilized on the site for over 10 years. The project will establish a new community serving place of worship while providing sufficient parking for the use. The proposed use of the site will not be detrimental to the harmonious and orderly growth of the City.

CONCLUSION:

The proposed Loma Linda Adventist Spanish Community Services & Worship Center would complete the interior build-out and site improvements for an existing dome shell located at 11055 New Jersey Street. The project would provide a community-serving religious worship and community-services facility with associated parking, landscaping, access, grading, drainage, utility, and frontage improvements.

The project has been reviewed for land use compatibility, site planning, architectural design, circulation, public services, and environmental compliance. The traffic consultant, Ganddini Group, reviewed the project and found it to be in compliance with Measure V. The project also qualifies for a CEQA Class 32 In-Fill Development Projects exemption based on the analysis provided in this report.

Based on the analysis provided in this Staff Report, staff recommends that the Planning Commission determine the project exempt from CEQA and approve Conditional Use Permit No. CUP-2025-0006, Tentative Parcel Map No. 2025-0005, and Precise Plan of Design No. 2026-0016, subject to the Conditions of Approval.

Attachments

Attachment A - Vicinity Map.pdf

Attachment B - Architecture, Prelim Grading, Prelim Street Improvement Plans

Attachment C - Tentative Parcel Map No. 21053

Attachment D - Ganddini Group Traffic Analysis

Attachment E - Conditions of Approval.pdf

Attachment A

Vicinity Map



LOMA LINDA ADVENTIST SPANISH COMMUNITY SERVICES & WORSHIP CENTER
11055 NEW JERSEY STREET
CUP-2025-0006, MDA-2024-0036, PPD-2026-0016



LaHabra® STUCCO SOLUTIONS FROM SCRATCH TO FINISH

EXTERIOR PLASTER

TITANIUM
P-1661 (38)
BASE 200

LaHabra® STUCCO SOLUTIONS FROM SCRATCH TO FINISH

EXTERIOR FACADE COLUMNS

CAREMELO
P-192 (57)
BASE 200

SHERWIN-WILLIAMS

SW 6377
Butterscotch

FASCIA AND
ROOF RIDGES

SW 9065
Perfect
Periwinkle

ROOF TOP

LOMA LINDA ADVENTIST SPANISH COMMUNITY SERVICES & WORSHIP CENTER
11055 NEW JERSEY STREET
CUP-2025-0006, MDA-2024-0036, PPD-2026-0016





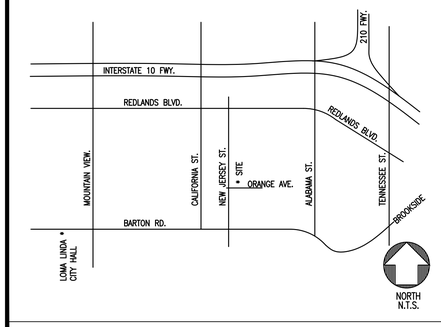
LOMA LINDA ADVENTIST SPANISH COMMUNITY SERVICES & WORSHIP CENTER
11055 NEW JERSEY STREET
CUP-2025-0006, MDA-2024-0036, PPD-2026-0016

LOMA LINDA ADVENTIST SPANISH COMMUNITY SERVICES & WORSHIP CENTER

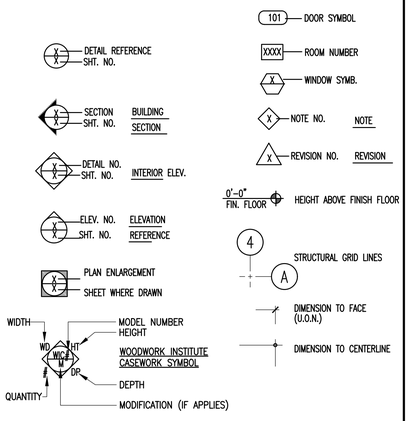
11055 NEW JERSEY ST.
LOMA LINDA CA.
PARCEL # 0292-163-09

AB	anchor bolt	FIN	finish (ed)
ABV	above	FLR	floor (ing)
AC	asphaltic concrete	FLUOR	fluorescent
A/C	air conditioning	FND	foundation
ADD	addendum	FTG	footing
AGG	aggregate		
ALT	alternate	GA	gage, gauge
ALUM	aluminum	GI	galvanized iron
APPROX	approximate	GL	glass, glazing
ARCH	architect (ural)	GP	galvanized pipe
AUTO	automatic	GYP. BD.	gypsum board
		GRD	grade, grading
BD	board	GSS	galvanized steel
BEL	below	GV	galvanized
BET	between		
BIT	bituminous	HB	hose bibb
BLDG	building	HC	hollow core
BLK	block	HD	heavy duty
BLKG	blocking	HDR	header
BM	bench mark	HDW	hardware
BOT	bottom	HGT	height
BRG	bearing	HM	hollow metal
BRZ	bronze	HOR	horizontal
BUR	built up roofing	HTG	heating
BW	both ways	HVAC	heating/ventilating air conditioning
CAB	cabinet	HWD	hardwood
CAD	cadmium	WH	water heater
CB	catch basin		
CEM	cement	ID	inside diameter
CER	ceramic	INCL	include (d, ing)
CFT	cubic foot	INSUL	insulate (d, ion)
CI	cast iron	INT	interior
CIR	circle	INV	invert
CIRC	circumference		
CLG	ceiling	JST	joist
CLL	contract limit line	JT	joint
CLR	clear (ance)		
CLS	closure	KIT	kitchen
CM	centimeter	KO	knockout
CMU	concrete masonry unit		
COL	column	LAB	laboratory
COMB	combination	LAM	laminate (d)
COMPO	composition	LAV	lavatory
CONC	concrete	LBL	label
CONT	continuous/ continue	LH	left hand
CONTR	contract (or)	LL	live load
CONST	construction	LT	light
CORR	corrugated	LTL	lintel
CPR	copper	LW	lightweight
CPT	carpet (ed)		
CYD	cubic yard	MAS	masonry
		MAX	maximum
DB	drop beam	MB	machine bolt
DEMO	demolish, demolition	MBR	member
DH	double hung	MC	medicine cabinet
DIAG	diagonal	MECH	mechanic
DIAM	diameter	MED	medium
DIM	dimension	MET	metal
DIV	division	MFR	manufacture (er)
DR	door	MH	manhole
DS	downspout	MIN	minimum
DTL	detail	MIR	mirror
DWG	drawing	MISC	miscellaneous
DWR	drawer	MLD	molding, moulding
		MM	millimeter
E	east	MT	mount (ed, ing)
(E)	existing	MTL	material (s)
EF	each face		
ELEV	elevation	N	north
ELEC	electric (al)	(N)	new
EMER	emergency	NAT	natural
ENC	enclosure	NIC	not in contract
EP	electrical panelboard	NOM	nominal
EQ	equal	NTS	not to scale
EQUIP	equipment		
EST	estimate	OA	overall
EWC	electric water cooler	OBSC	obscure
EXIST	existing	OC	on center
EXHST	exhaust	OD	outside diameter
EXP	exposed	OH	overhead
EXT	exterior	OPG	opening
		OPP	opposite
FA	fire alarm		
FB	flush beam	PAR	parallel
FD	floor drain	PB	panic bar
FE	fire extinguisher	PCC	precast concrete
FFE	finished floor elevation	PCF	pounds per cubic foot
FFL	finished floor line	PED	pedestal
		PERF	perforate (d)
		POS	per owner specification
		PRE.FAB.	prefabricate (d)
		PFL	pounds per linear foot
		PIP	poured in place
		PL	property line
		PLT	plate
		PLAS	plaster
		PLYWD	plywood
		PNL	panel
		PNT	paint (ed)
		POC	point of connection
		POS	per owner specification
		PSF	pounds per square foot
		PSI	pounds per square inch
		PT	point
		PVC	polyvinyl chloride
		RA	return air
		RAD	radius
		RCP	reinforced concrete pipe
		RD	roof drain
		REFR	refrigerator
		REG	register
		REM	remove
		RET	return
		RFG	roofing
		RH	right hand
		RM	room
		RO	rough opening
		ROW	right of way
		S	south
		SC	solid core
		SCH	schedule
		SD	storm drain
		SEC	section
		SFR	single family residence
		SH	shelf, shelving
		SHT	sheet
		SIM	similar
		SIMP.	simpson strong-tie connector (s)
		SL	sliding, slider (window)
		SP	single pane window (glass)
		SPEC	specification (s)
		SPK	speaker
		SQ	square
		SS	stainless steel
		ST	steel
		STA	station
		STD	standard
		STO	storage
		STR	structural
		SUS	suspended
		SYM	symmetry (ical)
		SYS	system
		TEL	telephone
		T&G	tongue & groove
		THK	thick (ness)
		TV	television
		TYP	typical
		UNO	unless noted otherwise
		UR	urinal
		VERT	vertical
		VIN	vinyl
		W	west
		W/	with
		W/H	water heater
		W/O	without
		WC	water closet
		WD	wood
		WI	wrought iron
		WIN	window
		WPT	working point
		WR	water repellant
		WWF	welded wire fabric
		XS	extra strong
		L	angle
		℄	center line
		d	penny
		⊥	perpendicular
		PL	plate
		ø	round
		@	at

ABREVIATIONS LEGEND



LOCATION MAP



SYMBOLS LEGEND

THIS PROJECT SHALL COMPLY WITH LOMA LINDA CONNECTED COMMUNITY PROGRAM (LLCCP). THE FIBER OPTIC/DATA ROOM SHALL BE EQUIPPED WITH CITY'S NEW FIBER-OPTICS INTERFACE AND COPPER CABLING. LLCCP INFORMATION CAN BE FOUND ONLINE: HTTPS://WWW.LOMALINDA-CA.GOV/SERVICES/L L C C P/THE L L CC C P STANDARD

THIS PROJECT SHALL COMPLY WITH C&D ORDINANCE.

DRIVE ISLES SHALL COMPLY WITH CITY STANDARDS.

BUILDING AND FIRE CODE STANDARDS WILL REFERENCE 2022 CBC AND CFC.

CFC CHAPTER 33 SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION/DEMOLITION.

NASFM CONSTRUCTION FIRE SAFETY TRAINING FOR PM AND SITE SUPERVISORS.

FIRE SAFETY PLAN REVIEWED AND APPROVED BY AHJ PRIOR TO START OF PROJECT.

NO LUMBER DRIPS UNTIL FIRE UNDERGROUND IS INSTALLED AND TESTED, AND FIRE DEPARTMENT ACCESS POINTS AND ROAD HAVE BEEN ESTABLISHED.

DEFERRED SUBMITTALS FOR A NFPA 13 SPRINKLER SYSTEM.

DEFERRED SUBMITTALS FOR A NFPA 72 NOTIFICATION AND MONITORING SYSTEM.

ILLUMINATED ADDRESS FOR EACH STRUCTURE PER LLOMC 15.28.190 Sec. 505.1

NEW ADDRESS WILL BE ASSIGNED BY FIRE DEPARTMENT ONCE PROJECT IS APPROVED.

REQUIREMENTS

FIRE DEPARTMENT NOTES:

- CFC CHAPTER 33 SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION/DEMOLITION.
- NASFM CONSTRUCTION FIRE SAFETY TRAINING FOR PROJECT MANAGER AND SITE SUPERVISORS.
- FIRE SAFETY PLAN REVIEW AND APPROVED BY AHJ PRIOR TO START OF PROJECT.
- NO LUMBER DROPS UNTIL FIRE UNDERGROUND IS INSTALLED AND TESTED, AND FIRE DEPARTMENT ACCESS POINTS AND ROAD HAVE BEEN ESTABLISHED.
- KNOX BOX SHALL BE PROVIDED AT ENTRY GATES AND/OR TO THE MAIN ENTRANCE OF THE BUILDING TO ACCOMMODATE FIRE MARSHAL ACCESS.

1. BUILDING ADDRESS NUMBERS TO BE PROVIDED ON THE FRONT OF BUILDING AND SHALL BE VISIBLE AND LEGIBLE FROM STREET FRONTING THE PROPERTY. SAID NUMBERS SHALL CONTRACT WITH THEIR BACKGROUND. FIRE CODE SECTION 901.4.4
2. COMMERCIAL DUMPSTERS OR CONTAINERS WITH AN INDIVIDUAL CAPACITY OF 1.5 CUBIC YARDS OR GREATER SHALL NOT BE STORED OF PLACED WITHIN FIVE FEET OF COMBUSTIBLE WALLS, OPENINGS OR COMBUSTIBLE ROOF EAVE LINES UNLESS AREAS CONTAINING DUMPSTERS ARE PROTECTED BY AN APPROVED SPRINKLER SYSTEM. FIRE CODE SECTION 1103.2.2.
3. ILLUMINATED EXIT SIGNS SHALL BE INSTALLED TO BE VISIBLE FROM ANY DIRECTION OF APPROACH. THEY SHALL ALSO BE LOCATED SO THAT NO POINT IN A CORRIDOR IS MORE THAN 100.0' OR THE LISTED VIEWING DISTANCE. LOW LEVEL EXIT SIGNS OR EXIT PATH MARKINGS SHALL BE PROVIDED FOR THIS OCCUPANCY.
4. THE MEANS OF EGRESS INCLUDING THE EXIT DISCHARGE SHALL BE ILLUMINATED AT ALL TIMES.
5. ANY REQUIRED FIRE SPRINKLER, FIRE HYDRANT, FIRE MAIN AND FIRE ALARM SYSTEM INSTALLATIONS NECESSITATED BY THIS CONSTRUCTION MUST BE MADE UNDER SEPARATE DETAILED FIRE PROTECTION PLANS APPROVED BY THE FIRE DEPARTMENT PRIOR TO INSTALLATION.
6. PORTABLE FIRE EXTINGUISHERS SHALL BE PROVIDED IN ACCORDANCE WITH CALIFORNIA FIRE CODE SECTION 906.

CONSTRUCTION NOTES:

1. CONTRACTOR SHALL VISIT SITE AND REVIEW ALL CONDITION TO FULLY FAMILIARIZE HIM/HER-SELF WITH THE PROJECT AND RELATED CONDITIONS.
2. CONTRACTOR SHALL CHECK, REVIEW AND VERIFY ALL FIELD MEASUREMENTS WITH PROPOSED SCOPE OF WORK AND NOTIFY ARCHITECT OF ANY DISCREPANCY PRIOR TO STARTING OR CONTINUING ANY WORK.
3. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER DRAWN SCALES SHOWN ON DRAWINGS. NOTE: CONTRACTOR SHALL NOT SCALE DRAWINGS. ALL DIMENSIONS SHALL BE VERIFIED AND REVIEWED BY CONTRACTOR. ANY DISCREPANCIES OR INFORMATION UNCLEAR TO CONTRACTOR SHALL BE REVIEWED WITH ARCHITECT FOR DIRECTION ANY ASSUMPTIONS MADE BY CONTRACTOR, WHICH CONFLICT WITH INTENT OF PROJECT, SHALL BE REMOVED AND/OR REPLACED AT THE CONTRACTOR'S EXPENSE.
4. CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL EXISTING CONSTRUCTION. ANY ITEM TO REMAIN OR NOT IN SCOPE OF PROJECT LIMITS THAT IS DAMAGED OR INJURED, SHALL BE, AT CONTRACTORS' EXPENSE, REPLACED, REPAIRED OR REFINISHED TO "AS-IS" CONDITION PRIOR TO CONSTRUCTION OR DEMOLITION.
5. TYPICAL DETAILS AND GENERAL NOTES ARE MINIMUM REQUIREMENTS FOR IMPLEMENTING INTENT OF PROJECT. THE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND CONSTRUCTION SPECIFICATIONS AND DRAWINGS ARE ALL ONE AND THE SAME AND AND NOT SEPARATE DOCUMENTS AS TO INFORMATION AND/OR PERFORMANCE OR NON-PERFORMANCE OF INDIVIDUAL TRADES AND THEIR CONTRACT.
6. THE INFORMATION INDICATED ON THESE DRAWINGS REPRESENT A FINISHED AND COMPLETE STRUCTURE. THE DRAWINGS DO NOT INDICATE METHOD OF CONSTRUCTION.
7. CONSTRUCTION EQUIPMENT OR MATERIALS SHALL BE EVENLY DISTRIBUTED AND PLACED, IF ON ROOF OR FLOOR STRUCTURE. LOADING SHALL NOT EXCEED DESIGN LIVE LOAD PER SQUARE FOOT.
8. TEMPORARY FIRE PROTECTION SHALL BE REQUIRED AND MAINTAINED DURING CONSTRUCTION. CONTACT AND REVIEW REQUIREMENTS OF LOCAL GOVERNING FIRE MARSHALL HAVING JURISDICTION PRIOR TO COMMENCING AN CONSTRUCTION.
9. AT ALL TIMES, THE BUILDING, WORK AREA AND SITE SHALL BE KEPT CLEAN, FIRE OF DEBRIS AND ORDERLY. ALL DIRT, DEBRIS WASTE, RUBBISH AND DISUSED IMPLEMENTS AND EQUIPMENT SHALL NOT ACCUMULATE OVER A 24-HOUR PERIOD. FLAMMABLE AND/OR TOXIC MATERIALS SHALL NOT BE STORED IN PROJECT CONSTRUCTION STRUCTURES OR ADJACENT TO STRUCTURES.

COMPLIANCE REQUIREMENTS

THE CONSTRUCTION OF THIS PROJECT SHALL MEET
THE REQUIREMENTS OF THE FOLLOWING:

2022 C.B.C. & (IBC),
2022 C.P.C. & (IPC),
2022 C.E.C. & (I.E.C.)
2022 C.M.C. & (I.M.C.),
2022 C.F.C. & (I.F.C),
2022 C.G.B.S.C.,
2022 C.E.enC.,
CITY OF LOMA LINDA MUNICIPAL CODE.

NOTES

PROJECT DATA:

SCOPE

COMPLETE INTERIOR BUILD-OUT OF (E) GEODESIC DOME SHELL W/A.D.A. AND PARKING.
NOTE: GEODESIC DOME SHELL; COMPLETED IN 2009, PERMIT # B200901455

LEGAL DESCRIPTION:

PARCEL # 0292-163-09

BUILDING DATA:

DESCRIPTION

ZONING:	LOW DENSITY RESIDENTIAL (R1)
STORIES:	ONE
OCCUPANCY:	A-3 OCCUPANCIES
CONSTRUCTION TYPE:	TYPE II-B
SPRINKLED:	YES
USE:	PLACE OF RELIGIOUS WORSHIP. (Religious education classes provided during worship)
LOT SIZE:	LOT = 391376.4 SF./43560 ACRE = 8.98 ACRES
LOT COVERAGE (40% MAX.):	19604/391376.4 = 5% COVERAGE

BUILDING AREA:

FIRST FLOOR AREA	19,604 SQ. FT.
OCCUPANT LOAD (Table: 1004.4.5)	868 Total Occupants. (Per. sht. A1.0)

MINIMUM PLUMBING FIXTURE REQUIRED

TOTAL OCCUPANT LOAD PER CPC TABLE - "A"
FIRST FLOOR: 975/2 = 489

FIXTURES REQUIRED: (MEN)-489	4 WATER CLOSETS	/	PROVIDED (MEN) 5 WATER CLOSETS
	4 URINALS	/	6 URINALS
	3 LAV.'s	/	4 LAV.'s
FIXTURES REQUIRED: (WOMEN)-489	9 WATER CLOSETS	/	PROVIDED (WOMEN) 10 WATER CLOSETS
	5 LAV.'s	/	5 LAV.'s
DRINKING FOUNTAINS: REQUIRED:	4 D.F.	/	PROVIDED 4 HI-LOW D.F.
MOP SINK	1	/	1

OWNER REPRESENTATIVE:
LACKYARD PLANNING SERVICES. (L.P.S.)
DAVID G. LACKYARD
P.O. BOX 3341, BIG BEAR CITY, CA. 92314
(909) 659-6610, dglackyard@gmail.com
https://archinect.com/lackyard

CONTRACTOR
GM TOWER BUILDERS INC.
ARTURO ALVAREZ
543 BIRCH ST.
LAKE ELSINORE, CA. 92530
(949) 466-1301
gabrielartu@aol.com

CIVIL ENGINEER
CORNERSTONE LAND SURVEYING INC.
20730 KNOB PLACE
PERRIS CA. 92570
Stefan: 951-736-0200
stefan@coronasurveyor.com

STRUCTURAL ENGINEER
KNAPP ENGINEERING
408 STODARD AVE.
SAN BERNARDINO CA. 92401
909-889-0115
knappae@aol.com

E.M.P.
EquitySpec MEP Consulting
www.equityspecengineers.com
Dave Celmer / celmerdave@gmail.com
Office: 909-534-3596 / Cell: 760-834-1537
44489 Town Center Way, Ste D529
Palm Desert, CA. 92260

PROJECT INFORMATION

MISC. NOTES:

1. ALL WORK TO BE PERFORMED SHALL MEET ALL LOCAL, STATE AND FEDERAL CODES AND REGULATIONS AS WELL AS THE CURRENT EDITION OF THE UNIFORM BUILDING CODE AND RELATED MUNICIPAL CODES.
2. THE CITY OF LOMA LINDA, BUILDING AND SAFETY HAS PERMITTING JURISDICTION. CALL (909) FOR INFORMATION REGARDING PERMITS AND INSPECTIONS.

AGENCY NOTES:

1. THE A.Q.M.D. SHOULD BE NOTIFIED FOR ANY DEMOLITION AND ASBESTOS REMOVAL IN THE BUILDING.

INSPECTIONS:

- The Building Inspector is available at the public counter and via telephone only between the hours of 8:00 a.m. to 10:00 a.m. Monday through Thursday.
- Inspection requests may be phoned in to (909) 799-2837, 24 hours a day with a touchtone phone.
- Inspection requests received by 5:00 p.m. will be performed the following day between 11:00am-1:00pm.

NOTES

GENERAL CONTRACTOR SHALL PROVIDE COMPLETE PLANS, SPECIFICATIONS AND ENGINEERING CALCULATIONS FOR THE FOLLOWING SYSTEMS:

INSTALLATION OF THESE SYSTEMS SHALL NOT BEGIN UNTIL PLANS, SPECIFICATIONS & CALCULATIONS HAVE BEEN ACCEPTED AND APPROVED BY THE LOCAL AUTHORITY OF JURISDICTION

- FIRE SERVICE SERVICE UNDERGROUND.
  (Hydrant calculations, and underground fire line/water plan
- AUTOMATIC FIRE SPRINKLERS
- FIRE ALARMS
- SITE TRASH ENCLOSURE
- SIGNAGE

DEFERRED SUBMITTALS

SHEET NUMBER	SHEET INDEX	
	SITE DEVELOPMENT	--
T 1.0	TITLE SHEET / GENERAL INFORMATION	
T 2.0	DEMOLITION -SITE PLAN	
T 3.0	NEW - SITE PLAN	
LS 1.0	LANDSCAPE -SITE PLAN	
SD 1.0	ENLARGED SITE PLAN	--
SD 1.1	DETAILS	
SD 1.2	DETAILS	
	SITE IMPROVEMENT/CIVIL	
1.of.4	PRELIM. STREET IMPROVEMENT	
2.of.4	PRELIM. GRADING PLAN	
3.of.4	PRELIM. GRADING PLAN	
4.of.4	PRELIM. UTILITY PLAN	
	ARCHITECTURAL	
A 1.0	EXIT / OCCUPANCY PLAN	
A 2.0	FLOOR PLAN	
A 4.0	EXTERIOR ELEVATIONS	
A 4.1	EXTERIOR ELEVATIONS	
A 4.2	CROSS SECTIONS	
	ELECTRICAL	
E-1.0	TITLE SHEET -CODES, ABBREVIATIONS	
E-1.4	SITE PHOTOMETRIC PLAN	
E-1.5	ELECTRICAL SITE PLAN	
E-2.1	POWER AND TELECOM PLAN	
E-3	Load Calc's / Single Line	
	FIRE	
F 2.0	FIRE ACCESS & WATER PLAN (FOR REFERENCE ONLY)	
	SURVEYOR	
Pg.s 1-7	*Topographic mapping*	

DISCLAIMER REGARDING FINAL CONSTRUCTION:

THE DEVELOPMENT OF THESE PLANS HAVE BEEN DRAWN IN ACCORDANCE WITH THE APPLICABLE DEVELOPMENT CODES IN THE CONTROLLING JURISDICTION. ANY CONTRACTOR PERFORMING CONSTRUCTION SHALL RECOGNIZE THESE PLANS TO BE THE GUIDING FACTOR IN ACCOMPLISHING THE DESIGN CRITERIA AS ESTABLISHED WITH THE OWNER DURING THE DESIGN PROCESS. CONTRACTOR SHALL FIELD VERIFY AND ANALYZE ALL FACETS OF CONSTRUCTION WITH THESE PLANS TO INSURE CONNECTIONS, DIMENSIONS, LUMBER SIZES, AND SPECIES WILL BE IN ACCORDANCE WITH THE ALLOWABLE CONSTRUCTION TECHNIQUES AND BUILDING CODES REQUIRED TO ACCOMPLISH COMPLETION AND INTENT OF THIS PROJECT. MODIFICATIONS MAY BE REQUIRED TO ACCOMPLISH THE INTENDED PURPOSE FOR WHICH THESE PLANS WERE DRAWN. THE ARCHITECT/ DESIGNER, ENGINEER OR PLANNER SHALL NOT BE RESPONSIBLE FOR ANY REVISIONS THAT MAY RESULT IN ADDITIONAL COST/ EXPENSES TO THE CONTRACTOR OR THE OWNER.

DAVID G. LACKYARD
PLANNING SERVICES
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BIG BEAR CITY CA. 92314
EMAIL: dglackyard@gmail.com
https://archinect.com/lackyard

PROJECT:

L.L. ADVENTIST SPANISH COMMUNITY SERVICES & WORSHIP CENTER
11055 NEW JERSEY ST.
LOMA LINDA CA. 92373
PARCEL # 0292-163-09

CONTROLLING JURISDICTION:
LOMA LINDA CITY HALL
25541 BARTON ROAD
LOMA LINDA CA. 92354
909-799-2830

OWNER:

ORANGE-NEW JERSEY PROPERTY
- PARTNERSHIP -
SOUTHEASTERN CALIF.
CONFERENCE OF
SEVENTH DAY ADVENTISTS

SUBMITTAL FOR ENTITLEMENTS:

CONDITIONAL USE PERMIT
AND
PRECISE PLAN OF DESIGN

PROPOSED OPERATION:
SATURDAY:
Religious Gathering and Worship
8:00 AM TO 1:00 PM.

Bible Study Sessions:
Prayer Meetings:
1:00 PM to 5:00 PM

WEDNESDAY:
Bible Study Sessions:
Prayer Meetings:
5:00 PM to 9:00 PM

ISSUANCES

DATE	DESCRIPTION

BUILDING & SAFETY REVISIONS

MARK	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		

OWNER/CONTRACTOR REVISIONS

MARK	DATE	DESCRIPTION
A		
B		
C		
D		
E		
F		

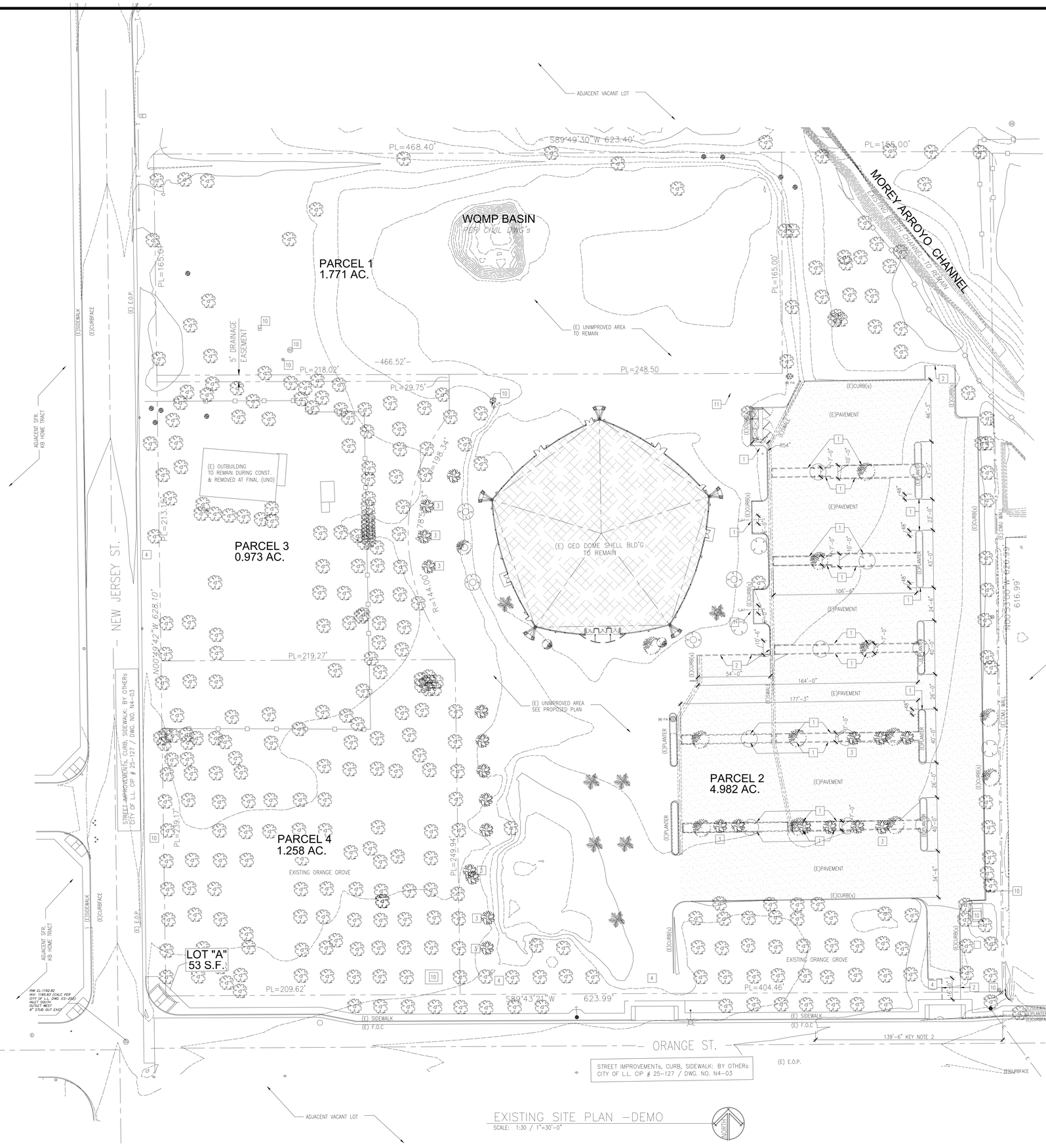
PROJECT NO:	20242201
CAD DWG FILE:	
DRAWN BY:	D.L.
DATE	06/15/2026

SHEET TITLE

GENERAL INFORMATION

T 1.0

CUP-2025-006, MDA-2024-0036, MPD-2025-007



EXISTING SITE PLAN –DEMO
SCALE: 1:30 / 1"=30'-0"

KEY NOTES –DEMO

X SYMBOL INDICATES PLAN NOTES. SEE BELOW

1. DEMO PORTION OF CURBS/PLANTER AND PAINT STRIPING TO ACCOMMODATE NEW PLAN. PRESERVE AND MARK EXISTING U.G. IRRIGATION LINES AND U.G. LIGHTING CONDUIT – AS NEEDED.
2. DEMO PORTION OF CURB/PAVEMENT– TO ACCOMMODATE (N) PLAN.
3. REMOVE TREES OBSTRUCTING NEW PLAN. SEE LEGEND
4. REMOVE PORTION OF TEMPORARY/OWNER FENCE AS NEED DURING CONST. AND AS NOTED – AT FINAL. P.O.S.

KEY NOTES –OTHER

10. CONTRACTOR TO MARK AND CONFIRM WITH OWNER PRESERVATION OF EXISTING: WATER, UG. IRRIGATION, ELECT. CONDUIT (Lighting), ETC. (UNO.) REFER TO TOPO, CIVIL, AND CONSTRUCTION DOCUMENTS FOR CLARITY.
11. VERIFY WITH OWNER DEMOLITION OF ABANDON "ORCHARD WIND MACHINE" TOWER.

LEGEND:

- EXISTING DOME BUILDING
- EXISTING CONC. PARKING LOT AND PLANTERS
- EXISTING CMU PERIMETER WALL
- EXISTING FENCING
- DEMO/REMOVE FENCING
- EXISTING TREE(S) – TO REMAIN (U.N.O.)
- REMOVE/DEMO TREE.

CONSTRUCTION NOTES

CONTRACTOR SHALL VERIFY ALL FACETS OF THIS PROJECT PRIOR TO DEMOLITION WORK AND PREPARE FOR CONSTRUCTION OF NEW PLAN.

ALL WORK TO BE IN CONFORMANCE WITH LOCAL CODES NOTED ON COVER SHEET.

VERIFY ALL DIMENSIONS. DIMENSIONS SHOWN MAY VARY. SITE CONDITIONS MAY REFLECT (+/– ½" TO 4").

MARK ALL EXISTING U.G. UTILITIES PRIOR TO COMMENCEMENT OF WORK.

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LOMA LINDA CA. 92354
909-799-2830

OWNER:

ORANGE-NEW JERSEY PROPERTY
- PARTNERSHIP -
SOUTHEASTERN CALIF.
CONFERENCE OF
SEVENTH DAY ADVENTISTS

SUBMITTAL FOR ENTITLEMENTS:

CONDITIONAL USE PERMIT
AND
PRECISE PLAN OF DESIGN

PROPOSED OPERATION:
SATURDAY:
Religious Gathering and Worship
8:00 AM TO 1:00 PM.

Bible Study Sessions:
Prayer Meetings:
1:00 PM to 5:00 PM

WEDNESDAY:
Bible Study Sessions:
Prayer Meetings:
5:00 PM to 9:00 PM

ISSUANCES

DATE	DESCRIPTION

BUILDING & SAFETY REVISIONS

MARK	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		

OWNER/CONTRACTOR REVISIONS

MARK	DATE	DESCRIPTION
A		
B		
C		
D		
E		
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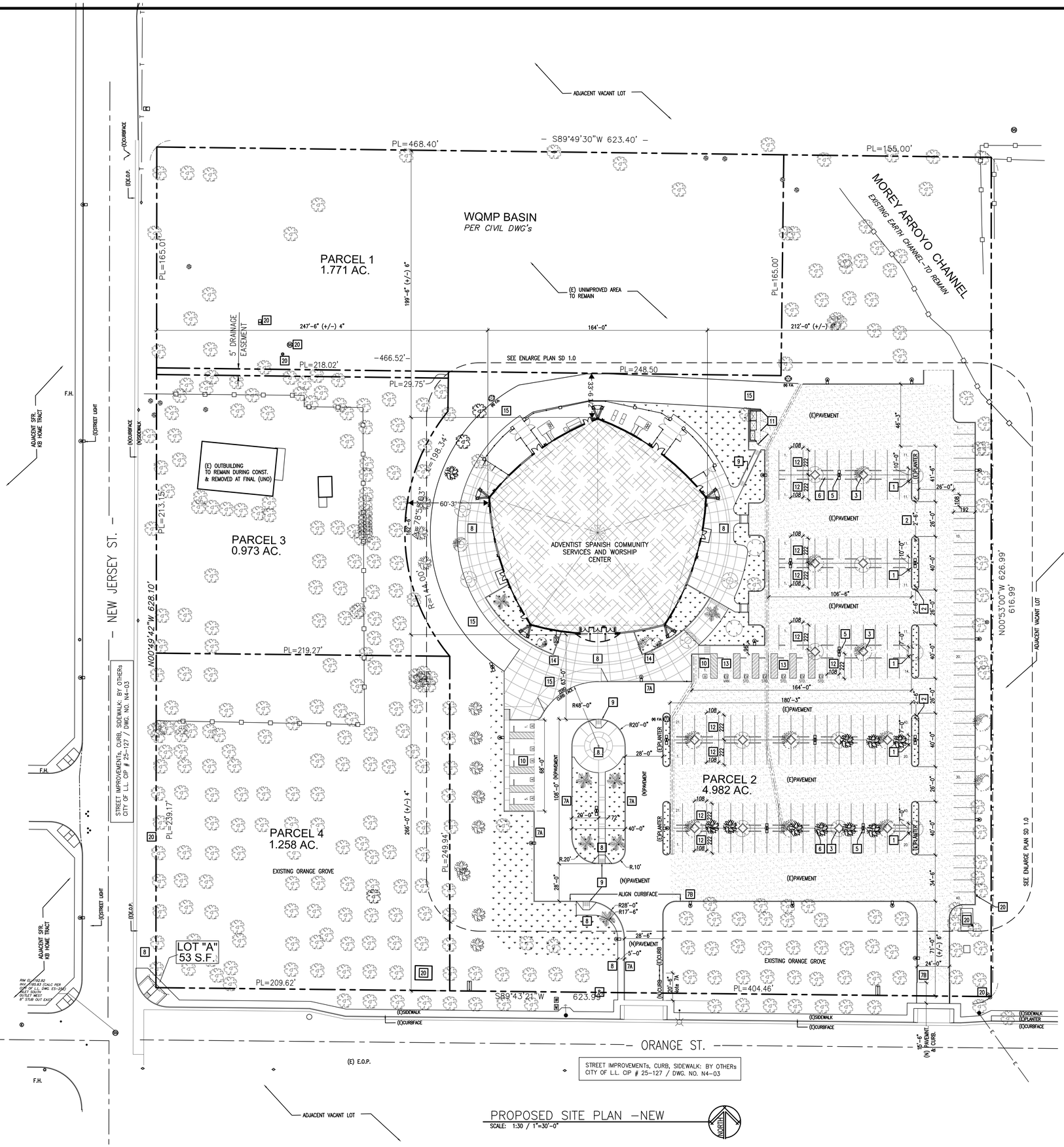
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DRAWN BY: D.L.

DATE 06/15/2026

SHEET TITLE

EXISTING SITE PLAN & DEMO

T2.0



CONSTRUCTION NOTES

CONTRACTOR SHALL VERIFY ALL FACETS OF THIS PROJECT PRIOR TO DEMOLITION WORK AND PREPARE FOR CONSTRUCTION OF NEW PLAN.

ALL WORK TO BE IN CONFORMANCE WITH LOCAL CODES NOTED ON COVER SHEET.

VERIFY ALL DIMENSIONS. DIMENSIONS SHOWN MAY VARY. SITE CONDITIONS MAY REFLECT (+/– 1" TO 4").

KEY NOTES –DEMO

[X] SYMBOL INDICATES PLAN NOTES. SEE BELOW

1. INSTALL IRRIGATION, UG. LIGHTING ELECT., AND RECONSTRUCT PORTION OF CURBS/PLANTER AND PROVIDE NEW PAINTED PARKING LOT STRIPING. REFER TO CITY STANDARD "PARKING" SIZE REQUIREMENT. SEE NOTES FOR IRRIGATION AND LIGHTING.
2. RECONSTRUCT PLANTER CURB. RADIUS TO MATCH EXISTING.
3. INSTALL NEW 5'–0" x 5'–0" DIAMOND PLANTER W/NEW TREE, IRRIGATION, AND LIGHTING (See Legend)–PER PLAN. SEE NOTES FOR IRRIGATION AND LIGHTING.
4. REMOVE PORTION OF FENCE AS NEED DURING CONST. AND AS NOTED – AT FINAL. P.O.S.
5. PARKING LOT LIGHT–POLE. VERIFY SINGLE OR DBL. LIGHT. SEE ELECT. PLAN.
6. NEW INFILL CONC. OR A/C PAVEMENT. AS REQUIRED.

7A NEW CONCRETE CURB. PER DETAIL.
7B EXISTING CONC. CURB.–TO REMAIN.

8. NEW CONCRETE SIDEWALK. SCORE AS SHOWN OR POS.
9. NEW CONCRETE ACCESSIBLE CURB RAMP.
10. ACCESSIBLE PARKING SPACES.
    STANDARD ACCESSIBLE STANDARD SPACE (STD.)= 108" Wide X 222" In Length.
    ACCESSIBLE VAN SPACE (VAN) = 144" Wide X 222" In Length.
    SEE LEGEND AND ENLARGED ACCESSIBILITY PLAN & DETAILS.
11. TRASH ENCLOSURE. PER CITY STANDARD AND DETAILS. SEE ENLARGED PLAN.
12. TYPICAL PARKING SPACE PROVIDED. 108" Wide X 222" In Length.
13. ELECTRICAL TO ACCOMMODATE E.V. SPACES –PROVIDED.
    ELECT. VEHICLE CHARGING STATIONS AND STRIPING – NOT PROVIDED.
14. THE FACAD OR PARKWAY SHALL HAVE A MIN. OF TWO TREES, A MIN. 24 Inch –BOX.
15. EMERGENCY FIRE APPARATUS ACCESS ROADWAY. PER FIRE ACCESS & WATER PLAN.

KEY NOTES –OTHER

20. CONTRACTOR TO MARK AND PRESERVE IN PLACE.
    WATER, UG. IRRIGATION, ELECT. CONDUIT (Lighting), ETC. (UNO.)
    REFER TO TOPO and E.M.P. FOR CLARITY.

LEGEND:

- EXISTING DOME BUILDING
- GRASS TURF. (OPTIONAL ARTIFICIAL GRASS)
- EXISTING CONC. PARKING LOT AND PLANTERS
- EXISTING CMU PERIMETER WALL
- EXISTING FENCING
- DEMO/REMOVE FENCING
- EXISTING ORANGE TREE(S) – TO REMAIN (U.N.O.)
- NEW BOX TREES. –SEE LANDSCAPE PLAN.
- TYPICAL PARKING SPACE(S) (Typ. 6"X36" Wheel Stop)
- ACCESSIBLE PARKING SPACE(S). (11B–502.2) PER ACCESSIBLE DETAILS.
  A = STANDARD SPACE (11B–502)
  V = VAN SPACE (11B–502.2)
  A.I. = ACCESS AISLE (11B–502.3)
- E.V. "CAPABLE" PARKING SPACE(S) WHEN PROVIDED (11B–228.3) WHERE PROVIDED AS APPLICABLE. (11B–228.3.2.1) PER ACCESSIBLE AND TYPICAL PARKING SPACES –DETAILS.
  EV + STD.= STANDARD ACCESSIBLE E.V. SPACES = 5
  EV + VAN = VAN E.V. SPACE = 1
  EV + TYP.. = TYP. PARKING W/ E.V. = 0
  FUTURE ELECT. SUPPLY (SEE ELECTRICAL PLAN)
- TYP. PARKING LOT LIGHT–POLE.
- TRASH ENCLOSURE
- F.H. = PRIVATE FIRE HYDRANT –PER FIRE ACCESS & WATER PLAN

REQUIREMENTS

MUNICIPAL CODE: 17.24.215 SPACES–PARKING OVERHANG PERMITTED WHEN.
PARKING IS PERMITTED TO OVERHANG A LANDSCAPE PLANTER OR WALKWAY A MAXIMUM OF TWO FEET. WHEN PARKING IS PROPOSED TO OVERHANG INTO A LANDSCAPE PLANTER OR A WALKWAY, THE PLANTER OR WALKWAY SHALL BE A MINIMUM OF SIX FEET IN WIDTH. IF A PLANTER OR WALKWAY IS OVERHUNG ON TWO SIDES, THE PLANTER OR WALKWAY SHALL BE A MINIMUM WIDTH OF EIGHT FEET.

17.24.320 SPACES –LANDSCAPING AND MAINTENANCE PLAN.
B. PARKING LOT LANDSCAPE, SCREENING AND MAINTENANCE SHALL CONFORM TO THE FOLLOWING:
1. ONE TREE PER EVERY FIVE PARKING SPACES.
2. TEN PERCENT LANDSCAPING FOR PARKING LOTS WITH LESS THAN EIGHTY–FIVE SPACES
3. EIGHT PERCENT LANDSCAPING FOR PARKING LOTS WITH EIGHTY–FIVE OR MORE PARKING SPACES.

17.24.210 Spaces–Aisle widths.
Except as otherwise provided, all parking spaces shall have a minimum length of (18.5') eighteen and one–half feet and a minimum width of (9'–0") nine feet. Aisle widths for angle parking shall be supplied as follows:

TOTAL PARKING SPACES COUNT:
5+40+40+16+11(5)+40 = 196

ACCESSIBLE SPACES
STANDARD.....(11B–208.2) = 6 SPACES
VAN.....(11B–208.2.4) = 1 VAN SPACE

ELECTRIC VEHICLE:
STANDARD.....
ACCESSIBLE.....
VAN.....

TOTAL NUMBER OF TREES:
196 PARKING SPACES /5 = 40 TREES REQUIRED
TREES PROVIDED:
EXISTING TREES.....324
NEW BOX TREES.....41
TOTAL TREES PROVIDED.....365

LANDSCAPING EQUIVALENT TO EIGHT PERCENT OF PARKING AREA.
TOTAL PARKING AREA = 86,000 (X 8 %) = 6,880 SF. REQUIRED.
LANDSCAPE PROVIDED = 147,000 SF./43,560 = 3.37 ACRES

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SUBMITTAL FOR ENTITLEMENTS:

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ISSUANCES

DATE	DESCRIPTION

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1		
2		
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5		
6		

OWNER/CONTRACTOR REVISIONS

MARK	DATE	DESCRIPTION
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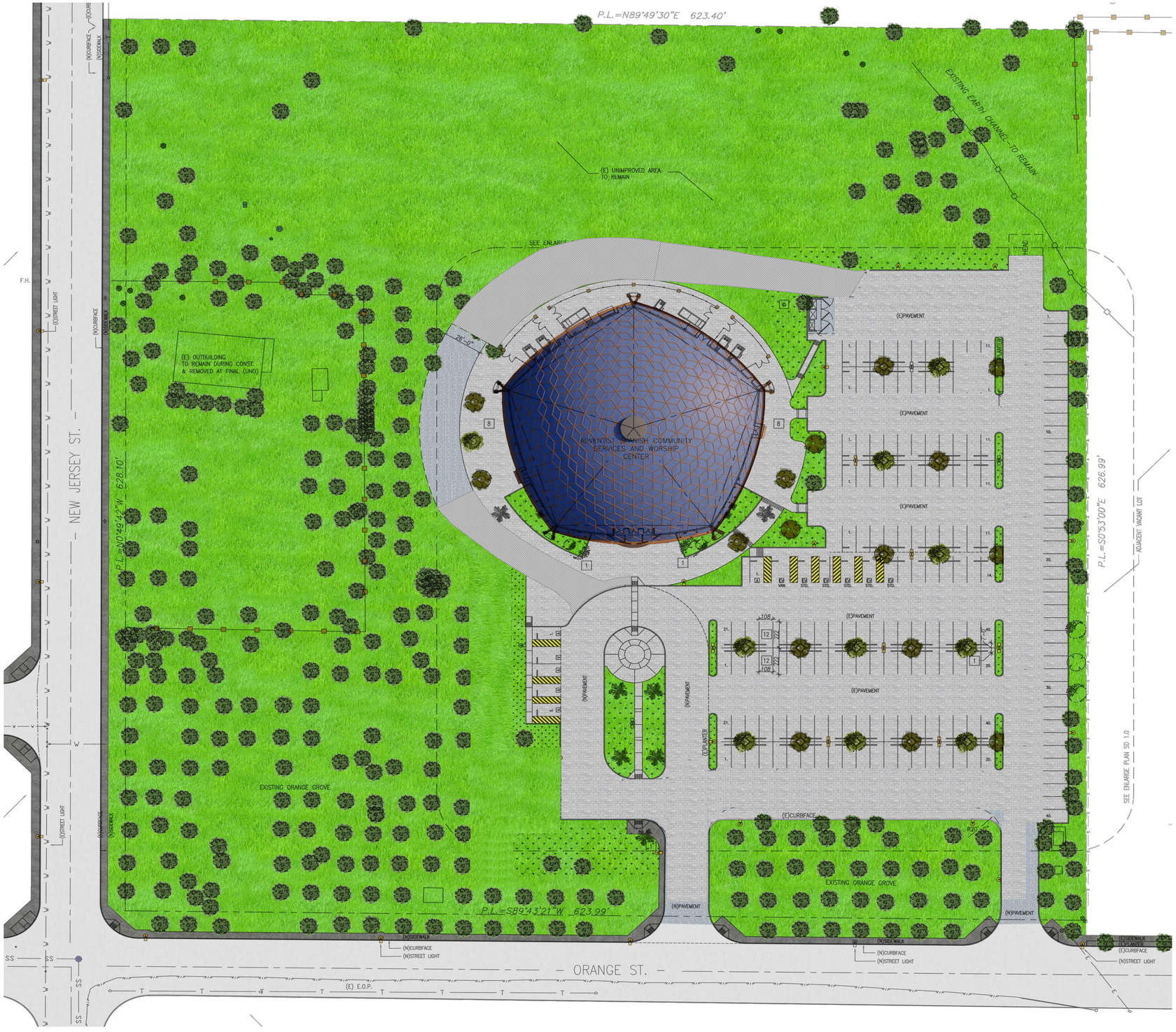
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CAD DWG FILE:
DRAWN BY: D.L.
DATE 06/15/2026

SHEET TITLE

PROPOSED SITE PLAN

T3.0

CUP-2025-006, MDA-2024-0036, MPD-2025-007



LANDSCAPE SITE PLAN

CONSTRUCTION NOTES

CONTRACTOR SHALL VERIFY ALL FACETS OF THIS PROJECT PRIOR TO DEMOLITION WORK AND PREPARE FOR CONSTRUCTION OF NEW PLAN.

ALL WORK TO BE IN CONFORMANCE WITH LOCAL CODES NOTED ON COVER SHEET.

ALL LANDSCAPING SHALL BE PROVIDED WITH IRRIGATION – PER PLUMBING PLAN.

KEY NOTES

[X] SYMBOL INDICATES PLAN NOTES. SEE BELOW

1. THE FACAD OR PARKWAY SHALL HAVE A MIN. OF TWO TREES, A MIN. 24 Inch –BOX.

LEGEND:

- EXISTING DOME BUILDING
- FIRE ACCESS ROAD
- GRASS TURF. (OPTIONAL ARTIFICIAL GRASS)
- EXISTING CMU PERIMETER WALL
- EXISTING FENCING
- DEMO/REMOVE FENCING
- EXISTING ORANGE TREE(S) – TO REMAIN (U.N.O.)
- NEW BOX TREES. –SEE "RECOMMENDED TREE SPECIES".

REQUIREMENTS

TOTAL NUMBER OF TREES:
196 PARKING SPACES /5 = 40 TREES REQUIRED
TREES PROVIDED:
EXISTING TREES.....324
NEW BOX TREES..... 41
TOTAL TREES PROVIDED....365

LANDSCAPING EQUIVALENT TO EIGHT PERCENT OF PARKING AREA.
TOTAL PARKING AREA = 86,000 (X 8 %) = 6,880 SF. REQUIRED.
LANDSCAPE PROVIDED = 147,000 SF./43,560 = 3.37 ACRES.

LANDSCAPING: Any part of a developed lot visible from street shall be landscaped. See §17.02.215. And, the front yard or parkway area shall have a minimum of 2 trees at least 24–inch–box.

RECOMMENDED TREE SPECIES:

For parking lots, it's advisable to choose tree species that are drought-tolerant, can withstand heat and compacted soils, and have minimal litter to reduce maintenance.

ADDITIONAL CONSIDERATIONS:

MAINTENANCE: Opt for trees with minimal fruit or seed drop to reduce maintenance and prevent potential hazards in parking areas.

SHADE AND CANOPY: Trees with broad canopies provide better shade, enhancing comfort for parked vehicles and pedestrians.

LOCAL CLIMATE ADAPTATION: Choose species that are well–adapted to Loma Linda's climate to ensure longevity and reduce water usage.

Chinese Elm (Ulmus parviflolia)
A hardy tree that adapts well to various soil types and urban conditions. It thrives in drought and is resistant to common pests and diseases. LEVEL GREEN LANDSCAPING



Crape Myrtle (Lagerstroemia indica)
Known for its vibrant flowers, this tree tolerates heat and drought, making it ideal for parking lots. It also has a relatively compact size, suitable for limited spaces. LEVEL GREEN LANDSCAPING



Zelkova 'Green Vase' (Zelkova serrata 'Green Vase')
This tree offers a graceful shape and is tolerant of wind, pollution, drought, and compacted soils, making it suitable for urban parking areas. LEVEL GREEN LANDSCAPING



Holly Oak (Quercus ilex)
An evergreen oak that provides ample shade and is drought-tolerant once established. It has been used in local landscaping projects, such as at Loma Linda University Medical Center. LOMA LINDA NEWS



California Redbud (Cercis occidentalis)
A native tree that offers beautiful spring blossoms and is well-suited to the local climate. It has been incorporated into Loma Linda's landscaping efforts. LOMA LINDA NEWS



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https://archinect.com/lackyard

LICENSED CONTRACTOR
DAVID G. LACKYARD
Dave Lackyard
No. 764716
REN. 6/30/25
STATE OF CALIFORNIA

PROJECT:

L.L. ADVENTIST SPANISH COMMUNITY SERVICES & WORSHIP CENTER

11055 NEW JERSEY ST.
REDLANDS CA. 92373
PARCEL # 0292-163-09

CONTROLLING JURISDICTION:
LOMA LINDA CITY HALL
25541 BARTON ROAD
LOMA LINDA CA. 92354
909-799-2830

OWNER:

ORANGE-NEW JERSEY PROPERTY

- PARTNERSHIP -
SOUTHEASTERN CALIF.
CONFERENCE OF
SEVENTH DAY ADVENTISTS

SUBMITTAL FOR ENTITLEMENTS:

CONDITIONAL USE PERMIT
AND
PRECISE PLAN OF DESIGN

ISSUANCES

DATE	DESCRIPTION

BUILDING & SAFETY REVISIONS

MARK	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		

OWNER/CONTRACTOR REVISIONS

MARK	DATE	DESCRIPTION
A		
B		
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E		
F		

PROJECT NO: 20242201
CAD DWG FILE:
DRAWN BY: D.L.

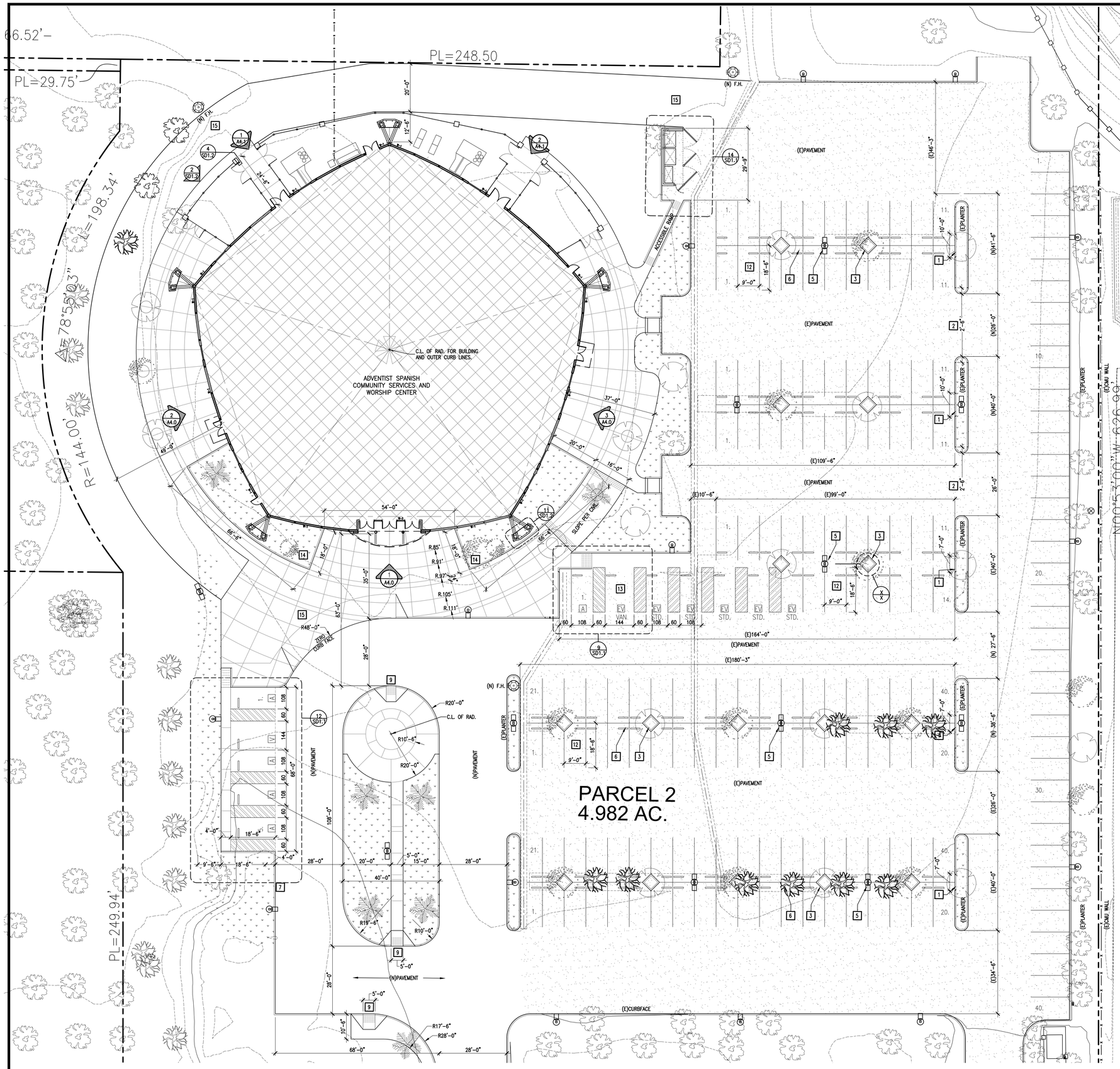
DATE 12/09/2024

SHEET TITLE

LANDSCAPE SITE PLAN

LS 1.0

CUP-2025-006, MDA-2024-0036, MPD-2025-007



CONSTRUCTION NOTES

CONTRACTOR SHALL VERIFY ALL FACETS OF THIS PROJECT PRIOR TO DEMOLITION WORK AND PREPARE FOR CONSTRUCTION OF NEW PLAN.

ALL WORK TO BE IN CONFORMANCE WITH LOCAL CODES NOTED ON COVER SHEET.

VERIFY ALL DIMENSIONS. DIMENSIONS SHOWN MAY VARY. SITE CONDITIONS MAY REFLECT (+/- ½" TO 4").

KEY NOTES –DEMO

[X] SYMBOL INDICATES PLAN NOTES. SEE BELOW

1. INSTALL IRRIGATION, UG. LIGHTING ELECT., AND RECONSTRUCT PORTION OF CURBS/PLANTER AND PROVIDE NEW PAINTED PARKING LOT STRIPING. REFER TO CITY STANDARD "PARKING" SIZE REQUIREMENT. SEE NOTES FOR IRRIGATION AND LIGHTING.
2. RECONSTRUCT PLANTER CURB. RADIUS TO MATCH EXISTING.
3. INSTALL NEW 5'–0" x 5'–0" DIAMOND PLANTER W/NEW TREE, IRRIGATION, AND LIGHTING (See Legend)–PER PLAN. SEE NOTES FOR IRRIGATION AND LIGHTING.
4. REMOVE PORTION OF FENCE AS NEED DURING CONST. AND AS NOTED – AT FINAL. P.O.S.
5. PARKING LOT LIGHT–POLE. VERIFY SINGLE OR DBL. LIGHT. SEE ELECT. PLAN.
6. NEW INFILL CONC. OR A/C PAVEMENT. AS REQUIRED.
7. NEW CONCRETE CURB. PER DETAIL.
8. NEW CONCRETE SIDEWALK. SCORE AS SHOWN OR POS.
9. NEW CONCRETE SIDEWALK ACCESSIBLE RAMP.
10. ACCESSIBLE PARKING SPACES. STANDARD ACCESSIBLE STANDARD SPACE (STD.)= 108" Wide X 222" In Length. ACCESSIBLE VAN SPACE (VAN) = 144" Wide X 222" In Length. SEE LEGEND AND ENLARGED ACCESSIBILITY PLAN & DETAILS.
11. TRASH ENCLOSURE. PER CITY STANDARD AND DETAILS. SEE ENLARGED PLAN.
12. TYPICAL PARKING SPACE PROVIDED. 108" Wide X 222" In Length.
13. ELECTRICAL TO ACCOMMODATE E.V. SPACES –PROVIDED. ELECT. VEHICLE CHARGING STATIONS AND STRIPING – NOT PROVIDED.
14. THE FACAD OR PARKWAY SHALL HAVE A MIN. OF TWO TREES, A MIN. 24 Inch –BOX.
15. EMERGENCY FIRE APPARATUS ACCESS ROADWAY. PER FIRE ACCESS & WATER PLAN.

KEY NOTES –OTHER

20. CONTRACTOR TO MARK AND PRESERVE IN PLACE. WATER, UG. IRRIGATION, ELECT. CONDUIT (Lighting), ETC. (UNO.) REFER TO TOPO and E.M.P. FOR CLARITY.

