CITY OF FULLERTON

SAFE STREETS AND ROADS FOR ALL ACTION PLAN

2026





Fullerton SS4A Action Plan

May 2026

Prepared for
City of Fullerton

Prepared by
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CH 1.
PROJECT OVERVIEW

What is Safe Streets and Road for All (SS4A)?

Transportation is an essential part of daily life in the City of Fullerton, shaping how residents access key destinations such as workplaces, schools, healthcare facilities, grocery stores, and their homes. The way people travel—whether by walking, biking, rolling, driving, or using public transit—is closely tied to the design and quality of the transportation system.

However, some routes in Fullerton present perceived challenges to travelers due to various factors, including roadway design, surrounding land use, and traffic conditions. These challenges can create obstacles to safe, convenient, and equitable mobility for all community members.

To address these challenges and enhance safety across the City's streets, the City of Fullerton is developing a Safe Streets and Roads for All Action Plan (Plan). This initiative will provide a comprehensive framework to guide future transportation safety improvements and help create safer, more accessible streets for everyone.

This effort is part of a broader initiative supported by the federal Safe Streets and Roads for All (SS4A) grant program and serves as a framework for developing key plan elements and securing future funding.

Plan Areas & Goals

The primary objective of the plan is to improve roadway safety by reducing the number of traffic-related fatalities and serious injuries. To achieve this, the plan addresses multiple key components of safety action planning, including:

- Assess existing policies and processes within the City to identify opportunities for enhancement and ensure new efforts build upon, rather than duplicate previous work.
- Data driven process to understand traffic safety patterns, crash trends, and high injury networks.
- Collaboration among stakeholders, government agencies, and community members to identify shared priorities and build consensus around transportation safety initiatives.
- Analyze the impacts of traffic safety on vulnerable populations, including residents with limited access to vehicles and those who rely on assisted mobility devices.
- Identify priority project locations through analysis of data, policies, and community input, and develop targeted countermeasures and recommendations for each site.

The City of Fullerton has a public commitment to reduce roadway fatalities and serious injuries to zero by 2040

Safe System Approach

The Safe System Approach, adopted by the U.S. Department of Transportation (USDOT), is a comprehensive roadway safety framework aimed at reducing risk throughout the transportation system. It focuses on preventing crashes and lessening their severity by recognizing both human error and physical vulnerability. This approach promotes a multi-layered strategy that includes safe infrastructure design, responsible human behavior, effective industry practices, and efficient emergency response.



Planning Structure

To develop this Action Plan, an Advisory Group was formed to participate and review the process. Two other City of Fullerton boards also served as key structures in the development of this plan.

Advisory Group

Formed specifically for the development of this action plan, the Advisory Group is comprised of seven members, all of whom are residents and/or key stakeholders within the City of Fullerton.

Transportation and Circulation Commission

The Transportation and Circulation Commission is a board within the City of Fullerton which acts in an advisory capacity to the City Council in the review and development of systems, facilities, plans, policies and programs that relate to public transportation and circulation within the City. The Commission is comprised of five members of the City of Fullerton and residents whom are appointed by Council members.

Active Transportation Committee

The Active Transportation Committee is a board within the City of Fullerton which reviews policies, plans and projects affecting active transportation in the City of Fullerton. The committee is comprised of five members (one seat is vacant at time of writing). Members are residents of the City of Fullerton whom are appointed by council members.

Components of a SS4A Action Plan

Table 1.1 Components of a SS4A Action Plan

	Question	Response, Document and Page Number
1. Leadership Commitment and Goal Setting	Are BOTH of the following true? • A high-ranking official and/or governing body in the jurisdiction publicly committed to an eventual goal of zero roadway fatalities and serious injuries; and • The commitment includes either setting a target date to reach zero OR setting one or more targets to achieve a reduction in roadway fatalities and serious injuries by a specific date.	Yes Fullerton SS4A Action Plan, pg. 9
2. Planning Structure	To develop the Action Plan, was a committee, task force, implementation group, or similar body established and charged with the plan's development, implementation, and monitoring?	Yes Fullerton SS4A Action Plan, pg. 11
3. Safety Analysis	Does the Action Plan include ALL of the following? • Analysis of existing conditions and historical trends to provide a baseline level of crashes involving fatalities and serious injuries across a jurisdiction, locality, Tribe, or region; • Analysis of the location(s) of crashes, the severity, contributing factors, and crash types; • Analysis of systemic and specific safety needs, as needed (e.g., high-risk road features or specific safety needs of relevant road users); and, • A geospatial identification (geographic or locational data using maps) of higher risk locations.	Yes Fullerton SS4A Action Plan, pg. 27 - 36

	Question	Response, Document and Page Number
4. Engagement and Collaboration	Did development of the Action Plan include ALL of the following activities? • Engagement with the public and relevant stakeholders, including the private sector and community groups; • Incorporation of information received from the engagement and collaboration into the plan; and • Coordination that included inter- and intra-governmental cooperation and collaboration, as appropriate.	Yes Fullerton SS4A Action Plan, pg. 37 - 53
5. Policy and Process Changes	Are BOTH of the following true? • The plan development included an assessment of current policies, plans, guidelines, and/or standards to identify opportunities to improve how processes prioritize safety; and • The plan discusses implementation through the adoption of revised or new policies, guidelines, and/or standards.	Yes Fullerton SS4A Action Plan, pg. 18 - 26, 95
6. Strategy and Project Selections	Does the plan identify a comprehensive set of projects and strategies to address the safety problems in the Action Plan, with information about time ranges when projects and strategies will be deployed, and an explanation of project prioritization criteria?	Yes Fullerton SS4A Action Plan, pg. 54 - 61, 96
7. Progress and Transparency	Does the plan include BOTH of the following? • A description of how progress will be measured over time that includes, at a minimum, outcome data. • The plan is posted publicly online.	Yes Fullerton SS4A Action Plan, pg. 95

Goal of this Action Plan

The Infrastructure Investment and Jobs Act (IIJA) established the Safe Streets and Roads for All (SS4A) discretionary program, providing $5 billion in funding over five years from 2022 to 2026. The SS4A program supports the U.S. Department of Transportation's National Roadway Safety Strategy and our goal of zero roadway deaths using a Safe System Approach. The SS4A program funds regional initiatives through grants to prevent roadway fatalies and serious injuries.



Eliminating Traffic Fatalities & Serious Injuries

The SS4A program prioritizes safety improvements that prevent deaths and severe injuries for all road users.



Improving Collaboration & Stakeholder Engagement

Encouraging partnerships between local governments, transportation agencies, community organizations, and the public, to develop effective safety strategies.



Promoting Transportation Safety for All

Addressing disparities in traffic safety by prioritizing support and interventions for historically underserved and high-risk communities.



Identifying & Prioritizing Safety Investments

Laying the groundwork for implementing safety improvements through funding opportunities, including future SS4A implementation grants.



Enhancing Data-Driven Decision-Making

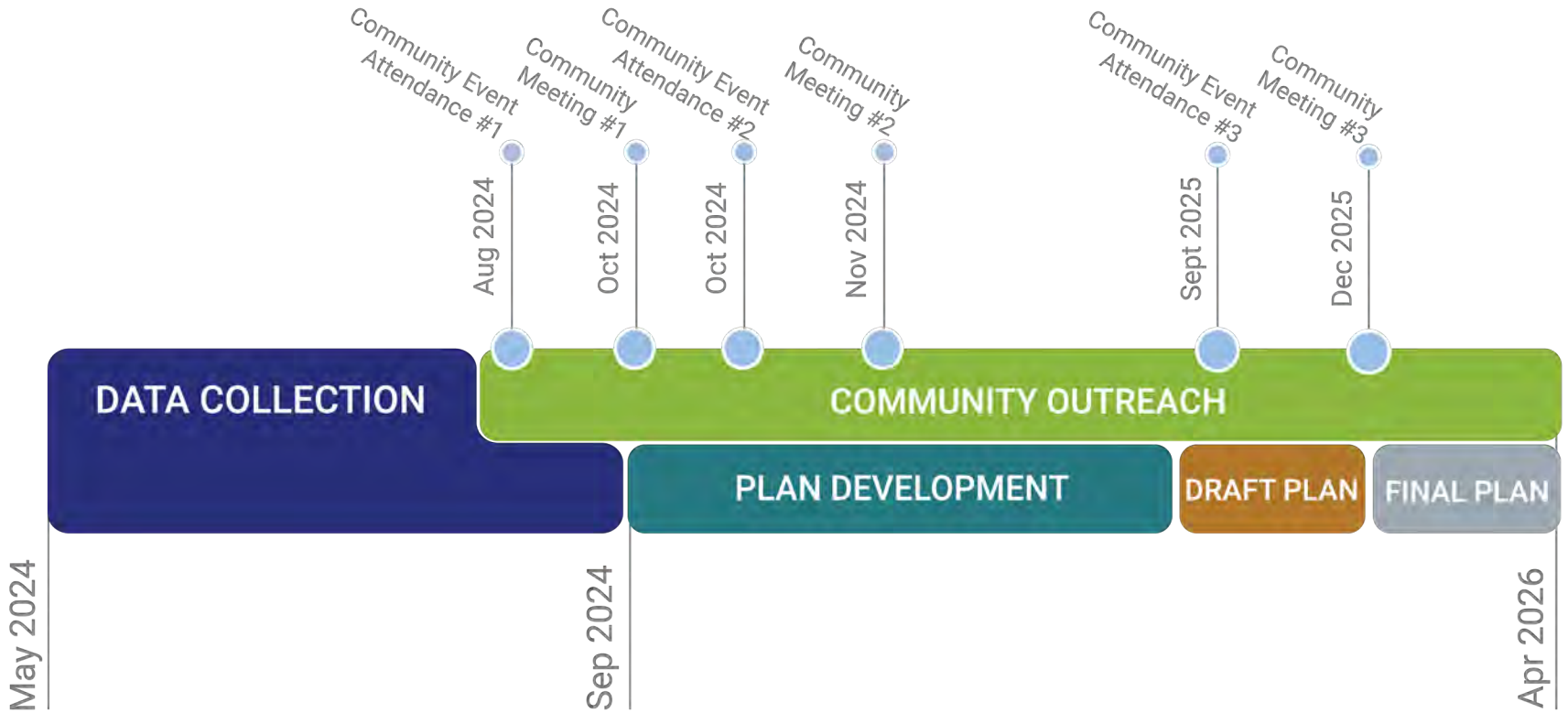
Utilizing crash data, GIS analysis, and safety assessments to identify more vulnerable locations and develop targeted countermeasures.



Advancing Systemic & Proactive Safety Measures

Moving beyond reactive safety improvements by adopting systemic strategies, such as speed management, road diets, and intersection safety enhancements.

Project Schedule



About the City of Fullerton

The City of Fullerton is located in northern Orange County within the Greater Los Angeles metropolitan area, approximately 25 miles southeast of Downtown Los Angeles. It is bordered by Anaheim to the south, Buena Park to the west, La Habra/Brea to the north, and Placentia to the east. The city is well-connected through major transportation networks, including Riverside Freeway (SR-91), Orange Freeway (SR-57), and Santa Ana Freeway (I-5), which provide regional east-west and north-south access. The Fullerton Transportation Center is also a key stop for Metrolink commuter rail as well as Amtrak rail services. The Metrolink Orange County and 91/Perris Valley have stops at this station, offering commuter rail service to Los Angeles, Riverside, and beyond. The Amtrak Pacific Surfliner and Southwest Chief offer intercity rail services to destinations throughout Southern California and beyond. The Amtrak Pacific Surfliner travels along the Southern California coastline, connecting San Diego and San Luis Obispo. The Southwest Chief is a long-distance passenger train connecting Chicago and Los Angeles. Local and regional transit is provided by the Orange County Transportation Authority (OCTA).

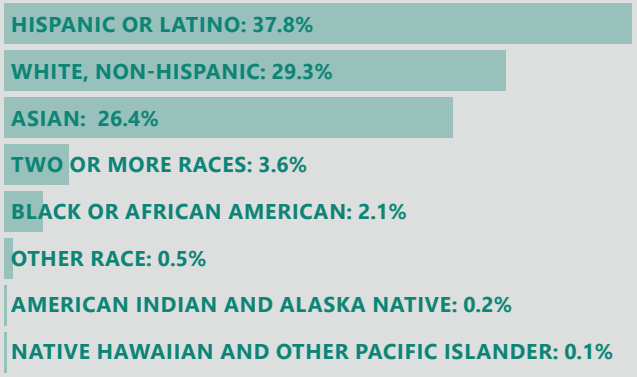
The City of Fullerton is an important education hub, home to California State University, Fullerton (CSUF) and Fullerton College. The City has a diverse economic base that includes healthcare, education, technology, and manufacturing industries, with strong connections to the broader Southern California economy. Downtown Fullerton serves as a cultural and commercial center, featuring a mix of historic preservation and modern development.

142,280
POPULATION

$99,279
MEDIAN HOUSEHOLD INCOME

36%
OF THE POPULATION IS UNDER 18 OR OVER 65 YEARS OLD

RACE & ETHNICITY



Decennial Census 2020

COMMUTING PATTERNS

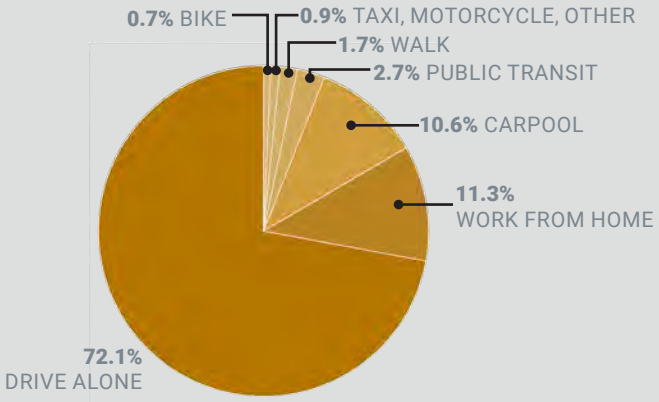
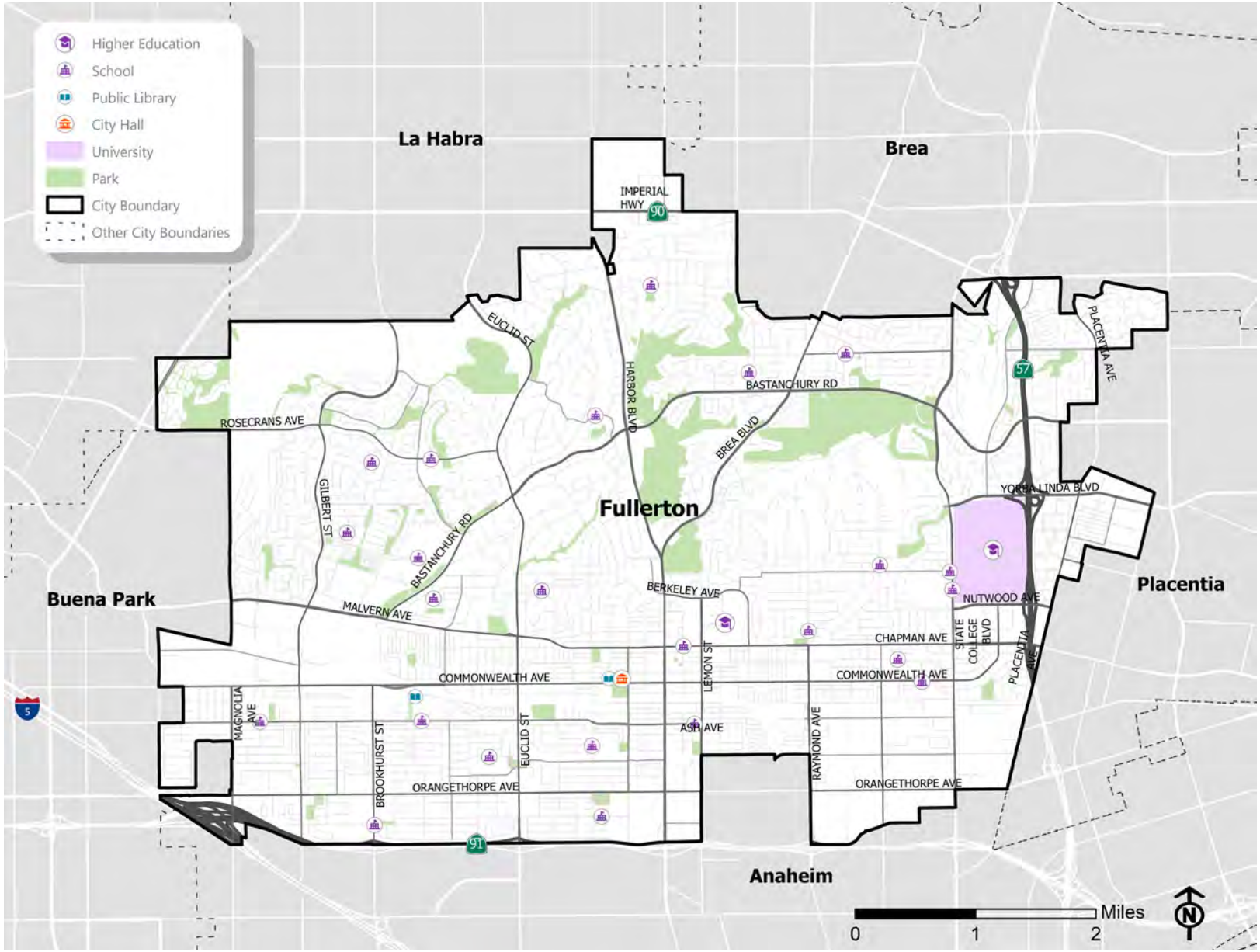


Figure 1.1 Project Area



Policy Context

The City of Fullerton is committed to providing its residents with access to safe, practical, and quality transportation facilities. The City continues to collaborate and coordinate with local stakeholders, neighboring municipalities, and regional agencies to develop policies and recommendations consistent with the region's end goal to create a sustainable, multi-modal transportation system. The following are the planning policies, guidelines, and related projects fundamental to the development of the City's multi-modal Safety Action Plan.

CITY OF FULLERTON GENERAL PLAN (2012)

The City of Fullerton outlined its long-term vision in the General Plan in 2012. The Fullerton SS4A Action Plan will supplement the following General Plan goals and policies that call out for a safer built environment that encourages all modes of transportation:

City of Fullerton Community Development Element

- **Community Development Policy P1.4:** "Connection and Integration of Uses"
- **Community Development Policy P1.13:** "Universal Design"

City of Fullerton Mobility Element

- **Mobility Element Goal:** "A balanced system promoting transportation alternatives that enable mobility and an enhanced quality of life."
- **Mobility Element Policy P5.2:** "Reduction of Single Occupant Vehicle Trips"
- **Mobility Element Policy P5.6:** "Quality Highways and Roads"
- **Mobility Element Policy P5.7:** "Complete Streets"
- **Mobility Element Policy P5.8:** "Maximization of Person-Trips" [over Vehicle-Trips]

City of Fullerton Bicycle Element

- **Bicycle Element Goal:** "A bicycle-friendly city where bicycling is a safe and convenient alternative to motorized transportation and a recreational opportunity for people of all ages and abilities."
- **Bicycle Element Policy P6.1:** "Consideration of Bicyclists"
- **Bicycle Element Policy P6.5:** "Bicycling Safety and Convenience"
- **Bicycle Element Policy P6.6:** "Safe Travel to Key Destinations"
- **Bicycle Element Policy P6.8:** "Multi-Tiered Bicycle Network"
- **Bicycle Element Policy P6.9:** "Intersection Safety"
- **Bicycle Element Policy P6.12:** "Bicycle Parking and Facilities"



CITY OF FULLERTON BICYCLE MASTER PLAN (2012)

The Plan establishes the goal of a bicycle-friendly city where bicycling is a safe and convenient alternative to motorized transportation and a recreational opportunity for people of all ages and abilities. The Plan includes the following policies that pertain to roadway safety:

- **Bicycle Plan Policy P1:** Support regional and subregional efforts to ensure bicyclists are considered when developing new or retrofitting existing transportation facilities and systems.
- **Bicycle Plan Policy P2:** Support efforts to maintain, expand and create new connections between the Fullerton bicycle network and the bicycle networks of adjacent cities, Orange County, and the region.
- **Bicycle Plan Policy P4:** Support projects, programs, policies, and regulations to recognize that every street in Fullerton is a street that a bicyclist can use.
- **Bicycle Plan Policy P5:** Support projects, programs, policies, and regulations that make bicycling safer and more convenient for all types of bicyclists.
- **Bicycle Plan Policy P6:** Support projects, programs, policies, and regulations to facilitate safe travel by bicycle to key destinations within the community and larger region.
- **Bicycle Plan Policy P7:** Support projects, programs, policies, and regulations to reduce negative impacts to, and increase opportunities for, bicycle users and the bicycle network in private and public development projects.
- **Bicycle Plan Policy P9:** Support projects, programs, policies, and regulations support the safe and efficient movement of bicyclists through and across intersections.
- **Bicycle Plan Policy P14:** Support projects, programs, policies, and regulations to consider bicycle friendly design using new technologies and innovative treatments.

The Plan proposes new bicycle off-street paths in the central and north parts of the City, which connect to Buena Park, La Habra, and Brea. Bike lanes are proposed on portions of Artesia Avenue, Orangethorpe Avenue, Placentia Avenue, Valencia Mesa Drive, and other streets. **Figure 1.2** on the following page shows the proposed network.

The Plan development included outreach activities where members of the public identified issues with safety, which included:

- Roadway users disregarding the rules of the road
- Bike lanes providing a false sense of security
- Debris in bike lanes
- Intersection and driveway conflicts

Members of the public also expressed a desire for:

- Multilingual education on rider safety
- Youth and parent education
- Public awareness campaigns to inform drivers that bicycles are allowed on all streets in Fullerton
- Consistent signage
- Bikeways through City parks
- Safer opportunities to cross State Route 57
- Sharrows wherever applicable
- Bike signal push buttons

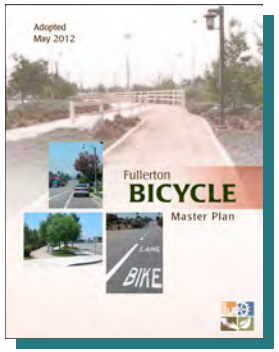
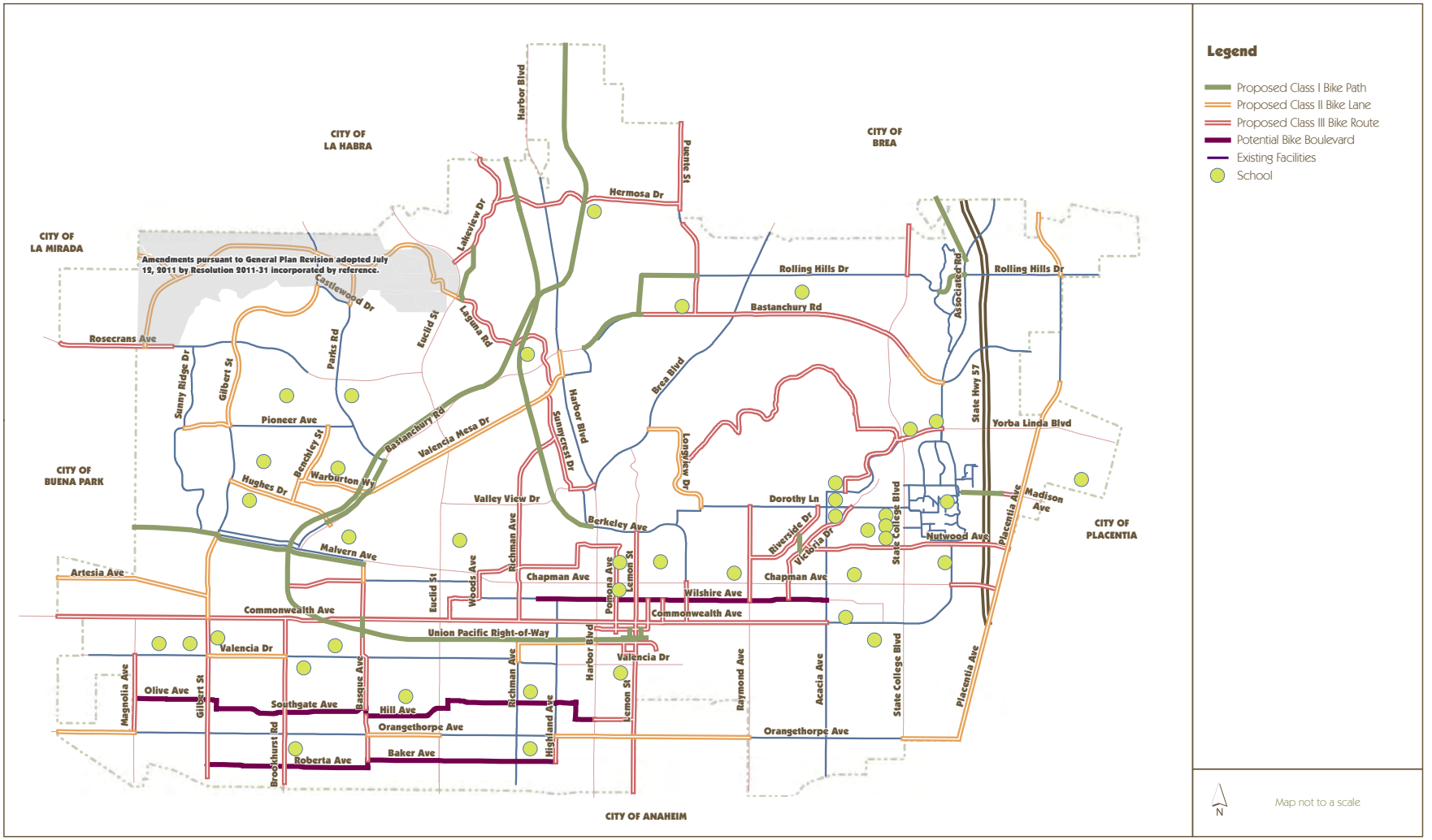


Figure 1.2 Proposed Bicycle Network



CITY OF FULLERTON LOCAL ROADWAY SAFETY PLAN (2022)

The City of Fullerton Local Roadway Safety Plan (LRSP) was developed to identify areas where safety improvements are needed based on collision data, geometric conditions, policies, and other considerations. The LRSP took a systemic approach to creating a safe roadway network, while identifying individual locations where specific countermeasures and improvements can help meet that goal. The LRSP used an analysis period of 2014 to 2019.

The collision assessment found that the top locations in the City where the most collisions took place are:

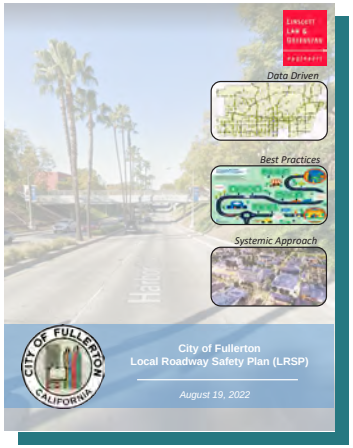
- Euclid St at Orangethorpe Ave
- Harbor Blvd at Orangethorpe Ave
- Placentia Ave at Yorba Linda Blvd
- Magnolia Ave at Orangethorpe Ave
- Commonwealth Ave at Chapman Ave
- Lemon Ave at Orangethorpe Ave
- Harbor Blvd at Chapman Ave
- Harbor Blvd at Commonwealth Ave
- Harbor Blvd at Houston Ave
- Harbor Blvd at Orangefair Ave

The roads that contain the corridors with the most collisions are:

- Orangethorpe Ave
- Harbor Blvd
- Brookhurst Rd

The collision assessment findings include:

- Fullerton ranks highly among cities of its size for Driving Under the Influence-related crashes
- Fullerton ranks highly among cities of its size for pedestrian fatalities
- Most collisions take place during daytime hours
- Pedestrian, bicycle, and motorcycle collisions represent a disproportionate share of fatal and severe-injury collisions
- Broadside collisions are the most common type at intersections, while rear-end collisions are the most common type at non-intersection locations
- Downtown Fullerton has a high number of collision totals



DOWNTOWN FULLERTON ON THE GO ACTIVE TRANSPORTATION PLAN (2022)

- The objective of the plan is to connect more people with jobs, goods, services, and public transit networks without or with less use of a car. The document proposes infrastructure and programmatic recommendations to enhance walking and biking, including specific projects and policies. The plan outlines several notable recommendations for enhancing active transportation in Downtown Fullerton.
- Bicycle Network: The plan proposes an additional 47 miles of new and upgraded bikeways in Downtown Fullerton. These include Class I bike paths, Class II bike lanes, buffered bike lanes, Class III bike routes, and separated bikeways.
- Pedestrian Priority District: Designating Downtown Fullerton as a Pedestrian Priority District (PPD) to prioritize pedestrian mobility and allow flexibility in city standards to better accommodate walking.
- Intersection Improvements: Specific improvements are suggested for key intersections. For example, increasing pedestrian crossing times and installing protected left-turn signals at Harbor Boulevard and Commonwealth Avenue. Also, a Pedestrian Hybrid Beacon (PHB) is recommended for installation at Harbor Boulevard and Ellis Place.
- Lighting Upgrades: Upgrading existing lighting at grade-separated roadways near the railroad tracks and improving lighting at intersections and along roadway segments to enhance pedestrian visibility and safety.
- Accessibility Improvements: Improving access to pedestrian push buttons to make them ADA accessible.
- Wayfinding: Installing a wayfinding system with signs and pavement markings to guide people to key destinations.

Figures 1.3 and 1.4, on the following page, show pedestrian and bicycle improvements under consideration as part of the plan.



Figure 1.3 Proposed Pedestrian Recommendations

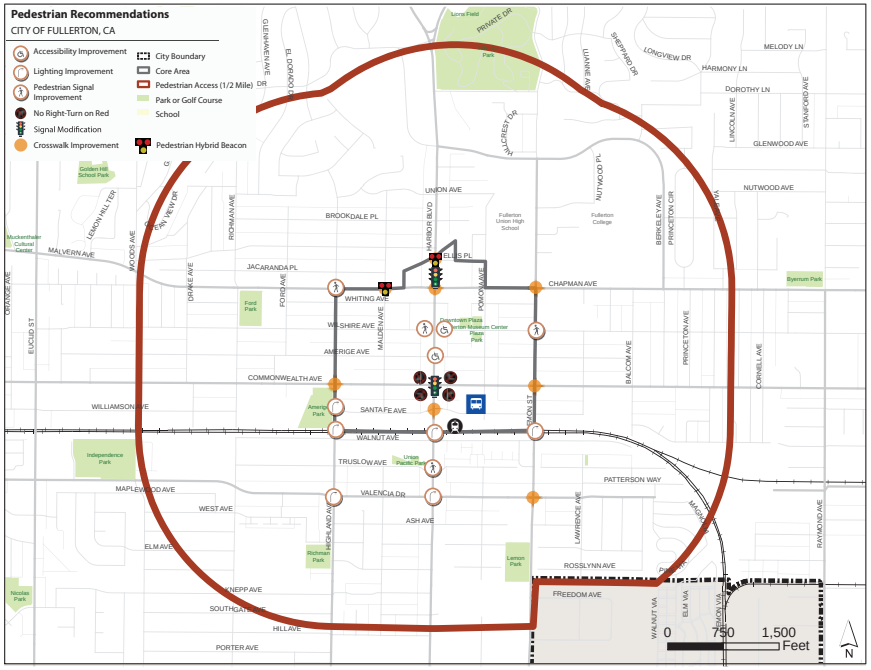
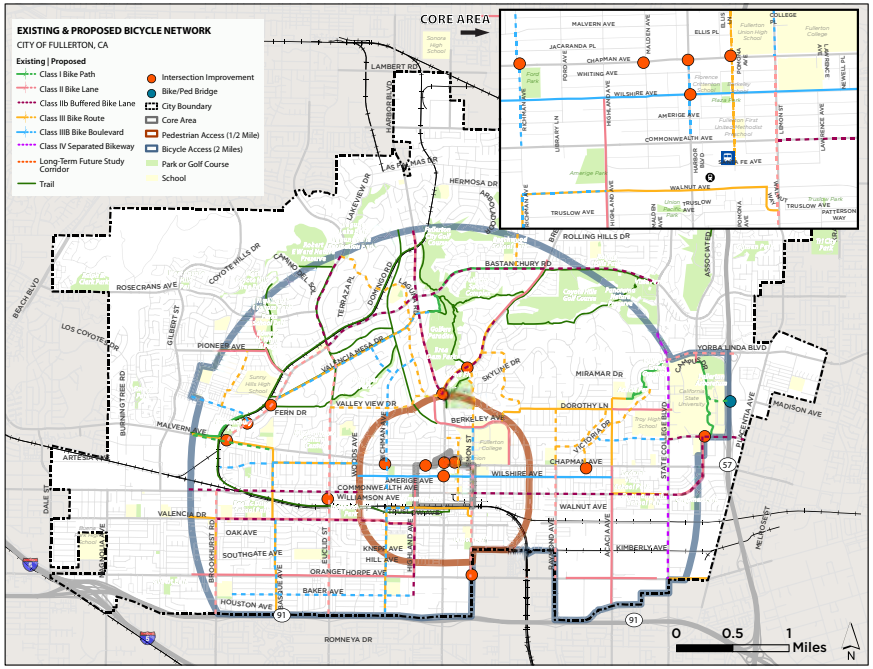


Figure 1.4 Proposed Bicycle Recommendations



OCTA LONG RANGE TRANSPORTATION PLAN (2022)

The OCTA Long Range Transportation Plan outlines the system-level vision for Orange County's transportation network out to the year 2045.

The Plan identifies the following safety concerns:

- At-grade rail crossings
- Poor pavement conditions posing safety issues for cyclists

The following types of projects are recommended in the Plan to address safety issues:

- Signal synchronization
- Active Transportation Investments

The development of the Plan included outreach efforts including surveys. The majority of respondents agreed that "Improving the efficiency and safety of roads and freeways is becoming more important as an alternative to major widening projects as state regulations and limited land availability are making it more difficult to add new lanes."

OCTA MASTER PLAN OF ARTERIAL HIGHWAYS (2024)

The OCTA Master Plan of Arterial Highways designates certain major roadways in Orange County under a set of classifications. The Plan exists to ensure consistency along roadways that serve regional traffic and pass through multiple jurisdictions. "Major" roadways in Fullerton include:

- Brea Boulevard between Imperial Highway and Harbor Boulevard
- Euclid Street between Imperial Highway and Bastanchury Road
- Harbor Boulevard between Berkeley Avenue and Lambert Road
- Bastanchury Road between Malvern Avenue and Valencia Avenue
- State College Boulevard between Imperial Highway and Lincoln Avenue

OC ACTIVE REPORT (2019)

The OC Active Report is a comprehensive Active Transportation Plan covering Orange County. The Report provides a framework for bikeway and pedestrian planning across the county and is compliant with statewide ATP requirements. The Plan analyzes each city within the County, including Fullerton.

Figure 1.5 shows the bikeway prioritization categorized into short-, medium-, and long-term in the Active Report. And **Figure 1.6** shows designated pedestrian focus areas within the City based on a pedestrian priority model.

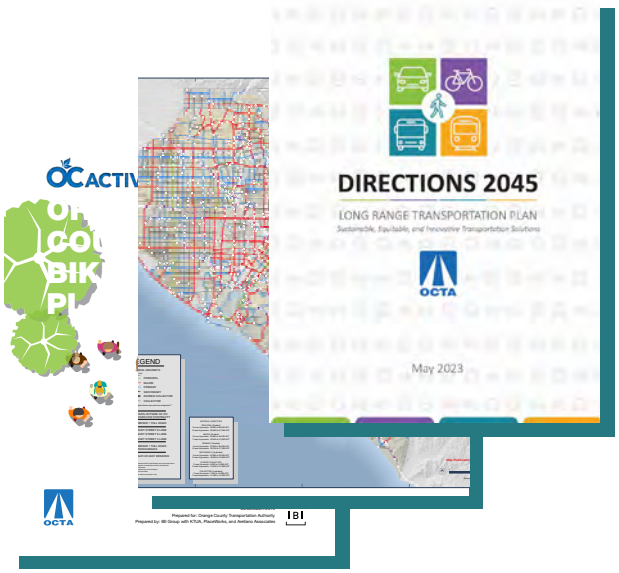


Figure 1.5 Fullerton Bikeway Prioritization

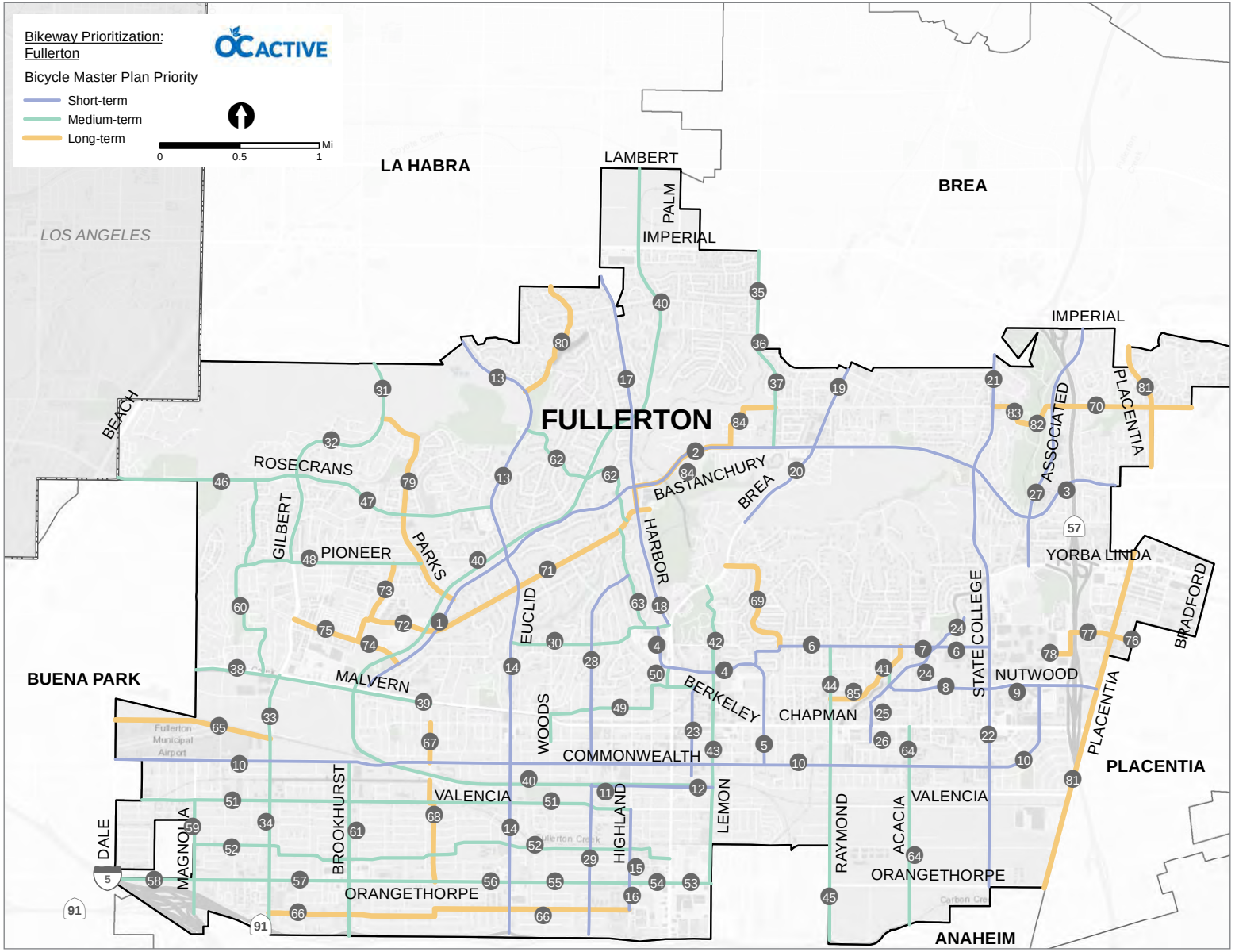
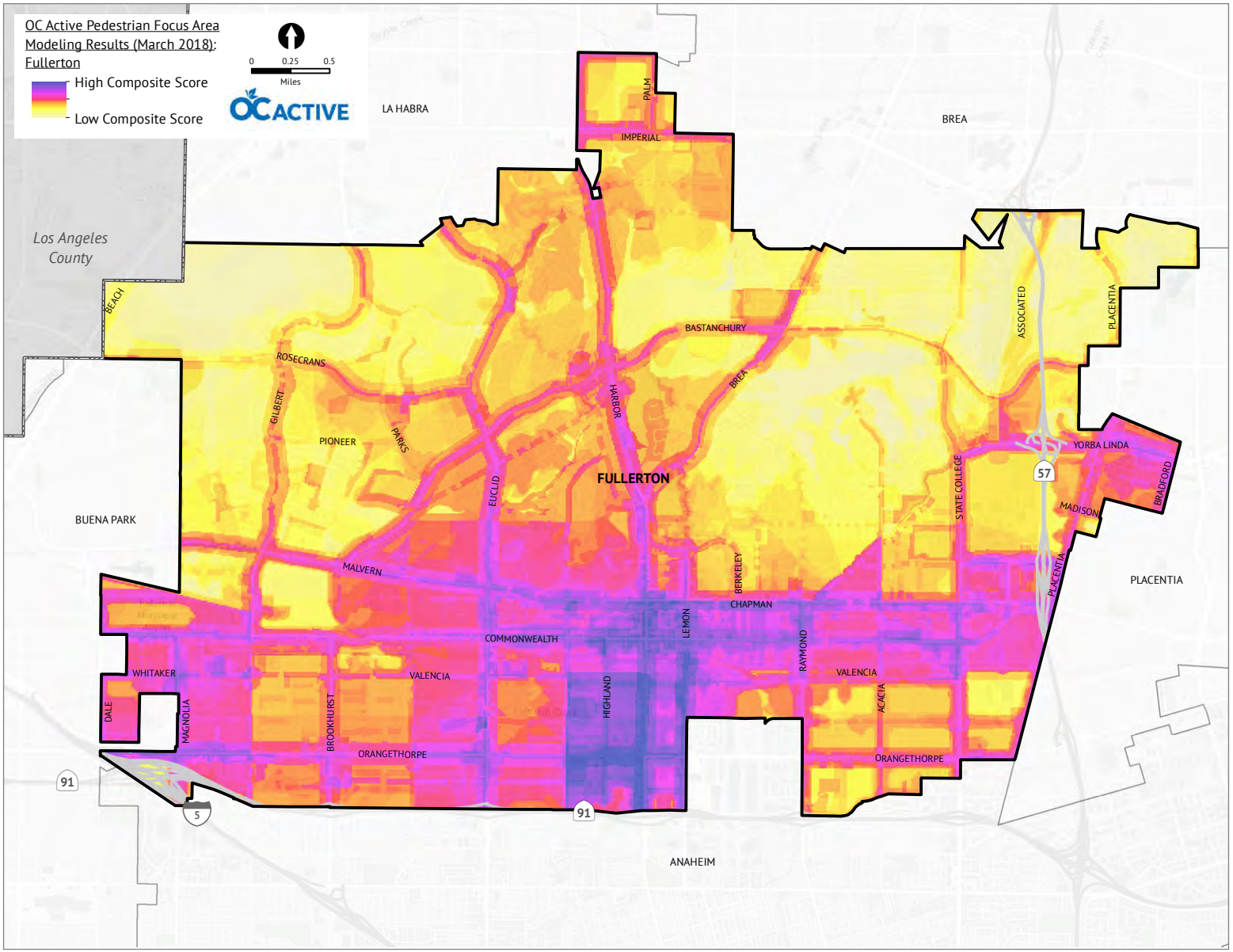


Figure 1.6 Fullerton Pedestrian Focus Area



CH 2.
SAFETY ANALYSIS

Collision Analysis

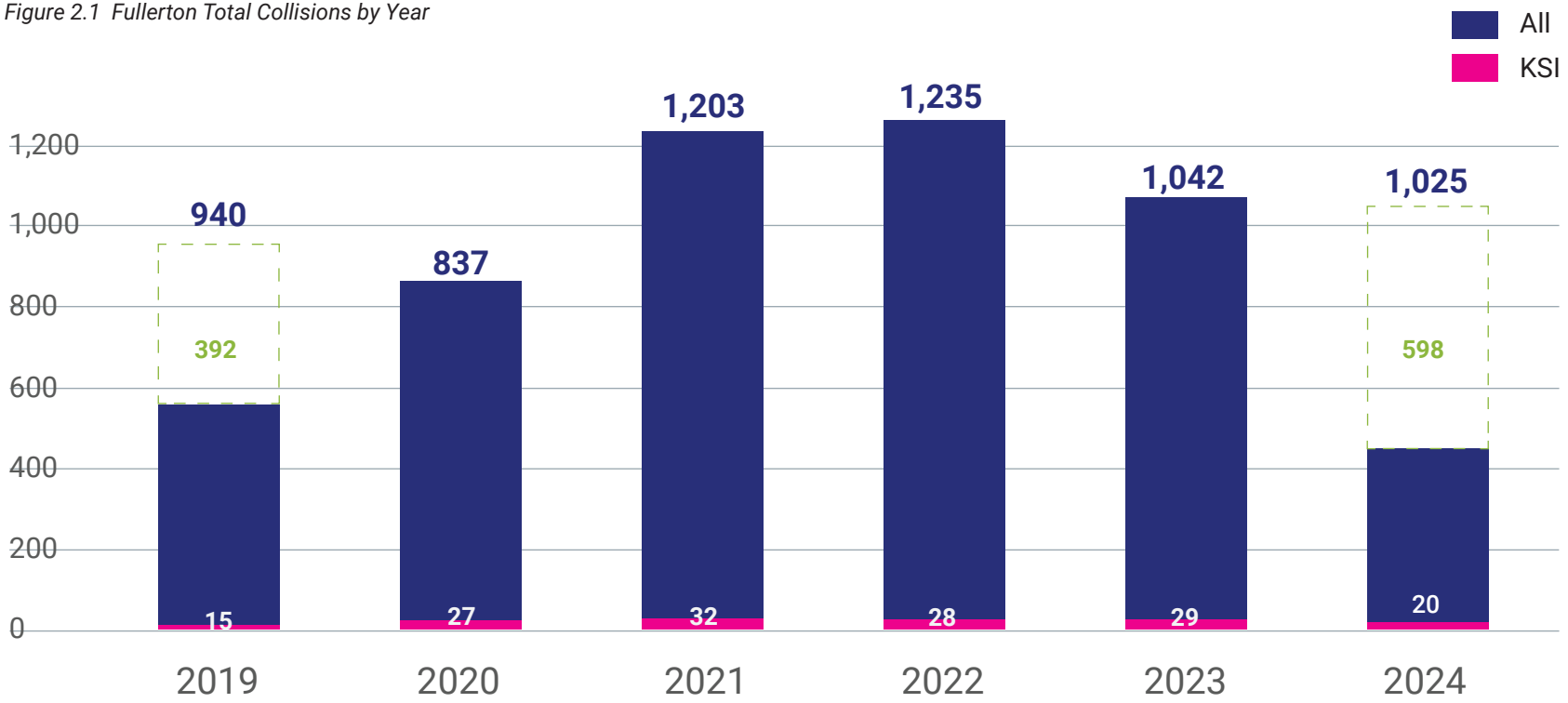
YEAR TREND

The collision trend analysis shows trends from June 1, 2019 to May 31, 2024, as it is reflective of the existing conditions that were considered during the development of the Plan. Crossroads collision data was provided by the City. During these five years, a total of 5,292 collisions occurred on city roadways.

Figure 2.1 shows that the annual number of collisions from June 1, 2019 to May 31, 2024.

There was a peak in collisions in 2022 followed by a period of decline. For 2024, the total number of collisions has been estimated based on current trends.

Figure 2.1 Fullerton Total Collisions by Year



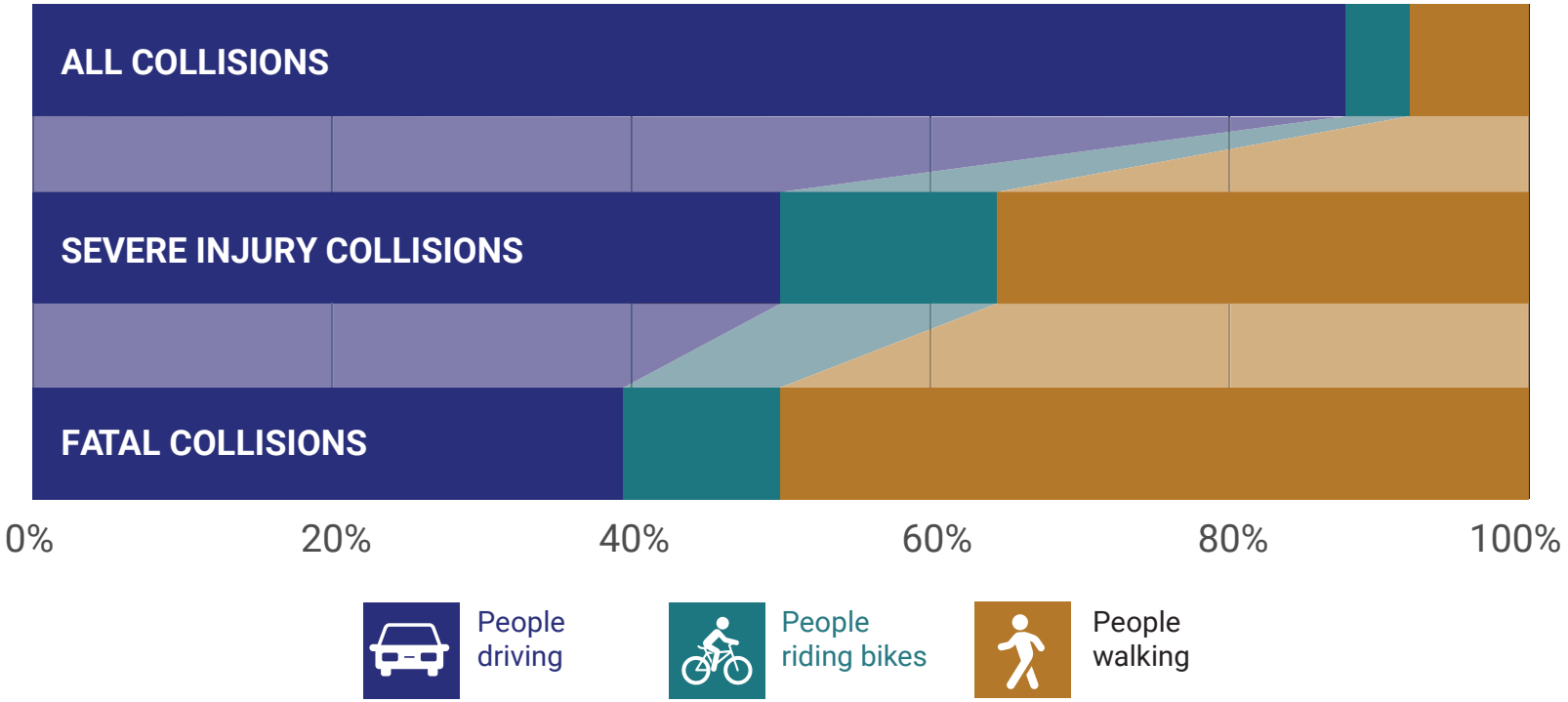
*Each year in Fullerton, an average of **30 people are killed or seriously injured (KSI)**, while traveling on our roads.*

WHO IS INVOLVED?

Crashes that result in death or serious injury disproportionately impact vulnerable road users—that is, those who are outside of a vehicle like people walking and biking.

Vulnerable road users also include people using wheelchairs and other mobility assistance devices, as well as electric bikes and scooters.

Figure 2.2 Disproportionate Impact of Crashes on Road User Modes



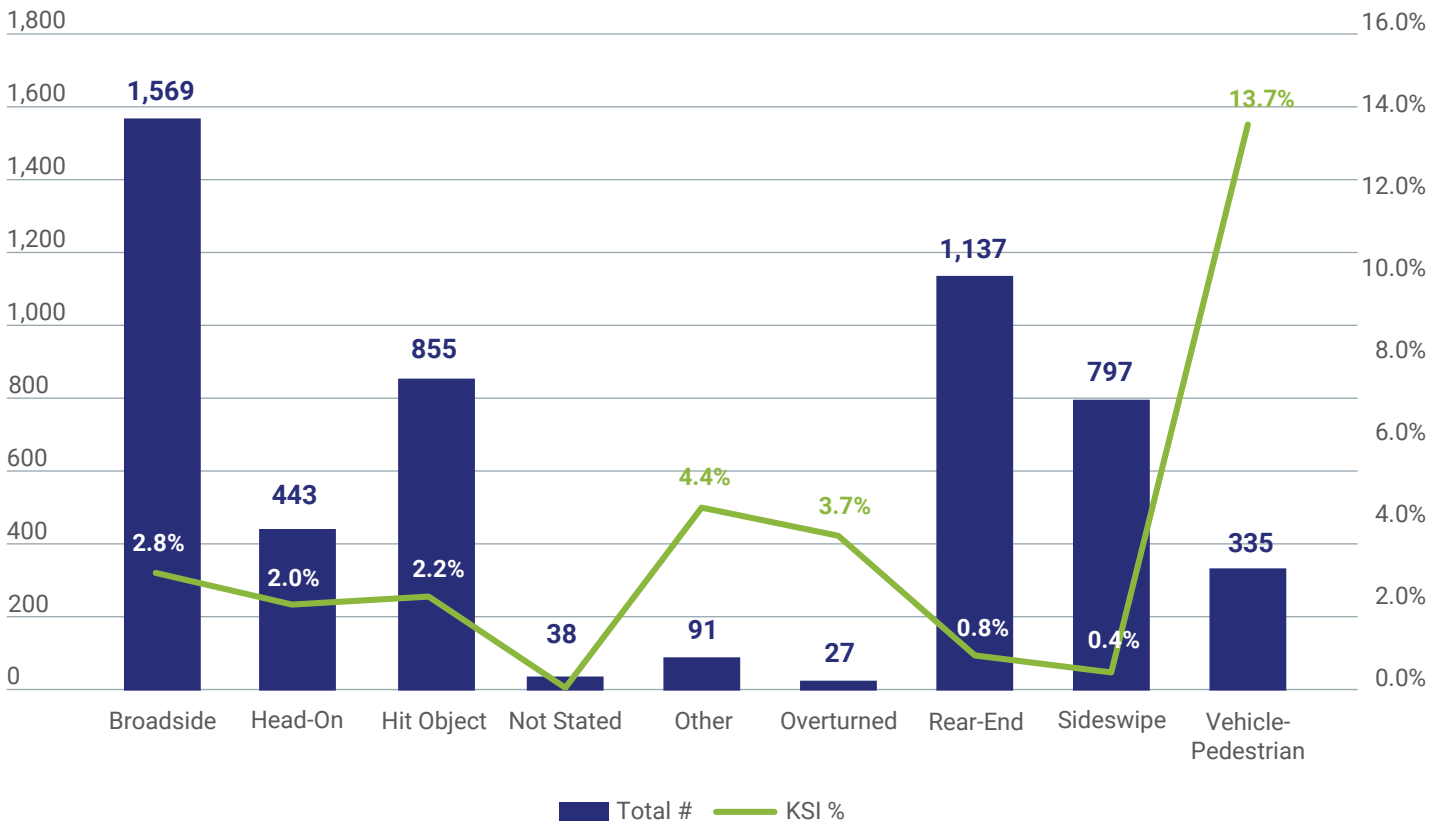
Collisions involving people walking and biking in Fullerton
are much more likely to result in fatality or severe injury than collisions involving only people driving.

WHICH COLLISIONS ARE MOST DANGEROUS?

Figure 2.3 compares the percent of fatal or seriously injured (KSI) collisions for each collision type with the total number of collisions for each type. The total number of collisions is categorized by collision type, as represented by the gray bars in the chart (see y-axis on the left side). Broadsides accounted for the largest category, comprising 29.6 percent of total collisions. The categories with the second and third highest amount of collisions, as shown in the chart below, were rear-end and hit object at 21.5 percent and 16.2 percent of total collisions, respectively.

The green line in the chart shows the percentage of each collision type that resulted in fatalities or severe injuries (see the y-axis on the right side). The labeled percentages represent the KSI collision percentages of each collision type. For example, as high as 30 percent of the pedestrian-related collisions were KSI collisions, 8.3 percent of the overturned collisions led to fatalities and severe injuries. In contrast, sideswipe and rear-end collisions were reported with less than one percent fatal or seriously injured victims.

Figure 2.3 Types of Collisions and Total Collisions vs. KSI Collisions



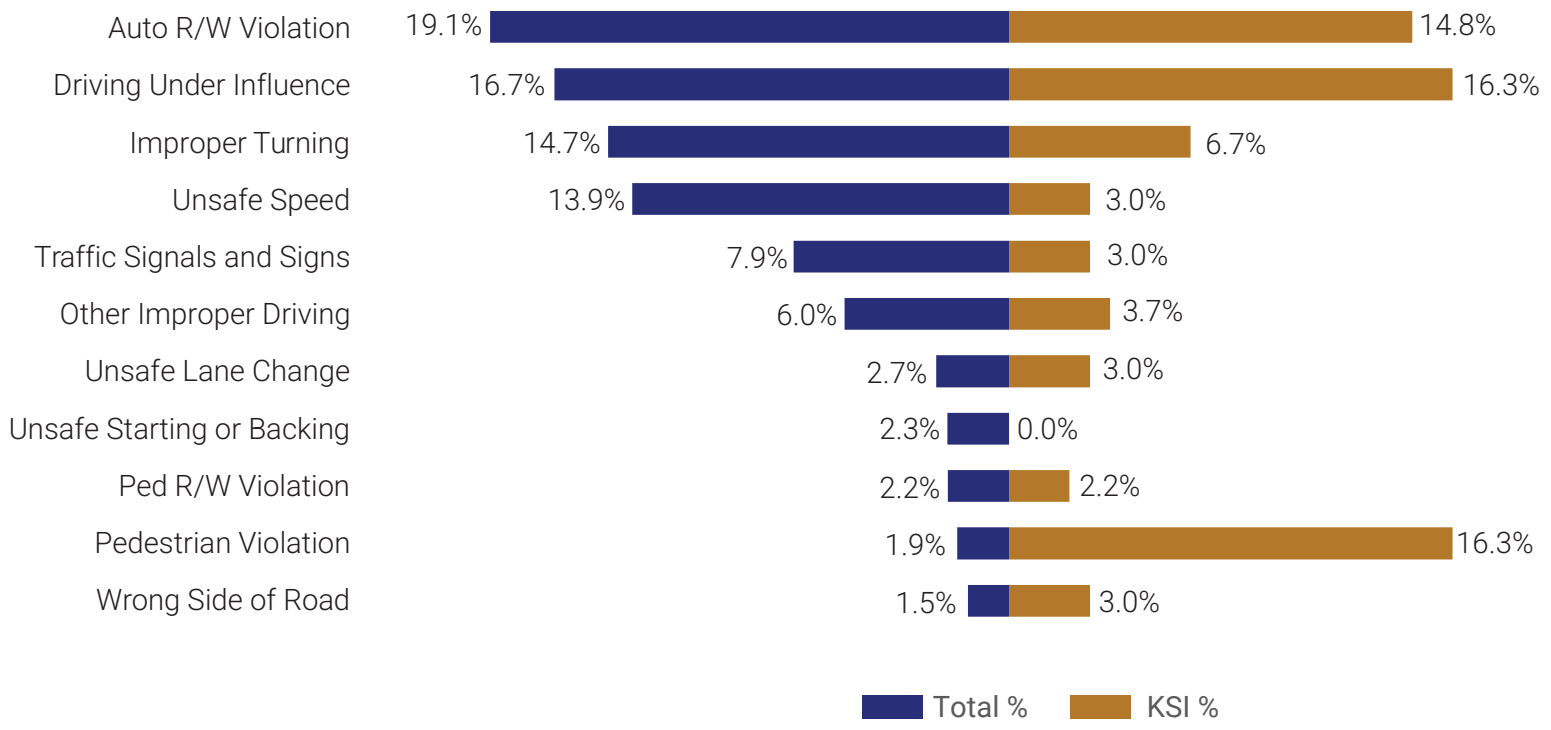
WHAT ARE THE LEADING CAUSES?

Figure 2.4 summarizes the Primary Collision Factor (PCF) for all the collisions in the past five years. PCF is the leading cause of a collision based on the law enforcement officer's opinion who conducted the investigation. The blue bars on the left side represent total collisions, and the brown bars on the right side represents KSI collisions only.

As shown in **Figure 2.4**, automobile right-of-way (19.1 percent), driving under the influence (16.7 percent), and improper turning (14.7 percent) were the top three causes of all collisions. For KSI collisions, the top three known causes were pedestrian violation and driving under the influence (both 16.3 percent), followed by automobile right-of-way (14.8 percent)

Note: The pedestrian right-of-way primary collision factor is a collision where a motorist did not yield the right-of-way to a pedestrian crossing a roadway within a marked or unmarked crosswalk at an intersection, resulting in a collision.

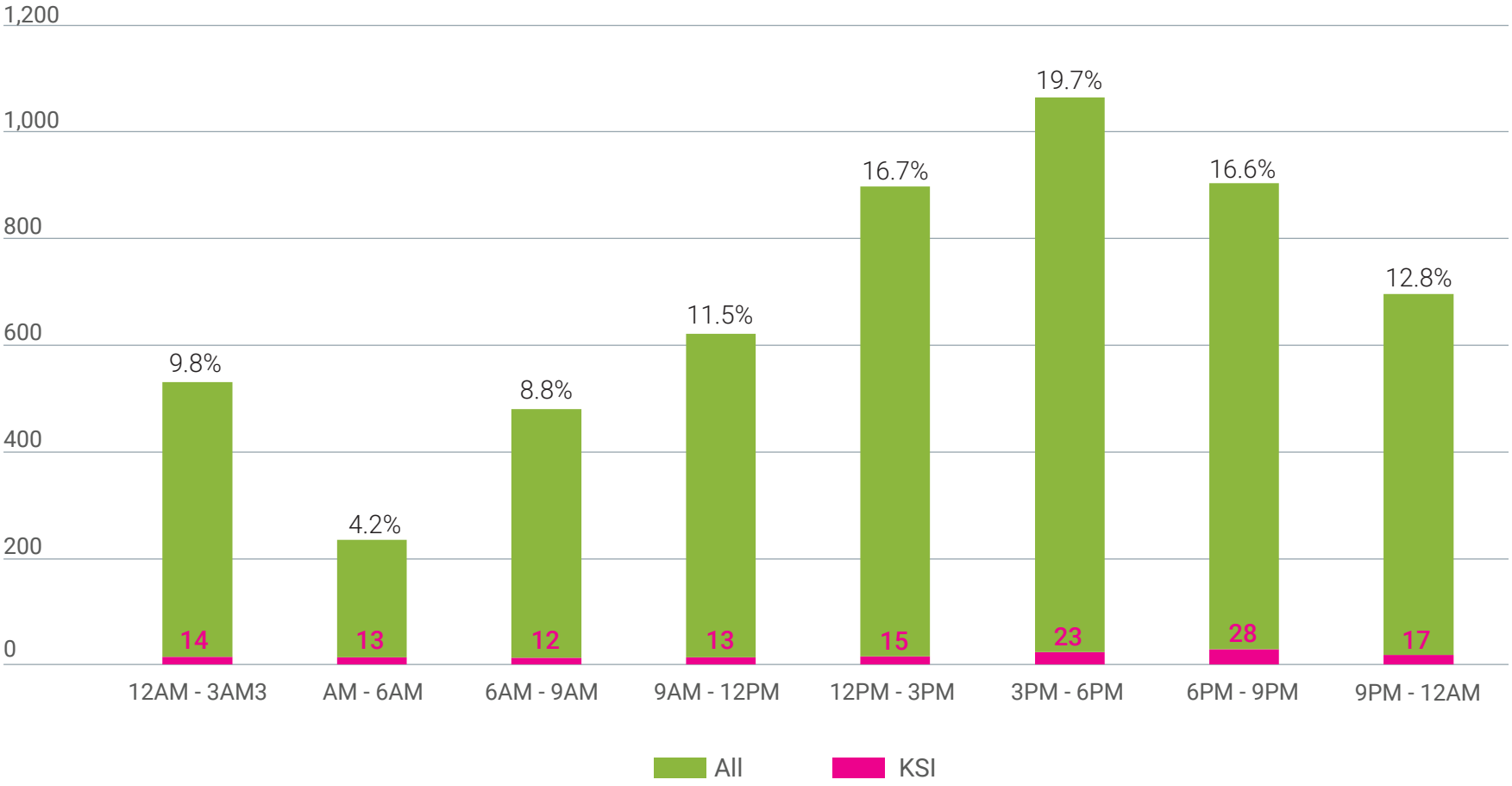
Figure 2.4 Disproportionate Impact of Crashes on Road User Modes



WHEN DO MOST COLLISIONS OCCUR?