LEGEND:

- EXISTING DOME BUILDING
- GRASS TURF. (OPTIONAL ARTIFICIAL GRASS)
- EXISTING CONC. PARKING LOT AND PLANTERS
- EXISTING CMU PERIMETER WALL
- EXISTING FENCING
- DEMO/REMOVE FENCING
- EXISTING ORANGE TREE(S) – TO REMAIN (U.N.O.)
- [14] NEW BOX TREES. –SEE LANDSCAPE PLAN. CIRCULAR OBJECT INDICATES A DECO. POTTED TREE.
- [3] [12] TYPICAL PARKING SPACE(S) — Typ. 6"X36" Wheel Stop
- ACCESSIBLE PARKING SPACE(S). (11B–502.2) PER ACCESSIBLE DETAILS. A = STANDARD SPACE (11B–502) V = VAN SPACE (11B–502.2) A.I. = ACCESS AISLE (11B–502.3)
- [13] E.V. "CAPABLE" PARKING SPACE(S) WHEN PROVIDED (11B–228.3) WHERE PROVIDED AS APPLICABLE. (11B–228.3.2.1) PER ACCESSIBLE AND TYPICAL PARKING SPACES –DETAILS. EV + STD.= STANDARD ACCESSIBLE E.V. SPACES = 5 EV + VAN = VAN E.V. SPACE = 1 EV + TYP.. = TYP. PARKING W/ E.V. = 0 FUTURE ELECT. SUPPLY (SEE ELECTRICAL PLAN)
- TYP. PARKING LOT LIGHT & POLE. PER ELECT. PLAN.
- TRASH ENCLOSURE

F.H. = FIRE HYDRANT –SEE SHEET F1.0

ENLARGED SITE PLAN

SCALE: 1:16 / 1/16"= 1'–0"

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CONDITIONAL USE PERMIT
AND
PRECISE PLAN OF DESIGN

PROPOSED OPERATION:
SATURDAY:
Religious Gathering and Worship
8:00 AM TO 1:00 PM.

Bible Study Sessions:
Prayer Meetings:
1:00 PM to 5:00 PM

WEDNESDAY:
Bible Study Sessions:
Prayer Meetings:
5:00 PM to 9:00 PM

ISSUANCES

DATE	DESCRIPTION

BUILDING & SAFETY REVISIONS

MARK	DATE	DESCRIPTION
1		
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4		
5		
6		

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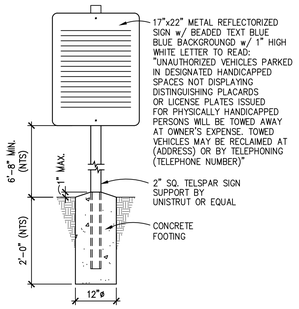
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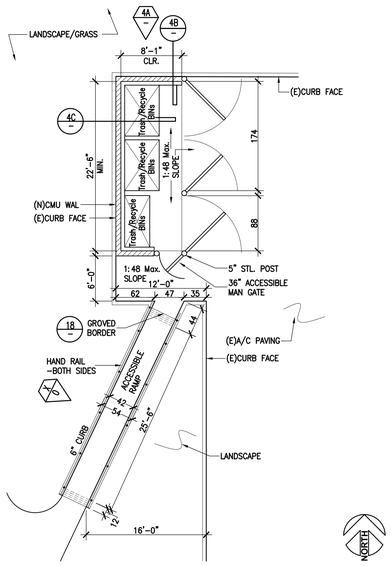
ENLARGED SITE PLAN

SD 1.0

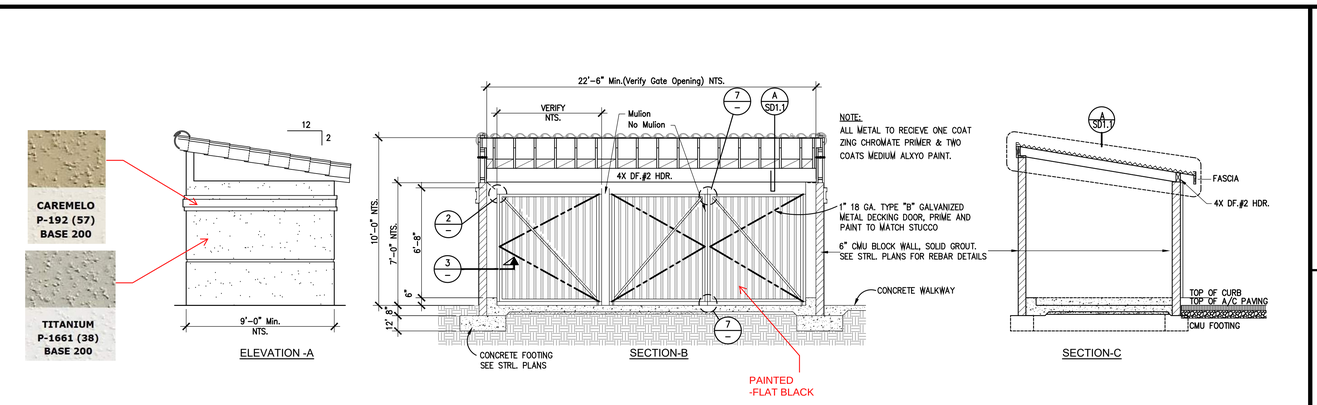
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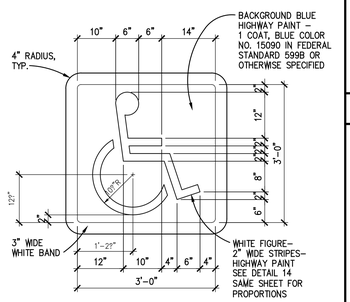
ENTRY SIGN — SCALE: NTS. — 20



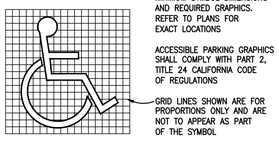
TRASH ENCLOSURE PLAN — NOT TO SCALE — 14



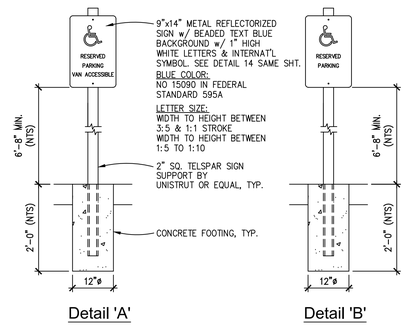
TRASH ENCLOSURE SECTIONS — NOT TO SCALE — 4



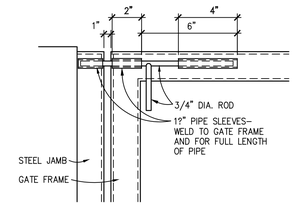
ACCESSIBLE PAVEMENT SYMBOL — SCALE: NTS. — 16



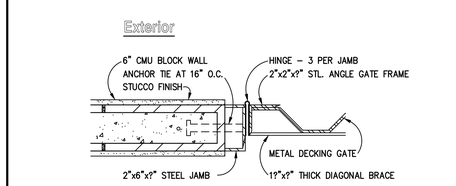
INTERNATIONAL ACCESSIBILITY SYMBOL — NOT TO SCALE — 15



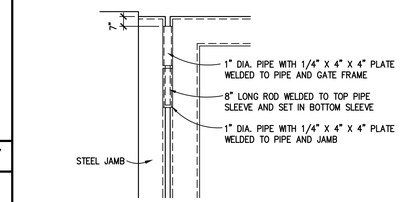
ACCESSIBLE PARKING SIGNAGE — SCALE: 1"=1'-0" — 11



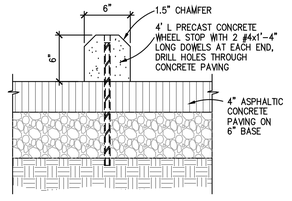
METAL GATE BOLT — NOT TO SCALE — 7



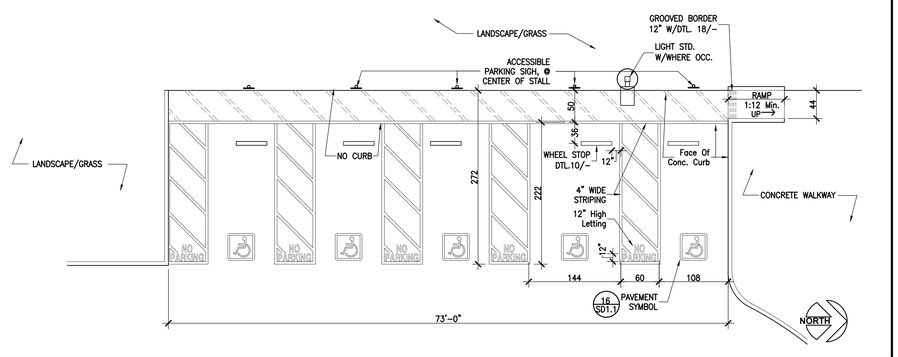
TRASH ENCLOSURE JAMB — NOT TO SCALE — 3



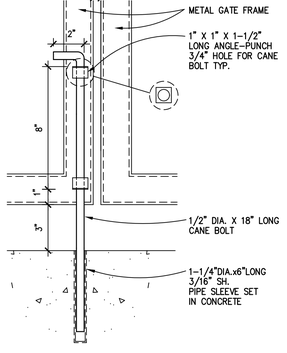
METAL GATE HINGE — NOT TO SCALE — 2



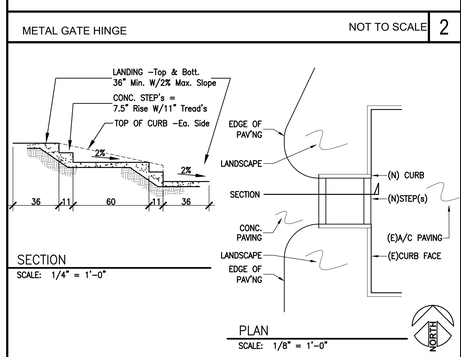
CONCRETE WHEEL STOP — SCALE: 1 "=1'-0" — 17



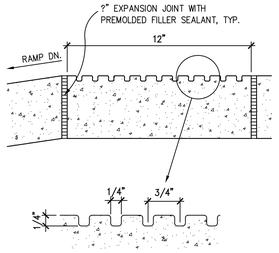
ENLARGED ACCESSIBLE PARKING AREA — 1/8" = 1'-0" — 12



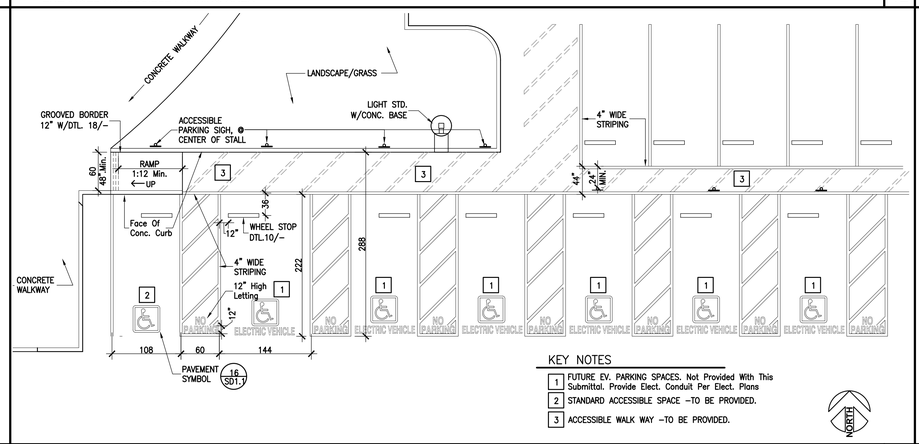
CANE BOLT — NOT TO SCALE — 6



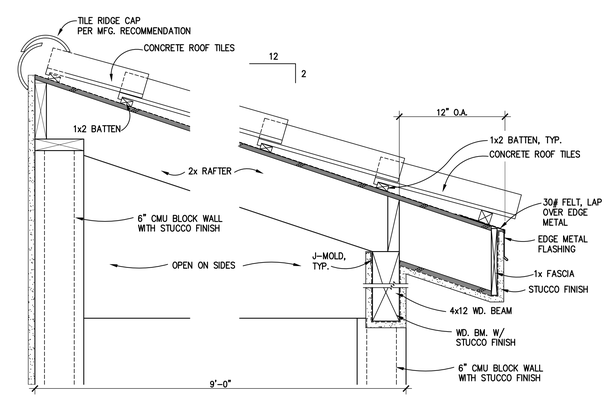
SITE STEPS - AT EAST SIDE — NOT TO SCALE — 1



GROOVED BORDER AT TOP OF RAMP. — SCALE: 3"=1'-0" — 18



ENLARGED ACCESSIBLE E.V. PARKING AND STANDARD SPACES — 1/8" = 1'-0" — 9



TRASH ENCLOSURE -ROOF SECTION — SCALE = 1-1/2"=1'-0" — A

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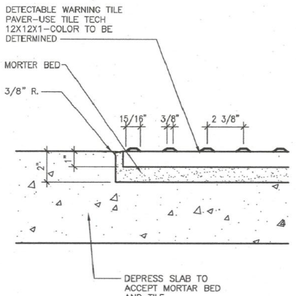
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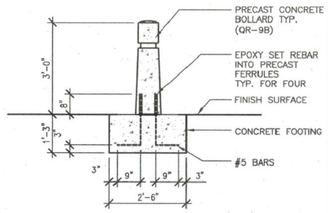
SITE DETAILS

SD 1.1

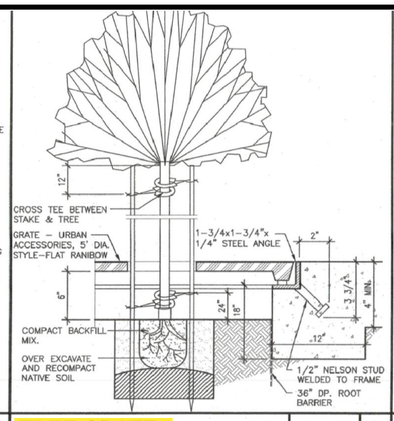
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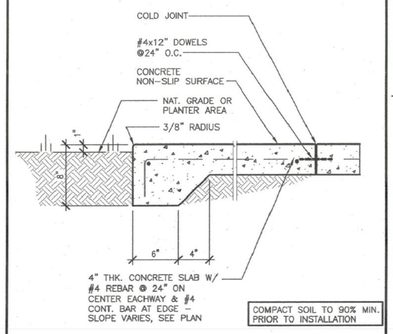
PAVER DETAIL | 3"=1'–0" | 14



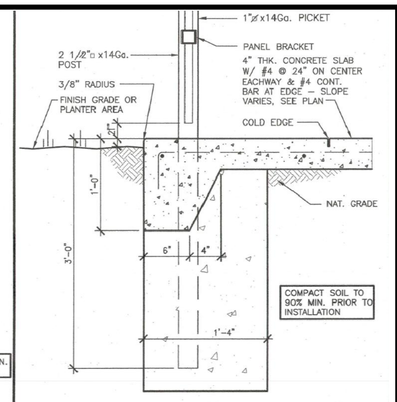
CONCRETE BOLLARD | 1/2"=1'–0" | 12



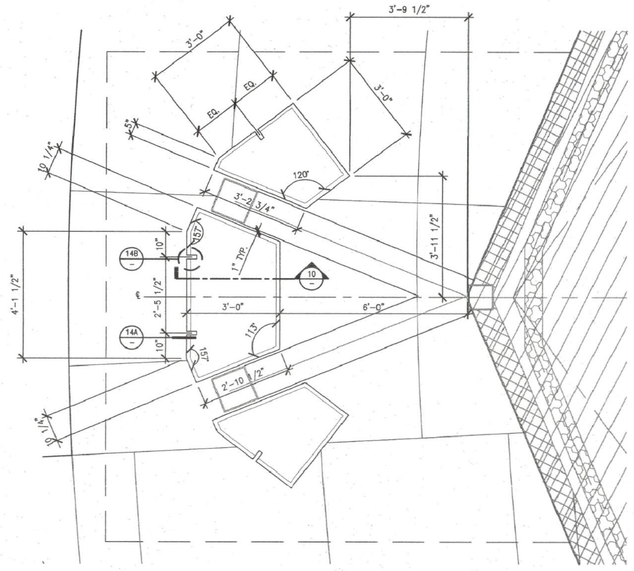
TREE GRATE | 3"=1'–0" | 9



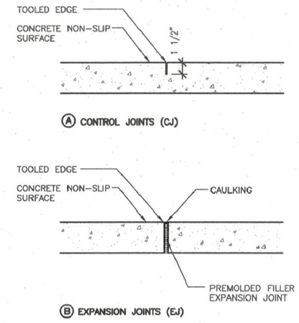
CONCRETE EDGE | 1 1/2"=1'–0" | 6



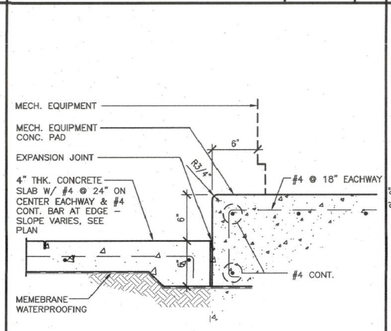
CONCRETE EDGE | 1 1/2"=1'–0" | 4



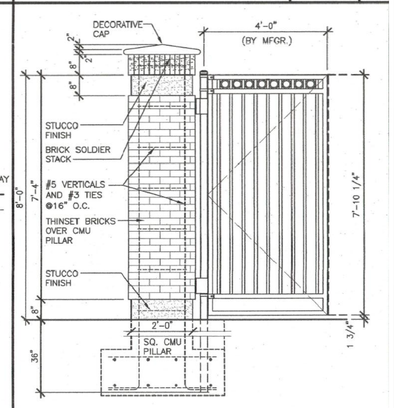
ENLARGED BENCH PLAN | 1/2"=1'–0" | 11



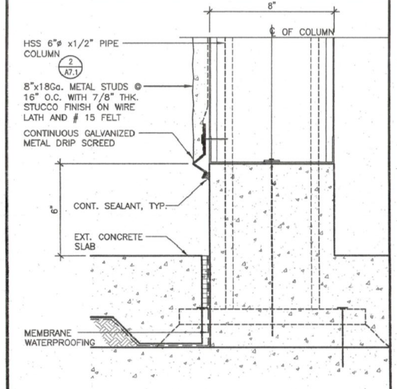
CONCRETE JOINTS | 1 1/2"=1'–0" | 8



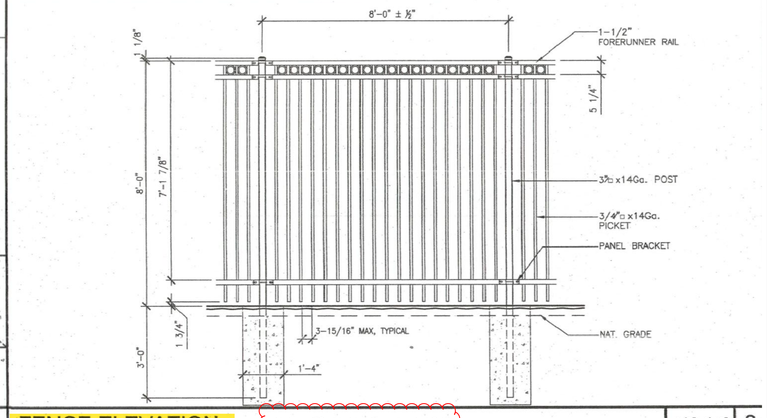
CONC. PAD DETAIL | 1 1/2"=1'–0" | 5



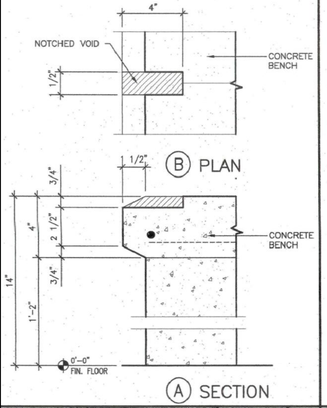
FENCE CONC. COL. | 1/2"=1'–0" | 3



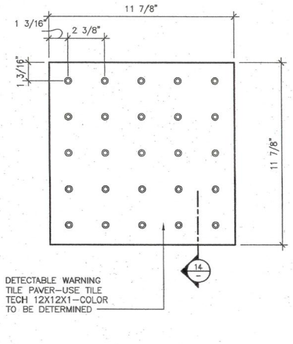
DETAIL | 3"=1'–0" | 7



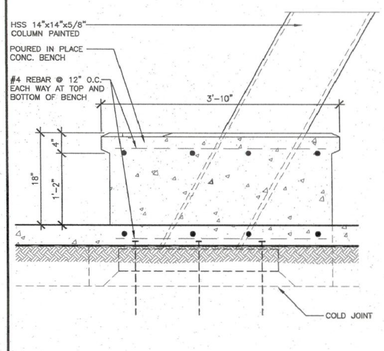
FENCE ELEVATION | PAINTED STANDARD - FLAT BLACK | 1/2"=1'–0" | 2



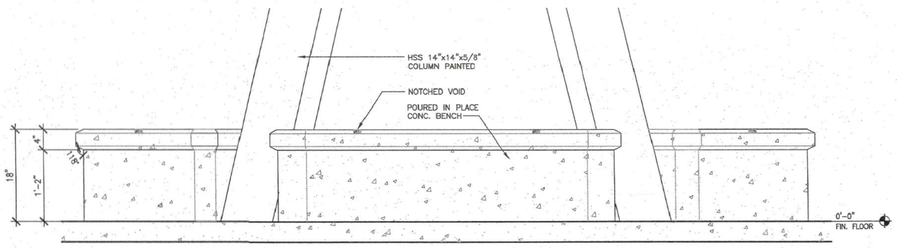
DETAIL | 3"=1'–0" | 15



PAVER DETAIL | 3"=1'–0" | 13



BENCH DETAIL | 1"=1'–0" | 10



CONCRETE BENCH ELEVATION | 1"=1'–0" | 1

DAVID G. LACKYARD
PLANNING SERVICES
PHONE: (909) 659-6610
P.O. BOX 3341
BIG BEAR CITY CA. 92314
EMAIL: dglackyard@gmail.com
https://archinect.com/lackyard

LICENSED CONTRACTOR
DAVID G. LACKYARD
Dave Lackyard
No. 764716
EXP. 6/30/25
STATE OF CALIFORNIA

PROJECT:

L.L. ADVENTIST SPANISH COMMUNITY SERVICES & WORSHIP CENTER

11055 NEW JERSEY ST.
REDLANDS CA. 92373
PARCEL # 0292-163-09

CONTROLLING JURISDICTION:
LOMA LINDA CITY HALL
25541 BARTON ROAD
LOMA LINDA CA. 92354
909-799-2830

OWNER:

ORANGE-NEW JERSEY PROPERTY

- PARTNERSHIP -
SOUTHEASTERN CALIF.
CONFERENCE OF
SEVENTH DAY ADVENTISTS

SUBMITTAL FOR ENTITLEMENTS:

CONDITIONAL USE PERMIT
AND
PRECISE PLAN OF DESIGN

ISSUANCES

DATE	DESCRIPTION

BUILDING & SAFETY REVISIONS

MARK	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		

OWNER/CONTRACTOR REVISIONS

MARK	DATE	DESCRIPTION
A		
B		
C		
D		
E		
F		

PROJECT NO: 20242201
CAD DWG FILE:
DRAWN BY: D.L.

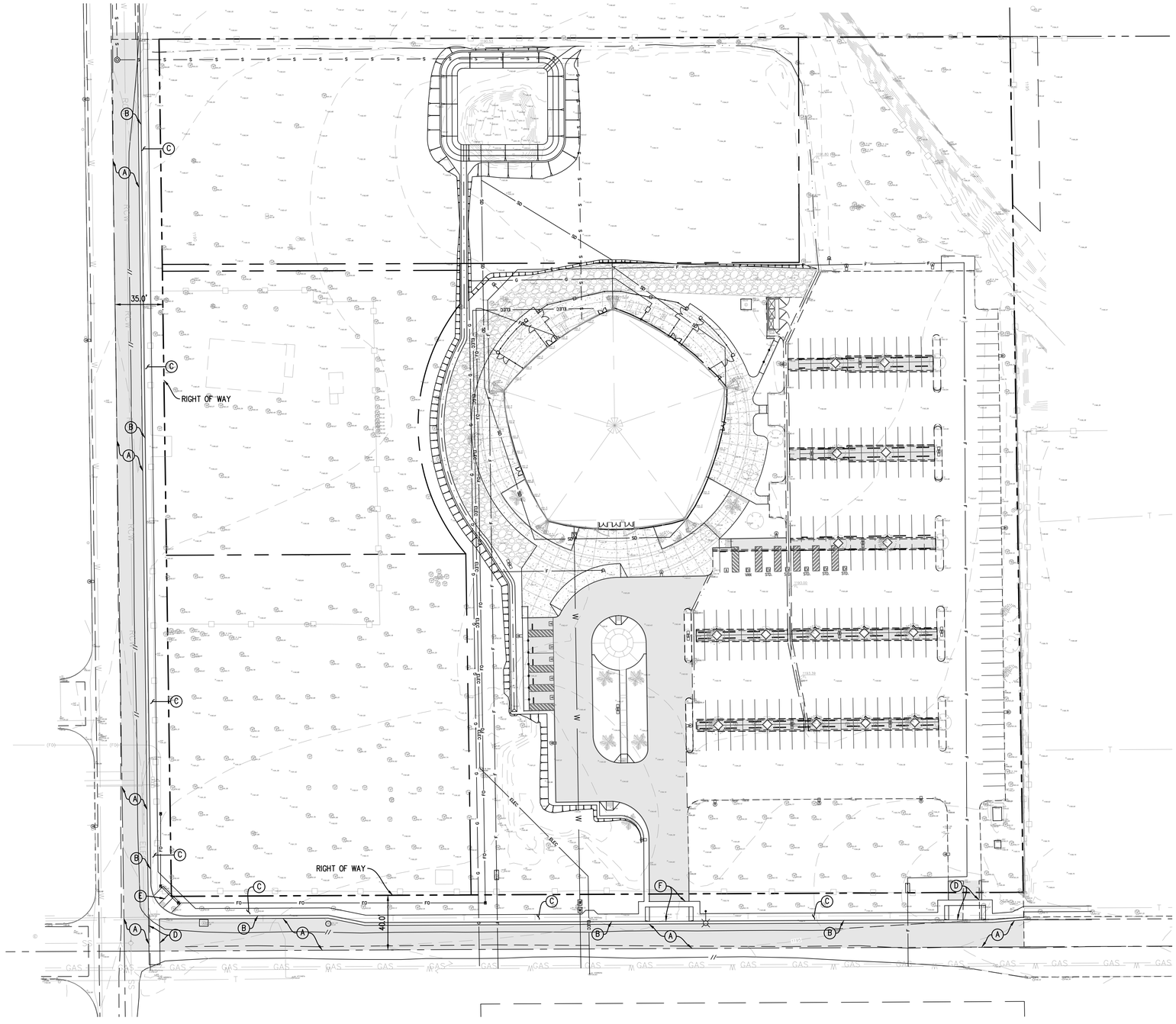
DATE 12/09/2024

SHEET TITLE

SITE DETAILS

SD 1.2

CUP-2025-006, MDA-2024-0036, MPD-2025-007



OFFSITE STREET CONSTRUCTION NOTES

(A) CONSTRUCT 4" AC PAVING OVER 6" CLASS II AGGREGATE BASE PER CITY OF LOMA LINDA CIP # 25-127 / DWG. NO. N4-03.

(B) CONSTRUCT 6" CURB AND GUTTER PER CITY OF LOMA LINDA STD. DWG. NO. R-2.1 AND PER CITY OF LOMA LINDA CIP # 25-127 / DWG. NO. N4-03.

(C) CONSTRUCT 4" THICK CONCRETE SIDEWALK PER CITY OF LOMA LINDA STD. DWG. NO. R-3.1 AND PER CITY OF LOMA LINDA CIP # 25-127 / DWG. NO. N4-03.

(D) CONSTRUCT CONCRETE CROSS GUTTER & SPANDREL PER CITY OF LOMA LINDA STD. DWG. NO. R-5 AND PER CITY OF LOMA LINDA CIP # 25-127 / DWG. NO. N4-03.

(E) CONSTRUCT CURB RAMP PER CITY OF LOMA LINDA STD. DWG. NO. R-8 AND CITY OF LOMA LINDA CIP # 25-127 / DWG. NO. N4-03.

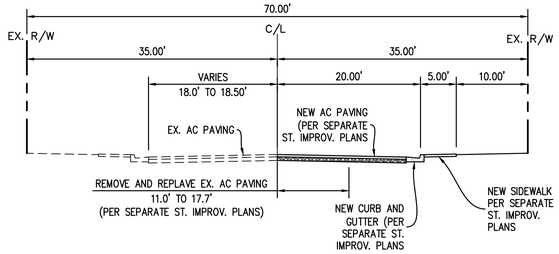
(F) CONSTRUCT COMMERCIAL DRIVEWAY APPROACH PER CITY OF LOMA LINDA STD. DWG. NO. R-4.1 AND CITY OF LOMA LINDA CIP # 25-127 / DWG. NO. N4-03.

SHEET INDEX

SHEET 1: PRELIMINARY STREET IMP. PLAN
SHEET 2: PRELIMINARY GRADING PLAN (WEST)
SHEET 3: PRELIMINARY GRADING PLAN (EAST)
SHEET 4: PRELIMINARY UTILITY PLAN

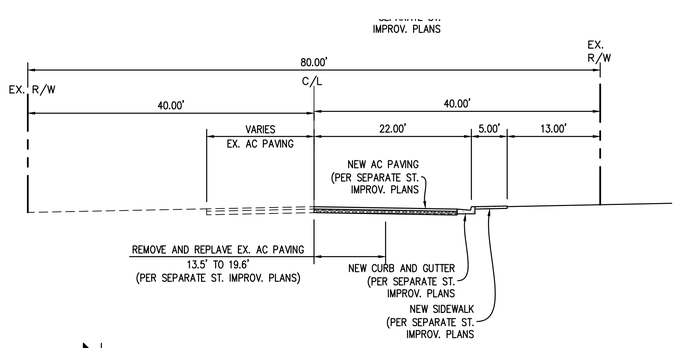
LEGEND

SEE TENTATIVE PARCEL MAP FOR LEGEND



NEW JERSEY STREET

SCALE: 1"=10'



ORANGE AVENUE

SCALE: 1"=10'

N

40 0 20 40 80

(IN FEET)

1 inch = 40 ft.

REGISTERED PROFESSIONAL ENGINEER
STEFAN C. LANTHIER
No. 59052
Exp. 06-30-26
CIVIL
STATE OF CALIFORNIA

Underground Service Alert
Call:TOll FREE
811
TWO WORKING DAYS BEFORE YOU DIG

Designed by	Drawn by	Checked by
GA	GA	SCL

PLANS PREPARED UNDER THE SUPERVISION OF
STEFAN LANTHIER, PE, PLS
Date 06-03-26 R.C.E. 59052

Reference Plans For These Improvements

Date	By	REVISIONS	App'd

BENCH MARK

Scale PER PLAN

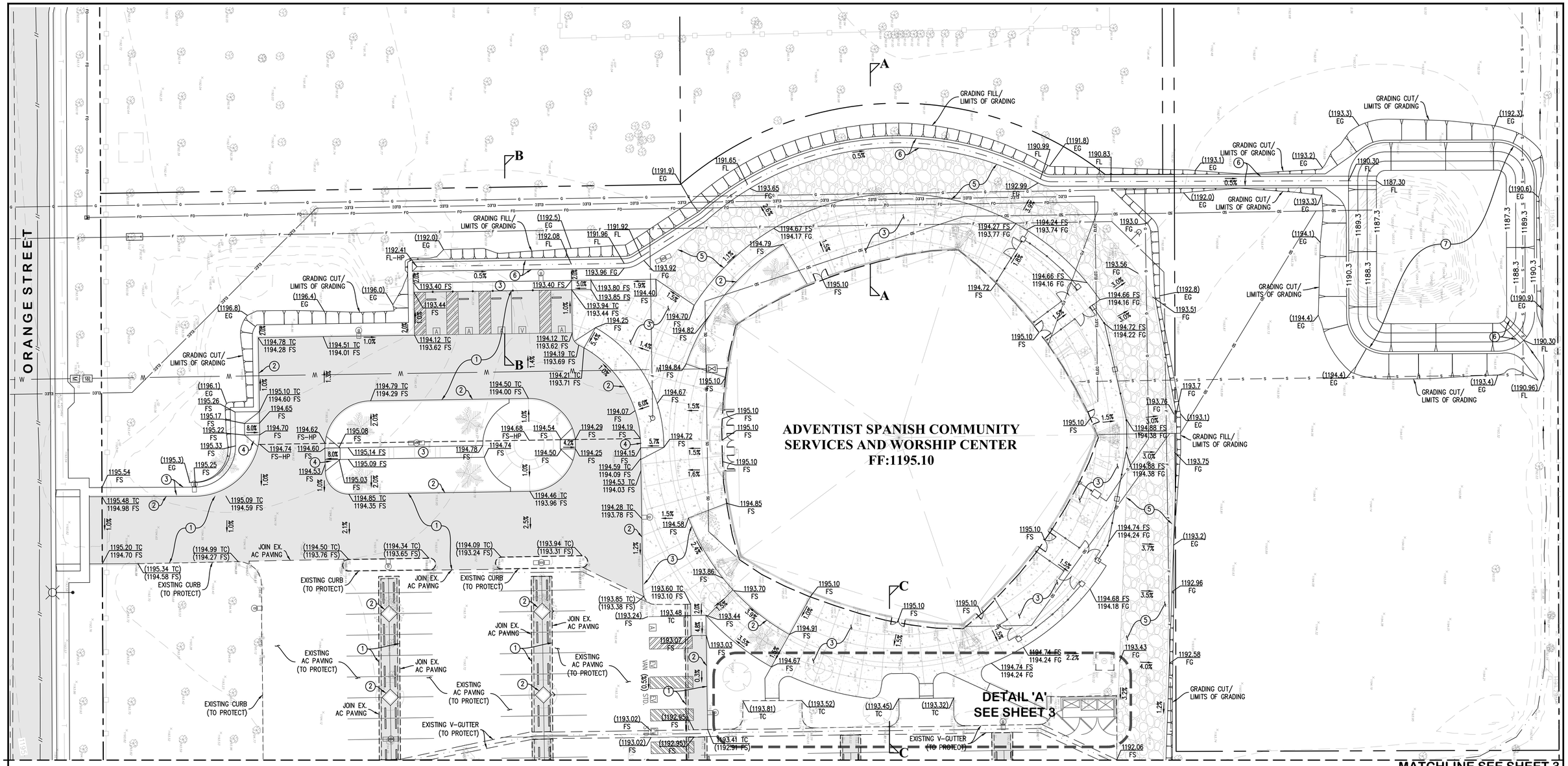
APPROVED

T. JARB THAIPEJR, PE
DIRECTOR OF PUBLIC WORKS
DATE

REGISTERED PROFESSIONAL ENGINEER
T. JARB THAIPEJR
No. C-47907
CIVIL
STATE OF CALIFORNIA

CITY OF LOMA LINDA
PRELIMINARY STREET IMPROVEMENT PLAN
11055 NEW JERSEY STREET

Drawing No.
SH. 1 OF 4



ONSITE CONSTRUCTION NOTES

1. CONSTRUCT 4" AC PAVING OVER 6" CLASS II AGGREGATE BASE.
2. CONSTRUCT 6" CURB PER CITY OF LOMA LINDA STD. DWG. NO. R-2.3.
3. CONSTRUCT 4" THICK CONCRETE SIDEWALK PER ARCHITECTURAL PLANS.
4. CONSTRUCT ACCESSIBLE RAMP PER ARCHITECTURAL PLANS.
5. CONSTRUCT FIRE DEPARTMENT ALL WEATHER ACCESS LANE.
6. CONSTRUCT CONCRETE V-DITCH.
7. CONSTRUCT RETENTION BASIN.

EARTHWORKS:

CUT	=	2,947 CY
FILL	=	1,875 CY
EXPORT	=	1,072 CY

DISTURBED AREA:

69,831.57 S.F. = 1.603 AC

REGISTERED PROFESSIONAL ENGINEER
STEFAN C. LANTHIER
No. 59052
Exp. 06-30-26
CIVIL
STATE OF CALIFORNIA

Z

20 0 10 20 40

(IN FEET)
1 inch = 20 ft.

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Designed by	Drawn by	Checked by
GA	GA	SCL

PLANS PREPARED UNDER THE SUPERVISION OF
STEFAN LANTHIER, PE, PLS
Date 06-03-26 R.C.E. 59052

Reference Plans For These Improvements

Date	By	REVISIONS	App'd

BENCH MARK

Scale PER PLAN

APPROVED

T. JARB THAIPEJR, PE DATE
DIRECTOR OF PUBLIC WORKS

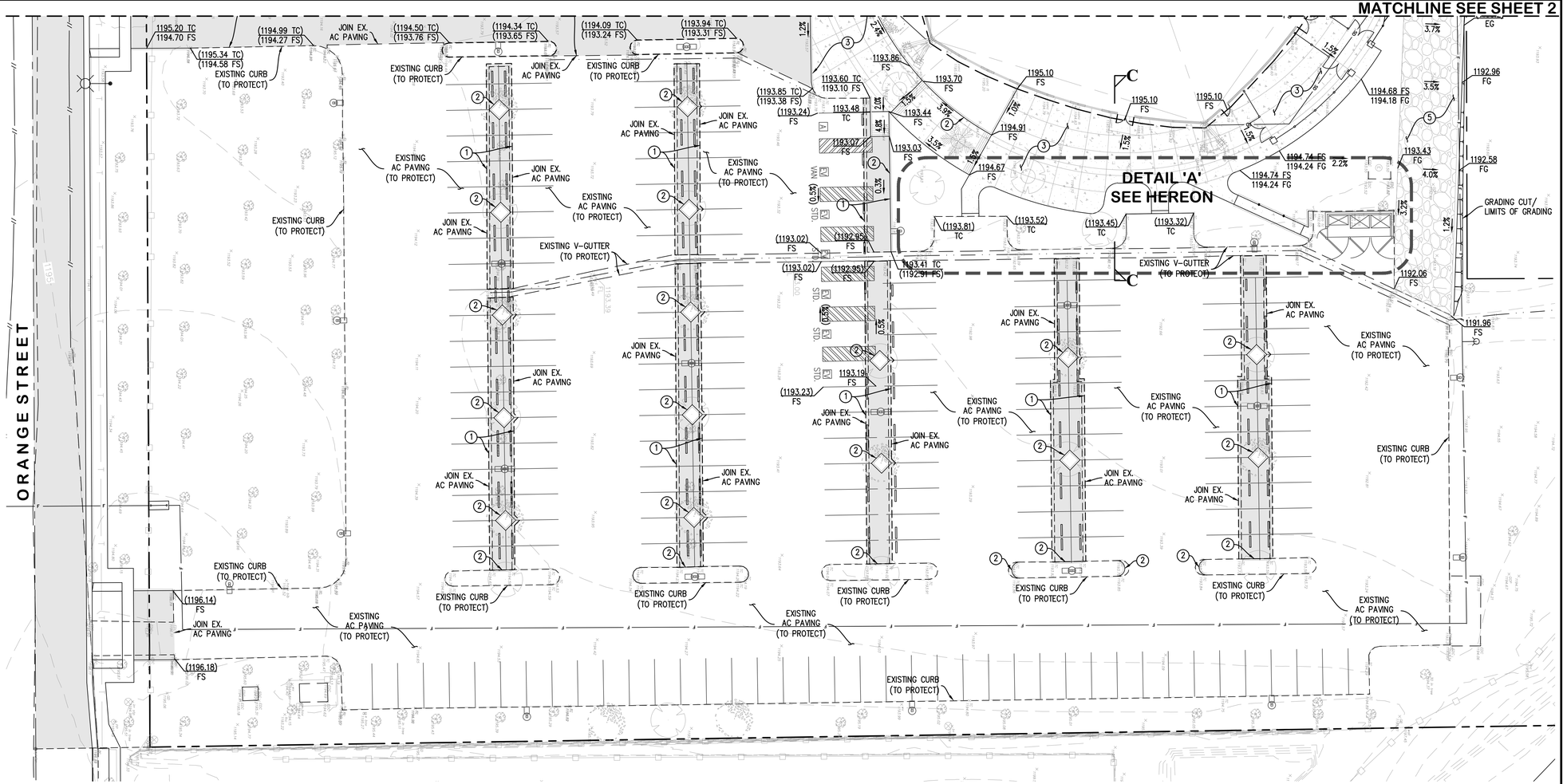
T. JARB THAIPEJR No. C-47907 CIVIL STATE OF CALIFORNIA

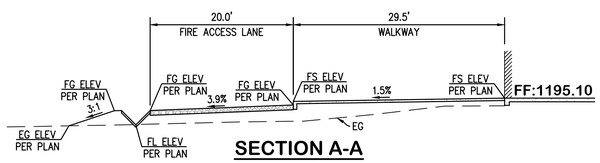
CITY OF LOMA LINDA
PRELIMINARY GRADING PLAN (WEST)
11055 NEW JERSEY STREET

Drawing No.
SH. 2 OF 4

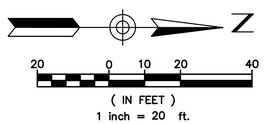
ONSITE CONSTRUCTION NOTES

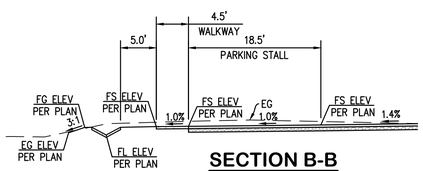
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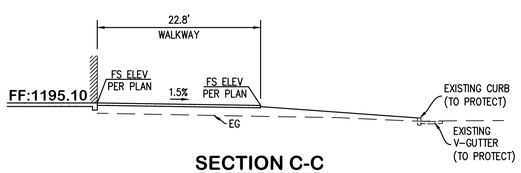


SECTION A-A
SCALE: 1"=10'

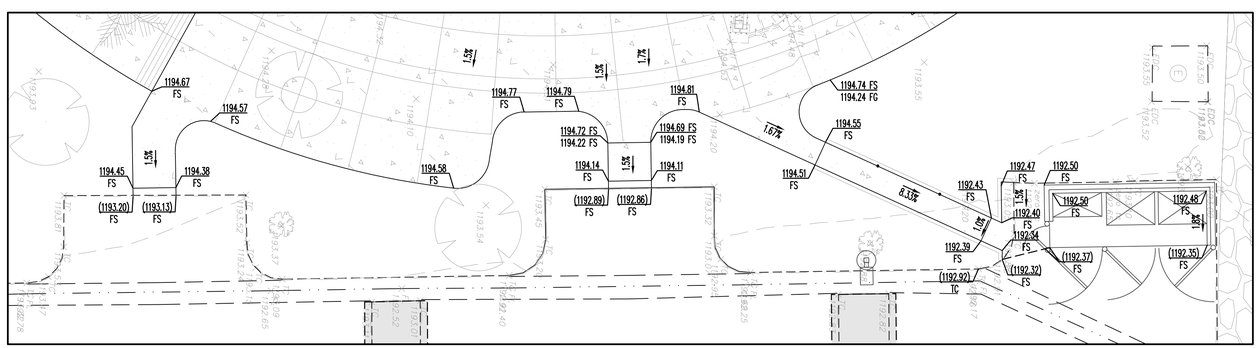




SECTION B-B
SCALE: 1"=10'



SECTION C-C
SCALE: 1"=10'



DETAIL 'A'
SCALE: 1"=10'

REGISTERED PROFESSIONAL ENGINEER STEFAN C. LANTHIER No. 59052 Exp. 06-30-26 CIVIL STATE OF CALIFORNIA

Underground Service Alert Call:TOll FREE 811 TWO WORKING DAYS BEFORE YOU DIG	Designed by GA	Drawn by GA	Checked by SCL				BENCH MARK	APPROVED
	PLANS PREPARED UNDER THE SUPERVISION OF STEFAN LANTHIER, PE, PLS						Scale PER PLAN	T. JARB THAIPEJR, PE DIRECTOR OF PUBLIC WORKS DATE
	Date 06-03-26	R.C.E. 59052		Reference Plans For These Improvements	Date	By	REVISIONS	App'd

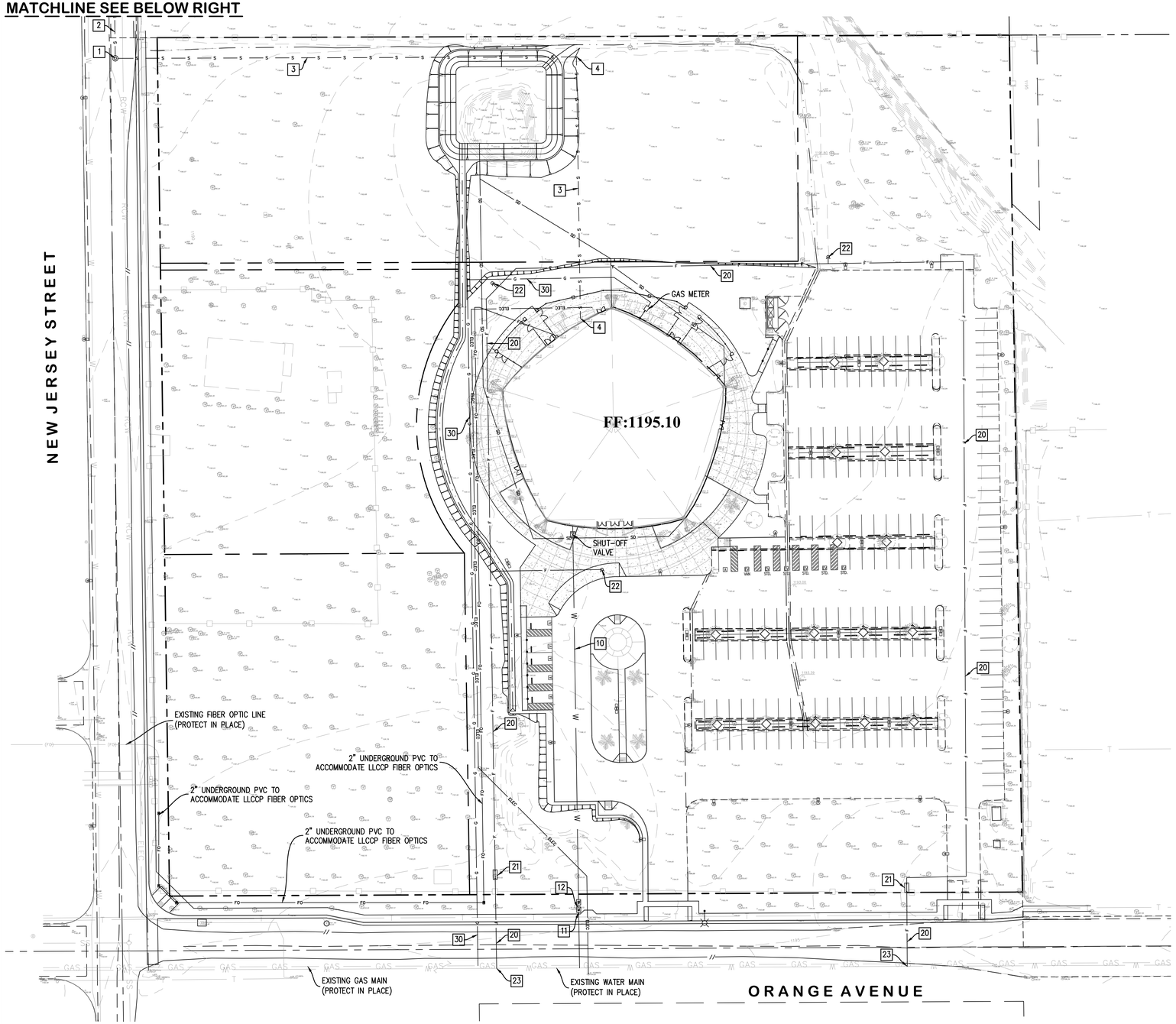
T. JARB THAIPEJR No. C-47907 CIVIL STATE OF CALIFORNIA

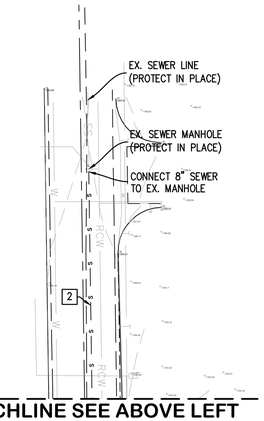
CITY OF LOMA LINDA
PRELIMINARY GRADING PLAN (EAST)
11055 NEW JERSEY STREET

Drawing No. SH. 3 OF 4

MATCHLINE SEE BELOW RIGHT

NEW JERSEY STREET





MATCHLINE SEE ABOVE LEFT

SEWER CONSTRUCTION NOTES

1 INSTALL 48" DIA. PRECAST SEWER MANHOLE PER CITY OF LOMA LINDA STD. DWG. NO. SS-1.

2 INSTALL 8" DIA. SDR35 PVC SEWER LINE.

3 INSTALL 6" DIA. SDR35 PVC SEWER LINE.

4 INSTALL SEWER CLEAN OUT PER CITY OF LOMA LINDA STD. DWWG. NO. SS-2.

WATER CONSTRUCTION NOTES

10 INSTALL 3" DIA. PVC SCH40 DOMESTIC WATER LINE.

11 INSTALL DOMESTIC WATER METER WITH TYPE K COPPER TUBING SERVICE CONNECTION. SIZE TO BE DETERMINED.

12 INSTALL REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY. SIZE TO BE DETERMINED.

FIRE CONSTRUCTION NOTES

20 INSTALL 10" DIA. C900 DR18 PVC PIPE.

21 INSTALL FIRE SERVICE DOUBLE CHECK DETECTOR ASSEMBLY PER CITY OF LOMA LINDA STD. DWG. W-18.

22 INSTALL FIRE HYDRANT PER CITY OF LOMA LINDA STD. DWG. NO. W-7.

23 HOT TAP EXISTING WATERLINE WITH TAPPING SLEEVE PER CITY OF LOMA LINDA STD. DWG. NO. W-16.

GAS CONSTRUCTION NOTES

30 INSTALL 3" MEDIUM DENSITY PE YELLOW GAS LINE PER ASTM D2513 AND MANUFACTURER'S INSTALLATION GUIDELINES.

N

40 0 20 40 80

(IN FEET)
1 inch = 40 ft.

REGISTERED PROFESSIONAL ENGINEER
STEFAN C. LANTHIER
No. 59052
Exp. 06-30-26
CIVIL
STATE OF CALIFORNIA

Underground Service Alert
Call:TOll FREE 811
TWO WORKING DAYS BEFORE YOU DIG

Designed by	Drawn by	Checked by
GA	GA	SCL

PLANS PREPARED UNDER THE SUPERVISION OF
STEFAN LANTHIER, PE, PLS
Date 06-03-26 R.C.E. 59052

Reference Plans For These Improvements

Date	By	REVISIONS	App'd

BENCH MARK

Scale PER PLAN

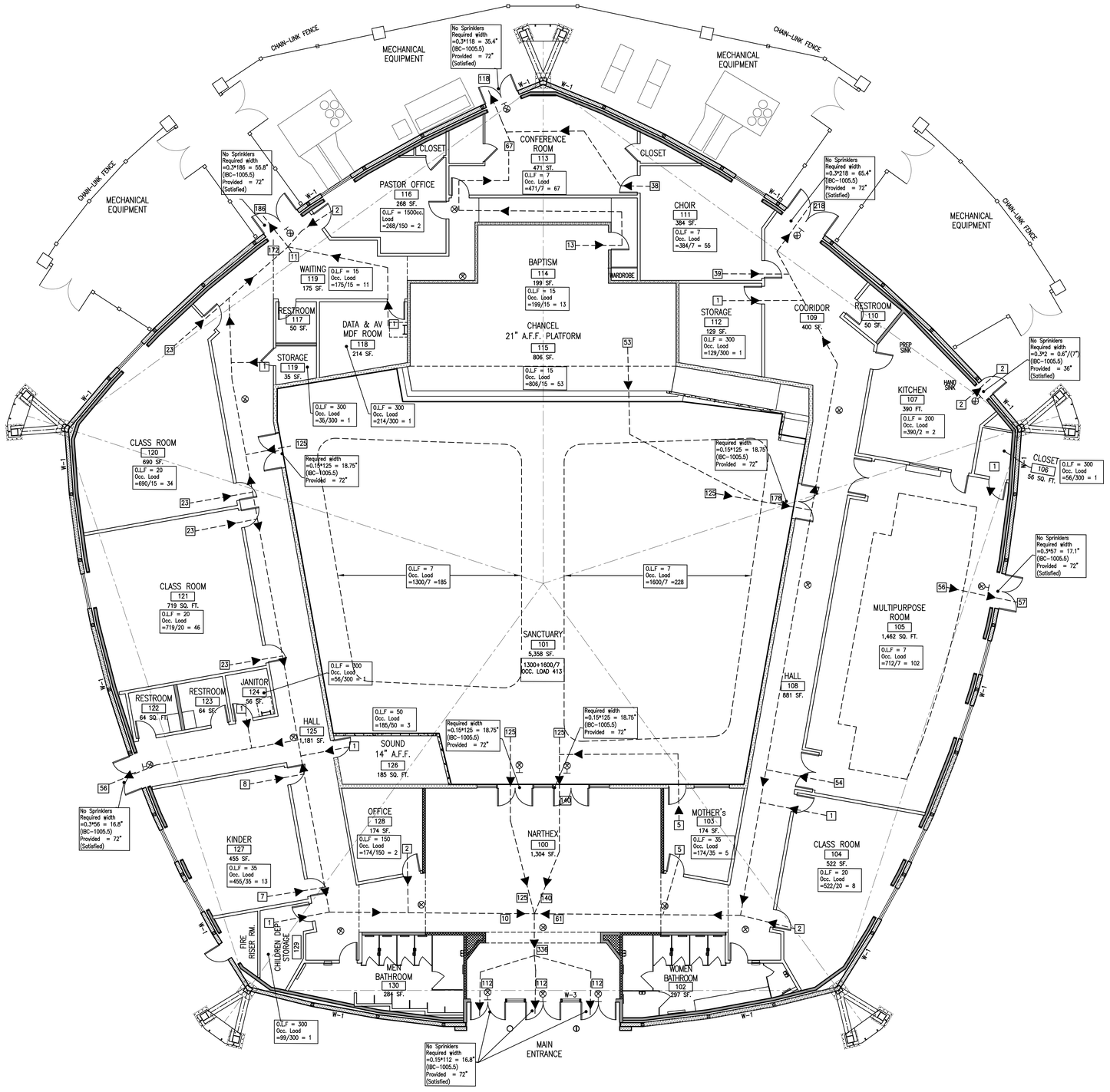
APPROVED

T. JARB THAIPEJR, PE
DIRECTOR OF PUBLIC WORKS
DATE

REGISTERED PROFESSIONAL ENGINEER
T. JARB THAIPEJR
No. C-47907
CIVIL
STATE OF CALIFORNIA

CITY OF LOMA LINDA
PRELIMINARY UTILITY PLAN
11055 NEW JERSEY STREET

Drawing No.
SH. 4 OF 4



OCCUPANT LOAD AND EXITING (1)
SCALE: 1/8" = 1'-0"

LEGEND:

- ⊗ EXIT SIGN ON CEILING. (SHADED AREA INDICATES ILLUMINATED FACE)
- ⊗H EXIT SIGN ON WALL. (SHADED AREA INDICATES ILLUMINATED FACE)
- DIRECTION OF TRAVEL.

NOTES:

CBC Sec. 903.2.1.3:
Group A-3. An automatic sprinkler system shall be provided throughout stories containing Group A-3 occupancies and throughout all stories from the Group A-3 occupancy to and including levels of exist discharge serving that occupancy where one of the following conditions exist.

1) Fire area exceeds 12,000 sf.
2) The fire area has an occ. Load of 300 or more.
3) The fire area is located on a floor other than a level of exit discharge serving such occ.
4) The structure exceeds 12,000 sf. contains more than one fire area containing exhibition and display rooms , and is separated into two or more buildings by fire walls of less than four-hour fire-resistance rating without openings.

OCCUPANT LOAD:

ROOM NAME	RM. #	RM. Sq.Ft.	Occupant Load
NARTHEX	100	1304	0
SANCTUARY	101	5358	500
MOTHER's RM.	103	174	5
CLASS ROOM	104	522	8
MULTIPURPOSE	105	1462	102
SOUND CLOSET	106	56	1
KITCHEN	107	390	2
CHOIR	111	384	55
CONFERENCE RM	113	471	67
BAPTISM	114	199	13
PASTOR OFFICE	116	268	2
DATA EQUIPMENT	118	214	2
WAITING	119	175	11
CLASS ROOM	120	690	34
CLASS ROOM	121	719	46
JANITOR	124	56	1
SOUND	126	185	3
OFFICE	128	174	2
CHILDREN STOR.	129	157	1
KINDER	127	455	13
TOTAL OCCUPANT LOAD	=		868

PARKING REQUIREMENT:
Parking required = Occ. Load 868/ 5 =174
PARKING SPACES PROVIDED = 196

DAVID G. LACKYARD
PLANNING SERVICES
PHONE: (909) 659-6610
P.O. BOX 3341
BIG BEAR CITY CA. 92314
EMAIL: dglackyard@gmail.com
https://archinect.com/lackyard

PROJECT:

L.L. ADVENTIST SPANISH COMMUNITY SERVICES & WORSHIP CENTER

11055 NEW JERSEY ST.
LOMA LINDA CA. 92373
PARCEL # 0292-163-09

CONTROLLING JURISDICTION:
LOMA LINDA CITY HALL
25541 BARTON ROAD
LOMA LINDA CA. 92354
909-799-2830

OWNER:

ORANGE-NEW JERSEY PROPERTY

- PARTNERSHIP -
SOUTHEASTERN CALIF.
CONFERENCE OF
SEVENTH DAY ADVENTISTS

SUBMITTAL FOR ENTITLEMENTS:

CONDITIONAL USE PERMIT
AND
PRECISE PLAN OF DESIGN

PROPOSED OPERATION:
SATURDAY:
Religious Gathering and Worship
8:00 AM TO 1:00 PM.

Bible Study Sessions:
Prayer Meetings:
1:00 PM to 5:00 PM

WEDNESDAY:
Bible Study Sessions:
Prayer Meetings:
5:00 PM to 9:00 PM

ISSUANCES

DATE	DESCRIPTION

BUILDING & SAFETY REVISIONS

MARK	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		

OWNER/CONTRACTOR REVISIONS

MARK	DATE	DESCRIPTION
A		
B		
C		
D		
E		
F		

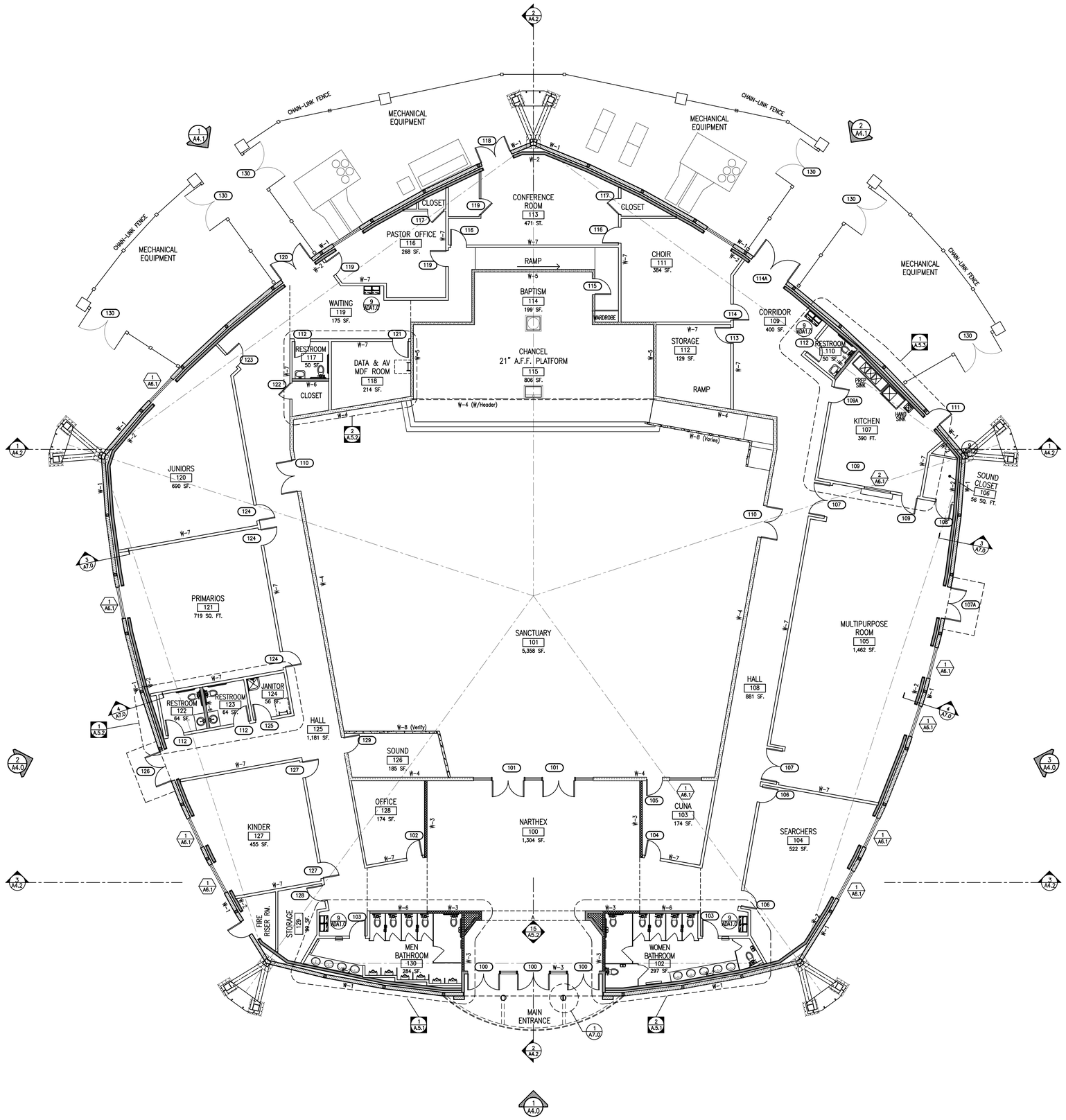
PROJECT NO: 20242201
CAD DWG FILE:
DRAWN BY: D.L.
DATE 06/15/2026

SHEET TITLE

OCCUPANT LOAD AND EXIT PLAN

A.1.0

CUP-2025-006, MDA-2024-0036, MPD-2025-007



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

1

WALL TYPES

REFER TO STRUCTURAL PLANS

LEGEND:

RM. NAME — ROOM NAME
X — ROOM NUMBER
XO SF. — SQUARE FOOTAGE OF ROOM
OCC. — OCCUPANT LOAD
XO — DOOR NUMBER – SHEET A6.1
X/O — WINDOW I.D. – SHEET A6.1

DAVID G. LACKYARD
PLANNING SERVICES
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PARCEL # 0292-163-09

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OWNER:

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WEDNESDAY:
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Prayer Meetings:
5:00 PM to 9:00 PM

ISSUANCES

DATE	DESCRIPTION

BUILDING & SAFETY REVISIONS

MARK	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		

OWNER/CONTRACTOR REVISIONS

MARK	DATE	DESCRIPTION
A		
B		
C		
D		
E		
F		

PROJECT NO: 20242201
CAD DWG FILE:
DRAWN BY: D.L.

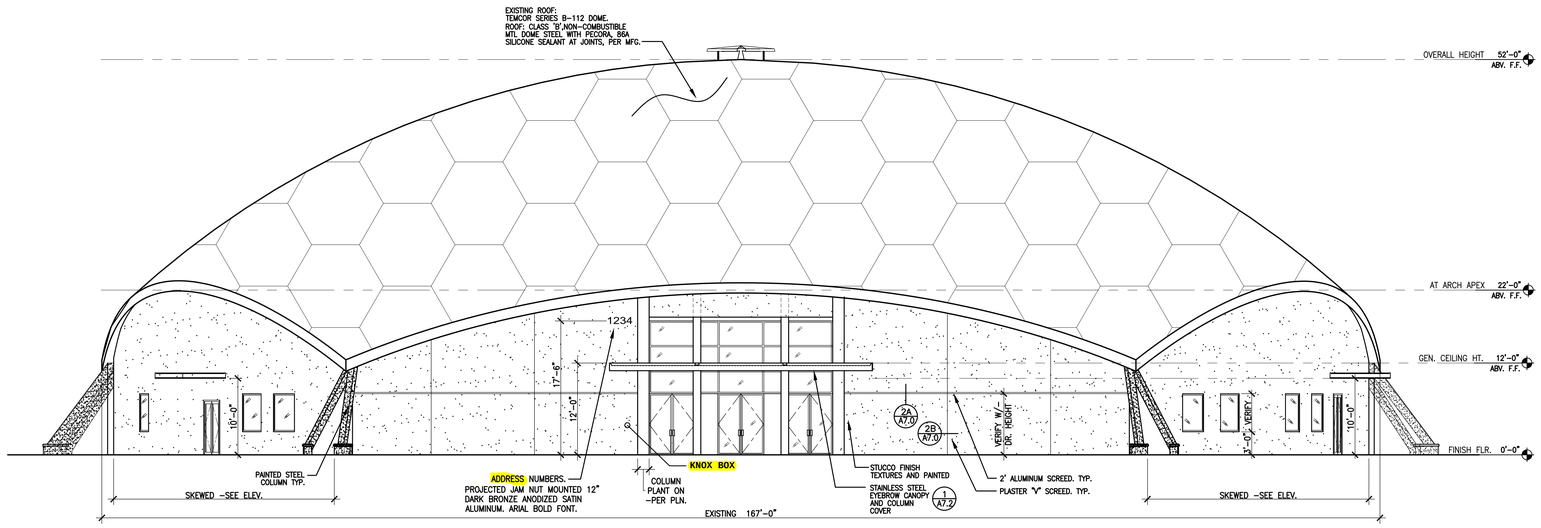
DATE 06/15/2026

SHEET TITLE

FLOOR PLAN

A.2.0

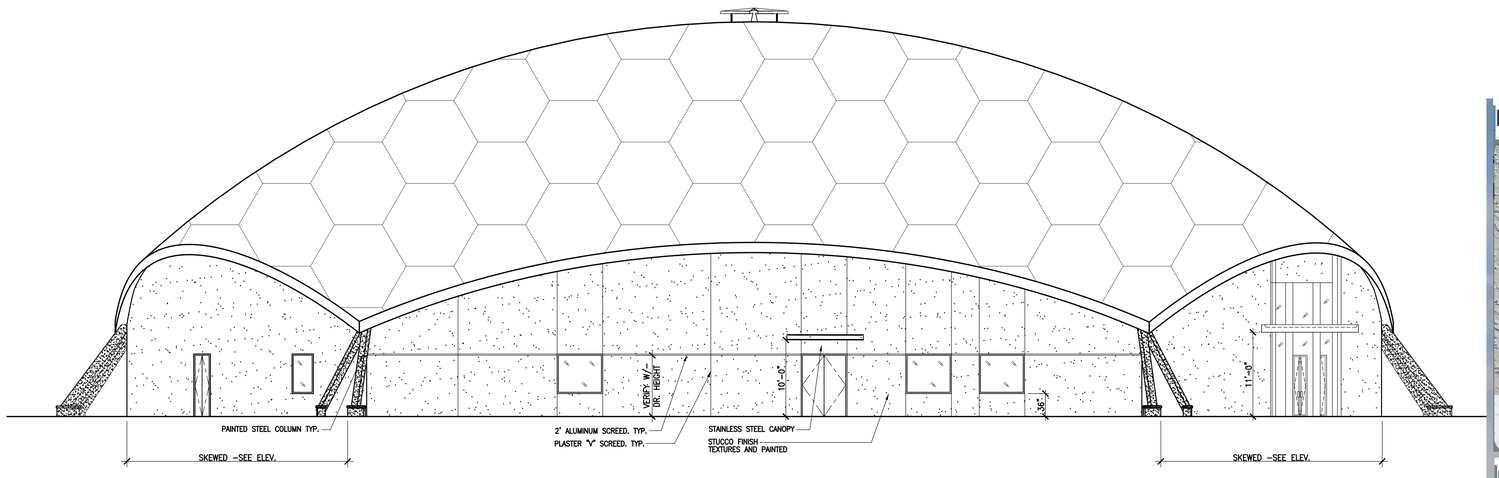
CUP-2025-006, MDA-2024-0036, MPD-2025-007



SOUTH EXTERIOR ELEVATION

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

1

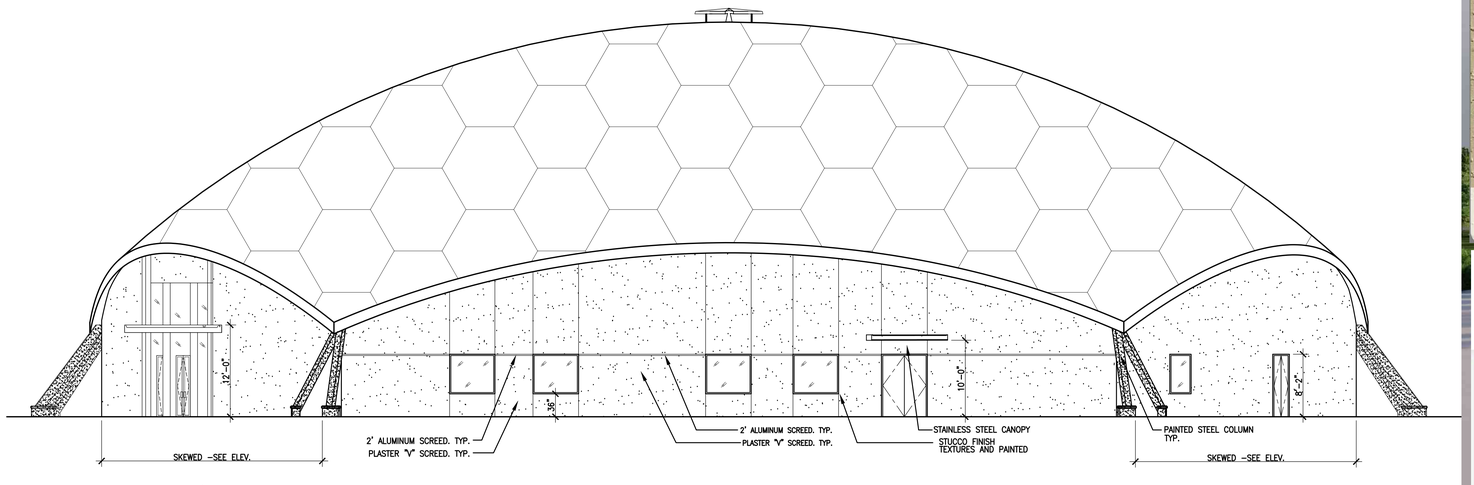


NOTE: SEE DETAIL 1/A4.0 FOR ADDITIONAL NOTES AND DIMENSIONS

SOUTH WEST EXTERIOR ELEVATION

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

2



NOTE: SEE DETAIL 1/A4.0 FOR ADDITIONAL NOTES AND DIMENSIONS

SOUTH EAST EXTERIOR ELEVATION

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

3

DAVID G. LACKYARD
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LICENSED CONTRACTOR
DAVID G. LACKYARD
Dave Lackyard
No. 784716
REN. 6/30/25
STATE OF CALIFORNIA

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PARCEL # 0292-163-09

CONTROLLING JURISDICTION:
LOMA LINDA CITY HALL
25541 BARTON ROAD
LOMA LINDA CA. 92354
909-799-2830

OWNER:

ORANGE-NEW JERSEY PROPERTY

- PARTNERSHIP -
SOUTHEASTERN CALIF.
CONFERENCE OF
SEVENTH DAY ADVENTISTS

SUBMITTAL FOR ENTITLEMENTS:

CONDITIONAL USE PERMIT
AND
PRECISE PLAN OF DESIGN

LaHabra® STUCCO SOLUTIONS FROM SCRATCH TO FINISH

EXTERIOR PLASTER

TITANIUM
P-1661 (38)
BASE 200

LaHabra® STUCCO SOLUTIONS FROM SCRATCH TO FINISH

EXTERIOR FACADE COLUMNS

CAREMELO
P-192 (57)
BASE 200

SHERWIN-WILLIAMS

SW 6377
Butterscotch
FASCIA AND ROOF RIDGES

SW 9065
Perfect Periwinkle
ROOF TOP

ISSUANCES

DATE	DESCRIPTION

BUILDING & SAFETY REVISIONS

MARK	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		

OWNER/CONTRACTOR REVISIONS

MARK	DATE	DESCRIPTION
A		
B		
C		
D		
E		
F		

PROJECT NO: 20242201
CAD DWG FILE:
DRAWN BY: D.L.

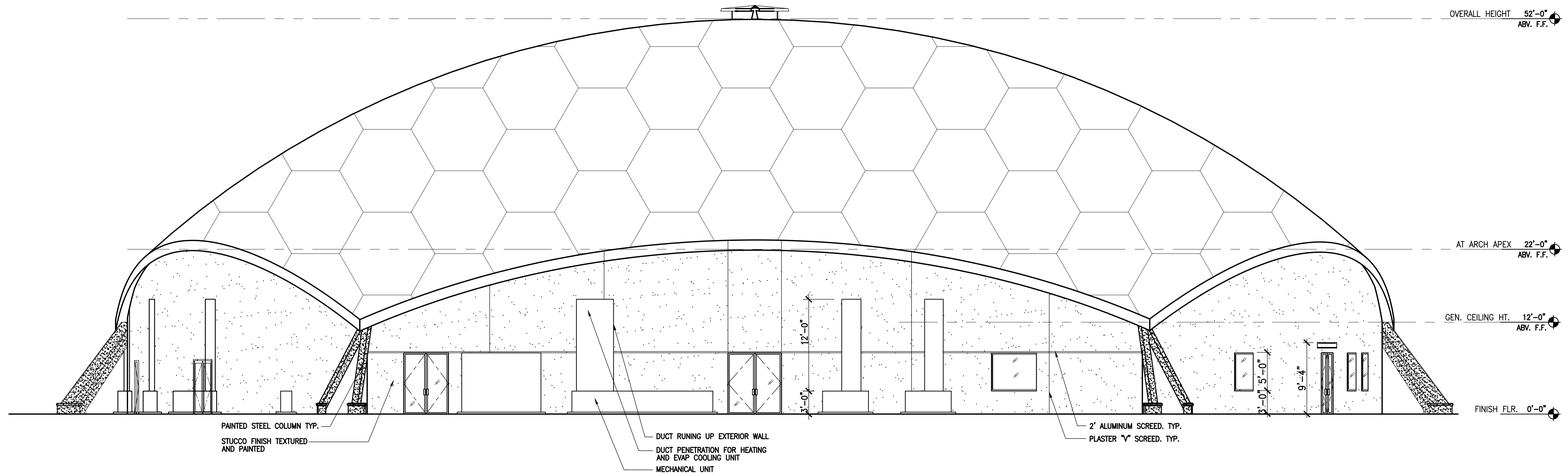
DATE 12/09/2024

SHEET TITLE

EXTERIOR ELEVATIONS

A 4.0

CUP-2025-006, MDA-2024-0036, MPD-2025-007

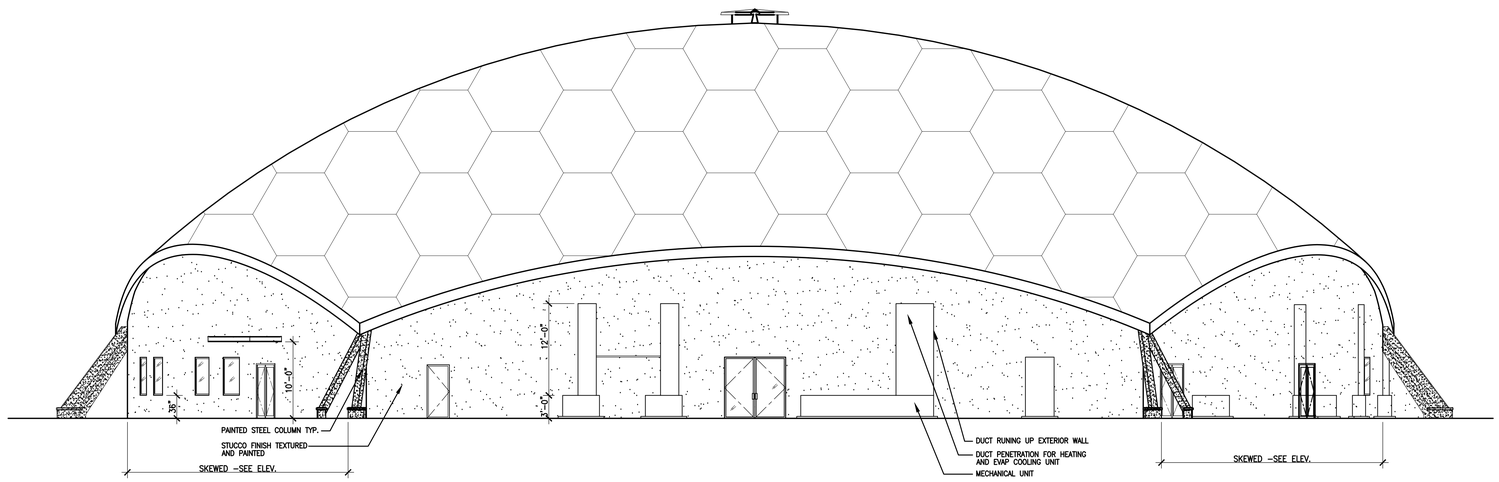


NOTE: SEE DETAIL 1/A4.0 FOR ADDITIONAL NOTES AND DIMENSIONS

NORTH WEST EXTERIOR ELEVATION

1

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



NOTE: SEE DETAIL 1/A4.0 FOR ADDITIONAL NOTES AND DIMENSIONS

NORTH EAST EXTERIOR ELEVATION

2

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

DAVID G. LACKYARD
PLANNING SERVICES
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P.O. BOX 3341
BIG BEAR CITY CA. 92314
EMAIL: dglackyard@gmail.com
https://archinect.com/lackyard

LICENSED CONTRACTOR
DAVID G. LACKYARD
Dave Lackyard
No. 764716
REN. 6/30/25
STATE OF CALIFORNIA

PROJECT:

L.L. ADVENTIST SPANISH COMMUNITY SERVICES & WORSHIP CENTER

11055 NEW JERSEY ST.
REDLANDS CA. 92373
PARCEL # 0292-163-09

CONTROLLING JURISDICTION:
LOMA LINDA CITY HALL
25541 BARTON ROAD
LOMA LINDA CA. 92354
909-799-2830

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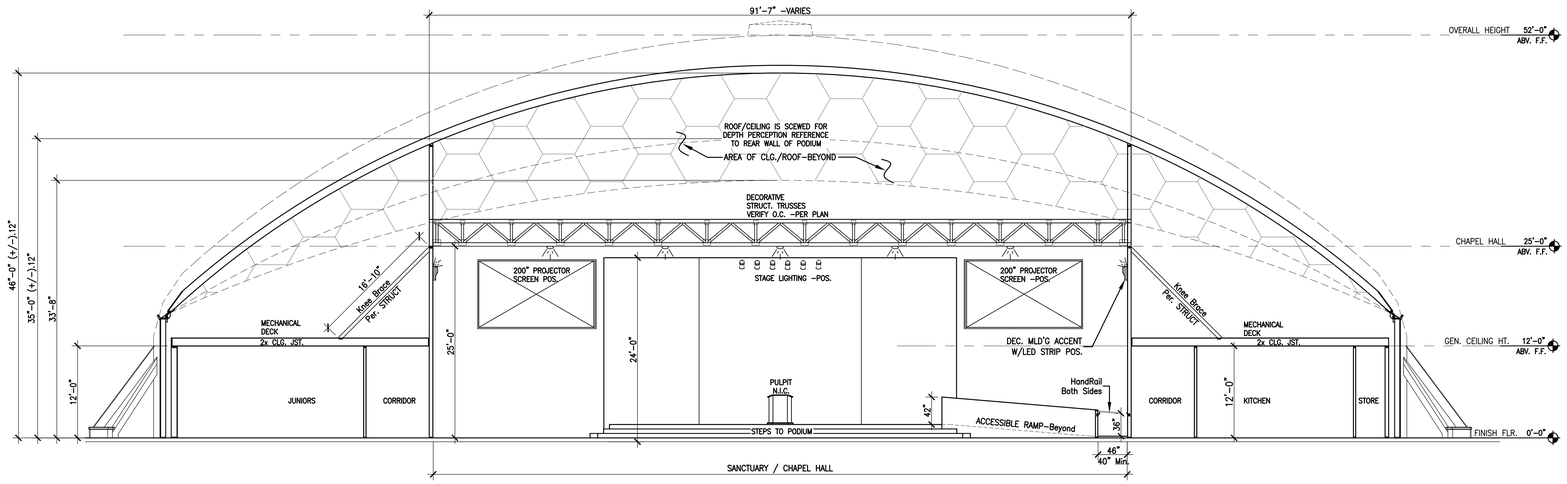
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CAD DWG FILE:	
DRAWN BY:	D.L.
DATE	12/09/2024

SHEET TITLE

EXTERIOR ELEVATIONS

A4.1

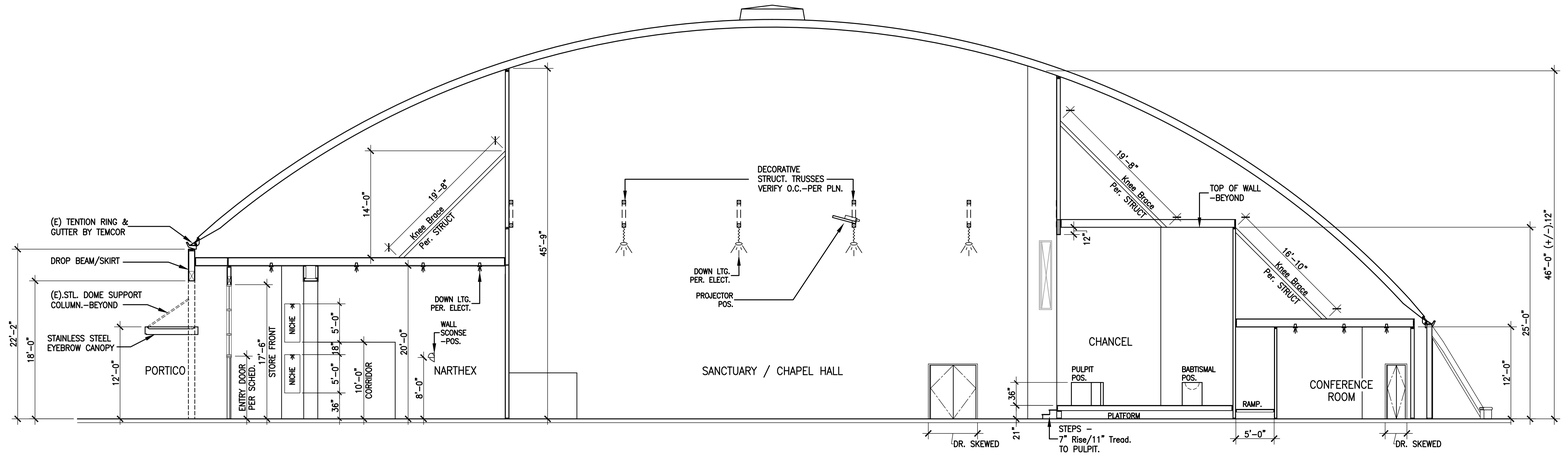
CUP-2025-006, MDA-2024-0036, MPD-2025-007



BUILDING SECTION (PODIUM)

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

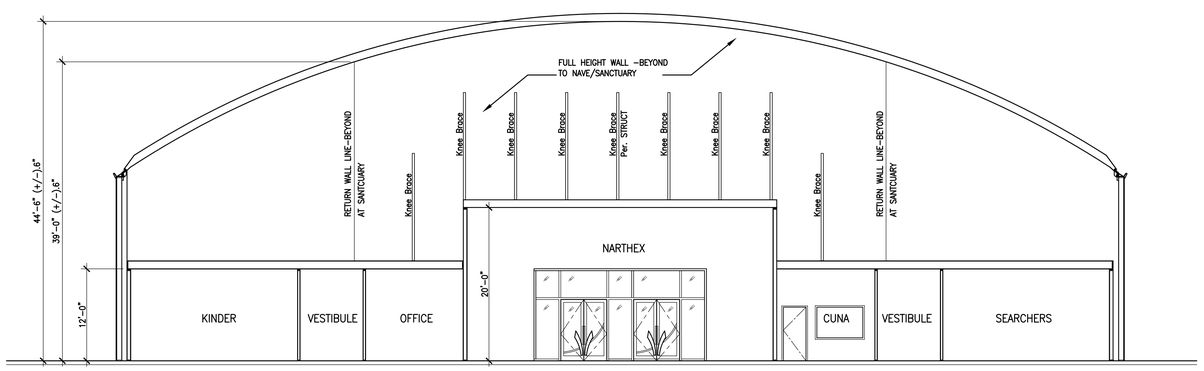
1



BUILDING SECTION (Sanctuary)

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

2



BUILDING SECTION (Narthex)

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

3

DAVID G. LACKYARD
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Dave Lackyard
No. 764716
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ISSUANCES

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DATE 12/09/2024

SHEET TITLE

INTERIOR SECTIONS

A 4.2

CUP-2025-006, MDA-2024-0036, MPD-2025-007

ABBREVIATIONS

ABBREV.	DESCRIPTION
A	AMPERE
AB	ABOVE BACKSPLASH
ADJ	ADJACENT (TO)
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFUE	ANNUAL FUEL UTILZATION INDEX
AHU	AIR HANDLING UNIT
AL	ALUMINUM
AM	AMETER
AP	ACCESS PANEL
ARCH	ARCHITECT/ARCHITECTURAL
AUTO	AUTOMATIC
@	AT
BDD	BACKDRAFT DAMPER
BEES	BUILDING ENERGY EFFICIENCY STANDARDS CALIFORNA ENERGY CODE TITLE 24, PART 6
BHP	BRAKE HORSEPOWER
BLDG	BUILDING
BOD	BASIS OF DESIGN, BOTTOM OF DUCT
BOG	BOTTOM OF GRILL
BOR	BOTTOM OF REGISTER
BTUH	BRITISH THERMAL UNIT PER HOUR
CD	CEILING DIFFUSER, CONDENSATE DRAIN
CECOM	CALIFORNIA ENERGY COMMISSION
CF	CUBIC FOOT
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CFSD	COMBINATION FIRE SMOKE DAMPER
C/L	CENTERLINE
CRFD	CEILING RADIATION FIRE DAMPER
CSFM	CALIFORNIA STATE FIRE MARSHALL
CH	CEILING HEIGHT
CLG	CEILING
CM	CONSTRUCTION MANAGER
CR	CEILING REGISTER
CO2	CARBON DIOXIDE
COMB	COMBINATION
CONN	CONNECTION, CONNECTOR OR CONNECT
CONTR	CONTRACTOR
COOR	COORDINATE
COP	COEFFICIENT OF PERFORMANCE
CU	COPPER, CONDENSING UNIT
DET	DETAIL
DIA	DIAMETER
DIST	DISTRIBUTION
DIV	DIVISION
D/L	DOOR LOUVER
DN	DOWN
DSD	DUCT SMOKE DETECTOR
DTR	DOWN THROUGH ROOF
DWG	DRAWING
DX	DIRECT EXPANSION (REFRIGERANT)
EA	EACH, EXHAUST AIR
EAD	EXHAUST AIR DUCT, EXHAUST AIR DAMPER
EAP	EXHAUST AIR PLENUM
EER	ENERGY EFFICIENCY RATIO
EEV	ELECTRONIC EXPANSION VALVE (REFRIGERANT)
EF	EXHAUST FAN
EG	EXHAUST GRILL
EH	ELECTRIC HEATER
ELEC	ELECTRICAL
ELEV	ELEVATION
ESP	EXTERNAL STATIC PRESSURE
EQ	EQUAL
EQUIP	EQUIPMENT
(E-R)	EXISTING TO BE RELOCATED
(E)	EXISTING
EXH	EXHAUST

ABBREV.	DESCRIPTION
FA	FACE AREA, FREE AREA
FC	FAN COIL
FD	FIRE DAMPER
FF	FINISHED FLOOR
FG	FINISHED GRADE
FIN	FINISHED
FLA	FULL LOAD AMPS
FLEX	FLEXIBLE
FLR	FLOOR
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FUT	FUTURE
G	GAS
GA	GAUGE
GALV	GALVANIZED
GI	GALVANIZED IRON
HACR	HEATING, AIR CONDITIONING, AND REFRIGERATION TYPE CIRCUIT BREAKER
HOA	HAND-OFF-AUTOMATIC
HORIZ	HORIZONTAL
HP	HORSEPOWER, HEAT PUMP
HTG	HEATING
HTR	HEATER
HSPF	HEATING SEASONAL PERFORMANCE FACTOR
IPLV	INTEGRATED PART LOAD VALUE
IBJS	IN BETWEEN JOIST (OR RAFTER OR BEAM) SPACE
ID	INSIDE DIAMETER
IN WC	INCHES WATER COLUMN
I/L	INTERLOCK
J-BOX	JUNCTION BOX
K	THOUSAND (KILO)
KW	KILOWATT
(L)	LINING - ACOUSTICAL DUCT LINING
LV	LOW VOLTAGE
LVR	LOUVER
M, MTR	MOTOR
MAN	MANUAL
MAX	MAXIMUM
MBH	THOUSAND BTUH
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPACITY
MECH	MECHANICAL
MFR	MANUFACTURER
MH	MOUNTING HEIGHT
MIN	MINIMUM
MOCP	MAXIMUM OVERCURRENT PROTECTION
MTG	MOUNTING
MUA	MAKE UP AIR
MVD	MANUAL VOLUME DAMPER
(N)	NEW
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO, NOS	NORMALLY OPEN, NUMBER, NUMBERS
NP	NAMEPLATE
NTS	NOT TO SCALE
OBD	OPPOSED BLADE DAMPER
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OVERHEAD
OPR	OWNERS PROGRAM REQUIREMENTS
OSA	OUTSIDE AIR
OSAD	OUTSIDE AIR DUCT, OUTSIDE AIR DAMPER
OSAP	OUTSIDE AIR PLENUM

ABBREV.	DESCRIPTION
PC	PLUMBING CONTRACTOR
PH	PHASE
PHP	SINGLE PACKAGE HEAT PUMP
PL	PILOT LIGHT
P/L	PROPERTY LINE
POC	POINT OF CONNECTION
POS	POSITION
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PTHP	PACKAGED TERMINAL HEAT PUMP
QTY	QUANTITY
RA	RETURN AIR
RAD	RETURN AIR DUCT, RETURN AIR DAMPER
RAP	RETURN AIR PLENUM
REQD	REQUIRED
RF	RETURN FAN
RG	RETURN GRILL
RL	REFRIGERANT LIQUID
RLA	RUNNING LOAD AMPS
RM	ROOM
RS	REFRIGERANT SUCTION
SA	SUPPLY AIR
SAD	SUPPLY AIR DUCT, SUPPLY AIR DAMPER
SAP	SUPPLY AIR PLENUM
SCH	SCHEDULE
SD	SMOKE DETECTOR
SECT	SECTION
SEER	SEASONAL ENERGY EFFICIENCY RATIO
SF	SUPPLY FAN, SQUARE FOOT
SHT	SHEET
SIG	SIGNAL
SM	SHEET METAL
SP	STATIC PRESSURE
SPEC	SPECIFICATIONS
SR	SIDEWALL RETURN (GRILL)
SS	SIDEWALL SUPPLY (GRILL)
SURF	SURFACE
SW	SWITCH
TC	TIME CLOCK
TEMP	TEMPERATURE
TOD	TOP OF DUCT
TOG	TOP OF GRILL
TOR	TOP OF REGISTER
TRANS	TRANSITION
TSP	TWISTED SHIELDED PAIR
TSTAT	THERMOSTAT
TV	TURNING VANES
TS	TEMPERATURE SENSOR
TXV	THERMOSTATIC EXPANSION VALVE
U/C	UNDERCUT (DOOR)
UG	UNDERGROUND
UH	UNIT HEATER
UL	UNDERWRITERS LABORATORIES
UNO	UNLESS NOTED OTHERWISE
V	VOLTS
VAC	VOLTS AC (ALTERNATING CURRENT)
VDC	VOLTS DC (DIRECT CURRENT)
VFD	VARIABLE FREQUENCY DRIVE
VERT	VERTICAL
W	WATTS
WP	WEATHERPROOF, NEMA 3R
W/	WITH
XFMR	TRANSFORMER

APPLICABLE CODES

1. INSTALLATION OF ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE FOLLOWING CODES:

2025 CALIFORNIA ELECTRICAL CODE
PART 3, TITLE 24, CCR

2025 CALIFORNIA ENERGY CODE
PART 6, TITLE 24, CCR

2025 CALIFORNIA GREEN BUILDING STANDARDS CODE
PART 11, TITLE 24, CCR

AND ALL CODES AND ORDINANCES, ETC., OF THE CITY OF LOMA LINDA, OF ALL AUTHORITIES HAVING JURISDICTION OVER THE WORK.

ELECTRICAL SHEET INDEX

← SHEET COUNT	SHEET NO.	SHEET TITLE
1	E-1.Ø	TITLE SHEET - CODES, ABBREVIATIONS
2	E-1.1	LEGEND, GENERAL NOTES
3	E-1.2	SPECIFICATIONS
4	E-1.3	LIGHTING FIXTURE AND CONTROL DEVICE SCHEDULES
5	E-1.4	ELECTRICAL SITE PLAN
6	E-1.5	SITE LIGHTING PHOTOMETRIC PLAN
7	E-2.Ø	LIGHTING PLAN
8	E-2.1	POWER AND TELECOM PLAN
9	E-2.2	EQUIPMENT MEZZANINE ELECTRICAL PLAN
1Ø	E-3	LOAD CALCULATION, SINGLE LINE DIAGRAM
11	E-4	DETAILS AND DIAGRAMS
12	E-5	PANEL SCHEDULES

CONSULTANT:
EquitySpec MEP
Consulting Engineers
MECHANICAL-ELECTRICAL-ENERGY
44489 Town Center Way D529
Palm Desert, CA 92260
V: 760 834-1537, 909 534-3596.
PM: Dave Celmer celmerdave@gmail.com

DATE: 4-20-26
ESCE JOB NO.: 2026-11
CAD FILE: LLSC
DRN. BY: ESCE
CHKD BY: DAC
SCALE: AS SHOWN

SEAL:



PROJECT:

LOMA LINDA ADVENTIST SPANISH COMMUNITY SERVICES & WORSHIP CENTER

11055 NEW JERSEY ST.
LOMA LINDA CA. 92373
PARCEL # 0292-163-09

CONTROLLING JURISDICTION:
LOMA LINDA CITY HALL
25541 BARTON ROAD
LOMA LINDA CA. 92354
909-799-2830

OWNER:

ORANGE-NEW JERSEY PROPERTY

- PARTNERSHIP -
SOUTHEASTERN CALIF. CONFERENCE OF SEVENTH DAY ADVENTISTS

SUBMITTAL:

BUILDING & SAFETY

ISSUANCES

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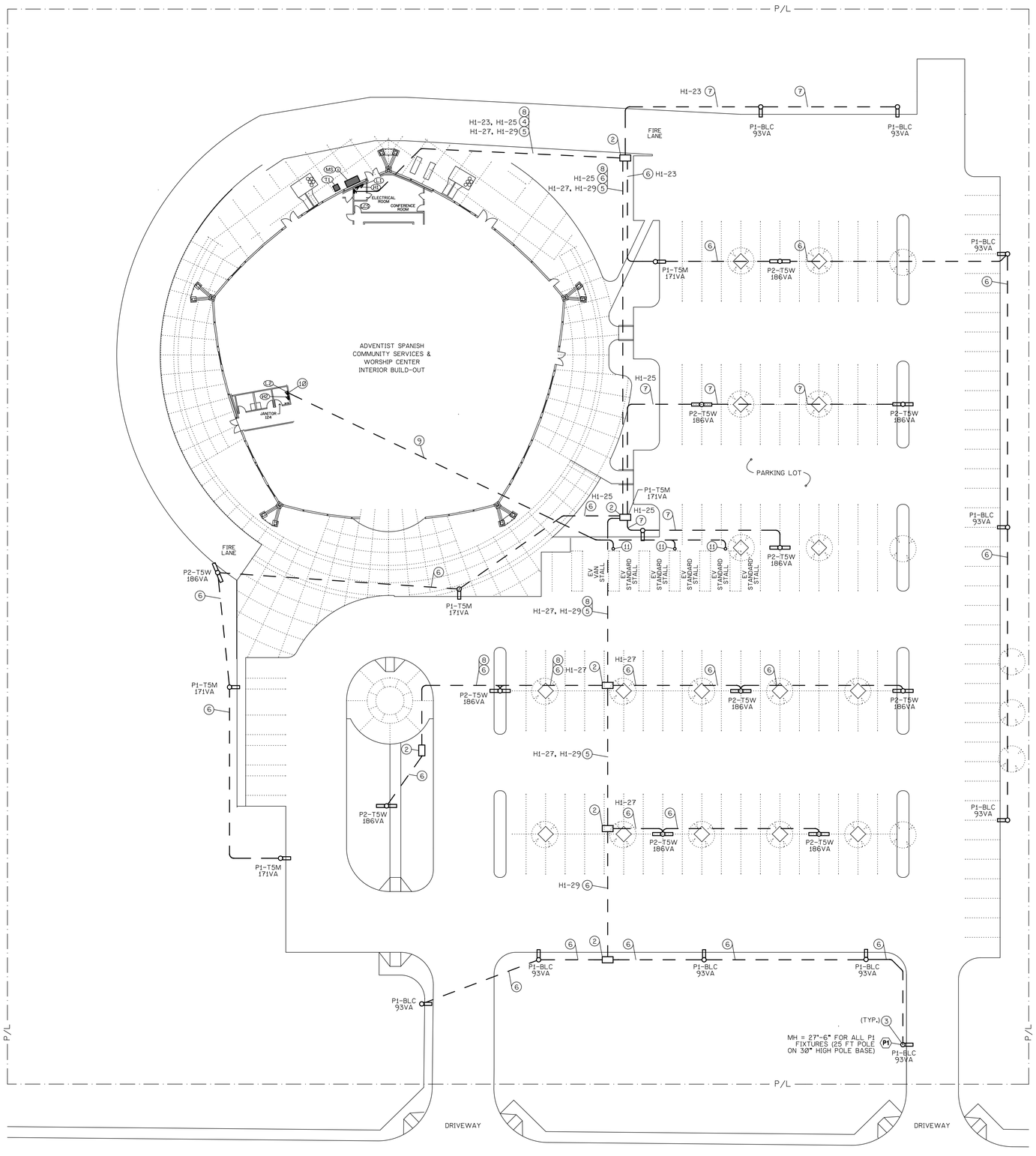
PROJECT NO:
CAD DWG FILE:
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DATE

SHEET TITLE

ELECTRICAL TITLE SHEET

E-1.0



PLAN NOTES

1. MAIN SERVICE "MS". REFER TO SINGLE LINE DIAGRAM.
2. IN-GRADE PULL BOX: 17" X 30" X 24" DEEP HIGH DENSITY REINFORCED CONCRETE BOX WITH REINFORCED CONCRETE BOLT-DOWN LID MARKED "ELECTRIC". CHRISTY 1730I336. SET FLUSH TO FINISH GRADE.
3. SITE LIGHTING POLE ON CONCRETE BASE: REFER TO DETAIL.

PARKING LOT LIGHTING BRANCH CIRCUITS AND CONDUIT RUNS:

4. (4)#10+(1)#12G-1-1/2"C. H1-23, H1-25.
5. (4)#10+(1)#12G-1-1/2"C. H1-27, H1-29.
6. (2)#10+(1)#12G-1-1/2"C.
7. (2)#12+(1)#12G-1-1/2"C.
8. 1-1/2" EMPTY CONDUIT WITH 1/4" NYLON PULL ROPE.

PROVISIONS FOR SIX FUTURE ELECTRIC VEHICLE CHARGING STATIONS (EVCS) CIRCUIT CONDUCTORS - PLAN NOTES 9, 10, 11 BELOW:

9. RUN THREE 1-1/2" EMPTY CONDUITS WITH 1/4" NYLON PULL ROPES FROM WIREWAY BELOW PANEL L2 TO PROPOSED LOCATIONS OF FUTURE EVCS.
10. PROVIDE 6" X 6" X 24" SCREW COVER WIREWAY BELOW PANEL L2. USE MEDIUM RADIUS SWEEPS FOR RUNS INTO BOTTOM OF RACEWAY.
11. APPROX. LOCATION OF CONDUIT STUB-UP FOR FUTURE DUAL-PORT EVCS. USE MEDIUM RADIUS SWEEP AND TERMINATE RUN WITH CAPPED STRAIGHT STUB EXTENDING 6" ABOVE GRADE. COORDINATE EXACT LOCATION WITH ARCHITECTURAL SITE PLAN.

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

NORTH:

CONSULTANT:
EquitySpec MEP
Consulting Engineers
MECHANICAL-ELECTRICAL-ENERGY
44489 Town Center Way D529
Palm Desert, CA 92260
v: 760 834-1537, 909 534-3596.
PM: Dave Celmer celmerdave@gmail.com

DATE: 4-20-26
ESCE JOB NO.: 2026-1
CAD FILE: LLSC
DRN. BY: ESCE
CHK'D BY: DAC
SCALE: AS SHOWN

SEAL:

REGISTERED PROFESSIONAL ENGINEER
David A. Celmer
No. E-27169
Signed 4-20-2026
ELECTRICAL
STATE OF CALIFORNIA

PROJECT:

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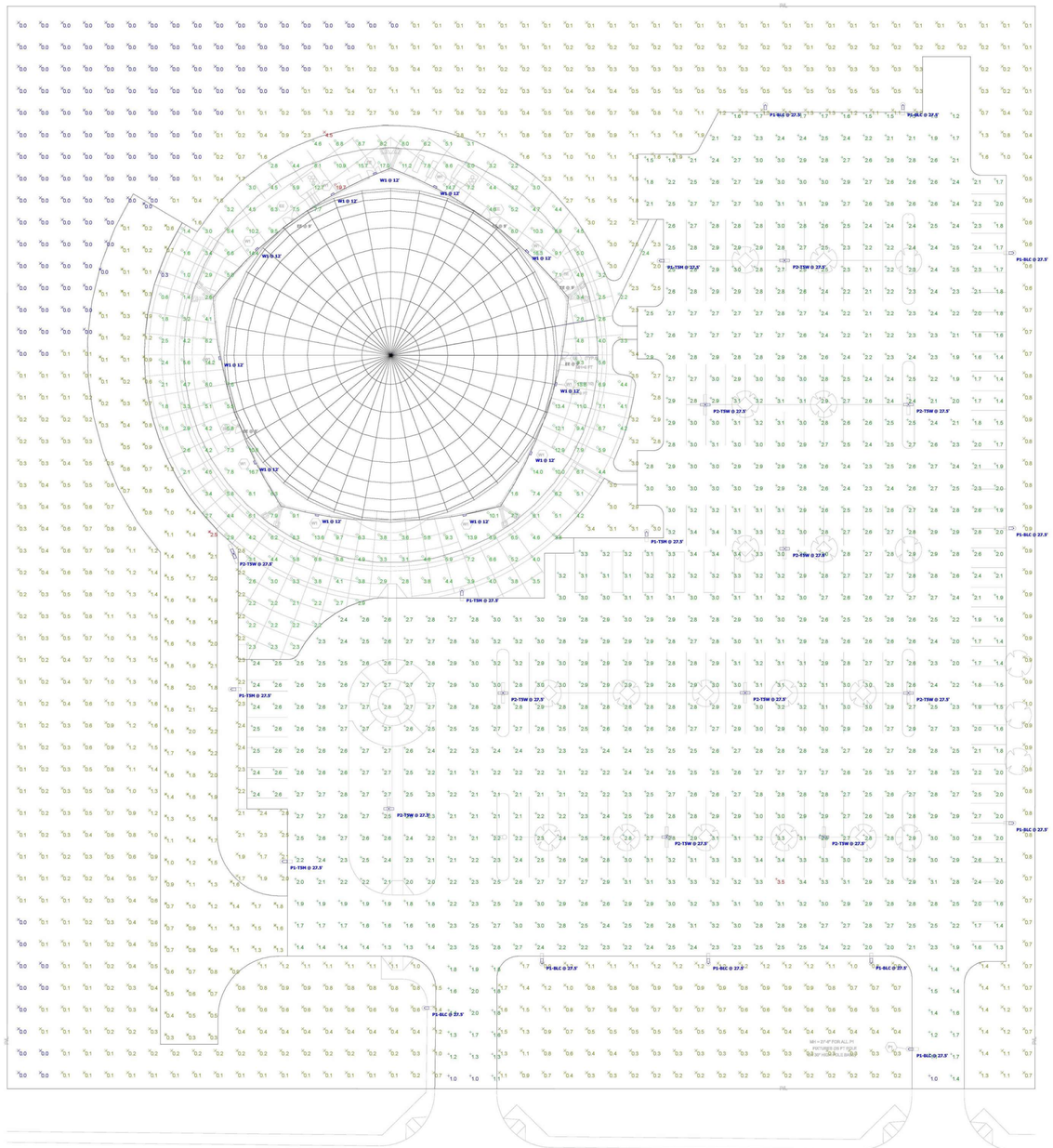
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CAD DWG FILE:
DRAWN BY:

DATE

SHEET TITLE

SITE ELECTRICAL PLAN

E-1.4

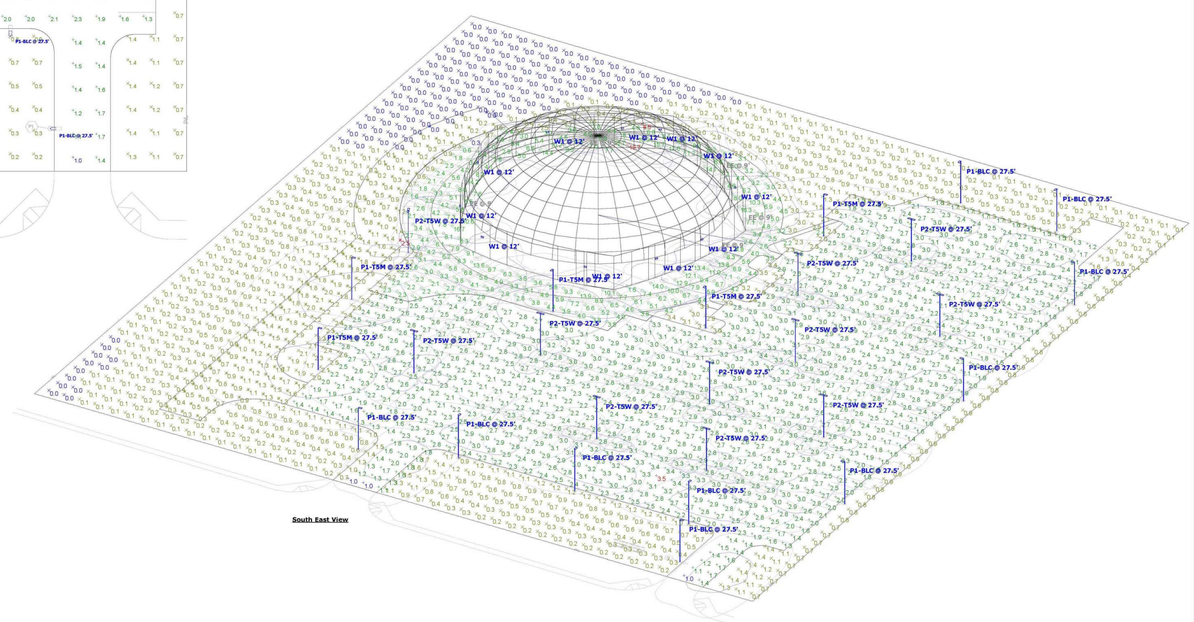


Plan View
Scale - 1" = 20ft

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
FIRE ACCESS LANE - Ground @ 0'AFG	+	1.1 fc	2.5 fc	0.0 fc	N/A	N/A
PARKING AND DRIVE AISLES - Ground @ 0'AFG	+	2.6 fc	3.5 fc	1.0 fc	3.5:1	2.6:1
PAVER AREA - Ground @ 0'AFG	+	5.8 fc	19.7 fc	0.3 fc	65.7:1	19.3:1
SITE - Ground @ 0'AFG	+	0.6 fc	4.5 fc	0.0 fc	N/A	N/A

Symbol	Label	Image	Quantity	Manufacturer	Catalog Number	Description	Filename	Lumen Multiplier	Light Loss Factor	Wattage	Plot
	EE		5	Lithonia Lighting	I-EM-USE ONLY - ZERO LIGHT OUTPUT> AFF FCT	AFF premium FCT (Forward Throw)	AFF_FCT.ies	1	0	0.48	Max: 1380cd
	P1-BLC		10	Lithonia Lighting	DSXO LED P4 30K 80CRI BLC3	DSXO Series 0 Area Luminaire P4 Performance Package 3000K CCT 80 CRI Type 3 Extreme Backlight Control	DSXO_LED_P4_30K_80CRI_BLC3.ies	1	0.9	93.04	Max: 7242cd
	P1-TSM		5	Lithonia Lighting	DSXO LED P7 30K 80CRI TSM	DSXO Series Size 0 Area Luminaire P7 Performance Package 3000K CCT 80 CRI Type 3 Medium	DSXO_LED_P7_30K_80CRI_TSM.ies	1	0.9	170.81	Max: 10139cd
	P2-TSW		11	Lithonia Lighting	DSXO LED P4 30K 80CRI TSW	DSXO Series Size 0 Area Luminaire P4 Performance Package 3000K CCT 80 CRI Type 3 Wide	DSXO_LED_P4_30K_80CRI_TSW.ies	1	0.9	186.08	Max: 6788cd
	W1		11	Lithonia Lighting	WDGE3 LED P4 50K 70CRI R4	WDGE3 LED WITH P4 - PERFORMANCE PACKAGE, 5000K, 70CRI, TYPE R OPTIC	WDGE3_LED_P4_50K_70CRI_R4.ies	1	0.9	87.8904	Max: 7396cd

Notes:
1. Reflectances: N/A, Exterior, Direct Component Only - To be verified by others
2. Building Height: N/A - To be verified by others
3. Fixture Mounting Height: As Noted on Plan - To be verified by others (Mounting Height = Pole + Base)
4. Calculation points are 10' x 10' typical on center spacing at height indicated in Statistics (Walkways at 5' x 5' on center spacing)
5. Vehicles, landscaping, fencing, curb, trash enclosures, partial height walls, HVAC, canopies, equipment, partitions, stairs, slope and other obstructions are not included in the calculation results unless drawn in model. The shadowing effects of these objects and other features are not included in the results.
6. The model numbers in the Luminaire Schedule below may vary from the Architectural/Engineering Fixture Schedule due to the availability of IES files. Refer to Architectural/Engineering Fixture Schedule for the complete specification and model number. Linear fixture run lengths are dependant on IES file Availability and should not be used for fixture counts or take off.
7. This lighting photometric study is not a substitute for an independent engineering analysis and the co-ordination of lighting system suitability, fixture placement, fixture selection and safety to comply with local building codes and project programming.
8. Luminaire data is obtained according to IES procedures under laboratory conditions. This photometric report is based on industry standard practices using commercially available IES photometric files provided by the lighting manufacturers. It assumes that the manufacturer's photometric files are accurate and complete. It is based on information known at the time of completion. This report is for informational purposes only and is not a guarantee of performance or an endorsement of any manufacturer's product. Actual field results may vary. Field results may differ from computer model due to many factors including but not limited to ambient temperature, line voltage variations, installation, reflectances, and other site specific conditions. Results are approximate.



South East View

performance lighting systems

Visual Lighting v.2.11.0164

LOMA LINDA ADVENTIST SPANISH COMMUNITY SERVICES & WORSHIP SERVICES
11055 NEW JERSEY ST. REDLANDS, CA 92373
LIGHTING PHOTOMETRIC STUDY - SITTE

Designer
JS for KB
Date
04/22/2026 12'AFF
Scale
As Noted
Drawing No.
Summary
1 of 1

CONSULTANT:
EquitySpec MEP
Consulting Engineers
MECHANICAL-ELECTRICAL-ENERGY
44489 Town Center Way D529
Palm Desert, CA 92260
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SEAL:

PROJECT:
LOMA LINDA ADVENTIST SPANISH COMMUNITY SERVICES & WORSHIP CENTER
11055 NEW JERSEY ST.
LOMA LINDA CA. 92373
PARCEL # 0292-163-09

CONTROLLING JURISDICTION:
LOMA LINDA CITY HALL
25541 BARTON ROAD
LOMA LINDA CA. 92354
909-799-2830

OWNER:
ORANGE-NEW JERSEY PROPERTY
- PARTNERSHIP -
SOUTHEASTERN CALIF. CONFERENCE OF SEVENTH DAY ADVENTISTS

SUBMITTAL:
BUILDING & SAFETY

ISSUANCES

DATE	DESCRIPTION

BUILDING & SAFETY REVISIONS

MARK	DATE	DESCRIPTION
1		
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4		

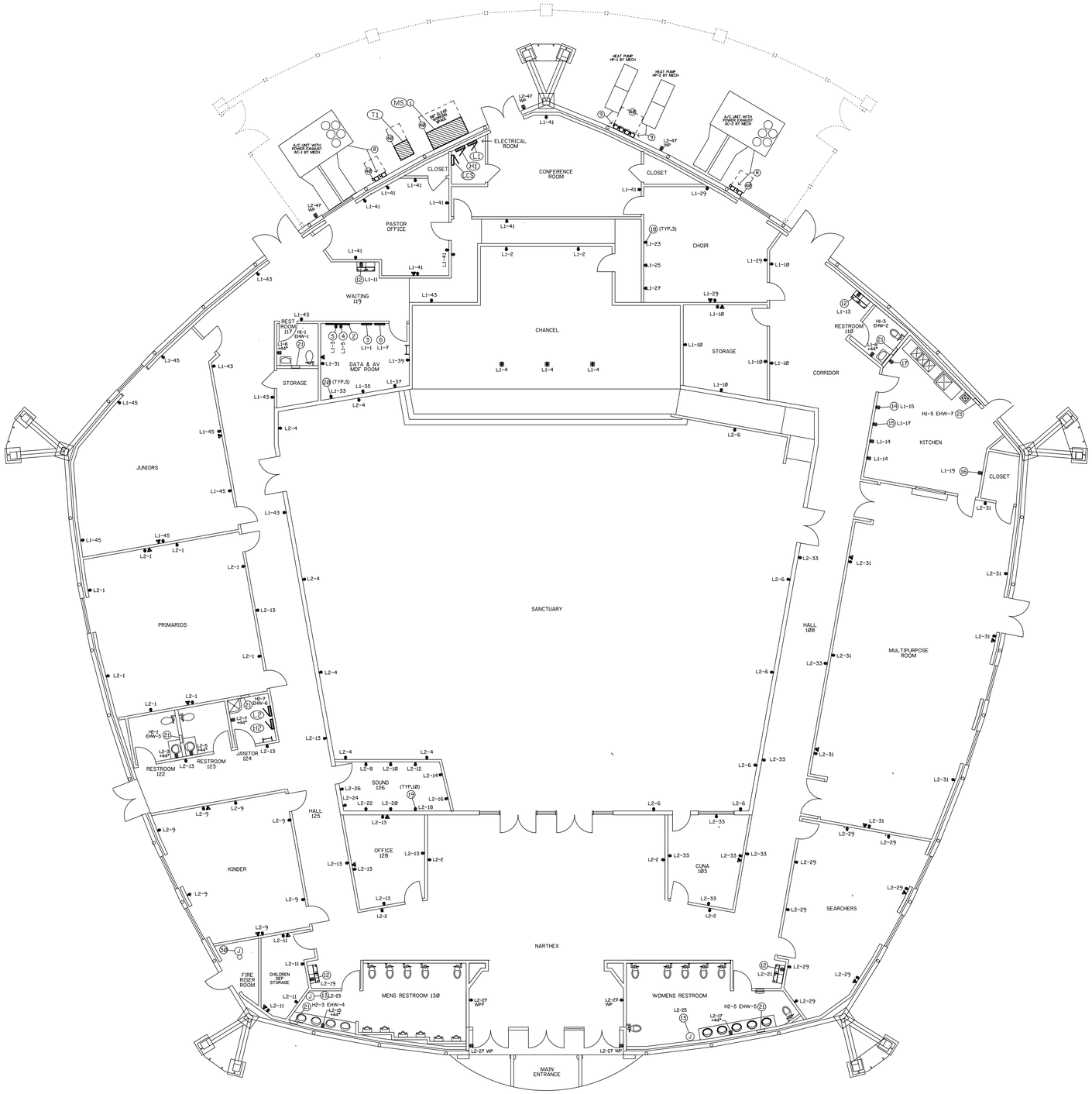
OWNER/CONTRACTOR REVISIONS

MARK	DATE	DESCRIPTION
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PROJECT NO:
CAD DWG FILE:
DRAWN BY:
DATE
SHEET TITLE

SITE LIGHTING PHOTOMETRIC PLAN

E-1.5



GENERAL NOTES

1. VERIFY EXACT LOCATION OF ELECTRICAL DEVICES WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN. DO NOT SCALE ELECTRICAL DRAWINGS FOR ROUGH-IN LOCATIONS.

PLAN NOTES

(1) MAIN SERVICE 'MS'. REFER TO SINGLE LINE DIAGRAM DETAIL..

(2) DESIGNATED WALL SPACE FOR TELEPHONE COMPANY AND CABLE COMPANY POINT OF PRESENCE CONNECTIONS. REFER TO TELECOM BACKBOARD DETAIL.

(3) SECURITY SYSTEM PANEL BY SECURITY SYSTEM VENDOR: PROVIDE A 20A DEDICATED CIRCUIT AND MAKE HARD-WIRED CONNECTION. REFER TO AND COORDINATE WITH APPROVED SECURITY SYSTEM SHOP DRAWINGS.

(4) RECEPTACLE OUTLET FOR TELEPHONE EQUIPMENT ON 20A DEDICATED CIRCUIT.

(5) RECEPTACLE OUTLET FOR CABLE/INTERNET EQUIPMENT ON 20A DEDICATED CIRCUIT.

(6) FIRE ALARM SYSTEM PANEL BY FIRE ALARM SYSTEM VENDOR: PROVIDE A 20A DEDICATED CIRCUIT AND MAKE HARD-WIRED CONNECTION. REFER TO AND COORDINATE WITH APPROVED FIRE ALARM SYSTEM SHOP DRAWINGS.

(7) RECEPTACLE OUTLET FOR IRRIGATION CONTROLLER ON 20A DEDICATED CIRCUIT.

(8) GRADE-MOUNTED ELECTRIC-COOLING GAS HEATING PACKAGED A/C UNIT. PROVIDE DEDICATED CIRCUIT AND WEATHERPROOF THREE POLE FUSED DISCONNECT SWITCH. COORDINATE ELECTRICAL REQUIREMENTS WITH NAMEPLATE RATING OF EQUIPMENT FURNISHED.

(9) GRADE-MOUNTED VRF HEAT PUMP. OUTDOOR UNIT OF A MULTI-ZONE VRF SYSTEM. REFER TO MANUFACTURERS INSTALLATION DRAWINGS SPECIFIC TO THIS PROJECT FOR REFRIGERANT PIPING AND POWER AND CONTROL WIRING TERMINATIONS. PROVIDE DEDICATED CIRCUIT AND WEATHERPROOF THREE POLE FUSED DISCONNECT SWITCH. COORDINATE ELECTRICAL REQUIREMENTS WITH NAMEPLATE RATING OF EQUIPMENT FURNISHED.

(10) DEDICATED OUTSIDE AIR SYSTEM (DOAS) FAN COIL. INDOOR UNIT OF A MULTI-ZONE VRF SYSTEM. REFER TO MANUFACTURERS INSTALLATION DRAWINGS SPECIFIC TO THIS PROJECT FOR REFRIGERANT PIPING AND POWER AND CONTROL WIRING TERMINATIONS. PROVIDE 15A DEDICATED CIRCUIT AND TWO POLE DISCONNECT SWITCH. (2)#12+#12G.

(12) ELECTRIC WATER COOLER: GFCI RECEPTACLE OUTLET ON 20A DEDICATED CIRCUIT.

(13) HAND DRYER: PROVIDE JUNCTION BOX FOR HARDWIRED CONNECTION TO DRYER.

(14) RECEPTACLE OUTLET ON 20A DEDICATED CIRCUIT. (REFRIGERATOR).

(15) RECEPTACLE OUTLET ON 20A DEDICATED CIRCUIT. (FREEZER).

(16) RECEPTACLE OUTLET ON 15A DEDICATED CIRCUIT. (GAS RANGE).

(17) RECEPTACLE OUTLET ON 20A DEDICATED CIRCUIT. (DISHWASHER).

(18) RECEPTACLE OUTLET ON 20A DEDICATED CIRCUIT. (CHOIR ROOM SOUND BOOTH EQUIPMENT).

(19) RECEPTACLE OUTLET ON 20A DEDICATED CIRCUIT. (SOUND BOOTH EQUIPMENT).

(20) RECEPTACLE OUTLET ON 20A DEDICATED CIRCUIT. (DATA + AV EQUIPMENT).

(21) WATER HEATER: PROVIDE 277V DEDICATED CIRCUIT AND CONNECT TO FACTORY-MOUNTED AND WIRED DISCONNECT SWITCH PROVIDED WITH WATER HEATER WALL SLEEVE.

(58) WIRE FIRE SPRINKLER RISER FLOW SWITCH AND TAMPER SWITCH AND P.I.V. TAMPER SWITCH TO FACP. REFER TO AND COORDINATE WITH APPROVED FIRE ALARM SHOP DRAWINGS AND APPROVED FIRE SPRINKLER SHOP DRAWINGS. REFER TO DETAIL.

(68) MAINTAIN CLEARANCES AT EQUIPMENT TO PERMIT ACCESS AND WORKING SPACE AS PER CEC 110.26.(A). THE WORKING SPACE IN FRONT OF THE EQUIPMENT SHALL BE THE WIDTH OF THE EQUIPMENT OR 30", WHICHEVER IS GREATER X 36" DEEP X 6'-6" HIGH. NO PIPING, DUCTS OR EQUIPMENT FOREIGN TO ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE LOCATED WITHIN A SPACE EXTENDING FROM THE FLOOR TO A HEIGHT OF 6 FEET ABOVE THE EQUIPMENT AS PER CEC 110.26(F)1.