Figure 2.5 summarizes the time of day a collision occurred in the past five years. Most of the collisions occurred in the afternoon, with 19.7 percent associated between **3 PM and 6 PM**, followed by 16.7 percent of the collisions between 12 PM and 3 PM. KSI-related collisions occurred most often between the hours of **6 AM and 9 AM**.

Figure 2.5 Collisions by Time of Day



WHERE DO MOST COLLISIONS OCCUR?

Table 2.1 summarizes the top 10 intersections in Fullerton with the highest number of reported collisions. **Table 2.2** summarizes the top 10 corridors in Fullerton with the highest number of reported collisions. **Figure 2.8** maps the locations of collisions resulting in fatalities or severe injuries (KSI), along with non-KSI collisions. **Figure 2.9** illustrates collision hot spots across the City, as identified through ArcGIS Hot Spot Analysis. This analysis uses statistically significant spatial clustering to detect areas with a high concentration of collisions.

Table 2.1 Top 10 Collision Intersections

RANK	Intersection	Fatal	Severe Injury	Other Visible Injury	Complaint of Pain	Property Damage Only	Total
1	Harbor Boulevard & Orangethorpe Avenue	2	1	13	29	52	97
2	Magnolia Avenue & Orangethorpe Avenue			10	31	31	72
3	Euclid Street & Orangethorpe Avenue	1	2	7	25	30	65
4	Orangethorpe Avenue & State College Boulevard		1	13	27	24	65
5	Commonwealth Avenue & Raymond Avenue			16	23	20	59
6	Highland Avenue & Orangethorpe Avenue		3	18	16	18	55
7	Brookhurst Road & Orangethorpe Avenue		1	9	20	23	53
8	Harbor Boulevard & Orangefair Avenue	1		7	22	22	52
9	Chapman Avenue & Harbor Boulevard		2	11	24	15	52
10	Commonwealth Avenue & Harbor Boulevard			10	18	24	52

Table 2.2 Top 10 Collision Corridors

RANK	Corridor	Fatal	Severe Injury	Other Visible Injury	Complaint of Pain	Property Damage Only	Total
1	Harbor Boulevard	8	11	111	223	257	610
2	Orangethorpe Avenue	10	25	99	191	208	533
3	Commonwealth Avenue	3	2	97	145	202	449
4	Euclid Street	2	3	56	128	104	293
5	Chapman Avenue	4	6	68	103	101	282
6	State College Boulevard	2	6	62	100	92	262
7	Gilbert Street	2	4	38	58	77	179
8	Bastanchury Road	3	4	46	66	57	176
9	Lemon Street	1		33	90	52	176
10	Yorba Linda Boulevard		1	44	51	57	153

Figure 2.8 KSI & Non-KSI Collisions

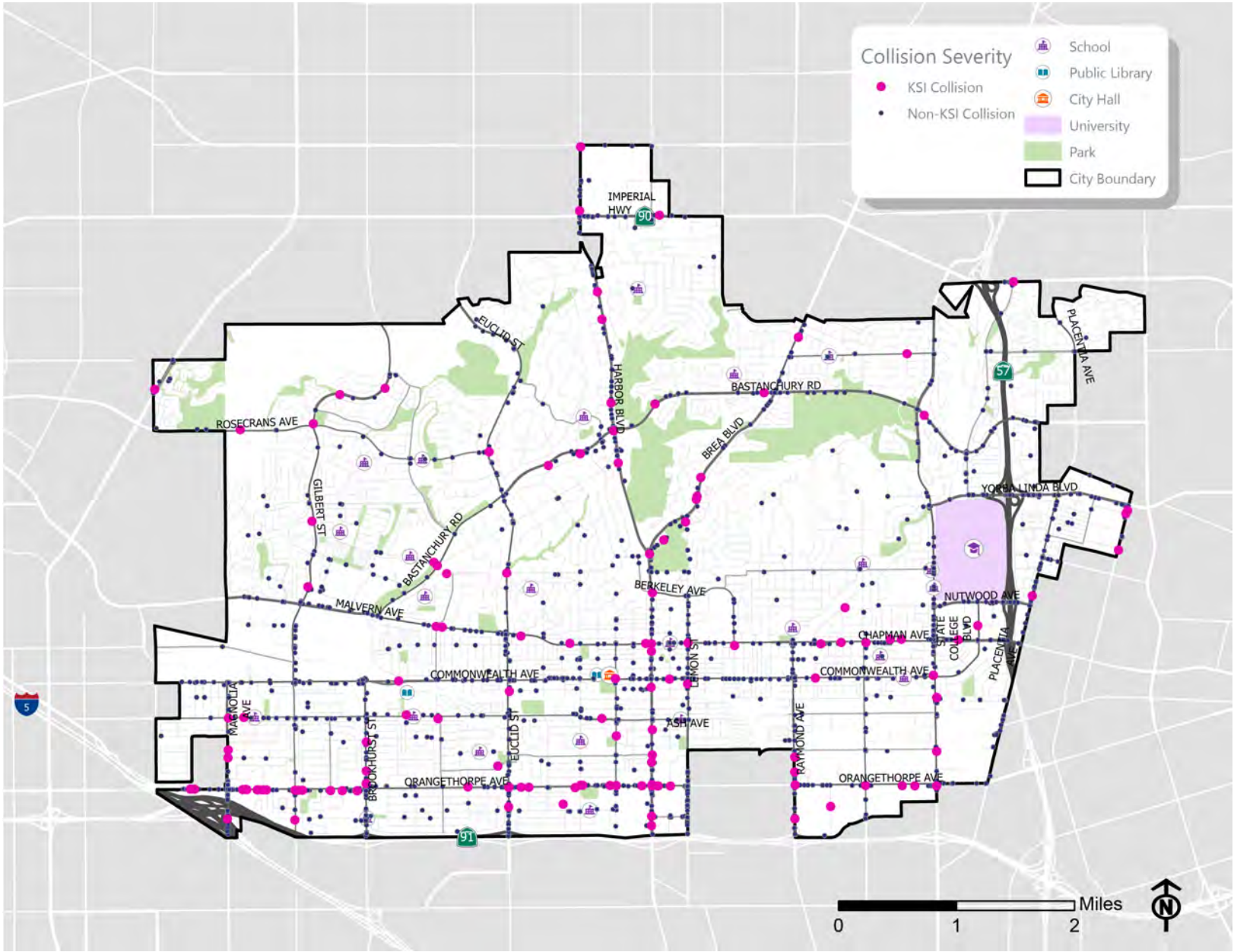
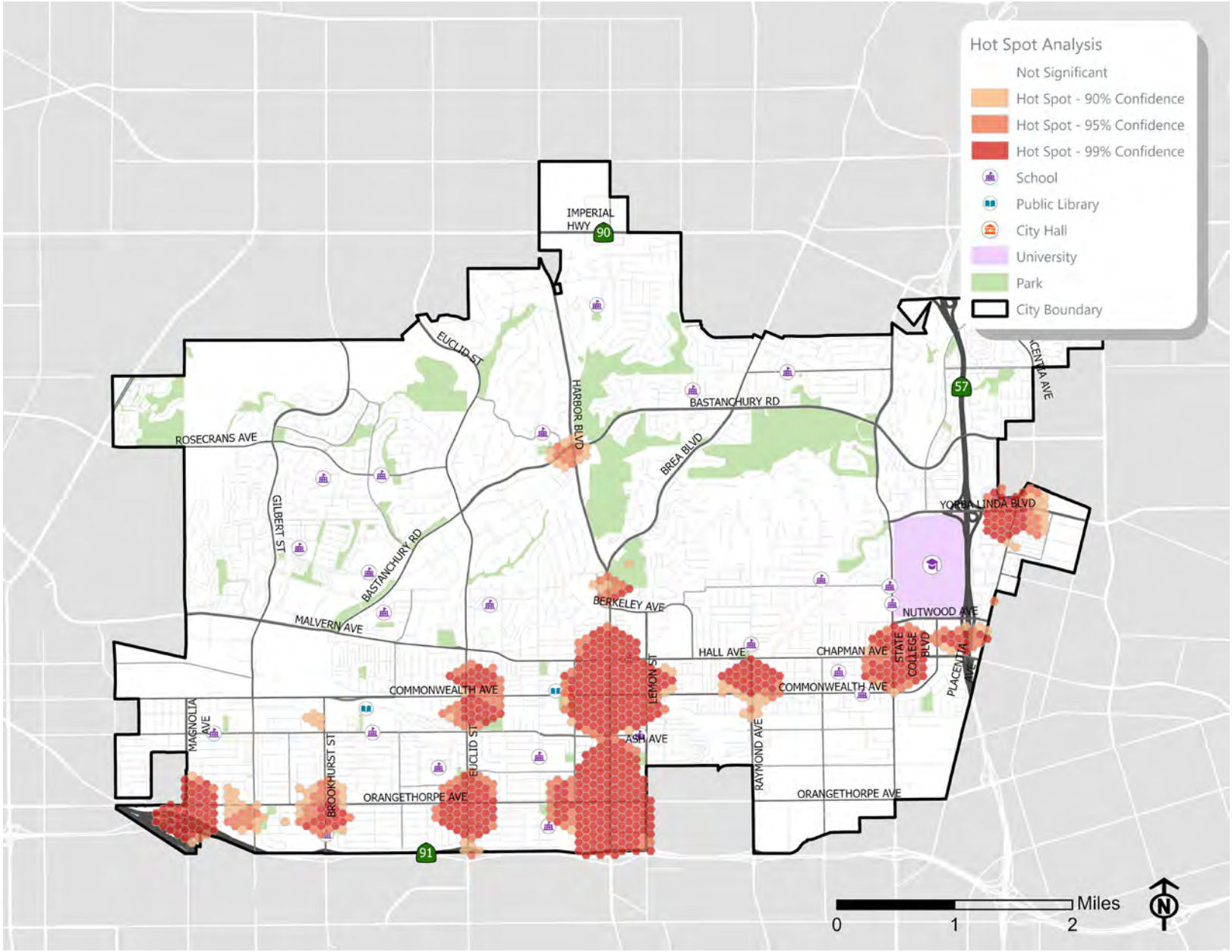


Figure 2.9 Hot Spot Locations



CH 3.
ENGAGEMENT AND COLLABORATION

Community & Public Engagement

Engaging with the Fullerton community across multiple channels was crucial in developing the Safe Streets and Roads for All Action Plan. This stage of the planning process allowed residents and stakeholders to provide their unique insights into making Fullerton a safer place for roadway users. Both in-person public events and surveys (paper and electronic) were employed to help the project team understand community sentiment on roadway safety in Fullerton.

The Project Team partnered with City of Fullerton staff to release survey flyers electronically through the City's Facebook and Instagram profiles, as well as mail physical copies of the survey to multiple residences. Additionally, community insight was gained through a series of in-person meetings and events where community members could directly provide their feedback on the Plan. A stakeholder list encompassing representatives from the City Public Works Department and the community (Fullerton School District, City of Fullerton Active Transportation Committee, California State University, Fullerton, etc.) was also compiled to create an Advisory Group representing diverse backgrounds and knowledge bases. This group provided expert insight while developing the Plan and convened four times. Fullerton residents were invited to attend a separate series of three Community Input Meetings to offer their concerns and suggestions relating to transportation-related issues. Finally, the Project Team engaged with the general public at three community events by distributing informational materials and answering questions.

This section summarizes the community engagement process that occurred during the development of the City of Fullerton Safe Streets and Roads for All Action Plan.



Advisory Group Meetings

As a part of the public outreach and engagement process, a stakeholder list encompassing representatives from the City Public Works Department and the community was compiled. These stakeholders formed an Advisory Group representing diverse backgrounds and knowledge bases. This group met virtually three times and provided expert insight to members of the Project Team during the planning process.

Advisory Group Meeting #1

AUGUST 7, 2024

The first Advisory Group Meeting brought together representatives from a variety of local organizations, including the Fullerton School District, the City of Fullerton Active Transportation Committee, and California State University, Fullerton (CSUF). The meeting covered existing road safety and active transportation conditions in Fullerton while also giving an overview of the Plan and upcoming community engagement strategies. During the discussion portion of the meeting, stakeholders mentioned certain major arterial roads as being unsafe for K-12 and college students to walk and bike due to high vehicle traffic, lack of pedestrian and bicycle infrastructure, and poor road conditions (i.e. potholes). Information on existing efforts by local groups to improve active transportation conditions in Fullerton was shared, as well as the next steps for upcoming meetings.

Advisory Group Meeting #2

DECEMBER 5, 2024

The second Advisory Group Meeting provided updates on the Project timeline, as well as preliminary feedback received from surveys and Community Input Meetings. A summary of the criteria used to identify areas and strategies for improvement was also provided. Members of the group discussed (among other items) the need to address challenges related to e-scooters, the potential for a pedestrian bridge near CSUF, and the opportunity to provide traffic safety education along with enforcement to reduce collisions across all modes of transportation.

Advisory Group Meeting #3

SEPTEMBER 4, 2025

The third Advisory Group Meeting provided key data points from completed outreach events, including from the surveys and the Community Input Meetings. The group also discussed priority neighborhoods, intersections, and corridors, along with their selection criteria. Finally, the project staff presented draft recommendations at locations along Bastanchbury Road to provide examples of recommendations being proposed in the SS4A Action Plan.



Community Input Meetings

Fullerton residents were invited to attend a separate series of three Community Input Meetings to offer their concerns and suggestions relating to transportation-related issues. These meetings took place at different in-person locations in areas with high vehicle traffic, a perceived need for safety and inadequate biking and walking facilities improvements. At each meeting, project team members and City staff met with residents of the surrounding community at the school to give a presentation about the project, explaining its goals and existing conditions. After the presentation, a mapping activity and discussion session were conducted to gather community feedback on traffic concerns in the area.

Community Input Meeting #1

OCTOBER 3, 2024

The first Community Input Meeting took place at Orangethorpe Elementary School, located near one of the most collision-prone intersections in the City of Fullerton. Project team members and City staff met with nine residents of the surrounding community, most of which were families who lived adjacent to the school.

Attendees highlighted issues such as poor sidewalk and lighting conditions on neighborhood streets, inadequate signal timing at the intersection of Brookhurst Road and Page Avenue, speeding along Brookhurst Road, Orangethorpe Avenue, and Page Avenue, and minimal crossing opportunities along Orangethorpe Avenue and Brookhurst Road.





Community Input Meeting #2

NOVEMBER 13, 2024

The second Community Input Meeting took place at Commonwealth Elementary School, another school located next to a vehicle and collision-heavy corridor. Nine attendees (comprised of a combination of residents, school parents, and members of advocacy organizations) also attended this meeting. Specific concerns that were raised included hazardous conditions for cyclists along Commonwealth Avenue and Lemon Street, speeding issues along Harbor Boulevard in the Downtown Fullerton area, and poor sidewalk and lighting conditions on local streets. The most common roadway safety concerns among those who attended were roadway speeds and bicycle safety.





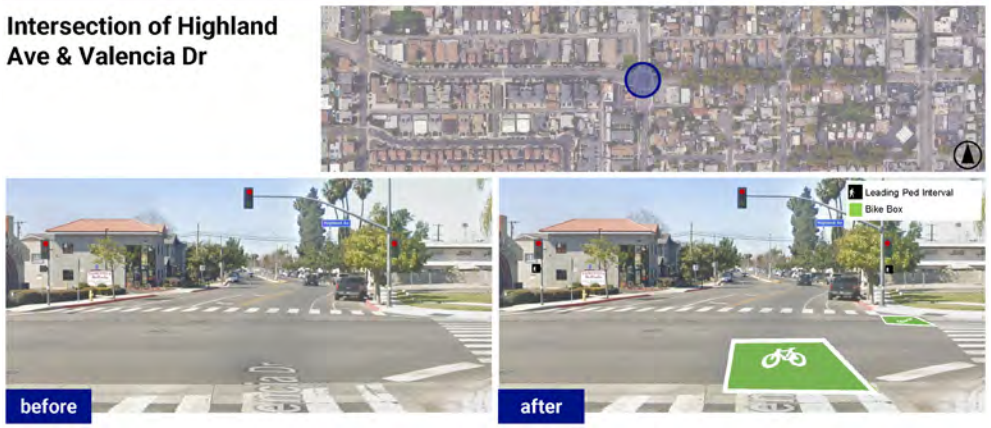


Community Input Meeting #3

DECEMBER 16, 2025

The third Community Input Meeting took place via Zoom to provide stakeholders with project updates, outreach status, selection critieria for countermeasures, and proposed treatments in the Fullerton SS4A Action Plan.





Community Events

The project team engaged with the general public at three community events by distributing informational materials and answering questions. As with the Community Input Meetings, each event involved the use of community input boards and paper surveys to gather feedback and concerns from local residents.

Downtown Fullerton Farmer's Market

AUGUST 22, 2024

The Downtown Fullerton Farmer's Market, a seasonal open-air weekly event, brought together local vendors and more than one hundred community members in a fun and festive atmosphere. Thirty attendees completed a survey.

Most attendees highlighted issues such as poor sidewalk and road conditions, speeding along major corridors like Chapman Avenue and Gilbert Street, and inadequate infrastructure for pedestrians and cyclists. Participants included both residents and non-residents, with many of the resident families arriving at the event location by car or on foot.





Fullerton Police Department Trunk-or-Treat event

OCTOBER 25, 2024

The City of Fullerton Trunk-or-Treat event, hosted by the Fullerton Police Department, was an annual Halloween-themed event bringing together over one hundred families, City staff, and other members of the community. Twenty attendees completed surveys.

Many residents at this event pointed out multiple safety-related issues on major streets throughout the City. These specific concerns included speeding issues along Orangethorpe and Commonwealth Avenues, as well as potholes and uneven sidewalks along Euclid Street and Chapman Avenue.





Downtown Fullerton Farmer's Market

SEPTEMBER 25, 2025

Project staff once again attended the Downtown Fullerton Farmer's Market. This time to gather feedback on proposed project recommendations and answer questions. There were over 100 attendees to the event, 30 of which stopped and engaged with project materials and staff. Ten stakeholders signed up for additional information.

Most attendees expressed support for the proposed treatments, especially those improving the pedestrian experience such as Leading Pedestrian Intervals (LPI), curb extensions, Rectangular Rapid Flashing Beacons (RRFB), and high visbility crosswalks. Participants were in favor of bicycle improvements such as bike lanes and turn boxes. Many noted that the proposed treatments would improve their experience at intersections that they frequent.

Some attendees expressed concerns about roadway changes such as lane reconfiguration and curb extensions citing an increase in congestion and construction cost.

Attendees were grateful for the City's outreach efforts and to see investment in Fullerton





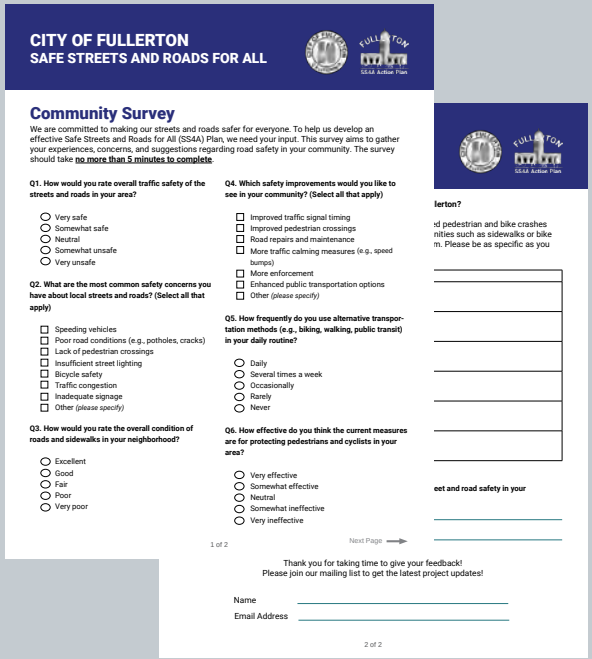
Survey Results

SURVEY #1

To better understand citywide safety concerns, a survey was conducted between September and December 2024. It received **242** responses through both hard copy submissions at community outreach events and an online format. The following results summarize the feedback collected during this period.

Link to Online Survey #1:

ENGLISH



CITY OF FULLERTON
SAFE STREETS AND ROADS FOR ALL

Community Survey

We are committed to making our streets and roads safer for everyone. To help us develop an effective Safe Streets and Roads for All (SS4A) Plan, we need your input. This survey aims to gather your experiences, concerns, and suggestions regarding road safety in your community. The survey should take **no more than 5 minutes to complete**.

Q1. How would you rate overall traffic safety of the streets and roads in your area?

- ◯ Very safe
- ◯ Somewhat safe
- ◯ Neutral
- ◯ Somewhat unsafe
- ◯ Very unsafe

Q2. What are the most common safety concerns you have about local streets and roads? (Select all that apply)

- ☐ Speeding vehicles
- ☐ Poor road conditions (e.g., potholes, cracks)
- ☐ Lack of pedestrian crossings
- ☐ Insufficient street lighting
- ☐ Bicycle safety
- ☐ Traffic congestion
- ☐ Inadequate signage
- ☐ Other *(please specify)*

Q3. How would you rate the overall condition of roads and sidewalks in your neighborhood?

- ◯ Excellent
- ◯ Good
- ◯ Fair
- ◯ Poor
- ◯ Very poor

Q4. Which safety improvements would you like to see in your community? (Select all that apply)

- ☐ Improved traffic signal timing
- ☐ Improved pedestrian crossings
- ☐ Road repairs and maintenance
- ☐ More traffic calming measures (e.g., speed bumps)
- ☐ More enforcement
- ☐ Enhanced public transportation options
- ☐ Other *(please specify)*

Q5. How frequently do you use alternative transportation methods (e.g., biking, walking, public transit) in your daily routine?

- ◯ Daily
- ◯ Several times a week
- ◯ Occasionally
- ◯ Rarely
- ◯ Never

Q6. How effective do you think the current measures are for protecting pedestrians and cyclists in your area?

- ◯ Very effective
- ◯ Somewhat effective
- ◯ Neutral
- ◯ Somewhat ineffective
- ◯ Very ineffective

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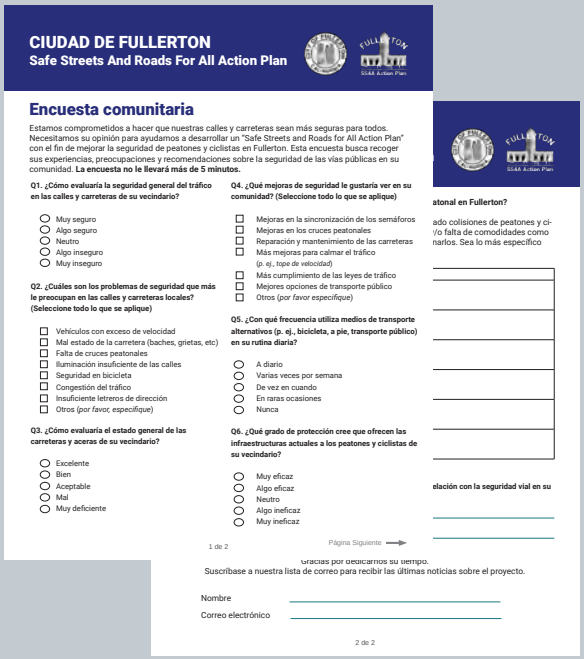
Thank you for taking time to give your feedback!
Please join our mailing list to get the latest project updates!

Name _____

Email Address _____

2 of 2

SPANISH



CIUDAD DE FULLERTON
Safe Streets And Roads For All Action Plan

Encuesta comunitaria

Estamos comprometidos a hacer que nuestras calles y carreteras sean más seguras para todos. Necesitamos su opinión para ayudarnos a desarrollar un "Safe Streets and Roads for All Action Plan" con el fin de mejorar la seguridad de peatones y ciclistas en Fullerton. Esta encuesta busca recoger sus experiencias, preocupaciones y recomendaciones sobre la seguridad de las vías públicas en su comunidad. **La encuesta no le llevará más de 5 minutos.**

Q1. ¿Cómo evaluaría la seguridad general del tráfico en las calles y carreteras de su vecindario?

- ◯ Muy seguro
- ◯ Algo seguro
- ◯ Neutro
- ◯ Algo inseguro
- ◯ Muy inseguro

Q2. ¿Cuáles son los problemas de seguridad que más le preocupan en las calles y carreteras locales? (Seleccione todo lo que se aplique)

- ☐ Vehículos con exceso de velocidad
- ☐ Mal estado de la carretera (baches, grietas, etc)
- ☐ Falta de cruces peatonales
- ☐ Iluminación insuficiente de las calles
- ☐ Seguridad en bicicleta
- ☐ Congestión del tráfico
- ☐ Insuficiente letreros de dirección
- ☐ Otros *(por favor, especifique)*

Q3. ¿Cómo evaluaría el estado general de las carreteras y aceras de su vecindario?

- ◯ Excelente
- ◯ Bien
- ◯ Aceptable
- ◯ Mal
- ◯ Muy deficiente

Q4. ¿Qué mejoras de seguridad le gustaría ver en su comunidad? (Seleccione todo lo que se aplique)

- ☐ Mejoras en la sincronización de los semáforos
- ☐ Mejoras en los cruces peatonales
- ☐ Reparación y mantenimiento de las carreteras
- ☐ Más mejoras para calmar el tráfico *(p. ej., tope de velocidad)*
- ☐ Más cumplimiento de las leyes de tráfico
- ☐ Mejores opciones de transporte público
- ☐ Otros *(por favor especifique)*

Q5. ¿Con qué frecuencia utiliza medios de transporte alternativos (p. ej., bicicleta, a pie, transporte público) en su rutina diaria?

- ◯ A diario
- ◯ Varias veces por semana
- ◯ De vez en cuando
- ◯ En raras ocasiones
- ◯ Nunca

Q6. ¿Qué grado de protección cree que ofrecen las infraestructuras actuales a los peatones y ciclistas de su vecindario?

- ◯ Muy eficaz
- ◯ Algo eficaz
- ◯ Neutro
- ◯ Algo ineficaz
- ◯ Muy ineficaz

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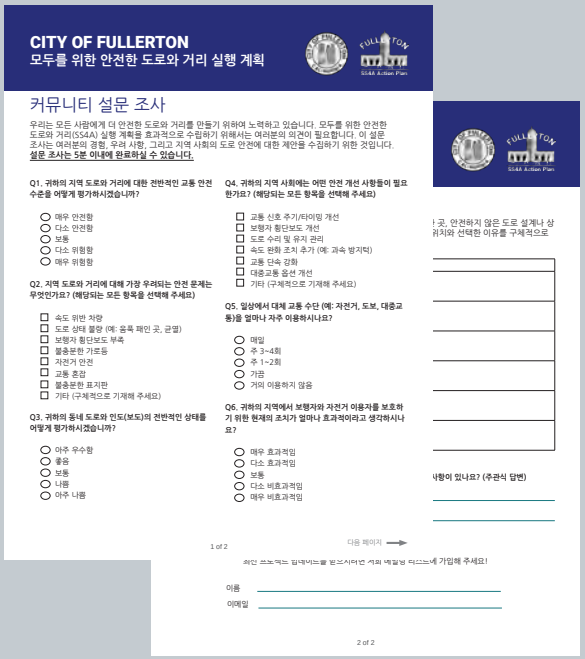
Gracias por dedicarnos su tiempo.
Suscríbase a nuestra lista de correo para recibir las últimas noticias sobre el proyecto.

Nombre _____

Correo electrónico _____

2 de 2

KOREAN



CITY OF FULLERTON
모두를 위한 안전한 도로와 거리 실행 계획

커뮤니티 설문 조사

우리는 모든 사람에게 더 안전한 도로와 거리를 만들기 위하여 노력하고 있습니다. 모두를 위한 안전한 도로와 거리(SS4A) 실행 계획을 효과적으로 수립하기 위해서는 여러분의 의견이 필요합니다. 이 설문 조사는 여러분의 경험, 우려 사항, 그리고 지역 사회의 도로 안전에 대한 제안을 수집하기 위한 것입니다. **설문 조사는 5분 이내에 완료하실 수 있습니다.**

Q1. 귀하의 지역 도로와 거리에 대한 전반적인 교통 안전 수준을 어떻게 평가하시겠습니까?

- ◯ 매우 안전함
- ◯ 다소 안전함
- ◯ 보통
- ◯ 다소 위험함
- ◯ 매우 위험함

Q2. 지역 도로와 거리에 대해 가장 우려되는 안전 문제는 무엇인가요? (해당되는 모든 항목을 선택해 주세요)

- ☐ 속도 위반 차량
- ☐ 도로 상태 불량 (예: 움푹 패인 곳, 균열)
- ☐ 보행자 횡단보도 부족
- ☐ 불충분한 가로등
- ☐ 자전거 안전
- ☐ 교통 혼잡
- ☐ 불충분한 표지판
- ☐ 기타 (구체적으로 기재해 주세요)

Q3. 귀하의 동네 도로와 인도(보도)의 전반적인 상태를 어떻게 평가하시겠습니까?

- ◯ 아주 우수함
- ◯ 좋음
- ◯ 보통
- ◯ 나쁨
- ◯ 아주 나쁨

Q4. 귀하의 지역 사회에는 어떤 안전 개선 사항들이 필요한가요? (해당되는 모든 항목을 선택해 주세요)

- ☐ 교통 신호 주기/타이밍 개선
- ☐ 보행자 횡단보도 개선
- ☐ 도로 수리 및 유지 관리
- ☐ 속도 완화 조치 추가 (예: 과속 방지턱)
- ☐ 교통 단속 강화
- ☐ 대중교통 옵션 개선
- ☐ 기타 (구체적으로 기재해 주세요)

Q5. 일상에서 대체 교통 수단 (예: 자전거, 도보, 대중교통)을 얼마나 자주 이용하시나요?

- ◯ 매일
- ◯ 주 3~4회
- ◯ 주 1~2회
- ◯ 가끔
- ◯ 거의 이용하지 않음

Q6. 귀하의 지역에서 보행자와 자전거 이용자를 보호하기 위한 현재의 조치가 얼마나 효과적이라고 생각하시나요?

- ◯ 매우 효과적임
- ◯ 다소 효과적임
- ◯ 보통
- ◯ 다소 비효과적임
- ◯ 매우 비효과적임

1 of 2 — 다음 페이지

이름 _____

이메일 _____

2 of 2

Traffic Safety Rating & Common Roadway Safety Issue

When asked their opinion on the overall traffic safety of streets and roads in Fullerton, most respondents (30 percent) mentioned feeling somewhat unsafe. This reveals a desire on the community's part for noticeable improvements in roadway safety. **Figure 3.1** illustrates how respondents rated traffic safety.

Figure 3.2 demonstrates the most commonly identified roadway safety issues found in the survey response data. The most common safety concerns brought up by residents were poor road conditions (173) and high vehicle speeds (161), both of which reflect concerns raised in the Community Input Meetings and Events.

Figure 3.1 Traffic Safety Rating

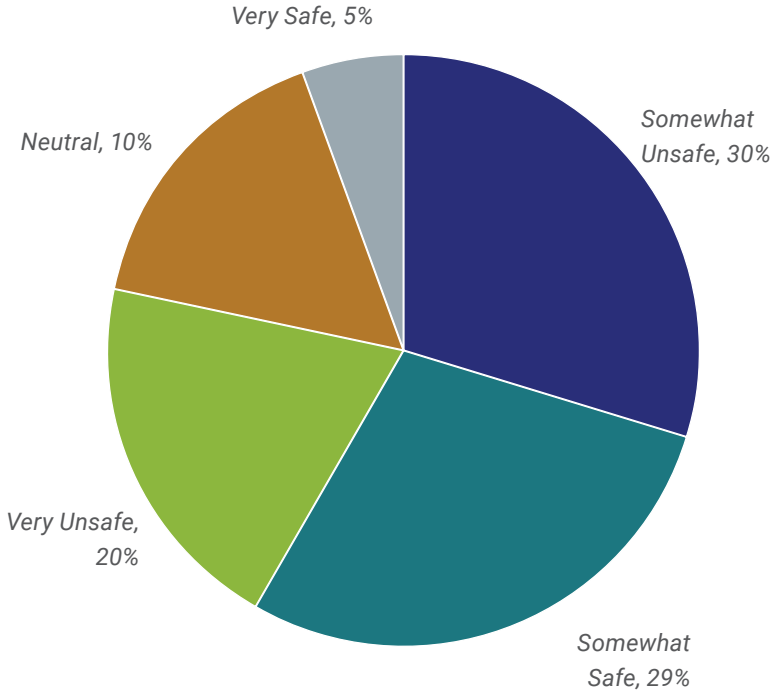
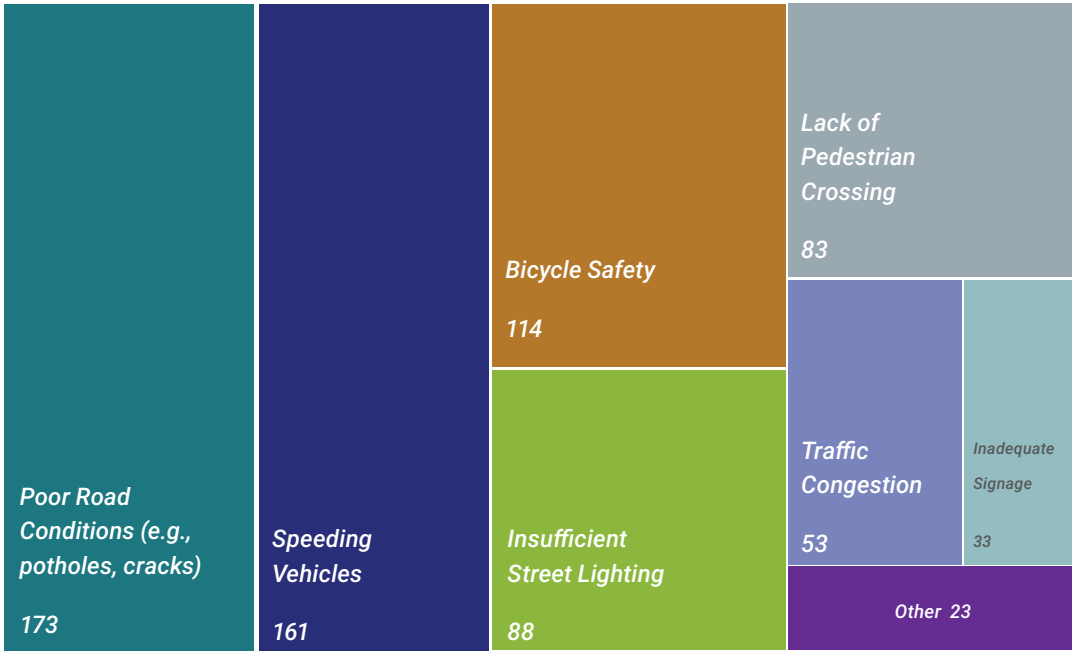


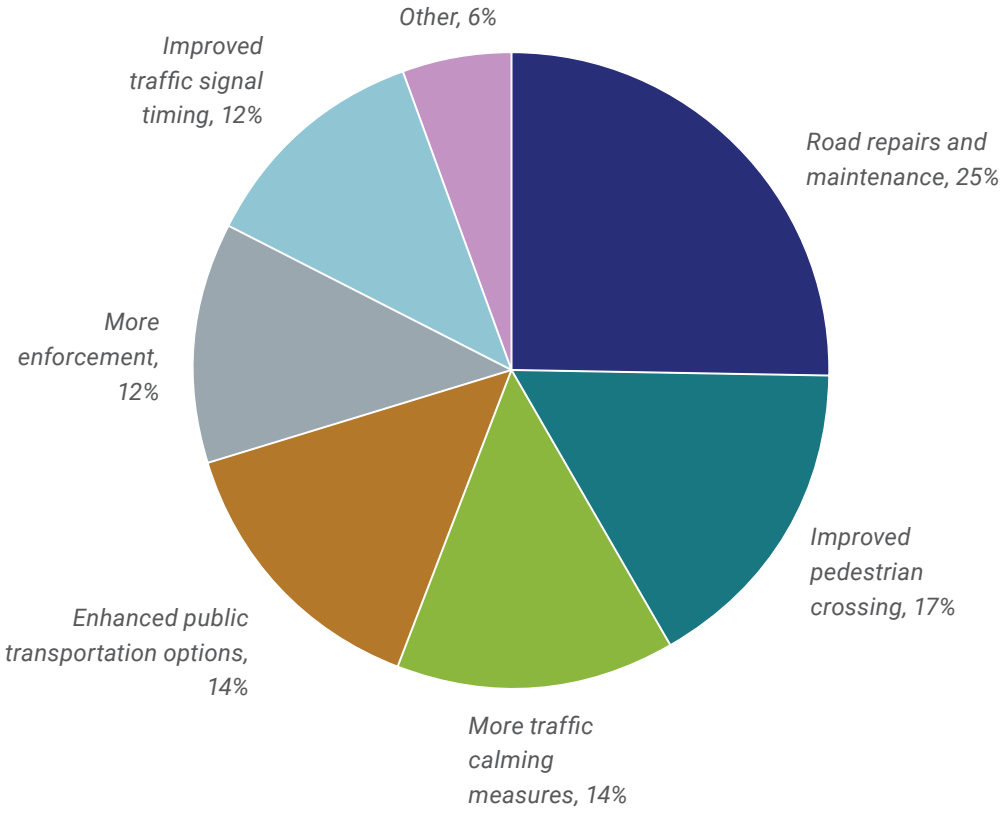
Figure 3.2 Common Roadway Safety Issues



Preferred Roadway Safety Improvements

When asked about their preferred methods of roadway safety improvement, similar results emerge. As shown in **Figure 3.3**, most respondents selected road repairs and maintenance as their most preferred improvement (25 percent), followed by improved pedestrian crossings (17 percent). Improving and maintaining roadways can reduce accidents by eliminating the possibility of vehicles and bicycles crashing as a result of poor conditions (i.e. potholes), while installing crosswalks can improve pedestrian safety by providing a safe space within an intersection or roadway that is separate from vehicular traffic.

Figure 3.3 Preferred Roadway Safety Improvements

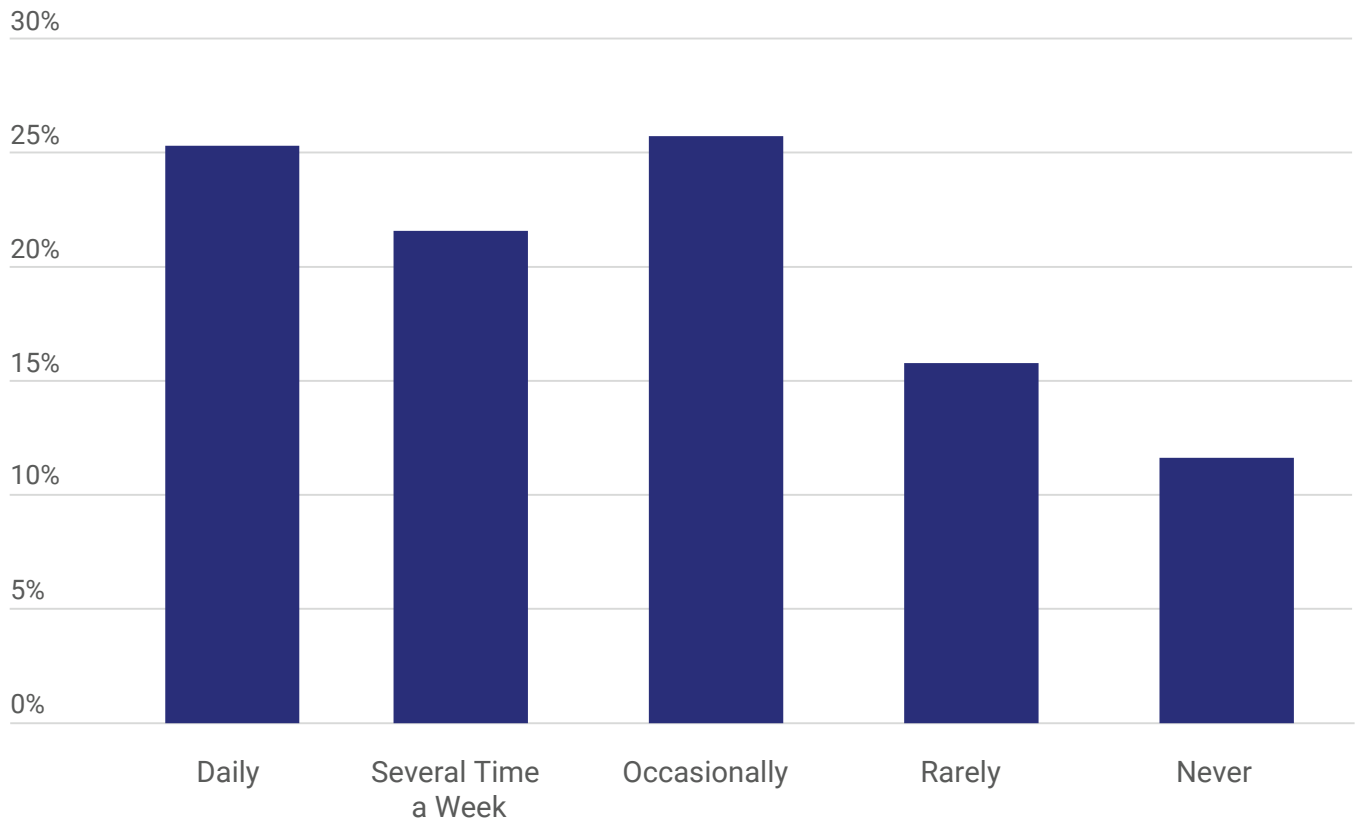


How Often Do People Walk, Bike, or Take Transit?

A majority of survey respondents reported either walking, biking or using public transportation daily (25 percent) or several times a week (21 percent). These findings, displayed in **Figure 3.4**, also reveal that a small minority of respondents reported never using these transportation modes (12 percent).

Because such a large number of community members regularly use alternative modes of transportation, it is crucial that roadway conditions are improved so that all users can feel comfortable and safe when traveling in Fullerton.

Figure 3.4 Traffic Safety Rating



SURVEY #2

After the project team developed preliminary recommendations, an online survey was conducted between December and January 2025. It prompted respondents to provide their feelings about specific treatment types and location. The survey received **15** responses. The following results summarize the feedback from this survey.

General Treatments

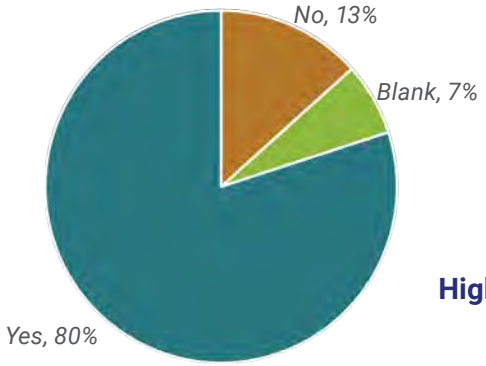
When asked about key treatments proposed at multiple locations on Fullerton roadways, respondents were overwhelmingly in support.

Figure 3.5 illustrates whether respondents think key treatments are positive additions to signalized intersections.

Figure 3.6 shows whether respondents agree that key treatments are positive additions to Fullerton roadways.

Figure 3.5 Are These Key Treatments Positive Additions?

Leading Pedestrian Intervals



High-Visibility Crosswalks

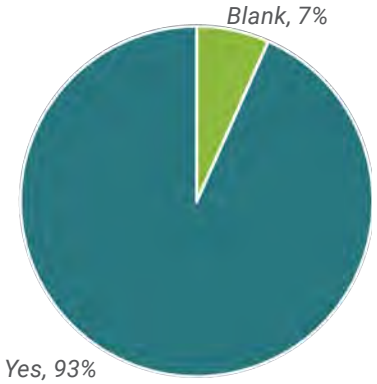
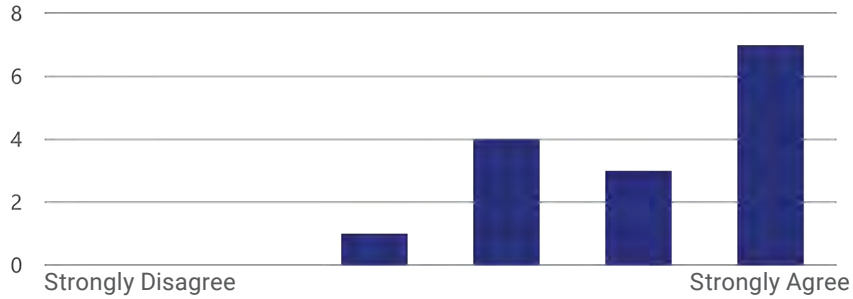
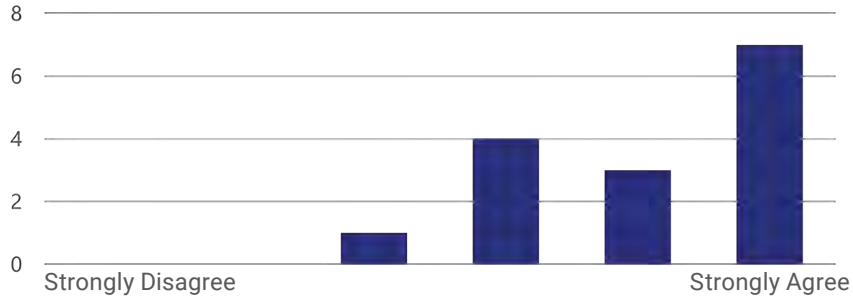


Figure 3.6 I think These Key Treatments are Positive Additions.

Retroreflective Backplates



ADA Curb Ramps



Treatments by Location

The survey included questions about key treatments at specific locations, that were selected as representative of the types of treatments proposed in the SS4A Action Plan.

Respondents were typically supportive of the treatments recommended. **Figures 3.7 - 3.14** show the survey responses to location-specific treatments.

Figure 3.7 I would like to see speed feedback signage on Bastanchury Road between Brea Boulevard and the East City Limit.

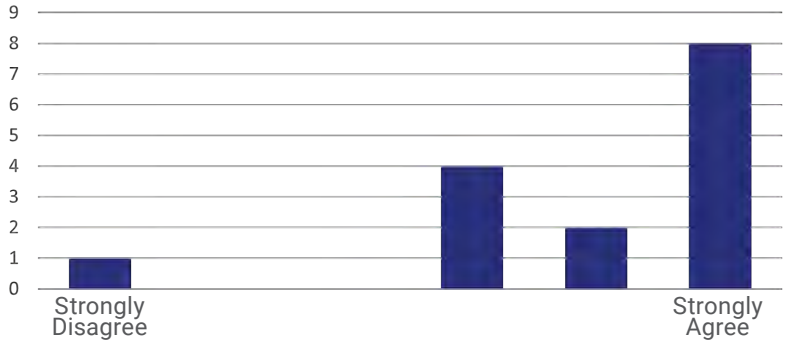


Figure 3.8 I would like to see bike turn boxes at the intersection of Bastanchury Road and Brea Boulevard.

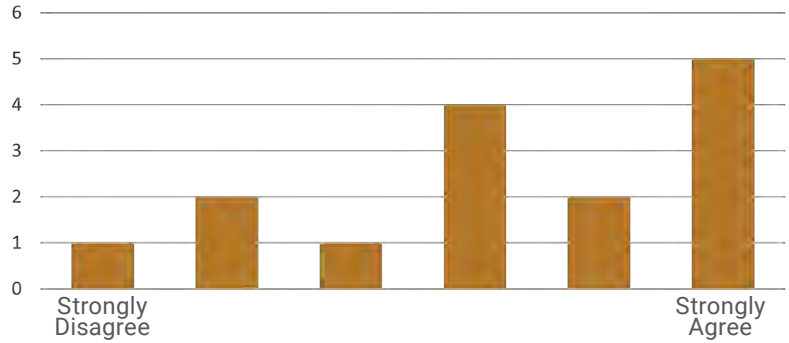


Figure 3.9 I would like to see a lane reconfiguration on Commonwealth Avenue between Library Lane and Balcom Avenue.

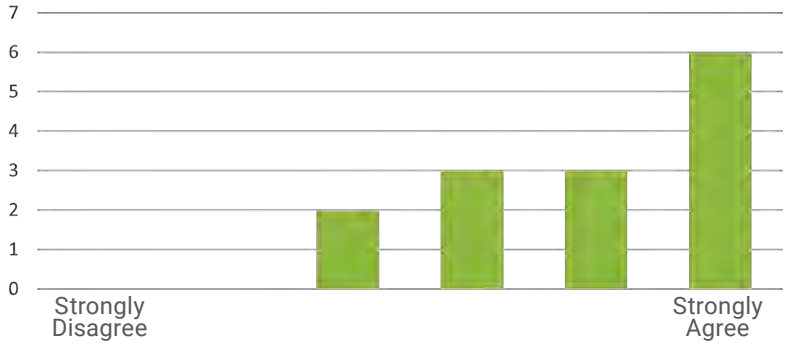


Figure 3.10 I would like to see a curb extension at the intersection of Commonwealth Avenue and Lillie Avenue.

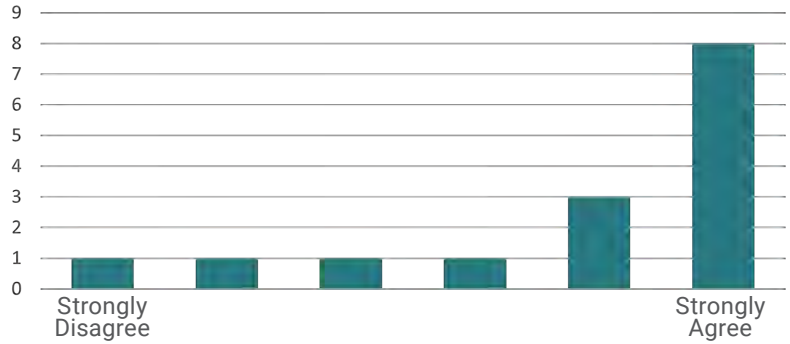


Figure 3.11 I would like to see a curb extension at the intersection of Commonwealth Avenue and Yale Avenue.

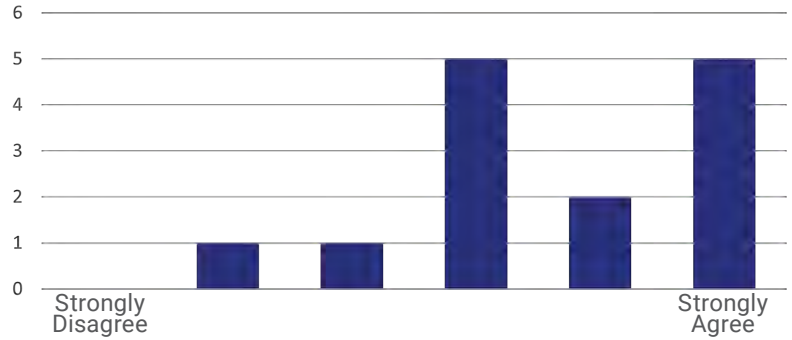


Figure 3.12 I would like to see a hardened centerline at the intersection of Commonwealth Avenue and Acacia Avenue.

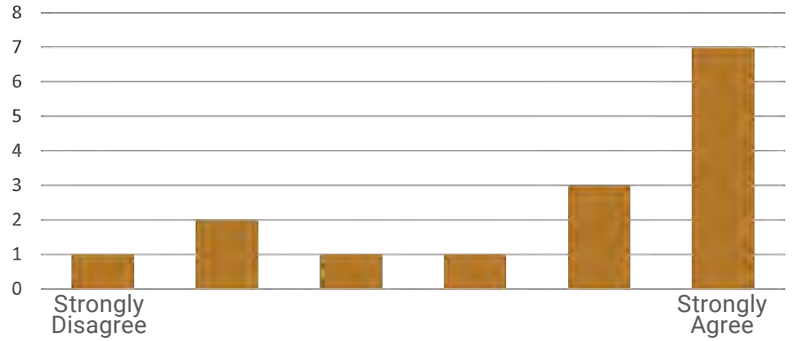


Figure 3.13 I would like to see a rectangular rapid flashing beacon at the intersection of Richman Avenue and Elm Avenue.

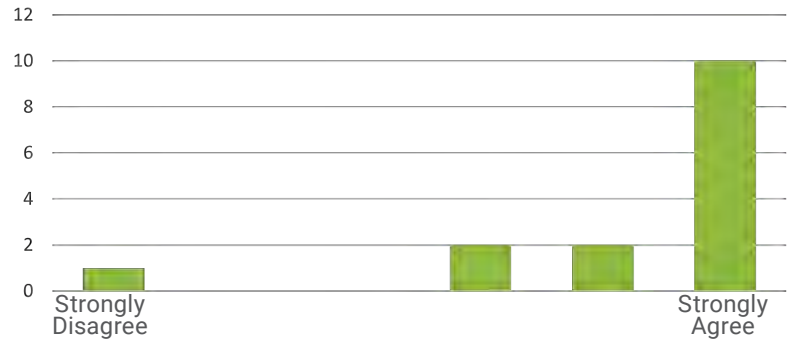


Figure 3.14 I would like to see a stop sign and marking at the intersection of Ash Avenue and Jensen Way.

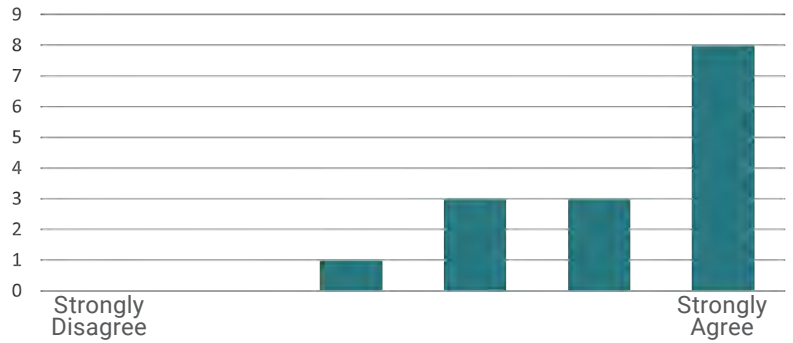


Figure 3.15 I think a scramble crosswalk is a positive addition to the intersection of State College Boulevard and Dorothy Lane.

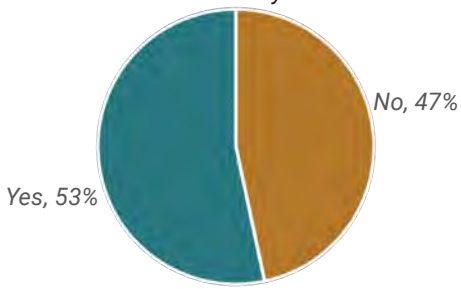


Figure 3.16 I think a hardened centerline is a positive addition to the intersection of State College Boulevard and Dorothy Lane.

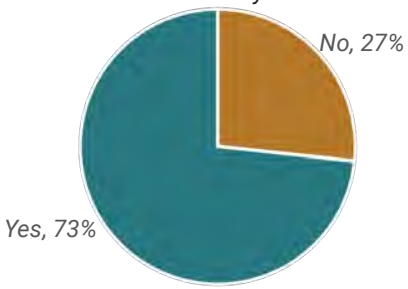


Figure 3.17 I think a gateway curb extension is a positive addition to the intersection of Citrus Avenue and Hill Avenue.

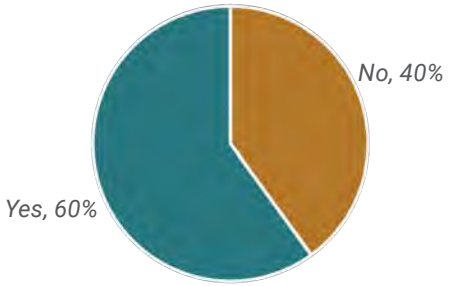
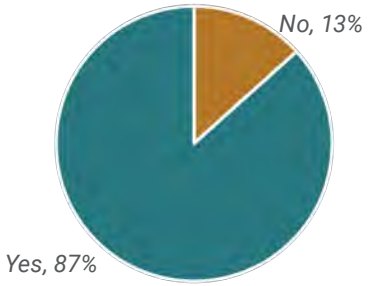


Figure 3.18 I think a rectangular rapid flashing beacon is a positive addition to the intersection of Citrus Avenue and Hill Avenue.



CH 4. OPPORTUNITY ANALYSIS

Opportunity Analysis

The opportunity analysis is based on a comprehensive set of criteria that assess socioeconomic, health, transportation, and environmental factors affecting Fullerton communities. These criteria were selected to identify priority areas and corridors that may experience disparities in mobility, safety, and access to essential services.

Each criterion is evaluated using established thresholds, primarily set at the 50th percentile for relevant indicators, ensuring that areas with higher-than-median burdens or challenges are highlighted. The data sources include:

- **CalEnviroScreen 4.0**: A tool provided by the California Office of Environmental Health Hazard Assessment that uses environmental, health, and socioeconomic information to identify communities that are most affected by pollution and the location of vulnerable populations.
- **The American Community Survey**: A annual demographics survey conducted by the US Census Bureau, collecting population data.
- **The California Department of Education**: The agency within the government of California that oversees education funding, testing, and resources.
- **Crossroads Traffic Records System**: A software for reporting and analytics of traffic collisions, used by police departments and public agencies.

Socioeconomic and Health Indicators:

- Poverty (50th percentile)
- Cardiovascular Disease (50th percentile)
- Unemployment (50th percentile)
- Housing Burden (50th percentile)
- Free and Reduced Meals (80% of students)

Transportation Access and Barriers:

- Transportation Barriers (50th percentile)
- Vehicle Access (50th percentile)
- Traffic Volume (50th percentile)
- Collisions (Total number of incidents)

Community Access:

- School Distance (¼ mile threshold)
- Library Distance (¼ mile threshold)

CalEnviroScreen 4.0

The CalEnviroScreen aggregates data from 21 indicators to characterize both pollution burden and population characteristics and calculates the CalEnviroScreen score for an individual census tract. The final score is used to identify communities experiencing greater environmental health burdens and/or facing more environmental health risks compared to other communities in California.

Pollution Burden

Exposures

- Ozone Concentrations
- PM2.5 Concentrations
- Diesel PM Emissions
- Drinking Water Contaminants
- Children's Lead Risk from Housing
- Pesticide Use
- Toxic Releases from Facilities
- Traffic Impacts

Enviromental Effects

- Cleanup Sites
- Groundwater Threats
- Hazardous Waste
- Impaired Water Bodies
- Solid Waste Sites and Facilities
- Drinking Water Contaminants
- Children's Lead Risk from Housing
- Pesticide Use
- Toxic Releases from Facilities
- Traffic Impacts

Population Characteristics

Sensitive Popolations

- Asthma Emergency Department Visits
- Cardiovascular Disease (Emergency Department Visits for Heart Attacks)
- Low Birth-Weight Infants

Socioeconomic Factors

- Educational Attainment
- Housing-Burdened Low-Income Households
- Linguistic Isolation
- Poverty
- Unemployment

American Community Survey

The American Community Survey (ACS), conducted by the U.S. Census Bureau, provides detailed demographic, social, economic, and housing data on an annual basis. Five-year estimates from the most recent ACS dataset were used to analyze sociodemographic characteristics within the study area.

Crossroads Traffic Records System

The Traffic Collision Database provides data input and management for collisions, citations, and DUIs; queries and reports, including historical, high incidence, and monthly, as well as collision reports by day and hour and other parameters. The most recent five years of collision data from June 1, 2019 to May 31, 2024 were extracted to identify long–term collision trends and patterns within the City.

TOP OPPORTUNITY INTERSECTIONS & CORRIDORS

To help identify areas of greatest need, a grid of approximately 9,500 hexagonal cells was overlaid on the project area, establishing a spatial framework for the analysis. Each hexagon was assigned values based on the characteristics of the land it encompasses. Eleven criteria, as previously listed, were taken into account. For example, each hexagon received a Poverty percentile value derived from the CalEnviroScreen 4.0 score corresponding to the area it covers.

Each intersection is analyzed using a 250-foot buffer. The calculations are derived from the hexagons that fall within this buffer. If the buffer overlaps two or more hexagons, the final score is a weighted sum of the scores from all overlapping hexagons. The weight is based on the proportion of each hexagon's area that lies within the buffer.

Similarly, each project corridor is analyzed using a 100-foot buffer, with calculations based on the values from the hexagons within that buffer area.

Tables 4.1 and 4.2 list the top opportunity intersections and corridors, along with their total scores. **Figures 4.1 and 4.2** illustrate these top opportunity intersections and corridors, respectively. **Figure 4.3** presents the five highest-ranking opportunity neighborhoods.

Table 4.1. Top Opportunity Intersections & Scores

RANK	Intersection	Total Score
1	Highland Avenue & Orangethorpe Avenue	124.51
2	Harbor Boulevard & Orangethorpe Avenue	123.18
3	Orangethorpe Avenue & Richman Avenue	114.06
4	Euclid Street & Orangethorpe Avenue	108.66
5	Harbor Boulevard & Valencia Drive	105.49
6	Harbor Boulevard & Southgate Avenue	102.57
7	Gilbert Street & Orangethorpe Avenue	102.40
8	Acacia Avenue & Commonwealth Avenue	100.68
9	Harbor Boulevard & Orangefair Avenue	98.80
10	Magnolia Avenue & Orangethorpe Avenue	98.16

Table 4.2. Top Opportunity Corridors & Scores

RANK	Corridor	Total Score
1	Orangethorpe Avenue	214.33
2	Commonwealth Avenue	168.27
3	Placentia Avenue	160.48
4	Harbor Boulevard	158.53
5	Malvern Avenue - Chapman Avenue	157.09
6	State College Boulevard	138.88
7	Euclid Street	137.07
8	Brea Boulevard	122.69
9	Bastanchury Road	117.42
10	State College Boulevard	94.06

Figure 4.1 Top Opportunity Intersections

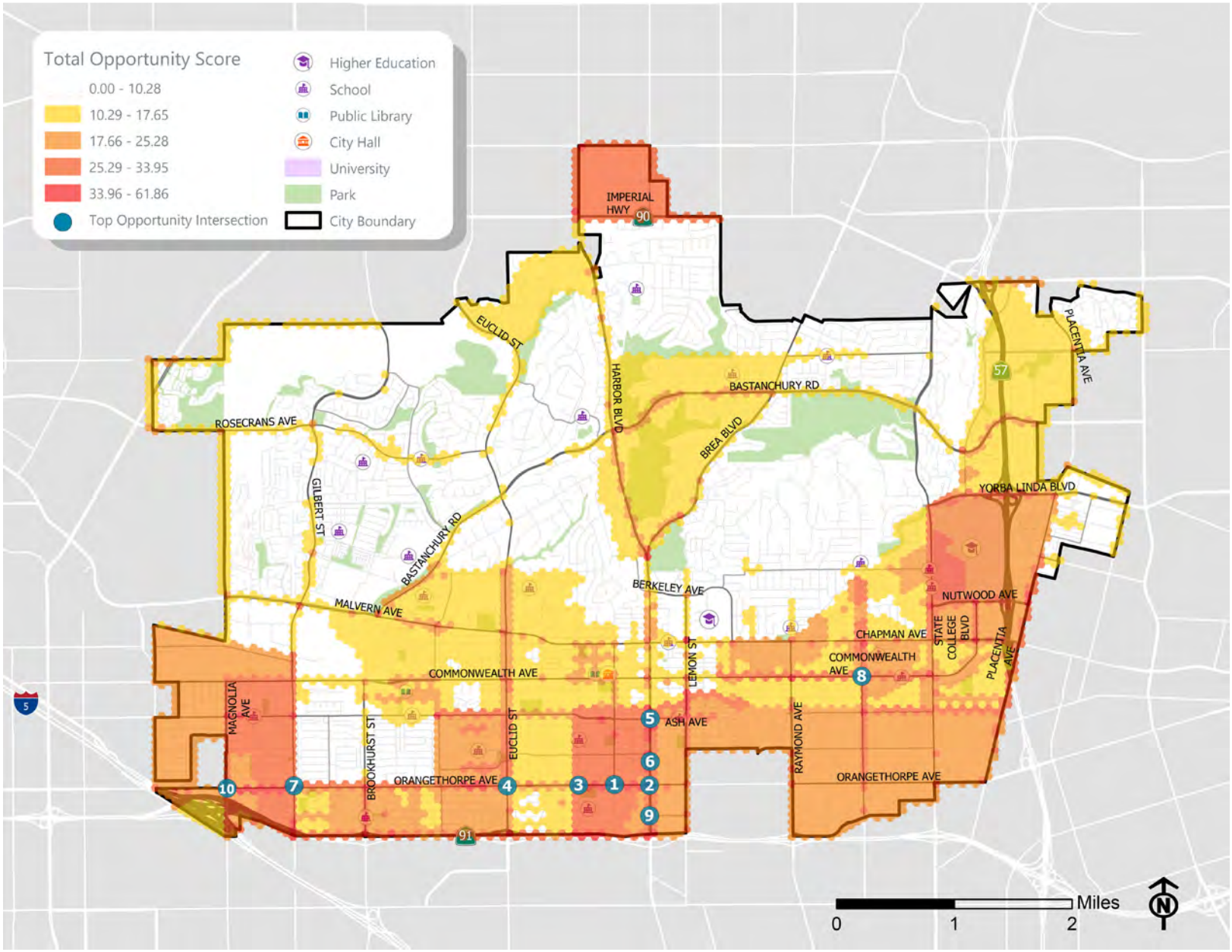
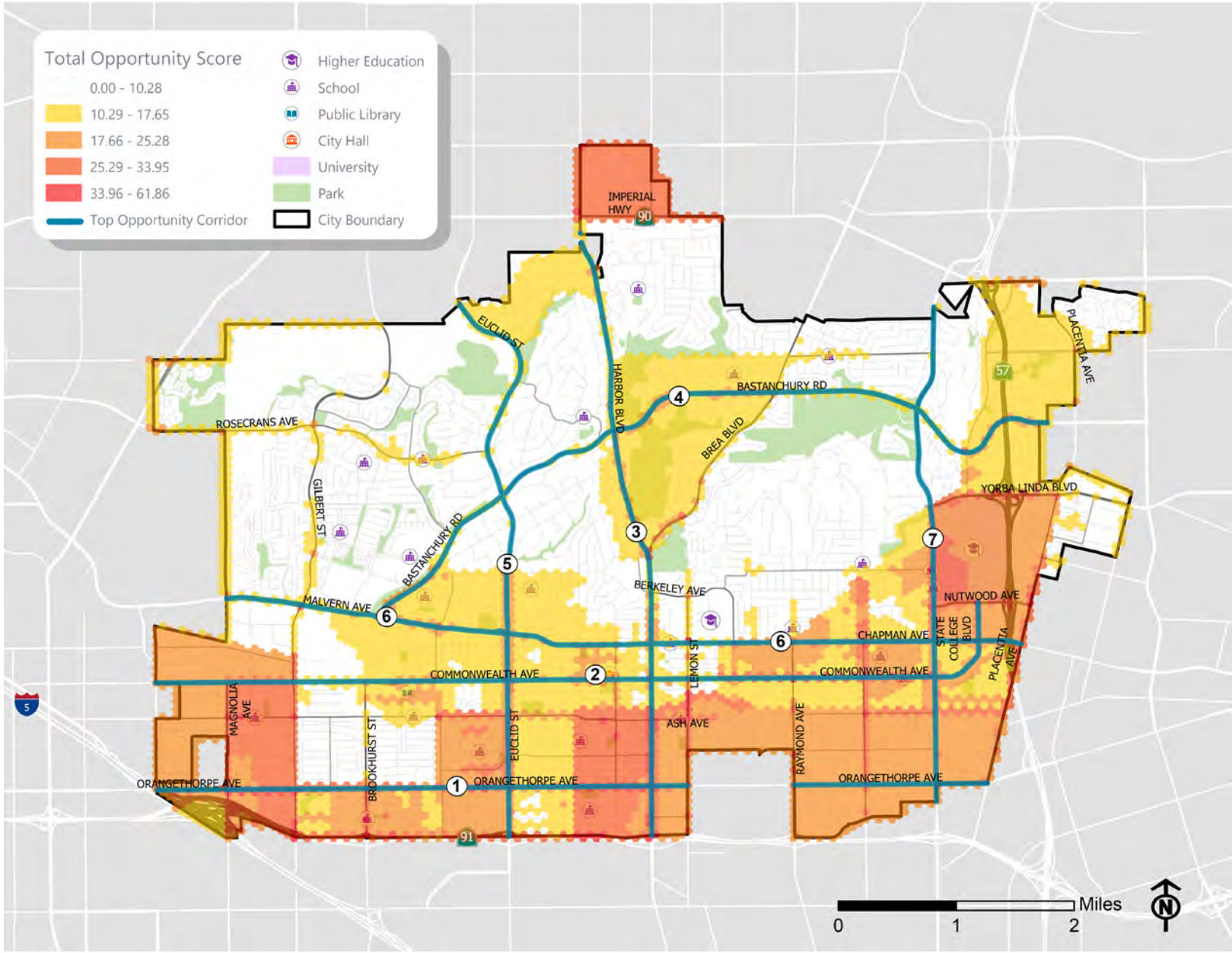


Figure 4.2 Priority Corridors



TOP OPPORTUNITY NEIGHBORHOODS

In addition to identifying top opportunity corridors, top neighborhoods were also selected based on areas with a high concentration of medium to high opportunity hexagons. Neighborhood groupings were also outlined to include roadways with similar character or treatment types needed.

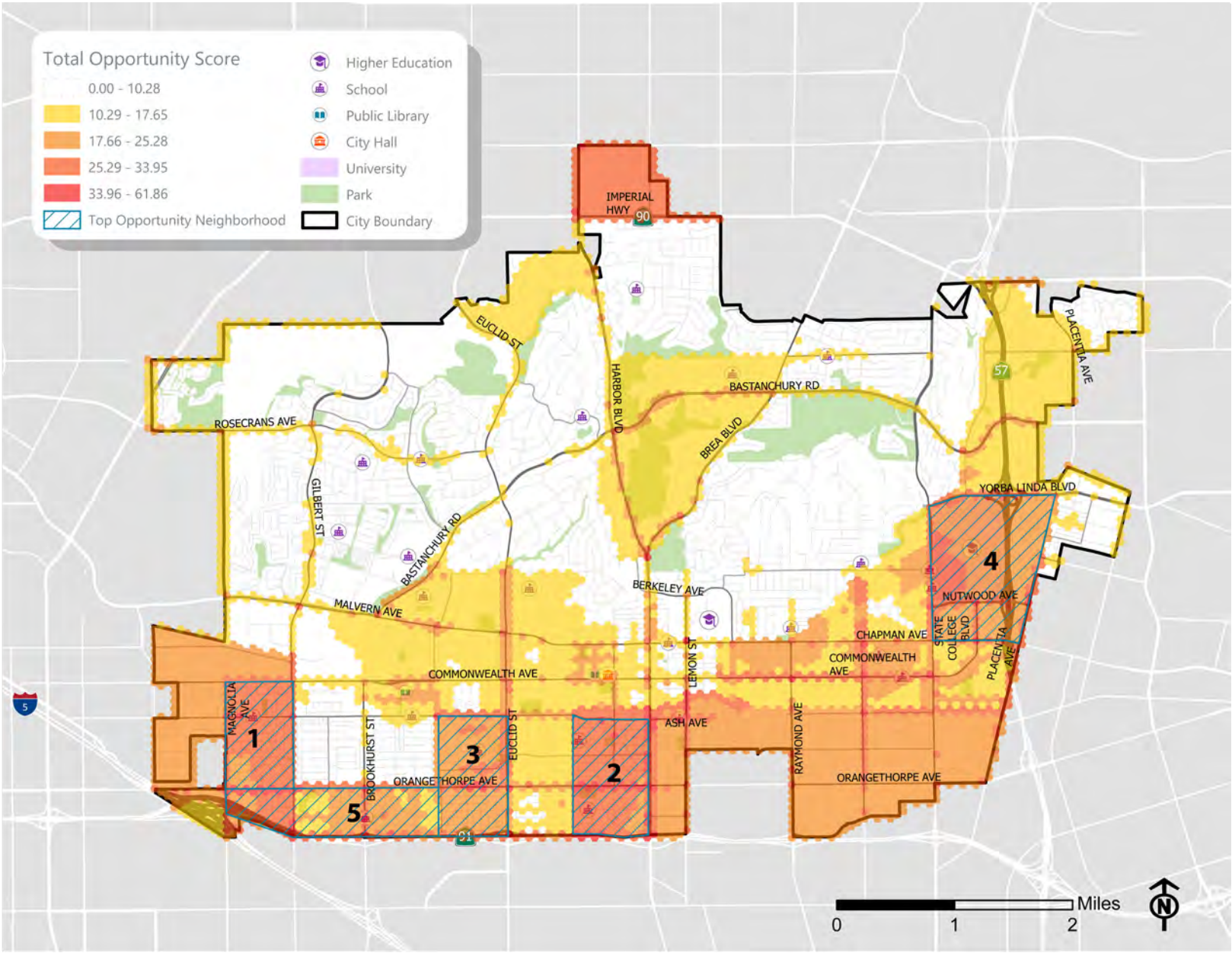
The top opportunity neighborhoods helped inform focus areas for treatment type. Top opportunity neighborhoods, as well as corridors, were referenced again when developing the implementation prioritization.

Table 4.3 lists the top opportunity neighborhoods, along with their bounds and average scores. Average scores were used to account for variation in neighborhood size and, thus, number of hexagons. **Figure 4.3** presents the five highest-ranking opportunity neighborhoods.

Table 4.3. Top Opportunity Neighborhoods

RANK	Neighborhood	Bounds	Average Score
1	Southwest Area	N: Commonwealth Avenue, E: Gilbert Street, S: Orangethorpe Avenue, W: Magnolia Avenue	30.06
2	Harbor West Area	N: Ash Avenue, E: Harbor Boulevard, S: City Limit, W: Richman Avenue	28.71
3	Euclid West Area	N: Ash Avenue, E: Euclid Street, S: City Limit, W: Basque Avenue	25.93
4	California State University, Fullerton Area	N: Yorba Linda Boulevard, E: Placentia Avenue, S: Chapman Avenue, W: State College Boulevard	24.73
5	Orangethorpe Avenue and Adjacent Area	N: Orangethorpe Avenue, E: Basque Avenue, S: City Limit, W: Magnolia Avenue	23.22

Figure 4.3 Top Opportunity Neighborhoods



CH 5. COUNTERMEASURES TOOLBOX

Countermeasures Toolbox

The project team collaborated with the City of Fullerton Public Works Department to develop the countermeasures toolbox. Countermeasures were selected if the Public Works Department affirmed their efficacy in past projects and feasibility of implementation within the context of Fullerton. Countermeasures selected are industry-standard treatments, supported by Caltrans Local Roadway Safety Manual (LRSM) and other publications with demonstrated success in addressing collisions. The toolbox includes the LRSM IDs, crash reduction factors (CRF), and funding eligibility where relevant for the included countermeasures.

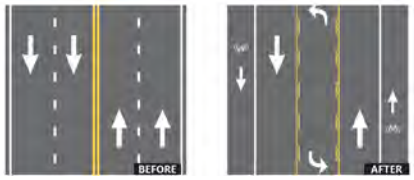
ROADWAYS & INTERSECTIONS



RAISED MEDIAN

A raised median is a curbed section that typically occupies the center of a roadway and provides opportunity for landscaping and street trees. They can reduce conflicts between opposing traffic and help calm traffic speeds.

LRSM ID SI11, NS16, NS21PB, R08
CRF 25-45%
HSIP Funding Eligibility 90%



LANE RECONFIGURATION

A lane reconfiguration can improve safety, calm traffic, and provide better mobility and access for all road users. Typically, they involve converting an existing four-lane undivided roadway to a three-lane roadway consisting of two through lanes and a center two-way left-turn lane.

LRSM ID R14
CRF 35%
HSIP Funding Eligibility 90%



SPEED FEEDBACK SIGN

A speed feedback sign displays a driver's current speed and reminds them of the posted speed limit, encouraging them to check and adjust their speed if necessary.

Not yet included in the LRSM; CRF in development.



RUMBLE STRIPS

Rumble strips are placed perpendicular to the travel lane to alert drivers of the need to slow down, stop, or prepare for upcoming changes. They create noise and vibration inside the vehicle, helping inattentive, distracted, or drowsy drivers stay within their lane. Rumble strips also enhance lane awareness in low-visibility conditions.

LRSM ID NS12
CRF 20%
HSIP Funding Eligibility 90%

ROADWAYS & INTERSECTIONS (CONTINUED)



HARDENED CENTERLINE

A hardened centerline is a small rubber barrier next to a crosswalk that requires people driving to make slower, more square left-hand turns. They can slow down vehicle speeds significantly at crosswalks and improve safety for people in the crosswalk.

LRSM ID	R28
CRF	25%
HSIP Funding Eligibility	90%



NEIGHBORHOOD TRAFFIC CIRCLE

Neighborhood traffic circles are circular intersections similar to roundabouts, but are stop controlled on the approach and intended for smaller intersections. Typically, they supplement existing stop-controlled intersections with a circular island in the center that is designed to slow traffic and eliminates severe conflict points (such as conflicting left-turn movements).

LRSM ID	NS06RA, NS07RA
CRF	Varies
HSIP Funding Eligibility	90%

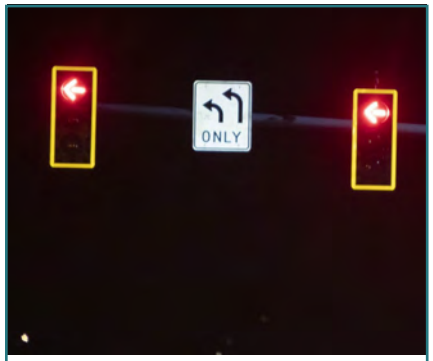


STREET LIGHTING

Installing intersection and pedestrian-scale lighting improves visibility for all road users, particularly at night or in low-light conditions, reducing the risk of collisions. Roadway lighting also enhances driver awareness and visibility of other road users and potential hazards.

LRSM ID	NS01NT, R01NT
CRF	35-40%
HSIP Funding Eligibility	90%

SIGNALS



RETROREFLECTIVE BACKPLATE

Retroreflective borders improve traffic signal visibility for aging and color-vision-impaired drivers, helping them identify the illuminated signal. They also enhance intersection awareness during power outages by making dark signal heads and backplates more visible.

LRSM ID	SI02
CRF	15%
HSIP Funding Eligibility	90%



PROTECTED LEFT TURNS

A protected left turn can be implemented at signalized intersections (with existing left turns pockets) that currently have a permissive left-turn or no left-turn protection. Providing protected left-turn phases for signalized intersections removes the need for the drivers to navigate through gaps in oncoming/ opposing through vehicles.

LRSM ID	SI05, SI06
CRF	30-55%
HSIP Funding Eligibility	90%



PROHIBIT RIGHT-TURN-ON-RED

Prohibiting right-turn-on-red movements should be considered at skewed intersections, or where exclusive pedestrian "WALK" phases, Leading Pedestrian Intervals (LPIs), sight distance issues, or high pedestrian volumes are present. Can help prevent crashes between vehicles turning right on red from one street and through vehicles on the cross street, and crashes involving pedestrians.

LRSM does not include turn restrictions.

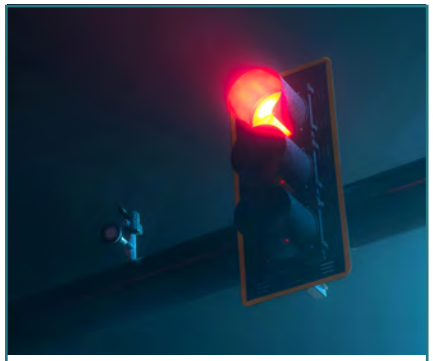


SEPARATE RIGHT-TURN PHASING

Provides a green arrow phase for right-turning vehicles. Avoids conflicts between right-turning traffic and bicyclists or pedestrians crossing the intersection on their right.

LRSM does not include right-turn phasing.

SIGNALS (CONTINUED)



SPEED SENSITIVE REST IN RED SIGNAL

During certain hours (e.g., late night), a traffic signal may remain red for all or specific approaches until a vehicle arrives. If the vehicle exceeds the desired speed, the signal stays red until the vehicle stops. If the vehicle is traveling at the desired speed, the signal turns green before arrival. This timing strategy encourages compliance with the speed limit and can be paired with variable speed warning signs for added effectiveness.

LRSM ID	SI03
CRF	15%
HSIP Funding Eligibility	50%



EXTEND YELLOW AND ALL RED TIME

Extending yellow and all red time increases the time allotted for the yellow and red lights during a signal phase. Extending yellow and all red time allows drivers and bicyclists a few additional seconds of time at the end of a signal phase to cross through a signalized intersection before conflicting traffic movements are permitted to enter the intersection.

LRSM ID	SI03
CRF	15%
HSIP Funding Eligibility	50%

PEDESTRIAN FACILITIES



ADD SIDEWALK

Adding sidewalks creates a continuous, dedicated space for pedestrians, ensuring their safety by separating them from traffic.

LRSM ID	R35PB
CRF	80%
HSIP Funding Eligibility	90%



HIGH-VISIBILITY CROSSWALK

A high-visibility crosswalk has a striped pattern with ladder markings made of high-visibility material, such as thermoplastic tape, instead of paint. A high-visibility crosswalk improves the visibility of marked crosswalks and provides motorists a cue to slow down and yield to pedestrians.

LRSM does not include crosswalk upgrades or new crosswalks at unsignalized intersections.



SCRAMBLE CROSSWALK

A form of pedestrian "WALK" phase at a signalized intersection in which all vehicular traffic is required to stop, allowing pedestrians to cross through the intersection in any direction, including diagonally.

LRSM ID	SI20PB
CRF	40%
HSIP Funding Eligibility	90%



LEADING PEDESTRIAN INTERVAL

A leading pedestrian interval gives pedestrians the opportunity to enter an intersection 3 - 7 seconds before vehicles are given a green indication. With this head start, pedestrians can better establish their presence in the crosswalk before vehicles have priority to turn left or right. Pedestrian recall is a traffic signal timing function that causes a pedestrian walk phase to activate automatically every cycle.

LRSM ID	SI22PB
CRF	60%
HSIP Funding Eligibility	90%

PEDESTRIAN FACILITIES (CONTINUED)



PEDESTRIAN HYBRID BEACON

A pedestrian-hybrid beacon (PHB) is used at unsignalized intersections or mid-block crosswalks to notify oncoming motorists to stop with a series of red and yellow lights. Unlike a traffic signal, the PHB rests in dark until a pedestrian activates it via pushbutton or other form of detection.

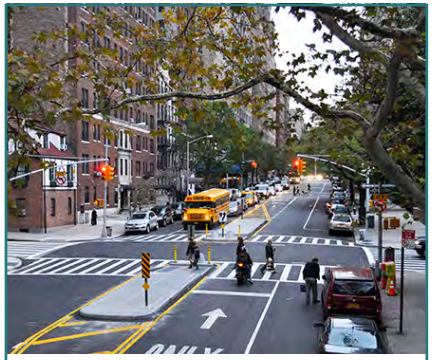
LRSM ID	NS25PB
CRF	55%
HSIP Funding Eligibility	90%



RECTANGULAR RAPID FLASHING BEACON

A rectangular rapid flashing beacon (RRFB) is a pedestrian-activated flashing light with additional signage to alert motorists of a pedestrian crossing. An RRFB increases the visibility of marked crosswalks and provides motorists a cue to slow down and yield to pedestrians.

LRSM ID	NS24PB
CRF	35%
HSIP Funding Eligibility	90%



PEDESTRIAN REFUGE ISLAND

A pedestrian refuge island is a raised barrier in the center of the roadway that can provide a place for pedestrians to wait if they are unable to finish crossing the intersection and reduce the exposure for pedestrians crossing the intersection. Pedestrian refuge areas constructed from paint and plastic may be implemented as part of a low-cost/quick build project.

LRSM ID	NS21PB
CRF	45%
HSIP Funding Eligibility	90%



CURB EXTENSIONS

A curb extension is a traffic calming measure that widens the sidewalk for a short distance to enhance the pedestrian crossing. This narrows the roadway, reduces the crossing distance, and allows pedestrians and drivers to see each other more easily when parked vehicles would otherwise block visibility.

LRSM ID	NS23PB, R36PB
CRF	35%
HSIP Funding Eligibility	90%

BICYCLE FACILITIES



BIKE LANE

Bike lanes designate an exclusive space for bicyclists using pavement markings and signage. The bike lane is located adjacent to motor vehicle travel lanes and flows in the same direction as motor vehicle traffic. Bike lanes are typically on the right side of the street, between the adjacent travel lane and curb, road edge, or travel lane.

LRSM ID	R33PB
CRF	35%
HSIP Funding Eligibility	90%



BUFFERED BIKE LANE

Buffered Bike Lanes are standard bike lanes paired with a designated horizontal buffer space, separating the bicycle lane from the adjacent motor vehicle travel lane and/or parking lane. This type of bikeway provides greater distance between vehicles and bicycles; provides space for bicyclists to pass each other; and encourages bicycling by contributing to the perception of safety.

LRSM ID	R33PB
CRF	35%
HSIP Funding Eligibility	90%



SEPARATED BIKEWAY

A separated bikeway, also called a cycletrack, provides dedicated street space, typically adjacent to outer vehicle travel lanes, with physical separation from vehicle traffic, designated lane markings, pavement legends, and signage. Physical separation may consist of plastic posts, parked vehicles, raised median, or a curb (if the separated bike lane is raised to sidewalk level).

LRSM ID	R34PB
CRF	45%
HSIP Funding Eligibility	90%



BIKE BOX

A designated area between the crosswalk and vehicle stop bar at a signalized intersection that is often painted green where bicyclists can wait during a red signal phase. The use of the bike box places bicyclists in a location where they are more visible to motorists.

LRSM ID	SI21PB
CRF	15%
HSIP Funding Eligibility	90%

BICYCLE FACILITIES (CONTINUED)



GREEN CONFLICT STRIPING

Green conflict striping is green pavement markings in a dashed pattern that extend across bike lanes approaching an intersection and/or going through an intersection. Green conflict striping improves and increases the visibility of bicyclists and potential conflict points so motorists and bicyclists can use caution when traveling toward and through an intersection.

LRSM does not include conflict striping.



BIKE CROSSING

Solid green paint across an intersection signifies the path of the bicycle crossing. Increases visibility of bicyclists' anticipated path of travel through an intersection.

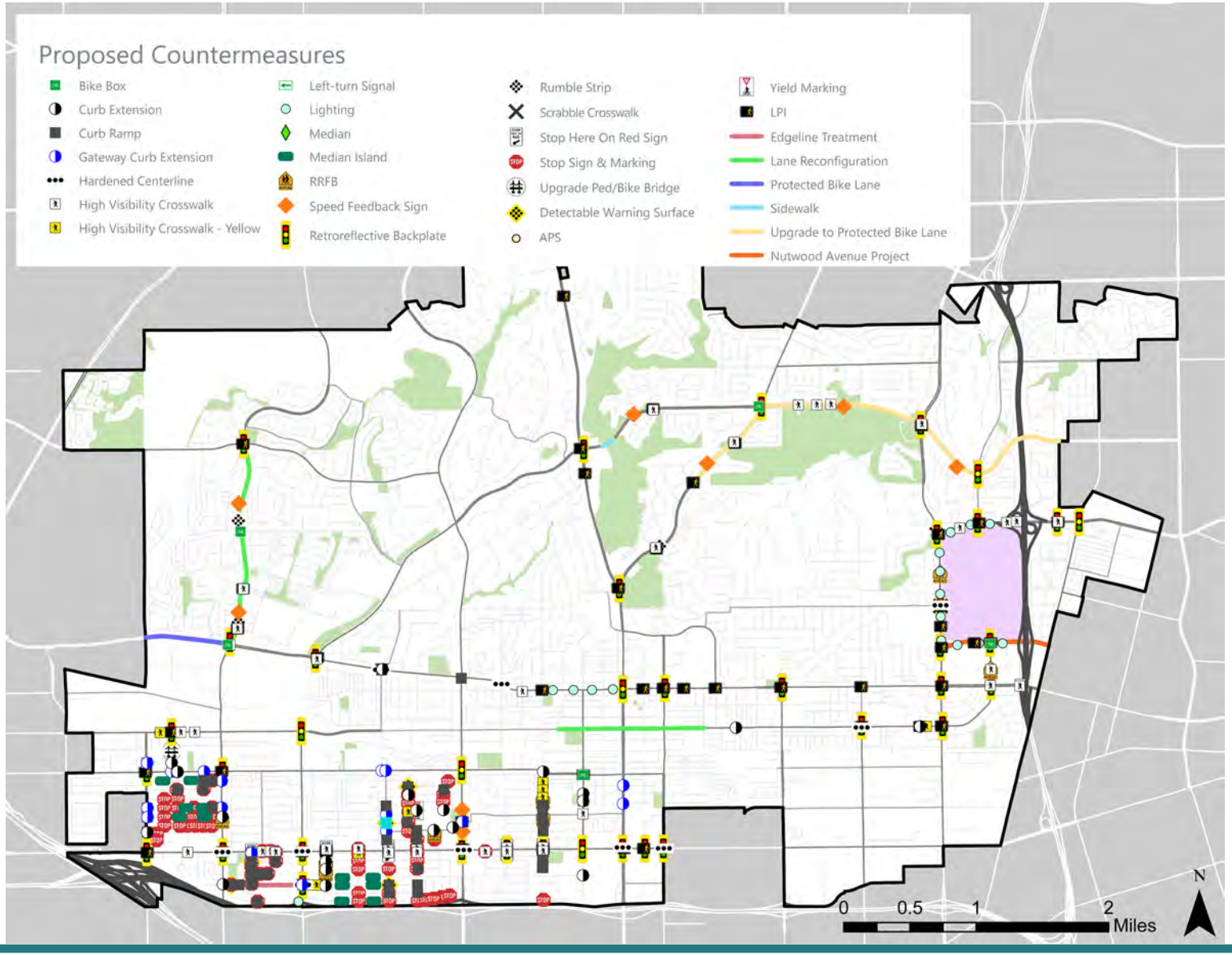
LRSM does not include bike crossing.

CH 6.
PRIORITY PROJECTS

Infrastructure Recommendations

The SS4A Action Plan proposes over 380 countermeasures on Fullerton roadways, developed to balance public concerns and engineering best practices. The project team considered collision trends and existing infrastructure, along with public feedback at specific locations to select appropriate countermeasures to address safety issues. **Figure 6.1** displays all the proposed recommendations. The complete list of recommendations is found in **Appendix B**.

Figure 6.1 Proposed Recommendations



Project Development and Prioritization

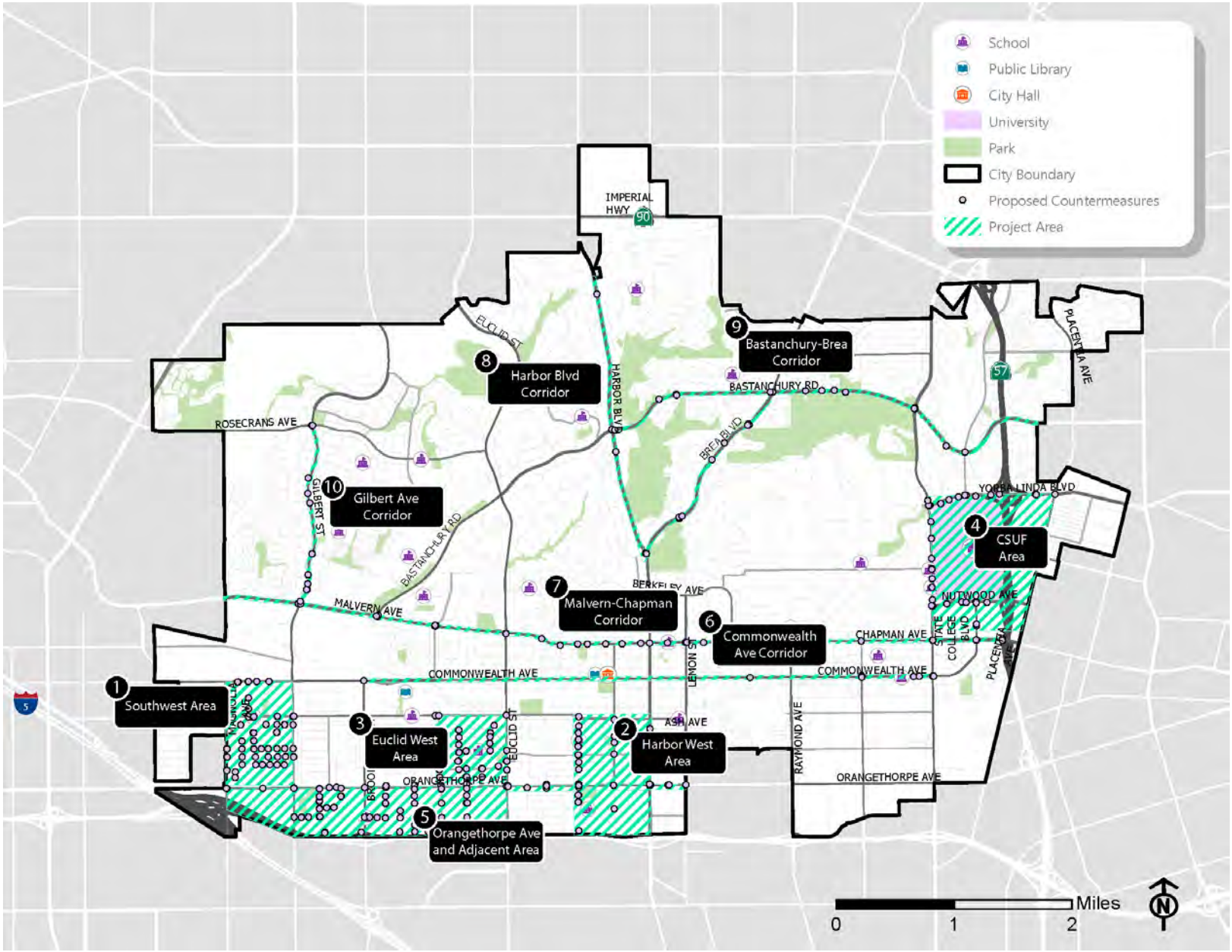
Due to the large number of proposed countermeasures, the project team developed groupings to ease project identification and support grant pursuits. The opportunity analysis (Chapter 4) formed the basis of the groupings, which were further outlined based on areas that had shared needs and proposed countermeasure types. The proposed treatments were grouped into ten projects and ranked based on their opportunity scores. The projects are either area projects, grouped by neighborhood, or corridor projects, grouped by a specific roadway.

The project names, bounds, and priority rankings are shown in **Table 6.1**. **Figure 6.2** shows the project names, location, and prioritization.

Table 6.1. Project Names and Bounds

RANK	Project Name	Bounds
1	Southwest Area	N: Commonwealth Avenue, E: Gilbert Street, S: Orangethorpe Avenue, W: Magnolia Avenue
2	Harbor West Area	N: Ash Avenue, E: Harbor Boulevard, S: City Limit, W: Richman Avenue
3	Euclid West Area	N: Ash Avenue, E: Euclid Street, S: City Limit, W: Basque Avenue
4	California State University, Fullerton Area	N: Yorba Linda Boulevard, E: Placentia Avenue, S: Chapman Avenue, W: State College Boulevard
5	Orangethorpe Avenue and Adjacent Area	N: Orangethorpe Avenue, E: Basque Avenue, S: City Limit, W: Magnolia Avenue
6	Commonwealth Avenue Corridor	Brookhurst Avenue - State College Boulevard
7	Malvern - Chapman Corridor	West City Limit - CA-57
8	Harbor Boulevard Corridor	North City Limit - Brea Boulevard
9	Bastanchury - Brea Corridor	Bastanchury Road (Harbor Boulevard - East City Limit) Brea Boulevard (Harbor Boulevard - Bastanchury Road)
10	Gilbert Avenue Corridor	Rosecrans Avenue - Malvern Avenue

Figure 6.2 Project Names and Prioritization



Concept Plans

Given the extensive number of proposed treatments, the project team opted to show four key projects that are representative of the Action Plan's treatments in the concept plans below. The concept plans show the entirety of Orangethorpe Avenue and Adjacent Area project's proposed countermeasures. This project was selected as it includes the vast majority of treatment types included in the Action Plan.

To show key treatments that were not included in the Orangethorpe Avenue and Adjacent Area project, segments of two of the corridor projects are also included. The Brea Boulevard segment (between Harbor Boulevard and Bastanchury Road) of the Bastanchury - Brea Corridor project is shown below, as well as the segment of the Commonwealth Avenue Corridor project between Library Lane and Balcom Avenue.

Finally, one key intersection of the California State University, Fullerton Area project is included: the intersection of State College Boulevard and Dorothy Lane.

In conjunction, these concept plans (listed again below) show a representative sample of the treatments proposed in this Action Plan.

- **Orangethope Avenue and Adjacent Area project**
- **Bastanchury - Brea Corridor project segment**: Brea Boulevard (Harbor Boulevard to Bastanchury Road)
- **Commonwealth Avenue Corridor project segment**: Library Lane to Balcom Avenue
- **California State University, Fullerton Area project intersection**: State College Boulevard & Dorothy Lane

Concept plans can be used for future spot improvements or corridor enhancement applications. The concept plans showcase typical improvements for enhanced pedestrian crossings, enhanced intersection movement, traffic operation strategies, and intersection strategies.

NOTE: *Concept plans presented within the SS4A should not be considered final. These concepts are subject to additional design and constructability review, as well as community input.*

Orangethorpe Avenue and Adjacent Area

NEIGHBORHOOD SNAPSHOT



- High-Visibility Crosswalk (Yellow)
- High-Visibility Crosswalk
- Curb Extension
- Retroreflective Backplate
- Leading Pedestrian Interval
- Hardened Centerline
- Stop Sign and Marking
- Left Turn Signal
- Stop Here for Peds Sign
- Detectable Warning Surface
- Curb Ramp & Detectable Warning Surface
- Gateway Curb Extension
- Lighting
- Rectangular Rapid Flashing Beacon
- Median Island
- Stop Here on Red Sign
- Edgeline Treatment
- Sidewalk

NEIGHBORHOOD FEATURE

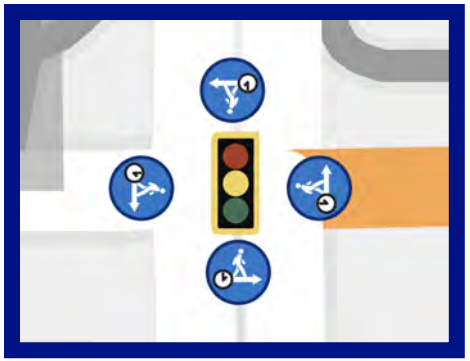
Orangethorpe Avenue and Adjacent Area is the area east of Magnolia Avenue and west of Basque Avenue and south of Orangethorpe Avenue. The area is bordered by Northwest Anaheim to the south. The area is primarily residential, with commercial land use at Orangethorpe Avenue's intersections with Magnolia Avenue, Gilbert Street, and Brookhurst Road. The area also includes Gilbert Park and Orangethorpe School Park. Orangethorpe Elementary School is in the neighborhood.

Corridors with recommended treatments are:

- Orangethorpe Avenue
- Woodcrest Avenue
- Gage Avenue
- Baker Avenue
- Roberta Avenue
- Maxim Avenue
- Houston Avenue

PROPOSED TREATMENTS BY INTERSECTION

A. Magnolia Avenue & Orangethorpe Avenue

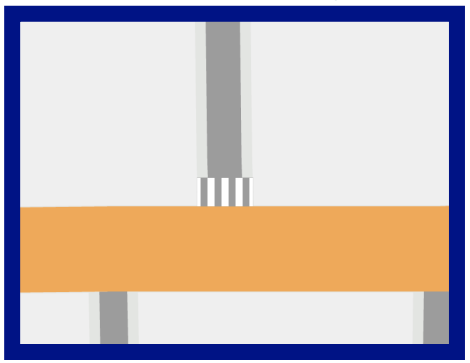


- Install Leading Pedestrian Intervals for crossings at all four legs of the intersection
- Upgrade all traffic signal heads to include retroreflective backplates

Retroreflective Backplate

Leading Pedestrian Interval

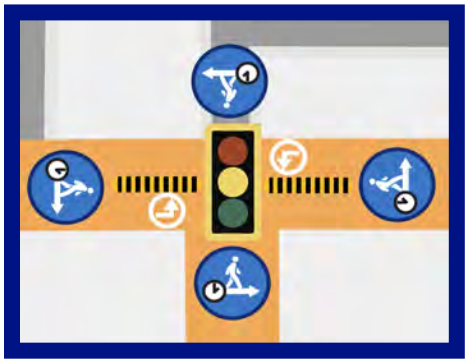
B. Nicklett Avenue & Orangethorpe Avenue



- Install a high-visibility crosswalk on the north leg of the intersection

High-Visbility Crosswalk

C. Gilbert Street & Orangethorpe Avenue



- Install Leading Pedestrian Intervals for crossings at all four legs of the intersection
- Upgrade all traffic signal heads to include retroreflective backplates
- Install hardened centerlines on the east and west legs
- Add a protected left-turn signal for eastbound and westbound traffic

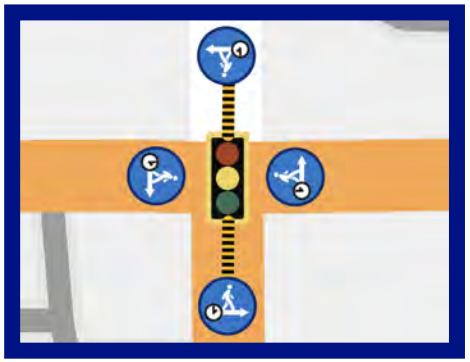
Retroreflective Backplate

Leading Pedestrian Interval

Hardened Centerline

Left Turn Signal

D. Brookhurst Road & Orangethorpe Avenue



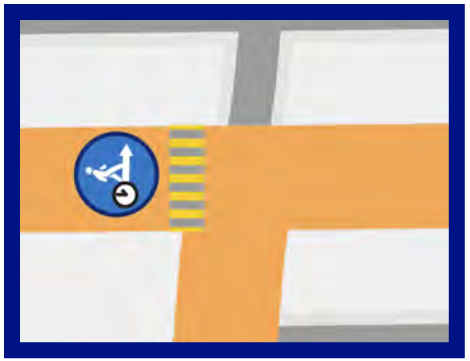
- Install Leading Pedestrian Intervals for crossings at all four legs of the intersection
- Upgrade all traffic signal heads to include retroreflective backplates
- Install hardened centerlines on the north and south legs

Retroreflective Backplate

Leading Pedestrian Interval

Hardened Centerline

E. Pacific Drive & Orangethorpe Avenue

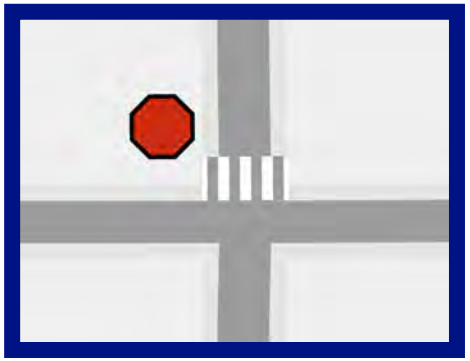


- Install Leading Pedestrian Intervals for crossings on the east leg
- Update existing crosswalk to be yellow on the east leg of the intersection

Leading Pedestrian Interval

High-Visibility Crosswalk (Yellow)

F. Courtney Avenue & Orangethorpe Avenue (North Frontage Road)

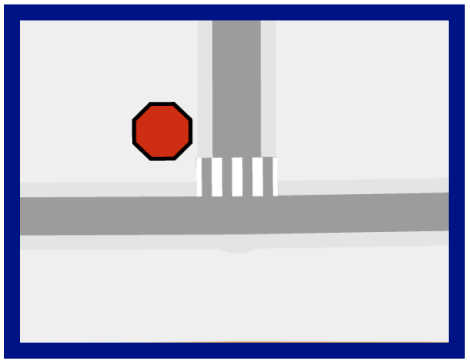


- Install a high-visibility crosswalk on the north leg of the intersection
- Install a Stop sign and marking on the north leg of the intersection

High-Visibility Crosswalk

Stop Sign and Marking

G. Cedar Avenue & Orangethorpe Avenue (North Frontage Road)



- Install a high-visibility crosswalk on the north leg of the intersection
- Install a Stop sign and marking on the north leg of the intersection

High-Visibility Crosswalk

Stop Sign and Marking

H. Pacific Drive & Orangethorpe Avenue (North Frontage Road)

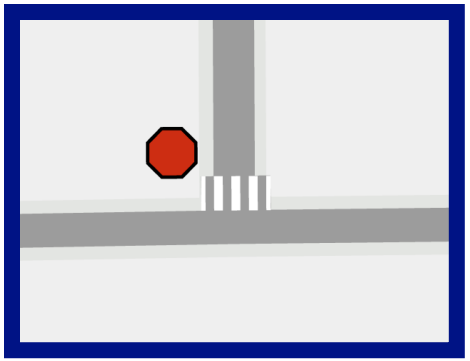


- Install high-visibility yellow crosswalks at the north and west legs of the intersection
- Install a Stop Here on Red sign at the north leg of the intersection

High-Visibility Crosswalk (Yellow)

Stop Here on Red Sign

I. Eadington Avenue & Orangethorpe Avenue (North Frontage Road)

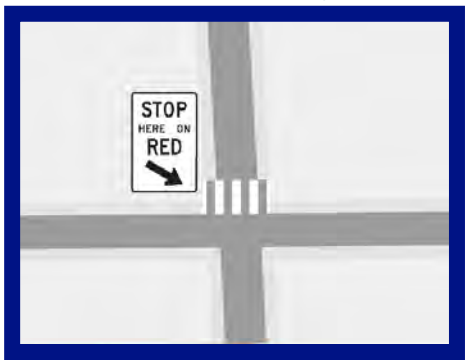


- Install a high-visibility crosswalk on the north leg of the intersection
- Install a Stop sign and marking on the north leg of the intersection

High-Visibility Crosswalk

Stop Sign and Marking

J. Basque Avenue & Orangethorpe Avenue (North Frontage Road)

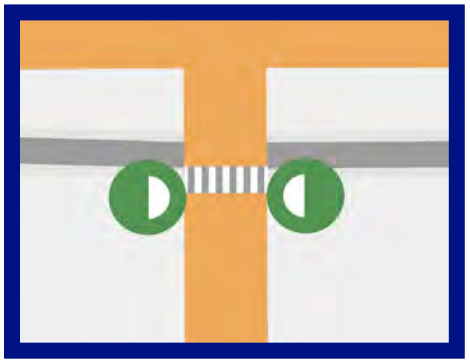


- Install a high-visibility crosswalk on the north leg of the intersection
- Install a Stop Here on Red sign at the north leg of the intersection

High-Visibility Crosswalk

Stop Here on Red Sign

K. Courtney Avenue & Orangethorpe Avenue (South Frontage Road)

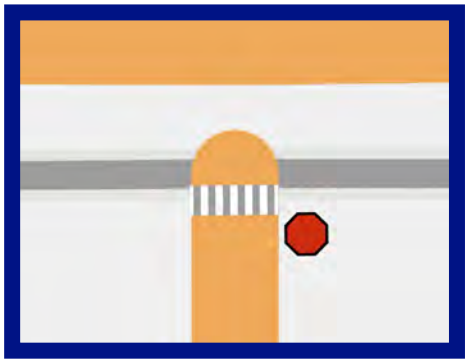


- Install a high-visibility crosswalk on the south leg of the intersection
- Install gateway curb extensions into Courtney Avenue on the southwest and southeast corners

High-Visibility Crosswalk

Gateway Curb Extension

L. Cedar Avenue & Orangethorpe Avenue (South Frontage Road)

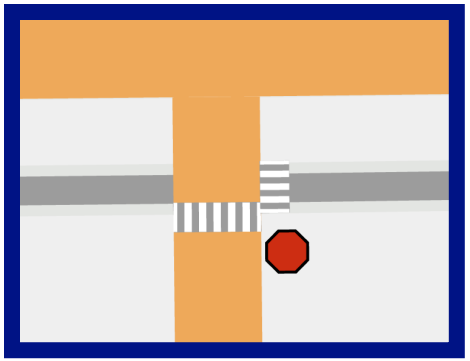


- Install a high-visibility crosswalk on the south leg of the intersection
- Install a Stop sign and marking on the south leg of the intersection

High-Visibility Crosswalk

Stop Sign and Marking

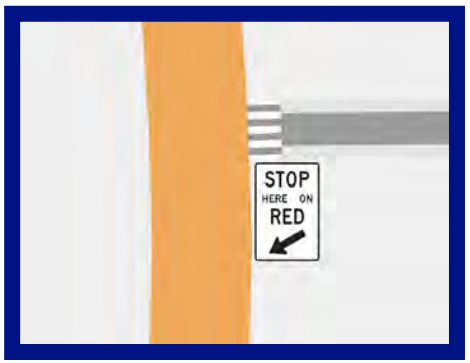
M. Eadington Avenue & Orangethorpe Avenue (South Frontage Road)



- Install high-visibility crosswalks on the south and east legs of the intersection
- Install a Stop sign and marking on the south leg of the intersection

High-Visibility Crosswalk
Stop Sign and Marking

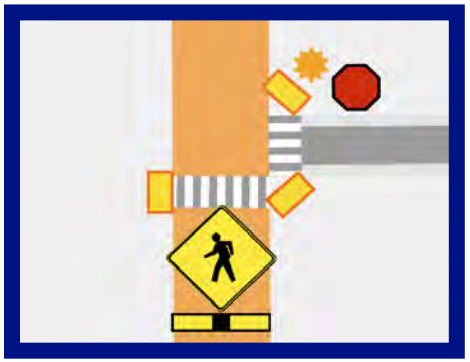
N. Basque Avenue & Orangethorpe Avenue (South Frontage Road)



- Install a high-visibility crosswalk on the east leg of the intersection
- Install a Stop Here on Red sign on the south leg of the intersection

High-Visibility Crosswalk
Stop Here on Red Sign

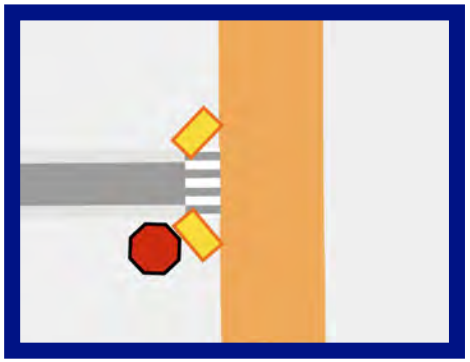
O. Courtney Avenue & Woodcrest Avenue



- Install high-visibility crosswalks on the east and south legs
- Install a Stop sign and marking on the east leg
- Install detectable warning surfaces and curb ramps on the northeast, southeast, and southwest corners
- Install lighting on the northeast corner
- Install Rectangular Rapid Flashing Beacon at crossing on the south leg

High-Visibility Crosswalk
Stop Sign and Marking
Curb Ramp & Detectable Warning
Lighting
Rectangular Rapid Flashing Beacon

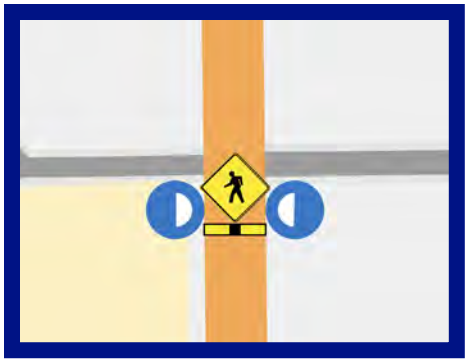
P. Cedar Avenue & Woodcrest Avenue



- Install a high-visibility crosswalk on the west leg of the intersection
- Install a Stop sign and marking on the west leg of the intersection
- Install detectable warning surfaces and curb ramps on the northwest and southwest corners of the intersection

High-Visibility Crosswalk
Stop Sign and Marking
Curb Ramp & Detectable Warning Surface

Q. Pacific Drive & Woodcrest Avenue

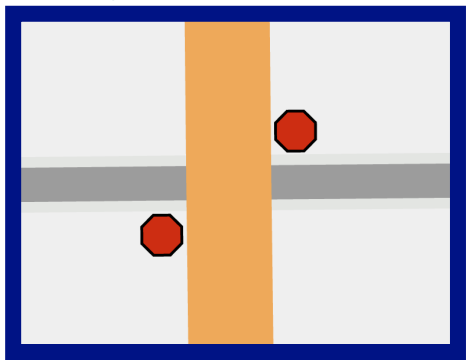


- Install Rectangular Rapid Flashing Beacon at crossing on the south leg of the intersection
- Install curb extension on the southwest and southeast corners of the intersection into Pacific Drive

Curb Extension

Rectangular Rapid Flashing Beacon

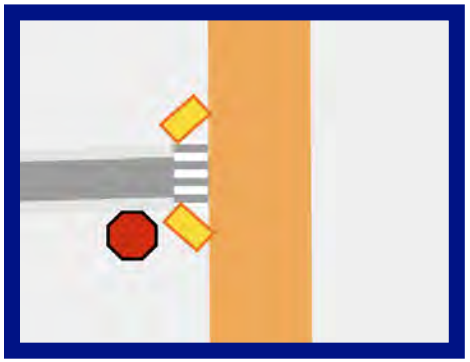
R. Eadington Avenue & Woodcrest Avenue



- Install Stop signs and markings at the east and west legs of the intersection

Stop Sign and Marking

S. Courtney Avenue & Gage Avenue



- Install a high-visibility crosswalk on the west leg of the intersection
- Install a Stop sign and marking at the west leg of the intersection
- Install detectable warning surfaces and curb ramps on the northwest and southwest corners of the intersection

High-Visibility Crosswalk

Stop Sign and Marking

Curb Ramp & Detectable Warning Surface

T. Pacific Drive & Gage Avenue

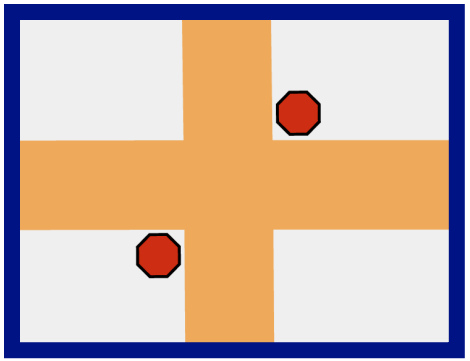


- Install Rectangular Rapid Flashing Beacon at crossing on the north leg of the intersection
- Install curb extensions on the northwest and northeast corners of the intersection into Pacific Drive

Curb Extension

Rectangular Rapid Flashing Beacon

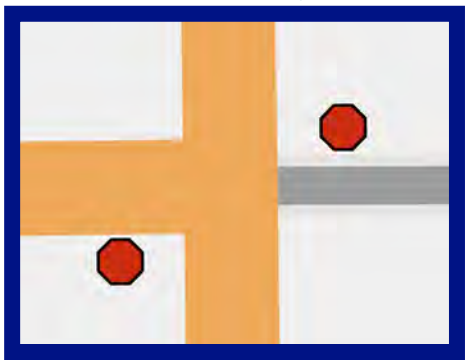
U. Eadington Avenue & Gage Avenue



- Install Stop signs and markings at the east and west legs of the intersection

Stop Sign and Marking

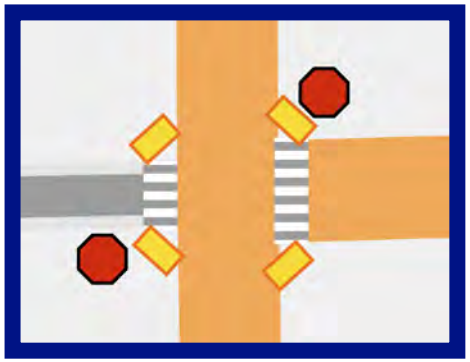
V. Basque Avenue & Gage Avenue



- Install Stop signs and markings at the east and west legs of the intersection

Stop Sign and Marking

W. Courtney Avenue & Baker Avenue



- Install high-visibility crosswalks on the west and east legs of the intersection
- Install Stop signs and markings on the east and west legs of the intersection
- Install curb ramps on the northwest and southwest corners of the intersection

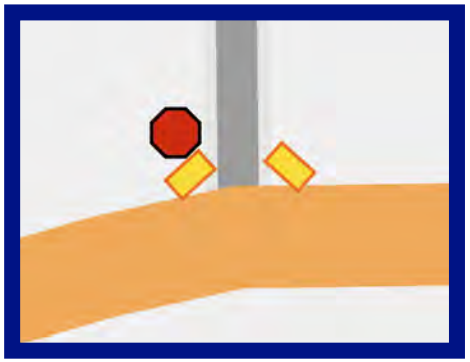
High-Visibility Crosswalk

Stop Sign and Marking

Curb Ramp & Detectable Warning Surface

Lighting

X. Naples Place & Baker Avenue

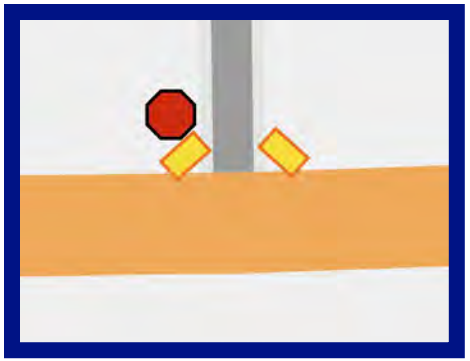


- Install a Stop sign and marking on the north leg of the intersection
- Install detectable warning surfaces and curb ramps on the northwest and northeast corners of the intersection

Stop Sign and Marking

Curb Ramp & Detectable Warning Surface

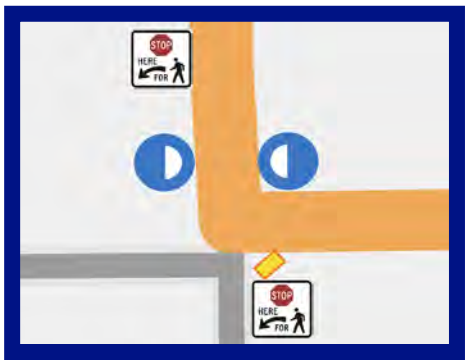
Y. Simi Place & Baker Avenue



- Install a Stop sign and marking on the north leg of the intersection
- Install detectable warning surfaces and curb ramps on the northwest and northeast corners of the intersection

Stop Sign and Marking
Detectable Warning Surface

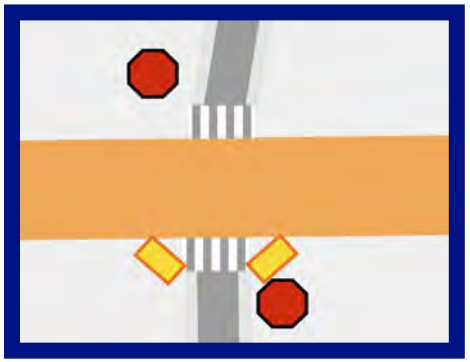
Z. Gilbert Street & Roberta Avenue



- Install curb extensions on the northwest and northeast corners of the intersection into Gilbert Street
- Upgrade existing crosswalk with "Stop Here for Pedestrians" sign and yield triangles for northbound and southbound traffic
- Install detectable warning surfaces and curb ramps on the northeast and southeast corners

Curb Extension
Stop Here for Peds Sign
Detectable Warning Surface

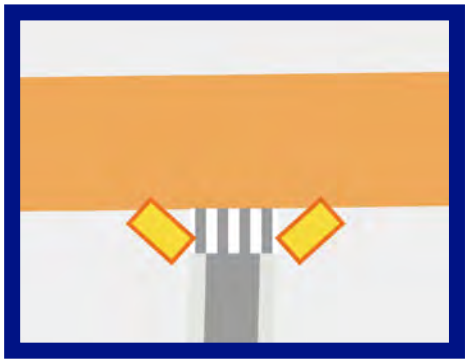
AA. Pine Drive & Roberta Avenue



- Install high-visibility crosswalks on the north and south legs of the intersection
- Install Stop signs and markings at the north and west legs of the intersection
- Install detectable warning surfaces and curb ramps on the southwest and southeast corners of the intersection

High-Visibility Crosswalk
Stop Sign and Marking
Detectable Warning Surface

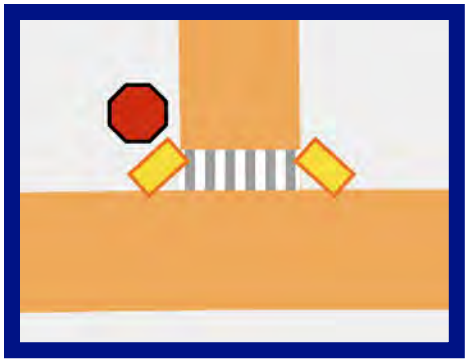
BB. Maxzim Avenue & Roberta Avenue



- Install a high-visibility crosswalk on the south leg of the intersection
- Install detectable warning surfaces and curb ramps on the southwest and southeast corners

High-Visibility Crosswalk
Detectable Warning Surface

CC. Courtney Avenue & Roberta Avenue



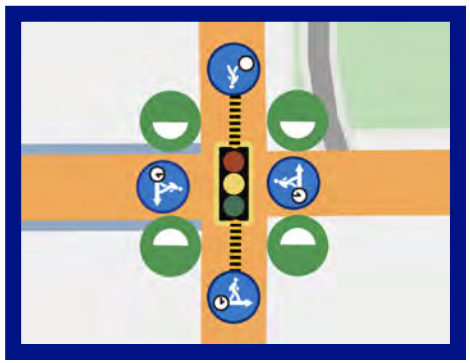
- Install a high-visibility crosswalk on the north leg of the intersection
- Install a Stop sign and marking at the north leg of the intersection
- Install detectable warning surfaces and curb ramps on the northwest and northeast corners of the intersection

High-Visibility Crosswalk

Stop Sign and Marking

Curb Ramp & Detectable Warning Surface

DD. Brookhurst Road & Roberta Avenue



- Install Leading Pedestrian Intervals for crossings at all four legs of the intersection
- Upgrade all traffic signal heads to include retroreflective backplates
- Install hardened centerlines on the north and south legs
- Install gateway curb extensions into Brookhurst Road on the all corners of the intersection

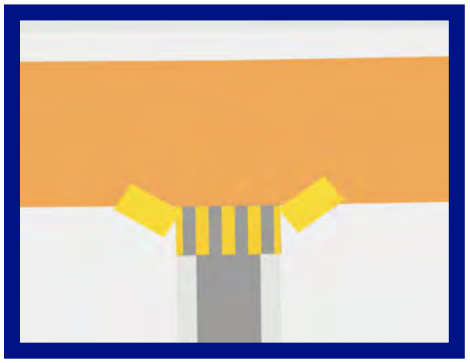
Retroreflective Backplate

Leading Pedestrian Interval

Hardened Centerline

Gateway Curb Extension

EE. Houston Avenue & Roberta Avenue

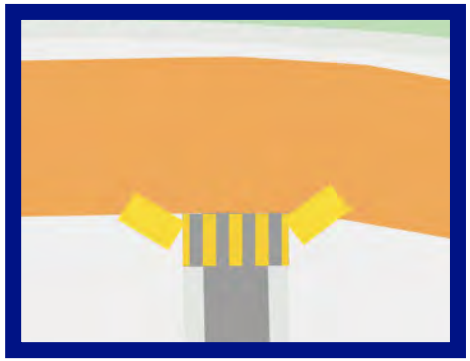


- Install a high-visibility (yellow) crosswalk on the south leg of the intersection
- Install detectable warning surfaces on the southwest and southeast corners of the intersection

High Visibility Crosswalk (Yellow)

Detectable Warning Surface

FF. Locust Drive & Roberta Avenue

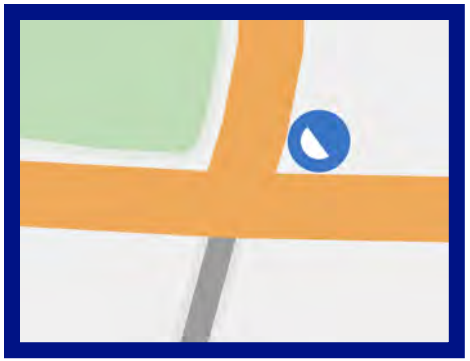


- Install a high-visibility (yellow) crosswalk on the south leg of the intersection
- Install detectable warning surfaces on the southwest and southeast corners of the intersection

High Visibility Crosswalk (Yellow)

Detectable Warning Surface

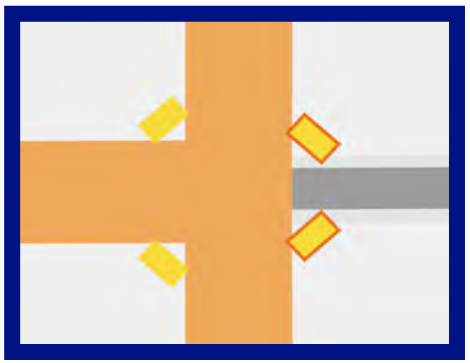
GG. Pacific Drive & Roberta Avenue



- Install a curb extension on the northeast corner of the intersection into Pacific Drive and Roberta Avenue

Curb Extension

HH. Basque Avenue & Roberta Avenue

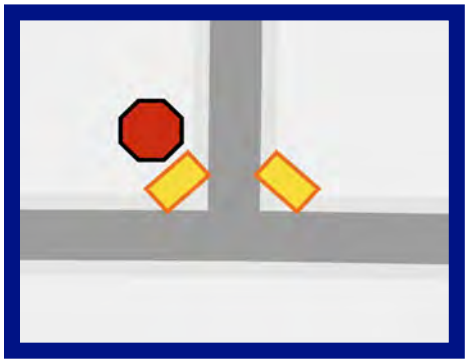


- Install detectable warning warning surfaces and curb ramps on the northeast and southeast corners of the intersection
- Install detectable warning surfaces on the northwest and southwest corners of the intersection

Curb Ramp

Curb Ramp & Detectable Warning Surface

II. Courtney Avenue & Houston Avenue

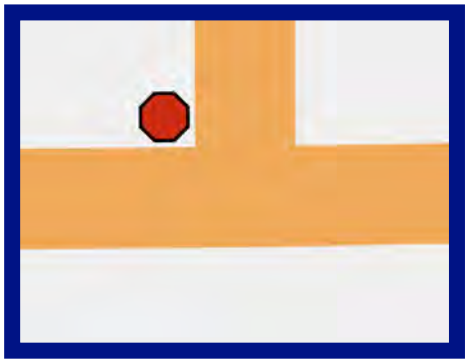


- Install a Stop sign and markings at the north leg of the intersection
- Install detectable warning surfaces and curb ramps on the northwest and northeast corners of the intersection

Stop Sign and Marking

Curb Ramp & Detectable Warning Surface

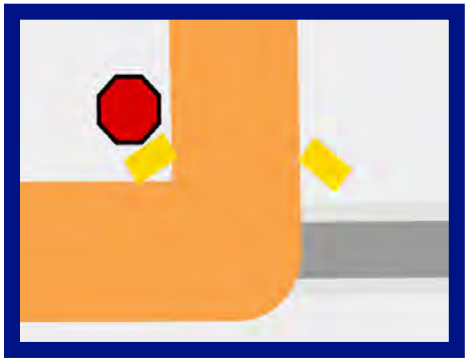
JJ. Eadington Avenue & Houston Avenue



- Install a Stop sign and markings at the north leg of the intersection

Stop Sign and Marking

KK. Basque Avenue & Houston Avenue



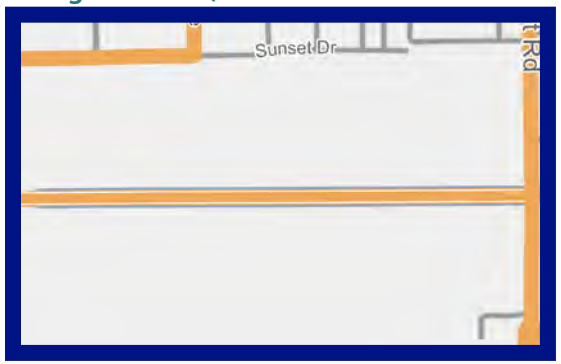
- Install a Stop sign and marking at the north leg of the intersection
- Install detectable warning surfaces on the northwest and northeast corners of the intersection

Stop Sign and Marking

Detectable Warning Surface

PROPOSED TREATMENTS BY SEGMENT

A. Page Avenue (Midblock - Brookhurst Road)



Sidewalk

- Install sidewalk that is currently missing on the north and south sides of the street, starting in front of 1940 and 1941 Roberta Avenue and continuing to the intersection with Brookhurst Road

B. Page Avenue (Courtney Avenue - Brookhurst Road)



Edgeline Treatment

- Stripe edgelines on the north and south edges of the street, from Courtney Avenue to Brookhurst Road

C. Multiple Locations



Median Island

- Install midblock median island at the following locations:
  - » Baker Avenue (Pacific Drive to Eadington Avenue)
  - » Baker Avenue (Eadington Avenue - Basque Avenue)
  - » Roberta Avenue (Pacific Drive to Eadington Avenue)
  - » Roberta Avenue (Eadington Avenue - Basque Avenue)
  - » Houston Avenue (Pacific Drive to Eadington Avenue)
  - » Houston Avenue (Eadington Avenue - Basque Avenue)

BREA BOULEVARD (HARBOR BOULEVARD TO BASTANCHURY ROAD)

CORRIDOR SNAPSHOT



CORRIDOR FEATURE

Brea Boulevard between Harbor Boulevard and Bastanchury Road is in the northeastern portion of the City of Fullerton. The corridor has primarily residential land use, along with a significant number of parks including Hillcrest Park, Brea Dam Park, Fullerton Sports Complex, and Coyote Hills East Preserve. There are commercial land uses at Brea Boulevard's intersections with Harbor Boulevard and Bastanchury Road.