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

CONSULTANT:
EquitySpec MEP
Consulting Engineers
MECHANICAL-ELECTRICAL-ENERGY
44489 Town Center Way D529
Palm Desert, CA 92260
V: 760 834-1537, 909 534-3596,
PM: Dave Celmer celmerdave@gmail.com

DATE: 4-20-26
ESCE JOB NO.: 2026-1
CAD FILE: LLSC
DRN. BY: ESCE
CHKD BY: DAC
SCALE: AS SHOWN

SEAL:

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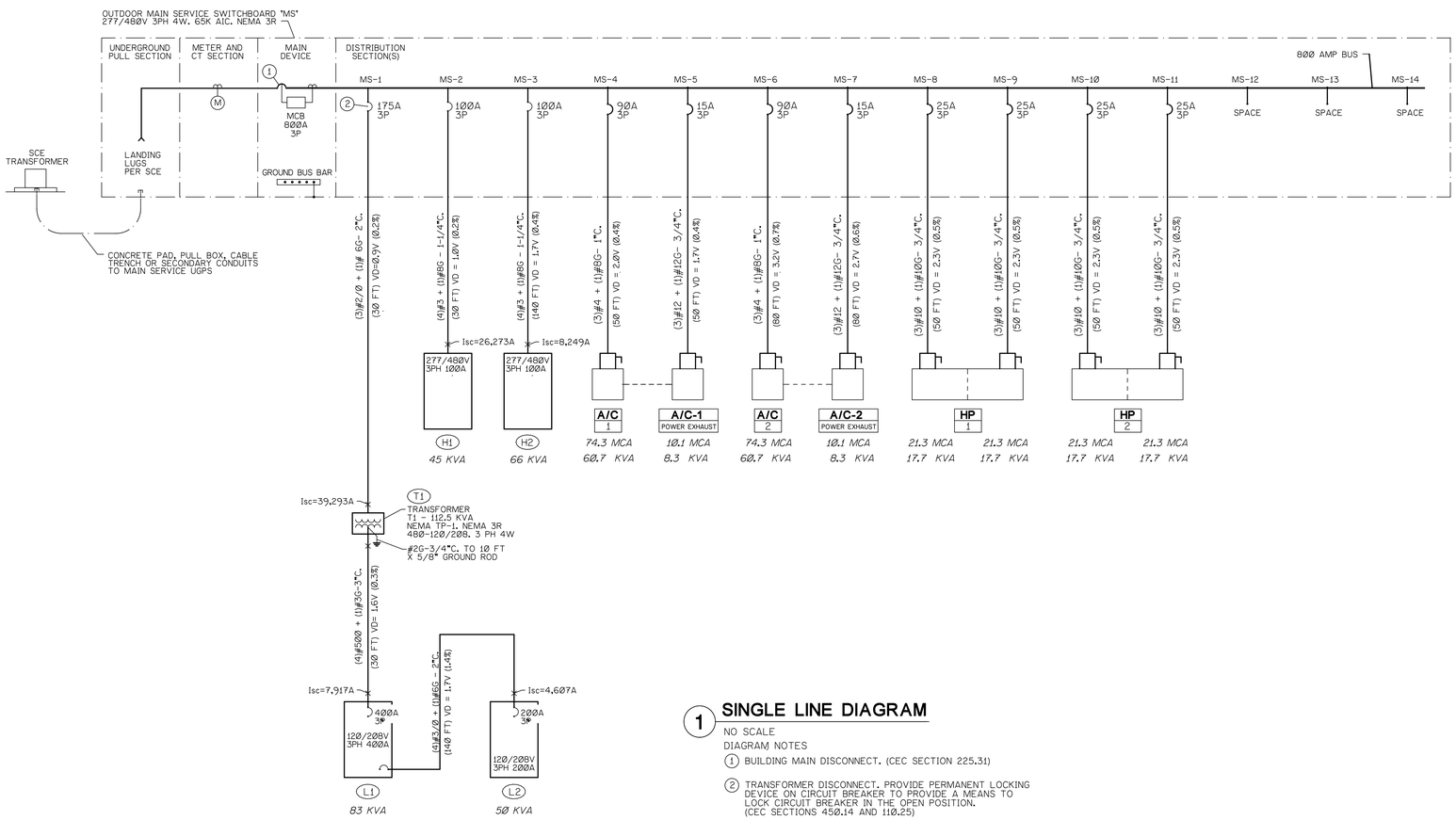
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POWER AND TELECOM PLAN

E-2.1



1 SINGLE LINE DIAGRAM

NO SCALE

DIAGRAM NOTES

1. BUILDING MAIN DISCONNECT. (CEC SECTION 225.31)
2. TRANSFORMER DISCONNECT. PROVIDE PERMANENT LOCKING DEVICE ON CIRCUIT BREAKER TO PROVIDE A MEANS TO LOCK CIRCUIT BREAKER IN THE OPEN POSITION. (CEC SECTIONS 450.14 AND 110.25)

SERVICE LOAD CALCULATION

PER 2025 CALIFORNIA ELECTRICAL CODE (CEC)
BUILDING FLOOR AREA = 19,600 SF

LIGHTING		
INTERIOR LIGHTING (19,600 SF X 1 VA/SF)		19,600 VA
EXTERIOR LIGHTING ON BLDG (EGRESS LOCATIONS)		400 VA
EXTERIOR SITE LIGHTING (LANDSCAPE, PARKING, DRIVEWAYS)		10,000 VA
	SUBTOTAL =	30,000 VA →
RECEPTACLES (DEMANDABLE)		
GENERAL PURPOSE	120 @ 180 VA =	21,600 VA
	FIRST 10 KVA @ 100% =	10,000 VA
	REMAINDER @ 50% =	5,800 VA
	SUBTOTAL =	15,800 VA →
MISCELLANEOUS EQUIPMENT AND APPLIANCES		
SECURITY SYSTEM		500 VA
TELEPHONE SYSTEM		500 VA
CABLE SYSTEM		500 VA
FIRE ALARM SYSTEM		500 VA
IRRIGATION CONTROLLER		500 VA
ELECTRIC WATER COOLER (4) @ 360		1,440 VA
HAND DRYER (2) @ 1,500		3,000 VA
REFRIGERATOR 1,200		1,200 VA
FREEZER 1,200		1,200 VA
GAS RANGE 500		500 VA
RANGE HOOD 500		500 VA
DISHWASHER 1,500		1,500 VA
SOUND BOOTH EQUIPMENT (10) @ 1,000		10,000 VA
DATA + AV EQUIPMENT (5) @ 1,000		5,000 VA
	SUBTOTAL @ 100% DEMAND =	26,840 VA →
MECHANICAL EQUIPMENT LOADS		
A/C-1 480/3		60,700 VA
A/C-1 POWER EXHAUST		10,100 VA
A/C-2		60,700 VA
A/C-2 POWER EXHAUST		10,100 VA
HP-1A		17,700 VA
HP-1B		17,700 VA
HP-2A		17,700 VA
HP-2B		17,700 VA
DOAS-1 208/1		750 VA
DOAS-2		750 VA
FC-1A		1,800 VA
FC-1B		
FC-2		
FC-3		
FC-4		
FC-5		
FC-6		
FC-7		
FC-8		
FC-9		
FC-10		
FC-11		
FC-12		
FC-13		
EWH-1 277/1		4,150 VA
EWH-2		4,150 VA
EWH-3		4,150 VA
EWH-4		11,080 VA
EWH-5		11,080 VA
EWH-6		18,850 VA
EWH-7		18,850 VA
	SUBTOTAL @ 100% DEMAND =	313,210 VA →
FUTURE ELECTRIC VEHICLE CHARGING STATIONS (6 @ 9,600 VA) =		57,600 VA →
	TOTAL LOAD =	443,450 VA ←

TOTAL AMPERES @ 480/277 3PH = 534 A
THERFORE A 800 A SERVICE IS PROPOSED.

CONSULTANT:
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Consulting Engineers
MECHANICAL-ELECTRICAL-ENERGY
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PM: Dave Celmer celmerdave@gmail.com

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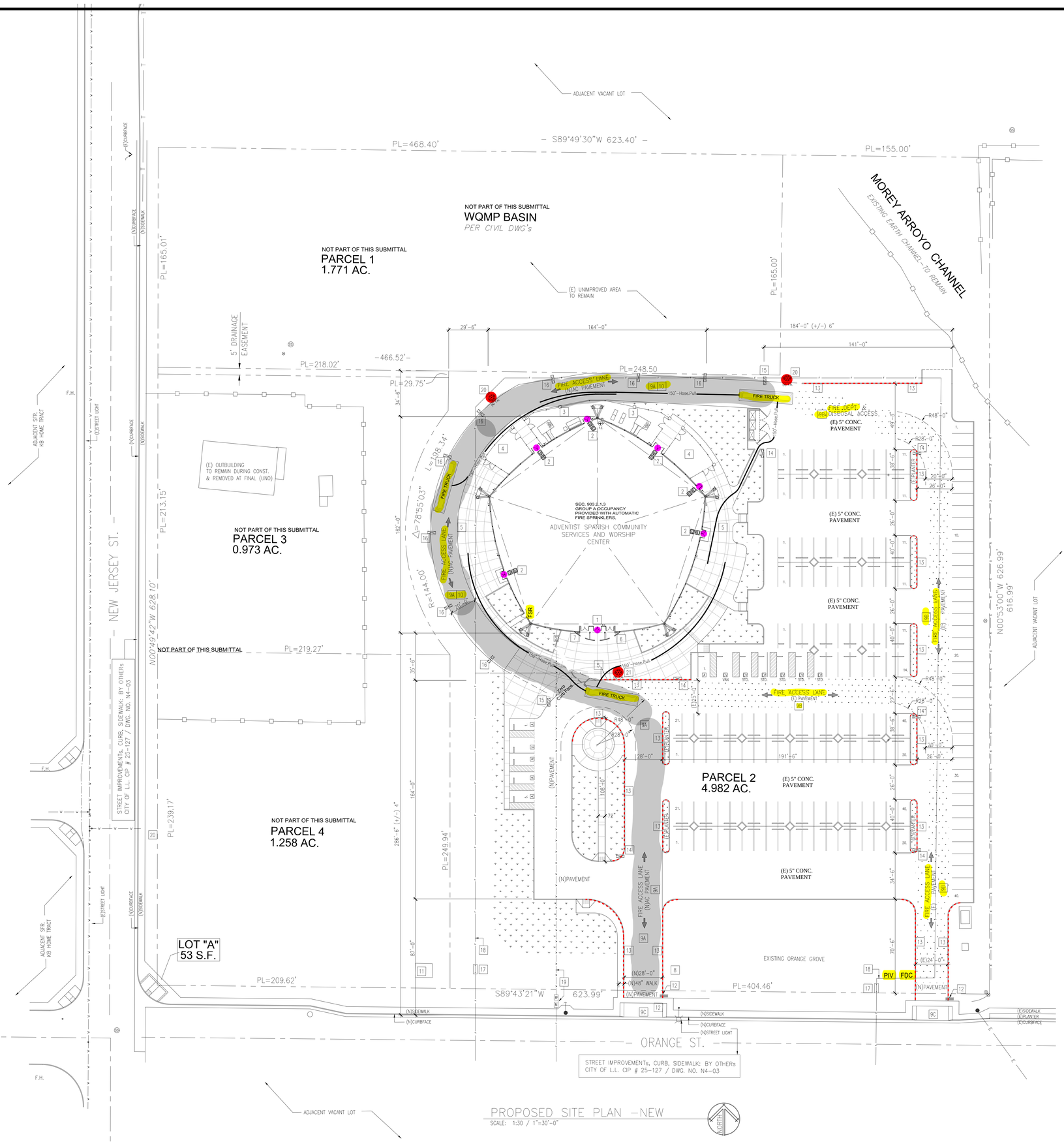
PROJECT NO:
CAD DWG FILE:
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DATE

SHEET TITLE

LOAD CALCULATION, SINGLE LINE DIAGRAM

E-3



PROPOSED SITE PLAN –NEW

SCALE: 1:30 / 1"=30'–0"

CONSTRUCTION NOTES

CONTRACTOR SHALL VERIFY ALL FACETS OF THIS PROJECT PRIOR TO DEMOLITION WORK AND PREPARE FOR CONSTRUCTION OF NEW PLAN.

ALL WORK TO BE IN CONFORMANCE WITH LOCAL CODES NOTED ON COVER SHEET.

VERIFY ALL DIMENSIONS. DIMENSIONS SHOWN MAY VARY. SITE CONDITIONS MAY REFLECT (+/– ½" TO 4").

TOTAL OCCUPANT LOAD – SHT. A1.0

KEY NOTES –DEMO

[X] SYMBOL INDICATES PLAN NOTES. SEE BELOW

1. PRIMARY MAIN ENTRANCE/EXIT OPENING.
2. BUILDING EXIT DOOR OPENINGS.
3. GATED (UNLOCKED)–EXTERIOR MECHANICAL EQUIPMENT
4. GATED (UNLOCKED)– PLAY AREA.
5. NEW CONCRETE SIDEWALK. SCORE AS SHOWN
6. PROVIDE KNOX DEVICE WHERE NECESSARY TO ENSURE THAT IMMEDIATE ACCESS FOR FIREFIGHTING, RESCUE, AND EMERGENCY PURPOSES.
7. ILLUMINATED BUILDING ADDRESS PROVIDED WITH 12" HIGH NUMBERS WITH 1" STROKE.
8. ILLUMINATED ADDRESS PROVIDED WITH 6" HIGH NUMBERS WITH ½" STROKE, VISIBLE FROM THE STREET OR SIDEWALK. ALONG STREET FRONTAGE. (CHURCH MONUMENT –BY OTHERS)

9A. NEW FIRE APPARATUS ACCESS ROUTE PER DETAIL X/XO. THE ASSEMBLY SHALL BE ASPHALT CONCRETE PAVEMENT OVER COMPACTED AGGREGATE BASE, DESIGNED AS AN ALL–WEATHER SURFACE TO SUPPORT 75,000–LB LLFD FIRE APPARATUS LOADING, INCLUDING 25,000–LB FRONT AXLE AND 50,000–LB TANDEM REAR AXLE LOADING. PAVEMENT SECTION SHALL BE DESIGNED BY THE CIVIL/GEOTECHNICAL ENGINEER AND MAINTAINED FREE OF RUTTING, SETTLEMENT, OR DETERIORATION THAT MAY IMPAIR EMERGENCY VEHICLE ACCESS.

9B. EXISTING FIRE APPARATUS ACCESS ROUTE COMPLETED UNDER S.B. COUNTY PERMIT# B200710446 THE EXISTING CONSTRUCTION IS 0.5" CONCRETE PAVEMENT OVER COMPACTED **NATIVE** BASE, DESIGNED AS AN ALL–WEATHER SURFACE TO SUPPORT 75,000–LB LLFD FIRE APPARATUS LOADING, INCLUDING 25,000–LB FRONT AXLE AND 50,000–LB TANDEM REAR AXLE LOADING. PAVEMENT SECTION HAS BEEN APPROVED BY THE CIVIL/GEOTECHNICAL ENGINEER OF RECORD PER GEOLOGICAL REPORT. THE CURRENT CONDITION HAS MAINTAINED FREE OF RUTTING, SETTLEMENT, OR DETERIORATION AND WILL NOT IMPAIR EMERGENCY VEHICLE ACCESS.

9C. DRIVE ENTRANCE AND CURB AT STREET COMPLETED BY OTHER's IN ACCORDANCE WITH THE CITY FIRE APPARATUS ACCESS ROUTE. PER CITY OF L.L. CIP # 25–127 / DWG. NO. N4–03

10. PROPOSED 20'–0" REAR/SIDE FIRE ACCESS ROUTE.
11. EXISTING WATER, UG. IRRIGATION, (UNO.) REFER TO P.M.E. FOR CLARITY.
12. INSTALL LLFD FIRE LANE ENTRANCE SIGN AT ORANGE STREET DRIVE ENTRANCE —PER DETAIL 10/F3.0. PROVIDE TOWING SERVICE INFORMATION PER 11/F3.0, AND POLE PER 14/F3.0
13. FIRE LANE RED CURB MARKING —PER DETAIL 9/F3.0
14. FIRE LANE NO PARKING SIGNS SHALL BE POSTED ADJACENT TO DESIGNATED FIRE LANES AT INTERVALS NOT TO EXCEED 50'–0" WHERE RED CURB MARKING IS NOT PROVIDED. PER DTL. 12/F3.0 AND POLE PER 14/F3.0
15. FIRE LANE NO PARKING BEYOND THIS POINT SIGN —PER DETAIL 12b/F3.0 AND POLE PER 14/F3.0
16. FIRE LANE NO PARKING SIGNS SHALL BE POSTED ADJACENT TO THE FIRE ACCESS ROUTE AT INTERVALS NOT TO EXCEED 50'–0" WHERE NO CURB EXISTs– PER DETAIL 12/F3.0 AND POLE PER 14/F3.0. SIGN SHALL BE TWO SIDED, (READ FROM DRIVING IN EITHER DIRECTION)
17. PROPOSED DDCA/DCDA LOCATION: FINAL SIZE, TYPE, AND PLACEMENT SHALL BE PER APPROVED FIRE UNDERGROUND PLANS AND AS APPROVED BY LLFD AND THE WATER PURVEYOR. ASSEMBLY SHALL REMAIN ACCESSIBLE FOR INSPECTION, TESTING, AND MAINTENANCE.
18. PROPOSED LOOPED PRIVATE FIRE SERVICE MAIN —SIZE PER APPROVED HYDRAULIC CALCULATIONS, 8" MIN. UNLESS OTHERWISE APPROVED
19. PROPOSED DOMESTIC WATER SERVICE AND BACKFLOW LOCATION: FINAL SIZE, TYPE, METER LOCATION, BACKFLOW PROTECTION, AND PLACEMENT SHALL BE PER APPROVED CIVIL/PLUMBING PLANS AND AS APPROVED BY THE CITY OF LOMA LINDA AND WATER PURVEYOR. DOMESTIC WATER SERVICE SHALL BE SEPARATE FROM THE PRIVATE FIRE SERVICE MAIN UNLESS OTHERWISE APPROVED
20. PROVIDE FIRE HYDRANT PROTECTIVE BOLLARD's. PER DTL. 19/F3.0
21. FIRE HYDRANT SHALL BE PROTECTED BY CURB FACE.

NOTES

FDC SHALL BE LOCATED SO THE HOSE LINE FROM THE SERVING FIRE HYDRANT TO THE FDC DOES NOT CROSS DRIVEWAYS, OBSTRUCT FIRE LANES, OBSTRUCT ROADS, OR INTERFERE WITH EMERGENCY VEHICLE RESPONSE. FINAL FDC LOCATION SHALL BE COORDINATED WITH THE APPROVED FIRE SPRINKLER PLANS.

FIRE HYDRANT DISTRIBUTION: FIRE HYDRANTS SHALL BE PROVIDED ALONG THE APPROVED FIRE APPARATUS ACCESS ROADWAY IN ACCORDANCE WITH CFC APPENDIX B AND APPENDIX C, TABLE C102.1, AS AMENDED BY THE CITY OF LOMA LINDA AND THE LLFD FIRE DEPARTMENT ACCESS & WATER REQUIREMENTS. HYDRANT QUANTITY AND LOCATIONS SHALL BE BASED ON THE REQUIRED FIRE FLOW AND APPROVED FIRE APPARATUS ACCESS ROUTE. HYDRANTS SHALL BE LOCATED WITHIN 3 FEET OF THE EDGE OF THE FIRE ACCESS ROADWAY, WITH OUTLETS FACING THE FIRE ACCESS ROADWAY.

REQUIRED FIRE FLOW:.....3,000 GPM
MINIMUM NUMBER OF HYDRANTS:.....3 HYDRANTS
HYDRANT TO FDC.....50 FEET
AVERAGE HYDRANT SPACING:.....400 FT MAX AVERAGE SPACING
MAXIMUM DISTANCE FROM STREET/ROAD FRONTAGE TO HYDRANT:.....300 FT MAX

FIRE LANE IDENTIFICATION SHALL CONSIST OF RED CURB MARKING PER DETAIL 9/F3.0 WHERE CURBS ARE PROVIDED. WHERE NO CURB EXISTS OR RED CURB MARKING IS NOT PRACTICAL, PROVIDE FIRE LANE NO PARKING SIGNS PER DETAIL 12/F3.0 AT INTERVALS NOT TO EXCEED 50'–0". FIRE LANE ENTRANCE SIGN SHALL BE PROVIDED AT ORANGE STREET DRIVEWAY ENTRANCE PER DETAIL 10/F3.0.

BOLLARD PROTECTION:
HYDRANTS, FDCS, PIVS, DDCAS, AND OTHER FIRE PROTECTION EQUIPMENT EXPOSED TO VEHICLE IMPACT SHALL BE PROTECTED BY CURBS OR BOLLARDS PER DETAIL 19/F3.0 AND CFC 312.2. BOLLARDS ARE NOT REQUIRED WHERE EQUIPMENT IS PROTECTED BY LOCATION OR BY A STANDARD CURB, OR IN PLANTER'S. SUBJECT TO LLFD APPROVAL.

LEGEND:

- WALKWAY –DECORATIVE CONCRETE OR PAVERS P.O.S.
- GRASS TURF. (OPTIONAL ARTIFICIAL GRASS)
- NEW FIRE APPARATUS ACCESS ROUTE. PER KEY NOTE 9A/–
- EXISTING FIRE APPARATUS ACCESS ROUTE. PER KEY NOTE 9B/–
- EXISTING CMU PERIMETER WALL
- TYPICAL PARKING SPACE(S)
- TRASH ENCLOSURE –PER CITY STANDARD
- FIRE TRUCK — DOUBLE AXLE/TANDEM FIRE TRUCK OR LADDER APPARATUS
- 150'–Hose.Pull
- PROPOSED DDCA/DCDA LOCATION. KEY NOTE 17/–
- (N) F.H. — NEW PRIVATE FIRE HYDRANT. MAXIMUM RADIUS DISTANCE BETWEEN HYDRANTS SHALL NOT EXCEED 300'–0" PROVIDE BOLLARD PROTECTION AS NOTED. JAMES JONES J–4000 TRITON SERIES WET BARREL FIRE HYDRANT, 4" X 2–1/2" X 2–1/2", OR APPROVED EQUAL APPROVED BY LLFD AND THE WATER PURVEYOR. 4" OUTLET SHALL FACE FIRE APPARATUS ACCESS ROADWAY.
- FIRE LANE RED CURB MARKING –KEY NOTE 13/–. PER DETAIL 9/F3.0
- FIRE LANE / NO PARKING SIGN –KEY NOTE 12/–. PER DETAIL 10/F3.0 AND 14/F3.0
- FIRE LANE / NO PARKING SIGN –KEY NOTE 14 & 16/–. PER DETAIL 12/F3.0 AND 14/F3.0
- FIRE LANE / NO PARKING SIGN – KEY NOTE 15/–. PER DETAIL 12b/F3.0 AND 14/F3.0

DESIGNER:
D.G. LACKYARD
PLANNING SERVICES
PHONE: (909) 659–6610
P.O. BOX 3341, BIG BEAR CITY CA. 92314
EMAIL: dglackyard@gmail.com / https://archinect.com/lackyard

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SUBMITTAL:
FIRE DEPARTMENT
ACCESS & WATER PLAN
Plan Rview # FDAC 2024–0008

IMPORTANT NOTICE
DIGALERT Underground Service Alert
Section 4216/4217 of the Government Code requires a DIG ALERT Identification Number be issued before a "Permit to Excavate" will be valid. For your Dig Alert I.D. Number Call Underground Service Alert TOLL FREE 1–800–227–2600 Two working days before you dig

ISSUANCES

DATE	DESCRIPTION

FIRE CORRECTIONS

MARK	DATE	DESCRIPTION
1		
2		
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4		

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PROJECT NO: 20260506
CAD DWG FILE:
DRAWN BY: D.L.

DATE 05/19/2026

SHEET TITLE
FIRE ACCESS & WATER

F 2.0

BOUNDARY MAP



General Notes

THE DATA CONTAINED HEREIN REPRESENTS A BOUNDARY, TOPOGRAPHICAL, AND UAV SURVEY OF LOT THE SOUTH 1/2 OF THE WEST 1/2 OF LOT 6, MAP OF BARTON RANCH, MB 6/19. MAPPING AND AERIAL IMAGERY COLLECTED BETWEEN 10/11/2024 & 10/18/2024 UNDERGROUND UTILITES AS SHOWN HEREIN ARE PLATTED PER VARIOUS RECORDS, AND SHALL NOT BE CONSIDERED ACCURATE UNTIL VERIFIED.

DATUM INFORMATION

HZ: CCS83 (NAD83) CALIFORNIA STATE PLANE ZONE 6 CSRC EPOCH 2017.50

VT: NAVD88 (DERIVED COH88) GEOID18

0 100
1" = 50'

No.	Revision/Issue	Date
1	ADDED RECORD UTILITIES FROM LOMA LINDA, CHARTER & REDLANDS	10/31/24
2	ADDED RECORD UTILITIES FROM SCE, SCG, & FRONTIER	11/20/24

LICENSED LAND SURVEYOR
JOSHUA D. TREMBA
LS 9043
STATE OF CALIFORNIA

Project Name and Address

APN 0292-163-09
11055 New Jersey Ave.
Loma Linda, CA 92373

Project	Sheet
0094LLNJ	1/7
Date: 10/18/2024	
Scale: 1" = 50'	

CUP-2025-006, MDA-2024-0036, MPD-2025-007

TOPOGRAPHY AND EASEMENT OVERVIEW



General Notes

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Project	Sheet
0094LLNJ	2 / 7
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NORTHWEST TOPOGRAPHY



General Notes

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DATUM INFORMATION

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VT: NAVD88 (DERIVED COH88) GEOID18

0 40
1" = 20'

No.	Revision/Issue	Date
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LS 9043
STATE OF CALIFORNIA

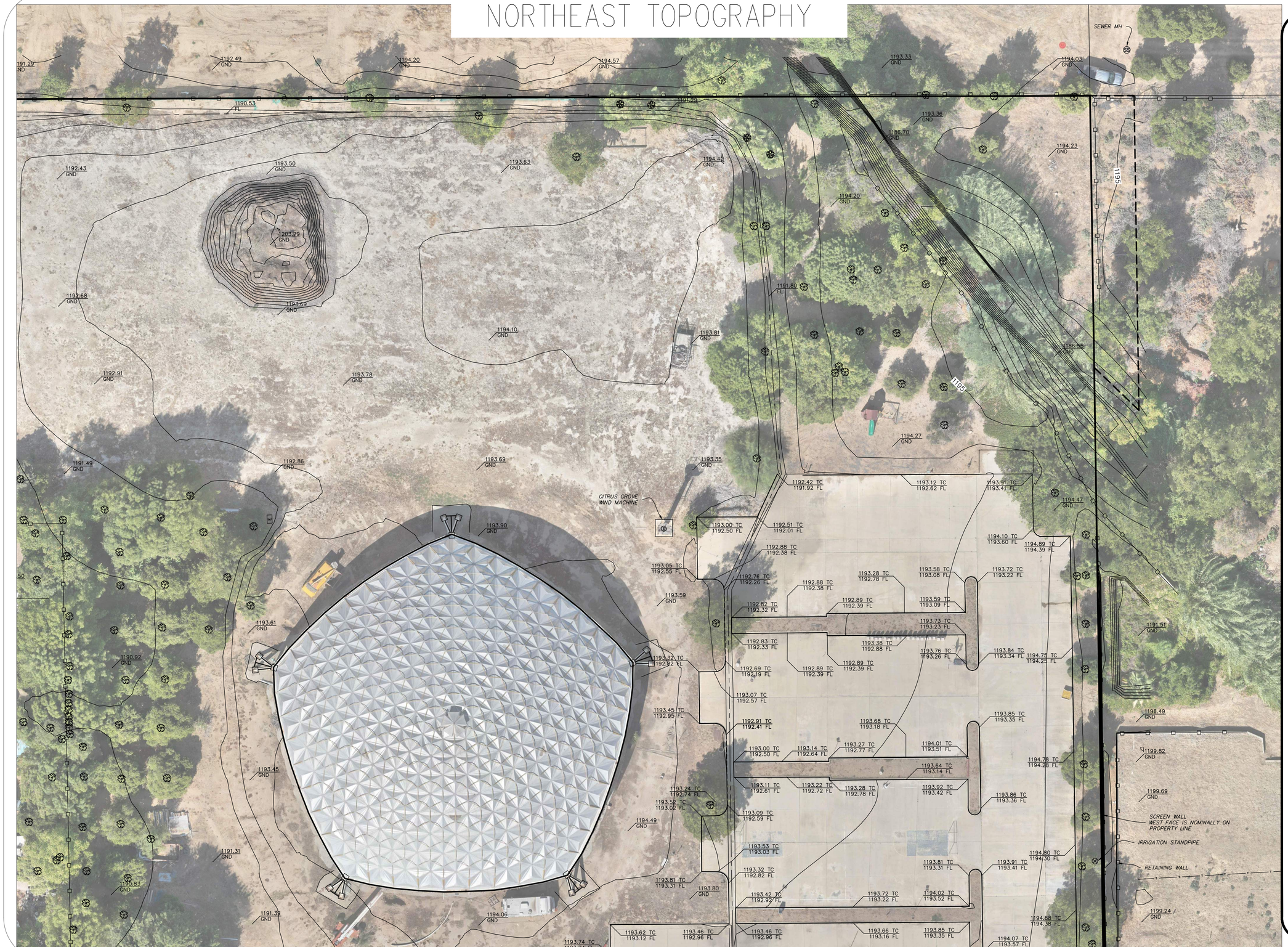
Project Name and Address

APN 0292-163-09
11055 New Jersey Ave.
Loma Linda, CA 92373

Project: 0094LLNJ	Sheet: 3 / 7
Date: 10/18/2024	
Scale: 1" = 20'	

CUP-2025-006, MDA-2024-0036, MPD-2025-007

NORTHEAST TOPOGRAPHY



General Notes

THE DATA CONTAINED HEREIN REPRESENTS A BOUNDARY, TOPOGRAPHICAL, AND UAV SURVEY OF LOT THE SOUTH 1/2 OF THE WEST 1/2 OF LOT 6, MAP OF BARTON RANCH, MB 6/19. MAPPING AND AERIAL IMAGERY COLLECTED BETWEEN 10/11/2024 & 10/18/2024 UNDERGROUND UTILITES AS SHOWN HEREIN ARE PLATTED PER VARIOUS RECORDS, AND SHALL NOT BE CONSIDERED ACCURATE UNTIL VERIFIED.

DATUM INFORMATION

HZ: CCS83 (NAD83) CALIFORNIA STATE PLANE ZONE 6 CSRC EPOCH 2017.50

VT: NAVD88 (DERIVED COH88) GEOID18

0 40
1" = 20'

No.	Revision/Issue	Date
1	ADDED RECORD UTILITIES FROM LOMA LINDA, CHARTER & REDLANDS	10/31/24
2	ADDED RECORD UTILITIES FROM SCE, SCG, & FRONTIER	11/20/24

LICENSED LAND SURVEYOR
JOSHUA D. TERESA
LS 9043
STATE OF CALIFORNIA

Project Name and Address

APN 0292-163-09
11055 New Jersey Ave.
Loma Linda, CA 92373

Project 0094LLNJ	Sheet 4/7
Date 10/18/2024	
Scale 1" = 20'	

CUP-2025-006, MDA-2024-0036, MPD-2025-007

SOUTHEAST TOPOGRAPHY



General Notes

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LICENSED LAND SURVEYOR
JOSHUA D. TRENNA
LS 9043
STATE OF CALIFORNIA

Project Name and Address

APN 0292-163-09
11055 New Jersey Ave.
Loma Linda, CA 92373

Project: 0094LLNJ	Sheet: 5/7
Date: 10/18/2024	
Scale: 1" = 20'	

CUP-2025-006, MDA-2024-0036, MPD-2025-007

SOUTHWEST TOPOGRAPHY



General Notes

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LICENSED LAND SURVEYOR
JOSHUA D. TREMBA
LS 9043
STATE OF CALIFORNIA

Project Name and Address

APN 0292-163-09
11055 New Jersey Ave.
Loma Linda, CA 92373

Project 0094LLNJ	Sheet 6/7
Date 10/18/2024	
Scale 1" = 20'	

CUP-2025-006, MDA-2024-0036, MPD-2025-007

WEST TOPOGRAPHY



General Notes

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DATUM INFORMATION

HZ: CCS83 (NAD83) CALIFORNIA STATE PLANE ZONE 6 CSRC EPOCH 2017.50

VT: NAVD88 (DERIVED COH88) GEOID18

0 40
1" = 20'

No.	Revision/Issue	Date
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LICENSED LAND SURVEYOR
JOSHUA D. TREMIA
LS 9043
STATE OF CALIFORNIA

Project Name and Address

APN 0292-163-09
11055 New Jersey Ave.
Loma Linda, CA 92373

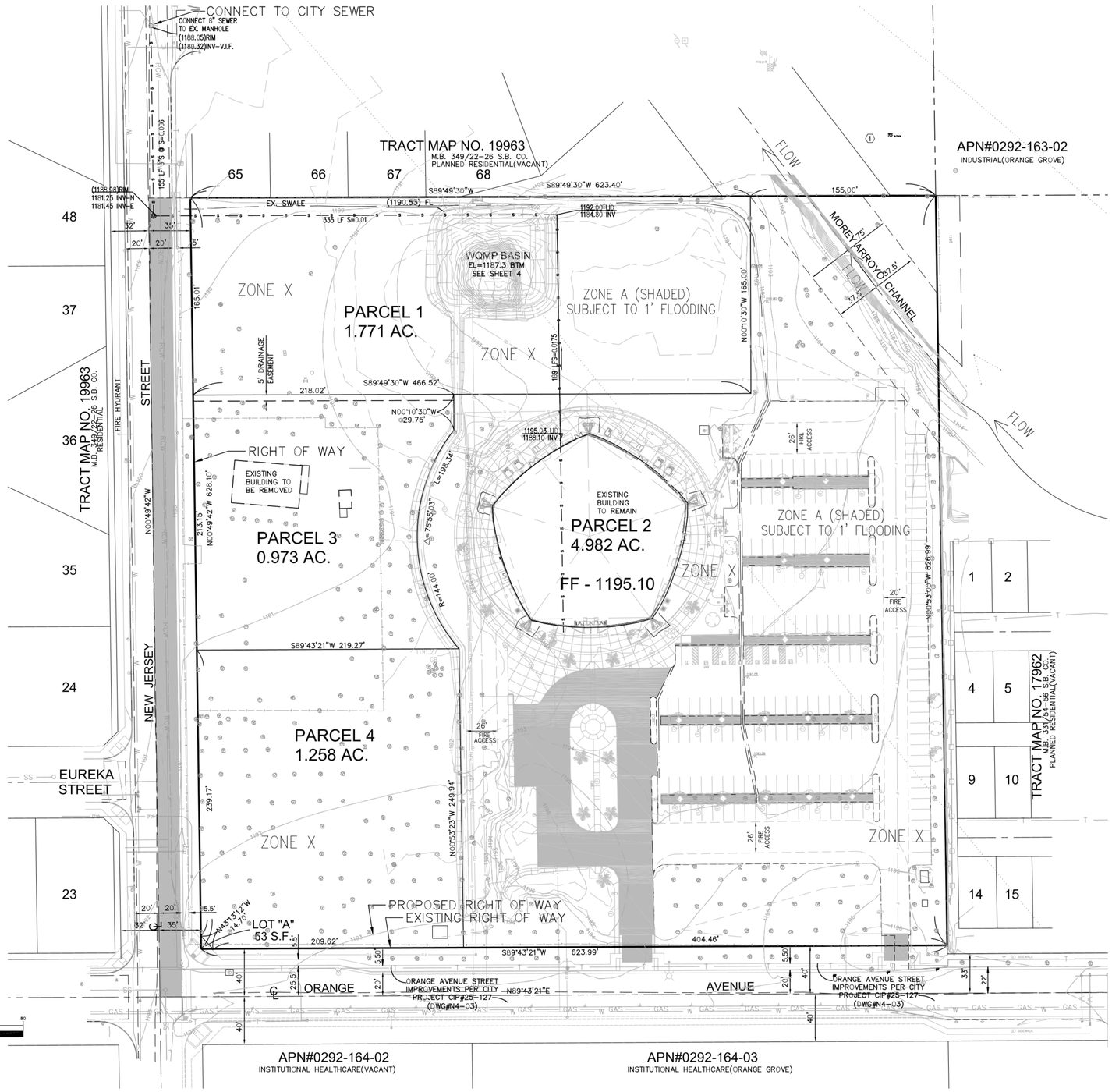
Project: 0094LLNJ	Sheet: 7 / 7
Date: 10/18/2024	
Scale: 1" = 20'	

CUP-2025-006, MDA-2024-0036, MPD-2025-007

TENTATIVE PARCEL MAP NO. 21053

Being a subdivision of the South 1/2 of the West 1/2 of Lot 6, Map of Barton Ranch MB 6/19

CITY OF LOMA LINDA, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA





VICINITY MAP

SECTION 29, TOWNSHIP 1 SOUTH, RANGE 3 WEST, S.B.M.
THOMAS BROS. MAP PAGE 647-G1

SURVEYOR
CORNERSTONE LAND SURVEYING INC
STEFAN C. LANTHIER
20730 KNOB PLACE
PERRIS, CA 92570
951 736-0200

PROPERTY OWNER/SUBDIVIDER
SOUTHEASTERN CALIFORNIA CONFERENCE OF SEVENTH-DAY ADVENTISTS
11330 PIERCE STREET
RIVERSIDE, CA 92505
951 509-2243

SOILS ENGINEER
MICHELLE SHIRIRO
35 NORTH LAKE AVE. SUITE 220
PASADENA, CA 91101
818 552-6400

LEGAL DESCRIPTION
THE SOUTH 1/2 OF THE WEST 1/2 OF LOT 6, BARTON RANCH, IN THE CITY OF LOMA LINDA, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 6, PAGE 19, OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

SITE ADDRESSES
11055 NEW JERSEY STREET
LOMA LINDA, CA 92373

ASSESSOR PARCEL NUMBER
0292-163-09

ZONING/LAND USE

SITE

ZONING	LOW DENSITY RESIDENTIAL
GENERAL PLAN	LOW DENSITY RESIDENTIAL (R-1)
EXISTING LAND USE	PARTIALLY DEVELOPED CHURCH STRUCTURE.

PROPOSED USE

PARCEL 1	LOW DENSITY RESIDENTIAL
PARCEL 2	PLACE OF RELIGIOUS ASSEMBLY
PARCEL 3	LOW DENSITY RESIDENTIAL
PARCEL 4	LOW DENSITY RESIDENTIAL

NORTH

ZONING	LOW DENSITY RESIDENTIAL
GENERAL PLAN	LOW DENSITY RESIDENTIAL (R-1)
EXISTING LAND USE	SINGLE-FAMILY RESIDENCES

SOUTH

ZONING	INSTITUTIONAL-HEALTHCARE (I-HC)
GENERAL PLAN	LOW DENSITY RESIDENTIAL (R-1)
EXISTING LAND USE	SINGLE-FAMILY RESIDENCES

EAST

ZONING	CITY OF REDLANDS JURISDICTION
GENERAL PLAN	CITY OF REDLANDS JURISDICTION
EXISTING LAND USE	CONDOMINIUMS AND EVENT VENUE

WEST

ZONING	LOW DENSITY RESIDENTIAL
GENERAL PLAN	GENERAL COMMERCIAL
EXISTING LAND USE	GENERAL COMMERCIAL (C2)

BENCHMARK
DERIVED FROM GPS STATION COH88 GEOID18 (NAVD 88)

DATE OF SURVEY
DATE OF FIELD SURVEY: OCTOBER 18, 2024

AREA
9.21 GROSS ACRES (8.90 NET ACRES)

FLOOD ZONE
SW IS FLOOD ZONE X - AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN PER FIRM MAP NO. 06071C8711H MAP REVISED 08/28/08.

NE IS FLOOD ZONE A - NO BASE FLOOD ELEVATIONS DETERMINED PER FIRM MAP NO. 06071C8711H MAP REVISED 08/28/08.

ACREAGE OF PROPERTY:

PARCEL#	NET AREA
PARCEL 1	77,131 SF (1.771 ACRES)
PARCEL 2	217,012 SF (4.982 ACRES)
PARCEL 3	42,399 SF (0.973 ACRES)
PARCEL 4	54,781 SF (1.258 ACRES)
LOT "A"	53 SF (0.001 ACRE)
GROSS AREA	391,376 SF (8.985 ACRES)
NET AREA	385,137 SF (8.984 ACRES)

EASEMENTS
(1) EASEMENT FOR DRAIANGE AND FLOWAGE PURPOSES IN FAVOR OF THE COUNTY OF SANBERNARDIN, A BODY CORPORATE AND POLITOC OF THE STATE OF CALIFORNIA AS DESCRIBED IN OFFER OF DEDICATION RECORDED SEPTEMBER 24, 2009 AS DOCUMENT NO. 2009-0417789 O.R. S.B. CO.

UTILITY PROVIDERS
CITY OF LOMA LINDA TO SERVE SEWER TO PARCELS
CITY OF LOMA LINDA TO SERVE WATER TO PARCELS

ELECTRIC
SOUTHERN CALIFORNIA EDISON
501 SOUTH MARENGO AVENUE
BLDG "E"
ALHAMBRA, CA 91802

GAS
SOTHERN CALIFORNIA GAS CO.
1981 W. LUGONIA AVE.
REDLANDS, CA. 92374
909-335-7955

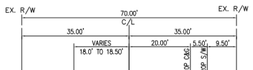
SEWER
CITY OF LOMA LINDA
25541 BARTON ROAD
LOMA LINDA, CA 92354
909 799-2840

WATER
CITY OF LOMA LINDA
25541 BARTON ROAD
LOMA LINDA, CA 92354
909 799-2840

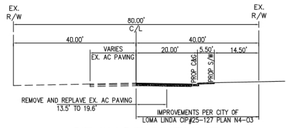
INTERNET
SPECTRUM-RIVERSIDE
7337 CENTRAL AVENUE
RIVERSIDE, CA 92504
951-406-1601

FRONTIER
1450 S. BUNDY DRIVE
LOS ANGELES, CA 90025
310-264-5100

CABLE
SPECTRUM-RIVERSIDE
7337 CENTRAL AVENUE
RIVERSIDE, CA 92504
951-406-1601



NEW JERSEY STREET
SCALE =1"=20'



ORANGE AVENUE
SCALE =1"=20'

LINETYPES

PROPERTY LINE		TV	EXISTING TELEVISION LINE
CENTERLINE		UT	EXISTING UNKNOWN UTILITY LINE
EASEMENT LINE	-(1200)-		EXISTING CONTOUR LINE
FLOWLINE	OH		EXISTING OVERHEAD LINE
EXISTING STRIPING			EXISTING CHAIN LINK FENCE
8"W(PVC)			EXISTING WOOD FENCE
10"S(VCP)			EXISTING WROUGHT IRON FENCE
2"G			EXISTING SHEET METAL FENCE
24"SD(RCP)			EXISTING BLOCK WALL
E			EXISTING EDGE OF PAVEMENT
T			
RCW			

SYMBOLS

SEWER MANHOLE	STORM DRAIN MANHOLE	AIR CONDITIONING UNIT	ELECTRIC METER
SEWER CLEANOUT	CATCHBASIN DROP INLET	MAILBOX	ELECTRIC CABINET
WATER METER	GAS VALVE	BOLLARD	ELECTRIC VAULT
WATER VALVE	GAS METER	FLAG POLE	EXISTING JUNCTION BOX
RECLAIMED WATER METER	ELECTRICAL MANHOLE	BENCHMARK	ELECTRIC PLUG
RECLAIMED WATER VALVE	EXISTING POWER POLE		TRANSFORMER
IRRIGATION CONTROL VALVE	LIGHT POLE	EXISTING TREE	TELEPHONE MANHOLE
FIRE HYDRANT	WALL LIGHT		TELEPHONE PEDISTAL
FIRE DEPT. CONNECTION	PULL BOX	EXISTING PALM TREE	SIGN
HOSEBIB	TRAFFIC SIGNAL PULL BOX		MANHOLE (TYPE UNKNOWN)
DRINKING FOUNTAIN	STREET LIGHT PULL BOX	EXISTING SHRUB	CABLE TV PULLBOX
WATER VAULT	TRAFFIC SIGNAL		FOUND MONUMENT
FLOOR DRAIN			ROOF DRAIN

ABBREVIATIONS

AC	= ASPHALT CONCRETE	FS	= FINISH SURFACE
BO	= BLOW OFF	GB	= GRADE BREAK
BTM	= BOTTOM	GF	= GARAGE FINISH FLOOR
BVC	= BEGIN VERTICAL CURVE	H	= HEIGHT OF RETAINING
BW	= BACK OF WALK	HP	= HIGH POINT
CATV	= CABLE TELEVISION	INV	= INVERT
CB	= CATCH BASIN	JB	= ELECTRICAL JUNCTION BOX
CF	= CURB FACE	LP	= LOW POINT
CL	= CENTER LINE	MVC	= MIDDLE OF VERTICAL CURVE
CONC	= CONCRETE PAVEMENT	N'LY	= NORTHERLY FROM PL
DDC	= DOUBLE DETECTOR CHECK	PAD	= PAD ELEVATION
DF	= DRINKING FOUNTAIN	RPBA	= REDUCED PRESSURE-BACKFLOW ASSEMBLY
DI	= DROP INLET	S'LY	= SOUTHERLY FROM PL
E	= ELECTRIC	TB	= TOP OF AC BERM
EG	= EDGE OF GUTTER	TC	= TOP OF CURB
E'LY	= EASTERLY FROM PL	TF	= TOP OF FOOTING
EP	= EDGE OF PAVEMENT	TG	= TOP OF GRATE
EVC	= END OF VERTICAL CURVE	TW	= TOP OF WALL
FF	= FINISH FLOOR	W'LY	= WESTERLY FROM PL
FG	= FINISH GRADE		
FL	= FLOWLINE		

LICENSED LAND SURVEYOR
STEFAN C. LANTHIER
L.S. 7259
SURVEYOR
STATE OF CALIFORNIA

STEFAN C. LANTHIER
REGISTERED LAND SURVEYOR
REGISTRATION NO. LS 7259

4-16-26
DATE

PREPARED BY:
CORNERSTONE LAND SURVEYING, INC.
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PERRIS, CA 92570
CELL: (949) 370-7099
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04-16-26
04-15-26
11-18-25
08-21-25

Cornerstone Land Surveying Inc.
A.L.T.A.+ Topographic+Boundary+Construction+Environmental
20730 KNOB PLACE
PERRIS, CA 92570
PH 951-736-0200

FILE LOCATION D:\JOBS\507 TENT. PARCEL MAP

TENTATIVE PARCEL MAP NO. 21053
FOR 11055 New Jersey Street
Loma Linda, CA 92373

SHEET 1 OF 1

JN24-507

11055 NEW JERSEY STREET - SPANISH CHURCH TRAFFIC IMPACT ANALYSIS

City of Loma Linda

May 29, 2026

Traffic Engineering ● Transportation Planning ● Parking ● Noise & Vibration
Air Quality ● Global Climate Change ● Health Risk Assessment

11055 NEW JERSEY STREET - SPANISH CHURCH TRAFFIC IMPACT ANALYSIS

City of Loma Linda

May 29, 2026

prepared by

Po Leung, EIT
Giancarlo Ganddini, PE, PTP

GANDDINI GROUP, INC.
555 Parkcenter Drive, Suite 225
Santa Ana, California 92705
(714) 795-3100 | ganddini.com

Project No. 19901

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EXECUTIVE SUMMARY

This section summarizes the proposed project, operational findings, and identifies recommendations (if any) as specified in this study.

Project Description

The project site is located at 11055 New Jersey Street (APNs: 0292-163-09), east of New Jersey Street and north of Orange Avenue in the City of Loma Linda, California. The project site is currently developed with an outbuilding (to be demolished after construction) and a geodesic dome structure.

The proposed project involves construction of a 19,000 square foot place of worship utilizing the existing dome structure. Vehicular site access is proposed by construction/reconstruction of two new paved two-way private driveways off Orange Avenue.

Project Trip Generation

The proposed project is forecast to generate approximately 129 daily trips, including 7 trips during the AM peak hour and 8 trips during the PM peak hour.

Level of Service Analysis

The study intersections currently operate within acceptable Levels of Service (C or better) during peak hours for the Existing conditions.

The study intersections are forecast to operate within acceptable Levels of Service (C or better) during the peak hours for Existing Plus Project conditions. The proposed project is not forecast to cause or substantially worsen any Level of Service deficiencies at the study intersections for Existing Plus Project conditions; **no off-site improvements are recommended for compliance with Measure V requirements.**

The study intersections are forecast to operate within acceptable Levels of Service (C or better) during the peak hours for Opening Year (2028) Without Project conditions, except for the intersection of New Jersey Street at Barton Road that is forecast to operate at Level of Service D during the PM peak hour with the addition of trips generated by other development projects.

The study intersections are forecast to operate within acceptable Levels of Service (C or better) during the peak hours for Opening Year (2028) With Project conditions, except for the intersection of New Jersey Street at Barton Road that is forecast to continue operating at Level of Service D during the PM peak hour with the addition of project trips. Although Level of Service D is forecast to occur at the intersection of the intersection of New Jersey Street at Barton Road (#3), this condition is primarily attributable to the addition of other development trips and would occur with or without the proposed project. The addition of project trips would not result in further Level of Service degradation and the project-related change in average control delay is relatively negligible (+0.1 seconds). Therefore, the project impact is not considered to substantially worsen the pre-project Level of Service deficiency; **no off-site improvements are recommended for compliance with Measure V requirements.**

1. INTRODUCTION

This section provides an overview of the proposed project and the general scope of the analysis.

PURPOSE AND OBJECTIVES

The purpose of this study is to evaluate the potential for transportation impacts resulting from the development of the proposed project in the context of the City of Loma Linda's discretionary authority for conformance with locally established Level of Service (LOS) standards as specified by Measure V. Although this is a technical report, effort has been made to prepare the report clearly and concisely. A glossary is provided in Appendix A to assist the reader with technical terms.

This study was prepared in consultation with the City of Loma Linda staff following the procedures and methodologies for assessing transportation impacts established by the City of Loma Linda. To assess the project's conformance with local operational standards, this study evaluates the project's effect on LOS and, if necessary, identifies recommended improvements or corrective measures to alleviate operational deficiencies substantially caused or worsened by the proposed project.

PROJECT DESCRIPTION

The project site is located at 11055 New Jersey Street (APNs: 0292-163-09), east of New Jersey Street and north of Orange Avenue in the City of Loma Linda, California. The project site is currently developed with an outbuilding (to be demolished after construction) and a geodesic dome structure. Figure 1 and Figure 2 show the regional and project location maps.

The proposed project involves construction of a 19,000 square foot place of worship utilizing the existing dome structure. Vehicular site access is proposed by construction/reconstruction of two new paved private driveways at Orange Avenue. Figure 3 shows the project site plan.

SCOPE OF ANALYSIS

The scope of this analysis was determined in consultation with the City of Loma Linda as documented in the City-approved scoping agreement provided in Appendix B.

Study Area

Figure 4 illustrates the study area. In accordance with the City of Loma Linda requirements, at a minimum, the study area should include classified roadway intersections to which a project is forecast to contribute 50 or more peak hour trips. Based on the City-approved scoping agreement, the following study intersections were identified, each within the City of Loma Linda jurisdiction:

1. California Street (NS) at Orange Avenue (EW)[1]
2. New Jersey Street (NS) at Orange Avenue (EW)
3. New Jersey Street (NS) at Barton Road (EW)
4. New Jersey Street (NS) at Barton Road (EW)
5. East Project Driveway (NS) at Orange Avenue (EW)

[1] (NS) = north-south roadway; (EW) = east-west roadway.

Analysis Scenarios

The following analysis scenarios are evaluated for weekday AM and PM peak hour conditions:

- Existing
- Existing Plus Project
- Opening Year (2028) Without Project
- Opening Year (2028) With Project

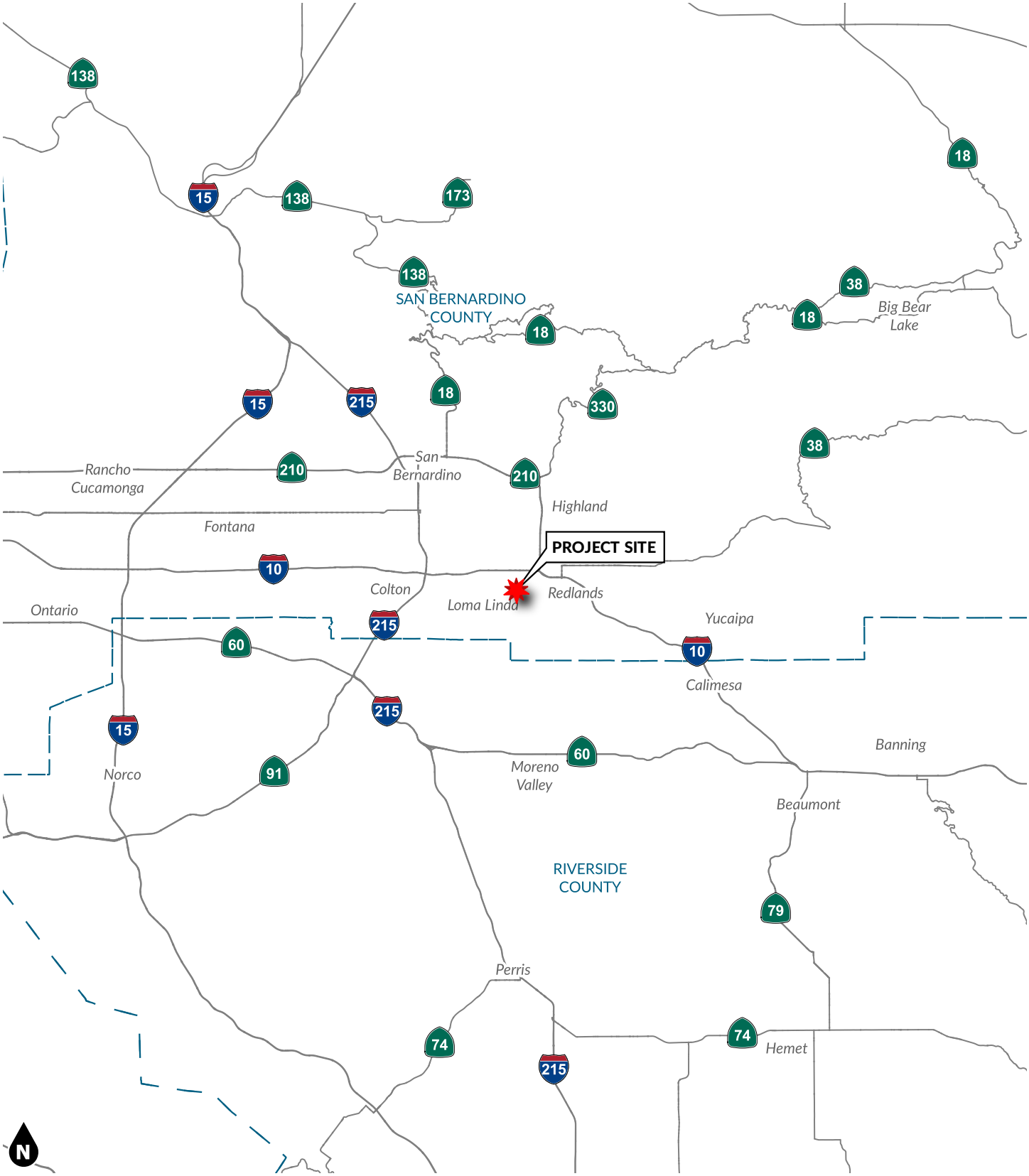


Figure 1
Regional Location Map



Figure 2
Project Location Map

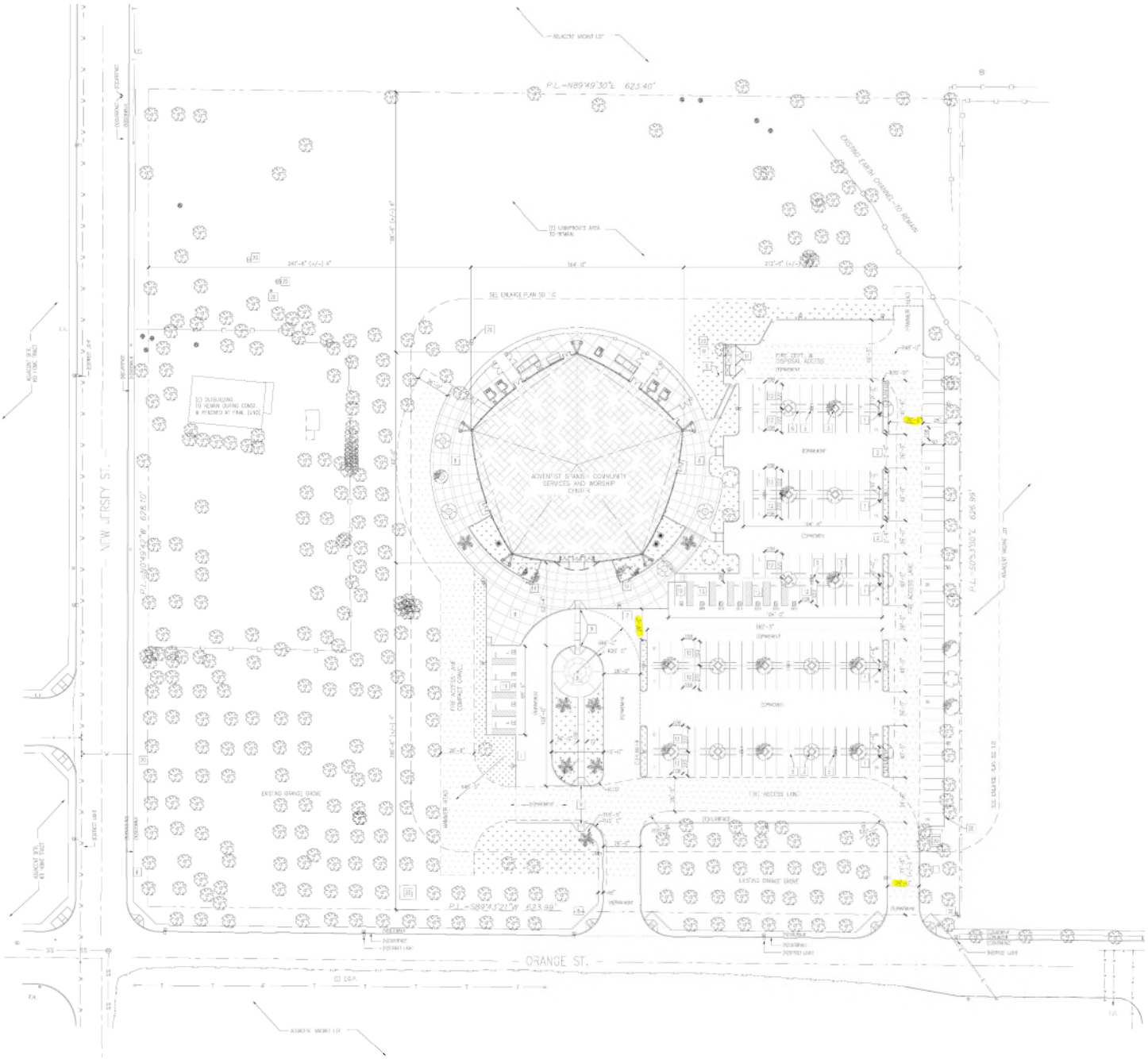
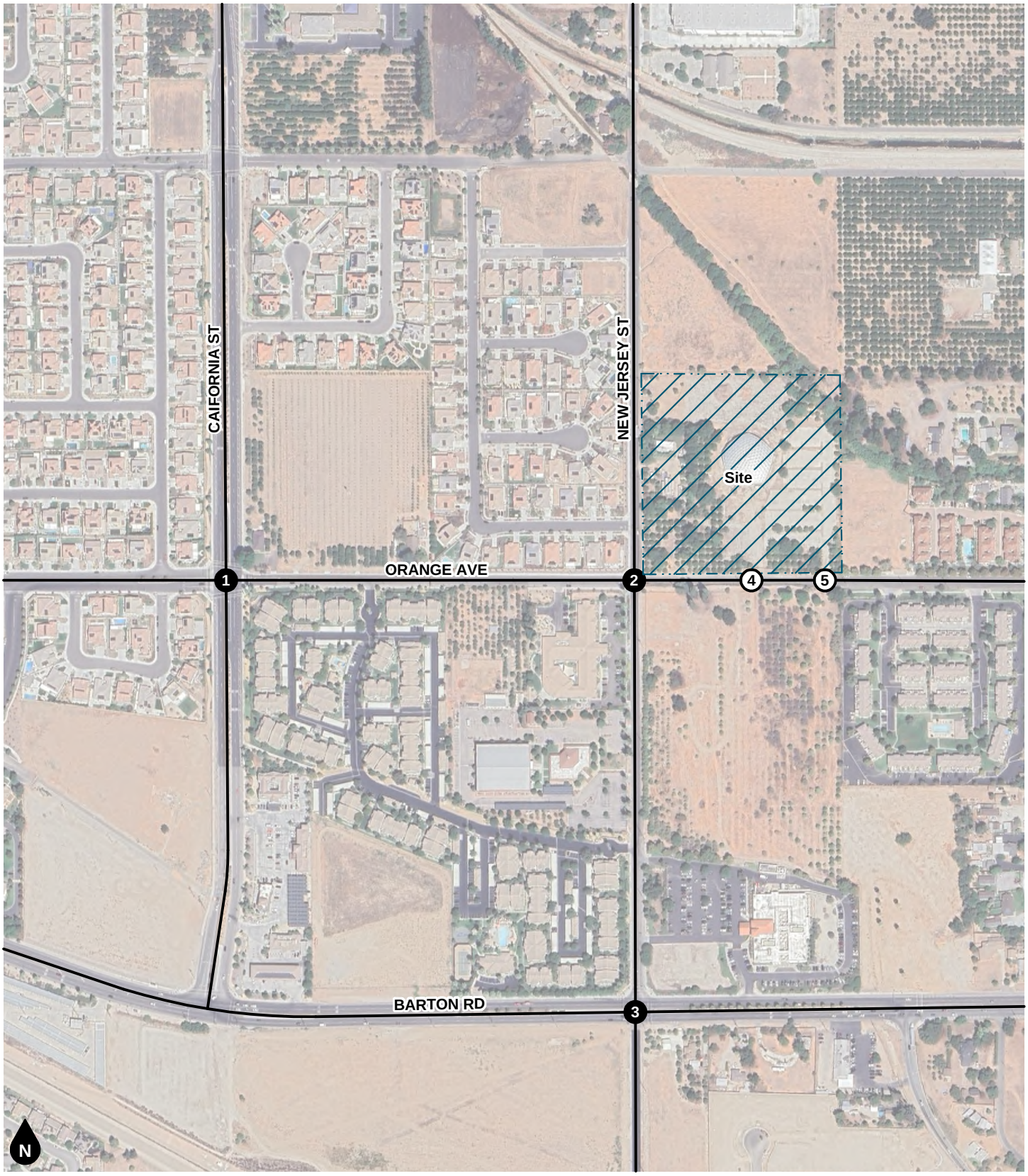


Figure 3
Site Plan



Legend

(#) Study Intersection

(#) Project Driveway

Figure 4
Study Area

2. METHODOLOGY

This section discusses the analysis methodologies used to assess transportation facility performance as adopted by the respective jurisdictional agencies. This traffic impact analysis was prepared in accordance with the City of Loma Linda standard procedures, which are generally based on the County of San Bernardino *Transportation Impact Study Guidelines* (July 2019) ["County TIA Guidelines"].