- High Visibility Crosswalk
- Leading Pedestrian Interval
- Retroreflective Backplate
- Transverse Rumble Strip
- Bike Box
- Speed Feedback Signage
- Upgrade to Protected Bike Lane

PROPOSED TREATMENTS BY INTERSECTION

A. Harbor Boulevard & Brea Boulevard



- Install Leading Pedestrian Intervals for crossings at all four legs of the intersection
- Upgrade all traffic signal heads to include retroreflective backplates

Retroreflective Backplate

Leading Pedestrian Interval

B. Lemon Street & Brea Bouevard



- Install high-visibility crosswalks on all four legs of the intersection
- Install Leading Pedestrian Intervals for crossings at the north and south legs of the intersection
- Install transverse rumble strips on the southbound approach to the intersection

High-Visibility Crosswalk

Leading Pedestrian Interval

Transverse Rumble Strip

C. Panorama Road & Brea Boulevard



- Install Leading Pedestrian Intervals for crossings at the east and west legs of the intersection

Leading Pedestrian Interval

D. Ashburn Terrace & Brea Boulevard



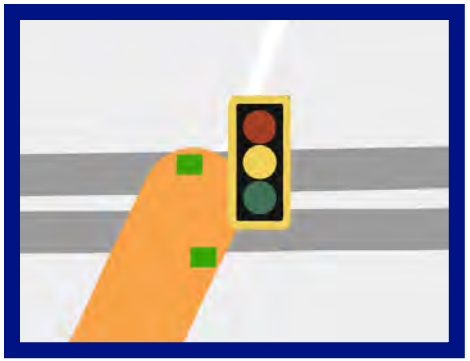
- Install high-visibility crosswalks on all three legs of the intersection
- Install Leading Pedestrian Intervals for crossings at the east leg of the intersection

High-Visibility Crosswalk

Leading Pedestrian Interval

PROPOSED TREATMENTS BY INTERSECTION (CONTINUED)

E. Bastanchury Road & Brea Boulevard



- Upgrade all traffic signal heads to include retroreflective backplates
- Install two-stage turn bike boxes for east- and westbound bicyclists

Retroreflective Backplate

Two-Stage Bike Turn Box

PROPOSED TREATMENTS BY SEGMENT

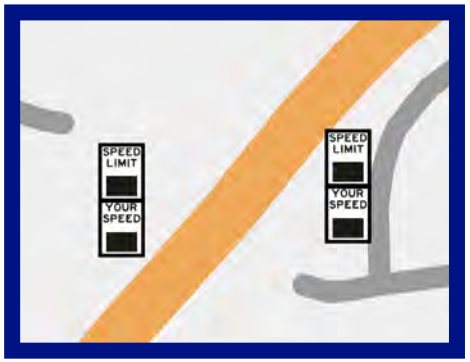
A. Brea Boulevard (Panorama Road - Bastanchury Road)



- Upgrade existing northbound and southbound bicycle facilities to buffered bike lanes

Buffered Bike Lanes

B. Brea Boulevard (Panorama Road - Ashburn Terrace)

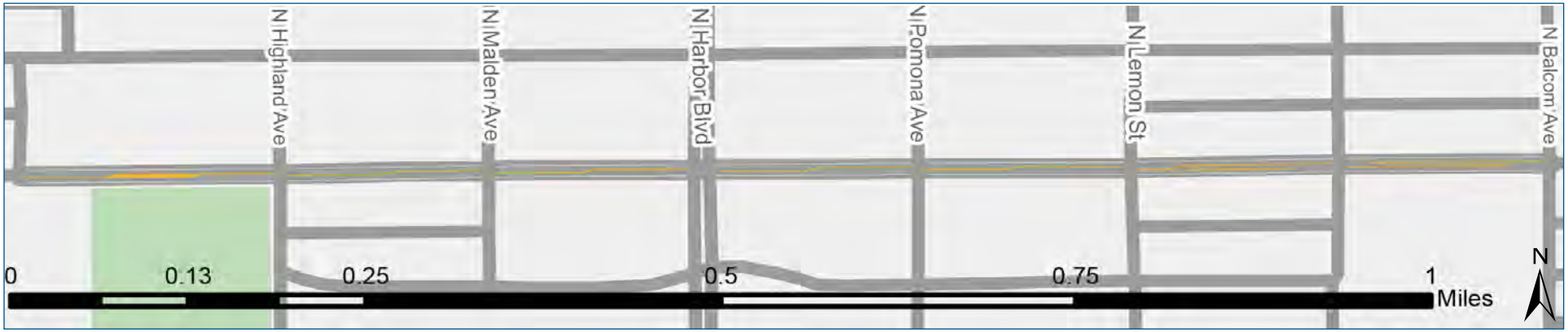


- Install a speed feedback sign southbound and northbound on Brea Boulevard

Speed Feedback Signage

COMMONWEALTH AVENUE (LIBRARY LANE TO BALCOM AVENUE)

CORRIDOR SNAPSHOT



Lane Reconfiguration and Buffered Bike Lanes

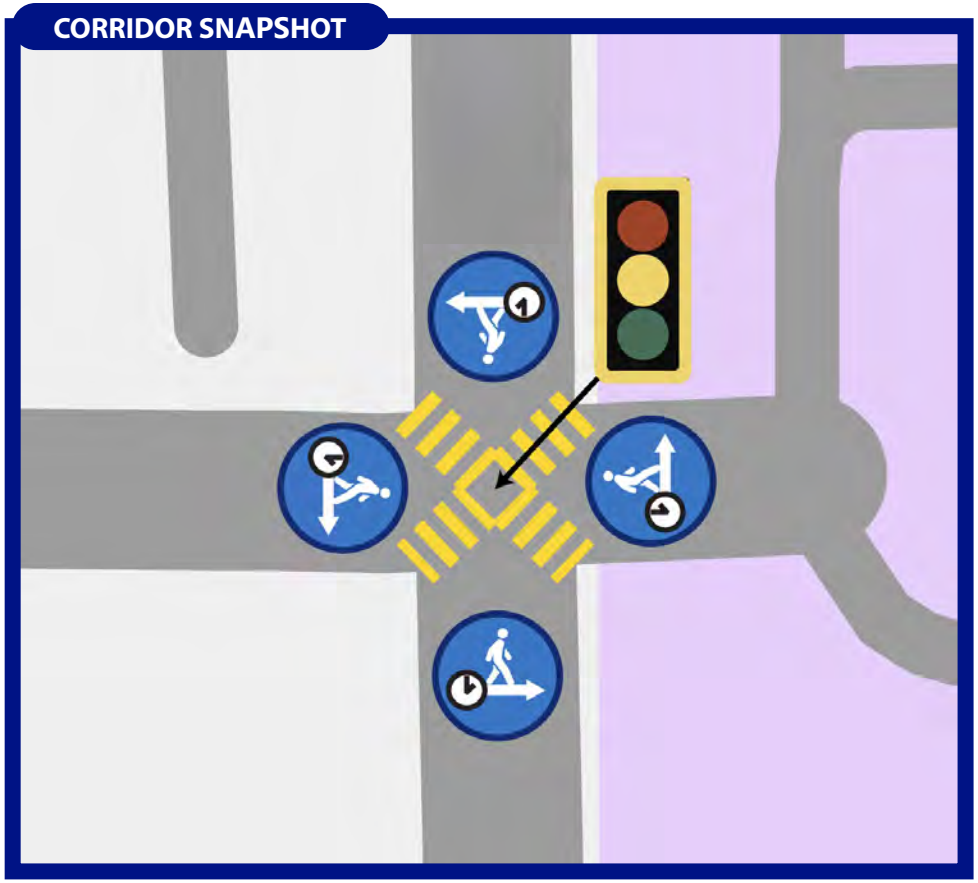
- Reconfigure the travel lanes to reduce lanes from two lanes in each direction with a center turn lane to one lane in each direction with a center turn lane
- Install a buffered bike lane eastbound and westbound

CORRIDOR FEATURE

Commonwealth Avenue between Library Lane to Balcom Avenue is centrally located within the City of Fullerton. The corridor has primarily commerical land use. Amerige Park is located on the southwest portion of the corridor, alongside Fullerton Community Center. Fullerton Public Library is located across the street on the northwest portion of the corridor.

STATE COLLEGE BOULEVARD & DOROTHY LANE

CORRIDOR SNAPSHOT



- Install a scramble crossing to allow for a pedestrian only phase during which pedestrians can cross in all directions, including diagonally
- Install Leading Pedestrian Intervals at all four legs of the intersection
- Upgrade all traffic signal heads to include retroreflective backplates
- Install hardened centerlines on the north leg of the intersection

Scramble Crosswalk

Leading Pedestrian Interval

Retroreflective Backplate

INTERSECTION FEATURE

State College Boulevard & Dorothy Lane is the main entrance to California State University, Fullerton, on the west side of campus. The Student Union is located adjacent to the northeast corner of the intersection.

There is a bus stop both northbound and southbound at this intersection, Orange County Transportation Authority Route 57: Brea to Newport Beach.

CH 7. IMPLEMENTATION & NEXT STEPS

Project Costs

The cost of each of the ten projects was estimated and can be used to inform applications for funding and City budgeting. The estimates are not final and are subject to change. Estimated costs are shown in **Table 7.1**.

Table 7.1 Summary of Estimated Costs by Project

#	PROJECT	CONSTRUCTION	SOFT COSTS	CONTINGENCY	INFLATION	TOTAL
1	Southwest Area	$4,751,000	$1,430,280	$1,854,384	$927,192	**$8,962,856**
2	Harbor West Area	$1,115,000	$412,200	$458,160	$229,080	**$2,214,440**
3	Euclid West Area	$1,656,500	$563,820	$666,096	$333,048	**$3,219,464**
4	California State University, Fullerton Area	$11,707,000	$297,960	$301,488	$150,744	**$12,457,192**
5	Orangethorpe Avenue and Adjacent Area	$2,345,800	$756,824	$930,787	$465,394	**$4,498,805**
6	Commonwealth Avenue Corridor	$482,500	$235,100	$215,280	$107,640	**$1,040,520**
7	Malvern - Chapman Corridor	$406,100	$213,708	$185,942	$92,971	**$898,721**
8	Harbor Boulevard Corridor	$25,000	$107,000	$39,600	$19,800	**$191,400**
9	Bastanchury - Brea Corridor	$764,000	$313,920	$323,376	$161,688	**$1,562,984**
10	Gilbert Avenue Corridor	$644,000	$280,320	$277,296	$138,648	**$1,340,264**
	TOTAL	**$23,896,900**	**$4,611,132**	**$5,252,409**	**$2,626,205**	**$36,386,646**

Policy and Process Recommendations

In alignment with the Safe System Approach, the following policy and process recommendations support the implementation and goals of the SS4A Action Plan.

Education

Improve public understanding of the rights of active transportation users:

- Target high-risk intersections using *Go Human* campaign materials to encourage drivers to watch for active transportation users.
- Incorporate pedestrian and bicycle safety into physical education class in the Fullerton School District and Fullerton Joint Union High School District.

Bolster awareness of the rules and regulations of the road:

- Use a social media advertising campaign, as well as advertising at public events, to educate drivers on the dangers of unsafe driving and refresh the rules of the road.
- Develop a website to provide resources such as articles, game, and videos on the rules of the road and safe driving.
- Distribute flyers and present at community centers and schools to convey the rules of the road to vulnerable populations, such as the elderly and children.

Progress Tracking and Transparency

Analyze data yearly to track trends and progress:

- Conduct a yearly safety analysis of collision trends to track if new high-risk locations are emerging. If locations with implemented treatments are improving, then maintain a robust understanding of safety trends on Fullerton roadways.
- Provide a public forum to allow submittal of comments in the year following the implementation of projects in order to collect data regarding the functioning and perception of projects.

Provide a platform for ongoing updates on the goals of the SS4A Action Plan:

- Report the results of the collision analysis annually in order, specifically informing the public of the progress toward reducing roadway fatalities and serious injuries.
- Provide the SS4A Action Plan on the City of Fullerton website, as well as a short, accessible description of the Plan to ensure public awareness of the Plan and its goals.

Implementation

The ten projects were ranked based on opportunity. Implementation should be reflective of this ranking, with high opportunity projects being pursued first. The timelines for implementation based on project ranking is show below:

Stage One

1 - 5 Years

1. Southwest Area
2. Harbor West Area
3. Euclid West Area

Stage Two

5 - 10 Years

4. California State University, Fullerton Area
5. Orangethorpe Avenue and Adjacent Area
6. Commonwealth Avenue Corridor
7. Malvern - Chapman Corridor

Stage Three

10+ Years

8. Harbor Boulevard Corridor
9. Bastanchury - Brea Corridor
10. Gilbert Avenue Corridor

Appendix A ENGAGEMENT MATERIALS

CITY OF FULLERTON

Safe Streets And Roads For All Action Plan Project Factsheet

PROJECT OVERVIEW

The Safe Streets and Roads for All (SS4A) Action Plan aims to enhance the safety and accessibility of our streets and roadways for all users. This project focuses on reducing traffic-related injuries and fatalities through targeted infrastructure improvements and community engagement.

GOALS AND OBJECTIVES

Improve Safety
Reduce traffic accidents and fatalities through effective road design and safety measures.

Promote Safe Travel
Encourage safe and responsible behavior among all road users.

Enhance Accessibility
Ensure streets and roadways are accessible to pedestrians, cyclists, and people with disabilities.

PROJECT TIMELINE



HOW YOU CAN GET INVOLVED

Attend Community Meetings
Participate in upcoming meetings to provide your input. Stay tuned for updates!

Complete Surveys
Please complete our Community Survey to help us identify traffic safety issues and areas of concern!

Questions?
Please contact the project team at 714-738-6899

Scan this **QR code** to take our survey!

CITY OF FULLERTON

Safe Streets And Roads For All Action Plan
Hoja informativa del proyecto

SS4A Action Plan

DESCRIPCIÓN DEL PROYECTO

El “Safe Streets and Roads for All (SS4A) Action Plan” busca mejorar la seguridad y accesibilidad de nuestras calles y carreteras para todos los usuarios. Este proyecto aspira a reducir el número de accidentes y muertes causados por el tráfico con mejoras específicas de las infraestructuras y la participación de la comunidad.

OBJECTIVOS DEL PROYECTO

Mejorar la seguridad
Reducir los accidentes de tráfico y las víctimas fatales mediante un diseño eficaz de las carreteras y mejores medidas de seguridad.

Promover viajes seguros
Promover un comportamiento seguro y responsable entre todos los usuarios de la carretera.

Mejorar la accesibilidad
Asegurar que las calles y carreteras sean accesibles para peatones, ciclistas y personas con discapacidad.

CRONOLOGÍA DEL PROYECTO



CÓMO PARTICIPAR

Asistir a las reuniones comunitarias
Participe en las próximas reuniones para dar su opinión. Manténgase informado para conocer las próximas fechas.

Completar encuestas
Por favor, rellene nuestra encuesta comunitaria para ayudarnos a identificar los problemas de seguridad vial y las áreas de mayor preocupación.

¿Preguntas?
Póngase en contacto con el equipo del proyecto: 714-738-6899

Escanear este **código QR** para rellenar nuestra encuesta.

CITY OF FULLERTON
모두를 위한 안전한 도로와 거리 실행 계획 프로젝트 안내문

SS4A Action Plan

프로젝트 개요

모두를 위한 안전한 도로와 거리(SS4A) 실행 계획은 모든 사용자를 위하여 도로와 거리를 안전하고 접근 가능하게 만드는 것을 목표로 합니다. 이 프로젝트는 교통사고 부상자 및 사망자를 줄이기 위해 맞춤형 인프라 개선과 지역 사회 참여를 중점적으로 추진합니다.

목표 및 목적

안전 개선

효과적인 도로 설계와 안전 조치를 통해 교통 사고 및 사망자 수를 줄입니다.

안전한 여행 장려

모든 도로 사용자들 사이에서 안전하고 책임감 있는 행동을 장려합니다.

접근성 향상

보행자, 자전거 이용자, 및 장애인을 포함한 모든 사람이 도로와 거리를 이용할 수 있도록 보장합니다.

프로젝트 일정



프로젝트 참여 방법

지역 사회 회의 참석

다가오는 회의에 참여하셔서 의견을 제공해 주세요. 자세한 회의 일정은 추후 제공되니 업데이트를 계속 확인해 주세요!

설문 조사 참여

교통 안전 문제와 우려되는 지역을 파악하는 데 도움이 될 수 있도록 커뮤니티 설문 조사를 완료해 주세요!

프로젝트 관련 질문이 있으신가요?
프로젝트 팀에 714-738-6899로 연락 주시기 바랍니다

QR code 를 스캔하여 설문 조사에 참여해보세요!

SAFE STREETS AND ROADS FOR ALL

Orangethorpe Elementary Neighborhood Meeting

Join Us to Build Safe Streets Together!

The City of Fullerton is committed to making our streets and roads safer for everyone. While our Safe Streets and Roads for All (SS4A) Plan is city-wide, this meeting will focus specifically on the neighborhood around Orangethorpe Elementary School. To help us develop an effective SS4A Plan, we need your input.

Please join us at our community-wide meeting to learn more about our efforts and ways for you to get involved!



Thursday, October 3, 2024
6:00 pm to 8:30 pm

Orangethorpe Elementary School
1400 S Brookhurst Rd, Fullerton, CA 92833

Scan this **QR code** to complete the community survey

Questions?
Please contact the project team at 714-738-6899

SS4A Action Plan

CALLES Y CARRETERAS SEGURAS PARA TODOS

Orangethorpe Elementary

Reunión Comunitaria

¡Acompáñenos a construir juntos calles más seguras!

La ciudad de Fullerton se ha comprometido a hacer nuestras calles y carreteras más seguras para todos. Aunque nuestro Plan de Calles y Carreteras Seguras para Todos (SS4A) se aplica a toda la ciudad, esta reunión se enfocará en la comunidad de alrededor de Orangethorpe Elementary. Necesitamos su opinión para ayudarnos a desarrollar un Plan SS4A efectivo.

Acompáñenos en esta reunión comunitaria para aprender sobre nuestros objetivos y las oportunidades de participación.



Jueves, 3 de octubre de 2024

De 6:00 pm a 8:30 pm

Orangethorpe Elementary School

1400 S Brookhurst Rd, Fullerton, CA 92833

Escanear este código QR para completar la encuesta comunitaria

¿Preguntas?
Póngase en contacto con el equipo del proyecto en 714-738-6899

SS4A Action Plan

모두를 위한 안전한 도로와 거리

오렌지솔프(Orangethorpe) 초등학교 지역 사회 회의

안전한 거리를 함께 만들어 가요!

플러튼시는 모든 사람을 위해 거리와 도로를 더 안전하게 만드는 데 노력하고 있습니다. 모두를 위한 안전한 거리와 도로를 위한 계획(SS4A)은 전 도시를 대상으로 하지만, 이번 지역사회 미팅은 특별히 오렌지솔프 초등학교 주변 지역에 초점을 맞출 것입니다. 효과적인 SS4A 계획을 개발하는 데 여러분의 의견이 필요합니다.

저희의 노력과 참여 방법에 대해 더 알아보시려면 지역 사회 회의에 꼭 참석해 주세요!



2024년 10월 3일 목요일
오후 6시- 8시 30분

Orangethorpe Elementary School
1400 S Brookhurst Rd, Fullerton, CA 92833

QR code 를 스캔하여 설문 조사에 참여해보세요!

프로젝트 관련 질문이 있으신가요?
프로젝트 팀에 714-738-6899로 연락 주시기 바랍니다.

CITY OF FULLERTON CALIFORNIA

FULLERTON SS4A Action Plan

Orangethorpe Elementary Neighborhood Meeting

Orangethorpe Elementary School
Thursday, October 3, 2024
6:00 - 8:30 PM



Orangethorpe Elementary School, located near the intersection of Orangethorpe Avenue and Brookhurst Road, serves one of the most collision-prone areas in the City of Fullerton. Project team members and City staff met with residents of the surrounding community at the school to give a presentation about the project, explaining its goals and existing conditions. After the presentation, they conducted a mapping activity to gather community feedback on traffic safety in the area. Following this, the project team and attendees shared their feedback.

FULLERTON
SS4A Action Plan

GENERAL FEEDBACK

Most attendees were families who live adjacent to the school. They highlighted issues such as poor sidewalk and lighting conditions on neighborhood streets, inadequate signal timing at the intersection of Brookhurst Road and Page Avenue, speeding along Brookhurst Road and Page Avenue, and minimal crossing opportunities along Orangethorpe Avenue.

SPECIFIC CONCERNS

- Major streets Orangethorpe Avenue and Brookhurst Road identified as having speeding issues
- Brookurst Road identified as being difficult to cross, especially near the school
- Neighborhood roads Page Avenue and Houston Avenue identified as having speeding issues and poor sidewalk conditions



Community concerns are collected using project area basemap posterboard.



Attendees have their questions and comments addressed by the City Traffic Engineer while interacting with the project area map.

ENGAGEMENT

9

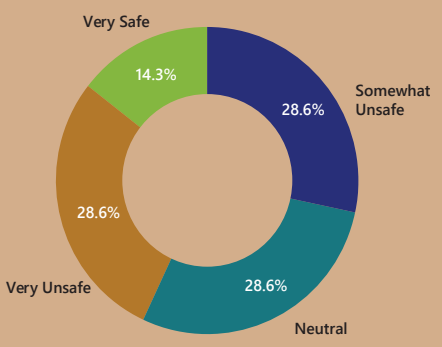
Number of Attendees

7

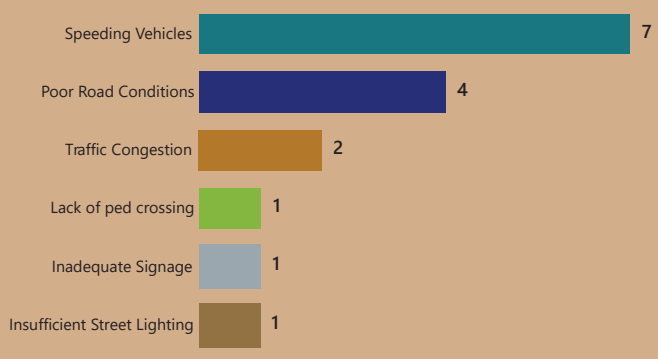
Surveys Completed

SURVEY TAKEAWAYS

How would you rate overall traffic safety of the streets and roads in your area?



What are the most common safety concerns you have about local streets and roads?



SAFE STREETS AND ROADS FOR ALL

Commonwealth Elementary Neighborhood Meeting

Join Us to Build Safe Streets Together!

The City of Fullerton is committed to making our streets and roads safer for everyone. While our Safe Streets and Roads for All (SS4A) Plan is city-wide, this meeting will focus specifically on the neighborhood around Commonwealth Elementary School. To help us develop an effective SS4A Plan, we need your input.

Please join us at our community-wide meeting to learn more about our efforts and ways for you to get involved!



Wednesday, November 13, 2024
6:00 pm to 8:00 pm

Commonwealth Elementary Multi-Purpose Room

2200 E Commonwealth Ave, Fullerton, CA 92831

Scan this **QR code** to complete the community survey

Questions?
Please contact the project team at *TrafficEngineering@cityoffullerton.com*

SS4A Action Plan

CALLES Y CARRETERAS SEGURAS PARA TODOS

Commonwealth Elementary
Reunión Comunitaria

¡Acompáñenos a construir juntos calles más seguras!

La ciudad de Fullerton se ha comprometido a hacer nuestras calles y carreteras más seguras para todos. Aunque nuestro Plan de Calles y Carreteras Seguras para Todos (SS4A) se aplica a toda la ciudad, esta reunión se enfocará en la comunidad de alrededor de Commonwealth Elementary. Necesitamos su opinión para ayudarnos a desarrollar un Plan SS4A efectivo.

Acompáñenos en esta reunión comunitaria para aprender sobre nuestros objetivos y las oportunidades de participación.



Miércoles, 13 de noviembre de 2024
De 6:00 pm a 8:00 pm

Commonwealth Elementary
Multi-Purpose Room

2200 E Commonwealth Ave, Fullerton, CA 92831

Escanear este código QR
para completar la encuesta
comunitaria

¿Preguntas?
Póngase en contacto con el equipo del proyecto en ***TrafficEngineering@cityoffullerton.com***

CITY OF FULLERTON CALIFORNIA

FULLERTON SS4A Action Plan

모두를 위한 안전한 도로와 거리

커먼웰스(Commonwealth) 초등학교 지역 사회 회의

안전한 거리를 함께 만들어 가요!

플러튼시는 모든 사람을 위해 거리와 도로를 더 안전하게 만드는 데 노력하고 있습니다. 모두를 위한 안전한 거리와 도로를 위한 계획(SS4A)은 전 도시를 대상으로 하지만, 이번 지역사회 미팅은 특별히 커먼웰스 초등학교 주변 지역에 초점을 맞출 것입니다. 효과적인 SS4A 계획을 개발하는 데 여러분의 의견이 필요합니다.

저희의 노력과 참여 방법에 대해 더 알아보시려면 지역 사회 회의에 꼭 참석해 주세요!



2024년 11월 13일 수요일
오후 6시- 8시

Commonwealth Elementary
Multi-Purpose Room
2200 E Commonwealth Ave, Fullerton, CA 92831

QR code 를 스캔하여 설문 조사에 참여해보세요!

프로젝트 관련 질문이 있으신가요?
프로젝트 팀에 ***TrafficEngineering@cityoffullerton.com*** 으로 이메일 주시기 바랍니다.

CITY OF FULLERTON CALIFORNIA

FULLERTON SS4A Action Plan

Orangethorpe Elementary Neighborhood Meeting

Orangethorpe Elementary School
Wednesday, November 13, 2024
6:00 - 8:00 PM



Commonwealth Elementary School, located near the intersection of Commonwealth Avenue and State College Boulevard, serves one of the most collision-prone areas in the City of Fullerton. Project team members and City staff met with residents of the surrounding community at the school to give a presentation about the project, explaining its goals and existing conditions. After the presentation, they conducted a mapping activity to gather community feedback on traffic safety in the area. Following this, the project team and attendees shared their feedback.

FULLERTON
SS4A Action Plan

GENERAL FEEDBACK

Many attendees are Fullerton residents from various parts of the city, including bike advocacy group members. They shared concerns such as hazardous conditions for cyclists along Commonwealth Avenue and Lemon Street, speeding issues along Harbor Boulevard in the Downtown Fullerton area, and poor sidewalk and lighting conditions on local streets.

SPECIFIC CONCERNS

- Bastanchury Road between Harbor Blvd and area immediately south of St. Jude Hospital parking structure identified as having a sidewalk gap.
- Commonwealth Avenue and Lemon Street identified as not having bicycle lanes, leaving cyclists exposed to unsafe road conditions
- Brea Boulevard, Harbor Boulevard, Lemon Street, and Bastanchury Road identified as having speeding issues.



Community concerns are collected using project area basemap posterboard.



Attendees listen to a presentation given by Project team members and City staff.

ENGAGEMENT

9

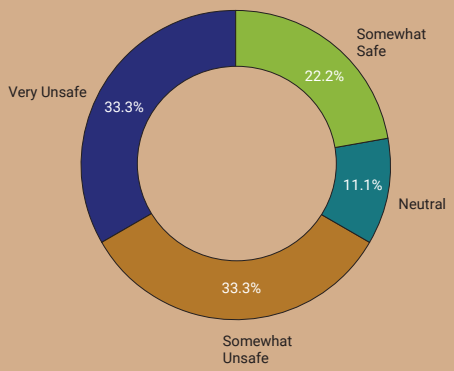
Number of Attendees

9

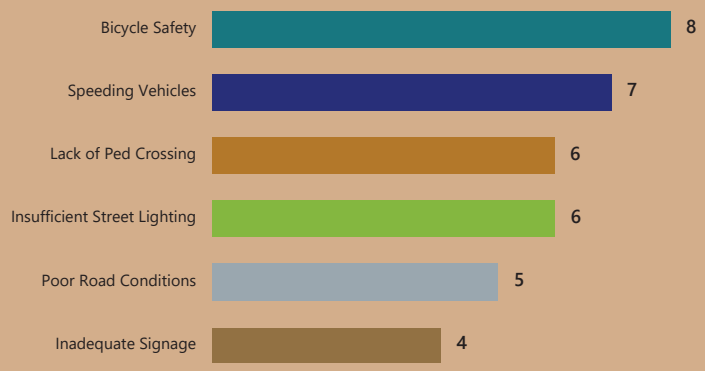
Surveys Completed

SURVEY TAKEAWAYS

How would you rate overall traffic safety of the streets and roads in your area?



What are the most common safety concerns you have about local streets and roads?



SAFE STREETS AND ROADS FOR ALL

Zoom Meeting

Join Us to Build Safe Streets Together!

The City of Fullerton is committed to making our streets and roads safer for everyone.

Please join us on this virtual meeting to learn about what the City is proposing at several locations throughout the city.



Tuesday, December 16, 2025

6:00 pm to 8:00 pm

Join us on Zoom!

https://bit.ly/SS4A_ZOOM

Scan this **QR code** to join the zoom meeting!

Scan this **QR code** to complete the community survey!

Questions?
Please contact the project team at 714-738-6899

SS4A Action Plan

CALLES Y CARRETERAS SEGURAS PARA TODOS

Reunión por Zoom

¡Únase a nosotros para construir calles seguras juntos!

La Ciudad de Fullerton está comprometida a hacer que nuestras calles y carreteras sean más seguras para todos.

Únase a nosotros en esta reunión virtual para conocer lo que la Ciudad está proponiendo en varios lugares a lo largo de la ciudad.



Martes, 16 de Diciembre de 2025

6:00 pm to 8:00 pm

¡Únase a nosotros en Zoom!

https://bit.ly/SS4A_ZOOM

Escanee este **código QR** para unirse a la reunión de Zoom.

Escanee este **código QR** para completar la encuesta comunitaria.

¿Preguntas?

Por favor comuníquese con el equipo del proyecto al 714-738-6899

CITY OF FULLERTON CALIFORNIA

FULLERTON SS4A Action Plan

모두를 위한 안전한 거리와 도로

Zoom 회의

함께 안전한 거리를 만들어 나가요!

풀러턴 시는 모든 사람을 위해 도로와 거리를 더 안전하게 만드는 데 최선을 다하고 있습니다.

시 전역 여러 위치에서 시가 제안하고 있는 내용을 알아보기 위해 이번 가상 회의에 참여해 주세요.



2025년 12월 16일 화요일

6:00 pm to 8:00 pm

Zoom에서 함께하세요!

https://bit.ly/SS4A_ZOOM

Zoom 회의에 참여하려면 이 **QR 코드**를 스캔하세요.

커뮤니티 설문을 완료하려면 이 **QR 코드**를 스캔하세요.

질문이 있으신가요?

문의 사항은 714-738-6899로 프로젝트 팀에 연락하세요.

CITY OF FULLERTON CALIFORNIA

FULLERTON SS4A Action Plan

Downtown Fullerton Farmers Market

Community Event Attendance #1
Thursday, August 22, 2024
4:30 - 8:30 PM



The Downtown Fullerton Farmers Market, a seasonal open-air weekly event, brings together local vendors and community members, offering unique products and services in a fun and festive atmosphere. Project team members attended to introduce the project, explain its goals, distribute surveys, and gather community feedback on driving, walking, biking, and public transit conditions in Fullerton.

FULLERTON
SS4A Action Plan

GENERAL FEEDBACK

Most attendees raised safety concerns about both major streets and local neighborhood roads. They highlighted issues such as poor sidewalk and road conditions, speeding, and inadequate infrastructure for pedestrians and cyclists. Participants included both residents and non-residents, with many of the resident families arriving at the event location by car or on foot.

SPECIFIC CONCERNS

- Orangethorpe Ave, Chapman Ave, Malvern Ave, and Gilbert St identified as having speeding issue
- Commonwealth Ave, Acacia Ave, and Raymond Ave identified as having potholes making it dangerous



Community concerns are collected using project area basemap posterboard.



Attendees interact with the poster board while the project team assists with input and answers questions.

ENGAGEMENT

100 +

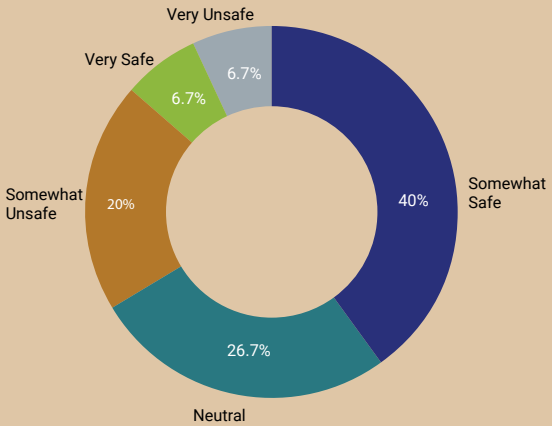
Number of Attendees

30

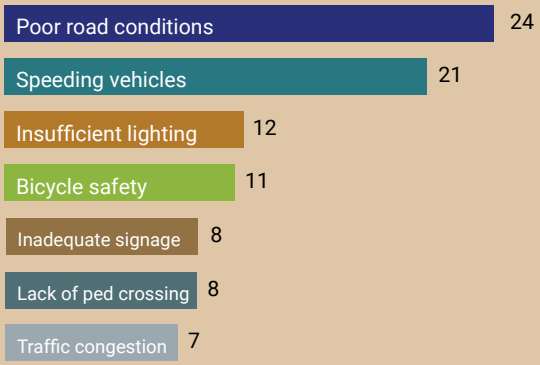
Surveys Completed

SURVEY TAKEAWAYS

How would you rate overall traffic safety of the streets and roads in your area?



What are the most common safety concerns you have about local streets and roads?



Fullerton Police Department Trunk or Treat Event

Community Event Attendance #2
Friday, October 25, 2024
5:00- 8:00 PM



The City of Fullerton Trunk or Treat Event, hosted by the Fullerton Police Department, is an annual Halloween-themed event bringing together families, City staff, and other members of the community in a festive atmosphere. Project team members attended to introduce the project, explain its goals, distribute surveys (and candy), and gather community feedback on driving, walking, biking, and public transit conditions in Fullerton.

FULLERTON
SS4A Action Plan

GENERAL FEEDBACK

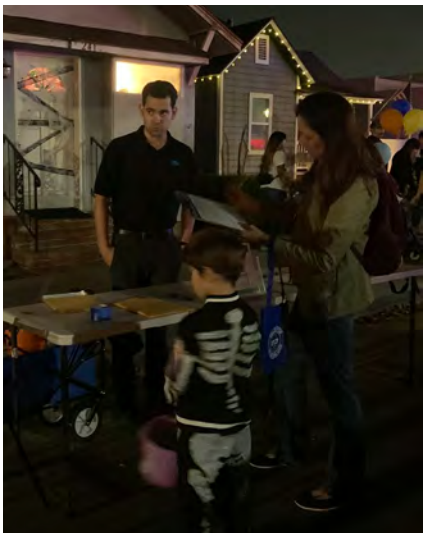
Most attendees raised safety concerns about both major streets and local neighborhood roads. They highlighted issues such as poor road conditions, speeding, and inadequate infrastructure for pedestrians. Participants included residents, non-residents, and City staff from the police and fire departments. Many of the resident families arriving at the event location by car or on foot.

SPECIFIC CONCERNS

- Orangethorpe Ave, Commonwealth Ave, Malvern Ave, and State College Blvd identified as having speeding issues
- Euclid St, Chapman Ave, and Commonwealth Ave identified as having potholes and/or uneven sidewalks, making it dangerous for vehicles and pedestrians



The project team set up community input boards to gather feedback and concerns from local residents.



Attendees complete a survey while the project team provides general information and answers questions.

ENGAGEMENT

100 +

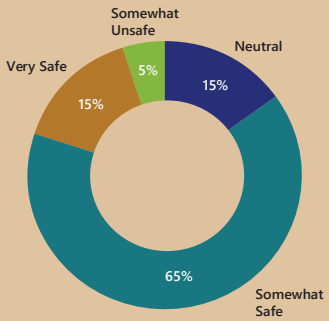
Number of Attendees

20

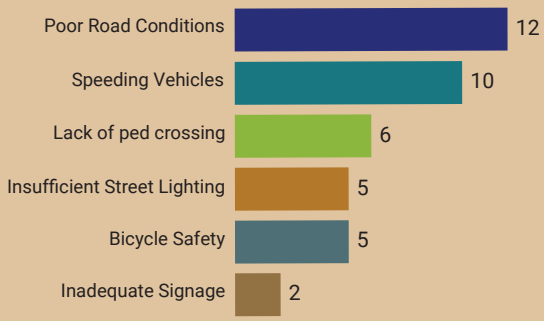
Surveys Completed

SURVEY TAKEAWAYS

How would you rate overall traffic safety of the streets and roads in your area?



What are the most common safety concerns you have about local streets and roads?



Downtown Fullerton Farmer's Market

Community Event Attendance #3
Thursday, September 25, 2025
4:30- 8:30 PM



The Downtown Fullerton Farmer's Market, presented by the City of Fullerton and the Fullerton Parks and Recreation Department, is a weekly event running April through September which hosts local vendors and live music to bring together families, City staff, and other members of the community in a festive atmosphere. Project team members attended to gather feedback on proposed project recommendations and answer questions.

FULLERTON
SS4A Action Plan

GENERAL FEEDBACK

Most attendees expressed support for the proposed treatments, especially those improving the pedestrian experience such as LPIs, curb extensions, RRFBs, and high visbility crosswalks. Participants were also in favor of bicycle facility improvements such as bike lanes and turn boxes. Many noted that the proposed treatments would improve their experience at intersections that they frequent.

Some attendees expressed concern about roadway changes such as lane reconfiguration and curb extensions citing concerns of increased congestion and construction cost.

Several attendees requested additional information and were excited to hear that a survey would be made available to submit feedback, noting that they would share the survey with their community when it came available.

Attendees were grateful for the City's outreach efforts and to see investment in Fullerton roadways. Participants included residents, non-residents, and City staff from the police and fire departments. Many of the resident families arriving at the event location by car or on foot.



Residents referenced the provided map to check out treatments in areas they frequent.



The project team set up input boards to gain feedback on specific countermeasure types.

ENGAGEMENT

100 +	30	10
Number of Attendees	Number Engaged	Information Sign-Ups

HOW DID YOU GET HERE TODAY?
¿Cómo Llegó hoy?
어떤 교통 수단을 이용하셨나요?

Instructions: Please place a sticker on which mode of transportation you used to get here today.

***Instrucciones:** por favor Ponga una pegatina para indicar qué medio de transporte utilizó usted para llegar aquí hoy.*

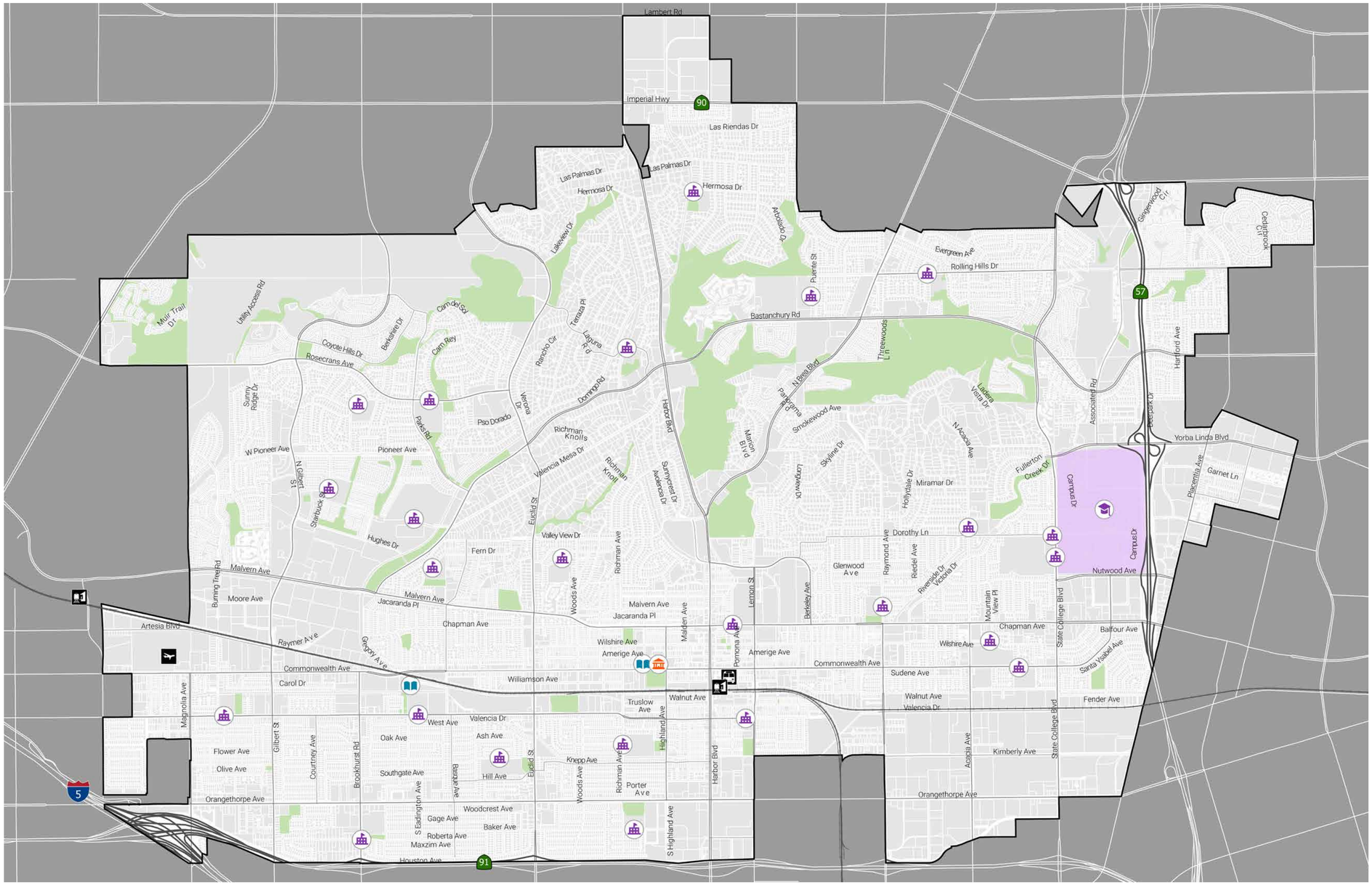
참여방법: 오실 때 이용하신 교통 수단에 스티커를 붙여주세요.

	FULLERTON RESIDENT *RESIDENTE DE FULLERTON* 플러튼 주민	**FULLERTON VISITOR** *VISITANTE DE FULLERTON* 플러튼 방문자
 WALK *Caminando* 도보		
 BIKE *Andando en bicicleta* 자전거		
 BUS *Autobús* 버스		
 CAR *Vehículo* 자동차		
 CARPOOL *Vehículo Compartído* 카풀		
 OTHER *Otro* 기타		

SS4A Action Plan

AREAS OF CONCERN
Lugares de preocupación
안전 우려 지역

CITY OF FULLERTON
Safe Streets and Roads For All (SS4A) Action Plan
Plan de Calles Seguras
모두를 위한 안전한 도로와 거리 실행 계획



SAFETY CONCERN
Preocupaciónes de seguridad
교통안전 우려 사항

- School / *Escuela* / 학교
- CSUFullerton
- City Hall / *Municipalidad* / 시청
- Public Library / *Biblioteca* / 도서관
- Metrolink / *Metrolink* / 메트로링크
- Metrolink Station / *Estación Metrolink* / 메트로링크 역
- Transportation Center / *Centro de Transporte* / 대중교통센터
- Airport / *Aeropuerto* / 공항
- Park / *Parque* / 공원
- University / *Universidad* / 대학교
- City Boundary / *Límite de la Ciudad* / 도시경계

FULLERTON
SS4A Action Plan

CITY OF FULLERTON
SAFE STREETS AND ROADS FOR ALL

Community Survey

We are committed to making our streets and roads safer for everyone. To help us develop an effective Safe Streets and Roads for All (SS4A) Plan, we need your input. This survey aims to gather your experiences, concerns, and suggestions regarding road safety in your community. The survey should take **no more than 5 minutes to complete**.

Q1. How would you rate overall traffic safety of the streets and roads in your area?

- ◯ Very safe
- ◯ Somewhat safe
- ◯ Neutral
- ◯ Somewhat unsafe
- ◯ Very unsafe

Q2. What are the most common safety concerns you have about local streets and roads? (Select all that apply)

- ☐ Speeding vehicles
- ☐ Poor road conditions (e.g., potholes, cracks)
- ☐ Lack of pedestrian crossings
- ☐ Insufficient street lighting
- ☐ Bicycle safety
- ☐ Traffic congestion
- ☐ Inadequate signage
- ☐ Other *(please specify)*

Q3. How would you rate the overall condition of roads and sidewalks in your neighborhood?

- ◯ Excellent
- ◯ Good
- ◯ Fair
- ◯ Poor
- ◯ Very poor

Q4. Which safety improvements would you like to see in your community? (Select all that apply)

- ☐ Improved traffic signal timing
- ☐ Improved pedestrian crossings
- ☐ Road repairs and maintenance
- ☐ More traffic calming measures (e.g., speed bumps)
- ☐ More enforcement
- ☐ Enhanced public transportation options
- ☐ Other *(please specify)*

Q5. How frequently do you use alternative transportation methods (e.g., biking, walking, public transit) in your daily routine?

- ◯ Daily
- ◯ Several times a week
- ◯ Occasionally
- ◯ Rarely
- ◯ Never

Q6. How effective do you think the current measures are for protecting pedestrians and cyclists in your area?

- ◯ Very effective
- ◯ Somewhat effective
- ◯ Neutral
- ◯ Somewhat ineffective
- ◯ Very ineffective

CITY OF FULLERTON
SAFE STREET AND ROADS FOR ALL

Q7. Where are your areas of concern relating to street safety in Fullerton?

These areas of concern could include places where you've witnessed pedestrian and bike crashes with cars, unsafe street designs or conditions, and/or a lack of amenities such as sidewalks or bike lanes. Please write the locations and your reasons for selecting them. Please be as specific as you can.

Location of Concern	Safety Issue

Q8. What additional comments or suggestions do you have regarding street and road safety in your community? (Open-ended response)

Thank you for taking time to give your feedback!
Please join our mailing list to get the latest project updates!

Name _____

Email Address _____

CIUDAD DE FULLERTON
Safe Streets And Roads For All Action Plan

Encuesta comunitaria

Estamos comprometidos a hacer que nuestras calles y carreteras sean más seguras para todos. Necesitamos su opinión para ayudarnos a desarrollar un "Safe Streets and Roads for All Action Plan" con el fin de mejorar la seguridad de peatones y ciclistas en Fullerton. Esta encuesta busca recoger sus experiencias, preocupaciones y recomendaciones sobre la seguridad de las vías públicas en su comunidad. **La encuesta no le llevará más de 5 minutos.**

Q1. ¿Cómo evaluaría la seguridad general del tráfico en las calles y carreteras de su vecindario?

- ◯ Muy seguro
- ◯ Algo seguro
- ◯ Neutro
- ◯ Algo inseguro
- ◯ Muy inseguro

Q2. ¿Cuáles son los problemas de seguridad que más le preocupan en las calles y carreteras locales? (Seleccione todo lo que se aplique)

- ☐ Vehículos con exceso de velocidad
- ☐ Mal estado de la carretera (baches, grietas, etc)
- ☐ Falta de cruces peatonales
- ☐ Iluminación insuficiente de las calles
- ☐ Seguridad en bicicleta
- ☐ Congestión del tráfico
- ☐ Insuficiente letreros de dirección
- ☐ Otros (*por favor, especifique*)

Q3. ¿Cómo evaluaría el estado general de las carreteras y aceras de su vecindario?

- ◯ Excelente
- ◯ Bien
- ◯ Aceptable
- ◯ Mal
- ◯ Muy deficiente

Q4. ¿Qué mejoras de seguridad le gustaría ver en su comunidad? (Seleccione todo lo que se aplique)

- ☐ Mejoras en la sincronización de los semáforos
- ☐ Mejoras en los cruces peatonales
- ☐ Reparación y mantenimiento de las carreteras
- ☐ Más mejoras para calmar el tráfico (*p. ej., tope de velocidad*)
- ☐ Más cumplimiento de las leyes de tráfico
- ☐ Mejores opciones de transporte público
- ☐ Otros (*por favor especifique*)

Q5. ¿Con qué frecuencia utiliza medios de transporte alternativos (p. ej., bicicleta, a pie, transporte público) en su rutina diaria?

- ◯ A diario
- ◯ Varias veces por semana
- ◯ De vez en cuando
- ◯ En raras ocasiones
- ◯ Nunca

Q6. ¿Qué grado de protección cree que ofrecen las infraestructuras actuales a los peatones y ciclistas de su vecindario?

- ◯ Muy eficaz
- ◯ Algo eficaz
- ◯ Neutro
- ◯ Algo ineficaz
- ◯ Muy ineficaz

Página Siguiente →

Q7. ¿Cuáles son las áreas de peligro en relación con la seguridad peatonal en Fullerton?

Estas áreas de preocupación podrían incluir lugares donde ha observado colisiones de peatones y ciclistas con vehículos, diseños o condiciones inseguras de las calles y/o falta de comodidades como aceras o carriles bici. Escriba los lugares y sus razones para seleccionarlos. Sea lo más específico posible.

	Razón

Q8. ¿Qué otros comentarios o recomendaciones le gustaría compartir en relación con la seguridad vial en su comunidad?

Gracias por dedicarnos su tiempo.
Suscríbase a nuestra lista de correo para recibir las últimas noticias sobre el proyecto.

Nombre _____

Correo electrónico _____

CITY OF FULLERTON
모두를 위한 안전한 도로와 거리 실행 계획

커뮤니티 설문 조사

우리는 모든 사람에게 더 안전한 도로와 거리를 만들기 위하여 노력하고 있습니다. 모두를 위한 안전한 도로와 거리(SS4A) 실행 계획을 효과적으로 수립하기 위해서는 여러분의 의견이 필요합니다. 이 설문 조사는 여러분의 경험, 우려 사항, 그리고 지역 사회의 도로 안전에 대한 제안을 수집하기 위한 것입니다. **설문 조사는 5분 이내에 완료하실 수 있습니다.**

Q1. 귀하의 지역 도로와 거리에 대한 전반적인 교통 안전 수준을 어떻게 평가하시겠습니까?

- ◯ 매우 안전함
- ◯ 다소 안전함
- ◯ 보통
- ◯ 다소 위험함
- ◯ 매우 위험함

Q2. 지역 도로와 거리에 대해 가장 우려되는 안전 문제는 무엇인가요? (해당되는 모든 항목을 선택해 주세요)

- ☐ 속도 위반 차량
- ☐ 도로 상태 불량 (예: 움푹 패인 곳, 균열)
- ☐ 보행자 횡단보도 부족
- ☐ 불충분한 가로등
- ☐ 자전거 안전
- ☐ 교통 혼잡
- ☐ 불충분한 표지판
- ☐ 기타 (구체적으로 기재해 주세요)

Q3. 귀하의 동네 도로와 인도(보도)의 전반적인 상태를 어떻게 평가하시겠습니까?

- ◯ 아주 우수함
- ◯ 좋음
- ◯ 보통
- ◯ 나쁨
- ◯ 아주 나쁨

Q4. 귀하의 지역 사회에는 어떤 안전 개선 사항들이 필요한가요? (해당되는 모든 항목을 선택해 주세요)

- ☐ 교통 신호 주기/타이밍 개선
- ☐ 보행자 횡단보도 개선
- ☐ 도로 수리 및 유지 관리
- ☐ 속도 완화 조치 추가 (예: 과속 방지턱)
- ☐ 교통 단속 강화
- ☐ 대중교통 옵션 개선
- ☐ 기타 (구체적으로 기재해 주세요)

Q5. 일상에서 대체 교통 수단 (예: 자전거, 도보, 대중교통)을 얼마나 자주 이용하시나요?

- ◯ 매일
- ◯ 주 3~4회
- ◯ 주 1~2회
- ◯ 가끔
- ◯ 거의 이용하지 않음

Q6. 귀하의 지역에서 보행자와 자전거 이용자를 보호하기 위한 현재의 조치가 얼마나 효과적이라고 생각하시나요?

- ◯ 매우 효과적임
- ◯ 다소 효과적임
- ◯ 보통
- ◯ 다소 비효과적임
- ◯ 매우 비효과적임

다음 페이지 →

CITY OF FULLERTON
모두를 위한 안전한 도로와 거리 실행 계획

Q7. 플러튼에서 거리 안전과 관련하여 우려되는 지역은 어디인가요?

우려되는 지역에는 교통사고가 잦은 곳, 보행자나 자전거가 차량과 충돌한 곳, 안전하지 않은 도로 설계나 상태, 보도나 자전거 도로와 같은 시설 부족 등이 포함될 수 있습니다. 해당 위치와 선택한 이유를 구체적으로 작성해 주세요. 가능한 한 자세히 기재해 주시기 바랍니다.

우려되는 곳	안전 이슈

Q8. 귀하의 지역 사회에서 도로와 거리 안전에 대해 추가로 의견이나 제안하실 사항이 있나요? (주관식 답변)

피드백을 제공해 주셔서 감사합니다!
최신 프로젝트 업데이트를 받으시려면 저희 메일링 리스트에 가입해 주세요!