LEVEL OF SERVICE/OPERATIONAL ANALYSIS METHODOLOGY

Level of Service (LOS) analysis is performed to assess conformance with General Plan and operational standards established by the applicable agencies.

Intersections Delay Methodology

The methodology used to assess the performance of intersections is known as the intersection delay methodology based on procedures contained in the *Highway Capacity Manual* (HCM) (Transportation Research Board, 7th Edition). The methodology considers the traffic volume and distribution of movements, traffic composition, geometric characteristics, and signalization details to calculate the average control delay per vehicle and corresponding Level of Service. Control delay is defined as the portion of delay attributed to the intersection traffic control (such as a traffic signal or stop sign) and includes initial deceleration, queue move-up time, stopped delay, and final acceleration delay. The intersection control delay is correlated to Level of Service based on the following thresholds:

Level of Service	Intersection Control Delay (Seconds / Vehicle)	
	Signalized Intersection	Unsignalized Intersection
A	≤ 10.0	≤ 10.0
B	> 10.0 to ≤ 20.0	> 10.0 to ≤ 15.0
C	> 20.0 to ≤ 35.0	> 15.0 to ≤ 25.0
D	> 35.0 to ≤ 55.0	> 25.0 to ≤ 35.0
E	> 55.0 to ≤ 80.0	> 35.0 to ≤ 50.0
F	> 80.0	> 50.0

Source: *Highway Capacity Manual 7th Editon* (Transportation Research Board).

Level of Service is used to qualitatively describe the performance of a roadway facility, ranging from Level of Service A (free-flow conditions) to Level of Service F (extreme congestion and system failure). At intersections with either traffic signal or all-way-stop control, Level of Service is determined by the average control delay for the overall intersection. At intersections with cross street stop control (i.e., one- or two-way stop control), Level of Service is determined by the average control delay for the worst minor street approach or major street left-turn movement. The intersection Level of Service analysis was performed in accordance with the County TIA Guidelines, including minimum phase time, lost time, and saturation flow rates using Vistro software.

PERFORMANCE STANDARDS

The City of Loma Linda General Plan Policy 6.10.1.a and Measure V establish that long-term traffic LOS should be maintained at LOS C or better, except where the current level of service is lower than LOS C.

In any location where the Level of Service (LOS) is Level of Service (D or worse) at the time an application for a development project is submitted, roadway improvement measures shall be imposed on that development

project to assure, at a minimum, that the level of traffic service is maintained at Levels of Service that are no worse than those existing at the time an application for development is filed.

A project-related impact is considered substantial if the project both: i) contributes measurable traffic to and ii) substantially and adversely changes the Level of Service at any off-site location projected to experience deficient operations under foreseeable cumulative conditions, where feasible improvements consistent with the City of Loma Linda General Plan cannot be constructed.

3. EXISTING CONDITIONS

This section describes the existing transportation setting in the project study area.

EXISTING ROADWAY SYSTEM

Figure 5 shows the lane geometry and intersection traffic controls for Existing conditions based on a field survey of the study area. Regional access to the project site is provided by Interstate 10 approximately 1.3 miles to the north of the project site. Local north-south circulation is provided by California Street and east-west circulation is provided by Orange Avenue.

Orange Avenue: This two-lane undivided roadway trends in an east-west direction and is unclassified in the City of Loma Linda General Plan Circulation Element. On-street parking is generally permitted on the south side of the roadway. Sidewalks are generally provided on the north side of the roadway in the project vicinity. The post speed in the project vicinity is 30 miles per hour.

Barton Road: This four-lane divided roadway trends in an east-west direction and is classified as a four-lane divided roadway in the City of Loma Linda General Plan Circulation Element. On-street parking is prohibited on both sides of the roadway. The roadway markings are consistent with the Class II bicycle lane designation by the City of Loma Linda Master Plan of Bikeways. Sidewalks are generally provided on the north side of the roadway in the project vicinity. The post speed in the project vicinity is 55 miles per hour.

California Street: This four-lane undivided roadway trends in a north-south direction and is classified as a four-lane undivided roadway in the City of Loma Linda General Plan Circulation Element in the study area. On-street parking is generally prohibited on both sides of the roadway. Sections of California Avenue currently provide Class II buffered bike lanes. Sidewalks are provided on both sides of the roadway. The post speed in the project vicinity is 45 miles per hour.

New Jersey Street: This two-lane undivided roadway trends in a north-south direction and is unclassified in the City of Loma Linda General Plan Circulation Element. On-street parking is generally permitted on both sides of the roadway. Sidewalks are provided on the west side of the roadway. The post speed in the project vicinity is 30 miles per hour.

PEDESTRIAN FACILITIES

Existing pedestrian facilities in the project vicinity are shown on Figure 6.

TRANSIT FACILITIES

Figure 7 shows the existing Omnitrans system map in the project vicinity. Bus Route 19 runs along Barton Road. The nearest bus stops to the project site are at the intersection of New Jersey Street and Barton Road.

GENERAL PLAN CONTEXT

Figure 8 shows the City of Loma Linda General Plan Circulation Element roadway classifications map. This figure shows the nature and extent of arterial and collector highways that are needed to adequately serve the ultimate development depicted by the Land Use Element of the General Plan. The City of Loma Linda standard roadway cross-sections are illustrated on Figure 9.

Bicycle Facilities Master Plan

Figure 10 shows the City of Loma Linda Bikeways Master Plan. As shown on Figure 10, dedicated Class II bicycle lanes are proposed along Barton Road in the project vicinity.

Existing Roadway Volumes

Figure 11 shows the existing average daily traffic volumes. Existing average daily traffic volumes were factored from peak hour intersection turning movement volumes at locations using the following formula for each intersection leg:

PM Peak Hour (Approach Volume + Exit Volume) x 11.5 = Leg Volume

Figure 12 and Figure 13 show the existing AM and PM peak hour intersection turning movement volumes. Existing peak hour intersection turning movement volumes are based upon AM peak period and PM peak period intersection turning movement counts obtained in April 2026 during typical weekday conditions. The weekday AM peak period was counted between 7:00 AM and 9:00 AM and the weekday PM peak period was counted between 4:00 PM and 6:00 PM; these periods capture the peak times for commuter traffic when the roadway system is typically experiencing peak demand. The actual peak hour within each two-hour count period is determined based on the sum of the four consecutive 15-minute periods with the highest total volume. Thus, the weekday PM peak hour at one intersection may be 4:45 PM to 5:45 PM if those four consecutive 15-minutes periods have the highest total volume and may vary at other intersections Intersection turning movement count worksheets are provided in Appendix C.

Existing Intersection Level of Service

The study intersection Levels of Service for Existing conditions are shown in Table 1. Existing Level of Service worksheets are provided in Appendix D.

As shown in Table 1, the study intersections currently operate within acceptable Levels of Service (C or better) during peak hours for the Existing Conditions.

Table 1
Existing Intersection LOS

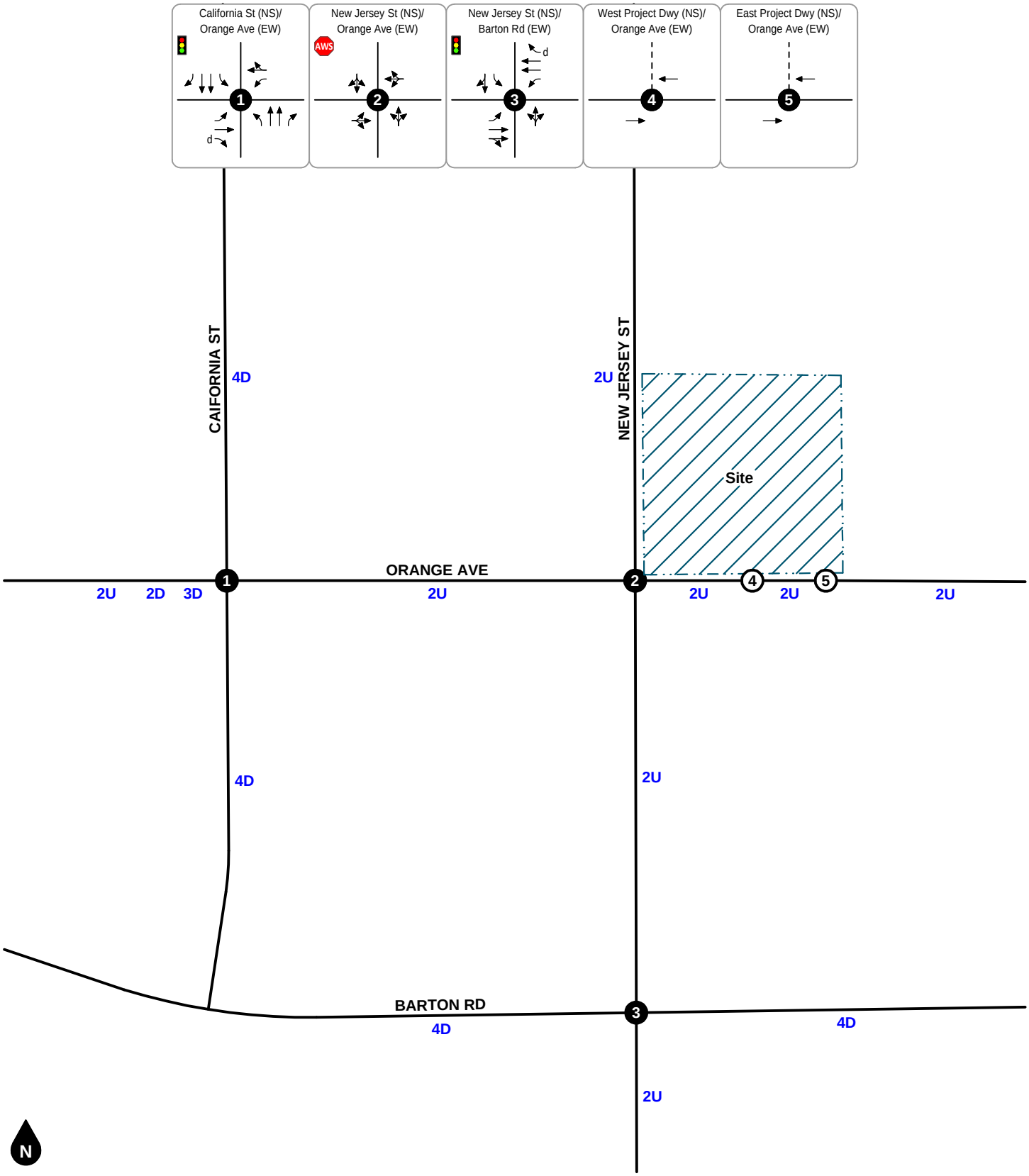
Study Intersection	Traffic Control[1]	AM Peak Hour		PM Peak Hour	
		Delay[2]	LOS[3]	Delay[2]	LOS[3]
1. California St at Orange Ave	TS	22.5	C	18.7	B
2. New Jersey St at Orange Ave	AWS	9.7	A	9.4	A
3. New Jersey St at Barton Rd	TS	24.4	C	33.4	C
4. West Project Dwy at Orange Ave	CSS	0.0	A	0.0	A
5. East Project Dwy at Orange Ave	CSS	0.0	A	0.0	A

Notes:

(1) TS = Traffic Signal; AWS = All Way Stop; CSS = Cross Street Stop

(2) Delay is shown in seconds per vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst minor street approach or major street left turn movement.

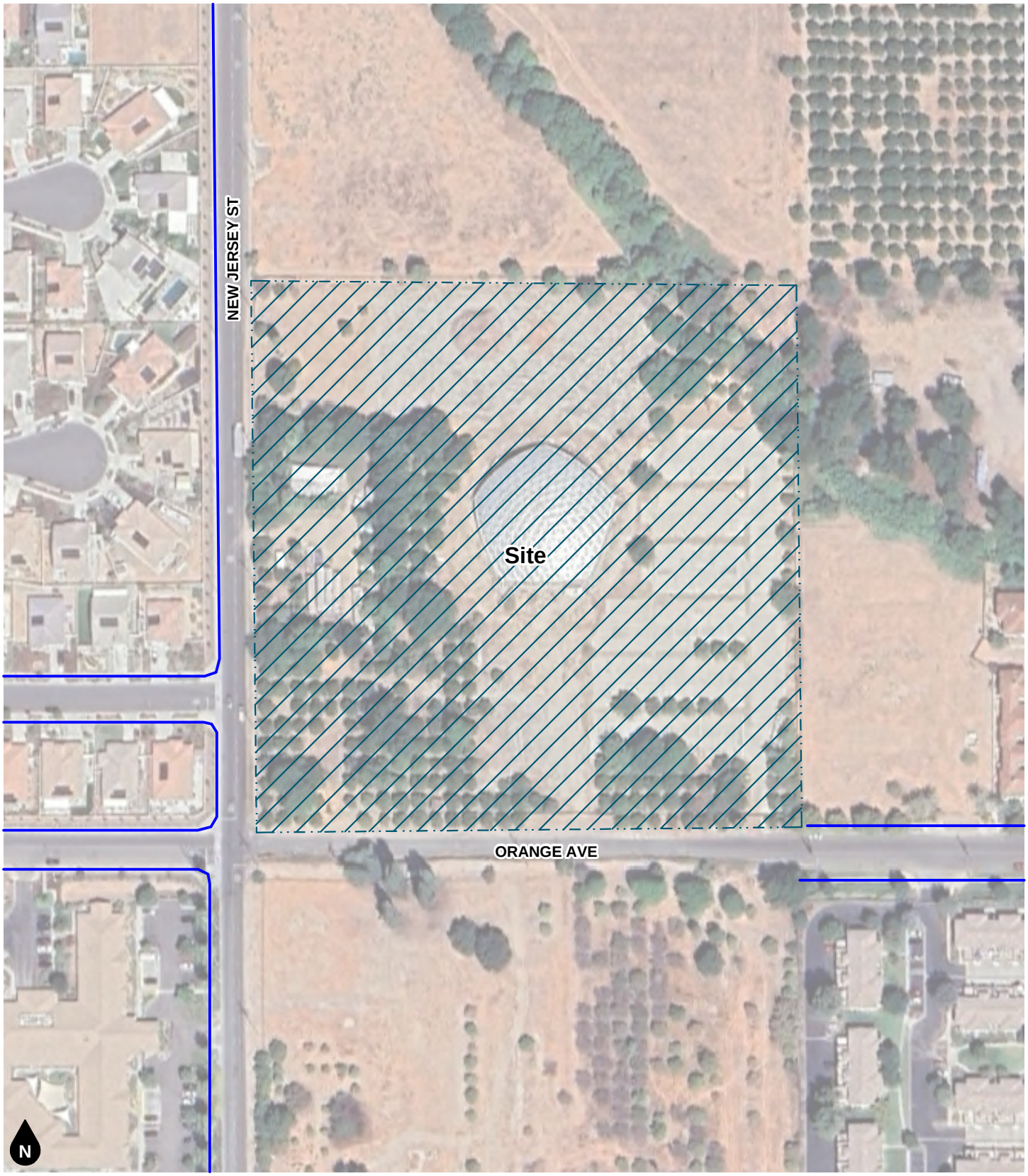
(3) LOS = Level of Service



Legend

- Traffic Signal
- All Way Stop
- Stop Sign
- #D #-Lane Divided Roadway
- #U #-Lane Undivided Roadway
- Existing Lane
- d De Facto Right Turn Lane
- Project Driveway

Figure 5
Existing Lane Geometry and Intersection Traffic Cotrols



Legend
Sidewalk

Figure 6
Existing Pedestrian Facilities



Figure 7
Existing Transit Routes

Source: Omnitrans

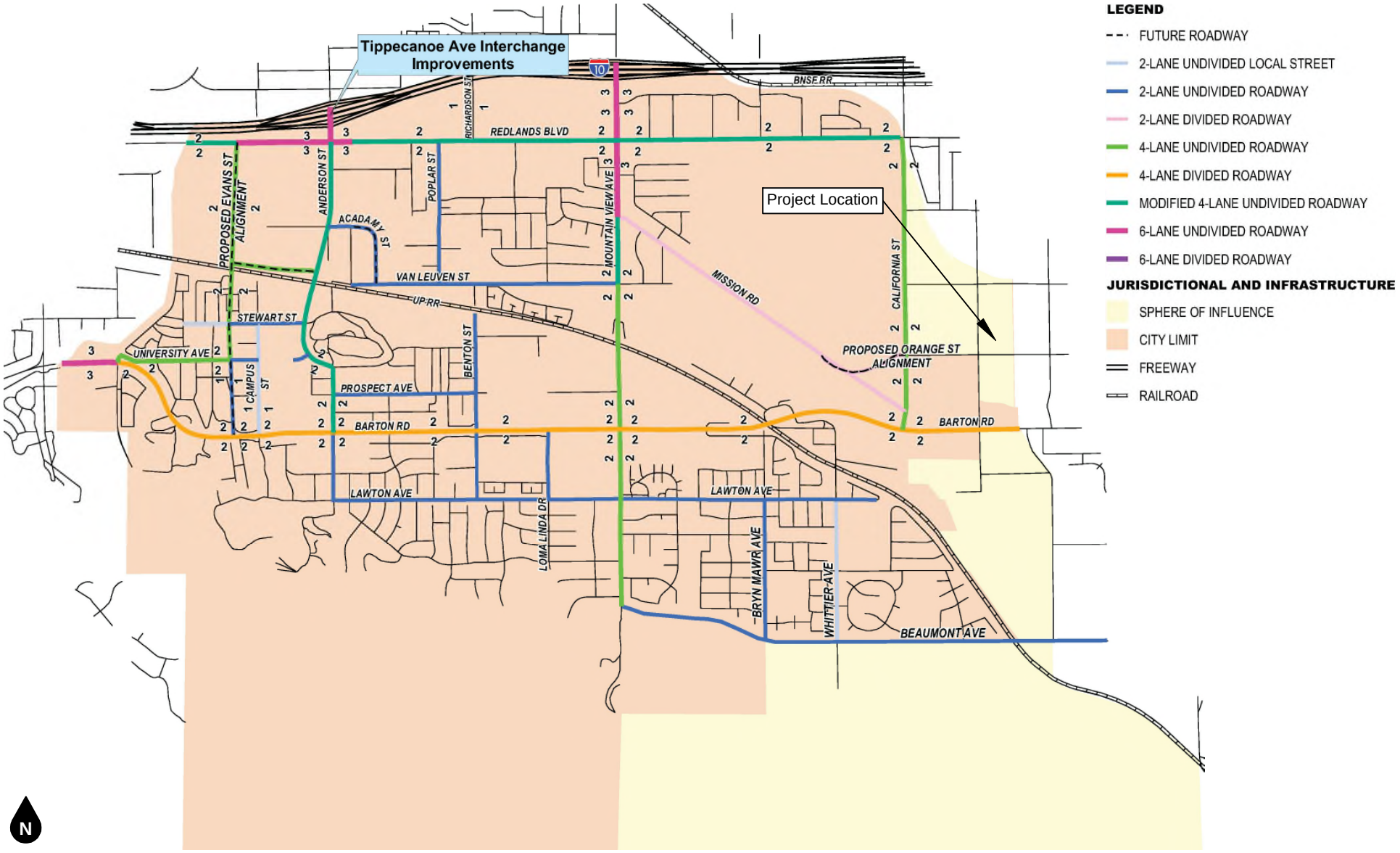
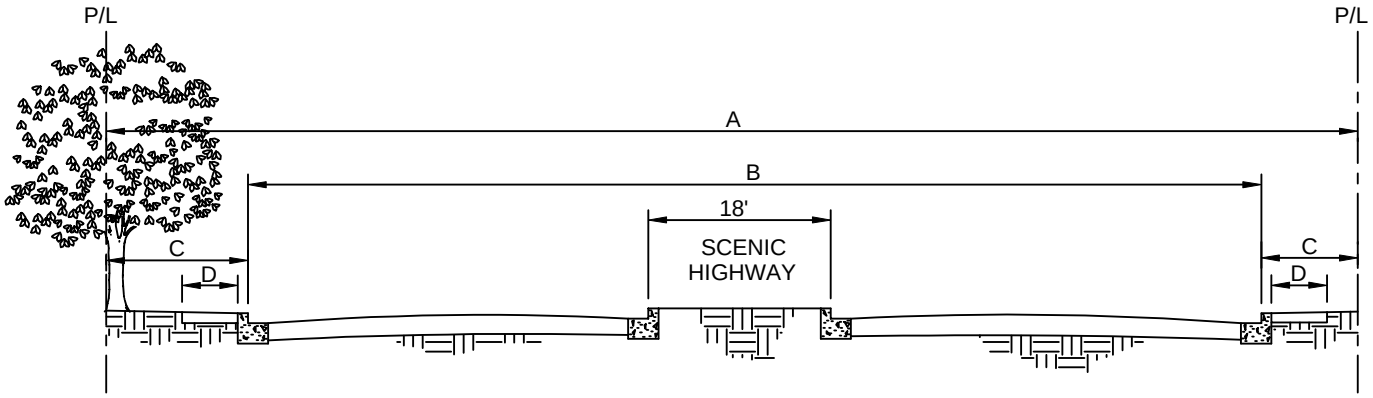
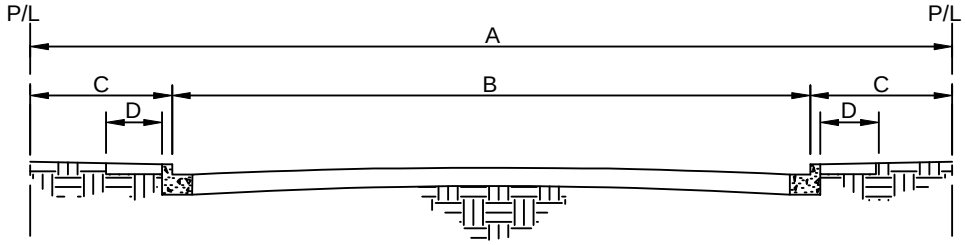


Figure 8
City of Loma Linda General Plan Circulation Element

Source: City of Loma Linda



MAJOR ARTERIAL SECTION



STANDARD SECTION

DIMENSIONS					MIN. PAVING	
STREET-TYPE	A	B	C	D*	T.I.	AC"/CAB"
LOCAL	60'	36'	12'	5'	6	3.5"/6"
COLLECTOR	64'	40'	12'	5'	6	3.5"/6"
COLLECTOR (SPECIAL)	66'	44'	11'	5'	7	4/6
SECONDARY HIGHWAY	88'	64'	12'	5'	8	4/7
MAJOR HIGHWAY	100'	72'	14'	5'	9	5/8
SCENIC HIGHWAY	120'	94'	13'	5'	9	5/8

*SIDEWALK EXTENDS TO PROPERTY LINE IN COMMERCIAL ZONE

Figure 9
City of Loma Linda General Plan Roadway Cross-Sections

Source: City of Loma Linda

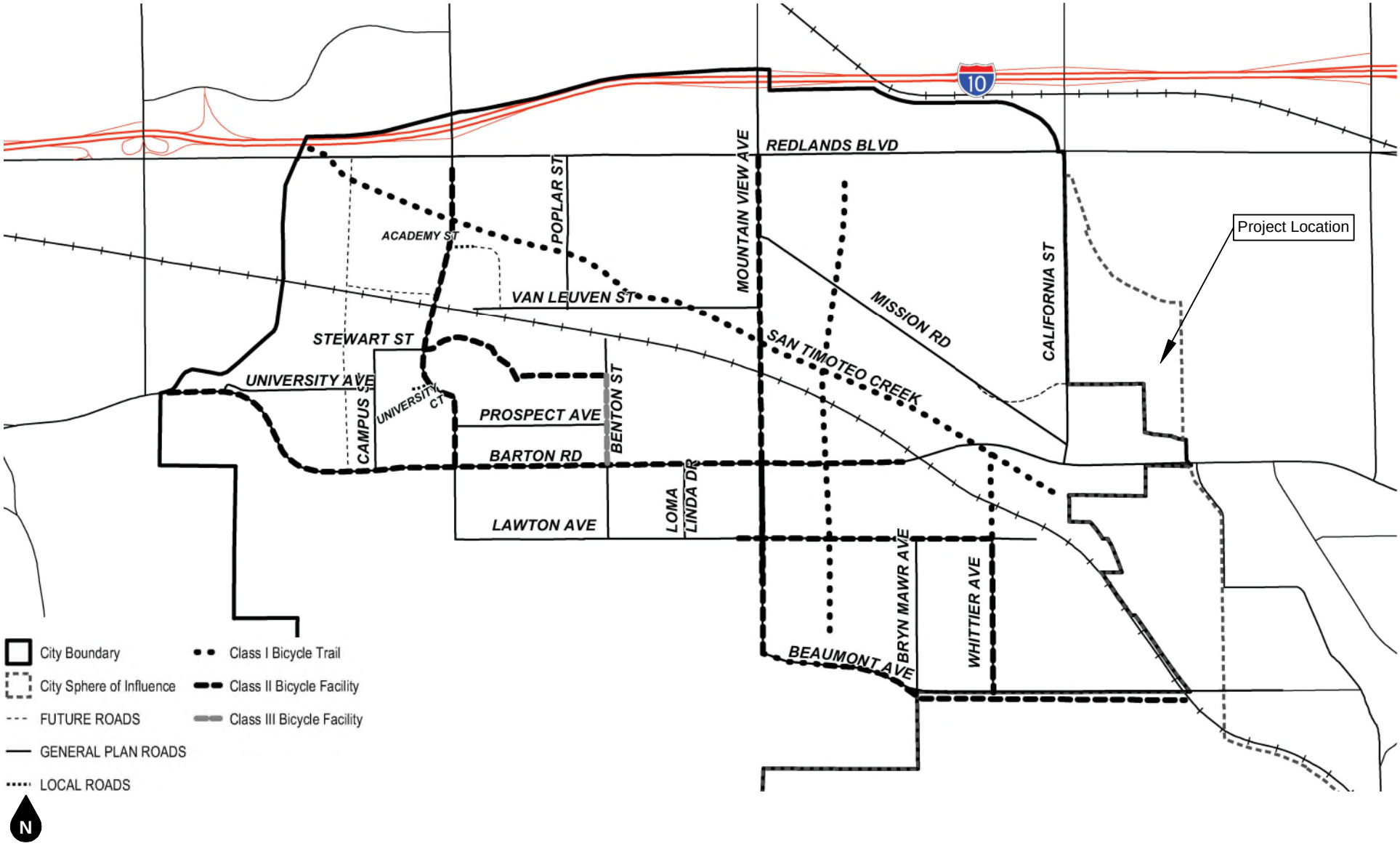
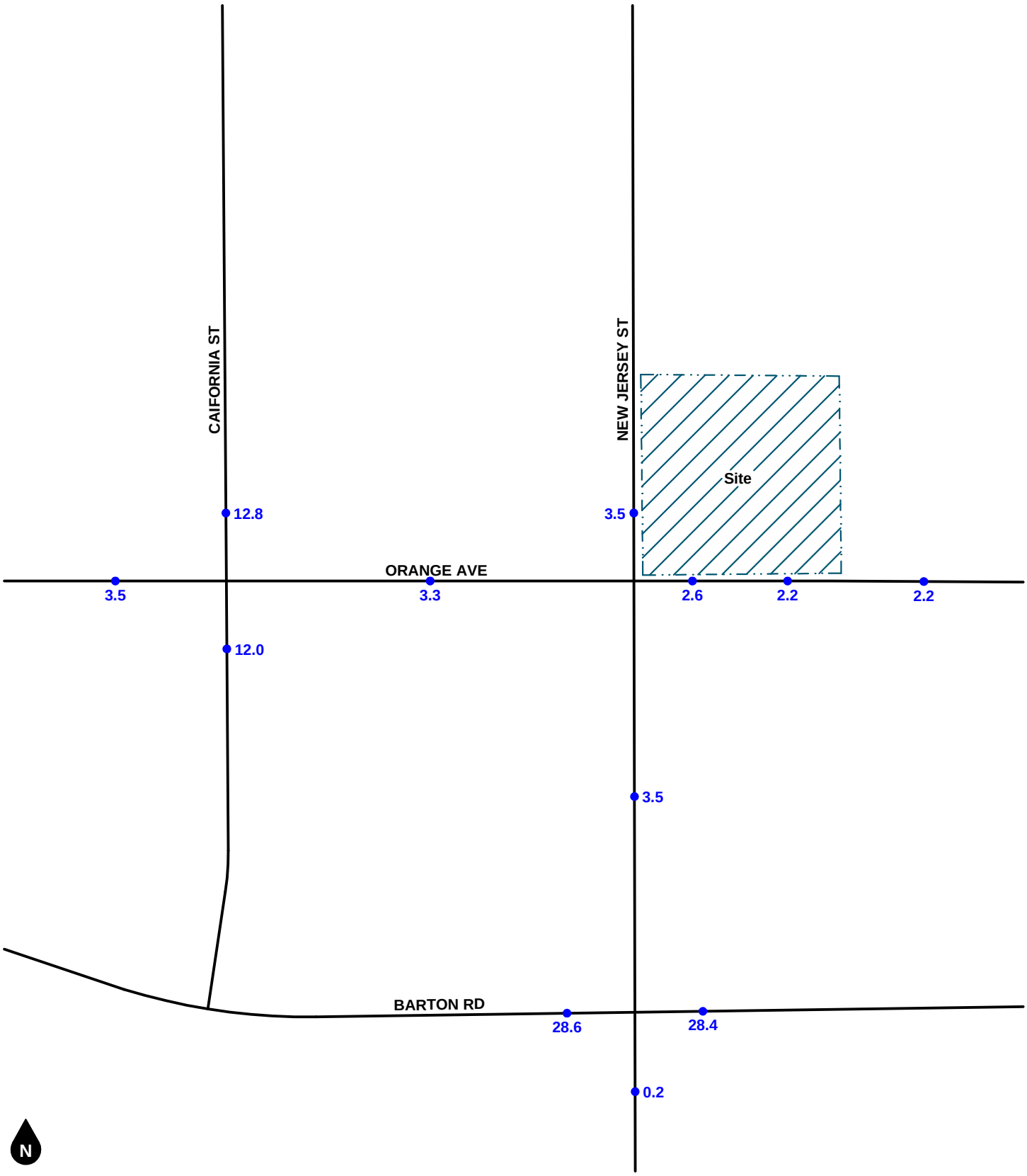


Figure 10
City of Loma Linda Bicycle Facilities Master Plan

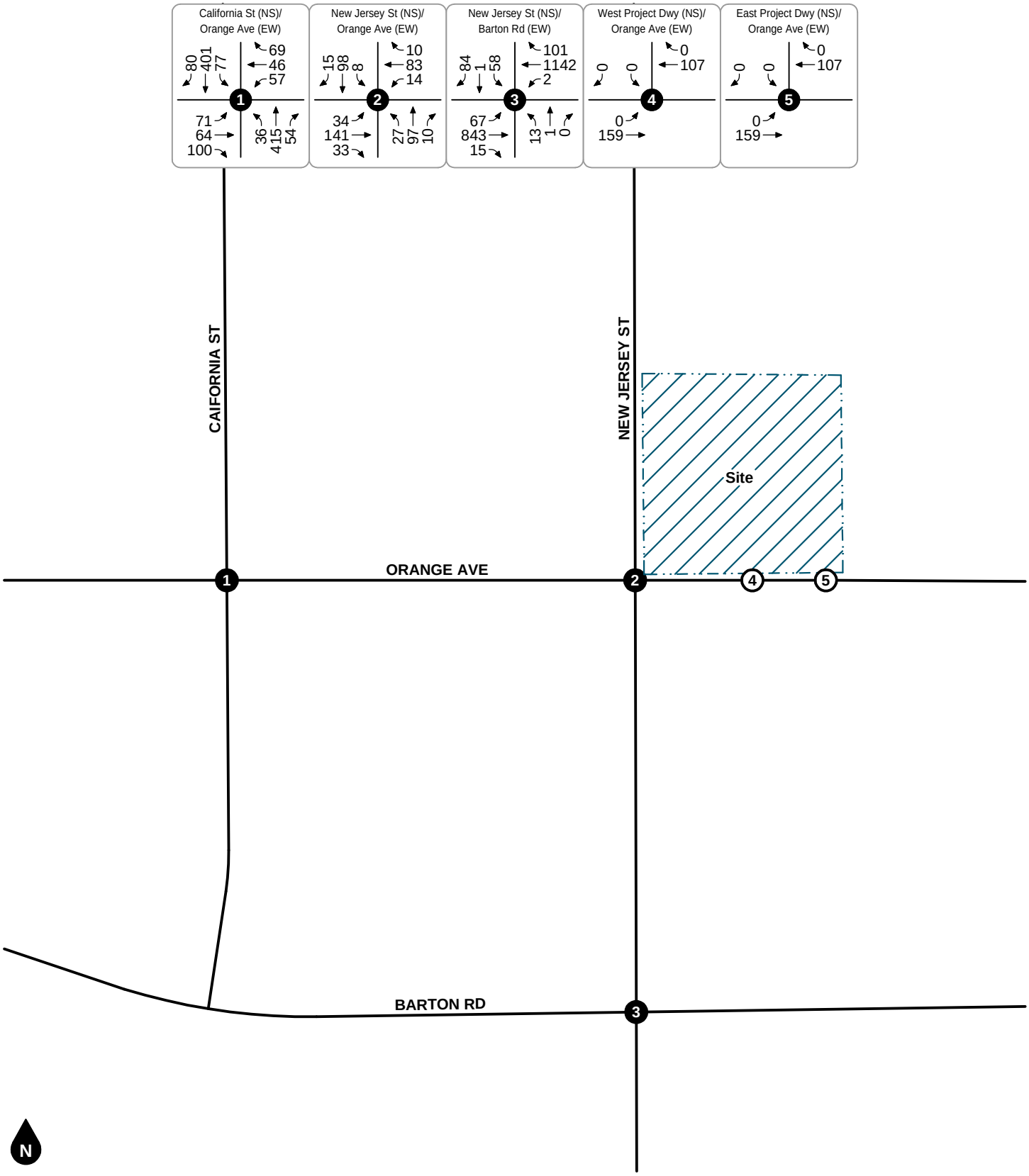
Source: City of Loma Linda



Legend

●# Vehicles Per Day (1,000's)

Figure 11
Existing Average Daily Traffic Volumes



Legend

(#) Study Intersection

(#) Project Driveway

Figure 12
Existing AM Peak Hour Intersection Turning Movement Volumes

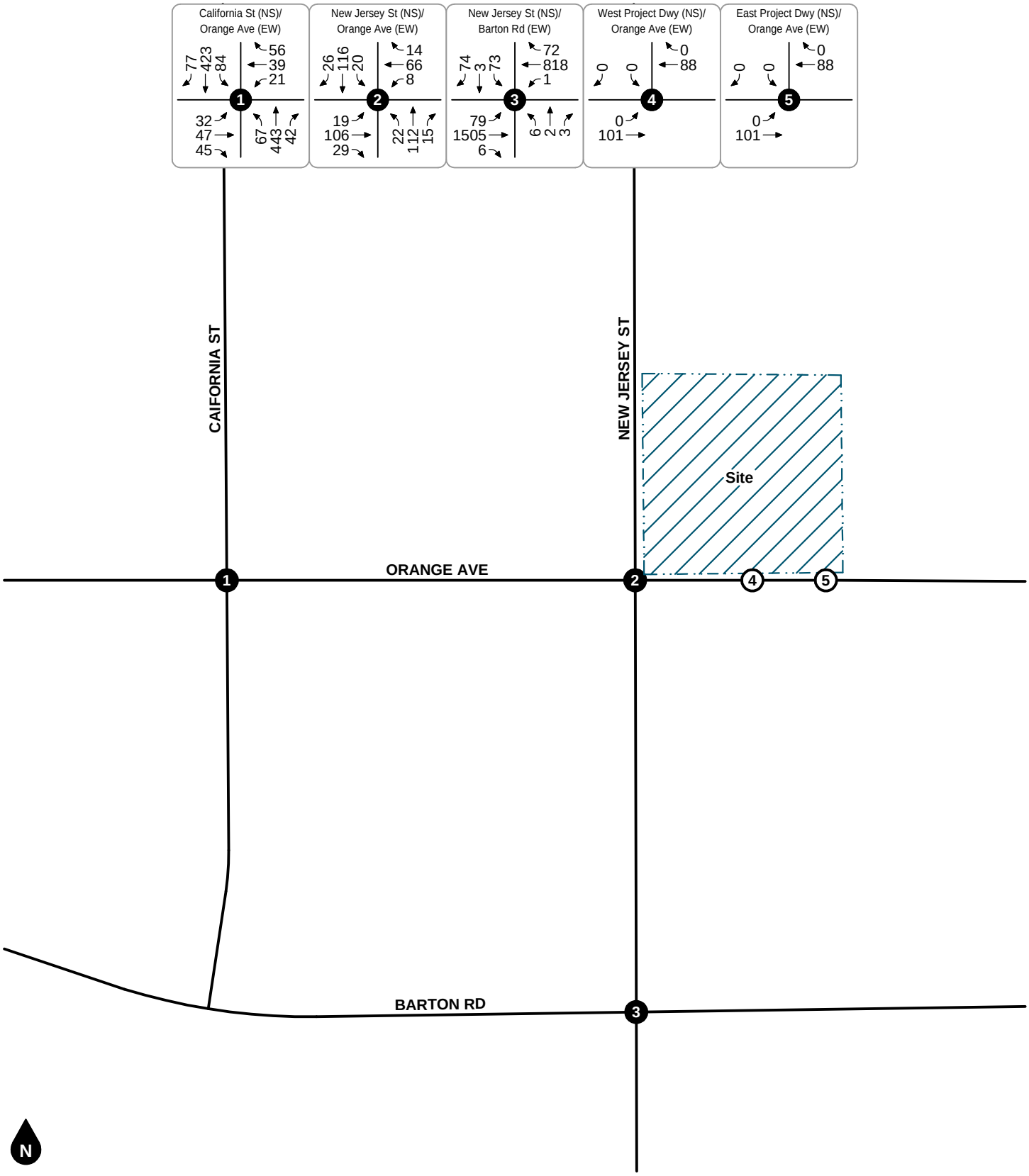


Figure 13
Existing PM Peak Hour Intersection Turning Movement Volumes

4. PROJECT TRIP FORECASTS

This section describes how project trip generation, trip distribution, and trip assignment forecasts were developed. The forecast project volumes are illustrated in the figures contained in this section.

PROJECT TRIP GENERATION

Table 2 shows the proposed project trip generation forecast based on rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (12th Edition, 2025). Based on review of ITE land use description, trip generation rates for ITE Land Use Code 560 - Church represent the proposed uses and were selected for calculation of the project trip generation forecast.

As shown in Table 2, the proposed project is forecast to generate approximately 129 daily trips, including 7 trips during the AM peak hour and 8 trips during the PM peak hour.

PROJECT TRIP DISTRIBUTION & ASSIGNMENT

Figure 14 to Figure 15 show the forecast directional outbound and inbound distribution patterns for the project generated trips, respectively. Trip distribution patterns were determined using engineering judgment in consultation with the City engineering staff based on review of existing volume data, surrounding land uses, and the local and regional roadway facilities in the project vicinity.

Based on the project trip generation and distributions, project average daily traffic volumes are shown on Figure 16. Project AM peak hour and PM peak hour intersection turning movement volumes are shown on Figure 17 and Figure 18.

Table 2
Project Trip Generation

Trip Generation Rates									
Land Use	Source[1]	Land Use Variable[2]	AM Peak Hour			PM Peak Hour			Daily Rate
			% In	% Out	Rate	% In	% Out	Rate	
Church	ITE 560	TSF	62%	38%	0.37	41%	59%	0.43	6.78

Trips Generated									
Land Use	Source	Quantity	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Church	ITE 560	19.000 TSF	4	3	7	3	5	8	129

Notes:
1. ITE = Institute of Transportation Engineers *Trip Generation Manual* (12th Edition, 2025); ### = Land Use Code.
2. TSF = Thousand Square Feet

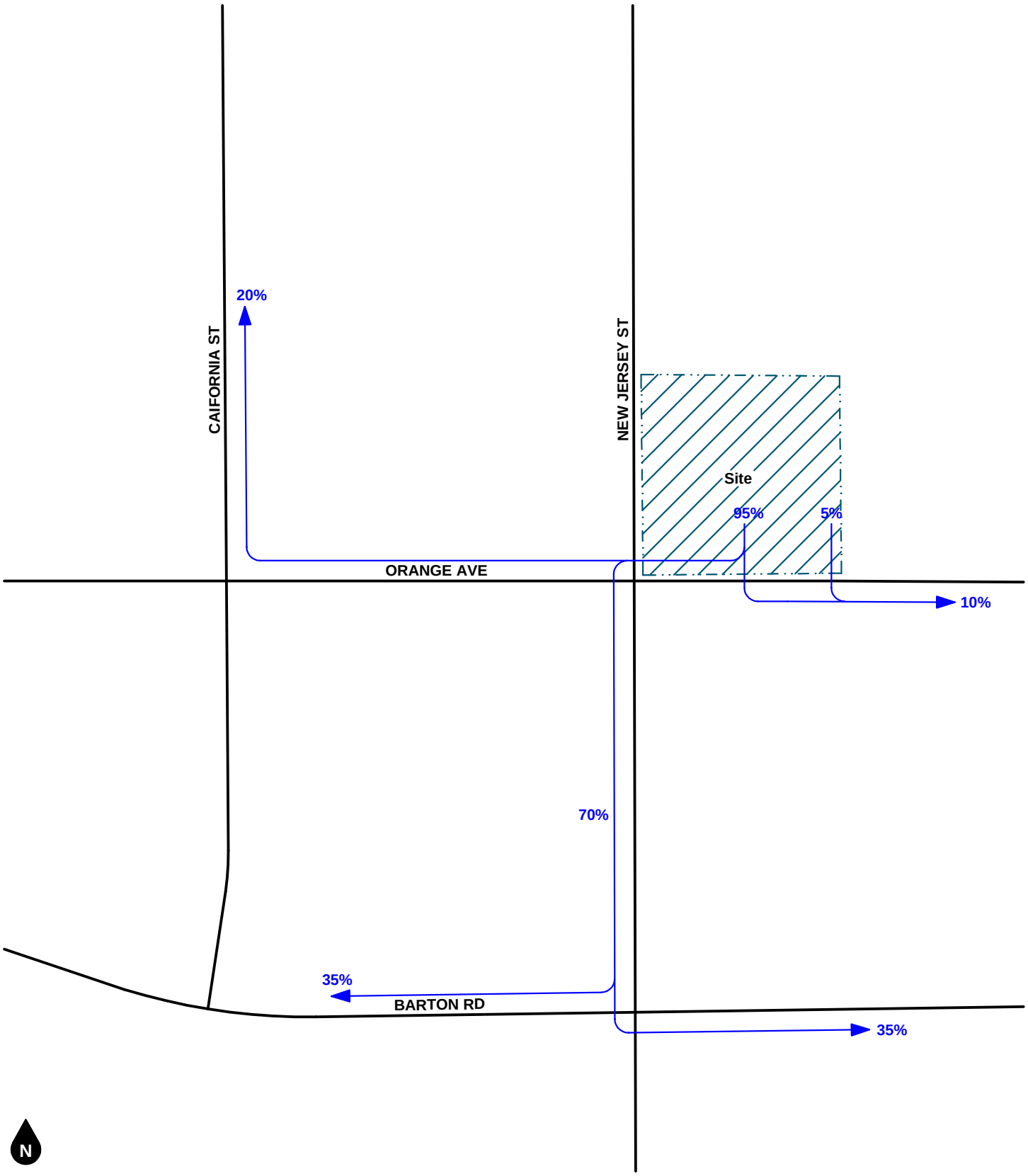


Figure 14
Project Trip Distribution (Outbound)

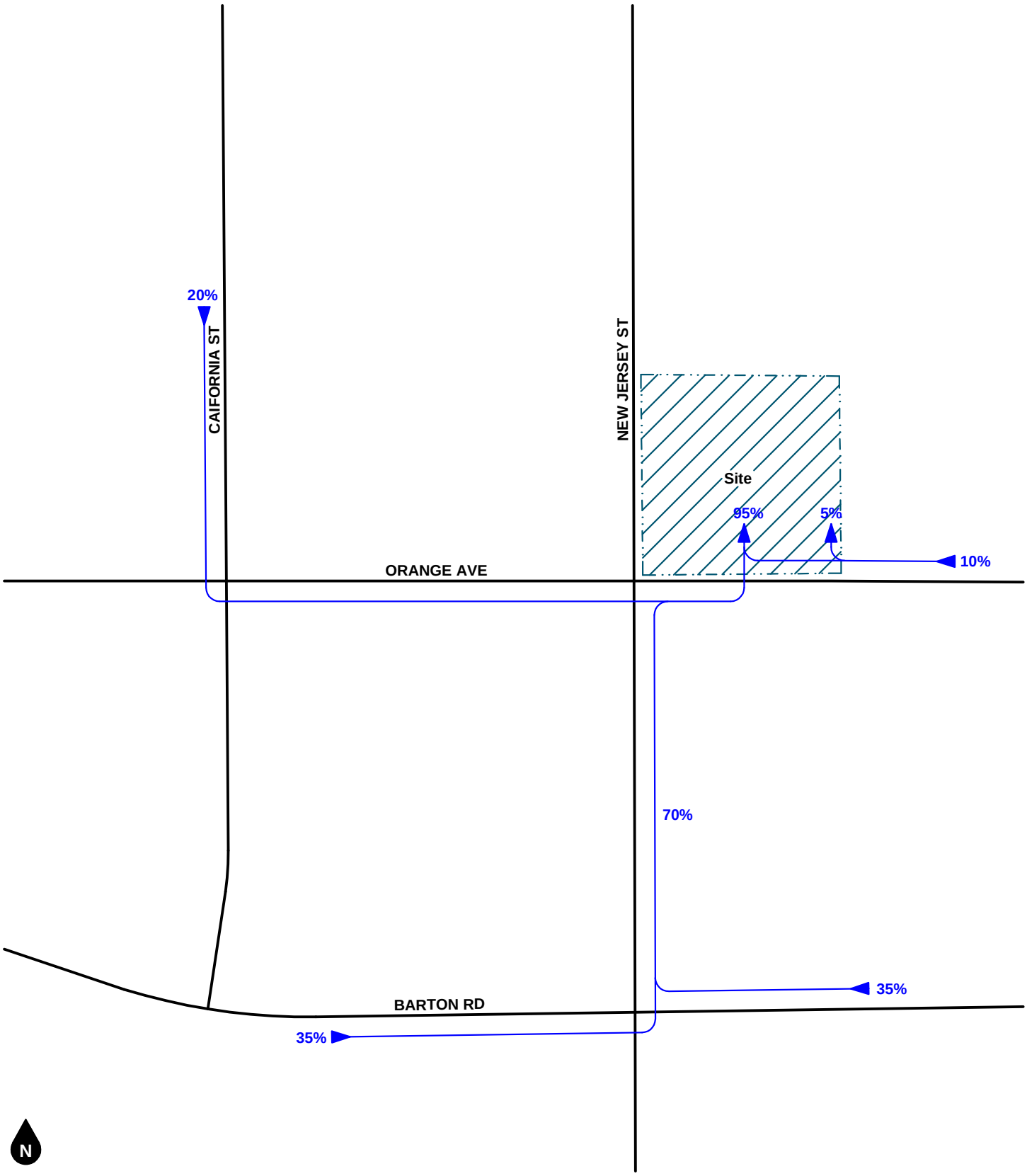
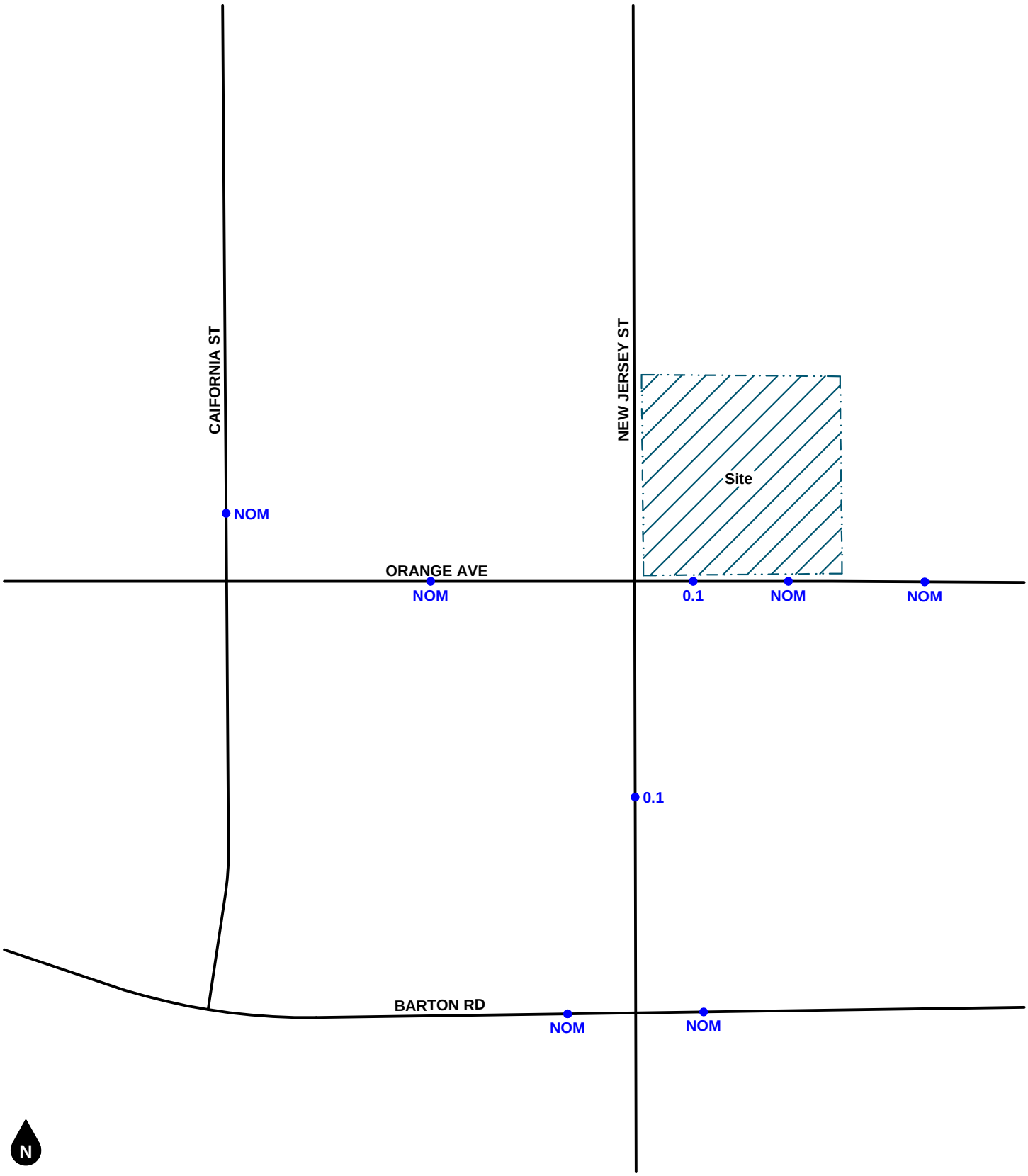


Figure 15
Project Trip Distribution (Inbound)



Legend

● # Vehicles Per Day (1,000's)

NOM Less Than 50 Vehicles Per Day

Figure 16
Project Average Daily Traffic Volumes

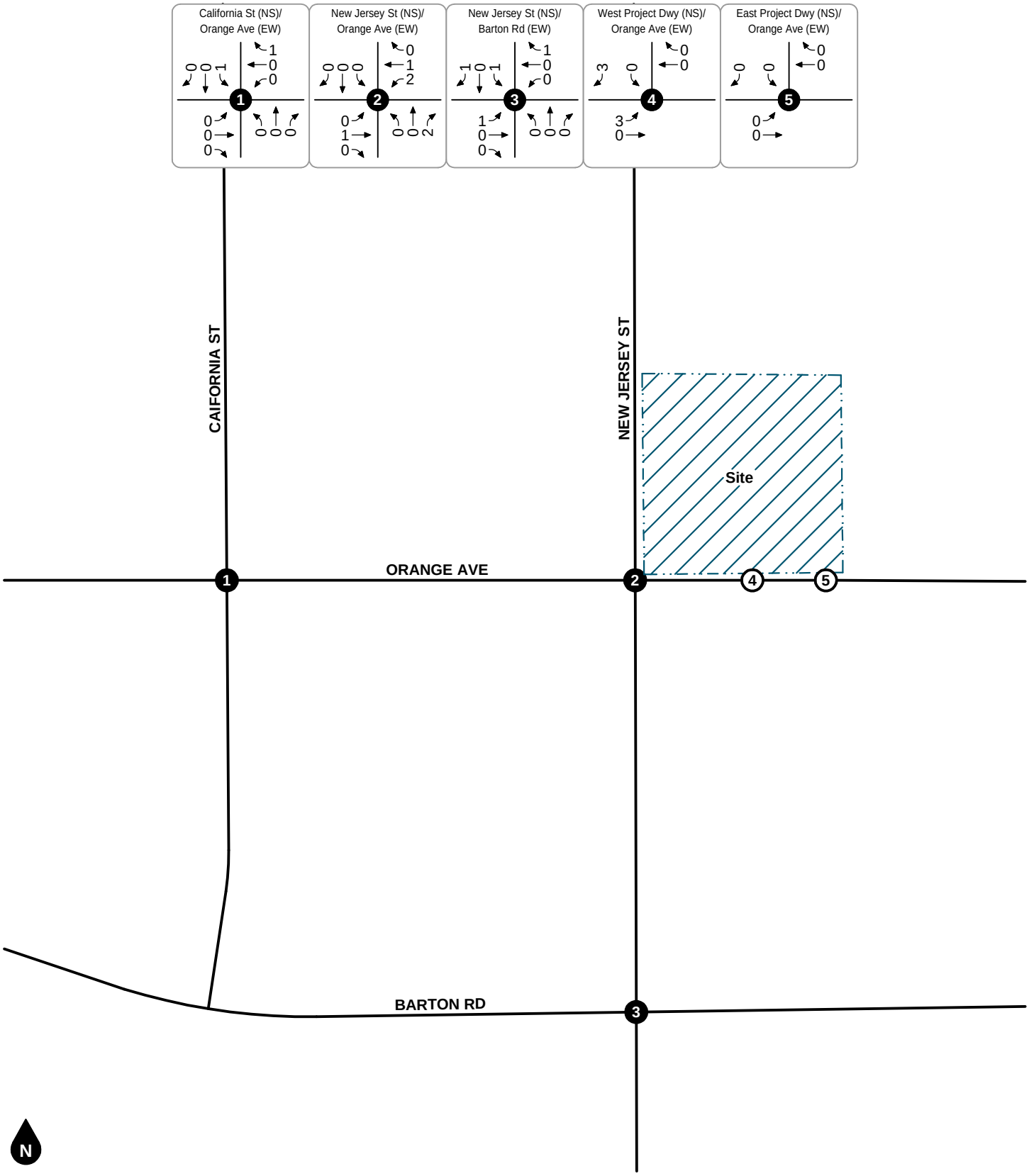
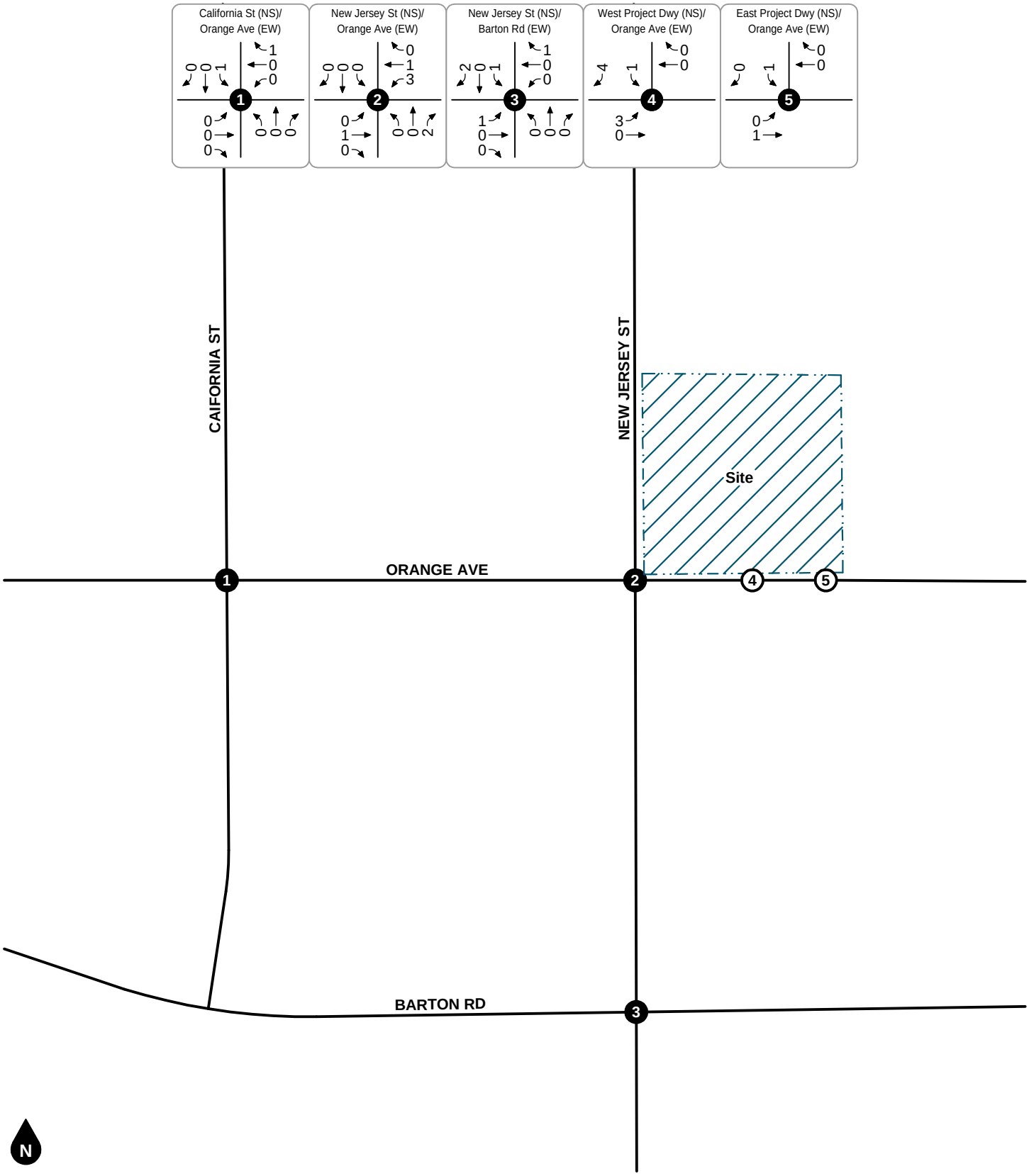


Figure 17
Project AM Peak Hour Intersection Turning Movement Volumes



Legend

Study Intersection

(#) Project Driveway

Figure 18
Project PM Peak Hour Intersection Turning Movement Volumes

5. FUTURE VOLUME FORECASTS

This section describes how future volume forecasts for each analysis scenario were developed. Forecast study area volumes are illustrated on figures contained in this section.

CUMULATIVE TRIPS

Ambient Growth Rate

To account for ambient growth on roadways, existing 2026 roadway volumes were increased by a growth rate of two percent (2%) per year over two years for Opening Year (2028) conditions. This equates to a total growth factor of approximately 1.04. The ambient growth rate was conservatively applied to all movements at the study intersections.

Other Development

To account for trips generated by future development, trips generated by pending or approved other development projects in the City of Loma Lind and City of Redlands were added to the study area. Table 3 shows the other development trip generation and Figure 19 shows the other development location map.

Figure 20 shows the forecast average daily traffic volumes for trips generated by other developments. Figure 21 and Figure 22 show the forecast AM and PM peak hour intersection turning movement volumes for trips generated by other developments.

ANALYSIS SCENARIO VOLUME FORECASTS

Existing Plus Project

Existing Plus Project volume forecasts were developed by adding the project generated trips to Existing volumes. Existing Plus Project average daily traffic volumes are illustrated on Figure 23. Existing Plus Project AM and PM peak hour intersection turning movement volumes are illustrated on Figure 24 and Figure 25.

Opening Year (2028) Without Project

Opening Year (2028) Without Project volume forecasts were developed by adding other development trips to Opening Year (2028) Base volumes. Opening Year (2028) Without Project average daily traffic volumes are illustrated on Figure 26. Opening Year (2028) Without Project AM and PM peak hour intersection turning movement volumes are shown on Figure 27 and Figure 28.

.

Opening Year (2028) With Project

Opening Year (2028) With Project volume forecasts were developed by adding project generated trips to Opening Year (2028) Without Project forecast. Opening Year (2028) With Project average daily traffic volumes are illustrated on Figure 29. Opening Year (2028) With Project AM and PM peak hour intersection turning movement volumes are shown on Figure 30 and Figure 31.