이름 _____

이메일 _____

Appendix B
PROPOSED TREATMENTS

PrimaryRd	SecondaryRd	Treatment	Leg	Notes	Comments	Project
Brea Blvd	Ashburn Ter	APS	E-W			Bastanchury-Brea
Bastanchury Rd	Brea Blvd	Bike Box	E		No other legs?	Bastanchury-Brea
Bastanchury Rd	Ashwood Cir	High Visibility Crosswalk	N		Note: Private Roadway	Bastanchury-Brea
Bastanchury Rd	Fairway Isles Dr	High Visibility Crosswalk	All		Okay, lighting concerns also...	Bastanchury-Brea
Bastanchury Rd	Payne Stewart Dr	High Visibility Crosswalk	All		Okay	Bastanchury-Brea
Bastanchury Rd	State College Blvd	High Visibility Crosswalk	All		Okay	Bastanchury-Brea
Bastanchury Rd	Torrey Pine Dr	High Visibility Crosswalk	N		Note: Private Roadway	Bastanchury-Brea
Brea Blvd	Ashburn Ter	High Visibility Crosswalk	All	Trail enterance	Okay	Bastanchury-Brea
Brea Blvd	Lemon St	High Visibility Crosswalk	All		Okay	Bastanchury-Brea
Bastanchury Rd	Fairway Isles Dr	LPI	N-S	Sports Complex / Fullerton Concert	Okay	Bastanchury-Brea
Bastanchury Rd	State College Blvd	LPI	E-W		Okay	Bastanchury-Brea
Brea Blvd	Ashburn Ter	LPI	E-W		Okay, maybe upgrade to APS too?	Bastanchury-Brea
Brea Blvd	Lemon St	LPI	N-S	Sports fields	Okay	Bastanchury-Brea
Brea Blvd	Panorama Rd	LPI	E-W	Sports fields	Okay	Bastanchury-Brea
Bastanchury Rd	Associated Rd	Retroreflective Backplate	All		Okay	Bastanchury-Brea
Bastanchury Rd	Brea Blvd	Retroreflective Backplate	All		Okay	Bastanchury-Brea
Bastanchury Rd	State College Blvd	Retroreflective Backplate	All		Okay	Bastanchury-Brea
Brea Blvd	Lemon St	Rumble Strip	SB		Just along chevron area?	Bastanchury-Brea
Bastanchury Rd	between St. Jude Medical Center Parking and Brea Dam Trail	Sidewalk				Bastanchury-Brea
Bastanchury Rd	between Brea Blvd and State College Blvd	Speed Feedback Sign	EB		Okay, and how about replacing the existing one on the other s	Bastanchury-Brea
Bastanchury Rd	between Harbor Blvd and Fairway Isles Dr	Speed Feedback Sign	WB		Why not both directions?	Bastanchury-Brea
Bastanchury Rd	between State College Blvd and Associated Rd	Speed Feedback Sign	EB		Okay, but I worry about the trees blocking the solar panel to cl	Bastanchury-Brea
Brea Blvd	between Bastanchury Rd and Panorama Rd	Speed Feedback Sign	SB		Why not both directions?	Bastanchury-Brea
Bastanchury Rd	between Brea Blvd and East Limit	Upgrade to Protected Bike Lane				Bastanchury-Brea
Brea Blvd	between Panorama Rd and Bastanchury Rd	Upgrade to Protected Bike Lane				Bastanchury-Brea
Commonwealth Ave	Lillie Ave	Curb Extension	NW	Curb ramps and detectable warning surfaces included	Drainage, truck turning, and lighting concerns...	Commonwealth
Commonwealth Ave	Yale Ave	Curb Extension	NW&SE	Curb ramps and detectable warning surfaces included	Drainage, truck turning, lighting concerns...	Commonwealth
Commonwealth Ave	Acacia Ave	Hardened Centerline	E-W		Depends on what we are proposing, no glue-down type deline	Commonwealth
Commonwealth Ave	Lillie Ave	High Visibility Crosswalk - Yellow	S		We'll need to check the property lines, this may be school proj	Commonwealth
Commonwealth Ave	between Library Ln and Balcom Ave	Lane Reconfiguration				Commonwealth
Commonwealth Ave	Acacia Ave	LPI	All		Okay	Commonwealth
Commonwealth Ave	Lillie Ave	LPI	All		Okay	Commonwealth
Commonwealth Ave	State College Blvd	LPI	All		Okay	Commonwealth
Commonwealth Ave	Acacia Ave	Retroreflective Backplate	All		Okay	Commonwealth
Commonwealth Ave	Brookhurst Rd	Retroreflective Backplate	All		Okay	Commonwealth
Commonwealth Ave	State College Blvd	Retroreflective Backplate	All		Okay	Commonwealth
Nutwood Ave	Commonwealth Ave	Bike Box	S	Nutwood ATP	We'll make sure to convery this to ATP and bridge design...	CSUF Area
State College Blvd	Dorothy Ln	Hardened Centerline	N		Depends on what we are proposing, no glue-down type deline	CSUF Area
Commonwealth Ave	College Pl	High Visibility Crosswalk	E&W		Lighting concerns, no xwalk on east side currently...	CSUF Area
Yorba Linda Blvd	CA-57 (NB)	High Visibility Crosswalk	N		Caltrans ROW	CSUF Area
Yorba Linda Blvd	CA-57 (SB)	High Visibility Crosswalk	N&E		Caltrans ROW	CSUF Area
Yorba Linda Blvd	Deerpark Dr	High Visibility Crosswalk	All		This could be a good LPI location	CSUF Area
Yorba Linda Blvd	Stadium Wy	High Visibility Crosswalk	S		This is most likely on private property...	CSUF Area
Nutwood Ave	between State College Blvd and CA-57	Lighting	N&S	369, 370, and 371 are all the same...	There is existing lighting, an upgrade would be nice, but it coul	CSUF Area
Nutwood Ave	between State College Blvd and CA-57	Lighting	N&S		There is existing lighting, an upgrade would be nice, but it coul	CSUF Area
Nutwood Ave	between State College Blvd and CA-57	Lighting	N&S		There is existing lighting, an upgrade would be nice, but it coul	CSUF Area
State College Blvd	between Yorba Linda Blvd and Nutwood Ave	Lighting	E&W	364, 365, 366, 367, and 368 are all the same...	There is existing lighting, an upgrade would be nice, but it coul	CSUF Area
State College Blvd	between Yorba Linda Blvd and Nutwood Ave	Lighting	E&W		There is existing lighting, an upgrade would be nice, but it coul	CSUF Area
State College Blvd	between Yorba Linda Blvd and Nutwood Ave	Lighting	E&W		There is existing lighting, an upgrade would be nice, but it coul	CSUF Area
State College Blvd	between Yorba Linda Blvd and Nutwood Ave	Lighting	E&W		There is existing lighting, an upgrade would be nice, but it coul	CSUF Area
State College Blvd	between Yorba Linda Blvd and Nutwood Ave	Lighting	E&W		There is existing lighting, an upgrade would be nice, but it coul	CSUF Area
Yorba Linda Blvd	between State College Blvd and CA-57	Lighting	N&S	361, 362, and 363 are all the same...	There is existing lighting, an upgrade would be nice, but it coul	CSUF Area
Yorba Linda Blvd	between State College Blvd and CA-57	Lighting	N&S		There is existing lighting, an upgrade would be nice, but it coul	CSUF Area
Yorba Linda Blvd	between State College Blvd and CA-57	Lighting	N&S		There is existing lighting, an upgrade would be nice, but it coul	CSUF Area
Nutwood Ave	Commonwealth Ave	LPI	All	Nutwood ATP	We'll make sure to incorporate into Nutwood ATP.	CSUF Area
Nutwood Ave	Titan Dr	LPI	All	Nutwood ATP	We'll make sure to incorporate into Nutwood ATP.	CSUF Area
State College Blvd	Arts Dr	LPI	E-W		Okay	CSUF Area
State College Blvd	Dorothy Ln	LPI	All		Okay	CSUF Area
State College Blvd	Nutwood Ave	LPI	All		Okay	CSUF Area
State College Blvd	Yorba Linda Blvd	LPI	All		Okay	CSUF Area
Yorba Linda Blvd	Associated Rd	LPI	N&S&W		Okay	CSUF Area
Yorba Linda Blvd	Deerpark Dr	LPI	All			CSUF Area
Nutwood Ave	between State College Blvd and Placentia Ave	Nutwood Avenue Project			Concept Design in Appendix	CSUF Area
Nutwood Ave	Commonwealth Ave	Retroreflective Backplate	All	Nutwood ATP	Intersection is having new design done due to bridge from CSU	CSUF Area
State College Blvd	Dorothy Ln	Retroreflective Backplate	All		Okay	CSUF Area

PrimaryRd	SecondaryRd	Treatment	Leg	Notes	Comments	Project
State College Blvd	Nutwood Ave	Retroreflective Backplate	All		Okay	CSUF Area
State College Blvd	Yorba Linda Blvd	Retroreflective Backplate	All		Okay	CSUF Area
Yorba Linda Blvd	Associated Rd	Retroreflective Backplate	All		Okay	CSUF Area
Yorba Linda Blvd	Deerpark Dr	Retroreflective Backplate	All		Okay	CSUF Area
Yorba Linda Blvd	Placentia Ave	Retroreflective Backplate	All		Okay	CSUF Area
Commonwealth Ave	College Pl	RRFB	E-W	or HAWK Signal	No HAWK signal, I'd rather not encourage people to cross here	CSUF Area
State College Blvd	Ranch Dr	RRFB	E-W	or HAWK Signal	Not onboard with RRFB on 6 lane arterial, HAWK could work, b	CSUF Area
State College Blvd	Yorba Linda Blvd	Rumble Strip	SB		Where do we want to install this?	CSUF Area
State College Blvd	Dorothy Ln	Scramble Crosswalk	All		Maybe, only for certain hours, but we'll really have to think ab	CSUF Area
Yorba Linda Blvd	between State College Blvd and Almira Ave	Sidewalk			CSUF shares the lot with church	CSUF Area
Citrus Ave	Hill Ave	Curb Extension	NW&SW	into Hill Ave, Curb ramps and detectable warning surfaces	Drainage, lighting, truck turning concerns...	Euclid West
Citrus Ave	Olive Ave	Curb Extension	SW	Curb ramps and detectable warning surfaces included	Drainage, lighting, truck turning concerns...	Euclid West
Hill Ave	Cul-de-sac	Curb Extension	SE	into Hill Ave, Curb ramps and detectable warning surfaces	Drainage, lighting, truck turning concerns...	Euclid West
Lee Ave	Oak Ave	Curb Extension	All	Curb ramps and detectable warning surfaces included		Euclid West
Orchard Ave	Olive Ave	Curb Extension	NE&NW&SE	Curb ramps and detectable warning surfaces included	Drainage, trucks, and lighting concerns....	Euclid West
Basque Ave	Elm Wy	Curb Ramp	NE&SE		Okay	Euclid West
Basque Ave	Porter Ave	Curb Ramp	All		Okay	Euclid West
Basque Ave	Southgate Ave	Curb Ramp	NE&SE		Okay, but why not bring the other side up to ADA compliance a	Euclid West
Citrus Ave	Ash Ave	Curb Ramp	All		Okay, but where would the SWC ramp go?	Euclid West
Lee Ave	Ash Ave	Curb Ramp	NE&NW		Okay, but why not bring the other side up to ADA compliance a	Euclid West
Lee Ave	Southgate Ave	Curb Ramp	NW&SW		Okay	Euclid West
Orchard Ave	Hill Ave	Curb Ramp	SE&SW		Okay	Euclid West
Orchard Ave	Porter Ave	Curb Ramp	NE&SE		Okay	Euclid West
Basque Ave	Southgate Ave	Detectable Warning Surface	NW&SW			Euclid West
Lee Ave	Ash Ave	Detectable Warning Surface	NW&SW			Euclid West
Basque Ave	Hill Ave	Gateway Curb Extension	NE&SE		Okay, but what about drainage, trucks, etc...?	Euclid West
Basque Ave	Olive Ave	Gateway Curb Extension	NE&SE		Drainage, trucks, etc...	Euclid West
Basque Ave	Valencia Dr	Gateway Curb Extension	NE&NW		Drainage, truck turning, and lighting concerns...	Euclid West
Basque Ave	Valencia Dr	Gateway Curb Extension	SE&SW		Drainage, truck turning, and lighting concerns...	Euclid West
Euclid St	Hill Ave/Southgate Ave	Gateway Curb Extension	NW&SW		Drainage, truck turning, lighting concerns...	Euclid West
Basque Ave	Hill Ave	High Visibility Crosswalk	E		Lighting concerns	Euclid West
Basque Ave	Olive Ave	High Visibility Crosswalk	E		Lighting concerns	Euclid West
Lee Ave	Olive Ave	High Visibility Crosswalk - Yellow	N&S		Not sure about this, also there are lighting concerns...	Euclid West
Euclid St	Hill Ave/Southgate Ave	LPI	All		Okay	Euclid West
Euclid St	Hill Ave/Southgate Ave	Retroreflective Backplate	All		Okay	Euclid West
Euclid St	Valencia Dr	Retroreflective Backplate	All		Okay	Euclid West
Citrus Ave	Hill Ave	RRFB	N-S		Okay	Euclid West
Euclid St	between Ash Ave and Hill Ave	Speed Feedback Sign	SB		Okay with subscription for remote access...	Euclid West
Euclid St	between Southgate Ave and Orangethorpe Ave	Speed Feedback Sign	NB		Okay with subscription for remote access...	Euclid West
Citrus Ave	Elm	Stop Sign & Marking	W		From the cul-de-sac or the NB leg?	Euclid West
Citrus Ave	Oak Ave	Stop Sign & Marking	W		Okay	Euclid West
Citrus Ave	Porter Ave	Stop Sign & Marking	N		Okay	Euclid West
Citrus Ave	West Ave	Stop Sign & Marking	S		Okay	Euclid West
Lee Ave	Elm Ave	Stop Sign & Marking	W		Okay	Euclid West
Lee Ave	Hill Ave	Stop Sign & Marking			all way?	Euclid West
Lee Ave	Oak Ave	Stop Sign & Marking	E&W		all way? Or just E/W?	Euclid West
Lee Ave	Olive Ave	Stop Sign & Marking	N&S		Need to check all-way stop warrant, what about just E/W?	Euclid West
Lee Ave	Southgate Ave	Stop Sign & Marking	W		Okay	Euclid West
Orchard Ave	Porter Ave	Stop Sign & Marking	E		Okay	Euclid West
Orchard Ave	Olive Ave	Yield Marking	E&W			Euclid West
Gilbert St	Pioneer Ave	Bike Box	N&E		What about S leg?	Gilbert
Malvern Ave	Gilbert St	Bike Box	W		Okay	Gilbert
Gilbert St	Hughes Dr	High Visibility Crosswalk	N&E		We have stamped concrete for the east leg...	Gilbert
Gilbert St	Stern Goodman St/Bramble Wy	High Visibility Crosswalk	All	Shopping Center	Okay but what about upgrading the lighting as well?	Gilbert
Malvern Ave	Gilbert St	High Visibility Crosswalk	All		Okay	Gilbert
Gilbert St	between Rosecrans Ave and Malvern Ave	Lane Reconfiguration				Gilbert
Gilbert St	Stern Goodman St	Lighting	All	Upgrade lighting		Gilbert
Gilbert St	Hughes Dr	LPI	E-W		Okay	Gilbert
Gilbert St	Rosecrans Ave	LPI	All	Park	Okay	Gilbert
Gilbert St	Stern Goodman St/Bramble Wy	LPI	E-W		Okay	Gilbert
Gilbert St	between Rosecrans Ave and Malvern Ave	Protected Bike Lane				Gilbert
Gilbert St	Rosecrans Ave	Retroreflective Backplate	All		Okay	Gilbert
Malvern Ave	Gilbert St	Retroreflective Backplate	All		Okay	Gilbert
Gilbert St	Loma Alta Dr	Rumble Strip	SB		Where do we want to do this? We're going to get calls if we ir	Gilbert
Gilbert St	Stern Goodman St	Rumble Strip	SB		Where? We're going to get a lot of calls if we do this...	Gilbert

PrimaryRd	SecondaryRd	Treatment	Leg	Notes	Comments	Project
Gilbert St	between Hughes Dr and Stern Goodman St	Speed Feedback Sign	NB	Downhill	Note, existing feedback sign between Pioneer and Daphne. Als	Gilbert
Gilbert St	between Rosecrans Ave and Pioneer Ave	Speed Feedback Sign	SB	Downhill	There's an existing one @ Gilbert/Daphne, we should install it	Gilbert
Harbor Blvd	Bastanchury Rd	LPI	E-W	Medical center	Okay	Harbor
Harbor Blvd	Brea Blvd	LPI	All		Okay	Harbor
Harbor Blvd	Hermosa Dr	LPI	E-W		Okay	Harbor
Harbor Blvd	Valencia Mesa Dr	LPI	E-W	Medical center	Okay	Harbor
Harbor Blvd	Bastanchury Rd	Retroreflective Backplate			Okay	Harbor
Harbor Blvd	Brea Blvd	Retroreflective Backplate	All		Okay	Harbor
Highland Ave	Valencia Dr	Bike Box	All		Okay	Harbor West
Highland Ave	Baker Ave	Curb Extension	NE&NW	Curb ramps and detectable warning surfaces included	Drainage, truck turning, lighting concerns...	Harbor West
Highland Ave	Elm Ave	Curb Extension	SE&SW	Curb ramps and detectable warning surfaces included	Drainage, truck turning, lighting concerns...	Harbor West
Highland Ave	Rosslynn Ave	Curb Extension	NE&SE	Curb ramps and detectable warning surfaces included		Harbor West
Richman Ave	Valencia Dr	Curb Extension	NW&SE	Curb ramps and detectable warning surfaces included	Drainage, truck turning, lighting concerns...	Harbor West
Richman Ave	Gage Ave	Curb Ramp	NW&SW		Okay	Harbor West
Richman Ave	Hill Ave	Curb Ramp	All		Okay	Harbor West
Richman Ave	Knepp Ave	Curb Ramp	All		Okay	Harbor West
Richman Ave	Rosslynn Ave	Curb Ramp	NW&SW		Okay	Harbor West
Richman Ave	Southgate Ave	Curb Ramp	All		Okay	Harbor West
Richman Ave	Woodcrest Ave	Curb Ramp	NW&SW		Okay	Harbor West
Harbor Blvd	Ash Ave	Gateway Curb Extension	NW&SW		Drainage, truck turning concerns...	Harbor West
Harbor Blvd	Rosslynn Ave	Gateway Curb Extension	NW&SW		Drainage, truck turning concerns...	Harbor West
Highland Ave	Knepp Ave	High Visibility Crosswalk	E&W		Lighting concerns	Harbor West
Highland Ave	Rosslynn Ave	High Visibility Crosswalk - Yellow	E		Should this be E-Leg?	Harbor West
Richman Ave	Ash Ave	High Visibility Crosswalk - Yellow	W		RRFB? yield to ped sign?	Harbor West
Richman Ave	Elm Ave	High Visibility Crosswalk - Yellow	W		RRFB? We've been getting a lot of calls about this intersection	Harbor West
Richman Ave	Gage Ave	High Visibility Crosswalk - Yellow	W		Lighting concerns	Harbor West
Richman Ave	Rosslynn Ave	High Visibility Crosswalk - Yellow	W		Lighting concerns	Harbor West
Richman Ave	West Ave	High Visibility Crosswalk - Yellow	E&W		Assuming N/S x-walk on each side? Lighting concerns...	Harbor West
Richman Ave	Woodcrest Ave	High Visibility Crosswalk - Yellow	W		Lighting concerns	Harbor West
Richman Ave	West Ave	Lighting	NE			Harbor West
Highland Ave	Valencia Dr	LPI	All		Okay	Harbor West
Richman Ave	Elm Ave	RRFB	E-W		Okay	Harbor West
Richman Ave	Knepp Ave	RRFB	E-W		Okay, and also lighting concerns...	Harbor West
Richman Ave	Houston Ave	Stop Sign & Marking	N		Okay	Harbor West
Malvern Ave	Basque Ave/Carhart Ave	Curb Extension	NW	Curb ramps and detectable warning surfaces included	Okay, drainage, lighting concerns... maybe realignment of strip	Malvern-Chapman
Malvern Ave	Basque Ave/Carhart Ave	Curb Ramp	SE&SW		Very limited space due to bridge, not sure how we can accomp	Malvern-Chapman
Malvern Ave	Euclid St	Curb Ramp	SE&SW		We are somewhat limited on space due to this being a bridge (	Malvern-Chapman
Malvern Ave	Basque Ave/Carhart Ave	Hardened Centerline	E-W		Depends on what we are proposing, no stick-down type deline	Malvern-Chapman
Malvern Ave/Chapman Ave	Woods Ave	Hardened Centerline	E-W		Depends on what we are proposing, no glue-down type deline	Malvern-Chapman
Chapman Ave	CA-57	High Visibility Crosswalk	N		Caltrans ROW	Malvern-Chapman
Chapman Ave	CA-57	High Visibility Crosswalk	S		Caltrans ROW	Malvern-Chapman
Chapman Ave	Commonwealth Ave	High Visibility Crosswalk	N&W		Okay	Malvern-Chapman
Chapman Ave	Drake Ave	High Visibility Crosswalk	S		Okay but also lighting concerns	Malvern-Chapman
Malvern Ave	Bastanchury Rd	High Visibility Crosswalk	All	Park	Okay	Malvern-Chapman
Chapman Ave	between Ford Ave and Highland Ave	Lighting	N		There is existing street lighting, perhaps upgrading... but may l	Malvern-Chapman
Chapman Ave	between Highland Ave and Malden Ave	Lighting	N		There is existing street lighting, perhaps upgrading... but may l	Malvern-Chapman
Chapman Ave	between Malden Ave and Harbor Blvd	Lighting	N		There is existing street lighting, perhaps upgrading... but may l	Malvern-Chapman
Chapman Ave	between Richman Ave and Ford Ave	Lighting	N		There is existing street lighting, perhaps upgrading... but may l	Malvern-Chapman
Chapman Ave	Acacia Ave	LPI	All		Okay	Malvern-Chapman
Chapman Ave	Berkeley Ave	LPI	All		Okay	Malvern-Chapman
Chapman Ave	Lawrence Ave	LPI	All	Fullerton College	Okay	Malvern-Chapman
Chapman Ave	Lemon St	LPI	All		Okay	Malvern-Chapman
Chapman Ave	Pomona Ave	LPI	All		Okay	Malvern-Chapman
Chapman Ave	Raymond Ave	LPI	All		Okay	Malvern-Chapman
Chapman Ave	Richman Ave	LPI	N-S	Park	Okay	Malvern-Chapman
Chapman Ave	State College Blvd	LPI	All		Okay	Malvern-Chapman
Malvern Ave	Basque Ave/Carhart Ave	LPI	N-S	School hours	Okay	Malvern-Chapman
Malvern Ave	Bastanchury Rd	LPI	E-W		Okay	Malvern-Chapman
Malvern Ave	between West Limit and Gilbert St	Protected Bike Lane				Malvern-Chapman
Chapman Ave	Commonwealth Ave	Retroreflective Backplate	All		Okay	Malvern-Chapman
Chapman Ave	Harbor Blvd	Retroreflective Backplate	N&E&W		HSIP Improvement	Malvern-Chapman
Chapman Ave	Lemon St	Retroreflective Backplate	All		Okay	Malvern-Chapman
Chapman Ave	Raymond Ave	Retroreflective Backplate	All		Okay	Malvern-Chapman
Chapman Ave	State College Blvd	Retroreflective Backplate	All		Okay	Malvern-Chapman
Malvern Ave	Bastanchury Rd	Retroreflective Backplate	All		Okay	Malvern-Chapman

PrimaryRd	SecondaryRd	Treatment	Leg	Notes	Comments	Project
Page Ave	between Courtney Ave and Brookhurst Rd	Edgeline Treatment				Orangethorpe
Orangethorpe Ave	Lemon St	Hardened Centerline	N-S		Shared intersection with Anaheim, this type of improvement n	Orangethorpe
Page Ave	between Courtney Ave and Brookhurst Rd	Sidewalk				Orangethorpe
Gilbert St	Roberta Ave	Curb Extension	NE&NW	Curb ramps and detectable warning surfaces included	Okay, but what about drainage, street sweepers, trash trucks,	Orangethorpe
Pacific Dr	Gage Ave	Curb Extension	NE&NW	Curb ramps and detectable warning surfaces included	Okay, this would take care of the space issues concern. ADA cc	Orangethorpe
Pacific Dr	Roberta Ave	Curb Extension	NE	Curb ramps and detectable warning surfaces included	Okay, but how do we deal with the drainage, street sweeping,	Orangethorpe
Pacific Dr	Woodcrest Ave	Curb Extension	SW & SE	Curb ramps and detectable warning surfaces included	Okay, this would help with the space concern.	Orangethorpe
Baker Ave	Courtney Ave	Curb Ramp	All		Okay, but what about drainage, street sweeping, trash trucks,	Orangethorpe
Baker Ave	Courtney Ave	Detectable Warning Surface	All			Orangethorpe
Baker Ave	Naples Pl	Curb Ramp	NE&NW		Okay, but what about drainage, street sweeping, trash trucks,	Orangethorpe
Baker Ave	Naples Pl	Detectable Warning Surface	NE&NW			Orangethorpe
Baker Ave	Simi Pl	Curb Ramp	NE&NW		Okay, but what about drainage, street sweeping, trash trucks,	Orangethorpe
Basque Ave	Maxzim Ave	Curb Ramp	All		Okay	Orangethorpe
Basque Ave	Roberta Ave	Curb Ramp	NE&SE		Okay, but why not bring the other side up to ADA compliance a	Orangethorpe
Gage Ave	Courtney Ave	Curb Ramp	NW&SW		Okay	Orangethorpe
Gage Ave	Courtney Ave	Detectable Warning Surface	NW&SW			Orangethorpe
Houston Ave	Courtney Ave	Curb Ramp	NE&NW		Okay, but what about drainage, street sweeping, trash trucks,	Orangethorpe
Orchard Ave	Gage Ave	Curb Ramp	All		Okay	Orangethorpe
Orchard Ave	Maxzim Ave	Curb Ramp	NW&SW		Okay	Orangethorpe
Orchard Ave	Roberta Ave	Curb Ramp	NW&SW		Okay	Orangethorpe
Roberta Ave	Maxzim Ave	Curb Ramp	SE&SW		Okay, but what about drainage, street sweeping, trash trucks,	Orangethorpe
Roberta Ave	Pine Dr	Curb Ramp	SE&SW		Okay, but what about drainage, street sweeping, trash trucks,	Orangethorpe
Roberta Ave/Page Ave	Courtney Ave	Curb Ramp	NE&NW		Okay, but what about drainage, street sweeping, trash trucks,	Orangethorpe
Woodcrest Ave	Cedar Ave	High Visibility Crosswalk	W			Orangethorpe
Woodcrest Ave	Cedar Ave	Curb Ramp	NW&SW		Okay, but what about drainage, street sweeping, trash trucks,	Orangethorpe
Woodcrest Ave	Cedar Ave	Detectable Warning Surface	NW&SW			Orangethorpe
Woodcrest Ave	Courtney Ave	Curb Ramp	NE&SE&SW		Okay, but what about drainage, street sweeping, trash trucks,	Orangethorpe
Basque Ave	Roberta Ave	Detectable Warning Surface	NW&SW			Orangethorpe
Roberta Ave	Pine Dr	Detectable Warning Surface	NW&SW			Orangethorpe
Woodcrest Ave	Courtney Ave	Detectable Warning Surface	NE&SE&SW			Orangethorpe
Brookhurst Rd	Roberta Ave/Page Ave	Gateway Curb Extension	NW&SW		How do we do this with the gutter? What about street sweepi	Orangethorpe
Orangethorpe Ave (South Frontage Rd)	Courtney Ave	Gateway Curb Extension	SE&SW		How will we design this with the gutters? Street sweepers, tra	Orangethorpe
Brookhurst Rd	Roberta Ave/Page Ave	Hardened Centerline	N-S		How do we do this without those glued down delineators?	Orangethorpe
Orangethorpe Ave	Brookhurst Rd	Hardened Centerline	N-S		How do we do this without those glued down delineators?	Orangethorpe
Orangethorpe Ave	Euclid St	Hardened Centerline	N-S		How do we do this without those glued down delineators? We	Orangethorpe
Orangethorpe Ave	Gilbert St	Hardened Centerline	E-W		How do we do this without those glued down delineators?	Orangethorpe
Orangethorpe Ave	Harbor Blvd	Hardened Centerline	E-W		How do we do this without those glued down delineators?	Orangethorpe
Baker Ave	Courtney Ave	High Visibility Crosswalk	W & E		Lighting concerns. We'll need to discuss since this is a propose	Orangethorpe
Gage Ave	Courtney Ave	High Visibility Crosswalk	W		Lighting concerns	Orangethorpe
Orangethorpe Ave	Nicklett Ave	High Visibility Crosswalk	N		ADA ramps, lighting, trucks, drainage, etc...	Orangethorpe
Orangethorpe Ave (North Frontage Rd)	Basque Ave	High Visibility Crosswalk	N		Is this for an E-W xing?	Orangethorpe
Orangethorpe Ave (North Frontage Rd)	Cedar Ave	High Visibility Crosswalk	N		Is this for an E-W xing?	Orangethorpe
Orangethorpe Ave (North Frontage Rd)	Courtney Ave	High Visibility Crosswalk	N		I'm assuming this is from the north Orangethorpe frontage to t	Orangethorpe
Orangethorpe Ave (North Frontage Rd)	Eadington Ave	High Visibility Crosswalk	N		Is this for an E-W xing?	Orangethorpe
Orangethorpe Ave (North Frontage Rd)	Orchard Ave	High Visibility Crosswalk	N&W		Is this for an E-W xing?	Orangethorpe
Orangethorpe Ave (North Frontage Rd)	Pacific Dr	High Visibility Crosswalk	N&W		Is this for an E-W xing?	Orangethorpe
Orangethorpe Ave (North Frontage Rd)	Richman Ave	High Visibility Crosswalk	N&W&E		This is okay, but what about ADA compliance for the ramps?	Orangethorpe
Orangethorpe Ave (North Frontage Rd)	Woods Ave	High Visibility Crosswalk	N&W&E		Is this for an E-W xing?	Orangethorpe
Orangethorpe Ave (South Frontage Rd)	Basque Ave	High Visibility Crosswalk	E		Is this for an E-W xing?	Orangethorpe
Orangethorpe Ave (South Frontage Rd)	Cedar Ave	High Visibility Crosswalk	S		Is ths for an E-W xing?	Orangethorpe
Orangethorpe Ave (South Frontage Rd)	Courtney Ave	High Visibility Crosswalk	S	Park, community center, and bus stops	Across Orangethorpe (south frontage)?	Orangethorpe
Orangethorpe Ave (South Frontage Rd)	Jefferson Ave	High Visibility Crosswalk	S		Is this for an E-W xing?	Orangethorpe
Orangethorpe Ave (South Frontage Rd)	Orchard Ave	High Visibility Crosswalk	S&E		Is this for an E-W xing?	Orangethorpe
Orangethorpe Ave (South Frontage Rd)	Richman Ave	High Visibility Crosswalk	S&W		This is okay, but what about ADA compliance for the ramps?	Orangethorpe
Orangethorpe Ave (South Frontage Rd)	Woods Ave	High Visibility Crosswalk	S&W&E		Is this for an E-W xing?	Orangethorpe
Roberta Ave	Maxzim Ave	High Visibility Crosswalk	S		We'll need to discuss this, if we're proposing new x-walks.	Orangethorpe
Roberta Ave	Pine Dr	High Visibility Crosswalk	N&S		We'll need to discuss this, if we're proposing new x-walks.	Orangethorpe
Roberta Ave/Page Ave	Courtney Ave	High Visibility Crosswalk	N		Lighting concerns. We'll need to discuss this.	Orangethorpe
Woodcrest Ave	Courtney Ave	High Visibility Crosswalk	E&S		Where will the E cross? There's driveways to the west. We'll r	Orangethorpe
Orangethorpe Ave (South Frontage Rd)	Eadington Ave	High Visibility Crosswalk - Yellow	S&E		Will the pre-schools qualify for the yellow x-walk? Is this for a	Orangethorpe
Roberta Ave	Houston Ave	High Visibility Crosswalk - Yellow	S		Okay, but what about ADA compliance for the ramps?	Orangethorpe
Roberta Ave	Locust Dr	High Visibility Crosswalk - Yellow	S		Okay, but what about ADA compliance for the ramps?	Orangethorpe
Orangethorpe Ave	Gilbert St	Left-turn Signal	E-W	Prot-Permissive Signal	Are we going to see if this is warranted or just go w/ protective	Orangethorpe
Brookhurst Rd	Houston Ave Path	Lighting			Solar?	Orangethorpe
Woodcrest Ave	Courtney Ave	Lighting	NE			Orangethorpe

PrimaryRd	SecondaryRd	Treatment	Leg	Notes	Comments	Project
Brookhurst Rd	Roberta Ave/Page Ave	LPI	All		Okay	Orangethorpe
Orangethorpe Ave	Brookhurst Rd	LPI	All		Okay	Orangethorpe
Orangethorpe Ave	Euclid St	LPI	N-S		This should be taken care of during the Euclid St RTSSP project	Orangethorpe
Orangethorpe Ave	Gilbert St	LPI	All		Okay	Orangethorpe
Orangethorpe Ave	Harbor Blvd	LPI	All		We can take care of this during our Harbor Blvd RTSSP project	Orangethorpe
Orangethorpe Ave	Magnolia Ave	LPI	All		Okay	Orangethorpe
Orangethorpe Ave	Pacific Dr	LPI	E		Okay but do we need to look into ADA compliance for the ram	Orangethorpe
Orangethorpe Ave	Pomona Ave	LPI	All		Okay	Orangethorpe
Orangethorpe Ave	Richman Ave	LPI	N-S		Okay	Orangethorpe
Baker Ave	between Eadington Ave and Basque Ave	Median Island			Continue east of Basque?	Orangethorpe
Orangethorpe Ave	Pacific Dr	High Visibility Crosswalk - Yellow	E			Orangethorpe
Baker Ave	between Pacific Dr and Eadington Ave	Median Island			What are you thinking for this?	Orangethorpe
Houston Ave	between Eadington Ave and Basque Ave	Median Island			No median islands east of Basque?	Orangethorpe
Houston Ave	between Pacific Dr and Eadington Ave	Median Island			What are you thinking for this?	Orangethorpe
Roberta Ave	between Eadington Ave and Basque Ave	Median Island			What are you thinking for this?	Orangethorpe
Roberta Ave	between Pacific Dr and Eadington Ave	Median Island			What are you thinking for this?	Orangethorpe
Gilbert St	Roberta Ave	Relocate Crosswalk	N		Suggested route to orangethorpe elementary	Orangethorpe
Brookhurst Rd	Roberta Ave/Page Ave	Retroreflective Backplate	All		Okay	Orangethorpe
Orangethorpe Ave	Brookhurst Rd	Retroreflective Backplate	All		HSIP Improvement	Orangethorpe
Orangethorpe Ave	Euclid St	Retroreflective Backplate	All		HSIP Improvement	Orangethorpe
Orangethorpe Ave	Gilbert St	Retroreflective Backplate	All		Okay	Orangethorpe
Orangethorpe Ave	Harbor Blvd	Retroreflective Backplate	All		HSIP Improvement	Orangethorpe
Orangethorpe Ave	Highland Ave	Retroreflective Backplate	All		Okay	Orangethorpe
Orangethorpe Ave	Lemon St	Retroreflective Backplate	All		Shared intersection with Anaheim, would need to coordinate	Orangethorpe
Orangethorpe Ave	Magnolia Ave	Retroreflective Backplate	All		HSIP Improvement	Orangethorpe
Orangethorpe Ave	Pomona Ave	Retroreflective Backplate	All		Okay	Orangethorpe
Orangethorpe Ave	Richman Ave	Retroreflective Backplate	All		Okay	Orangethorpe
Orangethorpe Ave	Woods Ave	Retroreflective Backplate	All		Okay	Orangethorpe
Pacific Dr	Gage Ave	RRFB	E-W		Space issues w/ push button.	Orangethorpe
Pacific Dr	Woodcrest Ave	RRFB	E-W		Ex. space is a concern to install everything. Pushbutton locatic	Orangethorpe
Orangethorpe Ave (North Frontage Rd)	Basque Ave	Stop Here On Red Sign	N		Where do you want to install this? Will we get detection?	Orangethorpe
Orangethorpe Ave (North Frontage Rd)	Pacific Dr	Stop Here On Red Sign	N		How will we detect the cars?	Orangethorpe
Orangethorpe Ave (North Frontage Rd)	Richman Ave	Stop Here On Red Sign	N		This is okay if we can get the video detection working there.	Orangethorpe
Orangethorpe Ave (North Frontage Rd)	Woods Ave	Stop Here On Red Sign	N		Where do you want to install this? Will we get detection?	Orangethorpe
Orangethorpe Ave (South Frontage Rd)	Basque Ave	Stop Here On Red Sign	S		Where do you want to install this? Will we get detection?	Orangethorpe
Orangethorpe Ave (South Frontage Rd)	Woods Ave	Stop Here On Red Sign	S		Where do you want to install this? Will we get detection?	Orangethorpe
Baker Ave	Courtney Ave	Stop Sign & Marking	W&E		Only 1 of 4 legs? Confirm - You don't want to do E/W?	Orangethorpe
Baker Ave	Naples Pl	Stop Sign & Marking	N		Okay	Orangethorpe
Baker Ave	Simi Pl	Stop Sign & Marking	N		Okay	Orangethorpe
Basque Ave	Gage Ave	Stop Sign & Marking	E&W		Okay	Orangethorpe
Basque Ave	Houston Ave	Stop Sign & Marking	N		Okay	Orangethorpe
Basque Ave	Maxzim Ave	Stop Sign & Marking	E&W		Okay	Orangethorpe
Citrus Ave	Houston Ave	Stop Sign & Marking	N		Okay	Orangethorpe
Eadington Ave	Gage Ave	Stop Sign & Marking	E&W		Okay	Orangethorpe
Eadington Ave	Houston Ave	Stop Sign & Marking	N		Okay	Orangethorpe
Eadington Ave	Maxzim Ave	Stop Sign & Marking	E&W		Okay	Orangethorpe
Eadington Ave	Woodcrest Ave	Stop Sign & Marking	E&W		Okay	Orangethorpe
Gage Ave	Courtney Ave	Stop Sign & Marking	W		Okay	Orangethorpe
Houston Ave	Courtney Ave	Stop Sign & Marking	N		Okay	Orangethorpe
Lovering Ave	Houston Ave	Stop Sign & Marking	N		Okay	Orangethorpe
Orange Ave	Houston Ave	Stop Sign & Marking	N		Okay	Orangethorpe
Orangethorpe Ave (North Frontage Rd)	Cedar Ave	Stop Sign & Marking	N		Okay	Orangethorpe
Orangethorpe Ave (North Frontage Rd)	Courtney Ave	Stop Sign & Marking	N		I'm assuming this is just north of Orangethorpe (north frontag	Orangethorpe
Orangethorpe Ave (North Frontage Rd)	Eadington Ave	Stop Sign & Marking	N		Okay	Orangethorpe
Orangethorpe Ave (North Frontage Rd)	Orchard Ave	Stop Sign & Marking	N		Okay	Orangethorpe
Orangethorpe Ave (South Frontage Rd)	Cedar Ave	Stop Sign & Marking	S		Okay	Orangethorpe
Orangethorpe Ave (South Frontage Rd)	Eadington Ave	Stop Sign & Marking	S		Okay	Orangethorpe
Orangethorpe Ave (South Frontage Rd)	Jefferson Ave	Stop Sign & Marking	S		Okay	Orangethorpe
Orangethorpe Ave (South Frontage Rd)	Orchard Ave	Stop Sign & Marking	S		Okay	Orangethorpe
Orchard Ave	Gage Ave	Stop Sign & Marking			All way, E/W...?	Orangethorpe
Orchard Ave	Houston Ave	Stop Sign & Marking	N		Okay	Orangethorpe
Orchard Ave	Woodcrest Ave	Stop Sign & Marking			All way, E/W....?	Orangethorpe
Roberta Ave	Pine Dr	Stop Sign & Marking	N&S		Did we check that it meets the warrants?	Orangethorpe
Roberta Ave/Page Ave	Courtney Ave	Stop Sign & Marking	N		Okay	Orangethorpe
Royer Ave	Houston Ave	Stop Sign & Marking	N		Okay	Orangethorpe

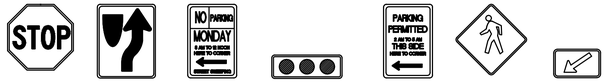
PrimaryRd	SecondaryRd	Treatment	Leg	Notes	Comments	Project
Woodcrest Ave	Cedar Ave	Stop Sign & Marking	W		Okay	Orangethorpe
Woodcrest Ave	Courtney Ave	Stop Sign & Marking	E		Okay	Orangethorpe
Gilbert St	Olive Ave	Curb Extension	SE&SW	Curb ramps and detectable warning surfaces included	Drainage, trucks, etc...	Southwest Area
Magnolia Ave	Academy Dr	Curb Extension	E	Curb ramps and detectable warning surfaces included	Shared intersection with Buena Park	Southwest Area
Pritchard Ave	Louise Pl	Curb Extension	E	Curb ramps and detectable warning surfaces included	Lighting concerns, drainage concerns, trucks, etc...	Southwest Area
Pritchard Ave	Valencia Dr	Curb Extension	N	Curb ramps and detectable warning surfaces included	Aren't we already proposing a curb extension?	Southwest Area
Jensen Wy	Ash Ave	Curb Ramp	NE&SE		Okay	Southwest Area
Jensen Wy	West Ave	Curb Ramp	All		Okay	Southwest Area
Paula Ave	Flower Ave	Curb Ramp	NE&NW		Okay	Southwest Area
Paula Ave	West Ave	Curb Ramp	SE&SE		Okay	Southwest Area
Pritchard Ave	Ash Ave	Curb Ramp	All		Okay, need to confirm space on SEC due to wall.	Southwest Area
Gilbert St	Flower Ave	Gateway Curb Extension	NE&SE		Lighting, trucks, drainage, etc...	Southwest Area
Gilbert St	West Ave	Gateway Curb Extension	NE&SE		Lighting, trucks, drainage, etc...	Southwest Area
Jensen Wy	Valencia Dr	Gateway Curb Extension	SE&SW		How will trucks make the turn? What about drainage, street s	Southwest Area
Magnolia Ave	Flower Ave	Gateway Curb Extension	NE&SE		Okay, but what about drainage, trucks, etc...	Southwest Area
Magnolia Ave	Louise Pl	Gateway Curb Extension	NE&SE		How will trucks make the turn? What about drainage, street s	Southwest Area
Magnolia Ave	Olive Ave	Gateway Curb Extension	NE&SE		Okay, but what about drainage, trucks, etc...	Southwest Area
Pritchard Ave	Valencia Dr	Gateway Curb Extension	NE&NW		Lighting concerns, drainage concerns, trucks, etc...	Southwest Area
Pritchard Ave	Valencia Dr	Gateway Curb Extension	SE&SW		Lighting concerns w/ RRFB, drainage concerns, trucks, etc...	Southwest Area
Commonwealth Ave	Jensen Wy	High Visibility Crosswalk	S		I'm assuming E/W, lighting concerns...	Southwest Area
Commonwealth Ave	Vermont Ave	High Visibility Crosswalk	S		I'm assuming E/W, lighting concerns...	Southwest Area
Magnolia Ave	Louise Pl	High Visibility Crosswalk	E		Lighting concerns	Southwest Area
Commonwealth Ave	Thompson Ave	High Visibility Crosswalk - Yellow	S		Lighting concerns and the fire hydrant in the ramp on the east	Southwest Area
Magnolia Ave	Academy Dr	High Visibility Crosswalk - Yellow	W		Shared intersection with Buena Park, west leg is in Buena Park	Southwest Area
Magnolia Ave	Flower Ave	High Visibility Crosswalk - Yellow	E		I'm assuming N/S x-walk, but I do have lighting concerns...	Southwest Area
Magnolia Ave	Olive Ave	High Visibility Crosswalk - Yellow	E		I'm assuming N/S x-walk, but I do have lighting concerns...	Southwest Area
Commonwealth Ave	Jensen Wy	Lighting	S			Southwest Area
Commonwealth Ave	Thompson Ave	Lighting	SW			Southwest Area
Commonwealth Ave	Vermont Ave	Lighting	S			Southwest Area
Gilbert St	Olive Ave	Lighting	SW		We already upgraded this intersection... currently working on	Southwest Area
Commonwealth Ave	Pritchard Ave	LPI	All		Okay	Southwest Area
Gilbert St	Valencia Dr	LPI	All		Okay	Southwest Area
Magnolia Ave	Valencia Dr	LPI			Okay	Southwest Area
Flower Ave	between Lindy Pl and Paula Ave	Median Island			What are you thinking for this? Will it be continuous... openin	Southwest Area
Flower Ave	between Pritchard Ave and Lindy Pl	Median Island			What are you thinking for this? Will it be continuous... openin	Southwest Area
Olive Ave	between Lindy Pl and Paula Dr	Median Island			What are you thinking for this? Will it be continuous... openin	Southwest Area
Olive Ave	between Vine Ave and Lindy Pl	Median Island			What are you thinking for this? Will it be continuous... openin	Southwest Area
West Ave	between Magnolia Ave and Pritchard Ave	Median Island			What are you thinking for this? Will it be continuous... openin	Southwest Area
West Ave	between Pritchard Ave and Jensen Wy	Median Island			What are you thinking for this? Will it be continuous... openin	Southwest Area
Commonwealth Ave	Pritchard Ave	Retroreflective Backplate	All		Okay, lighting upgrades as well?	Southwest Area
Gilbert St	Valencia Dr	Retroreflective Backplate	All		Okay	Southwest Area
Magnolia Ave	Valencia Dr	Retroreflective Backplate	All		Okay	Southwest Area
Gilbert St	Olive Ave	RRFB	S		all-way stop warrant? Gilbert ADT significantly higher than Oli	Southwest Area
Cherry Ave	Crystal Pl	Stop Sign & Marking	S		Okay	Southwest Area
Cherry Ave	Hill Ave	Stop Sign & Marking	S		Okay, can we also think about some centerline striping around	Southwest Area
Cherry Ave	Margaret Pl	Stop Sign & Marking	S		Okay	Southwest Area
Cherry Ave	Nicklett Ave	Stop Sign & Marking	S		Okay	Southwest Area
Cherry Ave	Paula Dr	Stop Sign & Marking	S		Shouldn't it be the W leg?	Southwest Area
Flower Ave	Lindy Pl	Stop Sign & Marking	S		Okay	Southwest Area
Jensen Wy	Ash Ave	Stop Sign & Marking	W		Okay	Southwest Area
Olive Ave	Lindy Pl	Stop Sign & Marking	N		Okay	Southwest Area
Olive Ave	Paula Dr	Stop Sign & Marking	S		Okay	Southwest Area
Paula Ave	Flower Ave	Stop Sign & Marking	N		Okay	Southwest Area
Paula Ave	West Ave	Stop Sign & Marking	S		Okay	Southwest Area
Pritchard Ave	Ash Ave	Stop Sign & Marking			Okay	Southwest Area
Pritchard Ave	Flower Ave	Stop Sign & Marking	N		Isn't this an alley?	Southwest Area
Pritchard Ave	Oak Ave	Stop Sign & Marking	N&S		Okay	Southwest Area
Vine Ave	Cherry Ave	Stop Sign & Marking	N		Which leg? I'm assuming N?	Southwest Area
Vine Ave	Flower Ave	Stop Sign & Marking	N&S		Which legs? I'm assuming E/W?	Southwest Area
Vine Ave	Hill Ave	Stop Sign & Marking	E		Which leg? I'm assuming E?	Southwest Area
Vine Ave	Oak Ave	Stop Sign & Marking	S		Okay	Southwest Area
Vine Ave	Olive Ave	Stop Sign & Marking	N&S		Which legs? I'm assuming E/W?	Southwest Area
Vine Ave	Porter Ave	Stop Sign & Marking	N		Which leg? I'm assuming N?	Southwest Area
Pritchard Ave	Creek	Upgrade Ped/Bike Bridge			What did you have in mind for this?	Southwest Area

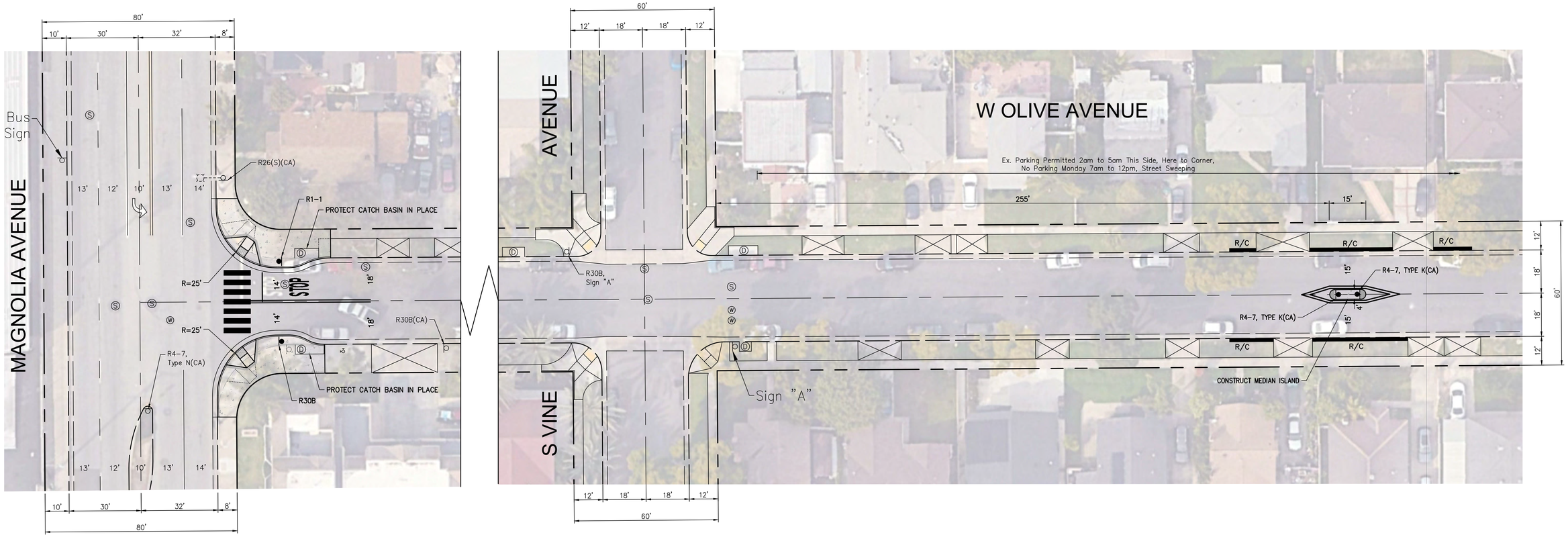
Appendix C
CONCEPT ENGINEERING DESIGNS

LEGEND

1. = EXISTING STRIPING & MARKINGS TO REMAIN.
   = EXISTING STRIPING & MARKINGS TO BE REMOVED.
   = PROPOSED STRIPING & MARKINGS.
2. = EXISTING SIGN AND POST.
   = EXISTING SIGN AND POST TO BE REMOVED OR RELOCATED.
   = PROPOSED SIGN AND POST.
3. (S) = SIGNALIZED INTERSECTION.
4. (RRFB) = EXISTING RECTANGULAR RAPID FLASHING BEACON INTERSECTION.
5. r/c = EXISTING RED CURB MARKINGS TO REMAIN.
   r/c = EXISTING RED CURB MARKINGS TO BE REMOVED.
   R/C = PROPOSED RED CURB MARKINGS.
6. = PROPOSED RECTANGULAR RAPID FLASHING BEACON
7. = EXISTING DRIVEWAY
8. = PROPOSED DRIVEWAY

SIGN LEGEND





20' 10' 0 10' 20'
1"=20' GRAPHIC SCALE

Lochner
1100 Corporate Center Drive, Suite 201
Monterey Park, California 91754
Tel: (323) 260-4703 Fax: (323) 260-4705

REVISIONS		
NUMBER	DESCRIPTION	DATE

	INITIALS	DATE
DRAWN	–	–
DESIGNED	–	–
REVIEWED	–	–
STREET		
SEWER		
DRAINAGE		
WATER		
TRAFFIC		
UTILITY/ELEC		
LANDSCAPE		
FACILITIES		
GENERAL ENG		
DESIGN ENG		
INSPECTION		
PARKS & REC		
AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

FULLERTON SS4A
PROPOSED TREATMENTS

CONCEPTUAL DESIGN
WEST OLIVE AVENUE BETWEEN MAGNOLIA AVENUE AND VINE AVENUE

APPROVED: _____ DATE
CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: _____ DATE
PUBLIC WORKS DIRECTOR

SCALE: 1" = 20'

SHEET 1 OF 11 SHEETS

B.M.:

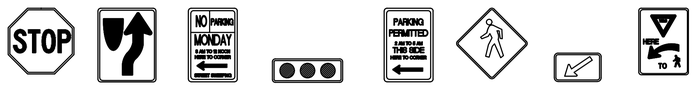
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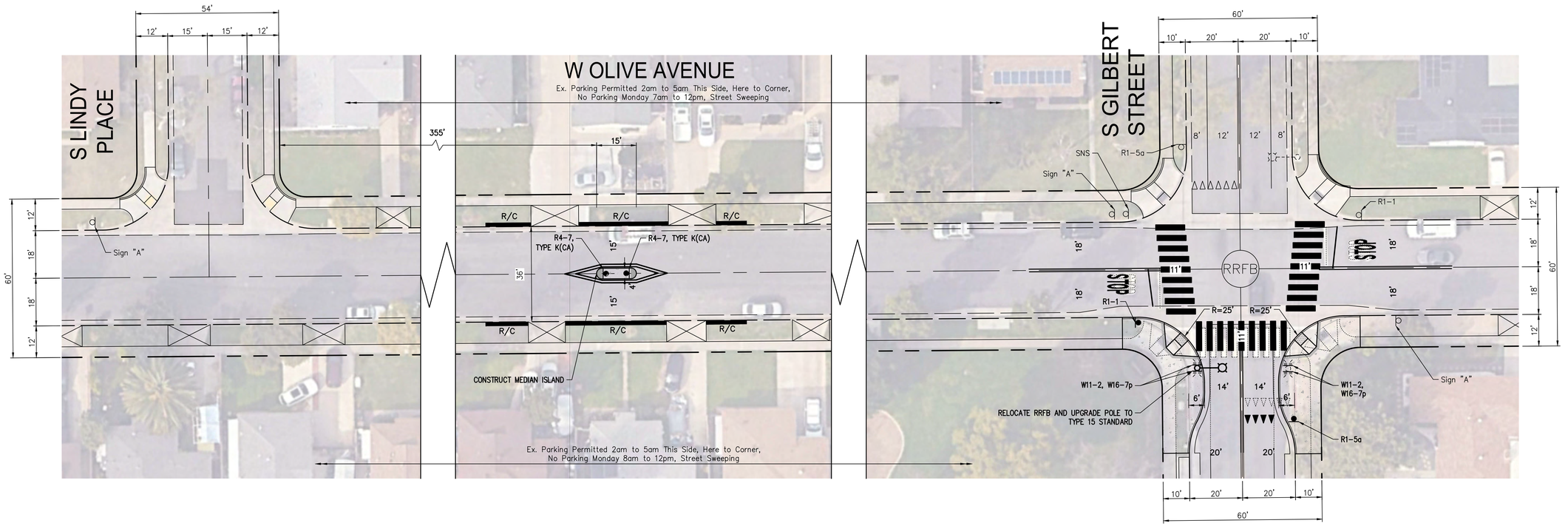
LEGEND

1. = EXISTING STRIPING & MARKINGS TO REMAIN.
   = EXISTING STRIPING & MARKINGS TO BE REMOVED.
   = PROPOSED STRIPING & MARKINGS.
2. = EXISTING SIGN AND POST.
   = EXISTING SIGN AND POST TO BE REMOVED OR RELOCATED.
   = PROPOSED SIGN AND POST.
3. (S) = SIGNALIZED INTERSECTION.
4. (RRFB) = EXISTING RECTANGULAR RAPID FLASHING BEACON INTERSECTION.
5. r/c = EXISTING RED CURB MARKINGS TO REMAIN.
   r/c = EXISTING RED CURB MARKINGS TO BE REMOVED.
   R/C = PROPOSED RED CURB MARKINGS.
6. = PROPOSED RECTANGULAR RAPID FLASHING BEACON
7. = EXISTING DRIVEWAY
8. = PROPOSED DRIVEWAY

SIGN LEGEND



R1–1 R4–7 R30B(CA) Type K(CA) Sign "A" W11–2 W16–7p R1–5a



20' 10' 0 10' 20'
1"=20'
GRAPHIC SCALE

Lochner
1100 Corporate Center Drive, Suite 201
Monterey Park, California 91754
Tel: (323) 260-4703 Fax: (323) 260-4705

REVISIONS					
NUMBER	DESCRIPTION	DATE		INITIALS	DATE
			DRAWN	–	–
			DESIGNED	–	–
			REVIEWED	–	–
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS–BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

FULLERTON SS4A
PROPOSED TREATMENTS

CONCEPTUAL DESIGN
WEST OLIVE AVENUE BETWEEN S LINDY PLACE AND GILBERT STREET

APPROVED: _____ DATE / CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: _____ DATE / PUBLIC WORKS DIRECTOR

SCALE: 1" = 20'

SHEET 2 OF 11 SHEETS

B.M.:

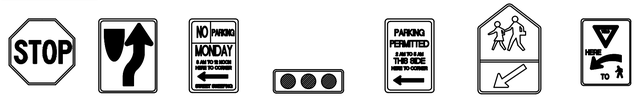
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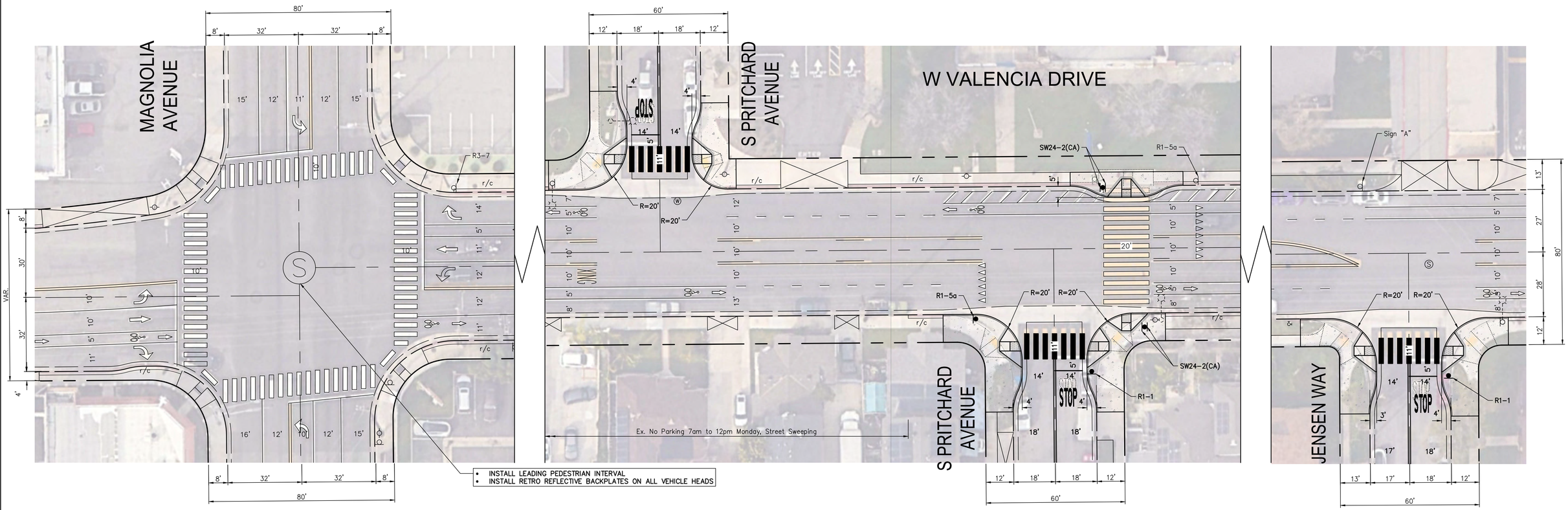
LEGEND

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7. = EXISTING DRIVEWAY
8. = PROPOSED DRIVEWAY

SIGN LEGEND



R1–1 R4–7 R30B(CA) Type K(CA) Sign "A" SW24–2(CA) R1–5a



20' 10' 0 10' 20'
1"=20' GRAPHIC SCALE

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REVISIONS					
NUMBER	DESCRIPTION	DATE		INITIALS	DATE
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			DESIGNED	–	–
			REVIEWED	–	–
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
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			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

FULLERTON SS4A
PROPOSED TREATMENTS

CONCEPTUAL DESIGN

WEST VALENCIA DRIVE BETWEEN SOUTH PRITCHARD AND JENSEN WAY

APPROVED: ACCEPTED:

DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR DATE PUBLIC WORKS DIRECTOR

SCALE: 1" = 20' SHEET 3 OF 11 SHEETS

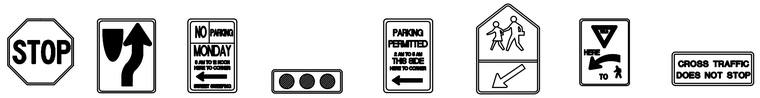
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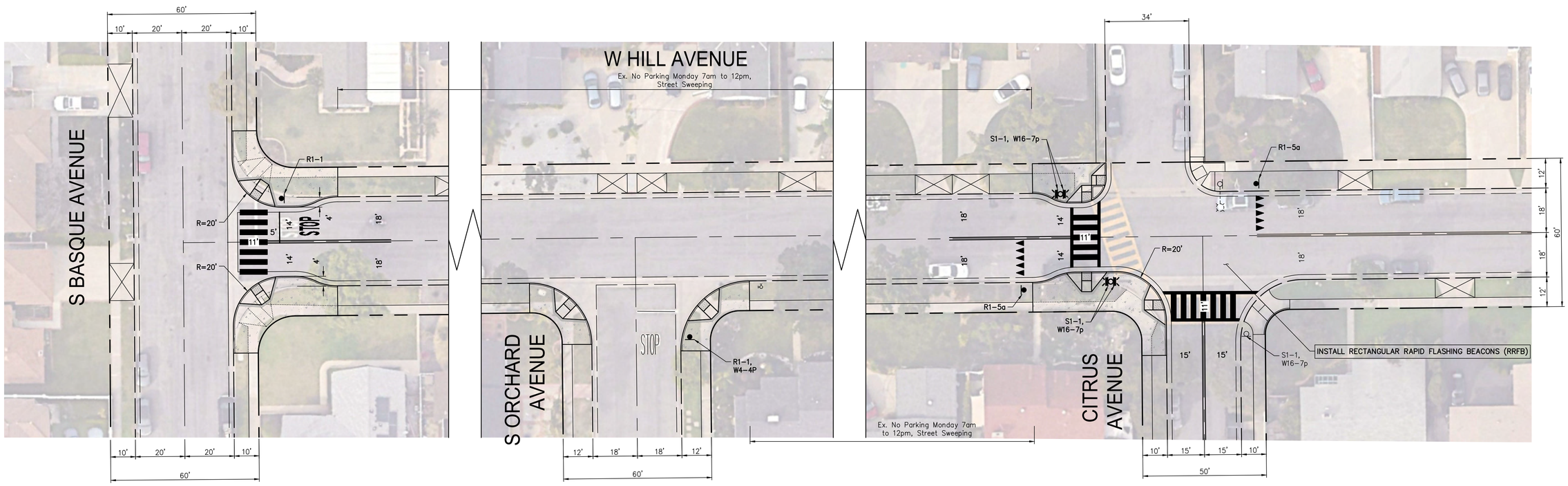
LEGEND

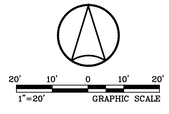
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SIGN LEGEND



R1-1 R4-7 R30B(CA) Type K(CA) Sign "A" SW24-2(CA) R1-5a W4-4P





Lochner
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REVISIONS

NUMBER	DESCRIPTION	DATE

	INITIALS	DATE
DRAWN	--	--
DESIGNED	--	--
REVIEWED	--	--
STREET		
SEWER		
DRAINAGE		
WATER		
TRAFFIC		
UTILITY/ELEC		
LANDSCAPE		
FACILITIES		
GENERAL ENG		
DESIGN ENG		
INSPECTION		
PARKS & REC		
AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

FULLERTON SS4A
PROPOSED TREATMENTS

CONCEPTUAL DESIGN

WEST HILL AVENUE BETWEEN SOUTH BASQUE AVENUE AND CITRUS AVENUE

APPROVED: _____ DATE
CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: _____ DATE
PUBLIC WORKS DIRECTOR

SCALE: 1" = 20'

SHEET 4 OF 11 SHEETS

B.M.:

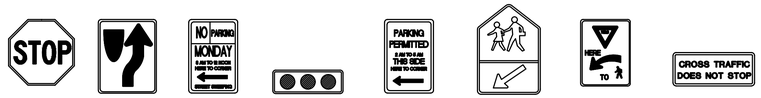
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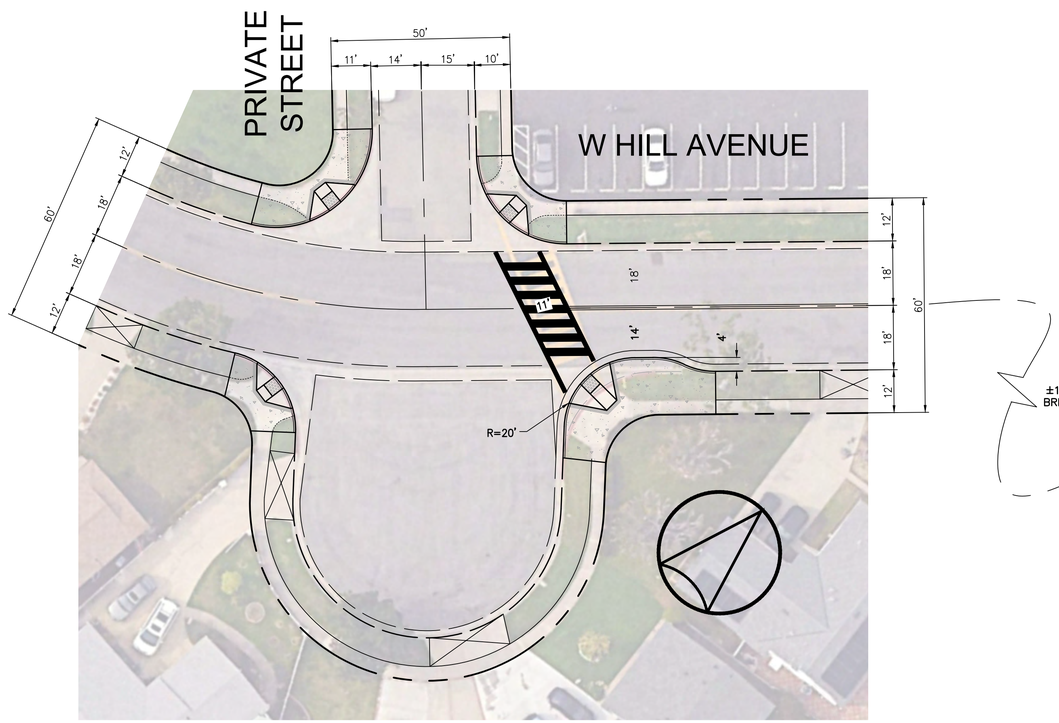
LEGEND