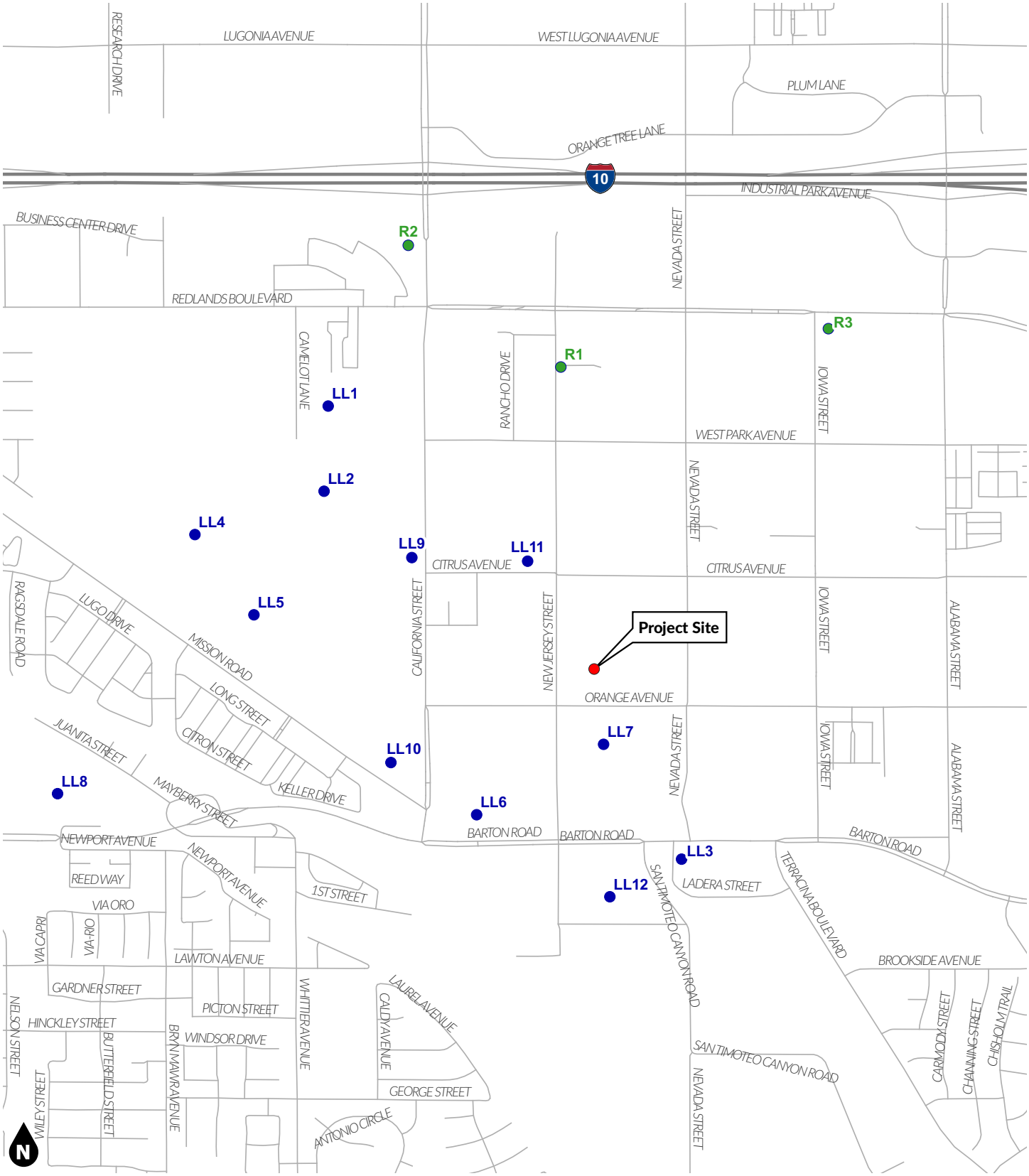
Table 3 (1 of 2)
Other Development Trip Generation

Map ID	Project Name/Address	Land Use	Source[1]	Quantity[2]	AM Peak Hour			PM Peak Hour			Daily
					In	Out	Total	In	Out	Total	
	CITY OF LOMA LINDA										
LL1	Park Ave 212	Senior Adult Housing - Multifamily	ITE 252	213 DU	14	27	41	30	24	54	692
		Strip Retail Plaza (<40k)	ITE 822	4.000 TSF	9	7	16	13	13	26	218
		Subtotal			23	34	57	43	37	80	910
LL2	Community Park within The Groves Specific Plan	Public Park	ITE 411	15.000 AC	0	0	0	1	1	2	12
		Recreational Community Center	ITE 495	6.000 TSF	8	4	12	8	9	17	173
		Pass-by Trips (19%PM)	ITE 495		*0*	*0*	0	*-2*	*-2*	*-4*	*-4*
		Fire and Rescue Station	ITE 575	3.960 TSF	0	0	0	1	1	2	2
		Subtotal			8	4	12	8	9	17	183
LL3	Covenant Point (Canyon Ranch)	Single-Family Detached Housing	[3]		23	65	88	75	44	119	1,188
LL4	Sierra Crest	Multifamily Housing (Mid-Rise, Not Close to Rail Transit)	ITE 221	103 DU	9	30	39	25	14	39	459
LL5	Gold Crest	Single-Family Detached Housing	ITE 210	51 DU	10	26	36	29	18	47	464
LL6	Zanja Heritage Village	Multifamily Housing (Low-Rise, Not Close to Rail Transit)_	[4]		6	20	26	21	13	34	445
LL7	Rehab Center	Adult Detention Facility	ITE 571	80 BED	4	4	8	1	6	7	78
LL8	Lube and Tune Center	Automobile Care Center	[5]		6	3	9	5	6	11	76
LL9	Daycare & Mixed Use site	Day Care Center	ITE 565	10.000 TSF	58	51	109	51	57	108	393
		Pass-by Trips (44%PM)	ITE 565		*0*	*0*	0	*-22*	*-25*	*-47*	*-47*
		Subtotal			58	51	109	29	32	61	346
LL10	Mission Road (apartments)	Multifamily Housing (Low-Rise, Not Close to Rail Transit)	ITE 220	36 DU	4	11	15	12	7	19	224
LL11	Wholesale Landscape Nursery/Citrus Avenue Commercial Nursery	Nursery	[6]		12	0	12	1	13	14	87
LL12	Covenant Point/Canyon Ranch	Single-Family Detached Housing	[7]		23	65	88	75	44	119	1,188

Table 3 (2 of 2)
Other Development Trip Generation

Map ID	Project Name/Address	Land Use	Source[1]	Quantity[2]	AM Peak Hour			PM Peak Hour			Daily
					In	Out	Total	In	Out	Total	
	CITY OF REDLANDS										
R1	Spanish Church	Church	ITE 560	19.500 TSF	4	3	7	3	5	8	132
R2	913 California Street Mixed-Use Center	Business Hotel/Coffee Donut Shop with Drive-Through Window/Automated Car Wash	[8]		60	64	124	65	65	130	1,619
R3	475 Iowa Street Redlands Business Center	General Light Industrial	[9]		16	2	18	2	14	16	130

Notes:
(1) ITE = Institute of Transportation Engineers *Trip Generation Manual* (12th Edition, 2025); ### = Land Use Code.
(2) DU = Dwelling Units; TSF = Thousand Square Feet; AC = Acres; BED = Beds
(3) Source: *Canyon Ranch Project Traffic Impact Analysis* , Ganddini Group, Inc., March 22, 2022
(4) Source: *Barton Road Apartments Traffic Impact Analysis* , Ganddini Group, Inc., December 16, 2024
(5) Source: *25972 Barton Road Lube and Tune Traffic Impact Analysis* (Ganddini Group, Inc., October 2025
(6) Source: *Transportation Screening Assessment for the Citrus Avenue Commercial Nursery Project* , Ganddini Group, Inc., September 10, 2024
(7) Source: *Canyon Ranch Project Traffic Impact Analysis* , Ganddini Group, Inc., March 22, 2022
(8) Source: *913 California Street Mixed-Use Center Traffic Impact Analysis* , Ganddini Group, Inc., April 2, 2025
(9) Source: *Redlands Business Center (Park & Iowa) Project Transportation Screening Assessment* , Ganddini Group, Inc., August 21, 2025



Legend

Other Development (see Table 3 for ID)

- City of Loma Linda
- City of Redlands

Figure 19
Other Development Location Map

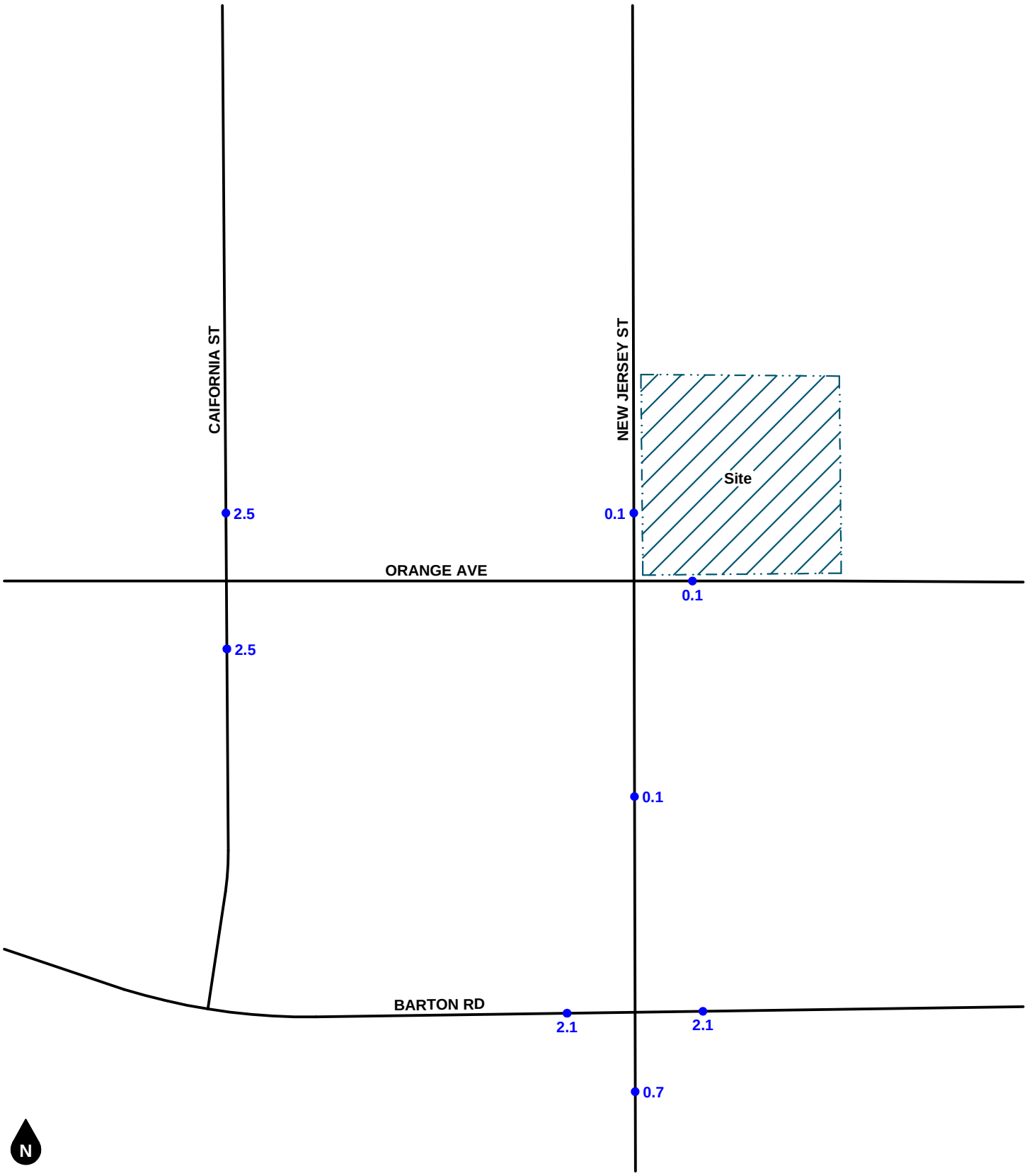
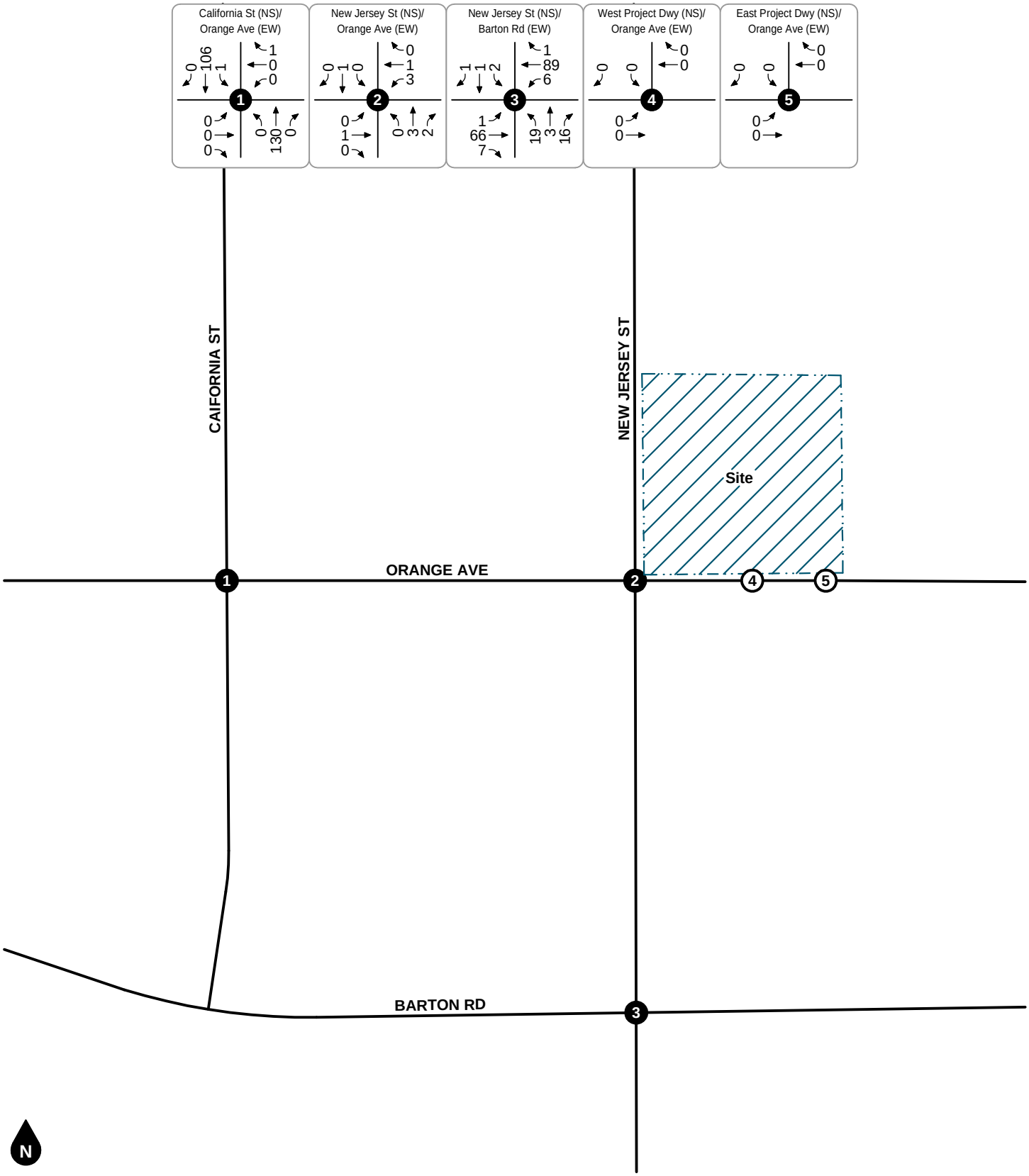


Figure 20
Other Develpment Average Daily Traffic Volumes

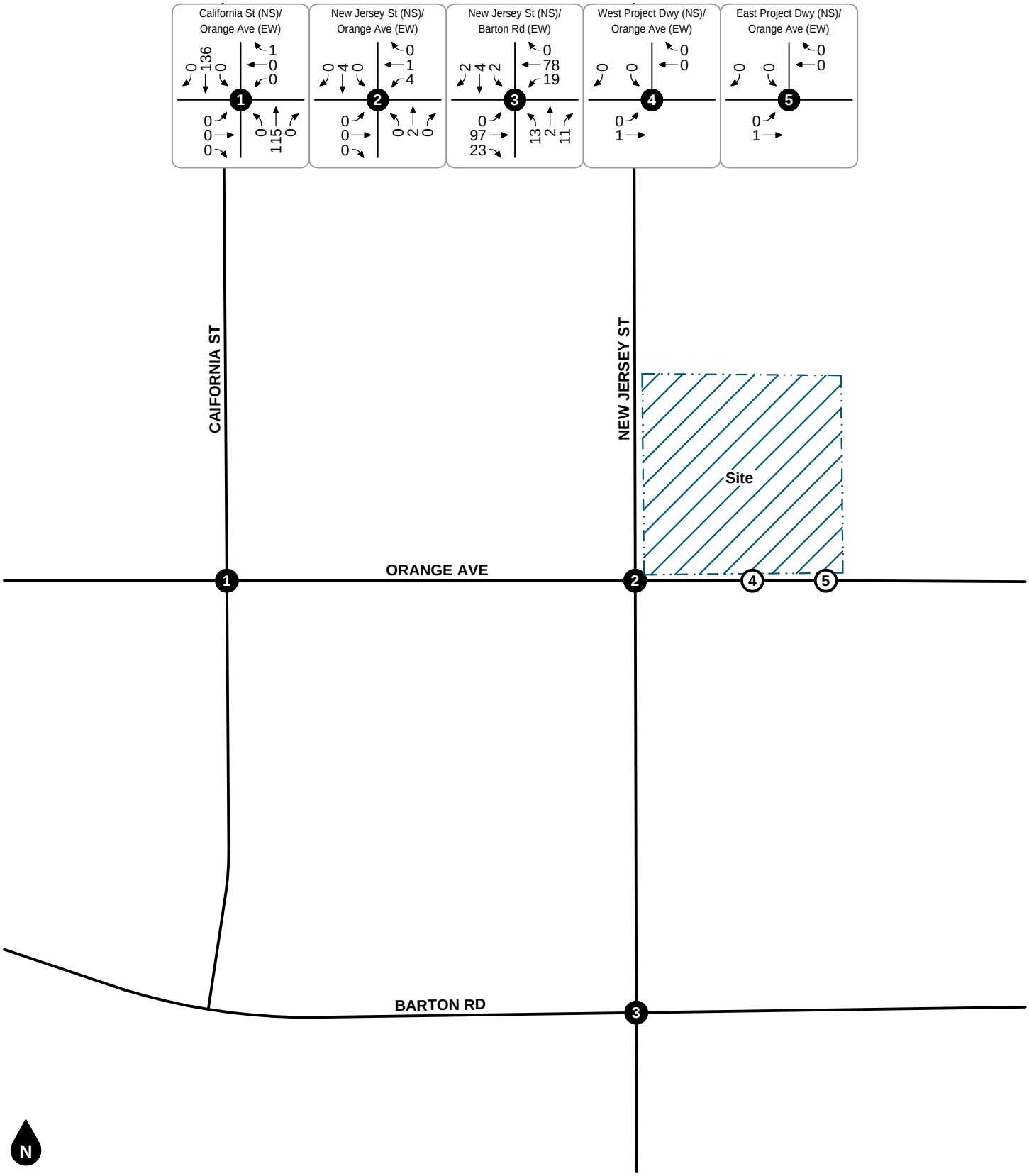


Legend

Study Intersection

(#) Project Driveway

Figure 21
Other Development
AM Peak Hour Intersection Turning Movement Volumes



Legend

(#) Study Intersection

(#) Project Driveway

Figure 22
Other Development
PM Peak Hour Intersection Turning Movement Volumes

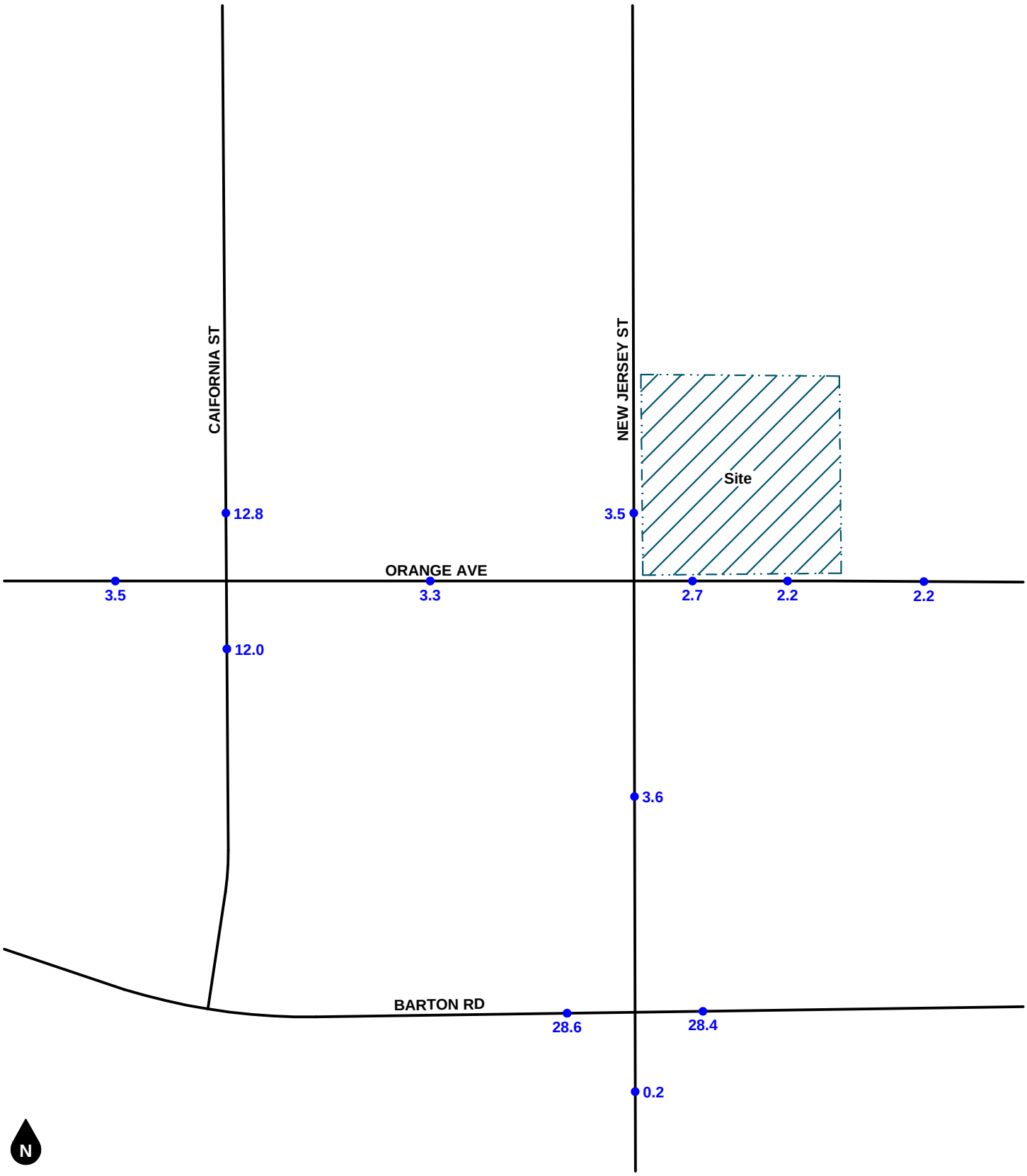
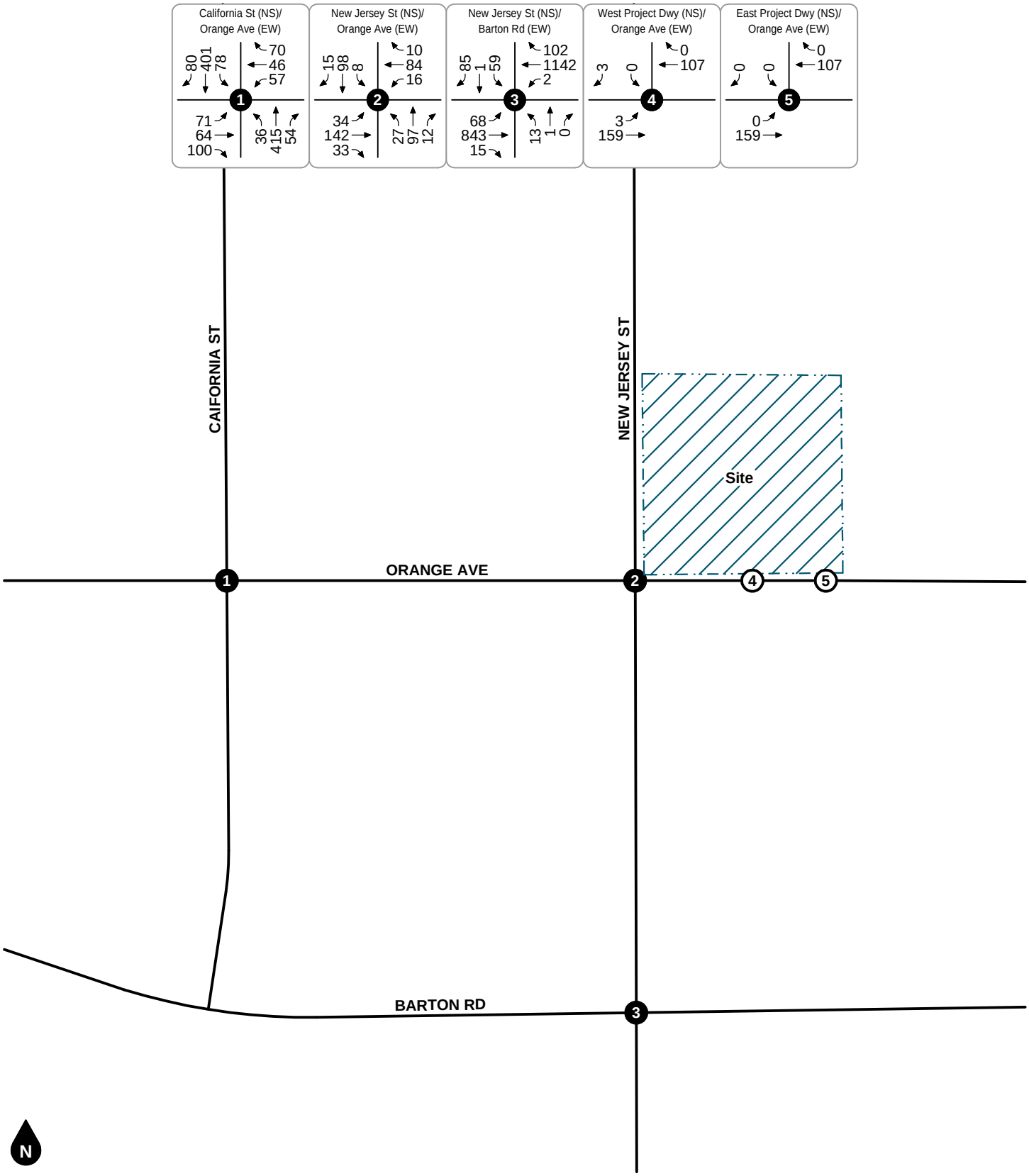


Figure 23
Existing Plus Project Average Daily Traffic Volumes

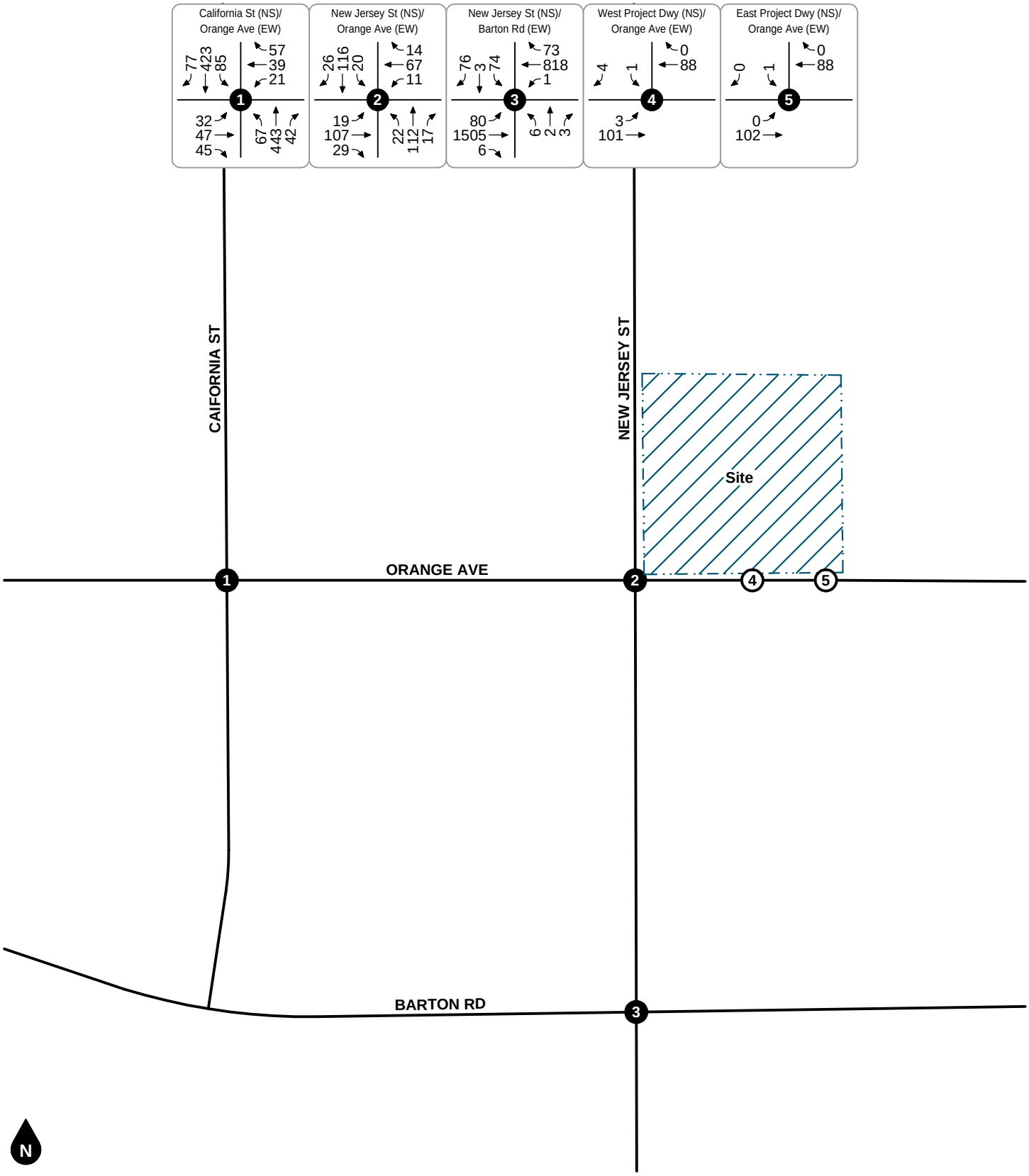


Legend

(#) Study Intersection

(#) Project Driveway

Figure 24
Existing Plus Project
AM Peak Hour Intersection Turning Movement Volumes



Legend

(#) Study Intersection

(#) Project Driveway

Figure 25
Existing Plus Project
PM Peak Hour Intersection Turning Movement Volumes

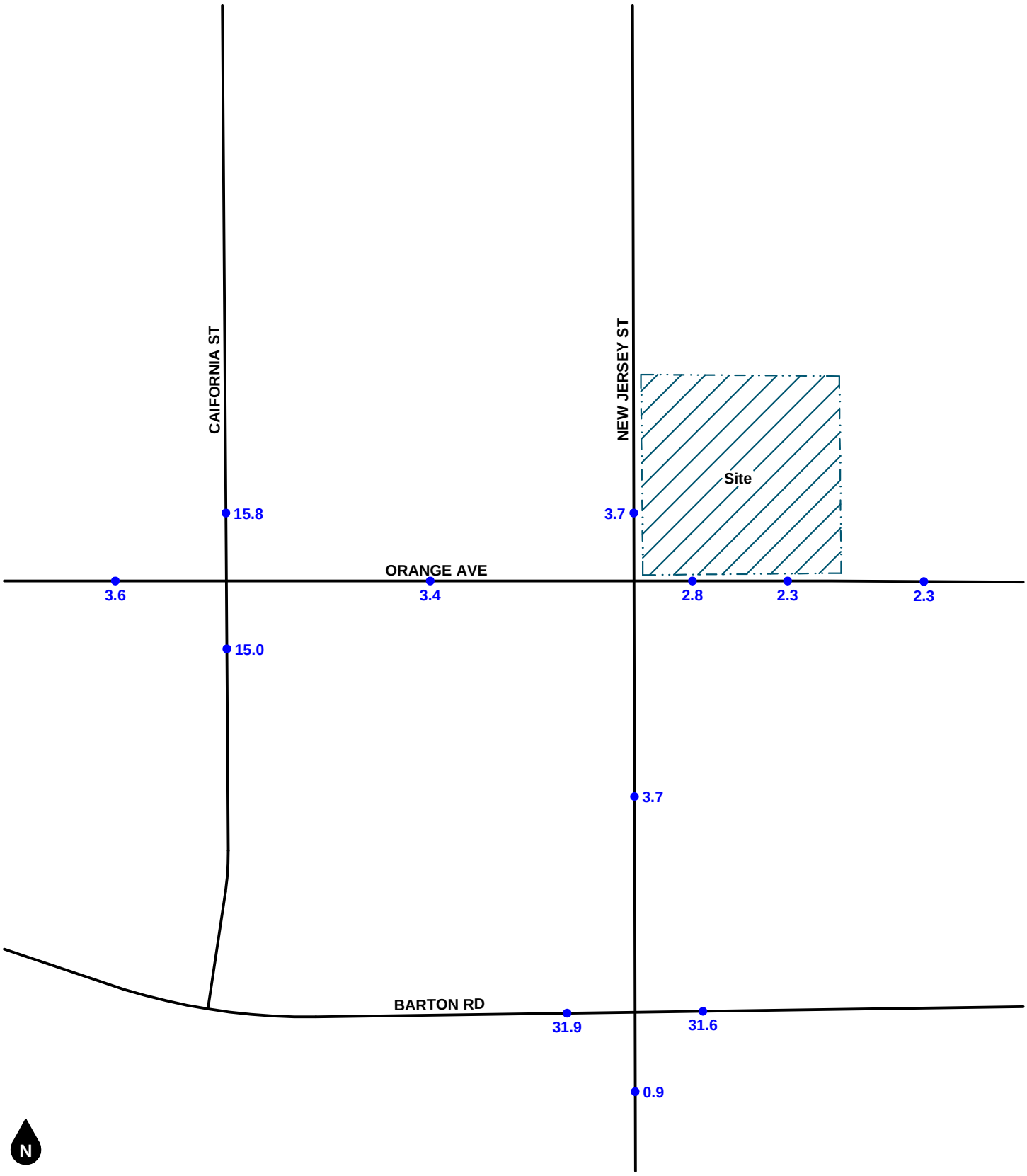


Figure 26
Opening Year (2028) Without Project Average Daily Traffic Volumes

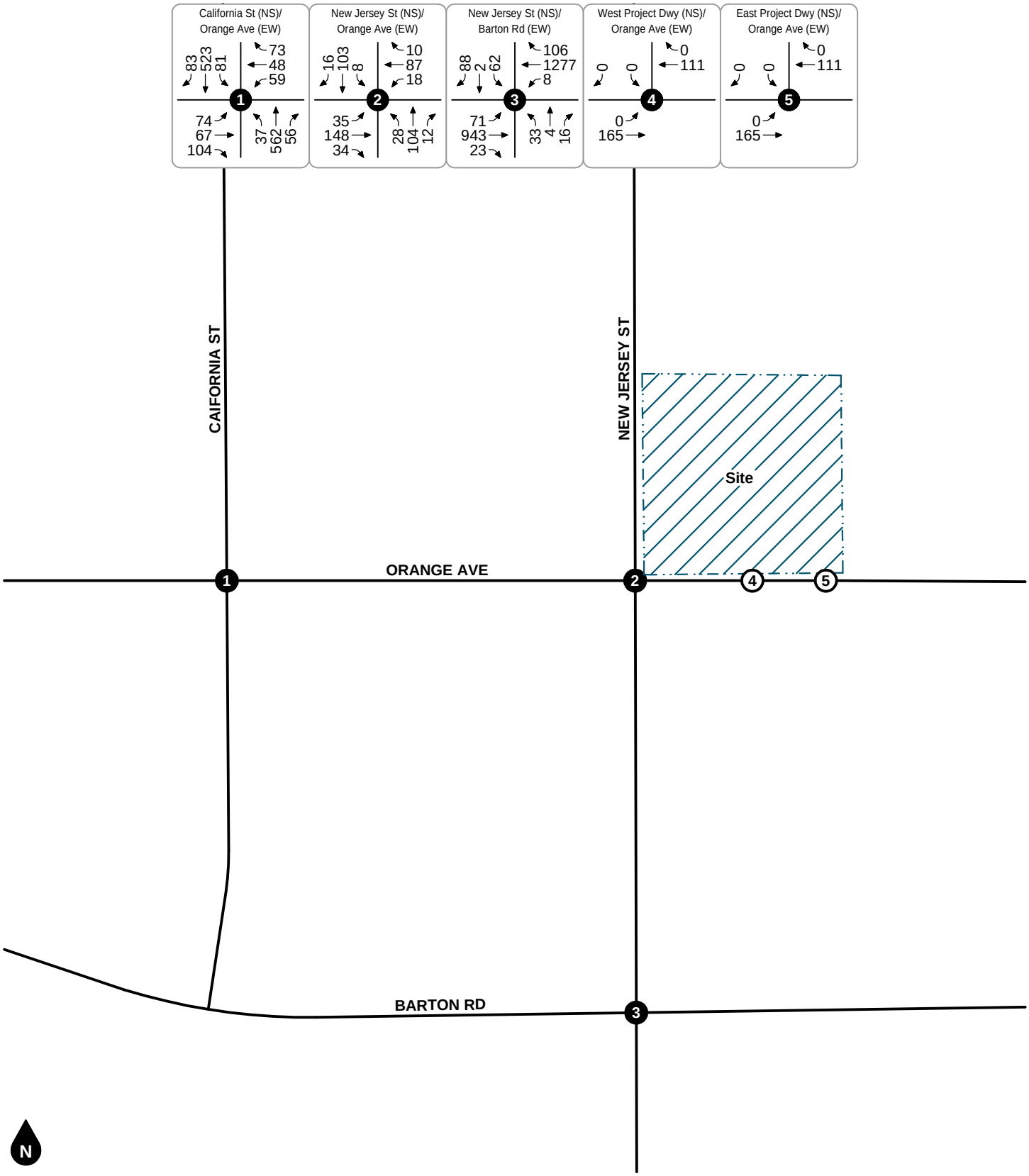
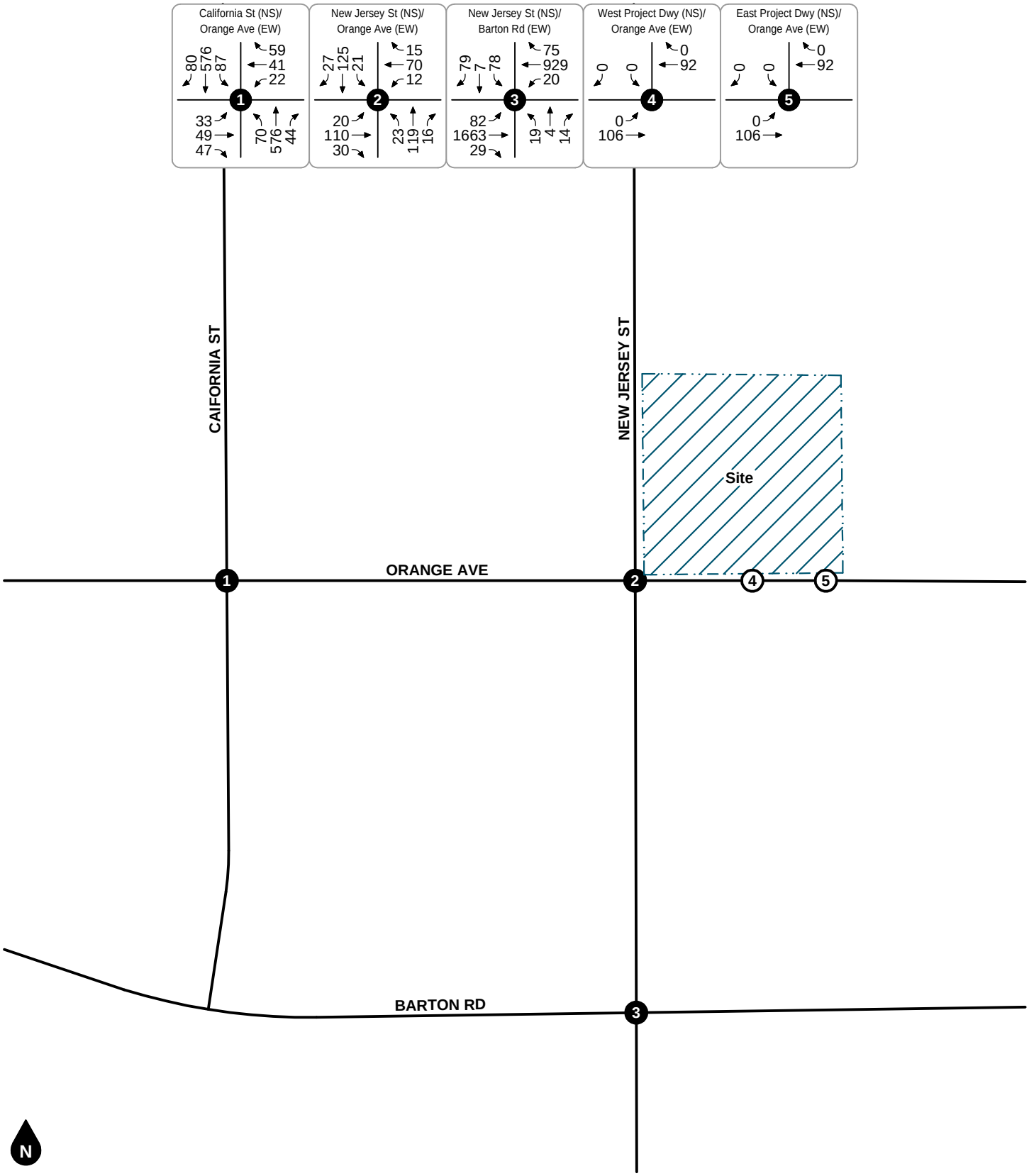


Figure 27
Opening Year (2028) Without Project
AM Peak Hour Intersection Turning Movement Volumes

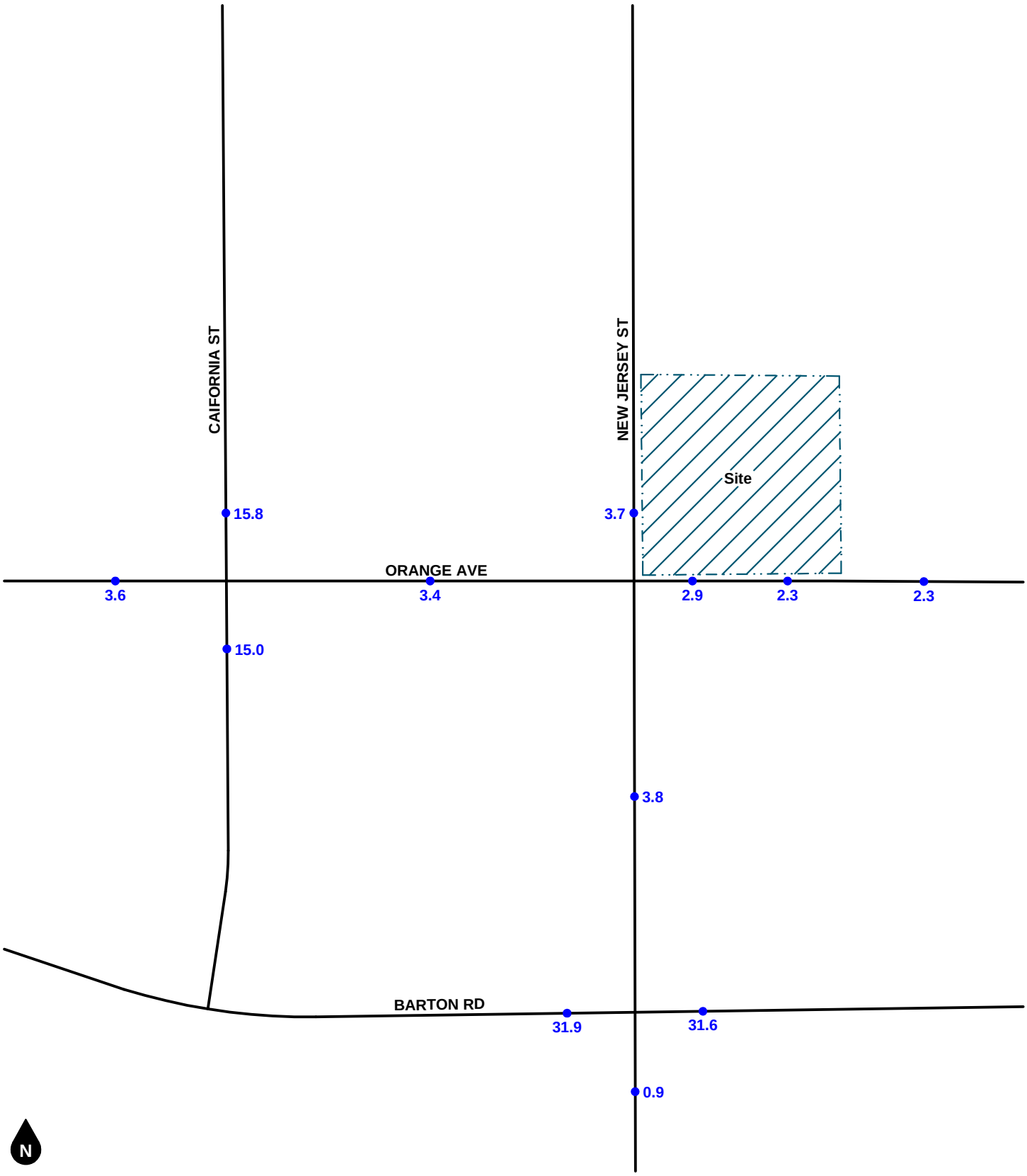


Legend

(#) Study Intersection

(#) Project Driveway

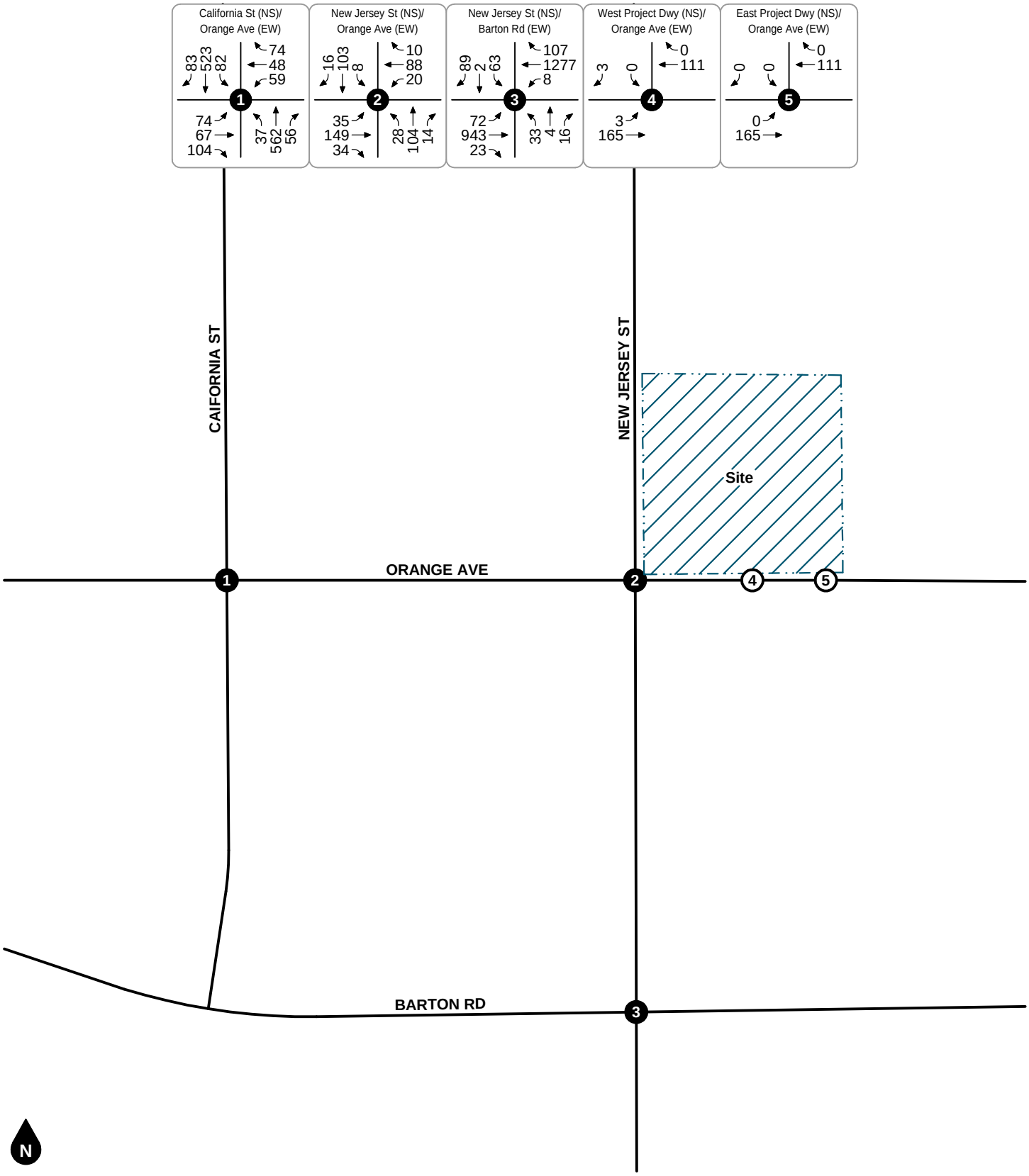
Figure 28
Opening Year (2028) Without Project
PM Peak Hour Intersection Turning Movement Volumes



Legend

●# Vehicles Per Day (1,000's)

Figure 29
Opening Year (2028) With Project Average Daily Traffic Volumes

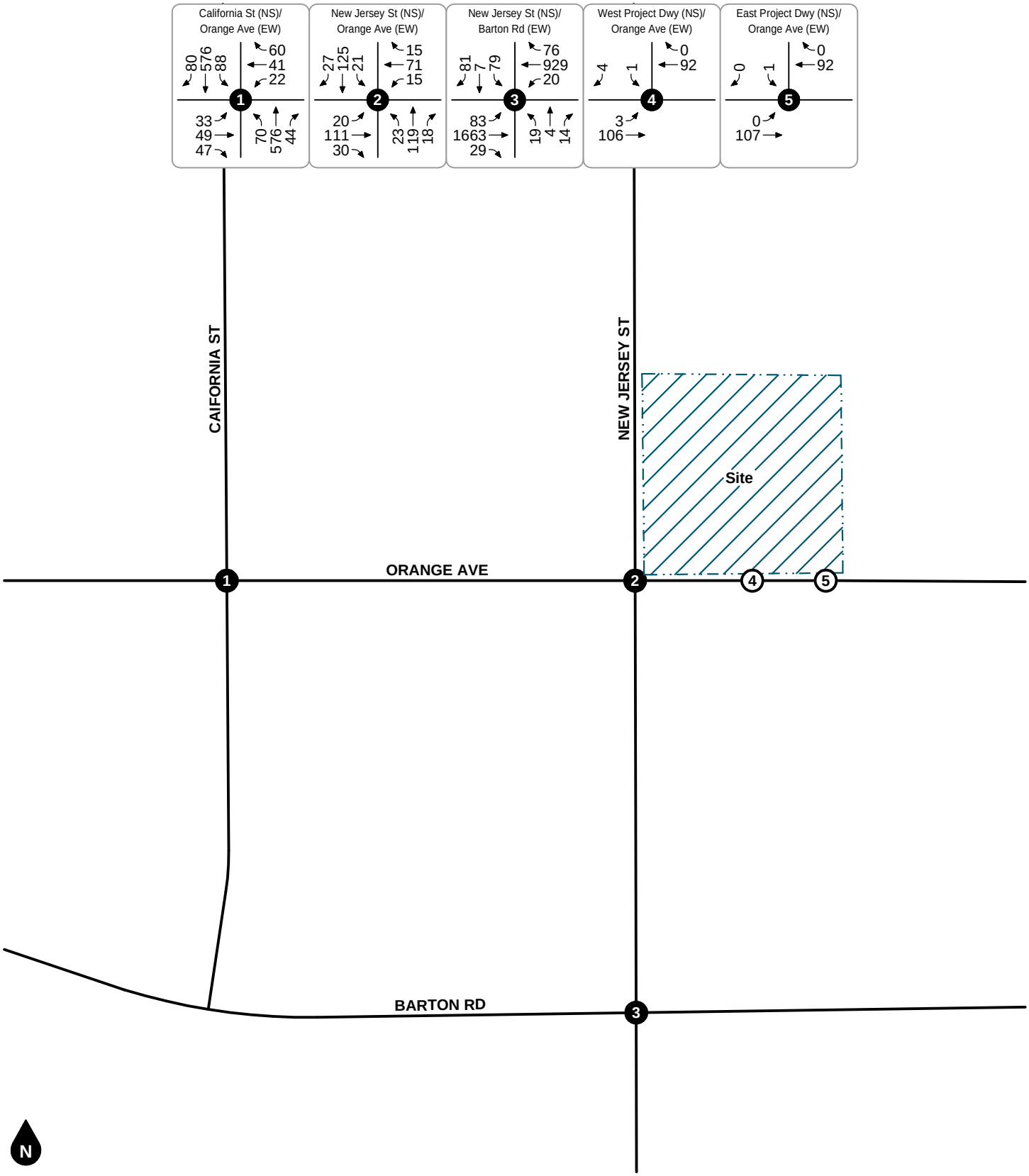


Legend

(#) Study Intersection

(#) Project Driveway

Figure 30
Opening Year (2028) With Project
AM Peak Hour Intersection Turning Movement Volumes



Legend

(#) Study Intersection

(#) Project Driveway

Figure 31
Opening Year (2028) With Project
PM Peak Hour Intersection Turning Movement Volumes

6. FUTURE OPERATIONAL ANALYSIS

Detailed intersection Level of Service calculation worksheets for each of the following analysis scenarios are provided in Appendix D.

EXISTING PLUS PROJECT

The intersection Levels of Service for Existing Plus Project conditions are shown in Table 4. As shown in Table 4, the study intersections are forecast to operate within acceptable Levels of Service (C or better) during the peak hours for Existing Plus Project conditions.

Table 5 evaluates the project impact at the study intersections for Existing Plus Project Conditions. As shown in Table 5, the proposed project is not forecast to cause or substantially worsen any Level of Service deficiencies at the study intersections for Existing Plus Project conditions; no off-site improvements are recommended for compliance with Measure V requirements.

OPENING YEAR (2028) WITHOUT PROJECT

The intersection Levels of Service for Opening Year (2028) Without Project conditions are shown in Table 6. As shown in Table 6, the study intersections are forecast to operate within acceptable Levels of Service (C or better) during the peak hours for Opening Year (2028) Without Project conditions, except for the intersection of New Jersey Street at Barton Road that is forecast to operate at Level of Service D during the PM peak hour with the addition of trips generated by other development projects.

OPENING YEAR (2028) WITH PROJECT

The intersection Levels of Service for Opening Year (2028) With Project conditions are shown in Table 7. As shown in Table 7, the study intersections are forecast to operate within acceptable Levels of Service (C or better) during the peak hours for Opening Year (2028) With Project conditions, except for the intersection of New Jersey Street at Barton Road that is forecast to continue operating at Level of Service D with the addition of project trips during the PM peak hour.

Table 8 evaluates the project impact at the study intersections for Opening Year (2028) With Project conditions. Although Level of Service D is forecast to occur at the intersection New Jersey Street at Barton Road (#3), this condition is primarily attributable to the addition of other development trips and would occur with or without the proposed project. As shown in Table 8, the addition of project trips would not result in further Level of Service degradation and the project-related change in average control delay is relatively negligible (+0.1 seconds). Therefore, the proposed project is not forecast to cause or substantially worsen any Level of Service deficiencies at the study intersections for Opening Year (2028) With Project conditions; no off-site improvements are recommended for compliance with Measure V requirements.

Table 4
Existing Plus Project Intersection LOS

Study Intersection	Traffic Control[1]	AM Peak Hour		PM Peak Hour	
		Delay[2]	LOS[3]	Delay[2]	LOS[3]
1. California St at Orange Ave	TS	22.5	C	18.8	B
2. New Jersey St at Orange Ave	AWS	9.7	A	9.5	A
3. New Jersey St at Barton Rd	TS	24.4	C	33.5	C
4. West Project Dwy at Orange Ave	CSS	8.8	A	8.9	A
5. East Project Dwy at Orange Ave	CSS	0.0	A	9.6	A

Notes:

(1) TS = Traffic Signal; AWS = All Way Stop; CSS = Cross Street Stop

(2) Delay is shown in seconds per vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst minor street approach or major street left turn movement.

(3) LOS = Level of Service

Table 5

Existing Plus Project Operational Impact Evaluation

Study Intersection	Traffic Control[1]	AM Peak Hour						PM Peak Hour					
		Without Project		With Project		Project-Related Delay Δ	Improvements Required?	Without Project		With Project		Project-Related Delay Δ	Improvements Required?
		Delay[2]	LOS[3]	Delay	LOS			Delay	LOS	Delay	LOS		
1. California St at Orange Ave	TS	22.5	C	22.5	C	0.0	No	18.7	B	18.8	B	+0.1	No
2. New Jersey St at Orange Ave	AWS	9.7	A	9.7	A	0.0	No	9.4	A	9.5	A	+0.1	No
3. New Jersey St at Barton Rd	TS	24.4	C	24.4	C	0.0	No	33.4	C	33.5	C	+0.1	No
4. West Project Dwy at Orange Ave	CSS	0.0	A	8.8	A	+8.8	No	0.0	A	8.9	A	+8.9	No
5. East Project Dwy at Orange Ave	CSS	0.0	A	0.0	A	0.0	No	0.0	A	9.6	A	+9.6	No

Notes:

(1) TS = Traffic Signal; AWS = All Way Stop; CSS = Cross Street Stop

(2) Delay is shown as seconds/vehicle.

(3) LOS = Level of Service

Table 6
Opening Year (2028) Without Project Intersection Level of Service

Study Intersection	Traffic Control[1]	AM Peak Hour		PM Peak Hour	
		Delay[2]	LOS[3]	Delay[2]	LOS[3]
1. California St at Orange Ave	TS	21.2	C	17.3	B
2. New Jersey St at Orange Ave	AWS	9.9	A	9.7	A
3. New Jersey St at Barton Rd	TS	25.1	C	53.7	D
4. West Project Dwy at Orange Ave	CSS	0.0	A	0.0	A
5. East Project Dwy at Orange Ave	CSS	0.0	A	0.0	A

Notes:

(1) TS = Traffic Signal; AWS = All Way Stop; CSS = Cross Street Stop

(2) Delay is shown in seconds per vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst minor street approach or major street left turn movement.

(3) LOS = Level of Service

Table 7
Opening Year (2028) With Project Intersection Level of Service

Study Intersection	Traffic Control[1]	AM Peak Hour		PM Peak Hour	
		Delay[2]	LOS[3]	Delay[2]	LOS[3]
1. California St at Orange Ave	TS	21.2	C	17.4	B
2. New Jersey St at Orange Ave	AWS	10.0	A	9.8	A
3. New Jersey St at Barton Rd	TS	25.2	C	53.8	D
4. West Project Dwy at Orange Ave	CSS	8.9	A	9.0	A
5. East Project Dwy at Orange Ave	CSS	0.0	A	9.6	A

Notes:

(1) TS = Traffic Signal; AWS = All Way Stop; CSS = Cross Street Stop

(2) Delay is shown in seconds per vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst minor street approach or major street left turn movement.

(3) LOS = Level of Service

Table 8

Opening Year (2028) With Project Operational Impact Evaluation

Study Intersection	Traffic Control[1]	AM Peak Hour						PM Peak Hour					
		Without Project		With Project		Project-Related Delay Δ	Improvements Required?	Without Project		With Project		Project-Related Delay Δ	Improvements Required?
		Delay[2]	LOS[3]	Delay	LOS			Delay	LOS	Delay	LOS		
1. California St at Orange Ave	TS	21.2	C	21.2	C	0.0	No	17.3	B	17.4	B	+0.1	No
2. New Jersey St at Orange Ave	AWS	9.9	A	10.0	A	+0.1	No	9.7	A	9.8	A	+0.1	No
3. New Jersey St at Barton Rd	TS	25.1	C	25.2	C	+0.1	No	53.7	D	53.8	D	+0.1	No
4. West Project Dwy at Orange Ave	CSS	0.0	A	8.9	A	+8.9	No	0.0	A	9.0	A	+9.0	No
5. East Project Dwy at Orange Ave	CSS	0.0	A	0.0	A	0.0	No	0.0	A	9.6	A	+9.6	No

Notes:

(1) TS = Traffic Signal; AWS = All Way Stop; CSS = Cross Street Stop

(2) Delay is shown as seconds/vehicle.

(3) LOS = Level of Service

7. SITE ACCESS AND CIRCULATION

This section evaluates the project site access and on-site circulation. Vehicular site access is proposed by construction/reconstruction of two new paved two-way private driveways at Orange Avenue

PROJECT DESIGN FEATURES

This analysis assumes the following improvements will be constructed by the project to provide project site access:

- Construction/reconstruction of two new paved private driveways to provide full access to/from Orange Avenue.

This analysis also assumes the project shall comply with the following conditions as part of the City of Loma Linda standard development review process to ensure adequate geometric design and emergency access:

- Site-adjacent roadways shall be constructed or repaired at their ultimate half-section width, including landscaping and parkway improvements in conjunction with development, or as otherwise required by the City of Loma Linda.

- All on-site and off-site roadway design, signing/striping, and traffic control improvements relating to the proposed project shall be submitted to the City for review and constructed following applicable State/Federal engineering standards to the satisfaction of the City of Loma Linda.

- The final grading, landscaping, and street improvement plans shall demonstrate that applicable sight distance requirements are met.

- Final project plans shall demonstrate adequate emergency vehicle access and circulation to the satisfaction of the City of Loma Linda Public Works and Fire Departments.

- Off-site construction activity, if any, should be subject to a construction traffic control plan that complies with applicable engineering standards outlined in the California *Manual of Uniform Traffic Control Devices* and shall be submitted to the City for review and approval before the issuance of a grading permit or start of construction. The plan shall identify any roadway, sidewalk, bike route, or bus stop closures and detours as well as haul routes and hours of operation. All construction-related trips shall be restricted to off-peak hours to the extent possible.