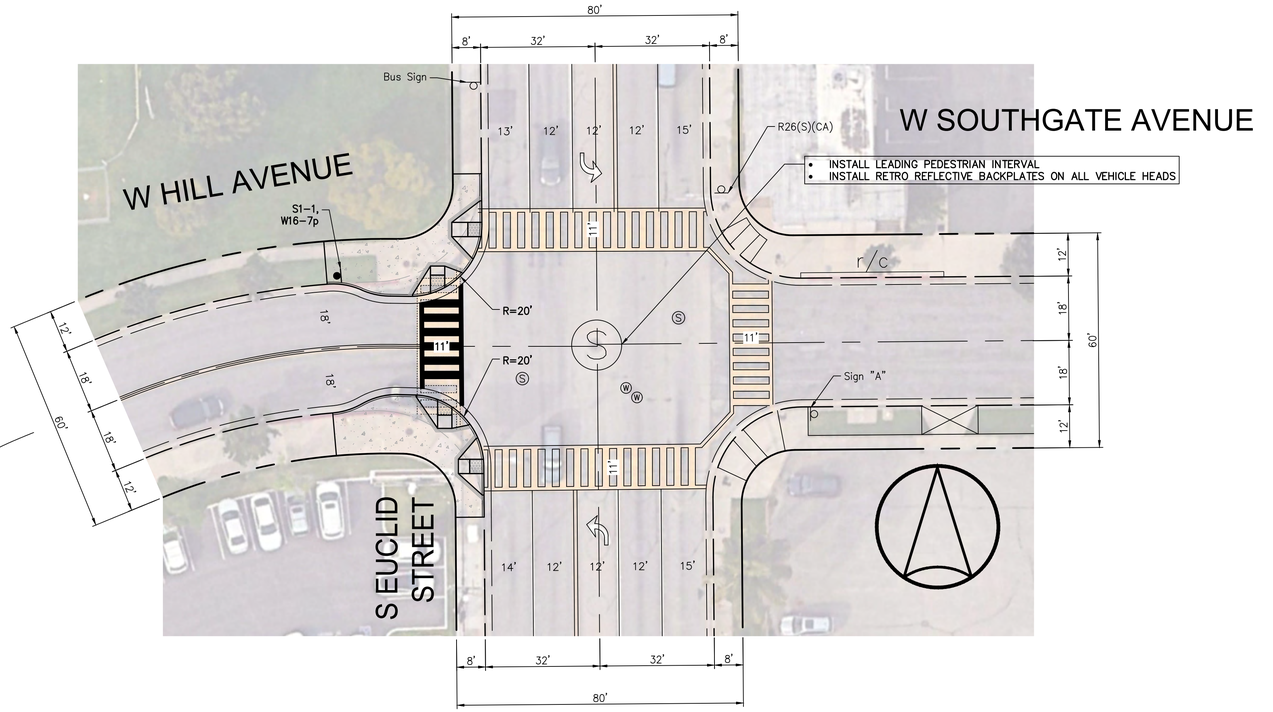
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SIGN LEGEND



R1–1 R4–7 R30B(CA) Type K(CA) Sign "A" SW24–2(CA) R1–5a W4–4P





20' 10' 0 10' 20'
1"=20' GRAPHIC SCALE

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REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	–	–
			DESIGNED	–	–
			REVIEWED	–	–
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

FULLERTON SS4A
PROPOSED TREATMENTS

CONCEPTUAL DESIGN

WEST HILL AVENUE BETWEEN CITRUS AVENUE AND EAST EUCLID STREET

APPROVED: ACCEPTED:

DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR DATE PUBLIC WORKS DIRECTOR

SCALE: 1" = 20' SHEET 5 OF 11 SHEETS

B.M.: FILE:

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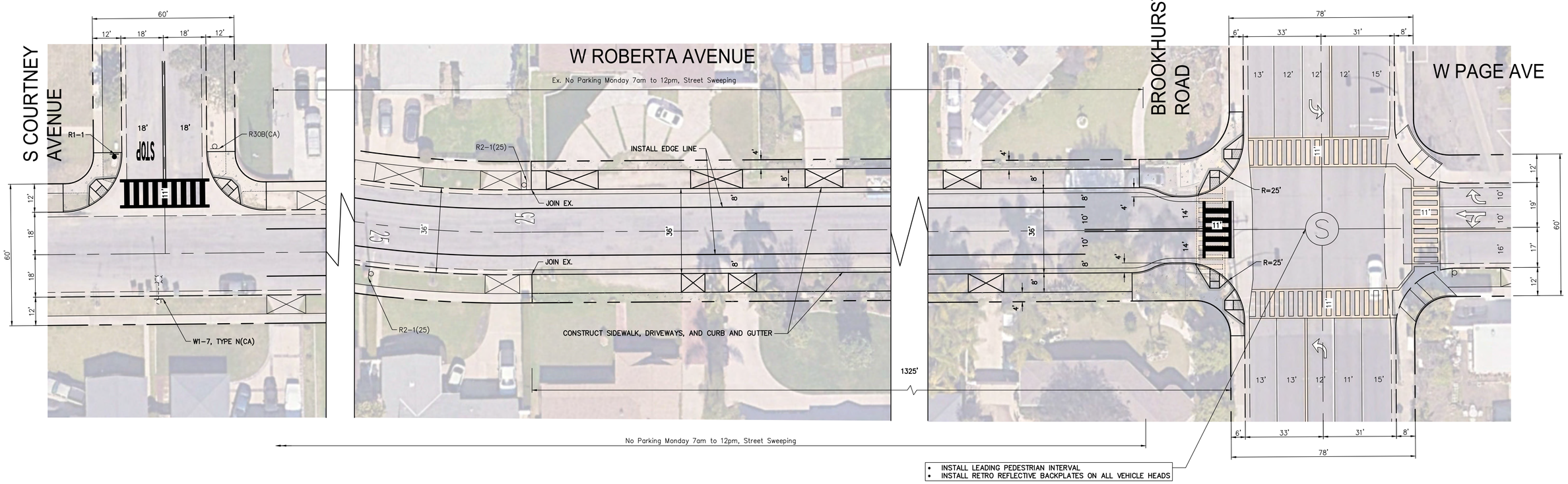
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SIGN LEGEND



R1-1 | R30B(CA) | Sign "A" | W1-7 | TYPE(N)(CA)



20' 10' 0 10' 20'
1"=20' GRAPHIC SCALE

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REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	–	–
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			REVIEWED	–	–
			STREET		
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			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

FULLERTON SS4A
PROPOSED TREATMENTS

CONCEPTUAL DESIGN

WEST ROBERTA AVENUE BETWEEN COURTNEY AVENUE AND BROOKHURST ROAD

APPROVED: | ACCEPTED:

DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR | DATE PUBLIC WORKS DIRECTOR

SCALE: 1" = 20' | SHEET 6 OF 11 SHEETS

B.M.: | FILE:

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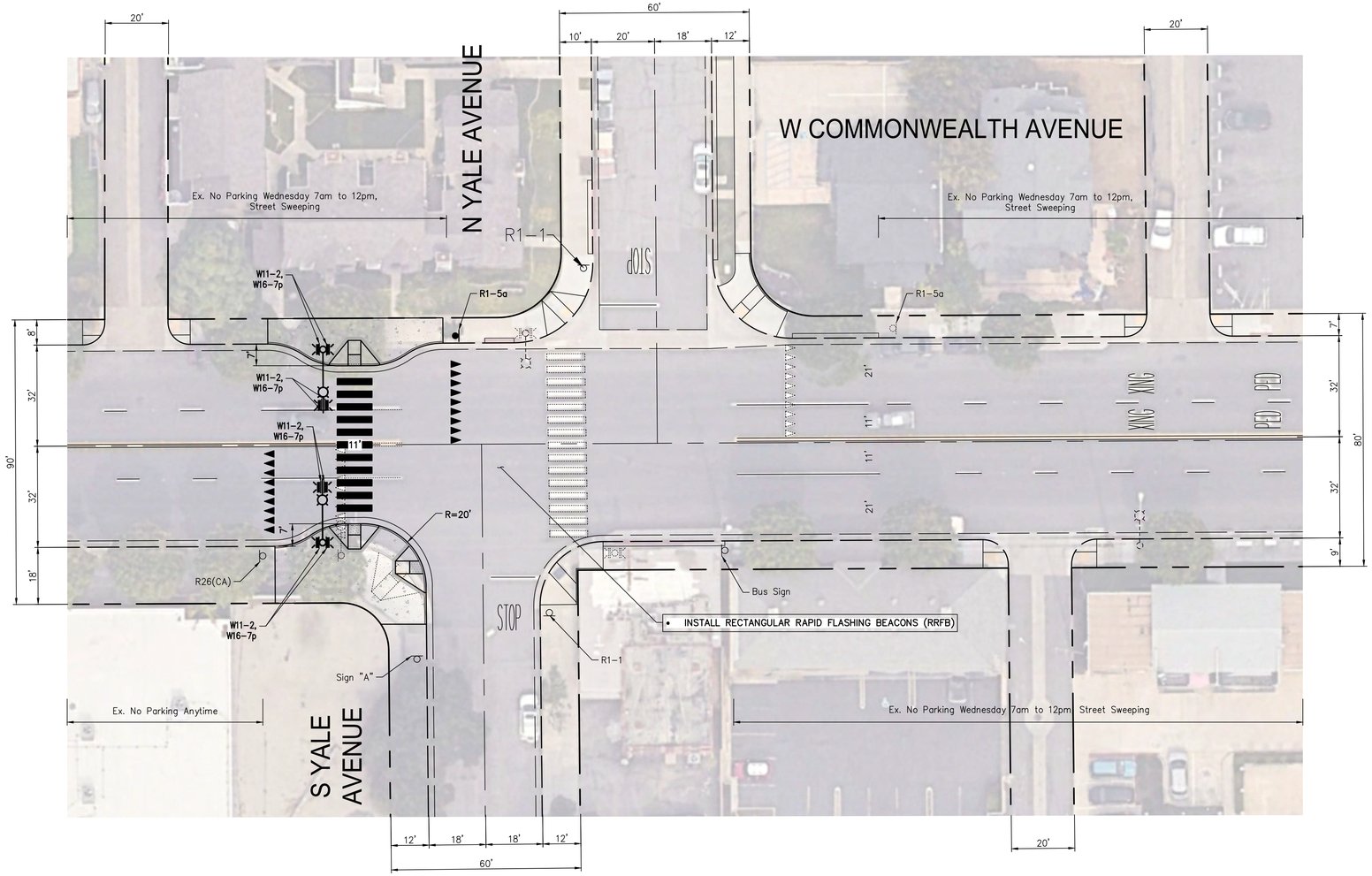
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SIGN LEGEND



R1–1 R30B(CA) Sign "A" W11–2 W16–7p R1–5a



20' 10' 0 10' 20'
1"=20' GRAPHIC SCALE

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REVISIONS				INITIALS	DATE
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			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

FULLERTON SS4A
PROPOSED TREATMENTS

CONCEPTUAL DESIGN
WEST COMMONWEALTH AVENUE AND NORTH YALE AVENUE

APPROVED: ACCEPTED:

DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR DATE PUBLIC WORKS DIRECTOR

SCALE: 1" = 20' SHEET 7 OF 11 SHEETS

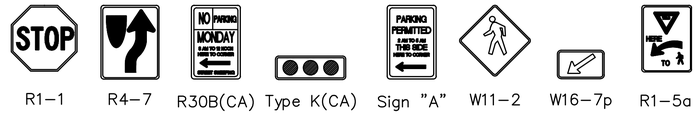
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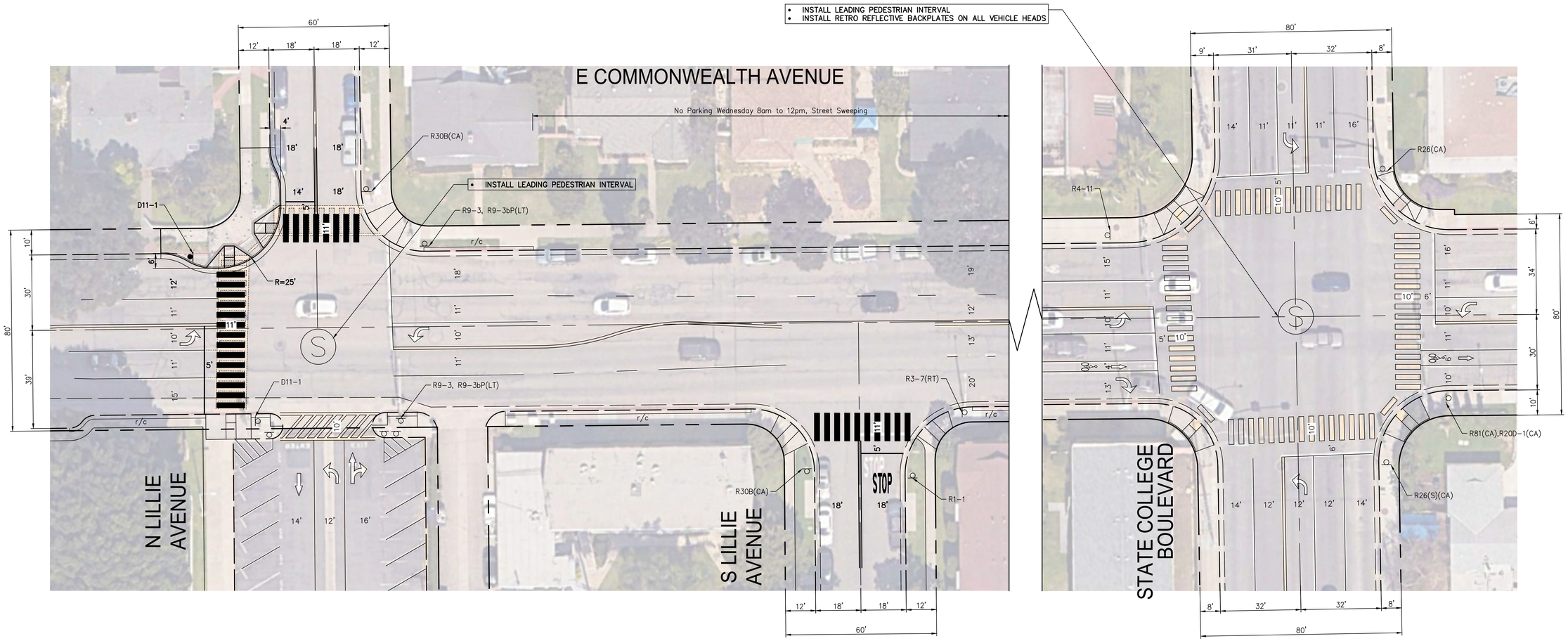
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SIGN LEGEND



R1–1 R4–7 R30B(CA) Type K(CA) Sign "A" W11–2 W16–7p R1–5a



20' 10' 0 10' 20'
1"=20' GRAPHIC SCALE

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REVISIONS				INITIALS	DATE
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			INSPECTION		
			PARKS & REC		
			AS–BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
FULLERTON SS4A
PROPOSED TREATMENTS

CONCEPTUAL DESIGN

EAST COMMONWEALTH AVENUE BETWEEN NORTH LILLIE AVENUE AND STATE COLLEGE BOULEVARD

APPROVED: ACCEPTED:

DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR DATE PUBLIC WORKS DIRECTOR

SCALE: 1" = 20' SHEET 8 OF 11 SHEETS

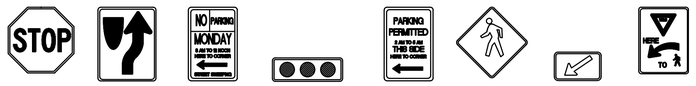
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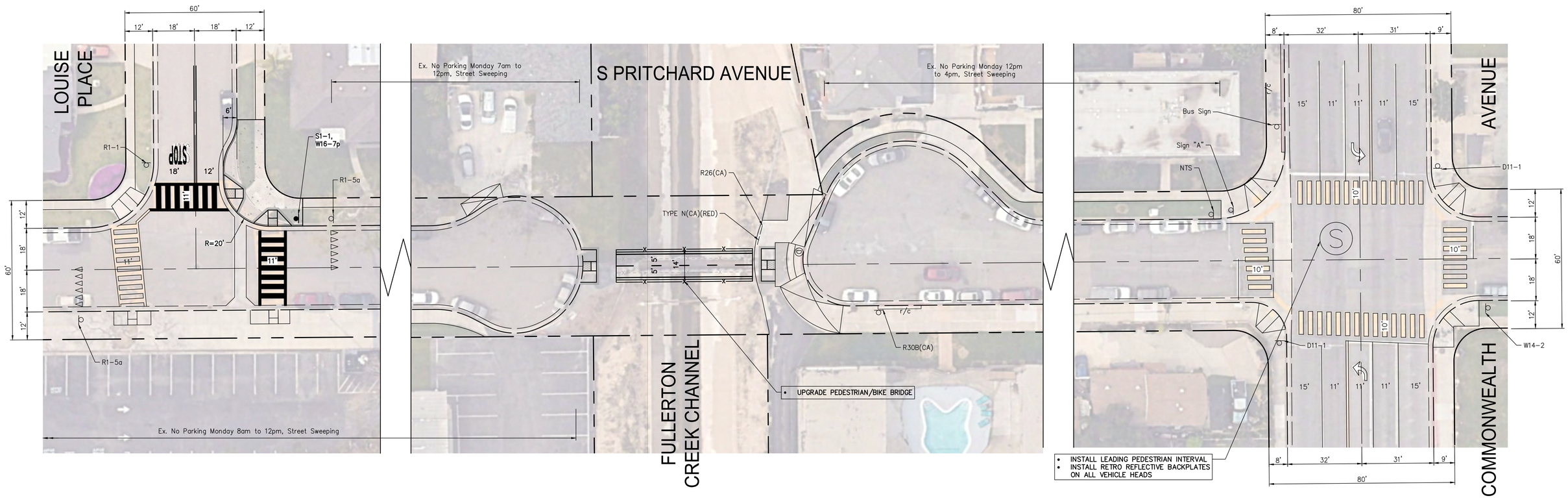
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SIGN LEGEND



R1–1 R4–7 R30B(CA) Type K(CA) Sign "A" W11–2 W16–7p R1–5a



20' 10' 0 10' 20'
1"=20' GRAPHIC SCALE

Lochner
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REVISIONS					
NUMBER	DESCRIPTION	DATE		INITIALS	DATE
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			PARKS & REC		
			AS–BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

FULLERTON SS4A
PROPOSED TREATMENTS

CONCEPTUAL DESIGN

S PRITCHARD AVENUE BETWEEN LOUISE PLACE AND WEST COMMONWEALTH AVENUE

APPROVED: ACCEPTED:

DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR DATE PUBLIC WORKS DIRECTOR

SCALE: 1" = 20' SHEET 9 OF 11 SHEETS

B.M.: FILE:

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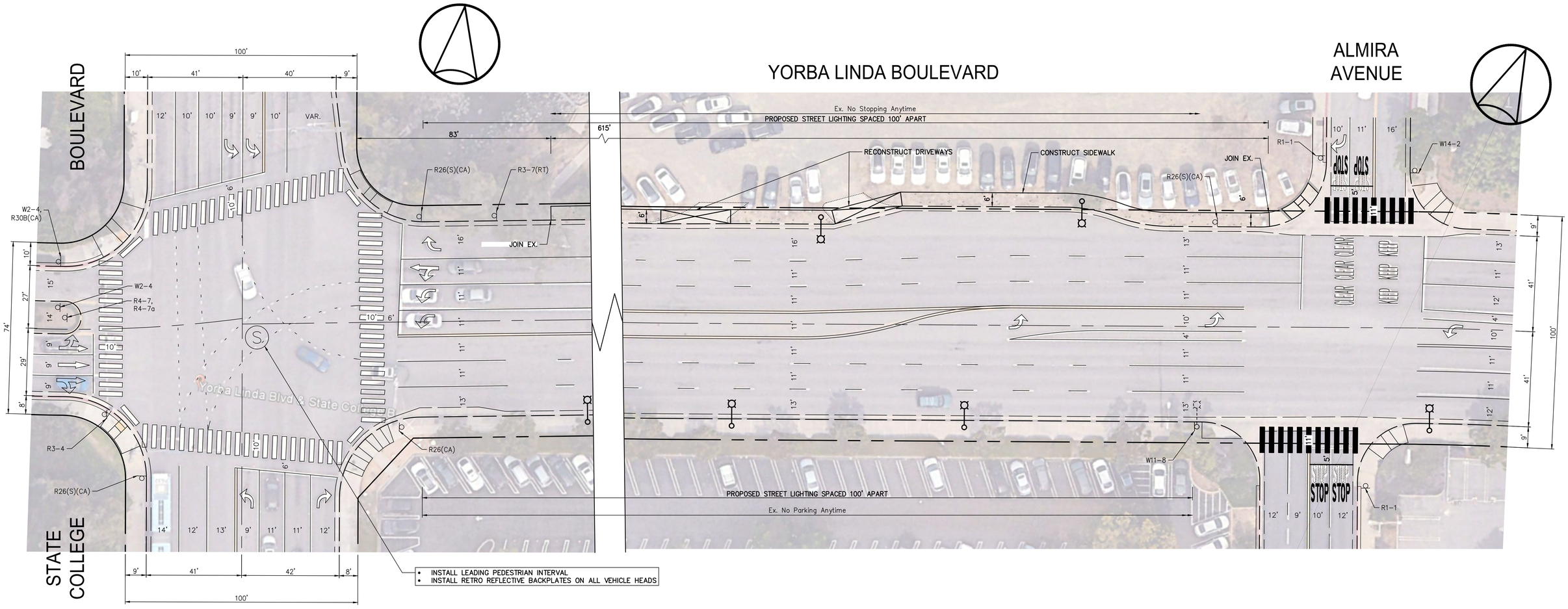
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SIGN LEGEND



R1–1 R30B(CA) Sign "A" R1–5a S1–1 W16–7p



- INSTALL LEADING PEDESTRIAN INTERVAL
- INSTALL RETRO REFLECTIVE BACKPLATES ON ALL VEHICLE HEADS

20' 10' 0 10' 20'
1"=20' GRAPHIC SCALE

Lochner
1100 Corporate Center Drive, Suite 201
Monterey Park, California 91754
Tel: (323) 260-4703 Fax: (323) 260-4705

REVISIONS					
NUMBER	DESCRIPTION	DATE		INITIALS	DATE
			DRAWN	–	–
			DESIGNED	–	–
			REVIEWED	–	–
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS–BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
FULLERTON SS4A
PROPOSED TREATMENTS

CONCEPTUAL DESIGN

YORBA LINDA BLVD BETWEEN STATE COLLEGE BLVD AND ALMIRA AVE

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR
ACCEPTED: DATE PUBLIC WORKS DIRECTOR

SCALE: 1" = 20'
B.M.:
SHEET 10 OF 11 SHEETS
FILE:

FILE PATH: I:\WIP\LEGACY\PROJECTS\2023\00023386 (4/2020) - FULLERTON SS4A\DESIGN\CONCEPTS\D_FULLERTON.DWG

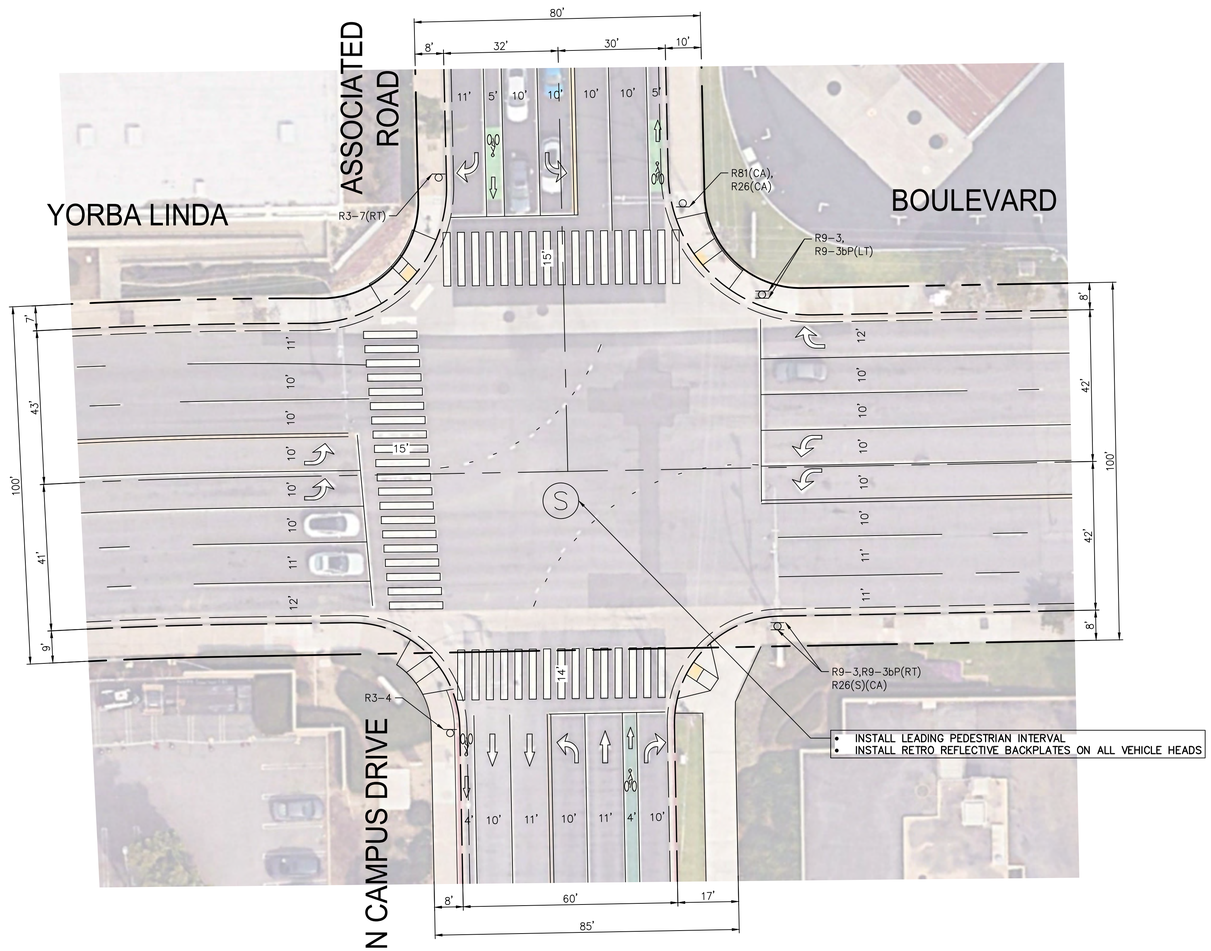
LEGEND

1. = EXISTING STRIPING & MARKINGS TO REMAIN.
   = EXISTING STRIPING & MARKINGS TO BE REMOVED.
   = PROPOSED STRIPING & MARKINGS.
2. = EXISTING SIGN AND POST.
   = EXISTING SIGN AND POST TO BE REMOVED OR RELOCATED.
   = PROPOSED SIGN AND POST.
3. (S) = SIGNALIZED INTERSECTION.
4. (RRFB) = EXISTING RECTANGULAR RAPID FLASHING BEACON INTERSECTION.
5. r/c = EXISTING RED CURB MARKINGS TO REMAIN.
   r/c = EXISTING RED CURB MARKINGS TO BE REMOVED.
   R/C = PROPOSED RED CURB MARKINGS.
6. = PROPOSED RECTANGULAR RAPID FLASHING BEACON
7. = EXISTING DRIVEWAY
8. = PROPOSED DRIVEWAY

SIGN LEGEND



R3-4 R9-3 R9-3bP R81(CA)



20' 10' 0 10' 20'
1"=20' GRAPHIC SCALE

Lochner
1100 Corporate Center Drive, Suite 201
Monterey Park, California 91754
Tel: (323) 260-4703 Fax: (323) 260-4705

REVISIONS

NUMBER	DESCRIPTION	DATE

	INITIALS	DATE
DRAWN	–	–
DESIGNED	–	–
REVIEWED	–	–
STREET		
SEWER		
DRAINAGE		
WATER		
TRAFFIC		
UTILITY/ELEC		
LANDSCAPE		
FACILITIES		
GENERAL ENG		
DESIGN ENG		
INSPECTION		
PARKS & REC		
AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

FULLERTON SS4A
PROPOSED TREATMENTS

CONCEPTUAL DESIGN
YORBA LINDA BOULEVARD AT ASSOCIATED ROAD

APPROVED: ACCEPTED:

DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR | DATE PUBLIC WORKS DIRECTOR

SCALE: 1" = 20' SHEET 11 OF 11 SHEETS

B.M.: FILE:

FILE PATH: I:\APP\LEGACY\PROJECTS\2023\0000023286 (4/1/2021) - FULLERTON SS4A\DESIGN\CONCEPTVDS_FULLERTON.DWG

Appendix D
NUTWOOD AVENUE PROJECT

CITY OF FULLERTON

CALIFORNIA

CONSTRUCTION PLANS

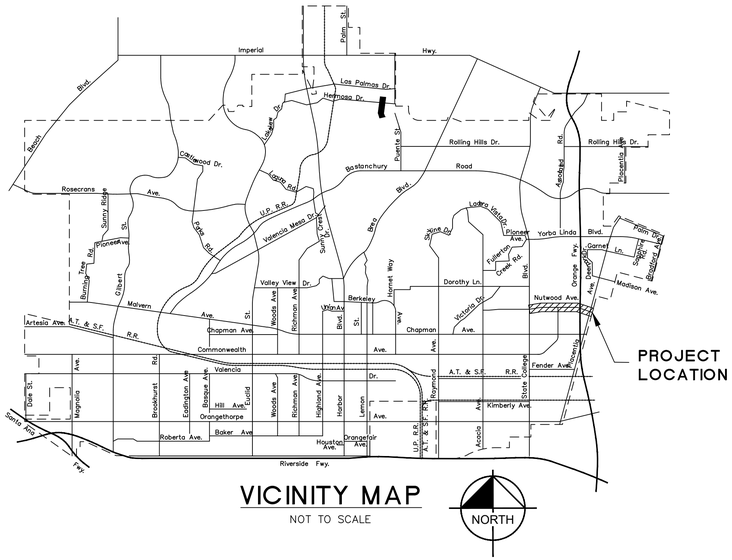
FOR

NUTWOOD AVENUE ATP IMPROVEMENTS
FY 2025-26

STATE COLLEGE BOULEVARD TO NORTH PLACENTIA AVENUE

CITY PROJECT NO. 48008

SHEET LIST TABLE	
SHEET NO.	SHEET TITLE
1	TITLE SHEET
2	TYPICAL SECTIONS
3-4	DEMOLITION PLAN
5-6	STREET IMPROVEMENT PLAN
7-16	CURB RAMP DETAILS
17-19	BIKEWAY & MISCELLANEOUS DETAILS
20-25	MEDIAN DETAILS
26-27	ON-SITE DETAILS
28-30	SIGNING AND STRIPING PLANS
31-35	TRAFFIC SIGNAL PLAN
36-37	STREET LIGHTING PLANS
38-39	BIKE PATH LIGHTING PLANS
40	EROSION CONTROL PLAN
41-48	RETAINING WALL PLAN & DETAILS
49-57	IRRIGATION PLAN & DETAILS
58-65	PLANTING PLAN & DETAILS



VICINITY MAP

NOT TO SCALE

NORTH

NOTICE TO CONTRACTORS:

1. CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2015 EDITION AND THE APPLICABLE REQUIREMENTS OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, 2010 EDITION EXCEPT AS MODIFIED BY THE CITY'S STANDARD DRAWINGS OR THE SPECIAL PROVISIONS.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS BEFORE STARTING WORK.
3. ALL A.C. PAVEMENT AND CONCRETE IMPROVEMENTS TO BE JOINED SHALL BE SAWCUT.
4. THE ENGINEER DOES NOT WARRANT THE ACCURACY OF SCALED DIMENSIONS ON ANY PLAN. ALL DIMENSIONS SHALL BE AS DESIGNATED ON THE PLANS. THE CONTRACTOR SHALL PROTECT ALL PUBLIC AND PRIVATE PROPERTY
5. DURING THE PERFORMANCE OF WORK DONE UNDER THE CONTRACT, THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO AVOID ANY DAMAGE TO ANY STRUCTURES ADJACENT TO THE PROJECT BOUNDARIES.
6. EXISTING UTILITIES SHOWN ARE BASED ON AVAILABLE RECORDS OF PARENT UTILITY COMPANIES AND MAY NOT ACCURATELY REPRESENT THEIR ACTUAL LOCATIONS. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE ACTUAL LOCATIONS (VERTICAL AND HORIZONTAL) OF ALL UTILITIES, IN THE FIELD OR COORDINATE SUCH INDEPENDENT VERIFICATION WITH THE PARENT UTILITY COMPANIES AND PROVIDE THE CITY WITH THE POTHOLE INFORMATION. THE CONTRACTOR SHALL PROTECT IN PLACE OR COORDINATE WITH PARENT COMPANY FOR THE RELOCATION OF CONFLICTING UTILITIES ENCOUNTERED DURING CONSTRUCTION.
7. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) AT 811 TWO WORKING DAYS PRIOR TO ANY EXCAVATION WORK.

UTILITIES LEGEND:

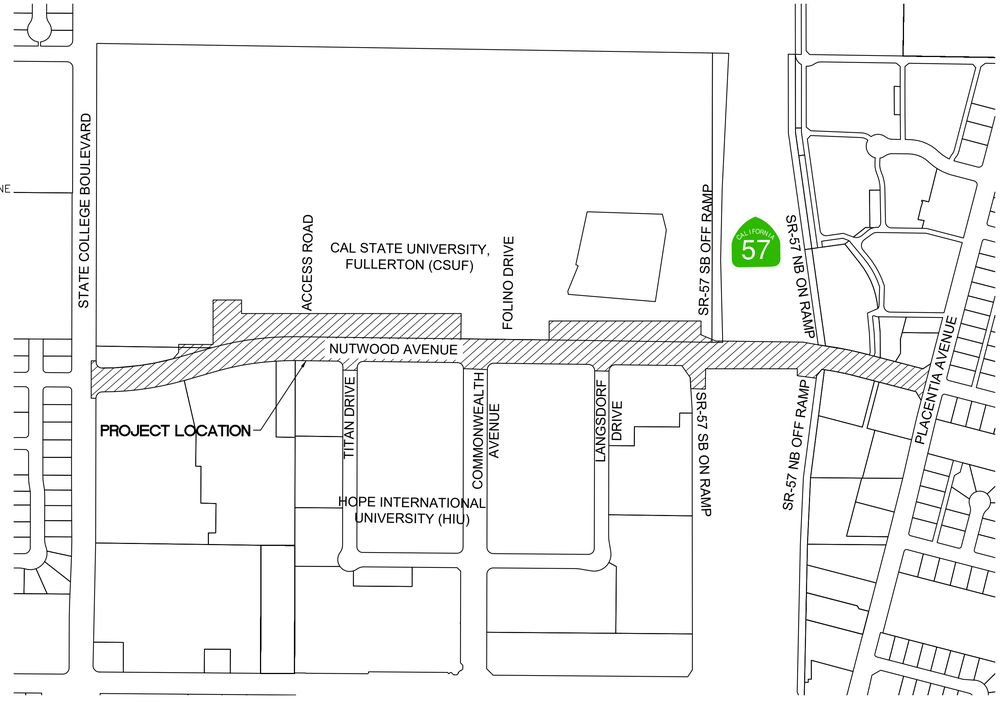
W	EXISTING WATER LINE
G	EXISTING GAS LINE
S	EXISTING SEWER LINE
SD	EXISTING STORM DRAIN LINE
E	EXISTING UNDERGROUND ELECTRIC LINE
T	EXISTING TELECOM LINE

ABBREVIATIONS:

AB	AGGREGATE BASE
AC	ASPHALT CONCRETE
ANGLE PT	POINT OF TANGENCY
AVE	AVENUE
BC	BEGIN CURVE
BCR	BEGIN CURB RETURN
BEG	BEGIN
BLVD	BOULEVARD
C	CURVE
CL	CENTERLINE
DR	DRIVE
E	EASTING
E	ELECTRICAL
EC	END CURVE
ECR	END CURB RETURN
ELEV	ELEVATION
EX	EXISTING
FL	FLOWLINE
FS	FINISHED SURFACE
G	GAS
HP	HINGE POINT
LT	LEFT
M&O	MILL AND OVERLAY
MIN	MINIMUM
N	NORTHING
NB	NORTHBOUND
NO	NUMBER
OCPW	ORANGE COUNTY PUBLIC WORKS
PCC	PORTLAND CEMENT CONCRETE
PCC	POINT OF COMPOUND CURVE
PI	POINT OF INTERSECTION
PRC	POINT OF REVERSE CURVE
R/W	RIGHT-OF-WAY
RC	RETAINING CURB
RT	RIGHT
S	SOUTHING
SB	SOUTHBOUND
SD	STORM DRAIN
SPPWC	STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION
SR	STATE ROUTE
SS	SANITARY SEWER
ST	STREET
STA	STATION
STD	STANDARD
SW	SIDEWALK
TC	TOP OF CURB
TYP	TYPICAL
VAR	VARIES
W	WATER
(#)	COUNT

X/Y

X= DETAIL NUMBER
Y= SHEET NUMBER



LOCATION MAP

1" = 300'

NORTH

UTILITY CONTACT NUMBERS:

COMPANY	CONTACT	TELEPHONE NO.
CITY OF FULLERTON WATER DEPARTMENT	STACY MATSUMOTO	(714) 738-7803
CITY OF FULLERTON ELECTRICAL	DANA HUFFMAN	(714) 738-6371
CITY OF FULLERTON SEWER DEPARTMENT	BILL ROSEBERRY	(714) 738-6373
CITY OF FULLERTON TRAFFIC DIVISION	DAVE LANGSTAFF	(714) 738-6858
TIME WARNER	KENNETH VAN VORS	(909) 208-8656
AT&T DISTRIBUTION	VALENTINA GIPSON	(714) 666-5467
SOUTHERN CALIFORNIA GAS COMPANY	ADALBERTO RODRIGUEZ	(714) 634-5069
SOUTHERN CALIFORNIA EDISON COMPANY	DAVID HENSLEY	(714) 870-3149
CALIFORNIA UNDERGROUND SERVICE ALERT (USA)		811

DIGALERT

DIAL TOLL FREE
811

AT LEAST TWO DAYS BEFORE YOU DIG

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUTCHISON No. C 30-25 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE			
			DRAWN	SR	10/26/2025
			DESIGNED	SR	10/26/2025
			REVIEWED	BC	10/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

NUTWOOD AVENUE ATP IMPROVEMENTS
TITLE SHEET

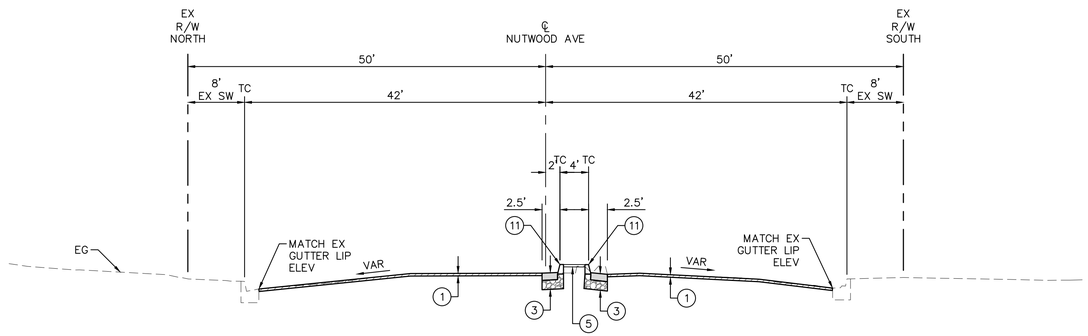
APPROVED: ACCEPTED:

DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED SHEET 1 OF 65 SHEETS

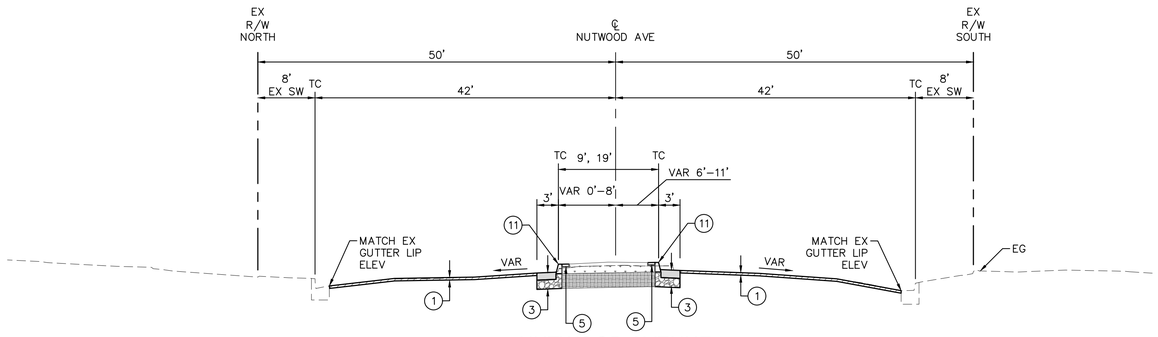
B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172' FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



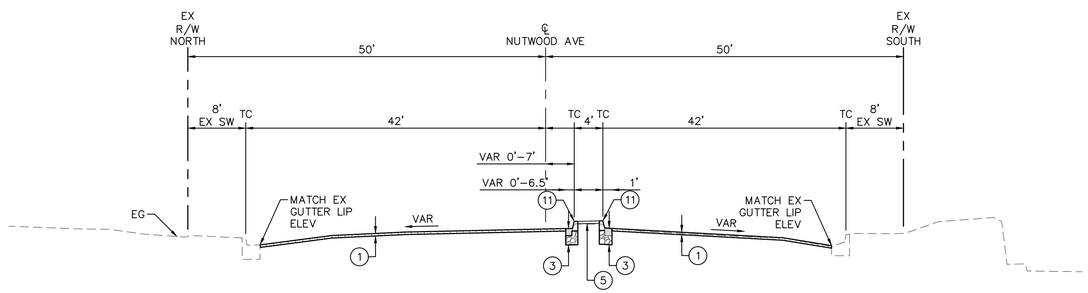
NUTWOOD AVENUE

STA 26+64.95 TO 31+00
NOT TO SCALE



NUTWOOD AVENUE

STA 21+39.84 TO 26+64.95
NOT TO SCALE

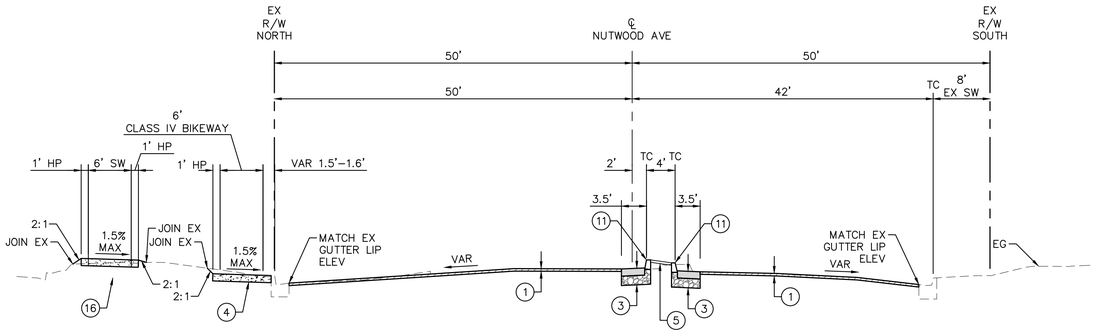


NUTWOOD AVENUE

STA 10+00 TO 21+39.84
NOT TO SCALE

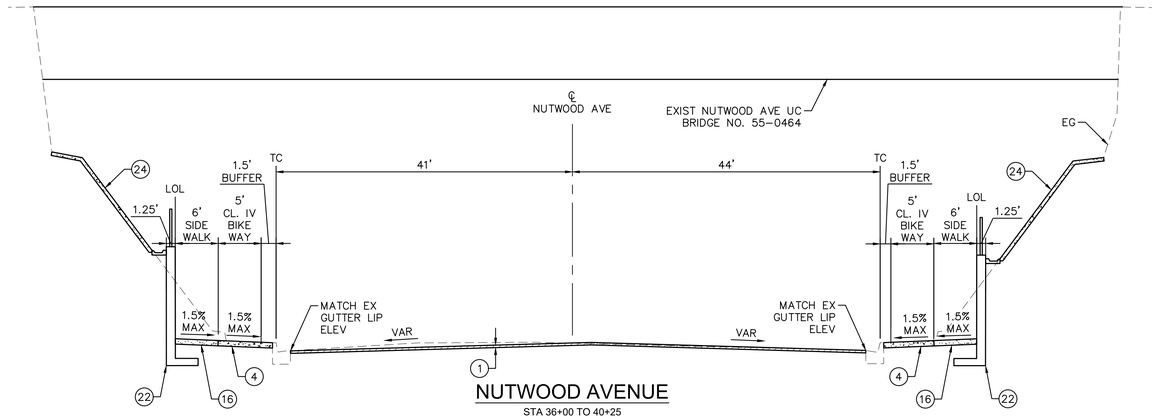
CONSTRUCTION NOTES

1. COLD MILL 2"EXISTING PAVEMENT AND OVERLAY 2"MIN DEPTH AC PAVEMENT.
3. CONSTRUCT 6" AC OVER 8" CLASS 2 AB.
4. CONSTRUCT 4" COLORED CONCRETE OVER COMPACTED SUBGRADE.
5. CONSTRUCT COLORED STAMPED CONCRETE OVER COMPACTED SUBGRADE. SEE LANDSCAPE PLANS.
11. CONSTRUCT 8"TYPE B–1 CURB (MEDIAN) PER CITY OF FULLERTON STD PLAN NO. 120.
16. CONSTRUCT 4"PCC SIDEWALK PER CITY OF FULLERTON STD PLAN NO. 122.
22. REINFORCED CONCRETE RETAINING WALL. SEE RETAINING WALL PLANS.
24. CONCRETE SLOPE PAVING. SEE RETAINING WALL PLANS.



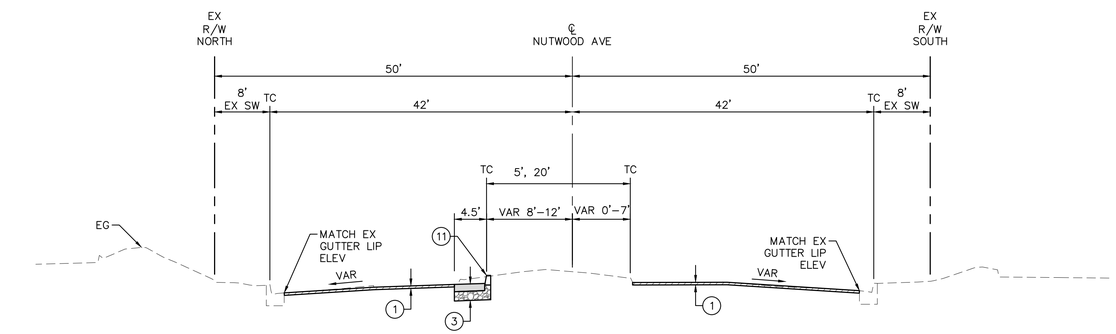
NUTWOOD AVENUE

STA 31+00 TO 36+00
NOT TO SCALE



NUTWOOD AVENUE

STA 36+00 TO 40+25
NOT TO SCALE



NUTWOOD AVENUE

SR-57 NB ON-RAMP TO PLACENTIA AVENUE
NOT TO SCALE

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUYNH No. 93109 12-30-25 CIVIL STATE OF CALIFORNIA
NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	SR	10/26/2025
			DESIGNED	SR	10/26/2025
			REVIEWED	BC	10/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS–BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

NUTWOOD AVENUE ATP IMPROVEMENTS

TYPICAL SECTIONS

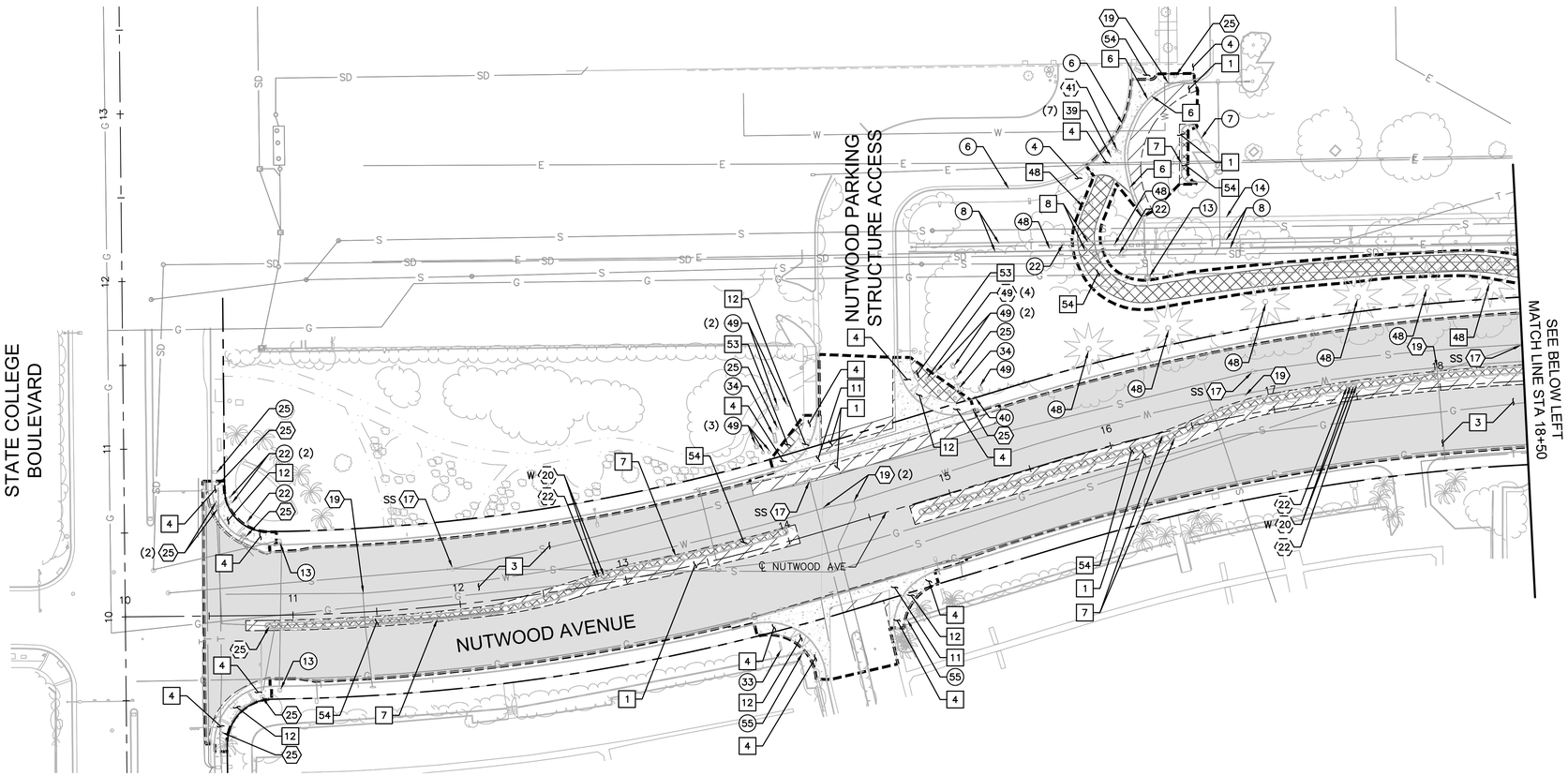
APPROVED: ACCEPTED:

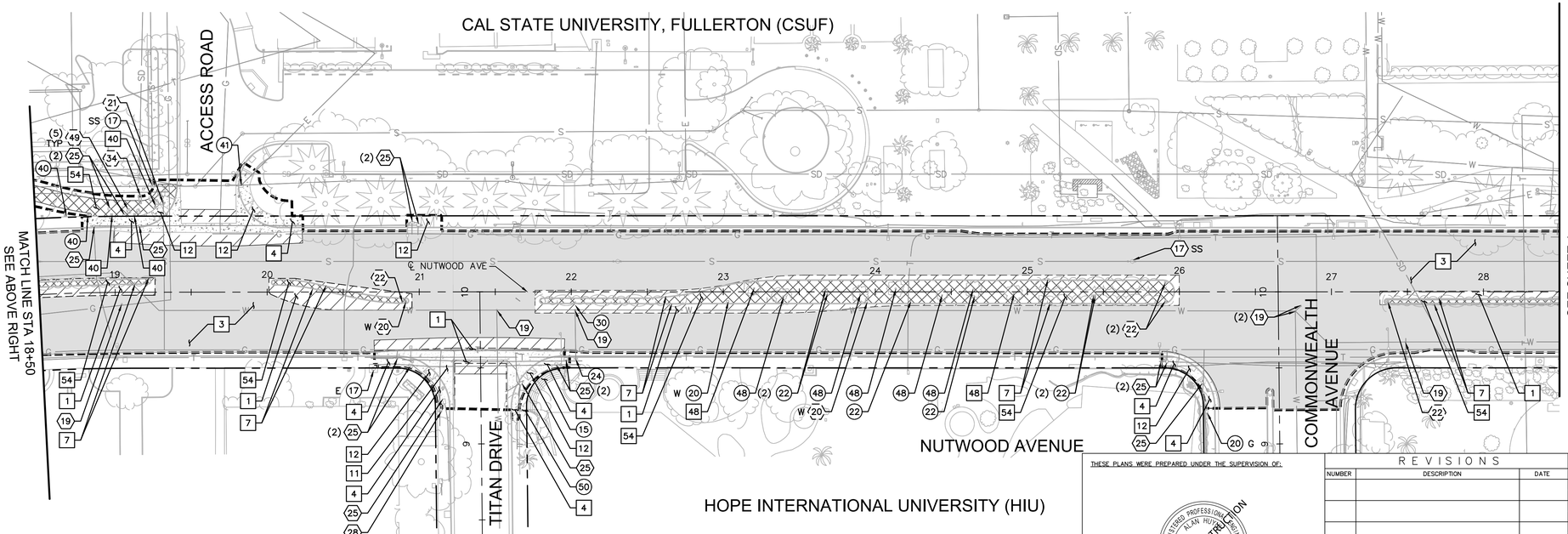
DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED SHEET 2 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D–29–70 ELEV = 250.172' FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT





LEGEND

- REMOVE
- PROTECT
- ADJUST TO GRADE
- RELOCATE
- SALVAGE
- COLD MILL AC PAVEMENT (2" MIN)
- SAWCUT AND REMOVE AC PAVEMENT
- LANDSCAPE REMOVAL
- PCC REMOVAL
- CENTERLINE
- EXISTING RIGHT OF WAY
- SAWCUT
- LIMITS OF WORK
- CALTRANS RIGHT OF WAY

NOTES

ITEM NO.	DESCRIPTION
1	AC PAVEMENT
2	PCC PAVEMENT
3	COLD MILL (0.17' MIN)
4	CONCRETE SIDEWALK
5	CONCRETE DRIVEWAY
6	CONCRETE CURB & GUTTER
7	CONCRETE CURB
8	CONCRETE MOW CURB
9	CONCRETE FOOTING
10	CURB DRAIN
11	CONCRETE CROSS GUTTER/SPANDREL
12	CURB RAMP
13	CATCH BASIN/INLET
14	CONCRETE VALLEY GUTTER
15	CONCRETE STEPS
16	CONCRETE WHEEL STOP
17	MANHOLE
18	UTILITY VAULTS
19	WATER VALVE
20	METER
21	GAS VALVE
22	IRRIGATION CONTROL VALVE
23	BACKFLOW PREVENTER
24	FIRE HYDRANT
25	PULL BOX
26	LOOP DETECTOR
27	VENT RISER
28	ELECTRICAL CABINET
29	WATER CABINET
30	UTILITY MARKER/SIGN
31	EMERGENCY POLE
32	ELECTRICAL OUTLET
33	SIGN

NOTES

ITEM NO.	DESCRIPTION
34	CSUF SIGN
35	MARRIOTT SIGN
36	INGROUND LIGHTING
37	TRUNCATED DOMES
38	HANDRAIL
39	BOLLARD
40	BOLLARD LIGHTING
41	LIGHT POLE, FOUNDATION, & WIRING
42	FLAG POLE
43	BUS SHELTER
44	BENCH
45	CHAIN LINK FENCE
46	PEDESTRIAN BARRICADE
47	VEHICULAR MAINTENANCE ACCESS
48	TREES
49	LANDSCAPE BOULDER
50	LANDSCAPE ROCKWALL
51	COBBLESTONE
52	PLANTER WALL
53	DECOMPOSED GRANITE
54	LANDSCAPE
55	BLOCK WALL
56	SLOPE PAVING
57	BRIDGE ABUTMENT

DEMOLITION NOTES

1. FOR LIMIT OF WORK AND PAVING LIMITS, SEE LAYOUT PLANS.
2. THE CONTRACTOR SHALL VERIFY THE LOCATION AND QUANTITY OF EXISTING SURFACE STRUCTURES. CONTRACTOR TO REMOVE ALL EXISTING FACILITIES IN CONFLICT WITH PROPOSED WORK, INCLUDING ITEMS NOT IDENTIFIED ON THESE PLANS. THE CONTRACTOR SHALL FULLY FAMILIARIZE THEMSELVES WITH THE WORK AREA PRIOR TO BIDDING THE WORK.
3. DUST CONTROL MEASURES SHALL BE USED DURING DEMOLITION.
4. FOR LIMITS OF WORK AND PAVING LIMITS, SEE LAYOUT PLANS.
5. SEE STORM DRAIN PLANS FOR PROPOSED RELOCATIONS AND DETAILS OF DRAINAGE FACILITIES.
6. FOR DISPOSITION OF TRAFFIC SIGNAL EQUIPMENT AND SIGNAL COMMUNICATION EQUIPMENT, SEE TRAFFIC SIGNAL PLANS AND TRAFFIC SIGNAL INTERCONNECT PLANS.
7. SEE SIGNING AND STRIPING PLANS FOR STREET SIGN REMOVALS AND RELOCATIONS.
8. SEE STREET LIGHTING PLANS FOR STREET LIGHT REMOVALS AND RELOCATIONS.
9. EXISTING TREES AND LANDSCAPING INSIDE OF WORK LIMITS SHALL BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED ON THE DEMOLITION PLANS OR LANDSCAPE PLANS.

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUTCHINSON No. C 30-25 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS					
NUMBER	DESCRIPTION	DATE		INITIALS	DATE
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			FACILITIES		
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			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

DEMOLITION PLAN

NUTWOOD AVENUE STA 10+00 TO 28+50

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED

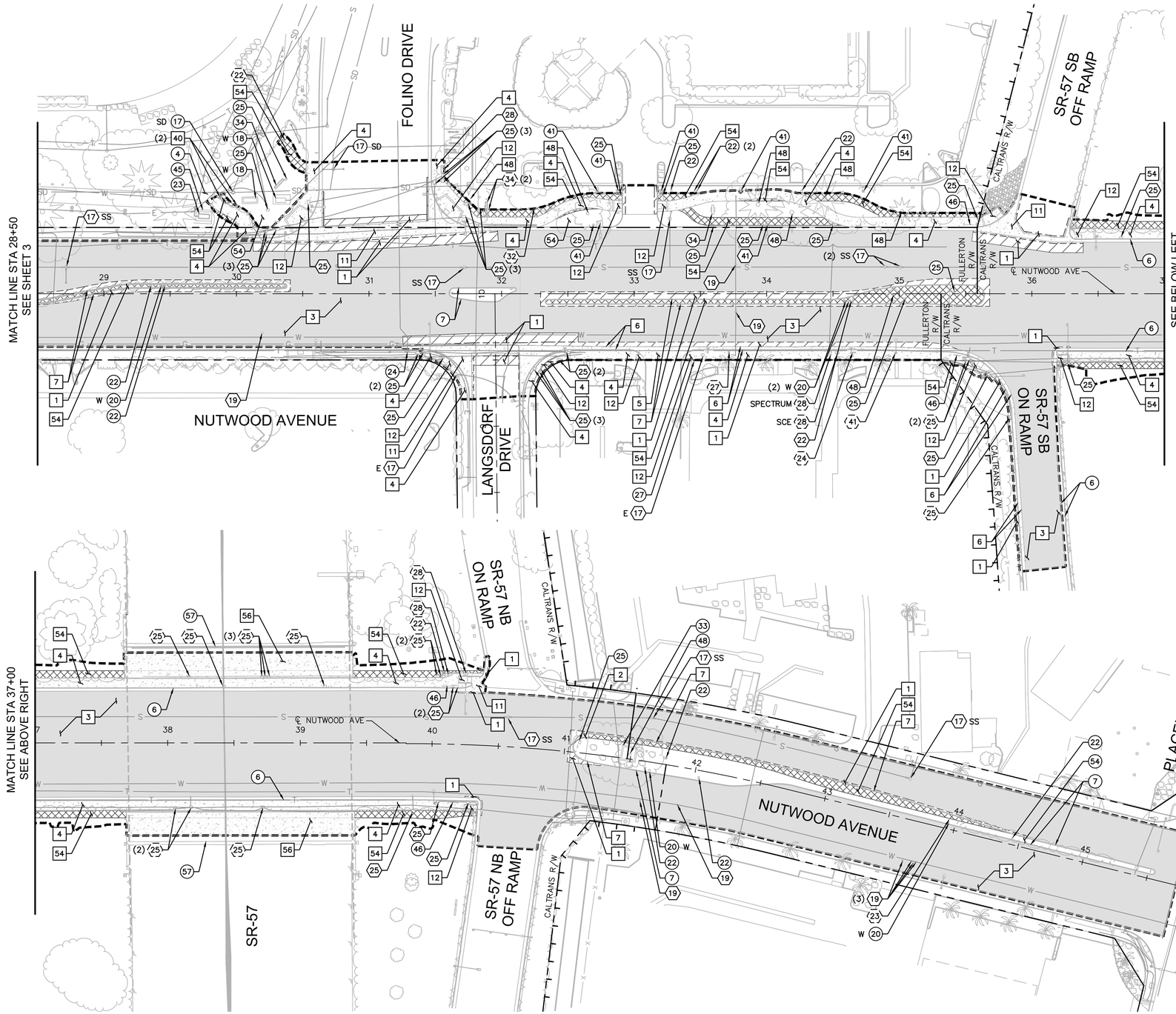
SHEET 3 OF 65 SHEETS

ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

B.M.:

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



LEGEND

- REMOVE
- PROTECT
- ADJUST TO GRADE
- RELOCATE
- SALVAGE
- CENTERLINE
- EXISTING RIGHT OF WAY
- SAWCUT
- LIMITS OF WORK
- CALTRANS RIGHT OF WAY
- COLD MILL AC PAVEMENT (2" MIN)
- SAWCUT AND REMOVE AC PAVEMENT
- LANDSCAPE REMOVAL
- PCC REMOVAL

NOTES

ITEM NO.	DESCRIPTION
1	AC PAVEMENT
2	PCC PAVEMENT
3	COLD MILL (0.17" MIN)
4	CONCRETE SIDEWALK
5	CONCRETE DRIVEWAY
6	CONCRETE CURB & GUTTER
7	CONCRETE CURB
8	CONCRETE MOW CURB
9	CONCRETE FOOTING
10	CURB DRAIN
11	CONCRETE CROSS GUTTER/SPANDREL
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16	CONCRETE WHEEL STOP
17	MANHOLE
18	UTILITY VAULTS
19	WATER VALVE
20	METER
21	GAS VALVE
22	IRRIGATION CONTROL VALVE
23	BACKFLOW PREVENTER
24	FIRE HYDRANT
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26	LOOP DETECTOR
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51	COBBLESTONE
52	PLANTER WALL
53	DECOMPOSED GRANITE
54	LANDSCAPE
55	BLOCK WALL
56	SLOPE PAVING
57	BRIDGE ABUTMENT

DEMOLITION NOTES

1. FOR LIMIT OF WORK AND PAVING LIMITS, SEE LAYOUT PLANS.
2. THE CONTRACTOR SHALL VERIFY THE LOCATION AND QUANTITY OF EXISTING SURFACE STRUCTURES. CONTRACTOR TO REMOVE ALL EXISTING FACILITIES IN CONFLICT WITH PROPOSED WORK, INCLUDING ITEMS NOT IDENTIFIED ON THESE PLANS. THE CONTRACTOR SHALL FULLY FAMILIARIZE THEMSELVES WITH THE WORK AREA PRIOR TO BIDDING THE WORK.
3. DUST CONTROL MEASURES SHALL BE USED DURING DEMOLITION.
4. FOR LIMITS OF WORK AND PAVING LIMITS, SEE LAYOUT PLANS.
5. SEE STORM DRAIN PLANS FOR PROPOSED RELOCATIONS AND DETAILS OF DRAINAGE FACILITIES.
6. FOR DISPOSITION OF TRAFFIC SIGNAL EQUIPMENT AND SIGNAL COMMUNICATION EQUIPMENT, SEE TRAFFIC SIGNAL PLANS AND TRAFFIC SIGNAL INTERCONNECT PLANS.
7. SEE SIGNING AND STRIPING PLANS FOR STREET SIGN REMOVALS AND RELOCATIONS.
8. SEE STREET LIGHTING PLANS FOR STREET LIGHT REMOVALS AND RELOCATIONS.
9. EXISTING TREES AND LANDSCAPING INSIDE OF WORK LIMITS SHALL BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED ON THE DEMOLITION PLANS OR LANDSCAPE PLANS.

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUTCHINSON No. 30-25 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS					
NUMBER	DESCRIPTION	DATE		INITIALS	DATE
			DRAWN	SR	10/26/2025
			DESIGNED	SR	10/26/2025
			REVIEWED	BC	10/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

DEMOLITION PLAN

NUTWOOD AVENUE STA 28+50 TO 46+00

APPROVED: _____ DATE / CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: _____ DATE / PUBLIC WORKS DIRECTOR

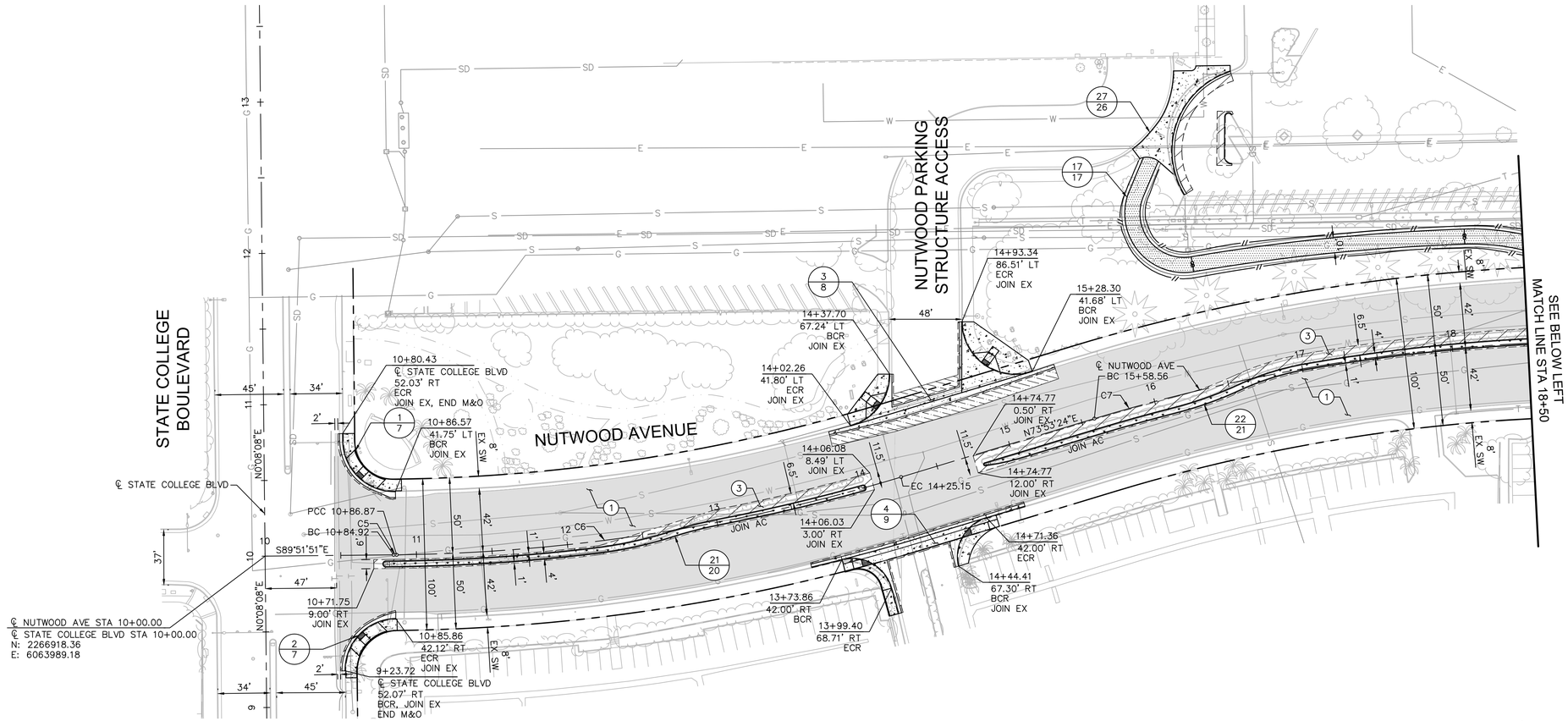
SCALE: AS NOTED

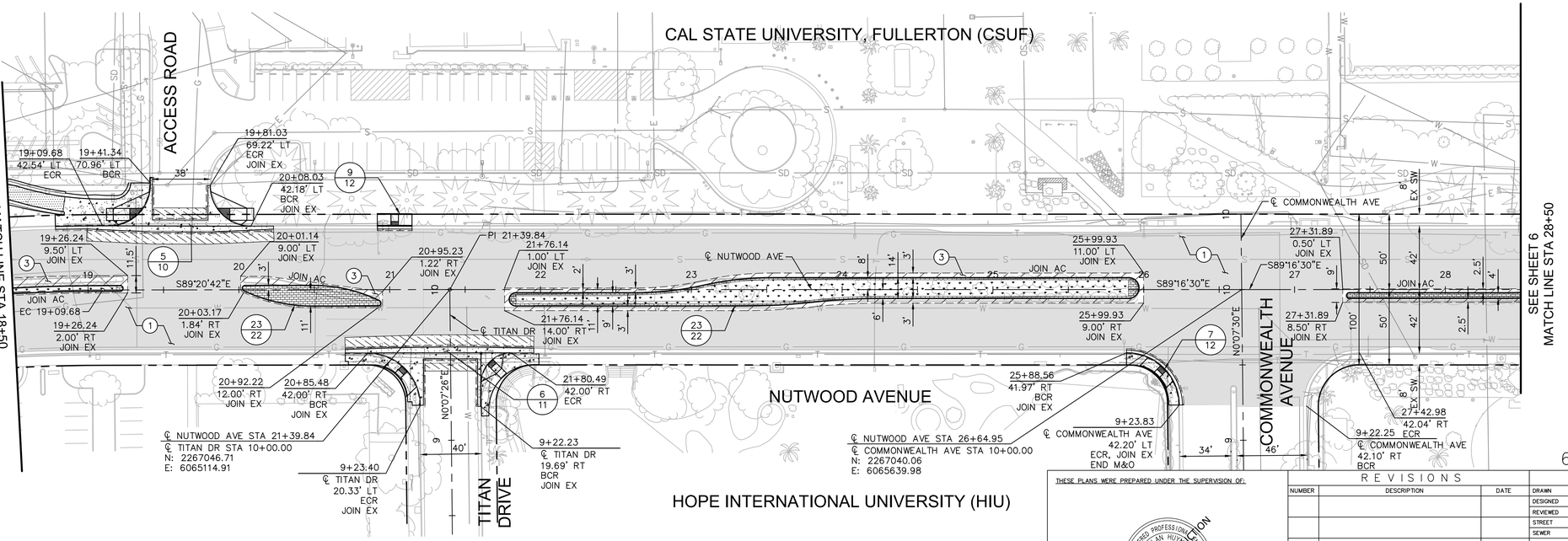
SHEET 4 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT





LEGEND

- CENTERLINE
- EXISTING RIGHT OF WAY
- CALTRANS RIGHT OF WAY
- RETAINING WALL LOL
- GRADING LIMIT
- SAWCUT
- X = DETAIL NUMBER
- Y = SHEET NUMBER
- ASPHALT CONCRETE PAVEMENT
- AC OVERLAY
- THICKENED AC PAVEMENT
- PEDESTRIAN CONCRETE PAVEMENT
- COLORED BIKEWAY CONCRETE PAVEMENT
- STAMPED CONCRETE
- LANDSCAPE

CONSTRUCTION NOTES

1. COLD MILL 2"EXISTING PAVEMENT AND OVERLAY 2"MIN DEPTH AC PAVEMENT.
3. CONSTRUCT 6" AC OVER 8" CLASS 2 AB.

NOTE

1. ALL STATIONING SHOWN IS BASED ON THE ℄ NUTWOOD AVE UNLESS OTHERWISE INDICATED ON PLANS.

CURVE TABLE			
CURVE	RADIUS	LENGTH	DELTA
C5	1200.00'	1.95'	0°05'36"
C6	1200.00'	338.27'	16°09'05"
C7	1200.00'	351.12'	16°45'53"

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUTCHINSON No. 29809 EXP. 6-30-25 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS					
NUMBER	DESCRIPTION	DATE		INITIALS	DATE
			DRAWN	SR	10/26/2025
			DESIGNED	SR	10/26/2025
			REVIEWED	BC	10/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

STREET IMPROVEMENT PLAN
NUTWOOD AVENUE STA 10+00 TO 28+50

APPROVED: _____ DATE _____ CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: _____ DATE _____ PUBLIC WORKS DIRECTOR

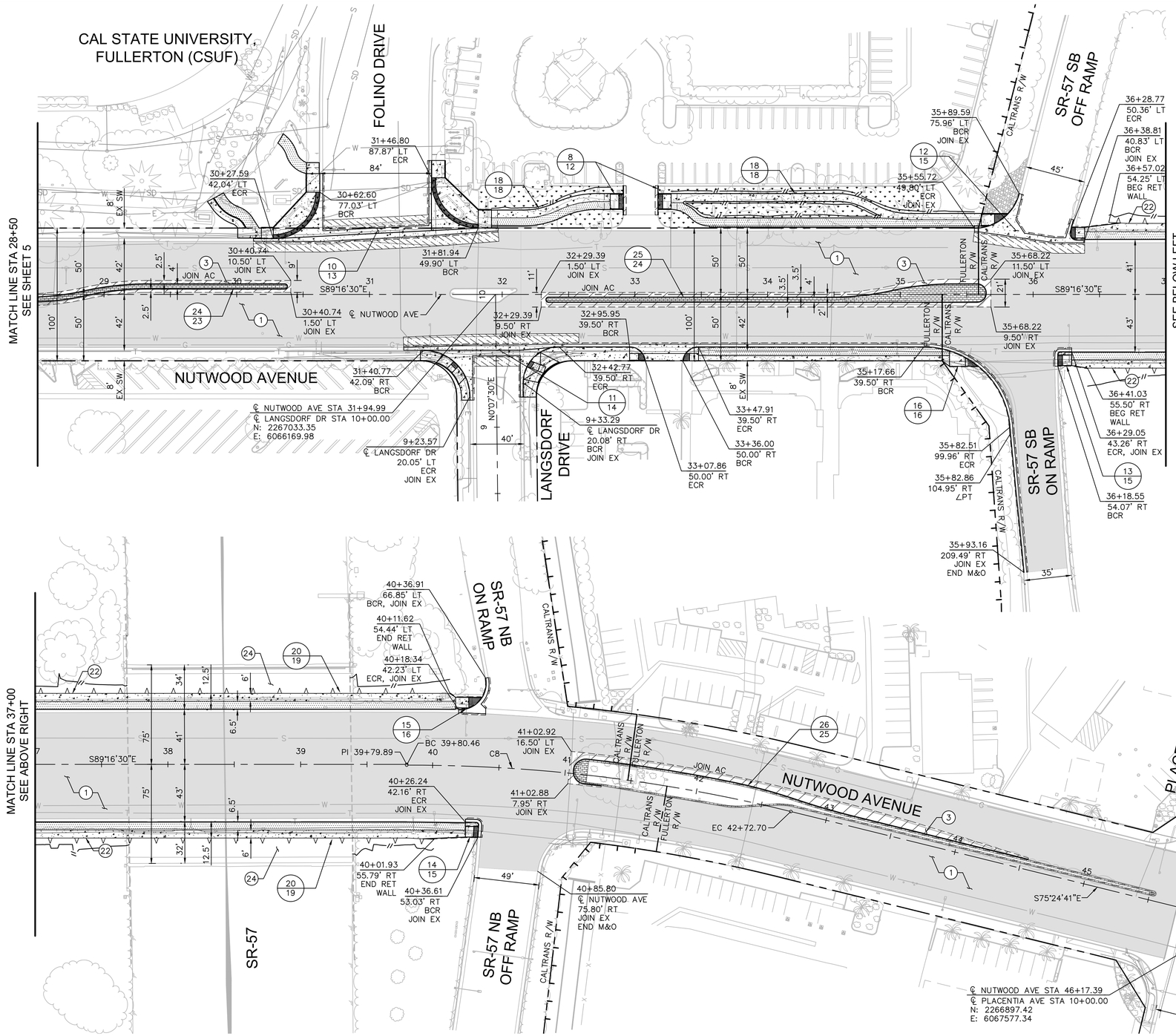
SCALE: AS NOTED

SHEET 5 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



LEGEND

- CENTERLINE
- EXISTING RIGHT OF WAY
- CALTRANS RIGHT OF WAY
- RETAINING WALL LOL
- GRADING LIMIT
- SAWCUT
- X = DETAIL NUMBER, Y = SHEET NUMBER
- ASPHALT CONCRETE PAVEMENT
- AC OVERLAY
- THICKENED AC PAVEMENT
- PEDESTRIAN CONCRETE PAVEMENT
- COLORED BIKEWAY CONCRETE PAVEMENT
- STAMPED CONCRETE
- LANDSCAPE

CONSTRUCTION NOTES

1. COLD MILL 2"EXISTING PAVEMENT AND OVERLAY 2"MIN DEPTH AC PAVEMENT.
3. CONSTRUCT 6" AC OVER 8" CLASS 2 AB.
22. REINFORCED CONCRETE RETAINING WALL. SEE RETAINING WALL PLANS.
24. CONCRETE SLOPE PAVING. SEE RETAINING WALL PLANS.

NOTE

1. ALL STATIONING SHOWN IS BASED ON THE ℄ NUTWOOD AVE UNLESS OTHERWISE INDICATED ON PLANS.

CURVE TABLE			
CURVE	RADIUS	LENGTH	DELTA
C8	1200.00'	292.04'	13°56'37"

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUTCHINSON No. C 30-25 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS

NUMBER	DESCRIPTION	DATE

	INITIALS	DATE
DRAWN	SR	10/26/2025
DESIGNED	SR	10/26/2025
REVIEWED	BC	10/26/2025
STREET		
SEWER		
DRAINAGE		
WATER		
TRAFFIC		
UTILITY/ELEC		
LANDSCAPE		
FACILITIES		
GENERAL ENG		
DESIGN ENG		
INSPECTION		
PARKS & REC		
AS-BUILT		

CITY OF FULLERTON

PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

STREET IMPROVEMENT PLAN

NUTWOOD AVENUE STA 28+50 TO 46+00

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

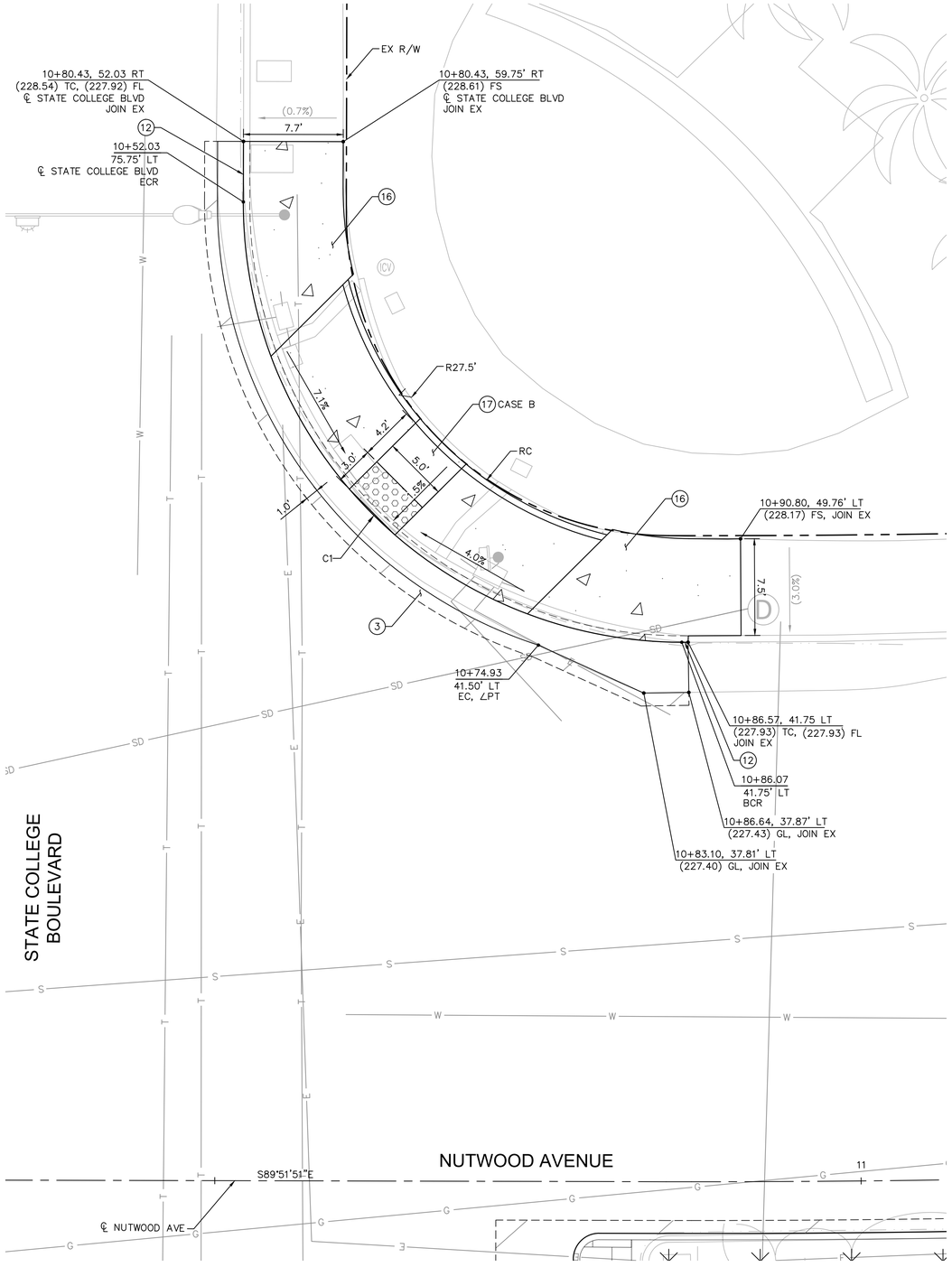
ACCEPTED: DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED

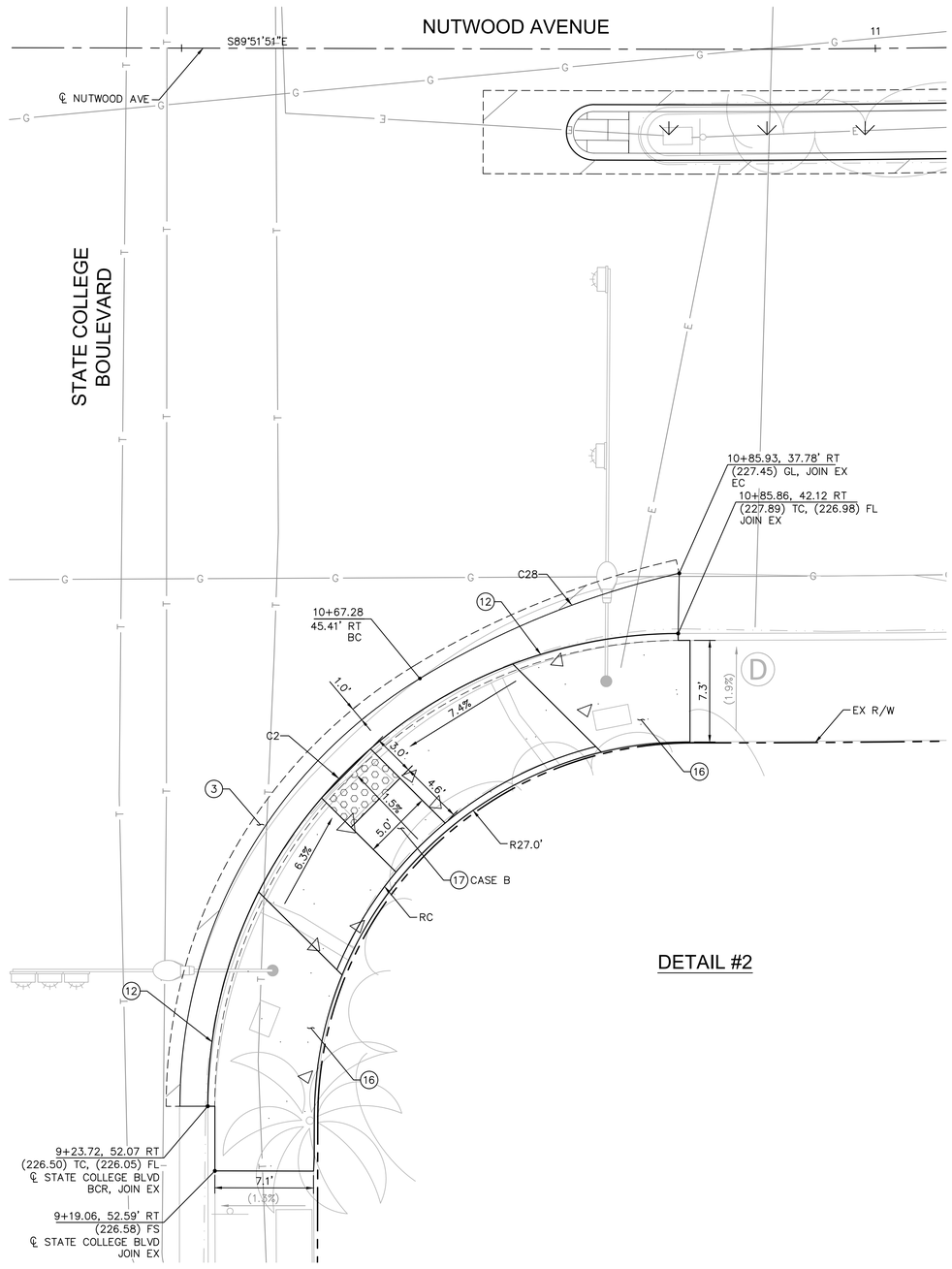
SHEET 6 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

FILE: XXXXX



DETAIL #1



DETAIL #2

LEGEND

- CENTERLINE
- EXISTING RIGHT OF WAY
- CALTRANS RIGHT OF WAY
- RETAINING WALL LOL
- GRADING LIMIT
- SAWCUT
- ASPHALT CONCRETE PAVEMENT
- AC OVERLAY
- THICKENED AC PAVEMENT
- PEDESTRIAN CONCRETE PAVEMENT
- COLORED BIKEWAY CONCRETE PAVEMENT
- STAMPED CONCRETE
- LANDSCAPE

CONSTRUCTION NOTES

(3) CONSTRUCT 6" AC OVER 8" CLASS 2 AB.

(12) CONSTRUCT 8" TYPE A CURB PER CITY OF FULLERTON STD PLAN NO. 120.

(16) CONSTRUCT 4" PCC SIDEWALK PER CITY OF FULLERTON STD PLAN NO. 122.

(17) CONSTRUCT CURB RAMP PER CALTRANS STD PLAN A88A. CASE AS NOTED.

CURVE TABLE			
CURVE	RADIUS	LENGTH	DELTA
C1	34.00'	53.41'	90°00'00"
C2	34.00'	53.39'	89°58'01"

GENERAL NOTES

1. FOR CURB RAMP DETAILS, SEE SHEETS 7–16.
2. FOR BIKEWAY DETAILS, SEE SHEETS 17–19.
3. FOR MEDIAN DETAILS, SEE SHEETS 20–25.
4. FOR ON–SITE DETAILS, SEE SHEETS 26–27.
5. FOR DEMOLITION PLANS, SEE SHEETS 3–4.
6. FOR STREET IMPROVEMENT PLANS, SEE SHEETS 5–6.

NORTH

GRAPHIC SCALE IN FEET
0 2.5 5 10

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUTH No. 79059 EXP. 6-30-25 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE			
			DRAWN	SR	10/26/2025
			DESIGNED	SR	10/26/2025
			REVIEWED	BC	10/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS–BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

CURB RAMP DETAILS

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: DATE PUBLIC WORKS DIRECTOR

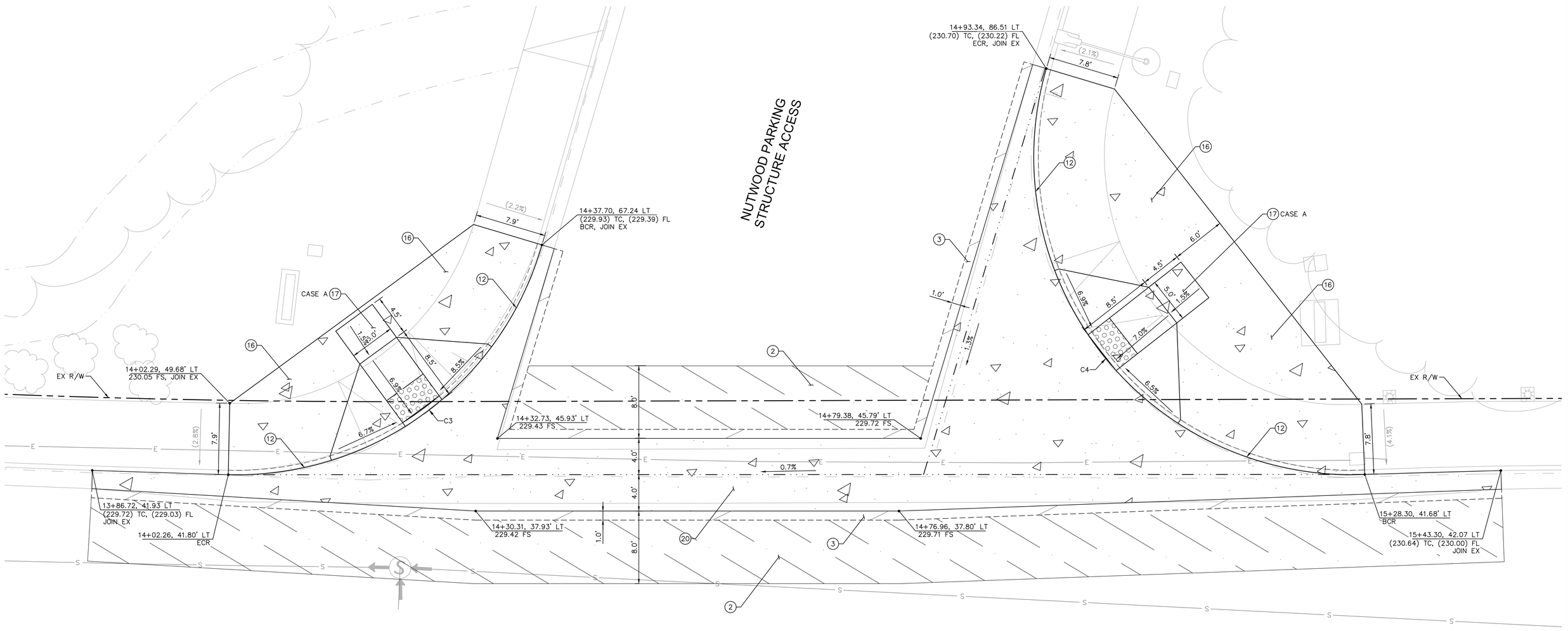
SCALE: AS NOTED

SHEET 7 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D–29–70 ELEV = 250.172'

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



LEGEND

- CENTERLINE
- EXISTING RIGHT OF WAY
- CALTRANS RIGHT OF WAY
- RETAINING WALL LOL
- GRADING LIMIT
- SAWCUT

- ASPHALT CONCRETE PAVEMENT
- AC OVERLAY
- THICKENED AC PAVEMENT
- PEDESTRIAN CONCRETE PAVEMENT
- COLORED BIKEWAY CONCRETE PAVEMENT
- STAMPED CONCRETE
- LANDSCAPE

CONSTRUCTION NOTES

(2) PROPOSED THICKENED PAVEMENT PER CITY OF FULLERTON STD PLAN NO. 108.

(3) CONSTRUCT 6" AC OVER 8" CLASS 2 AB.

(12) CONSTRUCT 8"TYPE A CURB PER CITY OF FULLERTON STD PLAN NO. 120.

(16) CONSTRUCT 4"PCC SIDEWALK PER CITY OF FULLERTON STD PLAN NO. 122.

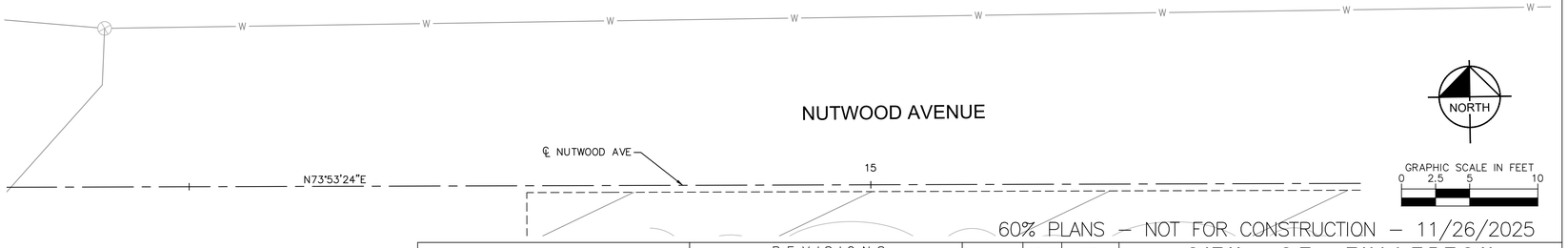
(17) CONSTRUCT CURB RAMP PER CALTRANS STD PLAN A88A. CASE AS NOTED.

(20) CONSTRUCT PCC SPANDREL/CROSS GUTTER PER CITY OF FULLERTON STD PLAN NO. 108.

CURVE TABLE			
CURVE	RADIUS	LENGTH	DELTA
C3	35.00'	46.11'	75°29'23"
C4	35.00'	66.35'	108°36'53"

GENERAL NOTES

1. FOR CURB RAMP DETAILS, SEE SHEETS 7–16.
2. FOR BIKEWAY DETAILS, SEE SHEETS 17–19.
3. FOR MEDIAN DETAILS, SEE SHEETS 20–25.
4. FOR ON–SITE DETAILS, SEE SHEETS 26–27.
5. FOR DEMOLITION PLANS, SEE SHEETS 3–4.
6. FOR STREET IMPROVEMENT PLANS, SEE SHEETS 5–6.



DETAIL #3

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUYNH No. C 96128 EXP. 06-30-25 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	SR	10/26/2025
			DESIGNED	SR	10/26/2025
			REVIEWED	BC	10/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS–BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

CURB RAMP DETAILS

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: DATE PUBLIC WORKS DIRECTOR

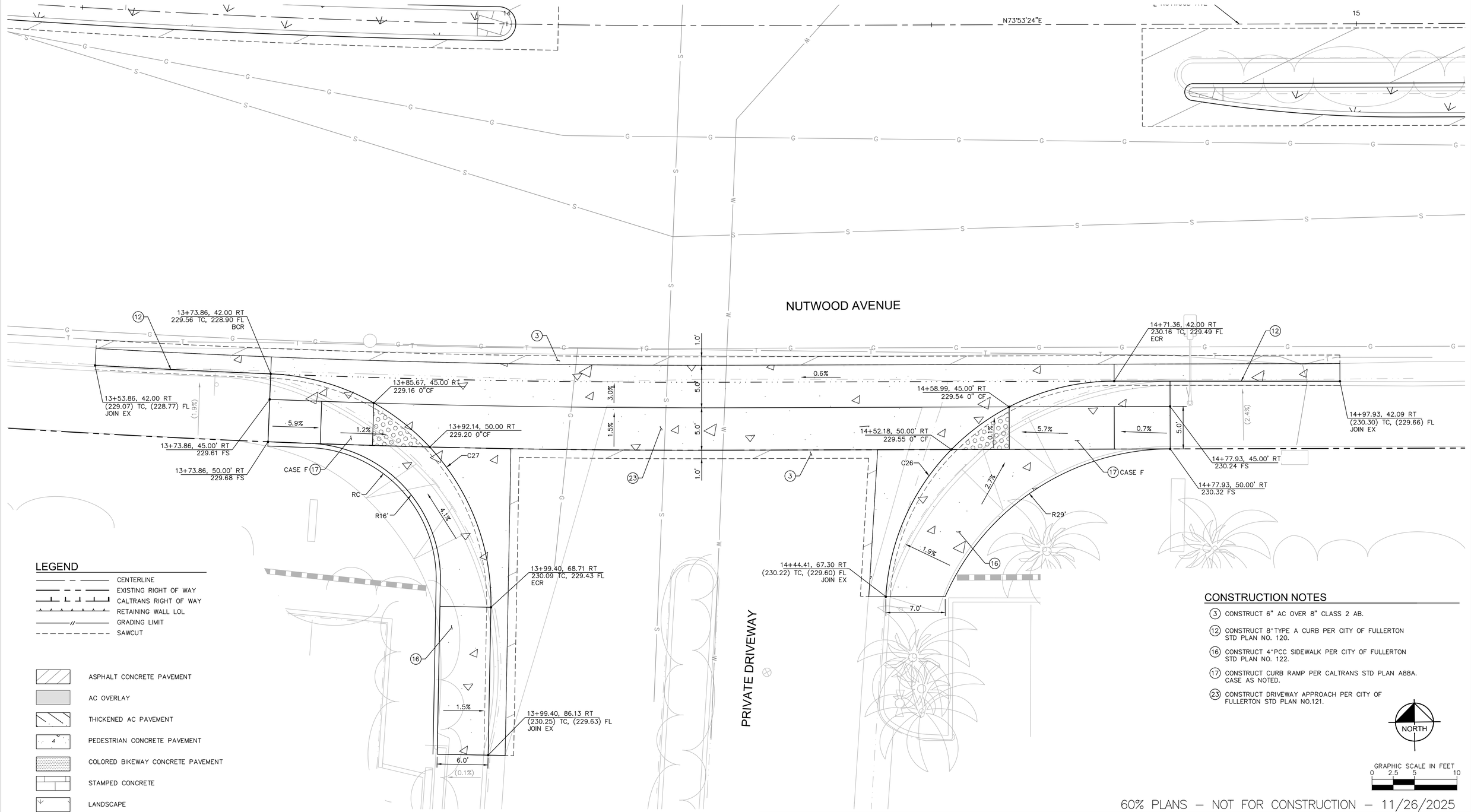
SCALE: AS NOTED

SHEET 8 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D–29–70 ELEV = 250.172'

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



LEGEND

- CENTERLINE
- EXISTING RIGHT OF WAY
- CALTRANS RIGHT OF WAY
- RETAINING WALL LOL
- GRADING LIMIT
- SAWCUT

- ASPHALT CONCRETE PAVEMENT
- AC OVERLAY
- THICKENED AC PAVEMENT
- PEDESTRIAN CONCRETE PAVEMENT
- COLORED BIKEWAY CONCRETE PAVEMENT
- STAMPED CONCRETE
- LANDSCAPE

GENERAL NOTES

1. FOR CURB RAMP DETAILS, SEE SHEETS 7–16.
2. FOR BIKEWAY DETAILS, SEE SHEETS 17–19.
3. FOR MEDIAN DETAILS, SEE SHEETS 20–25.
4. FOR ON–SITE DETAILS, SEE SHEETS 26–27.
5. FOR DEMOLITION PLANS, SEE SHEETS 3–4.
6. FOR STREET IMPROVEMENT PLANS, SEE SHEETS 5–6.

CURVE TABLE			
CURVE	RADIUS	LENGTH	DELTA
C26	27.00'	40.71'	86°23'37"
C27	27.00'	41.84'	88°46'51"

DETAIL #4

CONSTRUCTION NOTES

(3) CONSTRUCT 6" AC OVER 8" CLASS 2 AB.

(12) CONSTRUCT 8"TYPE A CURB PER CITY OF FULLERTON STD PLAN NO. 120.

(16) CONSTRUCT 4"PCC SIDEWALK PER CITY OF FULLERTON STD PLAN NO. 122.

(17) CONSTRUCT CURB RAMP PER CALTRANS STD PLAN A88A. CASE AS NOTED.

(23) CONSTRUCT DRIVEWAY APPROACH PER CITY OF FULLERTON STD PLAN NO.121.

NORTH

GRAPHIC SCALE IN FEET
0 2.5 5 10

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUTSON No. 79830 EXP. 6-30-25 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	SR	10/26/2025
			DESIGNED	SR	10/26/2025
			REVIEWED	BC	10/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

CURB RAMP DETAILS

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: DATE PUBLIC WORKS DIRECTOR

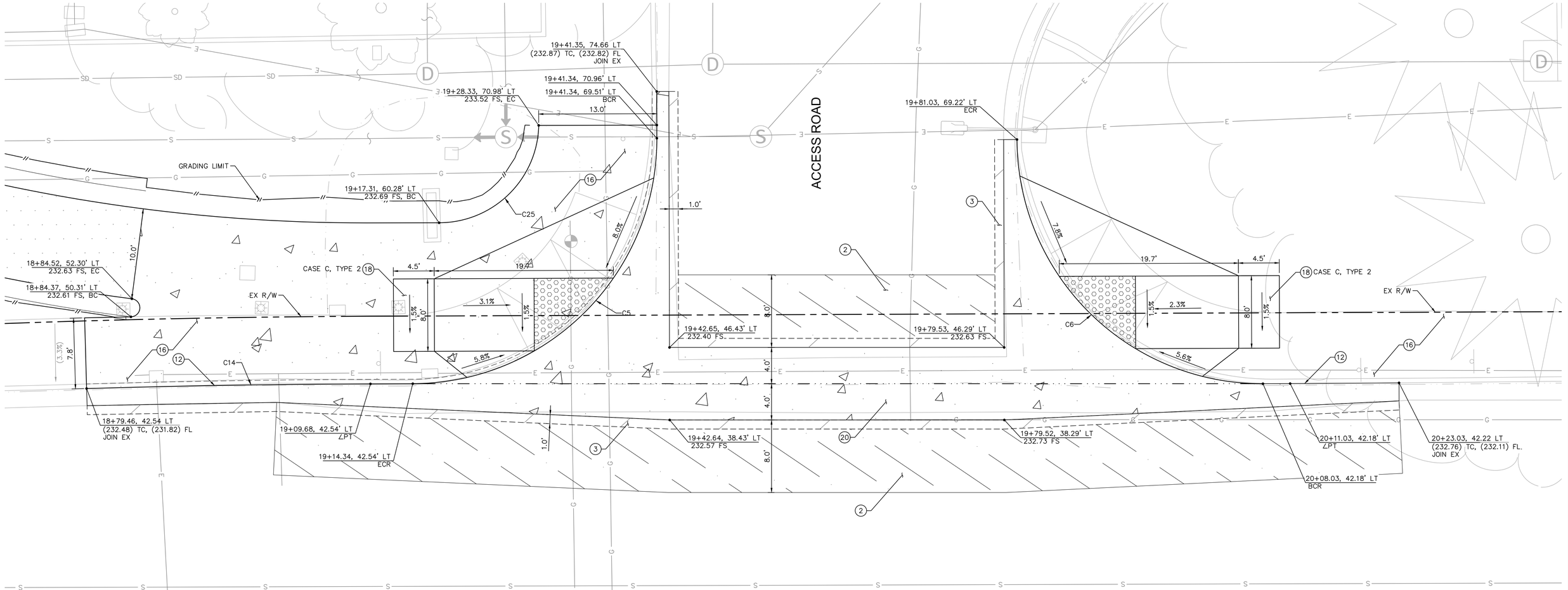
SCALE: AS NOTED

B.M.: ORANGE COUNTY BM NO.: 2D–29–70 ELEV = 250.172'

SHEET 9 OF 65 SHEETS

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



LEGEND

- CENTERLINE
- EXISTING RIGHT OF WAY
- CALTRANS RIGHT OF WAY
- RETAINING WALL LOL
- GRADING LIMIT
- SAWCUT

- ASPHALT CONCRETE PAVEMENT
- AC OVERLAY
- THICKENED AC PAVEMENT
- PEDESTRIAN CONCRETE PAVEMENT
- COLORED BIKEWAY CONCRETE PAVEMENT
- STAMPED CONCRETE
- LANDSCAPE

CONSTRUCTION NOTES

(2) PROPOSED THICKENED PAVEMENT PER CITY OF FULLERTON STD PLAN NO. 108.

(3) CONSTRUCT 6" AC OVER 8" CLASS 2 AB.

(12) CONSTRUCT 8" TYPE A CURB PER CITY OF FULLERTON STD PLAN NO. 120.

(16) CONSTRUCT 4" PCC SIDEWALK PER CITY OF FULLERTON STD PLAN NO. 122.

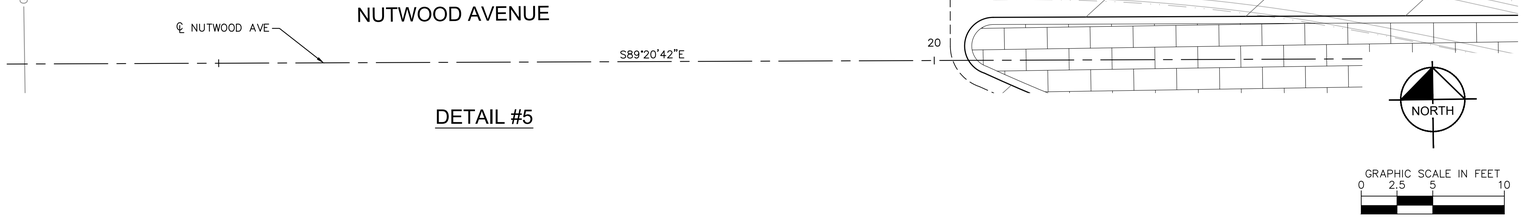
(18) CONSTRUCT CURB RAMP PER SPPWC STD PLAN NO. 111-5, CASE AND TYPE PER PLAN.

(20) CONSTRUCT PCC SPANDREL/CROSS GUTTER PER CITY OF FULLERTON STD PLAN NO. 108.

CURVE TABLE			
CURVE	RADIUS	LENGTH	DELTA
C5	27.00'	42.38'	89°55'47"
C6	27.00'	42.44'	90°04'13"
C14	1242.54'	31.29'	1°26'34"
C25	11.00'	17.00'	88°32'53"

GENERAL NOTES

1. FOR CURB RAMP DETAILS, SEE SHEETS 7-16.
2. FOR BIKEWAY DETAILS, SEE SHEETS 17-19.
3. FOR MEDIAN DETAILS, SEE SHEETS 20-25.
4. FOR ON-SITE DETAILS, SEE SHEETS 26-27.
5. FOR DEMOLITION PLANS, SEE SHEETS 3-4.
6. FOR STREET IMPROVEMENT PLANS, SEE SHEETS 5-6.



DETAIL #5

GRAPHIC SCALE IN FEET
0 2.5 5 10

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUTSON No. 83969 EXP. 12-30-25 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE			
			DRAWN	SR	10/26/2025
			DESIGNED	SR	10/26/2025
			REVIEWED	BC	10/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

CURB RAMP DETAILS

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED

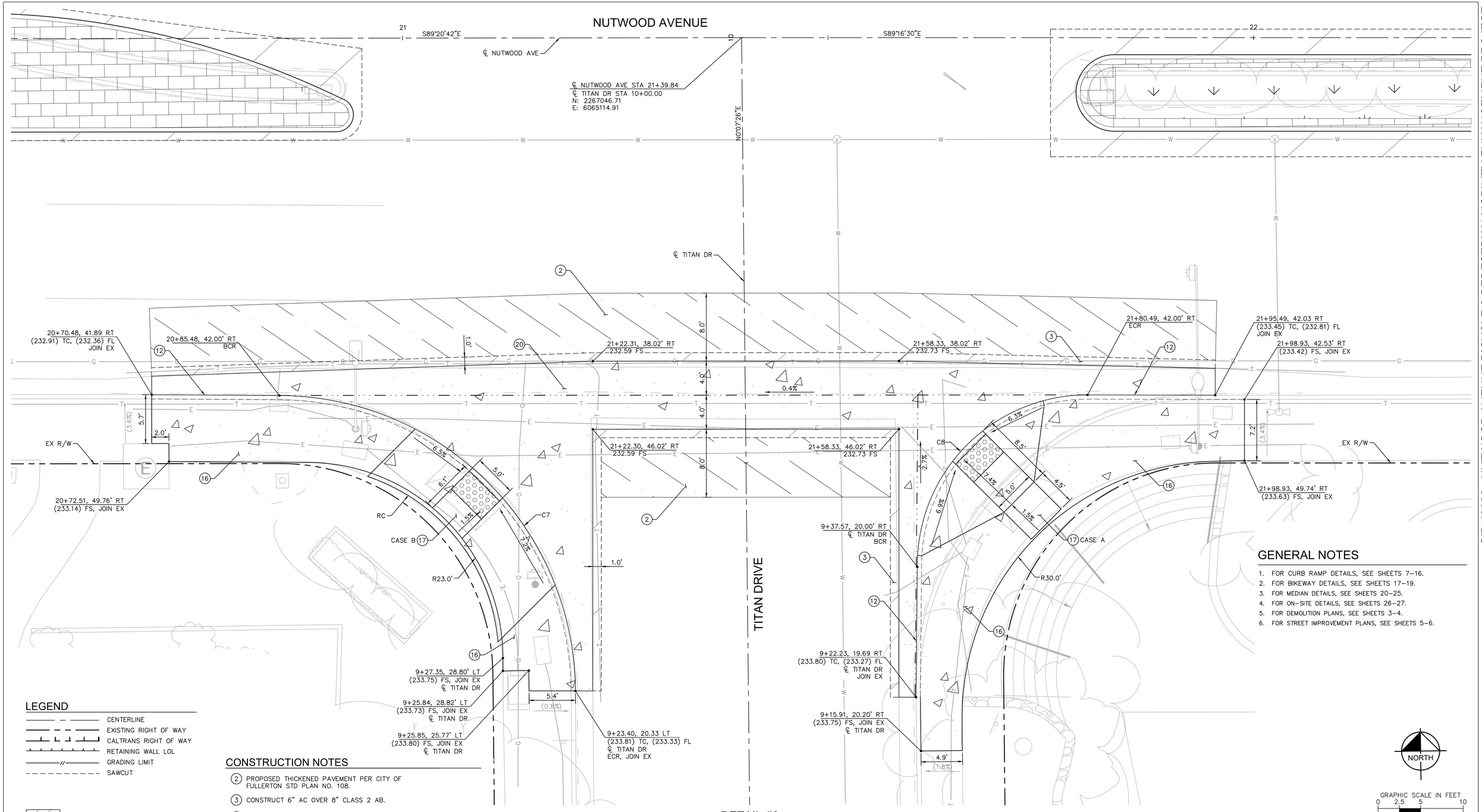
SHEET 10 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

NUTWOOD AVENUE



GENERAL NOTES

1. FOR CURB RAMP DETAILS, SEE SHEETS 7–16.
2. FOR BIKEWAY DETAILS, SEE SHEETS 17–19.
3. FOR MEDIAN DETAILS, SEE SHEETS 20–25.
4. FOR ON–SITE DETAILS, SEE SHEETS 26–27.
5. FOR DEMOLITION PLANS, SEE SHEETS 3–4.
6. FOR STREET IMPROVEMENT PLANS, SEE SHEETS 5–6.

LEGEND

- CENTERLINE
- EXISTING RIGHT OF WAY
- CALTRANS RIGHT OF WAY
- RETAINING WALL LOL
- GRADING LIMIT
- SAWCUT

- ASPHALT CONCRETE PAVEMENT
- AC OVERLAY
- THICKENED AC PAVEMENT
- PEDESTRIAN CONCRETE PAVEMENT
- COLORED BIKEWAY CONCRETE PAVEMENT
- STAMPED CONCRETE
- LANDSCAPE

CONSTRUCTION NOTES

(2) PROPOSED THICKENED PAVEMENT PER CITY OF FULLERTON STD PLAN NO. 108.

(3) CONSTRUCT 6" AC OVER 8" CLASS 2 AB.

(12) CONSTRUCT 8" TYPE A CURB PER CITY OF FULLERTON STD PLAN NO. 120.

(16) CONSTRUCT 4" PCC SIDEWALK PER CITY OF FULLERTON STD PLAN NO. 122.

(17) CONSTRUCT CURB RAMP PER CALTRANS STD PLAN A88A. CASE AS NOTED.

(20) CONSTRUCT PCC SPANDREL/CROSS GUTTER PER CITY OF FULLERTON STD PLAN NO. 108.

CURVE TABLE			
CURVE	RADIUS	LENGTH	DELTA
C7	35.00'	54.50'	89°12'42"
C8	20.00'	31.63'	90°36'04"

NORTH

GRAPHIC SCALE IN FEET
0 2.5 5 10

DETAIL #6

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUYNH No. 36169 EXP. 6-30-25 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	SR	10/26/2025
			DESIGNED	SR	10/26/2025
			REVIEWED	BC	10/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS–BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

CURB RAMP DETAILS

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: DATE PUBLIC WORKS DIRECTOR

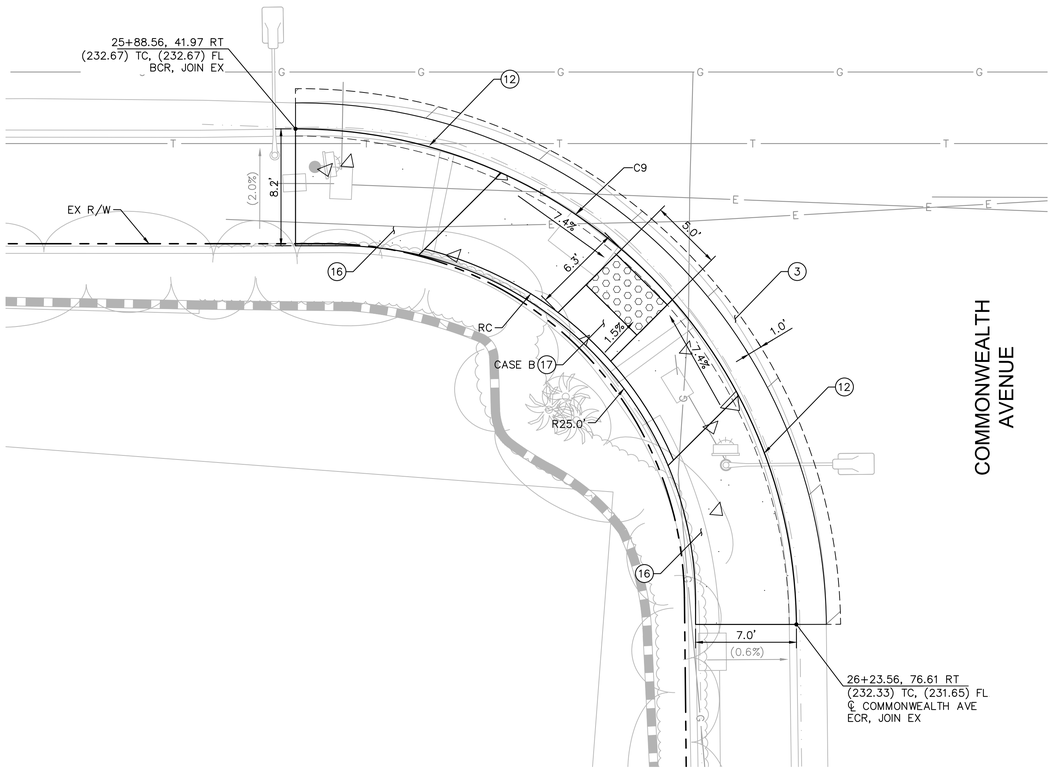
SCALE: AS NOTED

SHEET 11 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D–29–70 ELEV = 250.172'

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



DETAIL #7

LEGEND

- CENTERLINE
- EXISTING RIGHT OF WAY
- CALTRANS RIGHT OF WAY
- RETAINING WALL LOL
- GRADING LIMIT
- SAWCUT

- ASPHALT CONCRETE PAVEMENT
- AC OVERLAY
- THICKENED AC PAVEMENT
- PEDESTRIAN CONCRETE PAVEMENT
- COLORED BIKEWAY CONCRETE PAVEMENT
- STAMPED CONCRETE
- LANDSCAPE

CONSTRUCTION NOTES

(3) CONSTRUCT 6" AC OVER 8" CLASS 2 AB.

(10) CONSTRUCT 6"TYPE B-1 CURB PER CITY OF FULLERTON STD PLAN NO. 120.

(12) CONSTRUCT 8"TYPE A CURB PER CITY OF FULLERTON STD PLAN NO. 120.

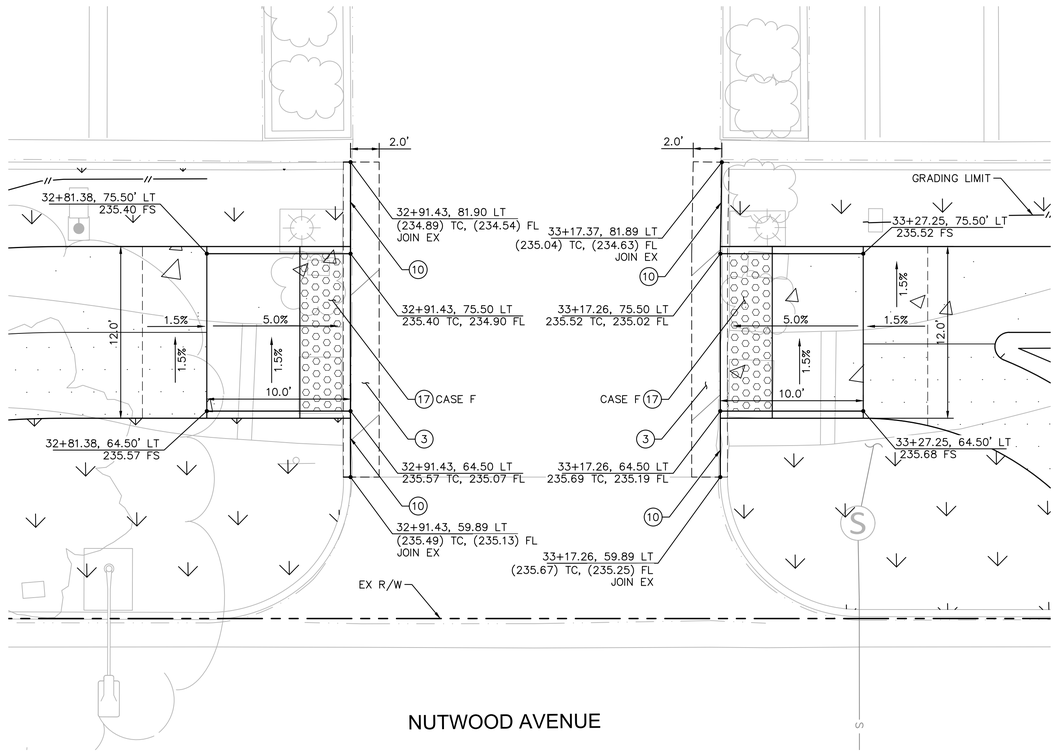
(16) CONSTRUCT 4"PCC SIDEWALK PER CITY OF FULLERTON STD PLAN NO. 122.

(17) CONSTRUCT CURB RAMP PER CALTRANS STD PLAN A88A. CASE AS NOTED.

CURVE TABLE			
CURVE	RADIUS	LENGTH	DELTA
C9	35.00'	54.61'	89°23'59"

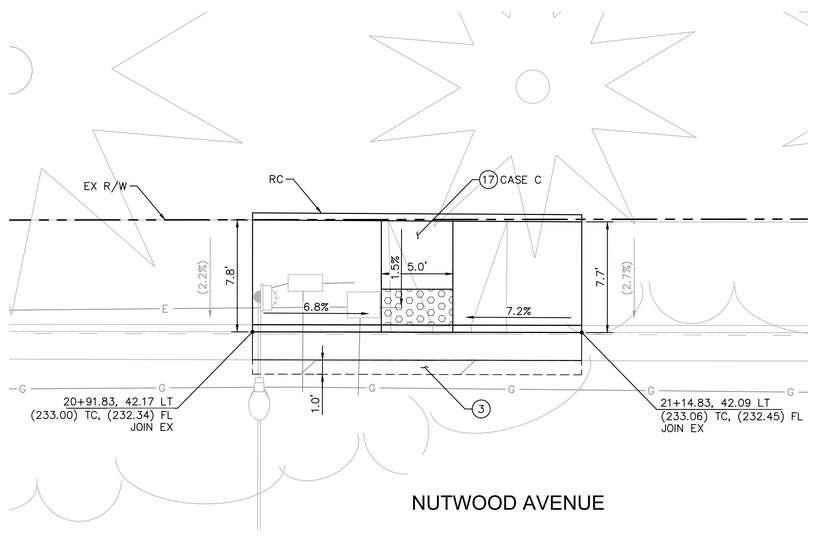
GENERAL NOTES

1. FOR CURB RAMP DETAILS, SEE SHEETS 7–16.
2. FOR BIKEWAY DETAILS, SEE SHEETS 17–19.
3. FOR MEDIAN DETAILS, SEE SHEETS 20–25.
4. FOR ON–SITE DETAILS, SEE SHEETS 26–27.
5. FOR DEMOLITION PLANS, SEE SHEETS 3–4.
6. FOR STREET IMPROVEMENT PLANS, SEE SHEETS 5–6.



NUTWOOD AVENUE

DETAIL #8



NUTWOOD AVENUE

DETAIL #9

NORTH

GRAPHIC SCALE IN FEET
0 2.5 5 10

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUYNH No. 89 EXP. 6-30-25 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE			
			DRAWN	SR	10/26/2025
			DESIGNED	SR	10/26/2025
			REVIEWED	BC	10/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

CURB RAMP DETAILS

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: DATE PUBLIC WORKS DIRECTOR

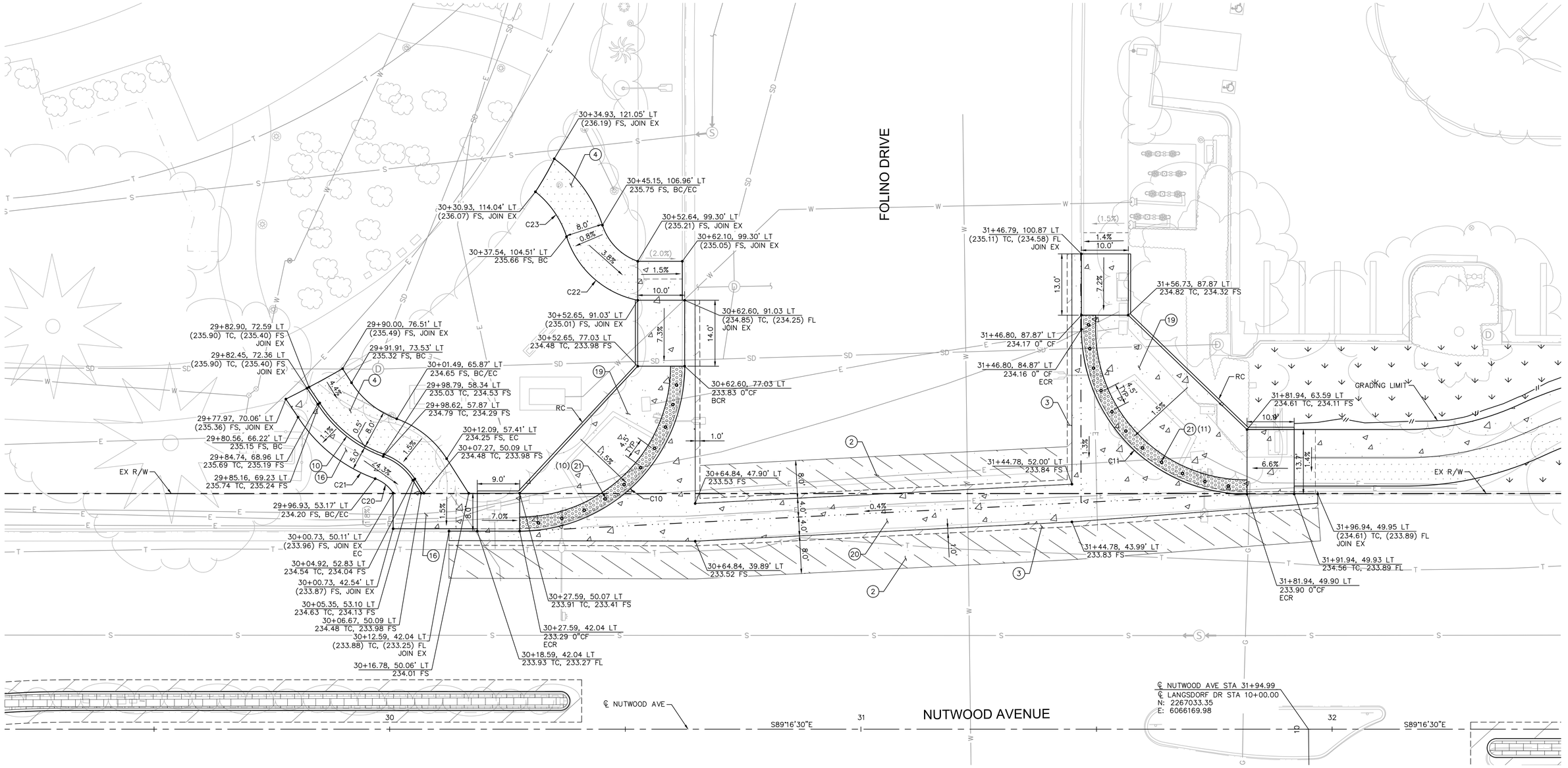
SCALE: AS NOTED

SHEET 12 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D–29–70 ELEV = 250.172'

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



DETAIL #10

LEGEND

- CENTERLINE
- EXISTING RIGHT OF WAY
- CALTRANS RIGHT OF WAY
- RETAINING WALL LOL
- GRADING LIMIT
- SAWCUT

- ASPHALT CONCRETE PAVEMENT
- AC OVERLAY
- THICKENED AC PAVEMENT
- PEDESTRIAN CONCRETE PAVEMENT
- COLORED BIKEWAY CONCRETE PAVEMENT
- STAMPED CONCRETE
- LANDSCAPE

CONSTRUCTION NOTES

(2) PROPOSED THICKENED PAVEMENT PER CITY OF FULLERTON STD PLAN NO. 108.