8. CONCLUSIONS

This section summarizes the proposed project, operational findings, and identifies recommendations (if any) as specified in previous sections of this study.

PROJECT TRIP GENERATION

The proposed project is forecast to generate approximately 129 daily trips, including 7 trips during the AM peak hour and 8 trips during the PM peak hour.

LEVEL OF SERVICE ANALYSIS

The study intersections currently operate within acceptable Levels of Service (C or better) during peak hours for the Existing conditions.

The study intersections are forecast to operate within acceptable Levels of Service (C or better) during the peak hours for Existing Plus Project conditions. The proposed project is not forecast to cause or substantially worsen any Level of Service deficiencies at the study intersections for Existing Plus Project conditions; **no off-site improvements are recommended for compliance with Measure V requirements.**

The study intersections are forecast to operate within acceptable Levels of Service (C or better) during the peak hours for Opening Year (2028) Without Project conditions, except for the intersection of New Jersey Street at Barton Road that is forecast to operate at Level of Service D during the PM peak hour with the addition of trips generated by other development projects.

The study intersections are forecast to operate within acceptable Levels of Service (C or better) during the peak hours for Opening Year (2028) With Project conditions, except for the intersection of New Jersey Street at Barton Road that is forecast to continue operating at Level of Service D during the PM peak hour with the addition of project trips. Although Level of Service D is forecast to occur at the intersection of the intersection of New Jersey Street at Barton Road (#3), this condition is primarily attributable to the addition of other development trips and would occur with or without the proposed project. The addition of project trips would not result in further Level of Service degradation and the project-related change in average control delay is relatively negligible (+0.1 seconds). Therefore, the project impact is not considered to substantially worsen the pre-project Level of Service deficiency; **no off-site improvements are recommended for compliance with Measure V requirements.**

APPENDICES

Appendix A Glossary
Appendix B Scoping Agreement
Appendix C Volume Count Worksheets
Appendix D Level of Service Worksheets

APPENDIX A

GLOSSARY

ACRONYMS

AC	Acres
ADT	Average Daily Traffic
Caltrans	California Department of Transportation
DU	Dwelling Unit
ICU	Intersection Capacity Utilization
GFA	Gross Floor Area
LOS	Level of Service
PCE	Passenger Car Equivalent
SF	Square Foot
SP	Service Population
TSF	Thousand Square Feet
V/C	Volume to Capacity Ratio
VMT	Vehicle Miles Traveled

TERMS

ACTUATED SIGNAL CONTROL: A type of traffic signal control in which display of each phase depends on whether the corresponding phase detector has registered a service call or the phase is on recall.

ACTUATION: Detection of a roadway user that is forwarded to the signal controller.

AVERAGE DAILY TRAFFIC: The average 24-hour volume for a stated period is divided by the number of days in that period. For example, Annual Average Daily Traffic is the total volume during a year divided by 365 days.

BANDWIDTH: The number of seconds of green time available for through traffic in a signal progression.

BOTTLENECK: A point of constriction along a roadway that limits the amount of traffic that can proceed downstream from its location.

CALL: An indication within a signal controller that a particular phase is waiting for service, either through actuation from a roadway user or phase recall.

CAPACITY: The maximum number of vehicles that can be reasonably expected to pass through a roadway facility during a specified period.

CHANNELIZATION: The separation of conflicting traffic movements by use of pavement markings, raised curbs, or other suitable means to facilitate free flow movement.

CLEARANCE INTERVAL: Equal to the yellow plus all-red time, if any, when a traffic signal changes between phases (i.e., the amount of time between the end of a green light from one movement to the beginning of a green light for the next).

COORDINATED SIGNAL CONTROL: A type of traffic signal control in which non-coordinated phases associated with minor movements are constrained such that the coordinated phases are served at a specific time during the signal cycle, thus maintaining the efficient progression of traffic flow along the major roadway.

CONTROL DELAY: The portion of delay attributed to the intersection traffic control (such as a traffic signal or stop sign). It includes initial deceleration, queue move-up time, stopped delay, and final acceleration delay.

CORDON: An imaginary boundary line around or across a study area across which vehicles, persons, or other information can be collected for survey and analytical purposes.

CORNER SIGHT DISTANCE: The minimum sight distance required by the driver of a vehicle to cross or enter the lanes of the major roadway without requiring approaching traffic traveling at a given speed to radically alter their speed or trajectory.

CYCLE: A complete sequence of signal indications for all phases. Also known as a signal cycle.

CYCLE LENGTH: The total time for a traffic signal to complete one full cycle.

DAILY CAPACITY: A theoretical value representing the daily traffic volume that will typically result in a peak hour volume equal to the capacity of the roadway.

DELAY: The total additional travel time experienced by a roadway user (driver, passenger, bicyclist, or pedestrian) beyond that required to travel at a desired speed.

DENSITY: The number of vehicles occupying in a unit length of the through traffic lanes of a roadway at any given instant. Usually expressed in vehicles per mile.

DETECTOR: A device used to count or determine the presence of a roadway user.

DESIGN SPEED: A speed used for purposes of designing horizontal and vertical alignments of a highway.

DIRECTIONAL SPLIT: The percent of two-way traffic traveling in a specified direction.

DIVERSION: The rerouting of traffic from a normal path of travel between two points, such as to avoid congestion or perform a secondary trip.

FREE FLOW: Traffic flow that is unaffected by a traffic control and/or or upstream or downstream conditions.

GAP: Time or distance between two vehicles measured from rear bumper of the front vehicle to front bumper of the second vehicle.

GAP ACCEPTANCE: The method by which a driver accepts an available gap in traffic to enter or cross the road.

HEADWAY: Time or distance between two successive vehicles measured from same point on both vehicles (i.e., front bumper to front bumper). Also known as gap.

LEVEL OF SERVICE: A grading scale of quantitative performance measures representing the quality of service of a transportation facility or service from an average traveler's perspective.

LOOP DETECTOR: A vehicle detector consisting of a loop of wire embedded in the roadway, energized by alternating current and producing an output circuit closure when passed over by a vehicle.

MULTI-MODAL: More than one mode, such as automobile, transit, bicycle, and pedestrian.

OFFSET: The time interval between the beginning of a traffic signal cycle at one intersection and the beginning of signal cycle an adjacent intersection.

PLATOON: A set of vehicles traveling at similar speed and moving as a general group with clear separation between other vehicles ahead and behind.

PASSENGER CAR EQUIVALENT: A metric used to assess the impact of larger vehicles, such as trucks, recreational vehicles, and buses, by converting the traffic volume of larger vehicles to an equivalent number of passenger cars.

PEDESTRIAN CLEARANCE INTERVAL: Also known as the "Flashing Don't Walk" interval, it signals the end of pedestrian entry into the crosswalk following the "Walk" indication and provides time for pedestrians who have already entered the crosswalk to finishing crossing.

PEAK HOUR: The hour within a day in which the maximum volume occurs.

PEAK HOUR FACTOR: The peak hour volume divided by the four times the peak 15-minute flow rate.

PHASE: In traffic signals, the green, yellow, and red clearance intervals assigned to a specified traffic movement.

PRETIMED SIGNAL: A traffic signal operation in which the cycle length, phasing sequence, and phasing times are predetermined and fixed, regardless of actual demand for any given traffic movement. Also known as a fixed time signal.

PROGRESSION: The coordinated movement of vehicles through signalized intersections along a corridor.

QUEUE: The number of vehicles waiting at a service area such as a traffic signal, stop sign, or access gate.

QUEUE LENGTH: The length of vehicle queue, typically expressed in feet, waiting at a service area such as a traffic signal, stop sign, or access gate.

RECALL: A signal phasing operation in which a specified phase places a call to the signal controller each time a conflicting phase is served, thus ensuring the specified phase will be serviced again.

SEMI-ACTUATED CONTROL: A type of traffic signal control in which only the minor movements are provided detection.

SIGHT DISTANCE: The continuous length of roadway visible to a driver or roadway user.

STACKING DISTANCE: The length of area available behind a service area, such as a traffic signal or gate, for vehicle queuing to occur.

STOPPING SIGHT DISTANCE: The minimum distance required by the driver of a vehicle traveling at a given speed to bring the vehicle to a stop after an object on the road becomes visible, including reaction and response time.

TRAFFIC-ACTUATED SIGNAL: A type of traffic signal that directs traffic to stop and go in accordance with the demands of traffic, as registered by the actuation of detectors. Also known as a demand responsive signal.

TRIP OR TRIP END: The one-directional movement of a person or vehicle. Every trip has an origin and a destination at its respective ends (i.e., trip ends). In terms of site trip generation, the same vehicle entering and exiting a site generates two trips: one inbound trip and one outbound trip.

TRIP GENERATION RATE: The rate at which a land use generates trips per the specified land use variable, such per dwelling unit or per thousand square feet.

TURNING RADIUS: The circular arc formed by the smallest turning path radius of the front outside tire of a vehicle, such as that performed by a U-turn maneuver. This is based on the length and width of the wheelbase as well as the steering mechanism of the vehicle.

VEHICLE MILES TRAVELED: A measure of the amount and distance of automobile travel essentially calculated as the sum of each trip times the trip length.

APPENDIX B

SCOPING AGREEMENT

MEMORANDUM OF UNDERSTANDING

TO: Mr. Gabriel Rivera, Associate Planner | CITY OF LOMA LINDA

FROM: Po Leung, Giancarlo Ganddini | GANDDINI GROUP, INC.

DATE: April 21, 2026

SUBJECT: 11055 New Jersey Street - Spanish Church Traffic Impact Analysis Scope
Project No. 19901

The purpose of this scoping document is to outline the fundamental parameters and assumptions of the focused traffic analysis to be prepared for the 11055 New Jersey Street - Spanish Church project for compliance with City of Loma Linda Measure V requirements.

PROJECT DESCRIPTION

The project site is located at 11055 New Jersey Street (APNs: 0292-163-09), east of New Jersey Street and north of Orange Avenue in the City of Loma Linda, California. The project site is currently developed with an outbuilding (to be demolished after construction) and a geodesic dome structure. Figure 1 shows the project location map.

The proposed project involves construction of a 19,000 square foot place of worship utilizing the existing dome structure. Vehicular site access is proposed by construction/reconstruction of two new paved private driveways off Orange Avenue. The proposed site plan is shown on Figure 2.

PROJECT TRIP GENERATION & DISTRIBUTION

Table 1 shows the project trip generation based upon rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (12th Edition, 2025) for Land Use Code 560 (Church). As shown in Table 1, the proposed project is forecast to result in approximately 129 daily trips, including 7 trips during the AM peak hour and 8 trips during the PM peak hour.

Figure 3 illustrates the forecast directional distribution patterns for the project-generated trips developed from engineering judgement based on review of surrounding land uses and the local and regional roadway facilities in the project vicinity.

STUDY AREA

The study area shall consist of the following three (3) intersections:

1. California Street (NS) and Orange Avenue (EW)[1]
2. New Jersey Street (NS) and Orange Avenue (EW)
3. New Jersey Street (NS) and Barton Road (EW)

[1] (NS) = north-south roadway; (EW) – east-west roadway

4. West Project Dwy (NS) at Orange Avenue (EW)
5. East Project Dwy (NS) at Orange Avenue (EW)

TRAFFIC COUNTS

New intersection turning movement counts will be collected at the existing study intersections on a typical weekday (Tuesday, Wednesday, or Thursday) during the AM peak period (7:00 AM – 9:00 AM) and PM peak period (4:00 - 6:00 PM) while local schools are in session and shall avoid weeks with a holiday, special events, construction activities, or other conditions which can alter the counts.

ANALYTICAL METHODOLOGY

In accordance with the County of San Bernardino *Transportation Impact Study Guidelines* (July 2019), as historically utilized by the City of Loma Linda, intersections shall by analyzed using the current edition of the *Highway Capacity Manual* intersection delay methodology (Transportation Research Board, 7th Edition). Default values not specifically identified in the County guidelines will be based on *Highway Capacity Manual* recommended values. Intersection analysis shall be performed using the Vistro software.

PERFORMANCE STANDARDS

The City of Loma Linda General Plan Policy 6.10.1.a and Measure V establish that long-term traffic Levels of Service (LOS) should be maintained at LOS C or better, except where the current level of service is lower than Level of Service C.

At locations where existing Level of Service is below LOS C, the project shall be required to provide improvements that maintain Level of Service that are no worse than those existing at the time the application for development is filed. In any location where the existing Level of Service is LOS F, the project shall be required to provide improvements that maintain a volume-to-capacity ratio that is no worse than that existing at the time the application for development is filed.

ANALYSIS SCENARIOS

The traffic study shall evaluate Existing, Opening Year Without Project, and Opening Year With Project analysis scenarios for typical weekday AM and PM peak hour conditions.

SITE ACCESS & ON-SITE CIRCULATION

The traffic study will review site access and on-site circulation considerations such as intersection traffic controls and lane configurations and access gate queuing, if necessary, recommend improvements.

CONCLUSION

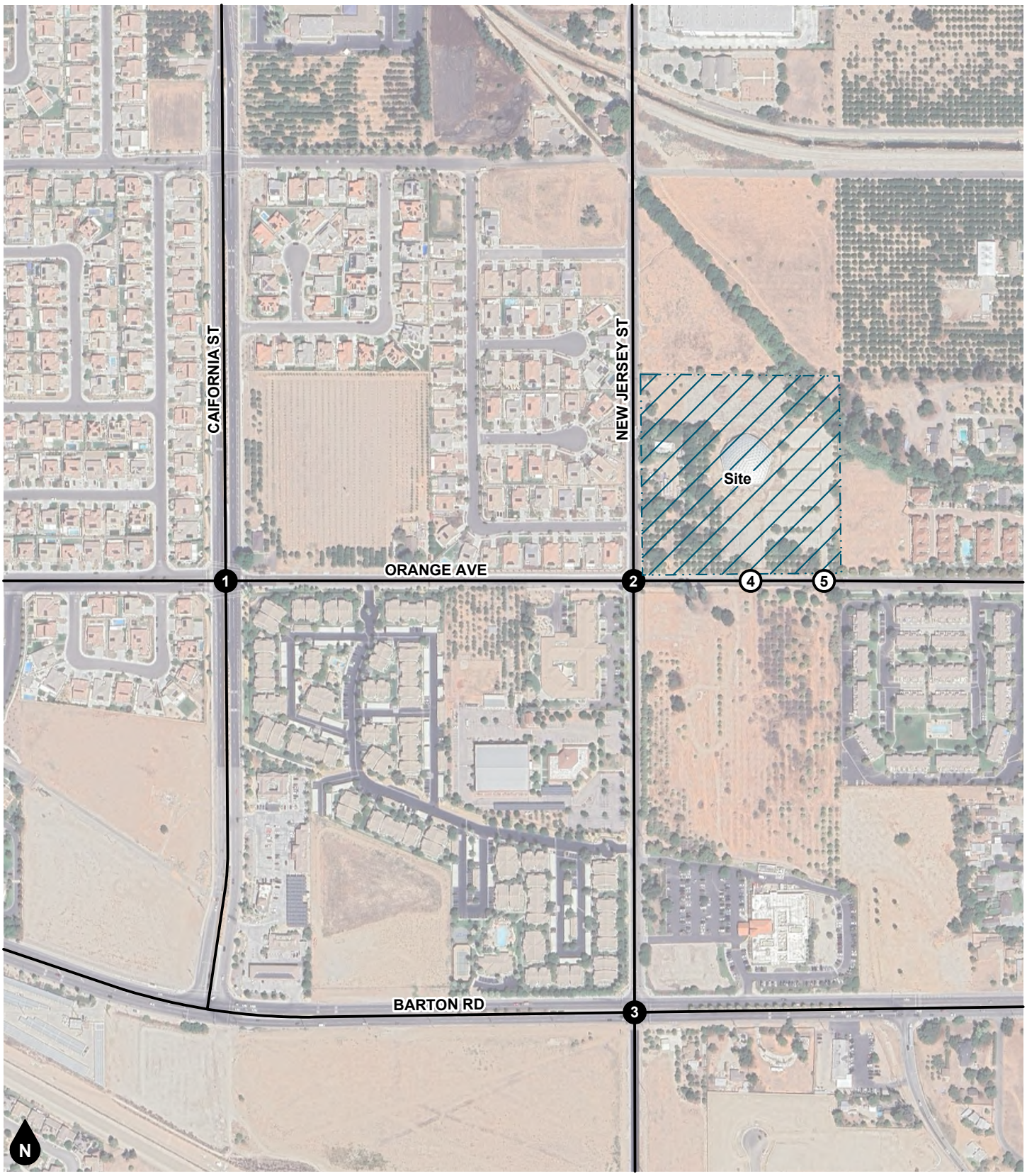
We appreciate the opportunity to provide this memorandum of understanding for your review. Should you have any questions or comments regarding the proposed scope, please contact me at (714) 795-3100 ext. 101.

Table 1
Project Trip Generation

Trip Generation Rates									
Land Use	Source[1]	Land Use Variable[2]	AM Peak Hour			PM Peak Hour			Daily Rate
			% In	% Out	Rate	% In	% Out	Rate	
Church	ITE 560	TSF	62%	38%	0.37	41%	59%	0.43	6.78

Trips Generated									
Land Use	Source	Quantity	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Church	ITE 560	19.000 TSF	4	3	7	3	5	8	129

Notes:
1. ITE = Institute of Transportation Engineers *Trip Generation Manual* (12th Edition, 2025); ### = Land Use Code.
   All rates based on General Urban/Suburban setting unless otherwise noted.
2. TSF = Thousand Square Feet



Legend

(#) Study Intersection

(#) Project Driveway

Figure 1
Project Location Map

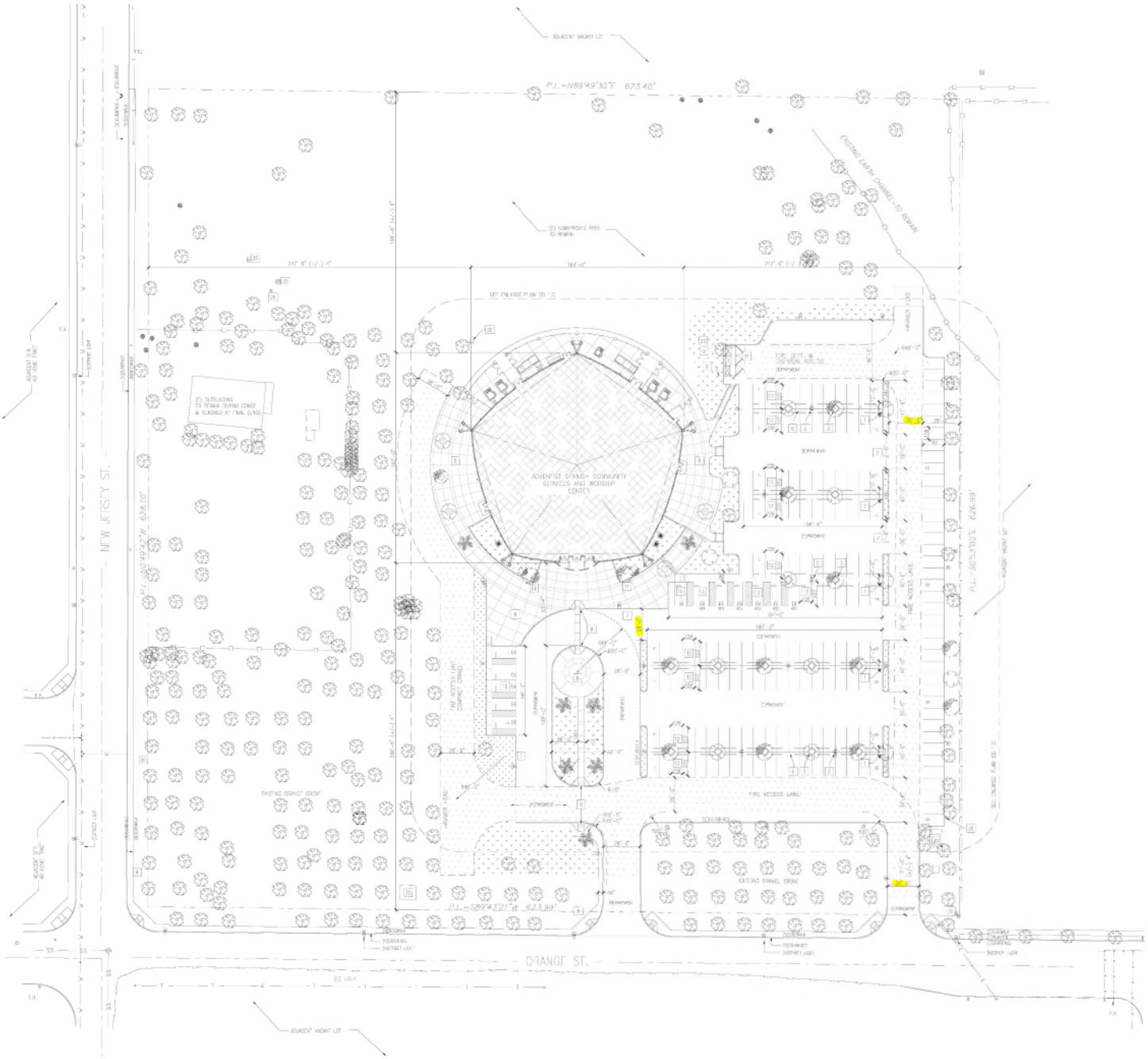


Figure 2
Site Plan

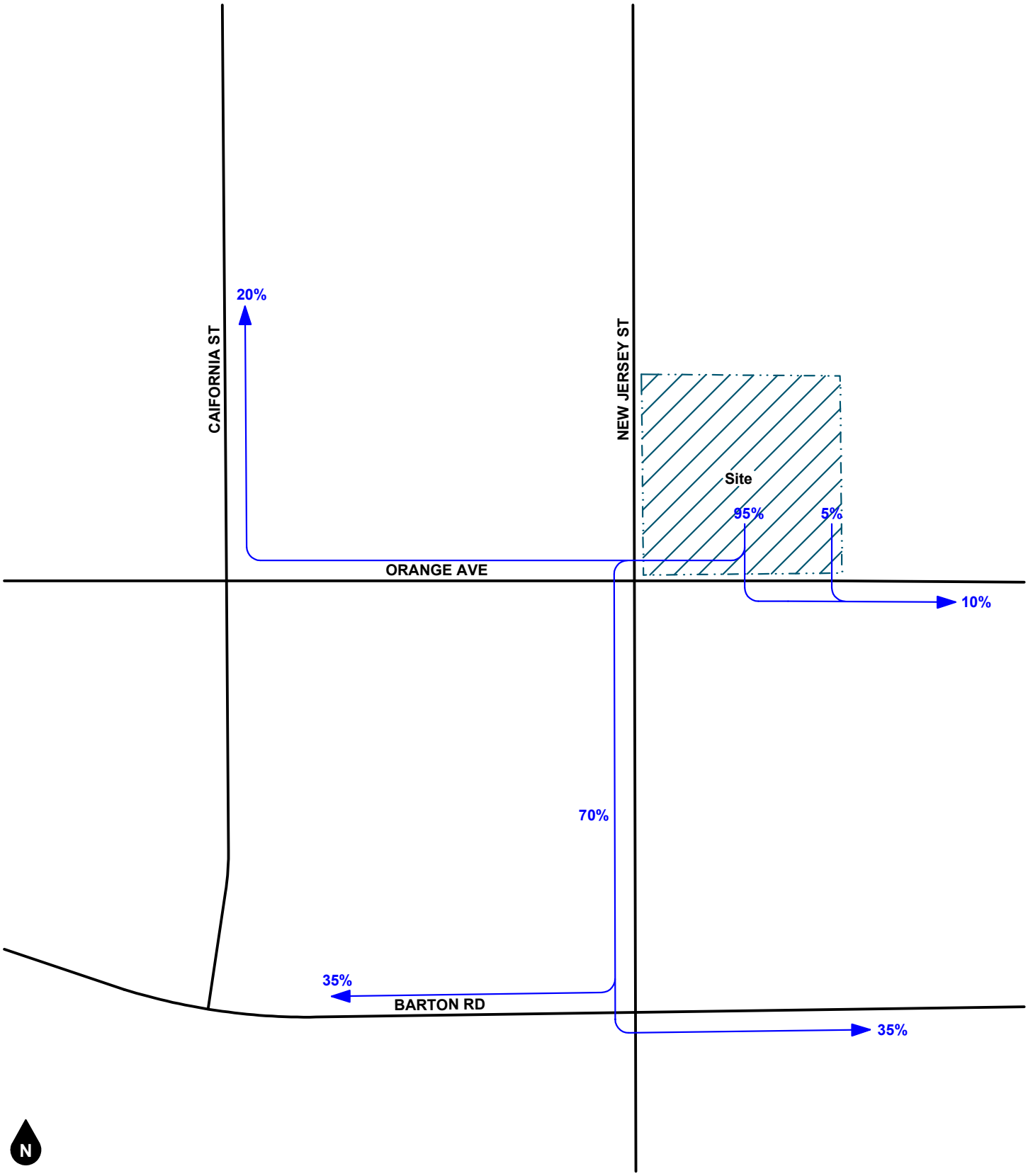


Figure 3
Project Trip Distribution

APPENDIX C

VOLUME COUNT WORKSHEETS

INTERSECTION TURNING MOVEMENT COUNTS

T031126

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Apr 14, 26

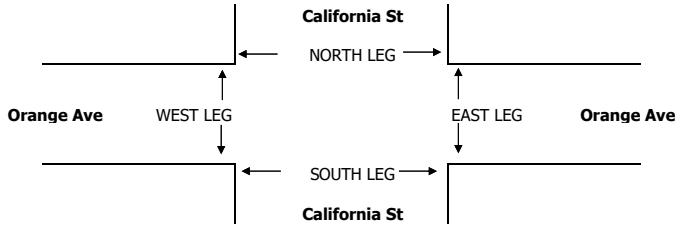
LOCATION: Loma Linda
NORTH & SOUTH: California St
EAST & WEST: Orange Ave

PROJECT #: SC6004
LOCATION #: 1
CONTROL: SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

		NORTHBOUND California St			SOUTHBOUND California St			EASTBOUND Orange Ave			WESTBOUND Orange Ave				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	3	89	6	9	65	5	8	4	13	9	5	20	236	0	0	0	0	0
	7:15 AM	7	104	9	18	79	6	14	7	23	18	12	17	314	1	0	0	0	1
	7:30 AM	10	101	12	13	118	19	22	12	28	18	13	21	387	1	2	0	0	3
	7:45 AM	14	117	14	24	114	27	24	24	24	9	13	16	420	3	2	0	0	5
	8:00 AM	5	93	19	22	90	28	11	21	25	12	8	15	349	0	0	0	0	0
	8:15 AM	12	76	14	22	85	7	5	21	24	7	13	14	300	1	1	0	0	2
	8:30 AM	12	103	8	23	99	8	13	13	20	9	15	16	339	4	0	0	0	4
	8:45 AM	14	75	5	27	87	1	5	12	15	8	12	14	275	1	2	0	0	3
	VOLUMES	77	758	87	158	737	101	102	114	172	90	91	133	2,638	11	7	0	0	18
	APPROACH %	8%	81%	9%	16%	73%	10%	26%	29%	44%	29%	29%	42%						
	APP/DEPART	933	/	1,000	1,003	/	1,010	388	/	359	314	/	269	0					
	BEGIN PEAK HR		7:15 AM																
	VOLUMES	36	415	54	77	401	80	71	64	100	57	46	69	1,479	5	4	0	0	
	APPROACH %	7%	81%	11%	14%	71%	14%	30%	27%	43%	33%	27%	40%						
	PEAK HR FACTOR		0.861			0.841			0.816			0.827		0.870					
	APP/DEPART	510	/	559	562	/	563	235	/	195	172	/	162	0					
PM	4:00 PM	15	104	8	23	104	10	7	11	14	5	11	10	322	1	0	0	0	1
	4:15 PM	20	92	19	14	97	8	10	15	11	5	15	13	319	1	1	0	0	2
	4:30 PM	16	123	9	21	96	13	6	17	17	5	8	19	350	0	0	1	0	1
	4:45 PM	16	95	15	22	123	21	5	12	9	4	9	6	337	0	0	0	0	0
	5:00 PM	12	120	8	19	107	20	10	10	10	6	11	20	353	3	0	0	0	3
	5:15 PM	23	105	10	22	97	23	11	8	9	6	11	11	336	1	0	0	0	1
	5:30 PM	18	79	9	11	88	21	7	9	16	10	10	8	286	1	0	0	0	1
	5:45 PM	15	102	8	19	114	17	13	17	13	5	6	17	346	1	0	0	0	1
	VOLUMES	135	820	86	151	826	133	69	99	99	46	81	104	2,659	8	1	1	0	10
	APPROACH %	13%	78%	8%	14%	74%	12%	26%	37%	37%	20%	35%	45%						
	APP/DEPART	1,049	/	994	1,111	/	979	268	/	336	231	/	350	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	67	443	42	84	423	77	32	47	45	21	39	56	1,381	4	0	1	0	
	APPROACH %	12%	80%	8%	14%	72%	13%	26%	38%	36%	18%	34%	48%						
	PEAK HR FACTOR		0.939			0.880			0.762			0.784		0.970					
	APP/DEPART	556	/	531	584	/	493	125	/	173	116	/	184	0					



INTERSECTION TURNING MOVEMENT COUNTS

T031126

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

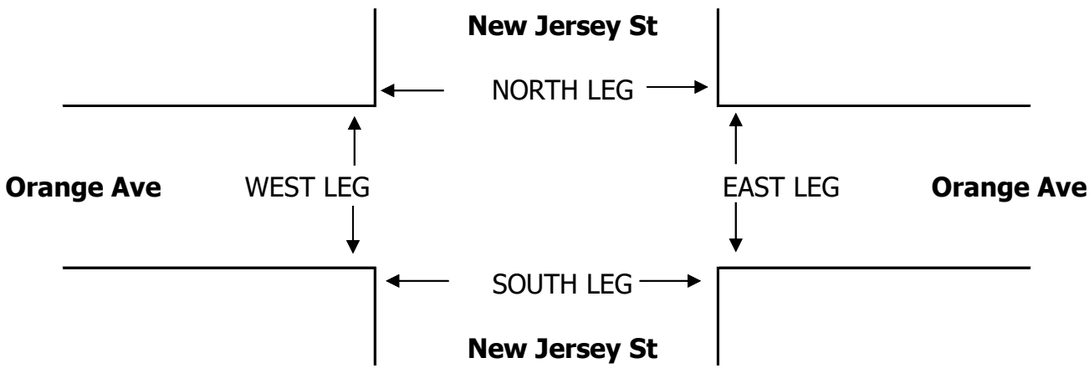
DATE:				
Tue, Apr 14, 26	LOCATION:	Loma Linda	PROJECT #:	SC6004
	NORTH & SOUTH:	New Jersey St	LOCATION #:	2
	EAST & WEST:	Orange Ave	CONTROL:	STOP ALL

NOTES:

AM PM MD OTHER OTHER

▲ N ◄ W E ► S ▼

	NORTHBOUND New Jersey St			SOUTHBOUND New Jersey St			EASTBOUND Orange Ave			WESTBOUND Orange Ave				U-TURNS				
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM 7:00 AM	3	27	3	3	9	2	4	3	7	5	15	2	83	0	0	0	0	0
7:15 AM	5	16	1	0	10	4	6	20	7	3	28	2	102	0	0	0	0	0
7:30 AM	11	20	2	2	17	4	8	18	8	4	22	3	119	0	0	0	0	0
7:45 AM	7	35	5	2	30	5	10	37	6	5	22	5	169	0	0	0	0	0
8:00 AM	6	22	0	3	23	2	13	41	9	3	21	2	145	0	0	0	0	0
8:15 AM	3	20	3	1	28	4	3	45	10	2	18	0	137	0	0	0	0	0
8:30 AM	7	15	1	0	17	3	4	24	14	4	22	5	116	0	0	0	0	0
8:45 AM	5	13	1	2	10	6	6	31	8	2	18	1	103	0	0	0	0	0
VOLUMES	47	168	16	13	144	30	54	219	69	28	166	20	974	0	0	0	0	0
APPROACH %	20%	73%	7%	7%	77%	16%	16%	64%	20%	13%	78%	9%						
APP/DEPART	231	/	242	187	/	241	342	/	248	214	/	243	0					
BEGIN PEAK HR		7:30 AM																
VOLUMES	27	97	10	8	98	15	34	141	33	14	83	10	570	0	0	0	0	
APPROACH %	20%	72%	7%	7%	81%	12%	16%	68%	16%	13%	78%	9%						
PEAK HR FACTOR		0.713			0.818			0.825			0.836		0.843					
APP/DEPART	134	/	141	121	/	145	208	/	159	107	/	125	0					
PM 4:00 PM	5	22	4	3	29	5	4	27	3	1	14	1	118	0	0	0	0	0
4:15 PM	5	24	0	8	25	7	5	24	7	3	14	2	124	0	0	0	0	0
4:30 PM	6	32	7	3	41	7	8	27	10	3	16	5	165	0	0	0	0	0
4:45 PM	4	22	6	5	24	4	3	28	7	1	12	2	118	0	0	0	0	0
5:00 PM	7	34	2	4	26	8	3	27	5	1	24	5	146	0	0	0	0	0
5:15 PM	4	19	5	3	26	7	2	26	4	5	19	2	122	0	0	0	0	0
5:30 PM	6	27	1	4	29	6	2	17	6	1	16	3	118	0	0	0	0	0
5:45 PM	6	16	2	1	23	4	4	23	14	3	8	0	104	0	0	0	0	0
VOLUMES	43	196	27	31	223	48	31	199	56	18	123	20	1,015	0	0	0	0	0
APPROACH %	16%	74%	10%	10%	74%	16%	11%	70%	20%	11%	76%	12%						
APP/DEPART	266	/	247	302	/	297	286	/	257	161	/	214	0					
BEGIN PEAK HR		4:15 PM																
VOLUMES	22	112	15	20	116	26	19	106	29	8	66	14	553	0	0	0	0	
APPROACH %	15%	75%	10%	12%	72%	16%	12%	69%	19%	9%	75%	16%						
PEAK HR FACTOR		0.828			0.794			0.856			0.733		0.838					
APP/DEPART	149	/	145	162	/	153	154	/	141	88	/	114	0					



INTERSECTION TURNING MOVEMENT COUNTS

T031126

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Apr 14, 26

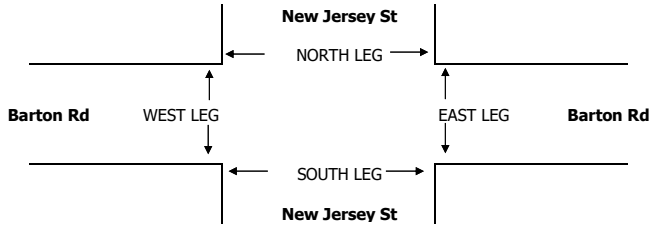
LOCATION: Loma Linda
NORTH & SOUTH: New Jersey St
EAST & WEST: Barton Rd

PROJECT #: SC6004
LOCATION #: 3
CONTROL: SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND New Jersey St			SOUTHBOUND New Jersey St			EASTBOUND Barton Rd			WESTBOUND Barton Rd				U-TURNS				
	LANES:	NL 0	NT 1	NR 0	SL 1	ST 0.5	SR 0.5	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	2	4	2	10	1	11	11	158	8	2	209	18	436	0	0	0	0	0
	7:15 AM	3	0	1	14	0	15	9	167	2	1	302	17	531	0	0	0	0	0
	7:30 AM	3	0	0	12	0	21	11	207	4	1	364	27	650	0	0	0	0	0
	7:45 AM	7	0	0	22	1	23	21	228	3	0	266	33	604	0	0	0	0	0
	8:00 AM	1	0	0	13	0	21	11	211	3	0	260	21	541	0	0	0	0	0
	8:15 AM	2	1	0	11	0	19	24	197	5	1	252	20	532	0	0	0	1	1
	8:30 AM	0	2	1	6	1	20	15	172	6	0	245	16	484	0	1	0	0	1
	8:45 AM	4	1	1	4	0	14	8	189	4	1	201	14	441	0	0	0	0	0
	VOLUMES	22	8	5	92	3	144	110	1,529	35	6	2,099	166	4,221	0	1	0	1	2
	APPROACH %	63%	23%	14%	38%	1%	60%	7%	91%	2%	0%	92%	7%						
	APP/DEPART	35	/	285	240	/	44	1,674	/	1,627	2,272	/	2,265	0					
	BEGIN PEAK HR	7:30 AM																	
	VOLUMES	13	1	0	58	1	84	67	843	15	2	1,142	101	2,328	0	0	0	1	
	APPROACH %	93%	7%	0%	41%	1%	59%	7%	91%	2%	0%	92%	8%						
	PEAK HR FACTOR	0.500			0.777			0.918			0.795			0.895					
	APP/DEPART	14	/	169	143	/	18	925	/	902	1,246	/	1,239	0					
PM	4:00 PM	2	0	0	23	1	14	18	352	0	0	203	11	624	0	0	0	0	0
	4:15 PM	3	0	2	18	1	16	12	339	2	0	174	12	579	0	0	0	0	0
	4:30 PM	2	1	2	23	0	22	15	401	2	1	203	24	696	0	1	0	0	1
	4:45 PM	2	0	1	9	2	15	15	354	3	0	208	19	628	0	0	0	0	0
	5:00 PM	1	1	0	21	1	17	27	398	1	0	220	18	705	0	0	0	0	0
	5:15 PM	1	0	0	20	0	20	22	352	0	0	187	11	613	0	0	0	0	0
	5:30 PM	1	3	1	14	0	20	15	343	5	0	164	16	582	0	0	0	0	0
	5:45 PM	0	0	0	22	0	13	12	350	1	0	169	9	576	0	0	0	0	0
	VOLUMES	12	5	6	150	5	137	136	2,889	14	1	1,528	120	5,004	0	1	0	0	1
	APPROACH %	52%	22%	26%	51%	2%	47%	4%	95%	0%	0%	93%	7%						
	APP/DEPART	23	/	262	293	/	20	3,039	/	3,045	1,649	/	1,677	0					
	BEGIN PEAK HR	4:30 PM																	
	VOLUMES	6	2	3	73	3	74	79	1,505	6	1	818	72	2,643	0	1	0	0	
	APPROACH %	55%	18%	27%	48%	2%	49%	5%	95%	0%	0%	92%	8%						
	PEAK HR FACTOR	0.550			0.821			0.933			0.936			0.937					
	APP/DEPART	11	/	154	151	/	10	1,590	/	1,581	891	/	898	0					



APPENDIX D

LEVEL OF SERVICE WORKSHEETS

EXISTING

Intersection Level Of Service Report
Intersection 1: California St (NS) at Orange Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	22.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.395

Intersection Setup

Name	California St			California St			Orange Ave			Orange Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	80.00	100.00	100.00	95.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	California St			California St			Orange Ave			Orange Ave		
Base Volume Input [veh/h]	36	415	54	77	401	80	71	64	100	57	46	69
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	36	415	54	77	401	80	71	64	100	57	46	69
Peak Hour Factor	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	119	16	22	115	23	20	18	29	16	13	20
Total Analysis Volume [veh/h]	41	477	62	89	461	92	82	74	115	66	53	79
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	7	0	5	7	0	5	7	0	5	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	21	37	0	21	37	0	20	41	0	21	42	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	14	0	0	26	0	0	30	0	0	31	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	3	53	53	6	56	56	6	10	10	5	9
g / C, Green / Cycle	0.04	0.59	0.59	0.07	0.62	0.62	0.06	0.11	0.11	0.05	0.10
(v / s)_i Volume / Saturation Flow Rate	0.02	0.14	0.04	0.05	0.14	0.06	0.05	0.04	0.08	0.04	0.08
s, saturation flow rate [veh/h]	1687	3373	1506	1687	3373	1506	1687	1772	1506	1687	1602
c, Capacity [veh/h]	61	1986	886	115	2092	934	106	204	174	85	165
d1, Uniform Delay [s]	42.87	8.88	7.95	41.32	7.53	6.92	41.60	36.80	38.18	42.25	39.48
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	11.86	0.29	0.15	10.71	0.24	0.21	11.40	1.08	4.28	13.68	8.53
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.67	0.24	0.07	0.78	0.22	0.10	0.78	0.36	0.66	0.77	0.80
d, Delay for Lane Group [s/veh]	54.74	9.16	8.10	52.02	7.77	7.13	53.00	37.88	42.46	55.94	48.02
Lane Group LOS	D	A	A	D	A	A	D	D	D	E	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.07	1.94	0.47	2.20	1.65	0.63	2.11	1.55	2.60	1.77	3.24
50th-Percentile Queue Length [ft/ln]	26.64	48.49	11.77	54.93	41.21	15.84	52.69	38.70	65.09	44.34	80.94
95th-Percentile Queue Length [veh/ln]	1.92	3.49	0.85	3.95	2.97	1.14	3.79	2.79	4.69	3.19	5.83
95th-Percentile Queue Length [ft/ln]	47.94	87.28	21.18	98.87	74.18	28.52	94.85	69.67	117.17	79.82	145.69

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	54.74	9.16	8.10	52.02	7.77	7.13	53.00	37.88	42.46	55.94	48.02	48.02
Movement LOS	D	A	A	D	A	A	D	D	D	E	D	D
d_A, Approach Delay [s/veh]	12.27			13.81			44.40			50.66		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	22.50											
Intersection LOS	C											
Intersection V/C	0.395											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.69	34.69	34.69	34.69
l_p,int, Pedestrian LOS Score for Intersectio	2.849	2.764	2.242	2.054
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	733	822	844
d_b, Bicycle Delay [s]	18.07	18.07	15.62	15.04
l_b,int, Bicycle LOS Score for Intersection	2.038	2.089	2.007	1.886
Bicycle LOS	B	B	B	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: New Jersey St (NS) at Orange Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	9.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.331

Intersection Setup

Name	New Jersey St			New Jersey St			Orange Ave			Orange Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	New Jersey St			New Jersey St			Orange Ave			Orange Ave		
Base Volume Input [veh/h]	27	97	10	8	98	15	34	141	33	14	83	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	27	97	10	8	98	15	34	141	33	14	83	10
Peak Hour Factor	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	29	3	2	29	4	10	42	10	4	25	3
Total Analysis Volume [veh/h]	32	115	12	9	116	18	40	167	39	17	98	12
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	708	713	745	715
Degree of Utilization, x	0.22	0.20	0.33	0.18

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.86	0.74	1.45	0.64
95th-Percentile Queue Length [ft]	21.43	18.62	36.20	16.04
Approach Delay [s/veh]	9.54	9.31	10.21	9.11
Approach LOS	A	A	B	A
Intersection Delay [s/veh]	9.66			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 3: New Jersey St (NS) at Barton Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	24.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.560

Intersection Setup

Name	New Jersey St			New Jersey St			Bartoin Rd			Barton Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	35.00			35.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	New Jersey St			New Jersey St			Bartoin Rd			Barton Rd		
Base Volume Input [veh/h]	13	1	0	58	1	84	67	843	15	2	1142	101
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	1	0	58	1	84	67	843	15	2	1142	101
Peak Hour Factor	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	0	16	0	23	19	235	4	1	319	28
Total Analysis Volume [veh/h]	15	1	0	65	1	94	75	941	17	2	1275	113
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	5	7	0	5	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	37	0	0	37	0	9	44	0	9	44	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	26	0	0	26	0	0	10	0	0	16	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
l1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
l2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	L	C	C	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	36	36	36	5	42	42	0	37	37
g / C, Green / Cycle	0.40	0.40	0.40	0.06	0.46	0.46	0.00	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.01	0.05	0.06	0.04	0.27	0.27	0.00	0.38	0.08
s, saturation flow rate [veh/h]	1148	1416	1508	1687	1772	1760	1687	3373	1506
c, Capacity [veh/h]	538	551	605	95	819	814	6	1382	617
d1, Uniform Delay [s]	18.58	16.98	17.24	41.97	17.85	17.85	44.76	25.22	16.96
k, delay calibration	0.50	0.50	0.50	0.11	0.13	0.13	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.10	0.44	0.55	13.71	0.79	0.79	33.54	3.08	0.14
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.03	0.12	0.16	0.79	0.59	0.59	0.35	0.92	0.18
d, Delay for Lane Group [s/veh]	18.69	17.41	17.79	55.68	18.64	18.64	78.30	28.30	17.10
Lane Group LOS	B	B	B	E	B	B	E	C	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.23	0.88	1.30	1.90	6.38	6.34	0.09	11.58	1.33
50th-Percentile Queue Length [ft/ln]	5.73	21.96	32.44	47.44	159.44	158.48	2.37	289.51	33.35
95th-Percentile Queue Length [veh/ln]	0.41	1.58	2.34	3.42	10.52	10.47	0.17	17.16	2.40
95th-Percentile Queue Length [ft/ln]	10.31	39.53	58.38	85.39	262.98	261.70	4.26	429.03	60.03

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	18.69	18.69	18.69	17.41	17.79	17.79	55.68	18.64	18.64	78.30	28.30	17.10
Movement LOS	B	B	B	B	B	B	E	B	B	E	C	B
d_A, Approach Delay [s/veh]	18.69			17.64			21.33			27.46		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	24.36											
Intersection LOS	C											
Intersection V/C	0.560											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	34.68	34.68	34.68
l_p,int, Pedestrian LOS Score for Intersectio	0.000	2.072	3.194	3.259
Crosswalk LOS	F	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	733	889	889
d_b, Bicycle Delay [s]	18.06	18.06	13.89	13.89
l_b,int, Bicycle LOS Score for Intersection	1.586	1.824	2.412	2.706
Bicycle LOS	A	A	B	B

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: West Project Dwy (NS) at Orange Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	West Project Dwy		Orange Ave		Orange Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	West Project Dwy		Orange Ave		Orange Ave	
Base Volume Input [veh/h]	0	0	0	159	107	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	159	107	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	42	28	0
Total Analysis Volume [veh/h]	0	0	0	167	113	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.07	8.83	7.44	0.00	0.00	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.45		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: East Project Dwy (NS) at Orange Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	East Project Dwy		Orange Ave		Orange Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	East Project Dwy		Orange Ave		Orange Ave	
Base Volume Input [veh/h]	0	0	0	159	107	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	159	107	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	42	28	0
Total Analysis Volume [veh/h]	0	0	0	167	113	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.07	8.83	7.44	0.00	0.00	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.45		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 1: California St (NS) at Orange Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	18.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.326

Intersection Setup

Name	California St			California St			Orange Ave			Orange Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	80.00	100.00	100.00	95.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	California St			California St			Orange Ave			Orange Ave		
Base Volume Input [veh/h]	67	443	42	84	423	77	32	47	45	21	39	56
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	67	443	42	84	423	77	32	47	45	21	39	56
Peak Hour Factor	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	114	11	22	109	20	8	12	12	5	10	14
Total Analysis Volume [veh/h]	69	457	43	87	436	79	33	48	46	22	40	58
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	7	0	5	7	0	5	7	0	5	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	21	37	0	21	37	0	20	41	0	21	42	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	14	0	0	26	0	0	30	0	0	31	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	58	58	6	59	59	3	8	8	2	7
g / C, Green / Cycle	0.05	0.65	0.65	0.07	0.66	0.66	0.03	0.09	0.09	0.02	0.08
(v / s)_i Volume / Saturation Flow Rate	0.04	0.14	0.03	0.05	0.13	0.05	0.02	0.03	0.03	0.01	0.06
s, saturation flow rate [veh/h]	1687	3373	1506	1687	3373	1506	1687	1772	1506	1687	1604
c, Capacity [veh/h]	89	2178	972	112	2224	993	54	152	129	41	126
d1, Uniform Delay [s]	42.13	6.54	5.82	41.40	6.00	5.52	43.06	38.68	38.82	43.45	40.76
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.16	0.22	0.09	10.88	0.20	0.16	10.74	1.17	1.65	10.55	10.02
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.21	0.04	0.78	0.20	0.08	0.61	0.32	0.36	0.54	0.78
d, Delay for Lane Group [s/veh]	55.29	6.76	5.90	52.28	6.20	5.67	53.80	39.85	40.47	54.00	50.78
Lane Group LOS	E	A	A	D	A	A	D	D	D	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.77	1.46	0.26	2.15	1.30	0.45	0.88	1.04	1.01	0.60	2.48
50th-Percentile Queue Length [ft/ln]	44.37	36.48	6.41	53.86	32.39	11.36	21.98	25.89	25.19	15.12	61.98
95th-Percentile Queue Length [veh/ln]	3.19	2.63	0.46	3.88	2.33	0.82	1.58	1.86	1.81	1.09	4.46
95th-Percentile Queue Length [ft/ln]	79.86	65.66	11.54	96.95	58.30	20.45	39.56	46.60	45.34	27.21	111.56

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	55.29	6.76	5.90	52.28	6.20	5.67	53.80	39.85	40.47	54.00	50.78	50.78
Movement LOS	E	A	A	D	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	12.58			12.79			43.70			51.37		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	18.74											
Intersection LOS	B											
Intersection V/C	0.326											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.69	34.69	34.69	34.69
l_p,int, Pedestrian LOS Score for Intersectio	2.818	2.733	2.207	2.020
Crosswalk LOS	C	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	733	822	844
d_b, Bicycle Delay [s]	18.07	18.07	15.62	15.04
l_b,int, Bicycle LOS Score for Intersection	2.029	2.056	1.769	1.758
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: New Jersey St (NS) at Orange Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.260

Intersection Setup

Name	New Jersey St			New Jersey St			Orange Ave			Orange Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	New Jersey St			New Jersey St			Orange Ave			Orange Ave		
Base Volume Input [veh/h]	22	112	15	20	116	26	19	106	29	8	66	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	22	112	15	20	116	26	19	106	29	8	66	14
Peak Hour Factor	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	33	4	6	35	8	6	32	9	2	20	4
Total Analysis Volume [veh/h]	26	134	18	24	138	31	23	127	35	10	79	17
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	733	741	731	712
Degree of Utilization, x	0.24	0.26	0.25	0.15

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.95	1.04	1.00	0.52
95th-Percentile Queue Length [ft]	23.74	26.00	25.07	13.03
Approach Delay [s/veh]	9.48	9.56	9.59	8.94
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	9.45			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 3: New Jersey St (NS) at Barton Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	33.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.590

Intersection Setup

Name	New Jersey St			New Jersey St			Bartoin Rd			Barton Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	35.00			35.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	New Jersey St			New Jersey St			Bartoin Rd			Barton Rd		
Base Volume Input [veh/h]	6	2	3	73	3	74	79	1505	6	1	818	72
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	2	3	73	3	74	79	1505	6	1	818	72
Peak Hour Factor	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	1	1	19	1	20	21	401	2	0	218	19
Total Analysis Volume [veh/h]	6	2	3	78	3	79	84	1606	6	1	873	77
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	5	7	0	5	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	37	0	0	37	0	9	44	0	9	44	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	26	0	0	26	0	0	10	0	0	16	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
l1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
l2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	L	C	C	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	35	35	35	5	43	43	0	38	38
g / C, Green / Cycle	0.39	0.39	0.39	0.06	0.48	0.48	0.00	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate	0.01	0.06	0.05	0.05	0.46	0.46	0.00	0.26	0.05
s, saturation flow rate [veh/h]	1337	1411	1514	1687	1772	1769	1687	3373	1506
c, Capacity [veh/h]	580	552	587	94	846	845	3	1428	638
d1, Uniform Delay [s]	17.04	18.07	17.86	42.22	22.54	22.55	44.88	20.18	15.76
k, delay calibration	0.50	0.50	0.50	0.11	0.40	0.40	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.06	0.54	0.50	23.10	18.48	18.62	60.42	0.43	0.08
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.02	0.14	0.14	0.89	0.95	0.95	0.35	0.61	0.12
d, Delay for Lane Group [s/veh]	17.10	18.61	18.36	65.33	41.02	41.17	105.30	20.61	15.85
Lane Group LOS	B	B	B	E	D	D	F	C	B
Critical Lane Group	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.15	1.10	1.14	2.34	17.69	17.72	0.07	6.19	0.86
50th-Percentile Queue Length [ft/ln]	3.63	27.56	28.52	58.40	442.19	442.88	1.73	154.84	21.41
95th-Percentile Queue Length [veh/ln]	0.26	1.98	2.05	4.20	24.59	24.62	0.12	10.27	1.54
95th-Percentile Queue Length [ft/ln]	6.53	49.60	51.34	105.12	614.63	615.45	3.11	256.87	38.55

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	17.10	17.10	17.10	18.61	18.36	18.36	65.33	41.10	41.17	105.30	20.61	15.85
Movement LOS	B	B	B	B	B	B	E	D	D	F	C	B
d_A, Approach Delay [s/veh]	17.10			18.48			42.30			20.31		
Approach LOS	B			B			D			C		
d_I, Intersection Delay [s/veh]	33.43											
Intersection LOS	C											
Intersection V/C	0.590											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	34.68	34.68	34.68
l_p,int, Pedestrian LOS Score for Intersectio	0.000	2.062	3.252	3.349
Crosswalk LOS	F	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	733	889	889
d_b, Bicycle Delay [s]	18.05	18.05	13.89	13.89
l_b,int, Bicycle LOS Score for Intersection	1.578	1.824	2.959	2.344
Bicycle LOS	A	A	C	B

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: West Project Dwy (NS) at Orange Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	West Project Dwy		Orange Ave		Orange Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	West Project Dwy		Orange Ave		Orange Ave	
Base Volume Input [veh/h]	0	0	0	101	88	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	101	88	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	27	23	0
Total Analysis Volume [veh/h]	0	0	0	106	93	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop		Free		Free	
Flared Lane	No					
Storage Area [veh]	0		0		0	
Two-Stage Gap Acceptance	No					
Number of Storage Spaces in Median	0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.56	8.73	7.40	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.15		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: East Project Dwy (NS) at Orange Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	East Project Dwy		Orange Ave		Orange Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	East Project Dwy		Orange Ave		Orange Ave	
Base Volume Input [veh/h]	0	0	0	101	88	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	101	88	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	27	23	0
Total Analysis Volume [veh/h]	0	0	0	106	93	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.56	8.73	7.40	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.15		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

EXISTING PLUS PROJECT

Intersection Level Of Service Report
Intersection 1: California St (NS) at Orange Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	22.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.397

Intersection Setup

Name	California St			California St			Orange Ave			Orange Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	80.00	100.00	100.00	95.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	California St			California St			Orange Ave			Orange Ave		
Base Volume Input [veh/h]	36	415	54	77	401	80	71	64	100	57	46	69
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	1	0	0	0	0	0	0	0	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	36	415	54	78	401	80	71	64	100	57	46	70
Peak Hour Factor	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	119	16	22	115	23	20	18	29	16	13	20
Total Analysis Volume [veh/h]	41	477	62	90	461	92	82	74	115	66	53	80
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	7	0	5	7	0	5	7	0	5	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	21	37	0	21	37	0	20	41	0	21	42	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	14	0	0	26	0	0	30	0	0	31	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	3	53	53	6	56	56	6	10	10	5	9
g / C, Green / Cycle	0.04	0.59	0.59	0.07	0.62	0.62	0.06	0.12	0.12	0.05	0.10
(v / s)_i Volume / Saturation Flow Rate	0.02	0.14	0.04	0.05	0.14	0.06	0.05	0.04	0.08	0.04	0.08
s, saturation flow rate [veh/h]	1687	3373	1506	1687	3373	1506	1687	1772	1506	1687	1602
c, Capacity [veh/h]	61	1981	884	116	2090	933	106	205	175	85	166
d1, Uniform Delay [s]	42.87	8.94	8.00	41.28	7.55	6.95	41.60	36.74	38.11	42.25	39.45
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	11.86	0.29	0.15	10.62	0.24	0.21	11.40	1.06	4.18	13.68	8.51
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.67	0.24	0.07	0.78	0.22	0.10	0.78	0.36	0.66	0.77	0.80
d, Delay for Lane Group [s/veh]	54.74	9.23	8.16	51.90	7.80	7.16	53.00	37.80	42.29	55.94	47.96
Lane Group LOS	D	A	A	D	A	A	D	D	D	E	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.07	1.95	0.47	2.22	1.65	0.64	2.11	1.55	2.60	1.77	3.26
50th-Percentile Queue Length [ft/ln]	26.64	48.75	11.83	55.46	41.34	15.89	52.69	38.65	64.94	44.34	81.50
95th-Percentile Queue Length [veh/ln]	1.92	3.51	0.85	3.99	2.98	1.14	3.79	2.78	4.68	3.19	5.87
95th-Percentile Queue Length [ft/ln]	47.94	87.76	21.29	99.82	74.41	28.60	94.85	69.57	116.90	79.82	146.70

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	54.74	9.23	8.16	51.90	7.80	7.16	53.00	37.80	42.29	55.94	47.96	47.96
Movement LOS	D	A	A	D	A	A	D	D	D	E	D	D
d_A, Approach Delay [s/veh]	12.33			13.88			44.30			50.60		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	22.54											
Intersection LOS	C											
Intersection V/C	0.397											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.69	34.69	34.69	34.69
l_p,int, Pedestrian LOS Score for Intersectio	2.849	2.765	2.242	2.055
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	733	822	844
d_b, Bicycle Delay [s]	18.07	18.07	15.62	15.04
l_b,int, Bicycle LOS Score for Intersection	2.038	2.090	2.007	1.888
Bicycle LOS	B	B	B	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: New Jersey St (NS) at Orange Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	9.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.333

Intersection Setup

Name	New Jersey St			New Jersey St			Orange Ave			Orange Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	New Jersey St			New Jersey St			Orange Ave			Orange Ave		
Base Volume Input [veh/h]	27	97	10	8	98	15	34	141	33	14	83	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	2	0	0	0	0	1	0	2	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	27	97	12	8	98	15	34	142	33	16	84	10
Peak Hour Factor	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	29	4	2	29	4	10	42	10	5	25	3
Total Analysis Volume [veh/h]	32	115	14	9	116	18	40	168	39	19	100	12
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	707	710	742	714
Degree of Utilization, x	0.23	0.20	0.33	0.18

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.87	0.75	1.46	0.67
95th-Percentile Queue Length [ft]	21.82	18.70	36.56	16.71
Approach Delay [s/veh]	9.58	9.34	10.25	9.18
Approach LOS	A	A	B	A
Intersection Delay [s/veh]	9.70			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 3: New Jersey St (NS) at Barton Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	24.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.562

Intersection Setup

Name	New Jersey St			New Jersey St			Bartoin Rd			Barton Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	35.00			35.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	New Jersey St			New Jersey St			Bartoin Rd			Barton Rd		
Base Volume Input [veh/h]	13	1	0	58	1	84	67	843	15	2	1142	101
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	1	0	1	1	0	0	0	0	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	1	0	59	1	85	68	843	15	2	1142	102
Peak Hour Factor	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	0	16	0	24	19	235	4	1	319	28
Total Analysis Volume [veh/h]	15	1	0	66	1	95	76	941	17	2	1275	114
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	5	7	0	5	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	37	0	0	37	0	9	44	0	9	44	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	26	0	0	26	0	0	10	0	0	16	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
l1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
l2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	L	C	C	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	36	36	36	5	42	42	0	37	37
g / C, Green / Cycle	0.40	0.40	0.40	0.06	0.46	0.46	0.00	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.01	0.05	0.06	0.05	0.27	0.27	0.00	0.38	0.08
s, saturation flow rate [veh/h]	1146	1416	1508	1687	1772	1760	1687	3373	1506
c, Capacity [veh/h]	537	550	605	95	819	814	6	1382	617
d1, Uniform Delay [s]	18.60	16.99	17.25	42.00	17.85	17.85	44.76	25.22	16.97
k, delay calibration	0.50	0.50	0.50	0.11	0.13	0.13	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.10	0.45	0.56	14.43	0.79	0.79	33.54	3.08	0.14
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.03	0.12	0.16	0.80	0.59	0.59	0.35	0.92	0.18
d, Delay for Lane Group [s/veh]	18.71	17.44	17.81	56.42	18.63	18.64	78.30	28.30	17.11
Lane Group LOS	B	B	B	E	B	B	E	C	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.23	0.89	1.31	1.94	6.38	6.34	0.09	11.58	1.35
50th-Percentile Queue Length [ft/ln]	5.73	22.32	32.80	48.45	159.43	158.47	2.37	289.50	33.67
95th-Percentile Queue Length [veh/ln]	0.41	1.61	2.36	3.49	10.52	10.47	0.17	17.16	2.42
95th-Percentile Queue Length [ft/ln]	10.32	40.17	59.05	87.21	262.97	261.70	4.26	429.03	60.61

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	18.71	18.71	18.71	17.44	17.81	17.81	56.42	18.64	18.64	78.30	28.30	17.11
Movement LOS	B	B	B	B	B	B	E	B	B	E	C	B
d_A, Approach Delay [s/veh]	18.71			17.66			21.41			27.45		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	24.39											
Intersection LOS	C											
Intersection V/C	0.562											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	34.68	34.68	34.68
l_p,int, Pedestrian LOS Score for Intersectio	0.000	2.074	3.194	3.261
Crosswalk LOS	F	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	733	889	889
d_b, Bicycle Delay [s]	18.06	18.06	13.89	13.89
l_b,int, Bicycle LOS Score for Intersection	1.586	1.827	2.413	2.707
Bicycle LOS	A	A	B	B

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: West Project Dwy (NS) at Orange Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name	West Project Dwy		Orange Ave		Orange Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	West Project Dwy		Orange Ave		Orange Ave	
Base Volume Input [veh/h]	0	0	0	159	107	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	3	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	3	3	159	107	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	1	42	28	0
Total Analysis Volume [veh/h]	0	3	3	167	113	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.13	8.84	7.44	0.00	0.00	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.24	0.24	0.13	0.13	0.00	0.00
d_A, Approach Delay [s/veh]	8.84		0.13		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.17					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: East Project Dwy (NS) at Orange Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	East Project Dwy		Orange Ave		Orange Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	East Project Dwy		Orange Ave		Orange Ave	
Base Volume Input [veh/h]	0	0	0	159	107	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	159	107	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	42	28	0
Total Analysis Volume [veh/h]	0	0	0	167	113	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop		Free		Free	
Flared Lane	No					
Storage Area [veh]	0		0		0	
Two-Stage Gap Acceptance	No					
Number of Storage Spaces in Median	0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.07	8.83	7.44	0.00	0.00	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.45		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 1: California St (NS) at Orange Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	18.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.327

Intersection Setup

Name	California St			California St			Orange Ave			Orange Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	80.00	100.00	100.00	95.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	California St			California St			Orange Ave			Orange Ave		
Base Volume Input [veh/h]	67	443	42	84	423	77	32	47	45	21	39	56
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	1	0	0	0	0	0	0	0	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	67	443	42	85	423	77	32	47	45	21	39	57
Peak Hour Factor	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	114	11	22	109	20	8	12	12	5	10	15
Total Analysis Volume [veh/h]	69	457	43	88	436	79	33	48	46	22	40	59
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	7	0	5	7	0	5	7	0	5	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	21	37	0	21	37	0	20	41	0	21	42	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	14	0	0	26	0	0	30	0	0	31	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	58	58	6	59	59	3	8	8	2	7
g / C, Green / Cycle	0.05	0.65	0.65	0.07	0.66	0.66	0.03	0.09	0.09	0.02	0.08
(v / s)_i Volume / Saturation Flow Rate	0.04	0.14	0.03	0.05	0.13	0.05	0.02	0.03	0.03	0.01	0.06
s, saturation flow rate [veh/h]	1687	3373	1506	1687	3373	1506	1687	1772	1506	1687	1603
c, Capacity [veh/h]	89	2173	970	113	2221	992	54	154	131	41	127
d1, Uniform Delay [s]	42.13	6.59	5.87	41.36	6.03	5.54	43.06	38.62	38.75	43.45	40.72
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.16	0.22	0.09	10.79	0.20	0.16	10.74	1.15	1.61	10.55	9.96
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.21	0.04	0.78	0.20	0.08	0.61	0.31	0.35	0.54	0.78
d, Delay for Lane Group [s/veh]	55.29	6.81	5.95	52.15	6.23	5.70	53.80	39.76	40.36	54.00	50.68
Lane Group LOS	E	A	A	D	A	A	D	D	D	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.77	1.47	0.26	2.18	1.30	0.46	0.88	1.03	1.01	0.60	2.50
50th-Percentile Queue Length [ft/ln]	44.37	36.74	6.45	54.39	32.52	11.40	21.98	25.85	25.15	15.12	62.54
95th-Percentile Queue Length [veh/ln]	3.19	2.65	0.46	3.92	2.34	0.82	1.58	1.86	1.81	1.09	4.50
95th-Percentile Queue Length [ft/ln]	79.86	66.13	11.62	97.91	58.53	20.52	39.56	46.53	45.26	27.21	112.57

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	55.29	6.81	5.95	52.15	6.23	5.70	53.80	39.76	40.36	54.00	50.68	50.68
Movement LOS	E	A	A	D	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	12.63			12.86			43.63			51.28		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	18.79											
Intersection LOS	B											
Intersection V/C	0.327											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.69	34.69	34.69	34.69
l_p,int, Pedestrian LOS Score for Intersectio	2.818	2.733	2.207	2.021
Crosswalk LOS	C	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	733	822	844
d_b, Bicycle Delay [s]	18.07	18.07	15.62	15.04
l_b,int, Bicycle LOS Score for Intersection	2.029	2.057	1.769	1.759
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: New Jersey St (NS) at Orange Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	9.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.261

Intersection Setup

Name	New Jersey St			New Jersey St			Orange Ave			Orange Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	New Jersey St			New Jersey St			Orange Ave			Orange Ave		
Base Volume Input [veh/h]	22	112	15	20	116	26	19	106	29	8	66	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	2	0	0	0	0	1	0	3	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	22	112	17	20	116	26	19	107	29	11	67	14
Peak Hour Factor	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	33	5	6	35	8	6	32	9	3	20	4
Total Analysis Volume [veh/h]	26	134	20	24	138	31	23	128	35	13	80	17
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	731	739	728	710
Degree of Utilization, x	0.25	0.26	0.26	0.16

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.97	1.05	1.01	0.55
95th-Percentile Queue Length [ft]	24.16	26.13	25.35	13.66
Approach Delay [s/veh]	9.52	9.59	9.63	9.00
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	9.49			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 3: New Jersey St (NS) at Barton Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	33.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.591

Intersection Setup

Name	New Jersey St			New Jersey St			Bartoin Rd			Barton Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	35.00			35.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	New Jersey St			New Jersey St			Bartoin Rd			Barton Rd		
Base Volume Input [veh/h]	6	2	3	73	3	74	79	1505	6	1	818	72
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	1	0	2	1	0	0	0	0	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	2	3	74	3	76	80	1505	6	1	818	73
Peak Hour Factor	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	1	1	20	1	20	21	401	2	0	218	19
Total Analysis Volume [veh/h]	6	2	3	79	3	81	85	1606	6	1	873	78
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	5	7	0	5	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	37	0	0	37	0	9	44	0	9	44	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	26	0	0	26	0	0	10	0	0	16	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
l1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
l2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	L	C	C	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	35	35	35	5	43	43	0	38	38
g / C, Green / Cycle	0.39	0.39	0.39	0.06	0.48	0.48	0.00	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate	0.01	0.06	0.06	0.05	0.46	0.46	0.00	0.26	0.05
s, saturation flow rate [veh/h]	1333	1411	1514	1687	1772	1769	1687	3373	1506
c, Capacity [veh/h]	578	551	586	94	846	845	3	1428	638
d1, Uniform Delay [s]	17.04	18.10	17.88	42.25	22.54	22.55	44.88	20.18	15.78
k, delay calibration	0.50	0.50	0.50	0.11	0.40	0.40	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.06	0.55	0.51	24.53	18.48	18.62	60.42	0.43	0.08
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.02	0.14	0.14	0.90	0.95	0.95	0.35	0.61	0.12
d, Delay for Lane Group [s/veh]	17.10	18.65	18.40	66.78	41.02	41.17	105.30	20.61	15.86
Lane Group LOS	B	B	B	E	D	D	F	C	B
Critical Lane Group	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.15	1.12	1.17	2.39	17.69	17.72	0.07	6.19	0.87
50th-Percentile Queue Length [ft/ln]	3.63	27.96	29.26	59.87	442.19	442.88	1.73	154.83	21.71
95th-Percentile Queue Length [veh/ln]	0.26	2.01	2.11	4.31	24.58	24.62	0.12	10.27	1.56
95th-Percentile Queue Length [ft/ln]	6.53	50.33	52.67	107.77	614.62	615.45	3.11	256.87	39.07

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	17.10	17.10	17.10	18.65	18.40	18.40	66.78	41.10	41.17	105.30	20.61	15.86
Movement LOS	B	B	B	B	B	B	E	D	D	F	C	B
d_A, Approach Delay [s/veh]	17.10			18.52			42.38			20.31		
Approach LOS	B			B			D			C		
d_I, Intersection Delay [s/veh]	33.46											
Intersection LOS	C											
Intersection V/C	0.591											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	34.68	34.68	34.68
l_p,int, Pedestrian LOS Score for Intersectio	0.000	2.064	3.252	3.351
Crosswalk LOS	F	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	733	889	889
d_b, Bicycle Delay [s]	18.05	18.05	13.89	13.89
l_b,int, Bicycle LOS Score for Intersection	1.578	1.829	2.960	2.345
Bicycle LOS	A	A	C	B

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: West Project Dwy (NS) at Orange Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	West Project Dwy		Orange Ave		Orange Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	West Project Dwy		Orange Ave		Orange Ave	
Base Volume Input [veh/h]	0	0	0	101	88	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	4	3	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	4	3	101	88	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	1	27	23	0
Total Analysis Volume [veh/h]	1	4	3	106	93	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.63	8.76	7.40	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.41	0.41	0.13	0.13	0.00	0.00
d_A, Approach Delay [s/veh]	8.93		0.20		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.32					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: East Project Dwy (NS) at Orange Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	East Project Dwy		Orange Ave		Orange Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	East Project Dwy		Orange Ave		Orange Ave	
Base Volume Input [veh/h]	0	0	0	101	88	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	0	1	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	0	102	88	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	27	23	0
Total Analysis Volume [veh/h]	1	0	0	107	93	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.57	8.74	7.40	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.10	0.10	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.57		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.05					
Intersection LOS	A					

OPENING YEAR (2028) WITHOUT PROJECT

Intersection Level Of Service Report
Intersection 1: California St (NS) at Orange Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	21.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.467

Intersection Setup

Name	California St			California St			Orange Ave			Orange Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	80.00	100.00	100.00	95.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	California St			California St			Orange Ave			Orange Ave		
Base Volume Input [veh/h]	36	415	54	77	401	80	71	64	100	57	46	69
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	130	0	1	106	0	0	0	0	0	0	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	37	562	56	81	523	83	74	67	104	59	48	73
Peak Hour Factor	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	161	16	23	150	24	21	19	30	17	14	21
Total Analysis Volume [veh/h]	43	646	64	93	601	95	85	77	120	68	55	84
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	7	0	5	7	0	5	7	0	5	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	21	37	0	21	37	0	20	41	0	21	42	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	14	0	0	26	0	0	30	0	0	31	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	3	52	52	6	55	55	6	11	11	5	10
g / C, Green / Cycle	0.04	0.58	0.58	0.07	0.61	0.61	0.06	0.12	0.12	0.05	0.11
(v / s)_i Volume / Saturation Flow Rate	0.03	0.19	0.04	0.06	0.18	0.06	0.05	0.04	0.08	0.04	0.09
s, saturation flow rate [veh/h]	1687	3373	1506	1687	3373	1506	1687	1772	1506	1687	1601
c, Capacity [veh/h]	63	1952	871	119	2064	922	110	214	182	88	173
d1, Uniform Delay [s]	42.84	9.89	8.35	41.16	8.25	7.24	41.48	36.39	37.83	42.17	39.24
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	12.27	0.46	0.16	10.39	0.36	0.22	11.09	1.02	4.03	13.31	8.37
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.68	0.33	0.07	0.78	0.29	0.10	0.78	0.36	0.66	0.77	0.80
d, Delay for Lane Group [s/veh]	55.11	10.35	8.52	51.55	8.61	7.46	52.57	37.41	41.85	55.48	47.60
Lane Group LOS	E	B	A	D	A	A	D	D	D	E	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.12	2.90	0.50	2.28	2.34	0.68	2.17	1.60	2.70	1.82	3.39
50th-Percentile Queue Length [ft/ln]	28.00	72.51	12.61	57.06	58.46	16.94	54.34	39.97	67.39	45.43	84.87
95th-Percentile Queue Length [veh/ln]	2.02	5.22	0.91	4.11	4.21	1.22	3.91	2.88	4.85	3.27	6.11
95th-Percentile Queue Length [ft/ln]	50.40	130.53	22.69	102.70	105.22	30.48	97.81	71.95	121.31	81.78	152.76

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	55.11	10.35	8.52	51.55	8.61	7.46	52.57	37.41	41.85	55.48	47.60	47.60
Movement LOS	E	B	A	D	A	A	D	D	D	E	D	D
d_A, Approach Delay [s/veh]	12.75			13.53			43.87			50.19		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	21.19											
Intersection LOS	C											
Intersection V/C	0.467											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.69	34.69	34.69	34.69
l_p,int, Pedestrian LOS Score for Intersectio	2.916	2.843	2.246	2.059
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	733	822	844
d_b, Bicycle Delay [s]	18.07	18.07	15.62	15.04
l_b,int, Bicycle LOS Score for Intersection	2.181	2.211	2.025	1.901
Bicycle LOS	B	B	B	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: New Jersey St (NS) at Orange Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	9.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.352

Intersection Setup

Name	New Jersey St			New Jersey St			Orange Ave			Orange Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	New Jersey St			New Jersey St			Orange Ave			Orange Ave		
Base Volume Input [veh/h]	27	97	10	8	98	15	34	141	33	14	83	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	2	0	1	0	0	1	0	3	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	104	12	8	103	16	35	148	34	18	87	10
Peak Hour Factor	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	31	4	2	31	5	10	44	10	5	26	3
Total Analysis Volume [veh/h]	33	123	14	9	122	19	42	176	40	21	103	12
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	698	701	732	703
Degree of Utilization, x	0.24	0.21	0.35	0.19

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.95	0.81	1.59	0.71
95th-Percentile Queue Length [ft]	23.81	20.19	39.74	17.83
Approach Delay [s/veh]	9.81	9.53	10.57	9.35
Approach LOS	A	A	B	A
Intersection Delay [s/veh]	9.94			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 3: New Jersey St (NS) at Barton Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	25.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.618

Intersection Setup

Name	New Jersey St			New Jersey St			Bartoin Rd			Barton Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	35.00			35.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	New Jersey St			New Jersey St			Bartoin Rd			Barton Rd		
Base Volume Input [veh/h]	13	1	0	58	1	84	67	843	15	2	1142	101
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	19	3	16	2	1	1	1	66	7	6	89	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	4	16	62	2	88	71	943	23	8	1277	106
Peak Hour Factor	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	1	4	17	1	25	20	263	6	2	357	30
Total Analysis Volume [veh/h]	37	4	18	69	2	98	79	1053	26	9	1426	118
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	5	7	0	5	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	37	0	0	37	0	9	44	0	9	44	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	26	0	0	26	0	0	10	0	0	16	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
l1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
l2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	L	C	C	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	33	33	33	5	44	44	1	40	40
g / C, Green / Cycle	0.37	0.37	0.37	0.06	0.48	0.48	0.01	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.05	0.05	0.07	0.05	0.31	0.31	0.01	0.42	0.08
s, saturation flow rate [veh/h]	1210	1389	1510	1687	1772	1757	1687	3373	1506
c, Capacity [veh/h]	514	478	561	94	857	850	19	1483	662
d1, Uniform Delay [s]	19.77	19.11	19.04	42.10	17.26	17.27	44.22	24.48	15.33
k, delay calibration	0.50	0.50	0.50	0.11	0.19	0.19	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.45	0.63	0.69	17.56	1.33	1.34	16.80	5.08	0.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.11	0.14	0.18	0.84	0.63	0.63	0.47	0.96	0.18
d, Delay for Lane Group [s/veh]	20.23	19.74	19.74	59.66	18.59	18.61	61.02	29.57	15.46
Lane Group LOS	C	B	B	E	B	B	E	C	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.91	1.02	1.46	2.08	7.23	7.18	0.28	13.37	1.30
50th-Percentile Queue Length [ft/ln]	22.82	25.50	36.49	52.05	180.86	179.48	6.92	334.20	32.51
95th-Percentile Queue Length [veh/ln]	1.64	1.84	2.63	3.75	11.65	11.57	0.50	19.36	2.34
95th-Percentile Queue Length [ft/ln]	41.07	45.89	65.68	93.68	291.13	289.33	12.45	484.10	58.52

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	20.23	20.23	20.23	19.74	19.74	19.74	59.66	18.60	18.61	61.02	29.57	15.46
Movement LOS	C	C	C	B	B	B	E	B	B	E	C	B
d_A, Approach Delay [s/veh]	20.23			19.74			21.40			28.68		
Approach LOS	C			B			C			C		
d_I, Intersection Delay [s/veh]	25.13											
Intersection LOS	C											
Intersection V/C	0.618											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	34.67	34.67	34.67
l_p,int, Pedestrian LOS Score for Intersectio	0.000	2.080	3.315	3.353
Crosswalk LOS	F	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	733	889	889
d_b, Bicycle Delay [s]	18.05	18.05	13.89	13.89
l_b,int, Bicycle LOS Score for Intersection	1.657	1.838	2.515	2.841
Bicycle LOS	A	A	B	C

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: West Project Dwy (NS) at Orange Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	West Project Dwy		Orange Ave		Orange Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	West Project Dwy		Orange Ave		Orange Ave	
Base Volume Input [veh/h]	0	0	0	159	107	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	165	111	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	43	29	0
Total Analysis Volume [veh/h]	0	0	0	174	117	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.14	8.85	7.45	0.00	0.00	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.50		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: East Project Dwy (NS) at Orange Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	East Project Dwy		Orange Ave		Orange Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	East Project Dwy		Orange Ave		Orange Ave	
Base Volume Input [veh/h]	0	0	0	159	107	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	165	111	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	43	29	0
Total Analysis Volume [veh/h]	0	0	0	174	117	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.14	8.85	7.45	0.00	0.00	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.50		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 1: California St (NS) at Orange Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	17.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.382

Intersection Setup

Name	California St			California St			Orange Ave			Orange Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	80.00	100.00	100.00	95.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	California St			California St			Orange Ave			Orange Ave		
Base Volume Input [veh/h]	67	443	42	84	423	77	32	47	45	21	39	56
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	115	0	0	136	0	0	0	0	0	0	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	70	576	44	87	576	80	33	49	47	22	41	59
Peak Hour Factor	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	148	11	22	148	21	9	13	12	6	11	15
Total Analysis Volume [veh/h]	72	594	45	90	594	82	34	51	48	23	42	61
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	7	0	5	7	0	5	7	0	5	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	21	37	0	21	37	0	20	41	0	21	42	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	14	0	0	26	0	0	30	0	0	31	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	58	58	6	59	59	3	8	8	2	7
g / C, Green / Cycle	0.05	0.64	0.64	0.07	0.65	0.65	0.03	0.09	0.09	0.02	0.08
(v / s)_i Volume / Saturation Flow Rate	0.04	0.18	0.03	0.05	0.18	0.05	0.02	0.03	0.03	0.01	0.06
s, saturation flow rate [veh/h]	1687	3373	1506	1687	3373	1506	1687	1772	1506	1687	1604
c, Capacity [veh/h]	93	2156	963	116	2201	983	55	159	135	42	132
d1, Uniform Delay [s]	42.00	7.12	6.04	41.28	6.60	5.75	43.03	38.45	38.57	43.41	40.56
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	12.67	0.32	0.09	10.62	0.30	0.17	10.84	1.16	1.59	10.49	9.70
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.28	0.05	0.78	0.27	0.08	0.62	0.32	0.36	0.54	0.78
d, Delay for Lane Group [s/veh]	54.67	7.43	6.13	51.90	6.90	5.91	53.87	39.60	40.15	53.90	50.26
Lane Group LOS	D	A	A	D	A	A	D	D	D	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.84	2.05	0.28	2.22	1.93	0.49	0.91	1.10	1.05	0.63	2.59
50th-Percentile Queue Length [ft/ln]	45.94	51.35	6.91	55.46	48.26	12.19	22.63	27.40	26.15	15.75	64.75
95th-Percentile Queue Length [veh/ln]	3.31	3.70	0.50	3.99	3.47	0.88	1.63	1.97	1.88	1.13	4.66
95th-Percentile Queue Length [ft/ln]	82.69	92.42	12.45	99.82	86.86	21.94	40.74	49.31	47.07	28.34	116.55

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	54.67	7.43	6.13	51.90	6.90	5.91	53.87	39.60	40.15	53.90	50.26	50.26
Movement LOS	D	A	A	D	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	12.13			12.08			43.45			50.92		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	17.33											
Intersection LOS	B											
Intersection V/C	0.382											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.69	34.69	34.69	34.69
l_p,int, Pedestrian LOS Score for Intersectio	2.881	2.807	2.211	2.024
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	733	822	844
d_b, Bicycle Delay [s]	18.07	18.07	15.62	15.04
l_b,int, Bicycle LOS Score for Intersection	2.146	2.192	1.779	1.768
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: New Jersey St (NS) at Orange Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	9.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.282

Intersection Setup

Name	New Jersey St			New Jersey St			Orange Ave			Orange Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	New Jersey St			New Jersey St			Orange Ave			Orange Ave		
Base Volume Input [veh/h]	22	112	15	20	116	26	19	106	29	8	66	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	0	0	4	0	0	0	0	4	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	119	16	21	125	27	20	110	30	12	70	15
Peak Hour Factor	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	36	5	6	37	8	6	33	9	4	21	4
Total Analysis Volume [veh/h]	27	142	19	25	149	32	24	131	36	14	84	18
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	721	730	717	699
Degree of Utilization, x	0.26	0.28	0.27	0.17

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.04	1.16	1.07	0.59
95th-Percentile Queue Length [ft]	26.04	28.98	26.79	14.81
Approach Delay [s/veh]	9.74	9.86	9.83	9.17
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	9.71			
Intersection LOS	A			

Intersection Level Of Service Report

Intersection 3: New Jersey St (NS) at Barton Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	53.7
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.674

Intersection Setup

Name	New Jersey St			New Jersey St			Bartoin Rd			Barton Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	35.00			35.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	New Jersey St			New Jersey St			Bartoin Rd			Barton Rd		
Base Volume Input [veh/h]	6	2	3	73	3	74	79	1505	6	1	818	72
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	13	2	11	2	4	2	0	97	23	19	78	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	4	14	78	7	79	82	1663	29	20	929	75
Peak Hour Factor	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	1	4	21	2	21	22	444	8	5	248	20
Total Analysis Volume [veh/h]	20	4	15	83	7	84	87	1774	31	21	991	80
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	5	7	0	5	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	37	0	0	37	0	9	44	0	9	44	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	26	0	0	26	0	0	10	0	0	16	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
l1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
l2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	L	C	C	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	33	33	33	5	43	43	2	40	40
g / C, Green / Cycle	0.37	0.37	0.37	0.06	0.48	0.48	0.02	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.03	0.06	0.06	0.05	0.51	0.51	0.01	0.29	0.05
s, saturation flow rate [veh/h]	1291	1393	1523	1687	1772	1761	1687	3373	1506
c, Capacity [veh/h]	536	497	562	94	842	837	38	1492	666
d1, Uniform Delay [s]	18.43	19.56	19.08	42.32	23.61	23.61	43.52	19.81	14.77
k, delay calibration	0.50	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.26	0.72	0.62	28.29	52.23	54.31	11.55	0.51	0.08
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.07	0.17	0.16	0.93	1.07	1.08	0.55	0.66	0.12
d, Delay for Lane Group [s/veh]	18.70	20.28	19.70	70.61	75.85	77.92	55.06	20.32	14.85
Lane Group LOS	B	C	B	E	F	F	E	C	B
Critical Lane Group	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.55	1.25	1.33	2.53	26.78	27.10	0.56	7.05	0.85
50th-Percentile Queue Length [ft/ln]	13.66	31.22	33.14	63.36	669.41	677.42	13.93	176.22	21.27
95th-Percentile Queue Length [veh/ln]	0.98	2.25	2.39	4.56	37.17	37.70	1.00	11.40	1.53
95th-Percentile Queue Length [ft/ln]	24.58	56.20	59.64	114.05	929.17	942.60	25.08	285.07	38.28

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	18.70	18.70	18.70	20.28	19.70	19.70	70.61	76.86	77.92	55.06	20.32	14.85
Movement LOS	B	B	B	C	B	B	E	F	E	E	C	B
d_A, Approach Delay [s/veh]	18.70			19.98			76.59			20.59		
Approach LOS	B			B			E			C		
d_I, Intersection Delay [s/veh]	53.68											
Intersection LOS	D											
Intersection V/C	0.674											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	34.67	34.67	34.67
l_p,int, Pedestrian LOS Score for Intersectio	0.000	2.071	3.371	3.453
Crosswalk LOS	F	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	733	889	889
d_b, Bicycle Delay [s]	18.05	18.05	13.89	13.89
l_b,int, Bicycle LOS Score for Intersection	1.624	1.847	3.121	2.461
Bicycle LOS	A	A	C	B

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: West Project Dwy (NS) at Orange Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	West Project Dwy		Orange Ave		Orange Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	West Project Dwy		Orange Ave		Orange Ave	
Base Volume Input [veh/h]	0	0	0	101	88	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	1	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	106	92	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	28	24	0
Total Analysis Volume [veh/h]	0	0	0	112	97	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.62	8.75	7.41	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.19		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: East Project Dwy (NS) at Orange Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	East Project Dwy		Orange Ave		Orange Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	East Project Dwy		Orange Ave		Orange Ave	
Base Volume Input [veh/h]	0	0	0	101	88	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	1	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	106	92	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	28	24	0
Total Analysis Volume [veh/h]	0	0	0	112	97	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.62	8.75	7.41	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.19		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

OPENING YEAR (2028) WITH PROJECT

Intersection Level Of Service Report
Intersection 1: California St (NS) at Orange Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	21.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.468

Intersection Setup

Name	California St			California St			Orange Ave			Orange Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	80.00	100.00	100.00	95.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	California St			California St			Orange Ave			Orange Ave		
Base Volume Input [veh/h]	36	415	54	77	401	80	71	64	100	57	46	69
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	130	0	2	106	0	0	0	0	0	0	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	37	562	56	82	523	83	74	67	104	59	48	74
Peak Hour Factor	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700	0.8700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	161	16	24	150	24	21	19	30	17	14	21
Total Analysis Volume [veh/h]	43	646	64	94	601	95	85	77	120	68	55	85
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	7	0	5	7	0	5	7	0	5	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	21	37	0	21	37	0	20	41	0	21	42	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	14	0	0	26	0	0	30	0	0	31	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	3	52	52	6	55	55	6	11	11	5	10
g / C, Green / Cycle	0.04	0.58	0.58	0.07	0.61	0.61	0.06	0.12	0.12	0.05	0.11
(v / s)_i Volume / Saturation Flow Rate	0.03	0.19	0.04	0.06	0.18	0.06	0.05	0.04	0.08	0.04	0.09
s, saturation flow rate [veh/h]	1687	3373	1506	1687	3373	1506	1687	1772	1506	1687	1600
c, Capacity [veh/h]	63	1947	869	121	2062	921	110	215	183	88	174
d1, Uniform Delay [s]	42.84	9.96	8.41	41.13	8.28	7.26	41.48	36.33	37.76	42.17	39.20
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	12.27	0.46	0.16	10.32	0.36	0.22	11.09	1.00	3.94	13.31	8.35
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.68	0.33	0.07	0.78	0.29	0.10	0.78	0.36	0.66	0.77	0.80
d, Delay for Lane Group [s/veh]	55.11	10.42	8.58	51.44	8.64	7.49	52.57	37.33	41.70	55.48	47.55
Lane Group LOS	E	B	A	D	A	A	D	D	D	E	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.12	2.92	0.51	2.30	2.35	0.68	2.17	1.60	2.69	1.82	3.42
50th-Percentile Queue Length [ft/ln]	28.00	72.89	12.67	57.59	58.63	16.98	54.34	39.92	67.25	45.43	85.43
95th-Percentile Queue Length [veh/ln]	2.02	5.25	0.91	4.15	4.22	1.22	3.91	2.87	4.84	3.27	6.15
95th-Percentile Queue Length [ft/ln]	50.40	131.20	22.81	103.66	105.54	30.57	97.81	71.86	121.05	81.78	153.77

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	55.11	10.42	8.58	51.44	8.64	7.49	52.57	37.33	41.70	55.48	47.55	47.55
Movement LOS	E	B	A	D	A	A	D	D	D	E	D	D
d_A, Approach Delay [s/veh]	12.82			13.59			43.78			50.14		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	21.23											
Intersection LOS	C											
Intersection V/C	0.468											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.69	34.69	34.69	34.69
l_p,int, Pedestrian LOS Score for Intersectio	2.916	2.844	2.246	2.060
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	733	822	844
d_b, Bicycle Delay [s]	18.07	18.07	15.62	15.04
l_b,int, Bicycle LOS Score for Intersection	2.181	2.211	2.025	1.903
Bicycle LOS	B	B	B	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: New Jersey St (NS) at Orange Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	10.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.355

Intersection Setup

Name	New Jersey St			New Jersey St			Orange Ave			Orange Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	New Jersey St			New Jersey St			Orange Ave			Orange Ave		
Base Volume Input [veh/h]	27	97	10	8	98	15	34	141	33	14	83	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	4	0	1	0	0	2	0	5	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	104	14	8	103	16	35	149	34	20	88	10
Peak Hour Factor	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432	0.8432
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	31	4	2	31	5	10	44	10	6	26	3
Total Analysis Volume [veh/h]	33	123	17	9	122	19	42	177	40	24	104	12
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	697	698	730	700
Degree of Utilization, x	0.25	0.21	0.35	0.20

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.98	0.81	1.61	0.74
95th-Percentile Queue Length [ft]	24.40	20.30	40.17	18.55
Approach Delay [s/veh]	9.86	9.57	10.62	9.42
Approach LOS	A	A	B	A
Intersection Delay [s/veh]	9.99			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 3: New Jersey St (NS) at Barton Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	25.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.620

Intersection Setup

Name	New Jersey St			New Jersey St			Bartoin Rd			Barton Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	35.00			35.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	New Jersey St			New Jersey St			Bartoin Rd			Barton Rd		
Base Volume Input [veh/h]	13	1	0	58	1	84	67	843	15	2	1142	101
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	19	3	16	3	1	2	2	66	7	6	89	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	4	16	63	2	89	72	943	23	8	1277	107
Peak Hour Factor	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954	0.8954
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	1	4	18	1	25	20	263	6	2	357	30
Total Analysis Volume [veh/h]	37	4	18	70	2	99	80	1053	26	9	1426	120
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	5	7	0	5	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	37	0	0	37	0	9	44	0	9	44	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	26	0	0	26	0	0	10	0	0	16	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
l1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
l2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	L	C	C	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	33	33	33	5	44	44	1	40	40
g / C, Green / Cycle	0.37	0.37	0.37	0.06	0.48	0.48	0.01	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.05	0.05	0.07	0.05	0.31	0.31	0.01	0.42	0.08
s, saturation flow rate [veh/h]	1207	1389	1510	1687	1772	1757	1687	3373	1506
c, Capacity [veh/h]	513	477	561	94	857	850	19	1483	662
d1, Uniform Delay [s]	19.79	19.13	19.06	42.13	17.26	17.27	44.22	24.48	15.36
k, delay calibration	0.50	0.50	0.50	0.11	0.19	0.19	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.45	0.65	0.70	18.57	1.33	1.34	16.80	5.08	0.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.11	0.15	0.18	0.85	0.63	0.63	0.47	0.96	0.18
d, Delay for Lane Group [s/veh]	20.24	19.78	19.76	60.70	18.59	18.61	61.02	29.57	15.49
Lane Group LOS	C	B	B	E	B	B	E	C	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.91	1.04	1.48	2.13	7.23	7.18	0.28	13.37	1.32
50th-Percentile Queue Length [ft/ln]	22.84	25.90	36.89	53.24	180.85	179.48	6.92	334.19	33.11
95th-Percentile Queue Length [veh/ln]	1.64	1.87	2.66	3.83	11.65	11.57	0.50	19.36	2.38
95th-Percentile Queue Length [ft/ln]	41.11	46.63	66.39	95.84	291.13	289.33	12.45	484.09	59.60

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	20.24	20.24	20.24	19.78	19.76	19.76	60.70	18.60	18.61	61.02	29.57	15.49
Movement LOS	C	C	C	B	B	B	E	B	B	E	C	B
d_A, Approach Delay [s/veh]	20.24			19.77			21.50			28.66		
Approach LOS	C			B			C			C		
d_I, Intersection Delay [s/veh]	25.16											
Intersection LOS	C											
Intersection V/C	0.620											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	34.67	34.67	34.67
l_p,int, Pedestrian LOS Score for Intersectio	0.000	2.082	3.316	3.355
Crosswalk LOS	F	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	733	889	889
d_b, Bicycle Delay [s]	18.05	18.05	13.89	13.89
l_b,int, Bicycle LOS Score for Intersection	1.657	1.842	2.516	2.842
Bicycle LOS	A	A	B	C

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: West Project Dwy (NS) at Orange Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name	West Project Dwy		Orange Ave		Orange Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	West Project Dwy		Orange Ave		Orange Ave	
Base Volume Input [veh/h]	0	0	0	159	107	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	3	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	3	3	165	111	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	1	43	29	0
Total Analysis Volume [veh/h]	0	3	3	174	117	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.21	8.86	7.45	0.00	0.00	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.24	0.24	0.13	0.13	0.00	0.00
d_A, Approach Delay [s/veh]	8.86		0.13		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.16					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: East Project Dwy (NS) at Orange Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	East Project Dwy		Orange Ave		Orange Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	East Project Dwy		Orange Ave		Orange Ave	
Base Volume Input [veh/h]	0	0	0	159	107	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	165	111	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	43	29	0
Total Analysis Volume [veh/h]	0	0	0	174	117	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.14	8.85	7.45	0.00	0.00	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.50		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 1: California St (NS) at Orange Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	17.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.383

Intersection Setup

Name	California St			California St			Orange Ave			Orange Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	80.00	100.00	100.00	95.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	California St			California St			Orange Ave			Orange Ave		
Base Volume Input [veh/h]	67	443	42	84	423	77	32	47	45	21	39	56
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	115	0	1	136	0	0	0	0	0	0	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	70	576	44	88	576	80	33	49	47	22	41	60
Peak Hour Factor	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698	0.9698
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	148	11	23	148	21	9	13	12	6	11	15
Total Analysis Volume [veh/h]	72	594	45	91	594	82	34	51	48	23	42	62
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	7	0	5	7	0	5	7	0	5	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	21	37	0	21	37	0	20	41	0	21	42	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	14	0	0	26	0	0	30	0	0	31	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	58	58	6	59	59	3	8	8	2	7
g / C, Green / Cycle	0.05	0.64	0.64	0.07	0.65	0.65	0.03	0.09	0.09	0.02	0.08
(v / s)_i Volume / Saturation Flow Rate	0.04	0.18	0.03	0.05	0.18	0.05	0.02	0.03	0.03	0.01	0.06
s, saturation flow rate [veh/h]	1687	3373	1506	1687	3373	1506	1687	1772	1506	1687	1603
c, Capacity [veh/h]	93	2151	960	117	2199	982	55	160	136	42	133
d1, Uniform Delay [s]	42.00	7.18	6.09	41.24	6.63	5.77	43.03	38.38	38.50	43.41	40.52
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	12.67	0.32	0.09	10.54	0.30	0.17	10.84	1.13	1.55	10.49	9.64
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.28	0.05	0.78	0.27	0.08	0.62	0.32	0.35	0.54	0.78
d, Delay for Lane Group [s/veh]	54.67	7.49	6.19	51.78	6.93	5.94	53.87	39.51	40.05	53.90	50.17
Lane Group LOS	D	A	A	D	A	A	D	D	D	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.84	2.07	0.28	2.24	1.94	0.49	0.91	1.09	1.04	0.63	2.61
50th-Percentile Queue Length [ft/ln]	45.94	51.70	6.96	55.99	48.44	12.24	22.63	27.35	26.10	15.75	65.31
95th-Percentile Queue Length [veh/ln]	3.31	3.72	0.50	4.03	3.49	0.88	1.63	1.97	1.88	1.13	4.70
95th-Percentile Queue Length [ft/ln]	82.69	93.05	12.53	100.78	87.19	22.02	40.74	49.24	46.99	28.34	117.56

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	54.67	7.49	6.19	51.78	6.93	5.94	53.87	39.51	40.05	53.90	50.17	50.17
Movement LOS	D	A	A	D	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	12.19			12.15			43.38			50.84		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	17.38											
Intersection LOS	B											
Intersection V/C	0.383											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.69	34.69	34.69	34.69
l_p,int, Pedestrian LOS Score for Intersectio	2.881	2.808	2.211	2.025
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	733	822	844
d_b, Bicycle Delay [s]	18.07	18.07	15.62	15.04
l_b,int, Bicycle LOS Score for Intersection	2.146	2.192	1.779	1.769
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: New Jersey St (NS) at Orange Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.284

Intersection Setup

Name	New Jersey St			New Jersey St			Orange Ave			Orange Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	New Jersey St			New Jersey St			Orange Ave			Orange Ave		
Base Volume Input [veh/h]	22	112	15	20	116	26	19	106	29	8	66	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	2	0	4	0	0	1	0	7	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	119	18	21	125	27	20	111	30	15	71	15
Peak Hour Factor	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379	0.8379
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	36	5	6	37	8	6	33	9	4	21	4
Total Analysis Volume [veh/h]	27	142	21	25	149	32	24	132	36	18	85	18
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	719	727	715	696
Degree of Utilization, x	0.26	0.28	0.27	0.17

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.06	1.17	1.08	0.63
95th-Percentile Queue Length [ft]	26.51	29.16	27.10	15.65
Approach Delay [s/veh]	9.80	9.90	9.88	9.26
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	9.76			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 3: New Jersey St (NS) at Barton Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	53.8
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.676

Intersection Setup

Name	New Jersey St			New Jersey St			Bartoin Rd			Barton Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	35.00			35.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	New Jersey St			New Jersey St			Bartoin Rd			Barton Rd		
Base Volume Input [veh/h]	6	2	3	73	3	74	79	1505	6	1	818	72
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	13	2	11	3	4	4	1	97	23	19	78	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	4	14	79	7	81	83	1663	29	20	929	76
Peak Hour Factor	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372	0.9372
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	1	4	21	2	22	22	444	8	5	248	20
Total Analysis Volume [veh/h]	20	4	15	84	7	86	89	1774	31	21	991	81
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	7	0	0	7	0	5	7	0	5	7	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	37	0	0	37	0	9	44	0	9	44	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	26	0	0	26	0	0	10	0	0	16	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
l1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
l2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	C	L	C	C	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	33	33	33	5	43	43	2	40	40
g / C, Green / Cycle	0.37	0.37	0.37	0.06	0.48	0.48	0.02	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.03	0.06	0.06	0.05	0.51	0.51	0.01	0.29	0.05
s, saturation flow rate [veh/h]	1286	1393	1523	1687	1772	1761	1687	3373	1506
c, Capacity [veh/h]	534	496	561	94	842	837	38	1492	666
d1, Uniform Delay [s]	18.44	19.59	19.11	42.37	23.61	23.61	43.52	19.81	14.78
k, delay calibration	0.50	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.26	0.74	0.64	32.01	52.23	54.31	11.55	0.51	0.08
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.07	0.17	0.17	0.95	1.07	1.08	0.55	0.66	0.12
d, Delay for Lane Group [s/veh]	18.70	20.33	19.74	74.38	75.84	77.92	55.06	20.32	14.87
Lane Group LOS	B	C	B	E	F	F	E	C	B
Critical Lane Group	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.55	1.27	1.36	2.68	26.78	27.10	0.56	7.05	0.86
50th-Percentile Queue Length [ft/ln]	13.66	31.66	33.92	66.88	669.38	677.45	13.93	176.22	21.55
95th-Percentile Queue Length [veh/ln]	0.98	2.28	2.44	4.82	37.17	37.71	1.00	11.40	1.55
95th-Percentile Queue Length [ft/ln]	24.59	56.99	61.06	120.38	929.13	942.63	25.08	285.07	38.79

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	18.70	18.70	18.70	20.33	19.74	19.74	74.38	76.86	77.92	55.06	20.32	14.87
Movement LOS	B	B	B	C	B	B	E	F	E	E	C	B
d_A, Approach Delay [s/veh]	18.70			20.02			76.76			20.59		
Approach LOS	B			C			E			C		
d_I, Intersection Delay [s/veh]	53.75											
Intersection LOS	D											
Intersection V/C	0.676											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	34.67	34.67	34.67
l_p,int, Pedestrian LOS Score for Intersectio	0.000	2.073	3.372	3.455
Crosswalk LOS	F	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	733	889	889
d_b, Bicycle Delay [s]	18.05	18.05	13.89	13.89
l_b,int, Bicycle LOS Score for Intersection	1.624	1.852	3.122	2.461
Bicycle LOS	A	A	C	B

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: West Project Dwy (NS) at Orange Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	West Project Dwy		Orange Ave		Orange Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	West Project Dwy		Orange Ave		Orange Ave	
Base Volume Input [veh/h]	0	0	0	101	88	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	4	3	1	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	4	3	106	92	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	1	28	24	0
Total Analysis Volume [veh/h]	1	4	3	112	97	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.69	8.77	7.41	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.41	0.41	0.13	0.13	0.00	0.00
d_A, Approach Delay [s/veh]	8.96		0.19		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.31					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: East Project Dwy (NS) at Orange Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	East Project Dwy		Orange Ave		Orange Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	East Project Dwy		Orange Ave		Orange Ave	
Base Volume Input [veh/h]	0	0	0	101	88	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0404	1.0404	1.0404	1.0404	1.0404	1.0404
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	0	2	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	0	107	92	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	28	24	0
Total Analysis Volume [veh/h]	1	0	0	113	97	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.63	8.76	7.41	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.10	0.10	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.63		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.05					
Intersection LOS	A					



GANDDINI GROUP INC.

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City of Loma Linda

25541 Barton Road, Loma Linda, CA 92354 ☎ (909) 799-2800 🖷 (909) 799-2894
Community Development Department

CONDITIONS OF APPROVAL

PROJECT DESCRIPTION: Master Development Application No. 2024-0026, Precise Plan of Design No. 2026-0016, Conditional Use Permit 2025-0006, Tentative Parcel Map 2025-0005 – A request to legalize and utilize and existing dome structure to construct a 19,604 sq. ft. place of worship with associated landscaping and parking improvements located at 11055 New Jersey Street. The project has a General Plan Land Use and Zoning designation of Low Density Residential (R-1).

COMMUNITY DEVELOPMENT DEPARTMENT (909)799-2827

1. The project shall be constructed and operated in accordance with the authorized use as described in the approved application materials and plans provided to Planning Commission.

2. The following approvals shall be exercised by the commencement of substantial construction within two (2) years of the date of approval, or they shall become null and void. If construction is commenced but subsequently discontinued for a continuous period of one (1) year, the approvals shall also become null and void.

CASE NUMBER	EXPIRATION DATE
MDA-2025-0045/PPD-2026-0016 CUP-2025-0006/TPM 2025-0005	July 15, 2028

3. The review authority may, upon payment and application being filed 30 days prior to the expiration date and for good cause, grant a one-time extension not to exceed 12 months. The review authority shall ensure that the project complies with all current Development Code provisions.

4. The Applicant shall indemnify, protect, defend, and hold harmless the City, and any agency or instrumentality thereof, and officers, officials, employees, or agents thereof, from any and all claims, actions, suits, proceedings, or judgments against the City, or any agency or instrumentality thereof, and any officers, officials, employees, or agents thereof to attack, set aside, void, or annul, an approval of the City, or any agency or instrumentality thereof, advisory agency, appeal board, or legislative body, including actions approved by the voters of the City, concerning the project and the approvals granted herein. Furthermore, the Applicant shall indemnify, protect, defend, and hold harmless the City, or any agency or instrumentality thereof, against any and all claims, actions, suits, proceedings, or judgments against another governmental entity in which the Applicant's project is subject to that other governmental entity's approval and a condition of such approval is that the City indemnify and defend such governmental entity.

5. In the event that this approval is legally challenged, the City will promptly notify the Applicant of any claim or action and will cooperate fully in the defense of the matter. Once notified, the Applicant agrees to defend, indemnify, and hold harmless the City, their

affiliate's officers, agents and employees from any claim, action or proceeding against the City of Loma Linda. The Applicant further agrees to reimburse the City of any costs and attorneys' fees, which the City may be required by a court to pay as a result of such action, but such participation shall not relieve the Applicant of his or her obligation under this condition.

6. The project shall be in substantial conformance with the plan(s) approved by the Planning Commission. A minor modification to the plan(s) shall be subject to approval by the Director through a minor administrative variation process. Any modification that exceeds 10% of the following allowable measurable design/site considerations require the refilling of the original application and a subsequent hearing by the appropriate hearing review authority if applicable:

a. On-site circulation and parking, loading and landscaping;
b. Placement and/or height of walls, fences and structures;
c. Reconfiguration of architectural features, including colors and modification of finished materials that do not alter or compromise the previously approved theme; and
d. A reduction in density or intensity of the project.

7. No vacant, relocated, altered, repaired or hereafter erected structure shall be occupied or no change of use of land or structure(s) shall be inaugurated, or no new business commenced as authorized by this permit until a Certificate of Occupancy has been issued by the Building Division. A Temporary Certificate of Occupancy may be issued by the Building Division subject to the conditions imposed on the use, provided that a deposit is filed with the Community Development Department prior to the issuance of the Certificate, if necessary. The deposit or security shall guarantee the faithful performance and completion of all terms, conditions and performance standards imposed on the intended use by this permit.

8. This permit or approval is subject to all the applicable provisions of the Loma Linda Municipal Code in effect at the time of approval.

9. Applicant shall follow all State and local regulations for disposal of oil or any hazardous waste on the property.

10. Signs are not approved as part of this permit. Prior to establishing any new signs, the Applicant shall submit an application and receive approval for a sign permit from both the Planning Division and Building and Safety Division pursuant to Chapter 17.18 of the Municipal Code.

11. Applicant must conform to all Business License regulations and maintain a current city license at all times. The Applicant shall obtain a tax-exempt Business License from the Finance Department.

12. The Planning Commission reserves the right revoke this entitlement based on nuisance complaints, increased calls of service, or any other matter the City may deem as not appropriate for the community.

13. The Applicant shall be responsible for maintaining the premises free of graffiti and all areas adjacent to the premises over which the Applicant has control. Graffiti shall be removed within 72 hours of its appearance or upon notice of its appearance.

14. The site shall be maintained in a clean and orderly fashion, including upkeep of all landscaping. Parking lots shall be routinely patrolled to ensure all trash is properly disposed of and that no nuisance activities are occurring, including vandalism, vagrancy, and loitering.

15. Pursuant to State law AB 827, the building is required to have indoor and outdoor trash containers in all common areas. There needs to be proper labeling for Trash, Organic and Recycle.

16. The number of persons shall not exceed the maximum occupancy load as determined by the Fire Department. Signs indicating the occupant load shall be posted in a conspicuous place on the approved sign near the main exit of the sanctuary room.

17. All outdoor lighting shall conform to the Development Code and shall be designed to not glare or reflect onto neighboring properties or public rights-of-way. Outdoor lighting shall be shielded and limited to that required for security and safety purposes.

18. Applicant shall provide infrastructure for the Loma Linda Connected Community Program (LLCCP), which includes providing technologically enabled development that includes coaxial, cable and fiber optic lines to all outlets. Plans for the location of the infrastructure shall be provided with building and precise grading plans and be reviewed and approved by City of Loma Linda prior to issuing building or grading permits. LLCCP info: http://www.lomalinda-ca.gov/asp/Site/LLCCP/AboutLLCCP/Introduction/index.asp

19. Development Impact Fees shall be paid to the City of Loma Linda prior to the issuance of any building and/or construction permits. It shall cover 100 percent of the pro rata share of the estimated cost of public infrastructure, public art, facilities, and services.

20. Prior to issuance of any Building and/or Construction Permits, the applicant shall submit to the Community Development Department (Building and Safety Division) proof of payment or waiver from the City of San Bernardino for sewer capacity fees and the Redlands Unified School District for school fees.

21. If any condition is violated or if any law, statute ordinance is violated, this permit may be revoked by the Community Development Department, as may be applicable; provided the Applicant has been given written notice to cease such violation and has failed to do so for a period of 30 days.

22. All installed address signage shall be illuminated.

Landscaping

1. During the Plan Check process, the Applicant shall submit a Final Landscape Plan prepared by a state licensed Landscape Architect, subject to approval of the Planning and Building Divisions, as well as the Public Works Department for landscaping in the public right-of-way.

2. The Final Landscape Plan shall conform to the City's landscape regulations (LLMC Chapter 17.74) and the State Model Water Efficient Landscape Ordinance (LLMC Chapter 13.32).

3. The Landscape Plan shall depict all utility laterals, concrete improvements, and tree locations. Any modifications to the landscape plans shall be reviewed and approved by Public Works as well as the Planning and Building Divisions prior to issuance of permits.

4. Final landscape and irrigation plans shall be in substantial conformance with the approved Preliminary Landscape Plan and the Conditions of Approval including areas of public right-of-way. Any and all fencing or walls shall be illustrated on the Final Landscape Plan.

5. The Applicant shall provide a Certificate of Landscape Compliance from the Landscape Architect upon final inspection of the project.

6. The Applicant shall maintain the property and landscaping in a clean and orderly manner and all dead or dying plants shall be replaced with similar or equivalent type and size of vegetation.

7. For the lifetime of this permit, the Applicant shall replace all dead or missing plants and trees as to comply with the approved Landscape Plan on file.

PUBLIC WORKS/ENGINEERING DEPARTMENT (909) 799-4407

1. All applicable improvement plans shall be submitted to the Public Works Department for review and approval.

2. Prior to issuance of a grading permit, the Applicant must submit improvement plans on 24" x 36" sheets having the City's standard signature blocks. All plans must be drawn in ink and must be signed by a California State Registered Civil Engineer at the time of first submittal. Applicant must submit improvement plans for the entire project as one package and must include all project improvements shown on the approved project exhibits and those to be designed per these Conditions. Piecemeal submittal of plans is not acceptable. Plans and studies must be signed by a California State Registered Civil Engineer at the time of first submittal. This package must include all supporting studies. For Title Block information, please reach out to Henry Reed at Hreed@lomalinda-ca.gov.

3. The precise grading plan with hydrology study, hydraulic calculations, and soils report for the project shall be approved by the City of Loma Linda Public Works Department prior to issuance of any building permits.

4. The Applicant shall submit final grade certifications, by the grading engineer, to the Public Works Department prior to issuance of any Certificate of Occupancy.

5. The Applicant shall coordinate with Public Works and comply with City adopted policies and ordinances regarding the reduction of construction and demolition (C&D) materials, including a required solid waste management plan.

6. National Pollutant Discharge Elimination System (NPDES) requirements apply, including SWPPP and WQMP.

7. The project shall comply with the Low Impact Development (LID) Principles and LID Best Management Practices (BMPs) for Southern California.

8. The City of Loma Linda shall be the water and sewer purveyor.

9. The Applicant shall pay for the relocation of any power poles or other existing public utilities as necessary.

10. Any abandoned wells on the property or similar structures shall be destroyed in a manner approved by the Public Works Department in accordance with the State of California Department of Health Services or other appropriate oversight agency.

11. All underground structures, except those desired to be retained, shall be broken in, backfilled, and inspected before covering.

12. The Applicant shall obtain design and plan approval from all applicable utility providers having jurisdiction over the on-site and off-site utilities. Completion of all undergrounding of on-site and off-site utilities. Completion of all undergrounding of on-site and off-site utilities is required and shall be in accordance with plans and specifications approved by the City Engineer. The City of Loma Linda shall be the water and sewer purveyor.

13. Any damage to existing improvements as a result of the project shall be repaired by the Applicant to the satisfaction of the City Engineer.

14. Prior to issuance of a grading permit, the Applicant shall submit and gain approval of a complete Water Quality Management Plan report in accordance with the County of San Bernardino Technical Guidance Document and latest template.

BUILDING AND SAFETY DEPARTMENT (909) 799-2836

1. The Applicant shall submit construction plans through the City's Online Permit Portal for Building and Safety plan check. Plans submitted on or before December 31, 2025, shall comply with the 2022 California Building Standards Code and California Fire Code. Plans submitted on or after January 1, 2026, shall comply with the 2025 California Building Standards Code and California Fire Code, as adopted by the City.

2. The Applicant shall also submit the structural calculations and Title 24 plans.

3. Disabled access parking shall be located on the shortest accessible route.

4. During construction of the site, the project shall comply with Section 9.20 (Prohibited Noises) which limit construction activities to the hours between 7:00 a.m. to 8:00 p.m. Monday through Friday, with no heavy construction occurring on weekends or national holidays. Additionally, all equipment is required to be properly equipped with standard noise muffling apparatus. Adhering to the City's noise ordinance would ensure impacts from construction noise would be less than significant.

5. The Applicant shall comply with the LLMC, Chapter 17.24.310 and the California Green Building Standard Code, Section 5.106 to reduce light pollution.

6. The Applicant shall implement SCAQMD Rule 403 and standard construction practices during all operations capable of generating fugitive dust, which will include but not be limited to the use of best available control measures and reasonably available control measures such as:

a. Water active grading areas and staging areas at least twice daily as needed.
b. The Applicant shall ensure that all disturbed areas are treated to prevent erosion until the site is constructed upon.
c. The Applicant shall ensure that landscaped areas are installed as soon as possible to reduce the potential for wind erosion.
d. Suspend grading activities when wind gusts exceed 25 mph;
e. Sweep public paved roads if visible soil material is carried off-site;
f. Enforce on-site speed limits on unpaved surface to 15 mph; and
g. Discontinue construction activities during Stage 1 smog episodes.

7. The Applicant shall work with the City's franchised solid waste hauler (CR&R) to follow a debris management plan to divert the material from landfills by the use of separate recycling bins (e.g., wood, concrete, steel, aggregate, glass) during demolition and construction to minimize waste and promote recycle and reuse of the materials.

8. The Applicant shall ensure that existing power sources are utilized where feasible via temporary power poles to avoid on-site power generation during construction.

9. The City enforces the State of California provisions of the California Building Code disabled access requirements. The Federal ADA standards differ in some cases from the California State requirements. It is the building owner's responsibility to be aware of those differences and comply accordingly.

10. The Applicant shall ensure that construction personnel are informed of ride sharing and transit opportunities.

11. To reduce emissions, all equipment used in grading and construction must be tuned and maintained to the manufacturer's specification to maximize efficient burning of vehicle fuel.

12. Separate submittals and permits are required for all additional accessory structures not part of this approval such as, but not limited to, trash enclosures, patios, block walls, and storage buildings.

13. The applicant shall comply with all existing and future CARB and SCAQMD regulations related to diesel-fueled trucks, which may include among others: (1) meeting more stringent emission standards; (2) retrofitting existing engines with particulate traps; (3) use of low sulfur fuel; and (4) use of alternative fuels or equipment.

FIRE DEPARTMENT (909)799-2853

1. Building and Fire Code Standards will reference 2022 CBC and CFC.

2. CFC Chapter 33 shall be maintained at all times during construction/demolition.

3. NASFM Construction Fire Safety Training is required for PM and site supervisors.

4. Fire Safety Plan to be reviewed and approved by AHJ prior to start of construction.

5. No lumber drops until fire underground is installed and tested, and fire department access points and road have been established.

6. The Applicant shall submit plans to the Fire Department for a NFPA 13 sprinkler system.

7. The Applicant shall submit plans to the Fire Department for a NFPA 72 Fire alarm system.

8. The building shall feature an illuminated address per LLMC 15.28.190 Section 505.1.

9. The applicant shall submit a request to the Fire Marshal for the assignment of a new address.

10. A deferred submittal shall be required for the Fire Underground Loop System.

11. B-107.2 Specifics: Any development within the City of Loma Linda that consists of more than a single structure on a commercially developed site; multiple floor commercial structures; multi-family commercial residences or fire flow requirements in excess of 2000 gpm will require a two point of connection full looped fire supply to the development. All required onsite fire hydrants will be supplied from this looped system and will be private to the development. When there are practical difficulties involved in carrying out the provisions of this ordinance the Fire Code Official is authorized to grant modifications for individual cases on application in writing by the owner or a duly authorized representative. The code official shall first fnd that a special reason makes enforcement of the strict letter of the ordinance impractical and any modification or change does not lessen any fire protection requirements. If so changes or modifications may be approved by the Fire Code Official or Fire Chief.

12. 509.3 Access to equipment in multi-unit buildings. When automatic fire sprinkler systems or fire alarm systems are installed in buildings constructed for multiple tenants and these systems protect multiple tenant spaces, the main controls and control appurtenances, such as risers, fire alarm control panels, and valves for such systems, shall be located in an

attached or included room or an approved weather-resistant enclosure with at least one exterior access door of not less than 3′-0″ by 6′-8″.

END OF CONDITIONS

Applicant Statement

I have read and accept responsibility for the Conditions of Approval. I agree to abide by and conform to the Conditions of Approval and the provisions of the Loma Linda Municipal Code pertaining to the project.

_____
Printed Name of Applicant

_____
Signature of Applicant

_____
Date

City of Loma Linda

Planning Commission Staff Report

A. Approval of Minutes 06-17-2026

Meeting	Agenda Group
Wednesday, July 15, 2026, 6:00 PM	Approval of Minutes Item: 4A.

Approval of Minutes for Minutes of June 17, 2026.

Attachments

Planning Commission-06-17-2026-minutesDraft.pdf

**** The following document is a draft of the minutes and the not the official approved minutes ****

Minutes for the Planning Commission

25541 Barton Road, Loma Linda, CA 92354

June 17, 2026, 6:00 PM - June 17, 2026, 7:00 PM

1. Call to Order

1.A. Call to Order

Chairman John Nichols called the meeting to order at 6:00PM.

1.B. Roll Call

Roll Call: (The following members were in attendance)

- John Nichols, Chairman
- Ryan Gallant, Vice-Chairman
- Larry Karpenko, Commissioner
- Doree Morgan, Commissioner
- Jay Nelson, Commissioner

Staff Present:

- Lorena Matarrita, Community Development Director
- Gabriel Rivera, Associate Planner
- Tiffany Colwell, Administrative Specialist II
- Diane Robbins, City Attorney

1.C. Pledge of Allegiance

1.D. Items to be Added or Deleted

No items to be added or deleted.

1.E. Conflict of Interest Disclosure

N/A

2. Public Comments on Non-Agenda Items (LIMITED TO 30 MINUTES; 3 MINUTES ALLOTTED FOR EACH SPEAKER)

2.A. Public Comments

No public comments.

3. Scheduled Items

3.A. Reorganization of Chairperson and Vice-Chairperson

Secretary opened nominations in order for Planning Commission Chairman.

Commissioner Nelson nominated John Nichols for Chairman. Motion moved by Commissioner Nelson, 2nd by Commissioner Karpenko

Ayes have unanimous votes.

Chairman Nichols opened nominations for Planning Commission Vice-Chair.

Commissioner Morgan nominated Ryan Gallant for Vice-Chair. Motion moved by Commissioner Morgan, 2nd by Commissioner Nelson.

Ayes have unanimous votes.

Motion by Commissioner Doree Morgan, seconded by Commissioner Jay Nelson and passing by a vote of 5-0-0-0-0
Motion by Commissioner Jay Nelson, seconded by Commissioner Larry Karpenko and passing by a vote of 5-0-0-0-0

4. Public Hearing Items

4.A. Public Hearing to Consider Municipal Code Amendments Establishing Regulations for Short-Term Rentals and Permitting Short-Term Rental Uses Within Residential and Planned Community Zones

Associate Planner Gabriel Rivera presented the proposed Short-Term Rental (STR) ordinance, including a new chapter establishing STR regulations and related amendments to the Zoning Code.

Staff reported that the City currently has approximately 30 active, unregistered STRs and explained that the proposed ordinance is intended to regulate existing and future STR operations, as well as help generate revenue. Staff summarized the ordinance's key provisions, including operational standards; compliance with Transient Occupancy Tax (TOT) and property maintenance requirements; and submission of house rules, owner or host contact information, and parking regulations. Staff also clarified that Accessory Dwelling Units (ADUs), motorhomes, and mobile homes would not be permitted as STRs. Additional discussion addressed permit fees, occupancy standards, parking limitations, enforcement procedures, and the treatment of existing versus new STR applications.

The Commission discussed the proposed provision authorizing permit revocation after two or more verified calls for service from Code Enforcement, the Fire Department, or other public safety agencies. Staff clarified that any enforcement

action, including permit revocation, would be subject to the City's established due process procedures.

Commissioner Karpenko discussed the distinction between hosted and unhosted STRs and expressed support for a 120-day operational limit to preserve neighborhood character. Director Matarrita noted that limiting unhosted STRs could result in vacant homes, up to eight months out of the year, remaining unattended when owners are absent.

The Commission also requested that staff provide periodic reports on STR activity, including the number of permits, hosted versus unhosted STRs, calls for service, and permit revocations.

The Commission approved with the following recommendations:

1. Modify Section 5.26.070 subsection 7 to modify the overconcentration limitation from a 300 foot radius to 1 short-term rental unit per 300 feet lineal feet measured from the property line.
2. Include a section which would allow the Traffic Advisory Committee to limit short-term rental parking on streets with a substandard width.
3. Limit occupancy for short-term rentals to two persons per bedroom, plus an additional two persons. Children under the age of 2 would be exempt from this occupancy limit.

Motion by Commissioner Doree Morgan, seconded by Commissioner Ryan Gallant and passing by a vote of 5-0-0-0-0

4.B. Public Hearing to Consider Municipal Code Amendments Establishing Regulations for City Communication Signs

Associate Planner Gabriel Rivera presented the staff report on proposed Municipal Code amendments to establish regulations for City communication signs.

The Commission discussed sign type versus sign content regulations, as well as the distinction between on-site and off-site advertising. Staff explained that while the City cannot regulate sign content, it may regulate sign type and design to ensure consistency with City standards and work with a future applicant to minimize the display of inappropriate materials.

Planner Rivera explained that the proposed digital sign is anticipated to be located on City-owned property along the Interstate 10 freeway frontage and will be subject to review and approval by the California Department of Transportation before the Planning Commission may consider the required Conditional Use Permit.

Commissioner Karpenko expressed concern that allowing the City to generate revenue through an exception to the sign regulations could be perceived negatively. Director Matarrita responded that the Municipal Code already contains exceptions for certain standards, citing the Medical Center as an example, where buildings are permitted to exceed the City's standard three-story height limit. She further stated that permitting off-site signage throughout the City could contribute to sign pollution and set an undesirable precedent; therefore, the amendment is narrowly tailored to allow a City communication sign that generates revenue while limiting the proliferation of off-site advertising.

Motion by Commissioner Doree Morgan, seconded by Commissioner Ryan Gallant and passing by a vote of 3-1-1-0-0 Opposed by Larry Karpenko Abstained by Jay Nelson

5. Approval of Minutes

Motion by Commissioner Ryan Gallant, seconded by Commissioner Doree Morgan and passing by a vote of 5-0-0-0-0

5.A. Approval of Minutes for Minutes of April 15, 2026

Minutes approved for minutes of April 15, 2026.

6. New Business

7. Reports

7.A. Commissioners’ Reports

No Reports from Commissioners.

7.B. Director's Reports

No Reports from Director.

8. Adjournment

8.A. Adjournment

Chairman John Nichols adjourned the meeting at 7:41PM.