(3) CONSTRUCT 6" AC OVER 8" CLASS 2 AB.

(4) CONSTRUCT 4" COLORED CONCRETE OVER COMPACTED SUBGRADE.

(10) CONSTRUCT 6"TYPE B-1 CURB PER CITY OF FULLERTON STD PLAN NO. 120.

(16) CONSTRUCT 4"PCC SIDEWALK PER CITY OF FULLERTON STD PLAN NO. 122.

(19) CONSTRUCT BLENDED TRANSITION CURB RAMP.

(20) CONSTRUCT PCC SPANDREL/CROSS GUTTER PER CITY OF FULLERTON STD PLAN NO. 108.

(21) CONSTRUCT REMOVABLE BOLLARD PER DETAIL A ON SHEET 19.

CURVE TABLE			
CURVE	RADIUS	LENGTH	DELTA
C10	35.00'	54.98'	90°00'19"
C11	35.00'	55.08'	90°09'58"
C20	7.50'	4.97'	37°59'21"
C21	32.50'	21.31'	37°34'16"
C22	20.00'	21.23'	60°49'22"
C23	20.00'	11.77'	33°43'11"

GENERAL NOTES

1. FOR CURB RAMP DETAILS, SEE SHEETS 7–16.
2. FOR BIKEWAY DETAILS, SEE SHEETS 17–19.
3. FOR MEDIAN DETAILS, SEE SHEETS 20–25.
4. FOR ON-SITE DETAILS, SEE SHEETS 26–27.
5. FOR DEMOLITION PLANS, SEE SHEETS 3–4.
6. FOR STREET IMPROVEMENT PLANS, SEE SHEETS 5–6.

NORTH

GRAPHIC SCALE IN FEET
0 5 10 20

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUTCHINSON No. 93030 EXP. 6-30-25 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	SR	10/26/2025
			DESIGNED	SR	10/26/2025
			REVIEWED	BC	10/26/2025
			STREET		
			SEWER		
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			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

CURB RAMP DETAILS

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: DATE PUBLIC WORKS DIRECTOR

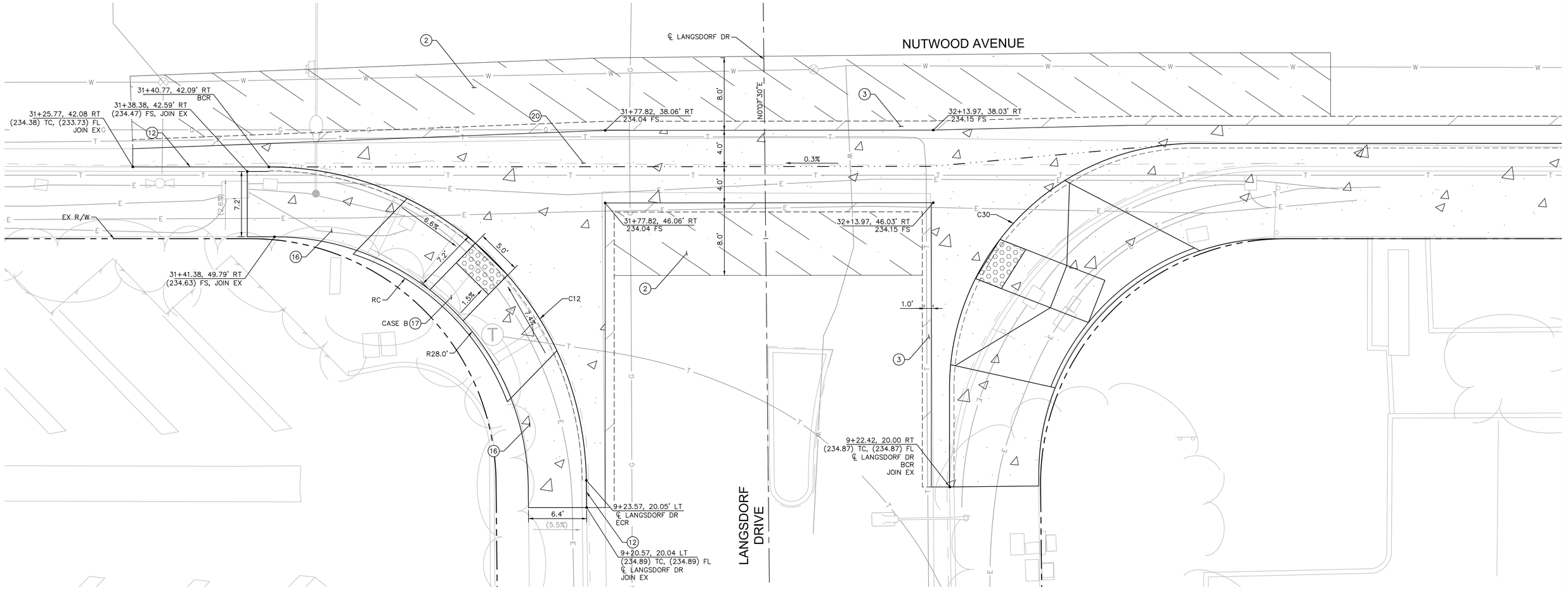
SCALE: AS NOTED

B.M.: ORANGE COUNTY BM NO.: 20-29-70 ELEV = 250.172'

SHEET 13 OF 65 SHEETS

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



DETAIL #11

LEGEND

- CENTERLINE
- EXISTING RIGHT OF WAY
- CALTRANS RIGHT OF WAY
- RETAINING WALL LOL
- GRADING LIMIT
- SAWCUT

- ASPHALT CONCRETE PAVEMENT
- AC OVERLAY
- THICKENED AC PAVEMENT
- PEDESTRIAN CONCRETE PAVEMENT
- COLORED BIKEWAY CONCRETE PAVEMENT
- STAMPED CONCRETE
- LANDSCAPE

CONSTRUCTION NOTES

(2) PROPOSED THICKENED PAVEMENT PER CITY OF FULLERTON STD PLAN NO. 108.

(3) CONSTRUCT 6" AC OVER 8" CLASS 2 AB.

(12) CONSTRUCT 8"TYPE A CURB PER CITY OF FULLERTON STD PLAN NO. 120.

(16) CONSTRUCT 4"PCC SIDEWALK PER CITY OF FULLERTON STD PLAN NO. 122.

(17) CONSTRUCT CURB RAMP PER CALTRANS STD PLAN A88A. CASE AS NOTED.

(20) CONSTRUCT PCC SPANDREL/CROSS GUTTER PER CITY OF FULLERTON STD PLAN NO. 108.

CURVE TABLE			
CURVE	RADIUS	LENGTH	DELTA
C12	35.00'	54.50'	89°13'28"
C30	27.00'	42.41'	90°00'00"

GENERAL NOTES

1. FOR CURB RAMP DETAILS, SEE SHEETS 7–16.
2. FOR BIKEWAY DETAILS, SEE SHEETS 17–19.
3. FOR MEDIAN DETAILS, SEE SHEETS 20–25.
4. FOR ON–SITE DETAILS, SEE SHEETS 26–27.
5. FOR DEMOLITION PLANS, SEE SHEETS 3–4.
6. FOR STREET IMPROVEMENT PLANS, SEE SHEETS 5–6.

NORTH

GRAPHIC SCALE IN FEET
0 2.5 5 10

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUTSON No. 83109 EXP. 6-30-25 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	SR	10/26/2025
			DESIGNED	SR	10/26/2025
			REVIEWED	BC	10/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS–BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008
CURB RAMP DETAILS

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: DATE PUBLIC WORKS DIRECTOR

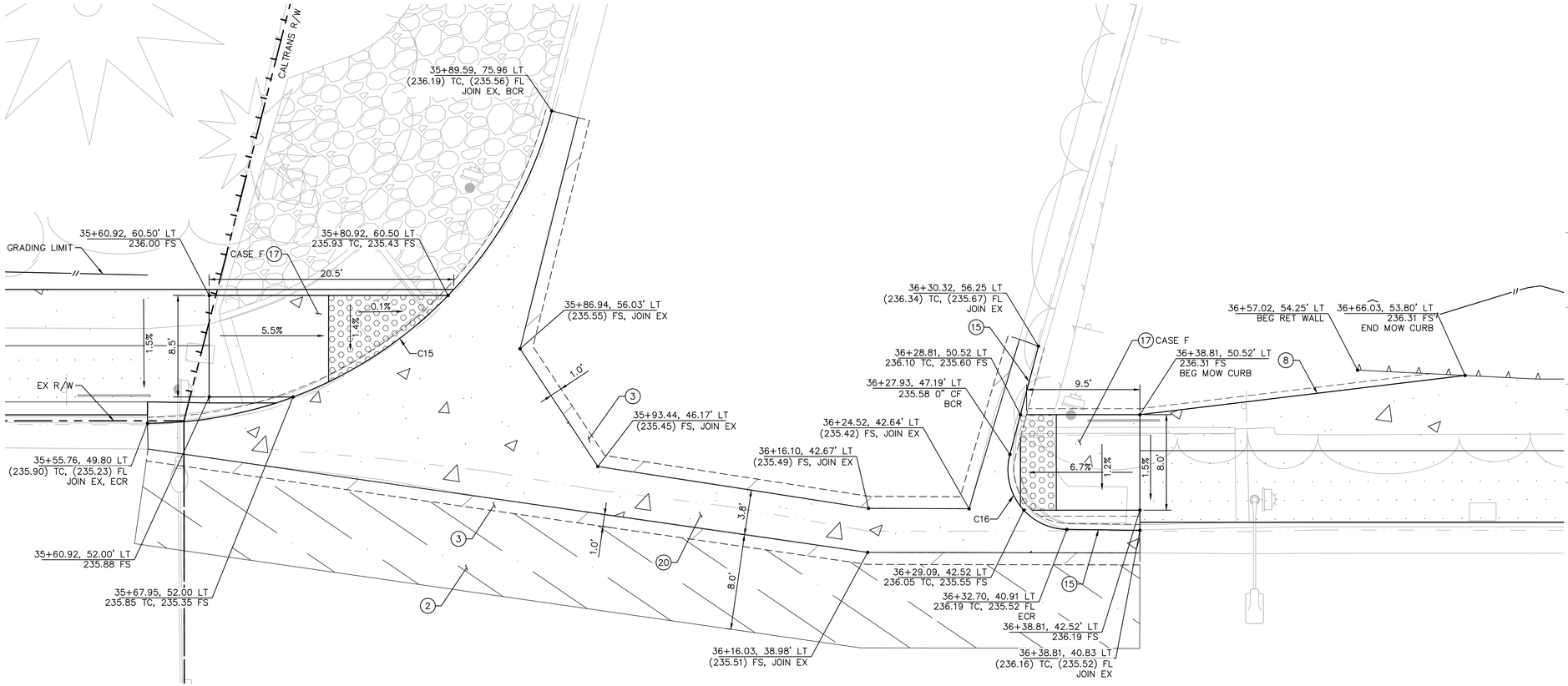
SCALE: AS NOTED

SHEET 14 OF 65 SHEETS

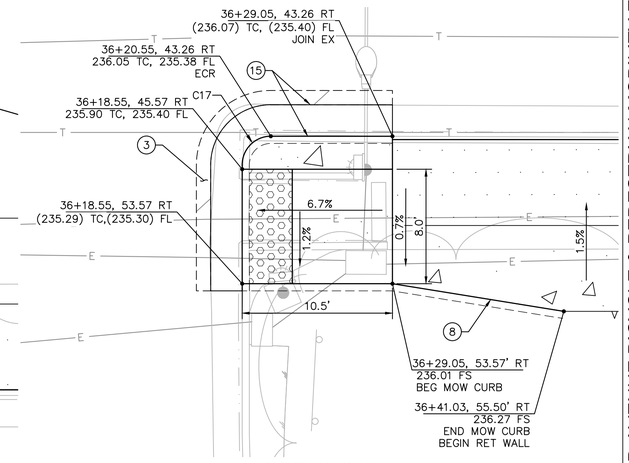
B.M.: ORANGE COUNTY BM NO.: 2D–29–70 ELEV = 250.172'

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



DETAIL #12



DETAIL #13

LEGEND

- CENTERLINE
- EXISTING RIGHT OF WAY
- CALTRANS RIGHT OF WAY
- RETAINING WALL LOL
- GRADING LIMIT
- SAWCUT

- ASPHALT CONCRETE PAVEMENT
- AC OVERLAY
- THICKENED AC PAVEMENT
- PEDESTRIAN CONCRETE PAVEMENT
- COLORED BIKEWAY CONCRETE PAVEMENT
- STAMPED CONCRETE
- LANDSCAPE

CURVE TABLE			
CURVE	RADIUS	LENGTH	DELTA
C15	35.00'	46.04'	75°22'30"
C16	5.00'	9.08'	104°00'35"
C17	2.00'	3.14'	90°00'00"
C19	2.00'	3.22'	92°16'30"

CONSTRUCTION NOTES

(2) PROPOSED THICKENED PAVEMENT PER CITY OF FULLERTON STD PLAN NO. 108.

(3) CONSTRUCT 6" AC OVER 8" CLASS 2 AB.

(8) CONSTRUCT CONCRETE MOW CURB PER DETAIL B ON SHEET 15.

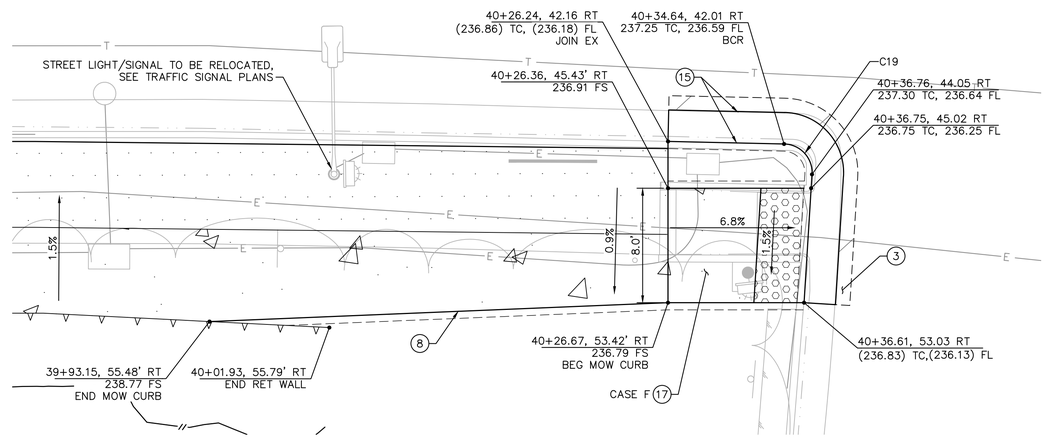
(15) CONSTRUCT A2-8 CURB & GUTTER PER CALTRANS STD PLAN NO. A87A.

(17) CONSTRUCT CURB RAMP PER CALTRANS STD PLAN A88A. CASE AS NOTED.

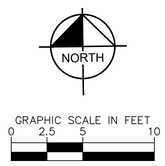
(20) CONSTRUCT PCC SPANDREL/CROSS GUTTER PER CITY OF FULLERTON STD PLAN NO. 108.

GENERAL NOTES

1. FOR CURB RAMP DETAILS, SEE SHEETS 7-16.
2. FOR BIKEWAY DETAILS, SEE SHEETS 17-19.
3. FOR MEDIAN DETAILS, SEE SHEETS 20-25.
4. FOR ON-SITE DETAILS, SEE SHEETS 26-27.
5. FOR DEMOLITION PLANS, SEE SHEETS 3-4.
6. FOR STREET IMPROVEMENT PLANS, SEE SHEETS 5-6.



DETAIL #14



60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUYNH No. C88030-25 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	SR	10/26/2025
			DESIGNED	SR	10/26/2025
			REVIEWED	BC	10/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

CURB RAMP DETAILS

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: DATE PUBLIC WORKS DIRECTOR

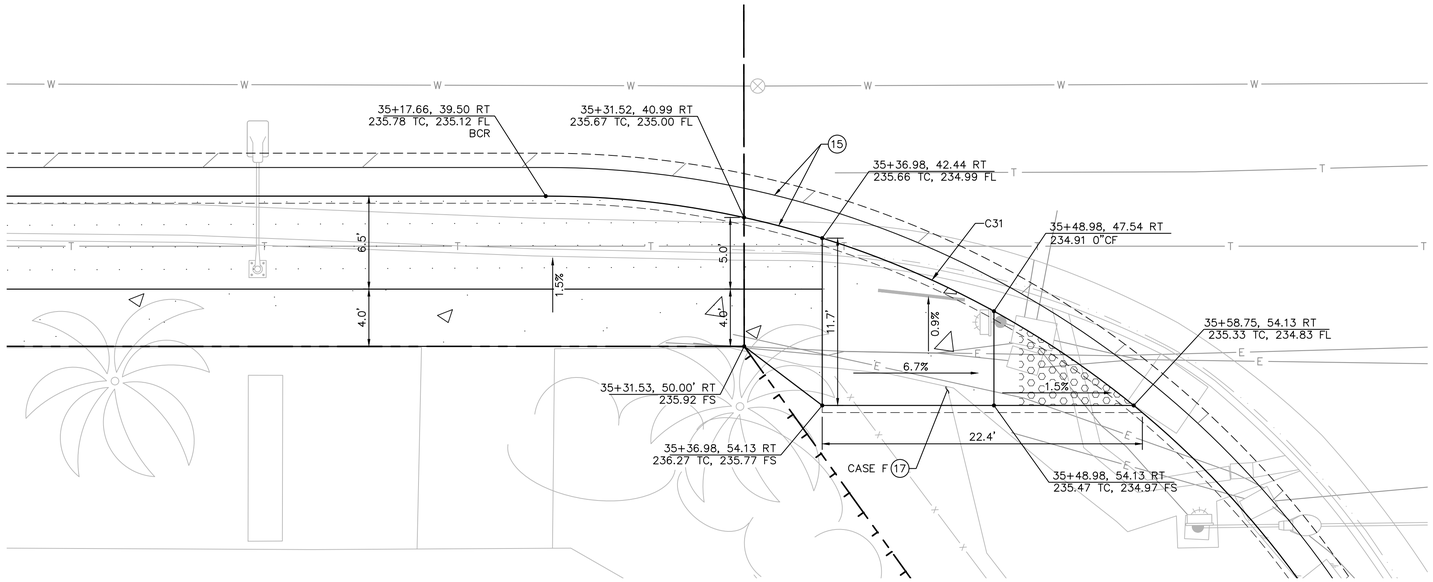
SCALE: AS NOTED

SHEET 15 OF 65 SHEETS

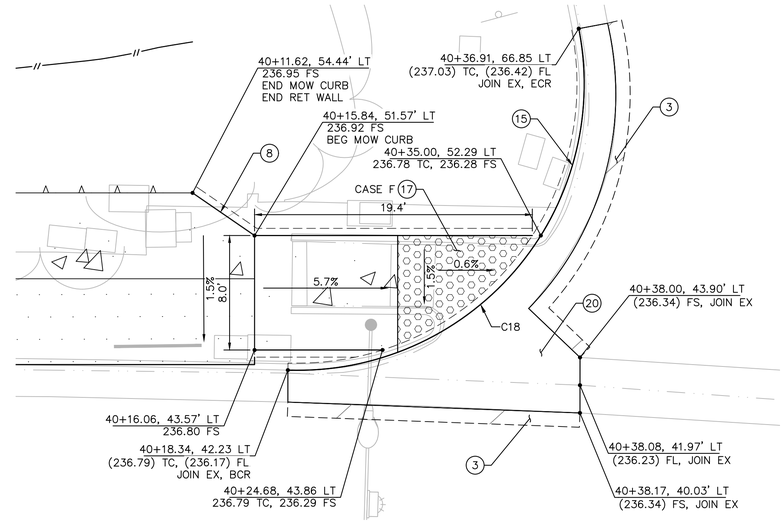
B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



DETAIL #16



DETAIL #15

LEGEND

- CENTERLINE
- EXISTING RIGHT OF WAY
- CALTRANS RIGHT OF WAY
- RETAINING WALL LOL
- GRADING LIMIT
- SAWCUT

- ASPHALT CONCRETE PAVEMENT
- AC OVERLAY
- THICKENED AC PAVEMENT
- PEDESTRIAN CONCRETE PAVEMENT
- COLORED BIKEWAY CONCRETE PAVEMENT
- STAMPED CONCRETE
- LANDSCAPE

CONSTRUCTION NOTES

(3) CONSTRUCT 6" AC OVER 8" CLASS 2 AB.

(8) CONSTRUCT CONCRETE MOW CURB PER DETAIL B ON SHEET 15.

(15) CONSTRUCT A2-8 CURB PER CALTRANS STD PLAN NO. A87A.

(17) CONSTRUCT CURB RAMP PER CALTRANS STD PLAN A88A. CASE AS NOTED.

(20) CONSTRUCT PCC SPANDREL/CROSS GUTTER PER CITY OF FULLERTON STD PLAN NO. 108.

CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA
C18	20.00'	35.73'	102°21'12"
C31	65.00'	97.56'	85°59'48"

GENERAL NOTES

1. FOR CURB RAMP DETAILS, SEE SHEETS 7-16.
2. FOR BIKEWAY DETAILS, SEE SHEETS 17-19.
3. FOR MEDIAN DETAILS, SEE SHEETS 20-25.
4. FOR ON-SITE DETAILS, SEE SHEETS 26-27.
5. FOR DEMOLITION PLANS, SEE SHEETS 3-4.
6. FOR STREET IMPROVEMENT PLANS, SEE SHEETS 5-6.

NORTH

GRAPHIC SCALE IN FEET
0 2.5 5 10

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUTCHINSON No. C 30-25 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	SR	10/26/2025
			DESIGNED	SR	10/26/2025
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			STREET		
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			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

CURB RAMP DETAILS

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: DATE PUBLIC WORKS DIRECTOR

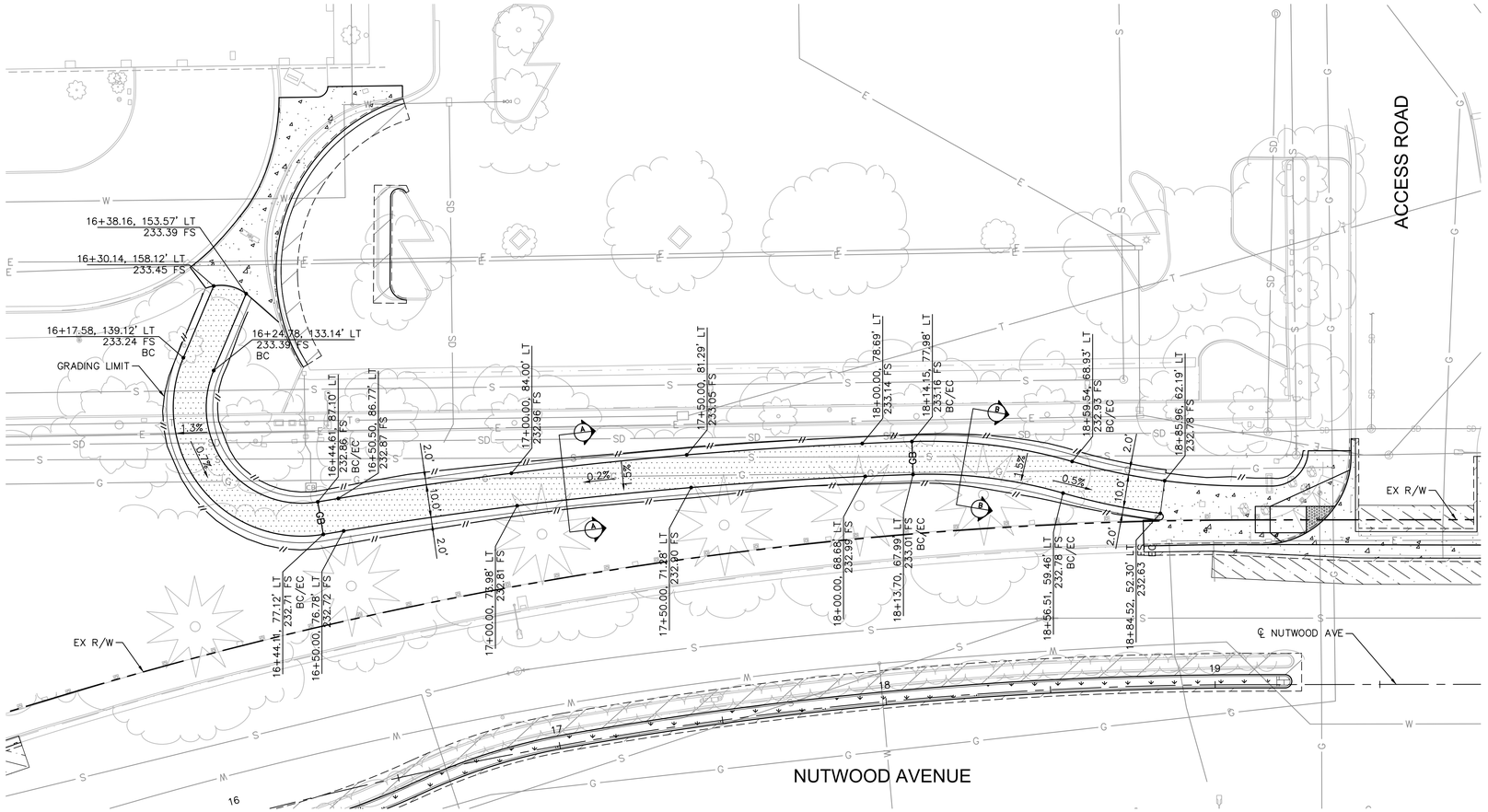
SCALE: AS NOTED

SHEET 16 OF 65 SHEETS

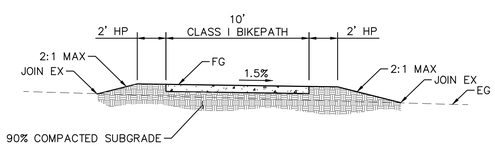
B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

FILE: XXXXX

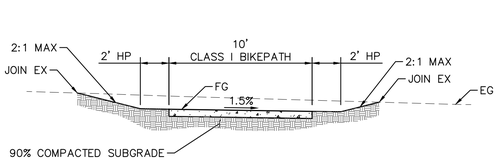
CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



DETAIL #17



SECTION A-A
NTS



SECTION B-B
NTS

LEGEND

- CENTERLINE
- EXISTING RIGHT OF WAY
- CALTRANS RIGHT OF WAY
- RETAINING WALL LOL
- GRADING LIMIT
- SAWCUT

- ASPHALT CONCRETE PAVEMENT
- AC OVERLAY
- THICKENED AC PAVEMENT
- PEDESTRIAN CONCRETE PAVEMENT
- COLORED BIKEWAY CONCRETE PAVEMENT
- STAMPED CONCRETE
- LANDSCAPE

CONSTRUCTION NOTES

(4) CONSTRUCT 4" COLORED CONCRETE OVER COMPACTED SUBGRADE.

CURVE TABLE			
CURVE	RADIUS	LENGTH	DELTA
C41	39.00'	83.43'	122°34'16"
C42	1331.01'	180.06'	7°45'04"
C43	146.52'	46.07'	18°00'58"

GENERAL NOTES

1. FOR CURB RAMP DETAILS, SEE SHEETS 7–16.
2. FOR BIKEWAY DETAILS, SEE SHEETS 17–19.
3. FOR MEDIAN DETAILS, SEE SHEETS 20–25.
4. FOR ON–SITE DETAILS, SEE SHEETS 26–27.
5. FOR DEMOLITION PLANS, SEE SHEETS 3–4.
6. FOR STREET IMPROVEMENT PLANS, SEE SHEETS 5–6.

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUTSON No. 29869 CIVIL 6-30-25 STATE OF CALIFORNIA
NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	SR	10/26/2025
			DESIGNED	SR	10/26/2025
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			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS–BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

BIKEWAY DETAILS

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: DATE PUBLIC WORKS DIRECTOR

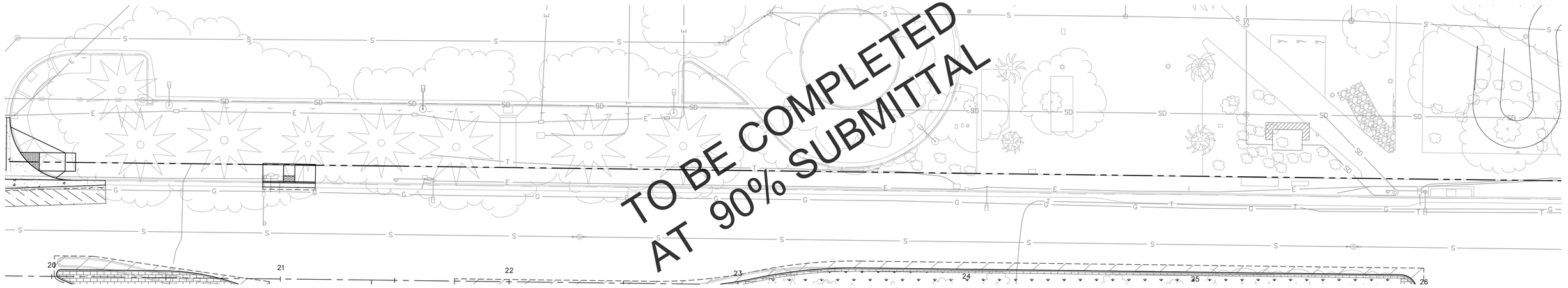
SCALE: AS NOTED

SHEET 17 OF 65 SHEETS

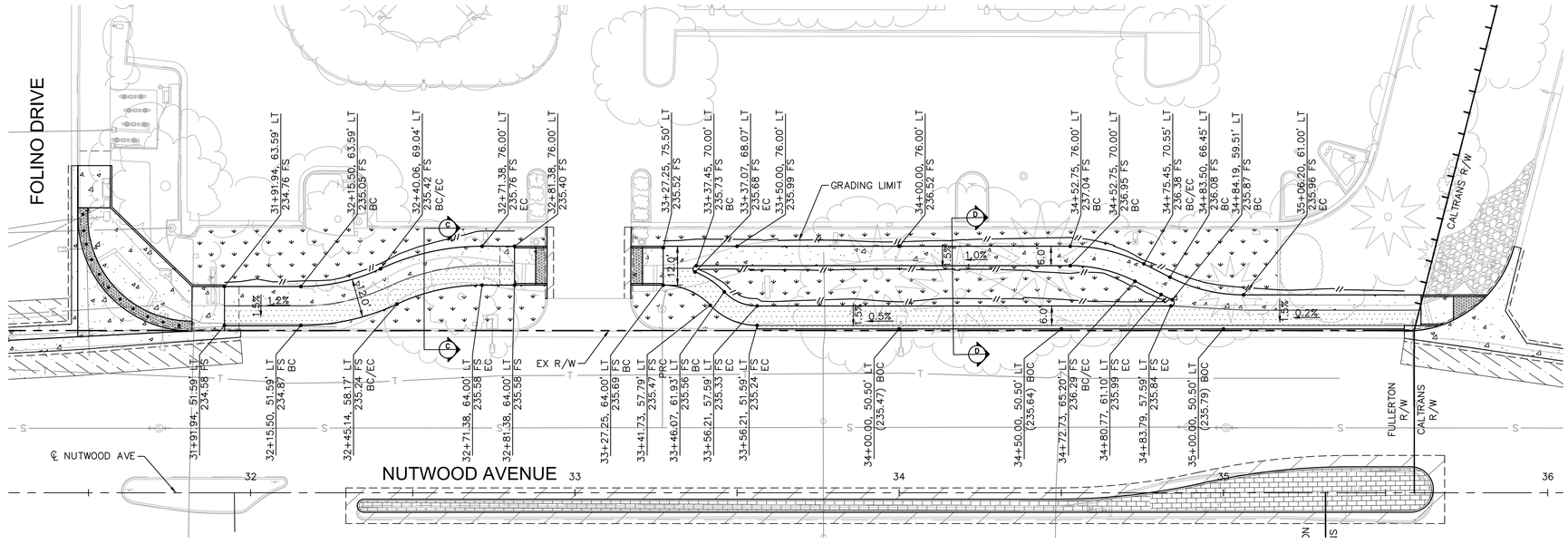
B.M.: ORANGE COUNTY BM NO.: 2D–29–70 ELEV = 250.172'

FILE: XXXXX

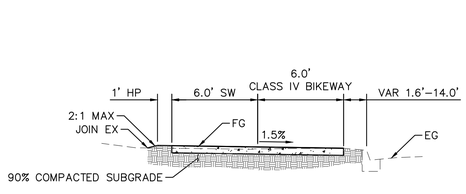
CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



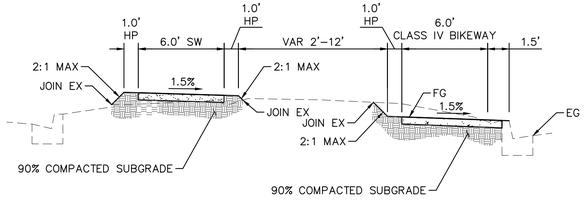
DETAIL #19



DETAIL #18



SECTION C-C
NTS



SECTION D-D
NTS

LEGEND

- CENTERLINE
- EXISTING RIGHT OF WAY
- CALTRANS RIGHT OF WAY
- RETAINING WALL LOL
- GRADING LIMIT
- SAWCUT

- ASPHALT CONCRETE PAVEMENT
- AC OVERLAY
- THICKENED AC PAVEMENT
- PEDESTRIAN CONCRETE PAVEMENT
- COLORED BIKEWAY CONCRETE PAVEMENT

CONSTRUCTION NOTES

(4) CONSTRUCT 4" COLORED CONCRETE OVER COMPACTED SUBGRADE.

(16) CONSTRUCT 4"PCC SIDEWALK PER CITY OF FULLERTON STD PLAN NO. 122.

GENERAL NOTES

1. FOR CURB RAMP DETAILS, SEE SHEETS 7–16.
2. FOR BIKEWAY DETAILS, SEE SHEETS 17–19.
3. FOR MEDIAN DETAILS, SEE SHEETS 20–25.
4. FOR ON–SITE DETAILS, SEE SHEETS 26–27.
5. FOR DEMOLITION PLANS, SEE SHEETS 3–4.
6. FOR STREET IMPROVEMENT PLANS, SEE SHEETS 5–6.

CURVE TABLE			
CURVE	RADIUS	LENGTH	DELTA
C32	70.00'	30.60'	25°02'44"
C33	62.00'	27.10'	25°02'44"
C34	20.00'	16.19'	46°23'35"
C35	20.00'	16.19'	46°23'35"
C36	1.00'	2.75'	157°48'30"
C37	1.00'	2.74'	156°51'13"
C38	50.00'	23.56'	27°00'08"
C39	50.00'	23.56'	27°00'08"
C40	56.00'	3.77'	3°51'21"

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUYNH No. 93189 EXP. 6-30-25 CIVIL STATE OF CALIFORNIA
NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	SR	10/26/2025
			DESIGNED	SR	10/26/2025
			REVIEWED	BC	10/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS–BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

BIKEWAY DETAILS

APPROVED: ACCEPTED:

DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED SHEET 18 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D–29–70 ELEV = 250.172' FILE: XXXXX



CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

LEGEND

- CENTERLINE
- EXISTING RIGHT OF WAY
- CALTRANS RIGHT OF WAY
- RETAINING WALL LOL
- GRADING LIMIT
- SAWCUT

- ASPHALT CONCRETE PAVEMENT
- AC OVERLAY
- THICKENED AC PAVEMENT
- PEDESTRIAN CONCRETE PAVEMENT
- COLORED BIKEWAY CONCRETE PAVEMENT

CONSTRUCTION NOTES

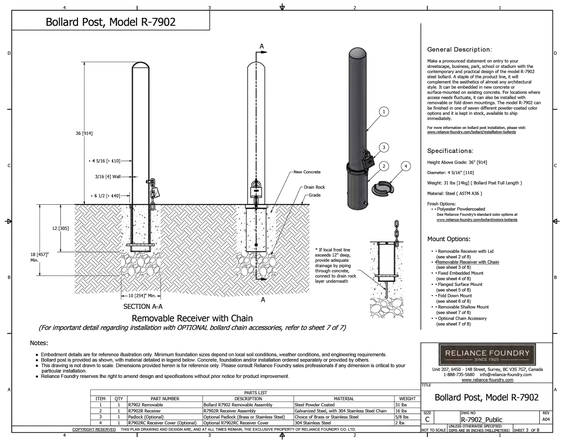
(4) CONSTRUCT 4" COLORED CONCRETE OVER COMPACTED SUBGRADE.

(16) CONSTRUCT 4"PCC SIDEWALK PER CITY OF FULLERTON STD PLAN NO. 122.

GENERAL NOTES

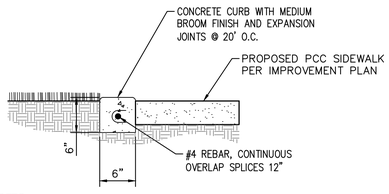
1. FOR CURB RAMP DETAILS, SEE SHEETS 7–16.
2. FOR BIKEWAY DETAILS, SEE SHEETS 17–19.
3. FOR MEDIAN DETAILS, SEE SHEETS 20–25.
4. FOR ON–SITE DETAILS, SEE SHEETS 26–27.
5. FOR DEMOLITION PLANS, SEE SHEETS 3–4.
6. FOR STREET IMPROVEMENT PLANS, SEE SHEETS 5–6.

DETAIL #20



DETAIL A - REMOVABLE BOLLARD

NTS

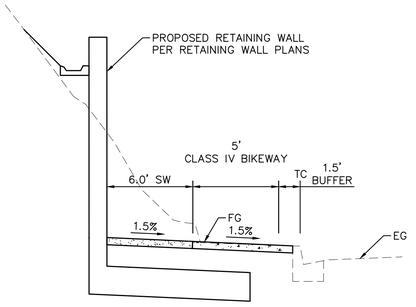


NOTES:

1. CONCRETE SHALL BE 2500 PSI.
2. ISOLATION JOINTS SHALL BE PLACED ONLY AS SPECIFIED
3. CONTRACTION JOINTS CONSISTING OF 1" DEEP SCORES SHALL BE PLACED AT 15' INTERVALS O.C.

DETAIL B - CONCRETE MOW CURB

NTS



SECTION E-E

NTS



GRAPHIC SCALE IN FEET
0 10 20 40

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUTCHINSON No. C 30-25 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	SR	10/26/2025
			DESIGNED	SR	10/26/2025
			REVIEWED	BC	10/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

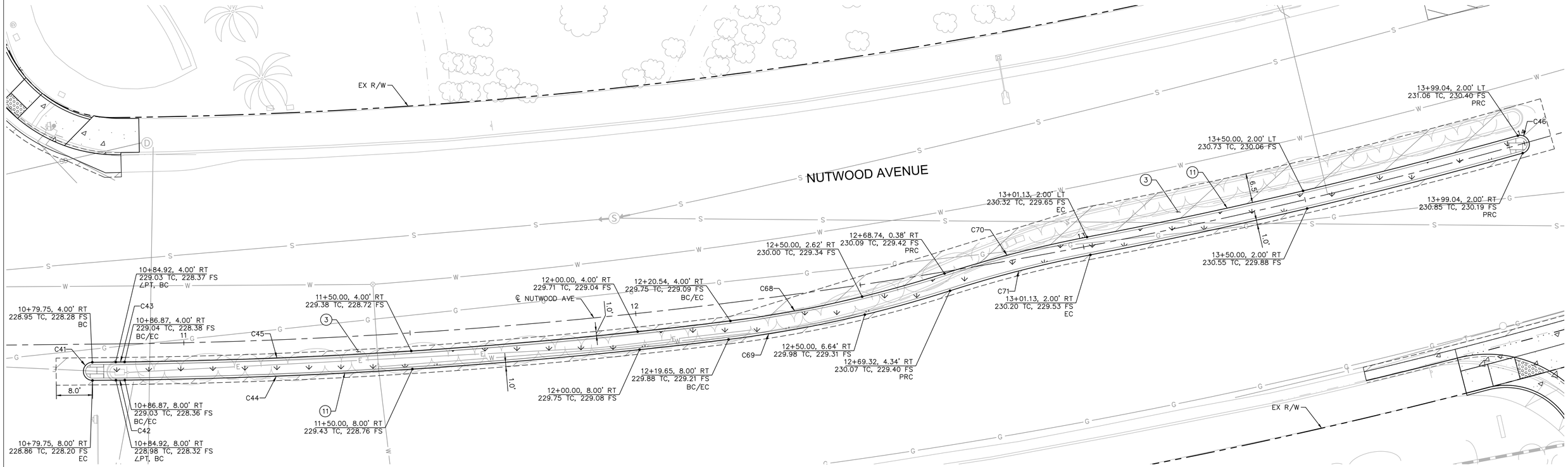
BIKEWAY & MISCELLANEOUS DETAILS

APPROVED: ACCEPTED:

DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED SHEET 19 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172' FILE: XXXXX



DETAIL #21

LEGEND

- CENTERLINE
- EXISTING RIGHT OF WAY
- CALTRANS RIGHT OF WAY
- RETAINING WALL LOL
- GRADING LIMIT
- SAWCUT

- ASPHALT CONCRETE PAVEMENT
- AC OVERLAY
- THICKENED AC PAVEMENT
- PEDESTRIAN CONCRETE PAVEMENT
- COLORED BIKEWAY CONCRETE PAVEMENT
- STAMPED CONCRETE
- LANDSCAPE

CURVE TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C41	2.00'	6.28'	180°00'00"	INFINITY'
C42	1206.41'	1.97'	0°05'36"	0.98'
C43	1094.96'	1.96'	0°06'09"	0.98'
C44	1208.00'	133.66'	6°20'22"	66.90'
C45	1204.00'	134.11'	6°22'55"	67.12'
C46	2.00'	6.28'	180°00'01"	1537521.39'
C68	263.14'	48.49'	10°33'27"	24.31'
C69	267.00'	50.13'	10°45'30"	25.14'
C70	271.00'	32.48'	6°52'03"	16.26'
C71	267.00'	32.00'	6°52'03"	16.02'

GENERAL NOTES

1. FOR CURB RAMP DETAILS, SEE SHEETS 7–16.
2. FOR BIKEWAY DETAILS, SEE SHEETS 17–19.
3. FOR MEDIAN DETAILS, SEE SHEETS 20–25.
4. FOR ON–SITE DETAILS, SEE SHEETS 26–27.
5. FOR DEMOLITION PLANS, SEE SHEETS 3–4.
6. FOR STREET IMPROVEMENT PLANS, SEE SHEETS 5–6.

CONSTRUCTION NOTES

(3) CONSTRUCT 6" AC OVER 8" CLASS 2 AB.

(11) CONSTRUCT 8"TYPE B–1 CURB (MEDIAN) PER CITY OF FULLERTON STD PLAN NO. 120.

NORTH

GRAPHIC SCALE IN FEET
0 5 10 20

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUYNH No. 93189 6-30-25 CIVIL STATE OF CALIFORNIA NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	SR	10/26/2025
			DESIGNED	SR	10/26/2025
			REVIEWED	BC	10/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS–BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

MEDIAN DETAILS

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: DATE PUBLIC WORKS DIRECTOR

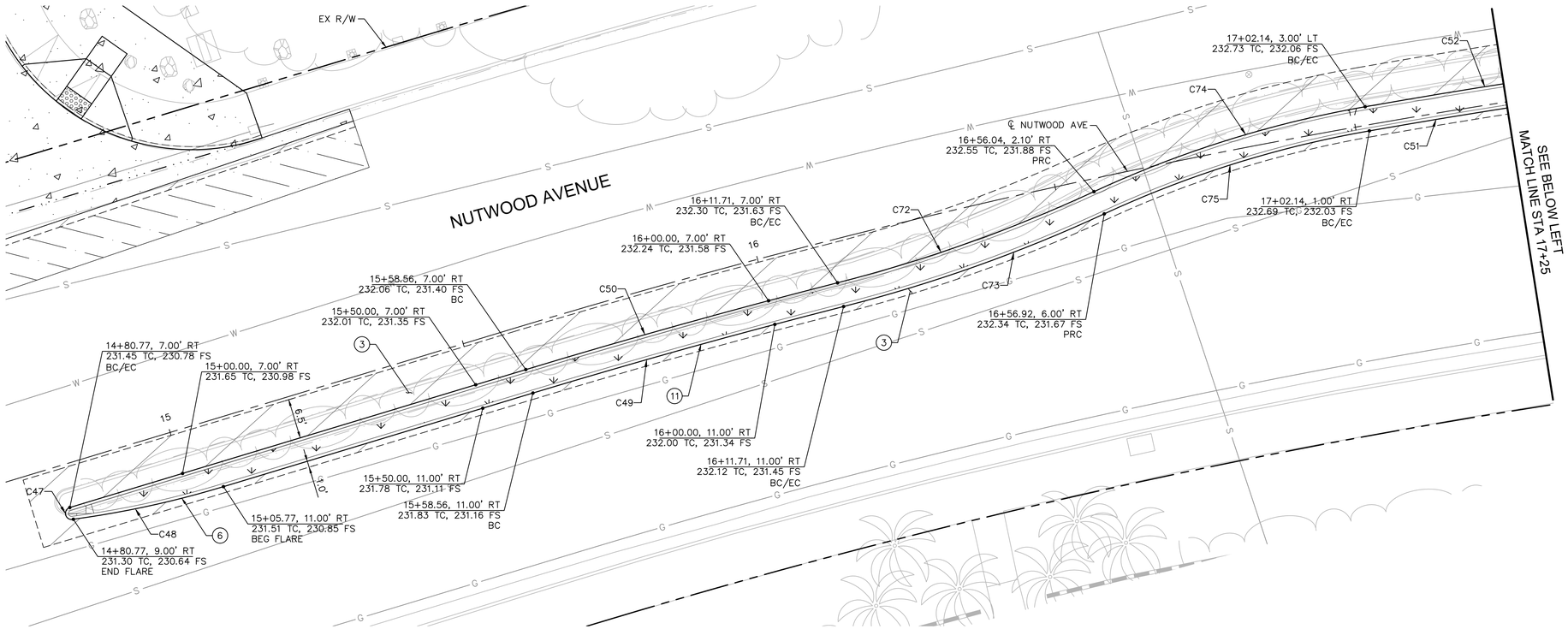
SCALE: AS NOTED

SHEET 20 OF 65 SHEETS

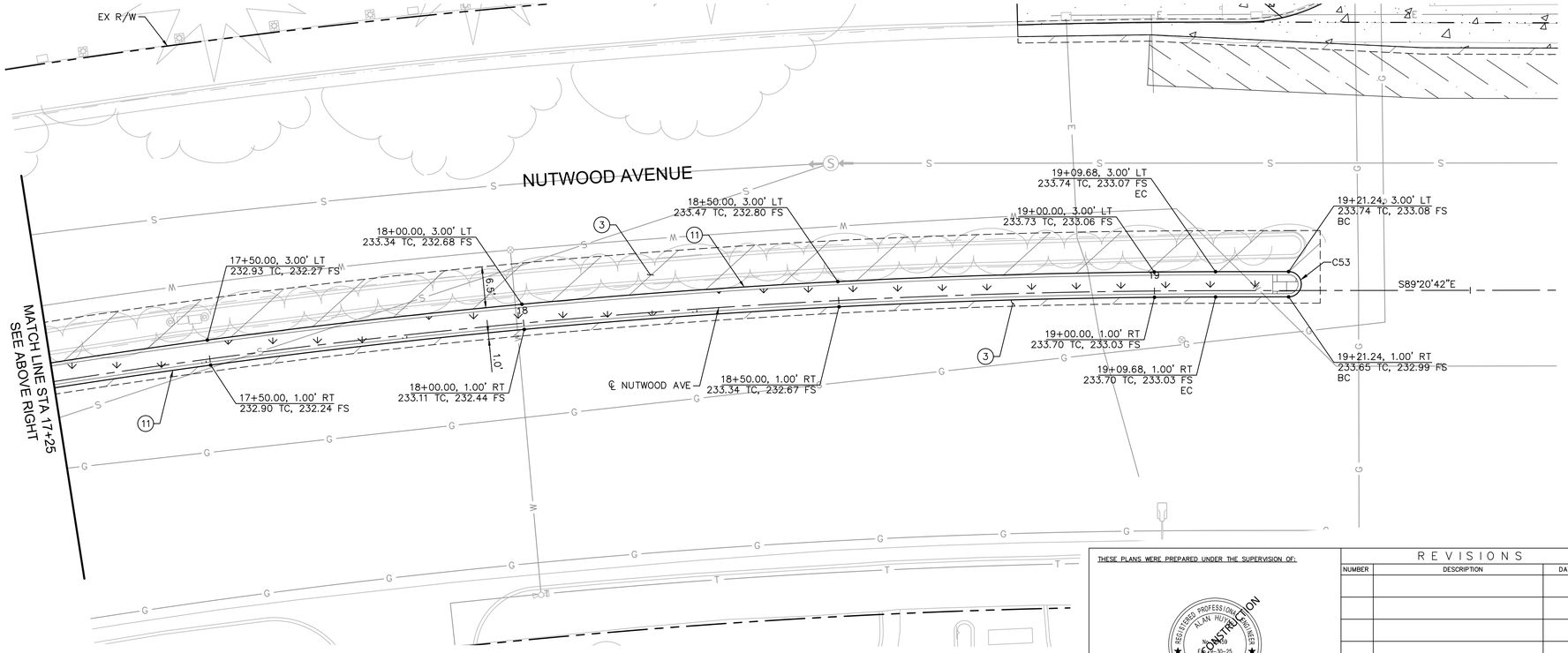
B.M.: ORANGE COUNTY BM NO.: 2D–29–70 ELEV = 250.172'

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



DETAIL #22



DETAIL #22

LEGEND

- CENTERLINE
- EXISTING RIGHT OF WAY
- CALTRANS RIGHT OF WAY
- RETAINING WALL LOL
- GRADING LIMIT
- SAWCUT
- ASPHALT CONCRETE PAVEMENT
- AC OVERLAY
- THICKENED AC PAVEMENT
- PEDESTRIAN CONCRETE PAVEMENT (4)
- COLORED BIKEWAY CONCRETE PAVEMENT
- STAMPED CONCRETE
- LANDSCAPE

CONSTRUCTION NOTES

(3) CONSTRUCT 6" AC OVER 8" CLASS 2 AB.

(6) CONSTRUCT MEDIAN FLARE PER SPPWC STD PLAN NO. 141-2.

(11) CONSTRUCT 8"TYPE B-1 CURB (MEDIAN) PER CITY OF FULLERTON STD PLAN NO. 120.

CURVE TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C47	1.00'	3.14'	180°00'00"	INFINITY'
C48	157.25'	25.11'	9°08'52"	12.58'
C49	1189.00'	52.66'	2°32'16"	26.34'
C50	1205.33'	52.84'	2°30'43"	26.43'
C51	1199.00'	207.36'	9°54'33"	103.94'
C52	1203.00'	208.05'	9°54'32"	104.29'
C53	2.00'	6.28'	180°00'00"	INFINITY'
C72	241.68'	44.50'	10°32'57"	22.31'
C73	245.68'	45.23'	10°32'57"	22.68'
C74	178.68'	46.53'	14°55'11"	23.40'
C75	174.68'	45.49'	14°55'11"	22.87'

GENERAL NOTES

1. FOR CURB RAMP DETAILS, SEE SHEETS 7-16.
2. FOR BIKEWAY DETAILS, SEE SHEETS 17-19.
3. FOR MEDIAN DETAILS, SEE SHEETS 20-25.
4. FOR ON-SITE DETAILS, SEE SHEETS 26-27.
5. FOR DEMOLITION PLANS, SEE SHEETS 3-4.
6. FOR STREET IMPROVEMENT PLANS, SEE SHEETS 5-6.

NORTH

GRAPHIC SCALE IN FEET
0 5 10 20

60% PLANS - NOT FOR CONSTRUCTION - 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUTCHINSON No. C 30-25 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	SR	10/26/2025
			DESIGNED	SR	10/26/2025
			REVIEWED	BC	10/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

MEDIAN DETAILS

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: DATE PUBLIC WORKS DIRECTOR

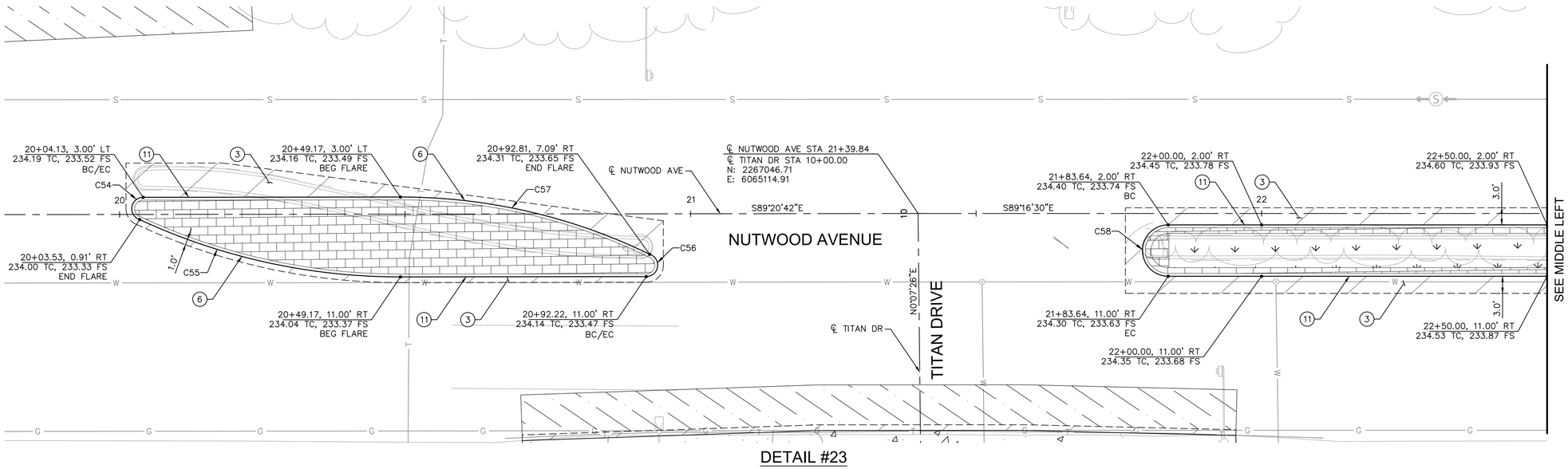
SCALE: AS NOTED

SHEET 21 OF 65 SHEETS

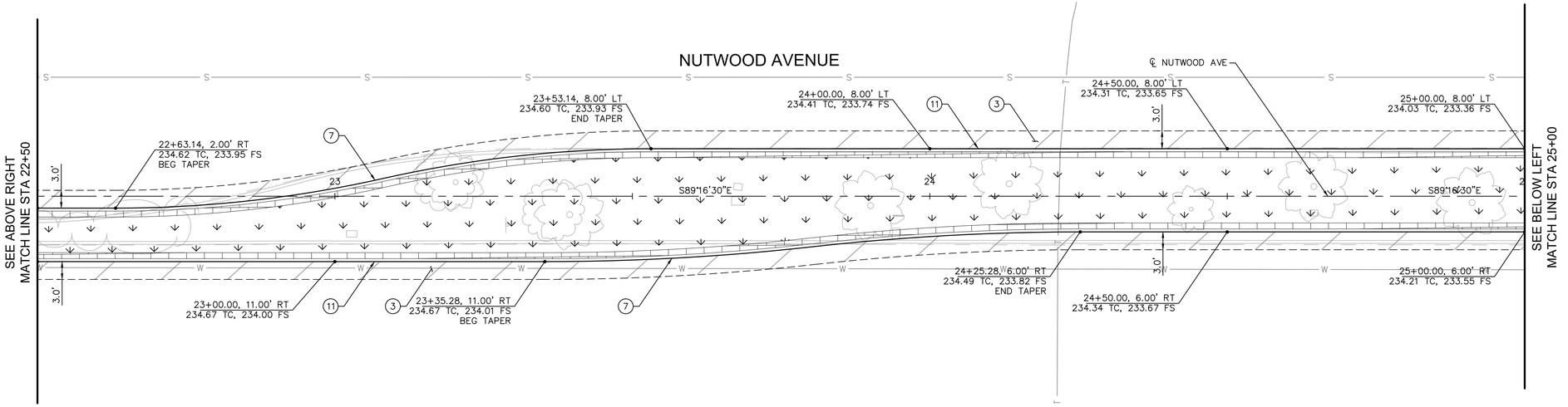
B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

FILE: XXXXX

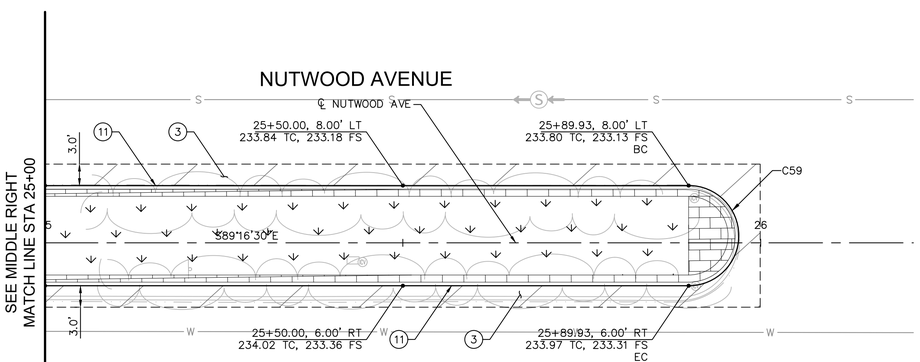
CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



DETAIL #23



DETAIL #23



DETAIL #23

LEGEND

- CENTERLINE
- EXISTING RIGHT OF WAY
- CALTRANS RIGHT OF WAY
- RETAINING WALL LOL
- GRADING LIMIT
- SAWCUT

- ASPHALT CONCRETE PAVEMENT
- AC OVERLAY
- THICKENED AC PAVEMENT
- PEDESTRIAN CONCRETE PAVEMENT
- COLORED BIKEWAY CONCRETE PAVEMENT
- STAMPED CONCRETE
- LANDSCAPE

CONSTRUCTION NOTES

(3) CONSTRUCT 6" AC OVER 8" CLASS 2 AB.

(6) CONSTRUCT MEDIAN FLARE PER SPPWC STD PLAN NO. 141-2.

(7) CONSTRUCT MEDIAN TAPER PER SPPWC STD PLAN NO. 140-3.

(11) CONSTRUCT 8"TYPE B-1 CURB (MEDIAN) PER CITY OF FULLERTON STD PLAN NO. 120.

CURVE TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C54	2.00'	5.68'	162°44'08"	13.17'
C55	108.27'	47.11'	24°55'57"	23.94'
C56	2.00'	5.68'	162°44'08"	13.17'
C57	99.42'	45.18'	26°02'13"	22.99'
C58	4.50'	14.14'	180°00'00"	INFINITY'
C59	7.00'	21.99'	180°00'00"	INFINITY'

GENERAL NOTES

1. FOR CURB RAMP DETAILS, SEE SHEETS 7-16.
2. FOR BIKEWAY DETAILS, SEE SHEETS 17-19.
3. FOR MEDIAN DETAILS, SEE SHEETS 20-25.
4. FOR ON-SITE DETAILS, SEE SHEETS 26-27.
5. FOR DEMOLITION PLANS, SEE SHEETS 3-4.
6. FOR STREET IMPROVEMENT PLANS, SEE SHEETS 5-6.

NORTH

GRAPHIC SCALE IN FEET
0 5 10 20

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUYNH No. 30-25 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE			
			DRAWN	SR	10/26/2025
			DESIGNED	SR	10/26/2025
			REVIEWED	BC	10/26/2025
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			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

MEDIAN DETAILS

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: DATE PUBLIC WORKS DIRECTOR

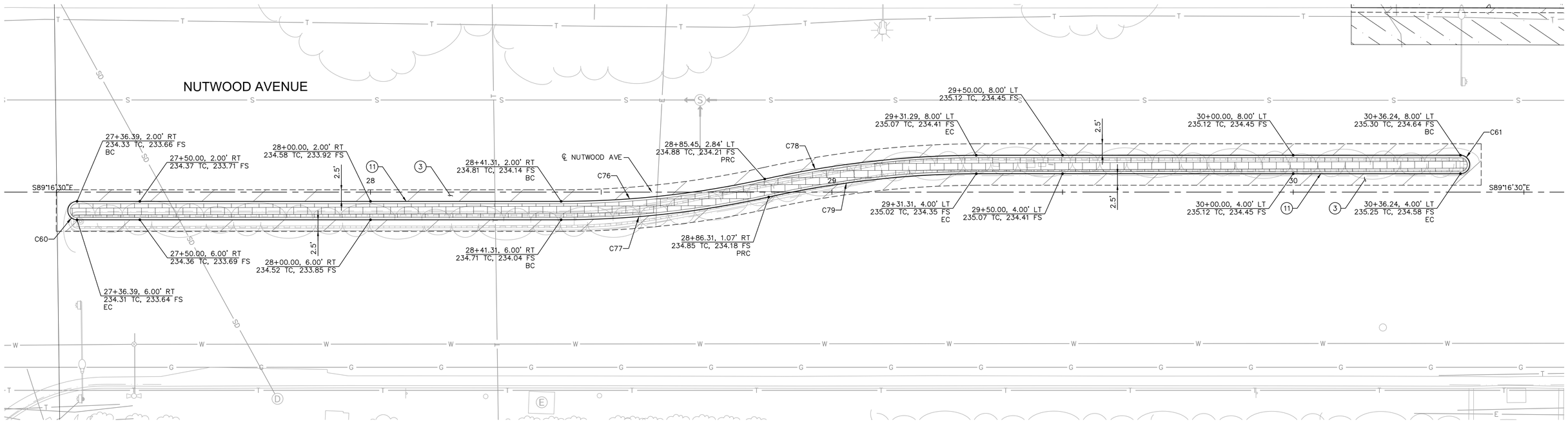
SCALE: AS NOTED

SHEET 22 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



DETAIL #24

LEGEND

- CENTERLINE
- EXISTING RIGHT OF WAY
- CALTRANS RIGHT OF WAY
- RETAINING WALL LOL
- GRADING LIMIT
- SAWCUT

- ASPHALT CONCRETE PAVEMENT
- AC OVERLAY
- THICKENED AC PAVEMENT
- PEDESTRIAN CONCRETE PAVEMENT
- COLORED BIKEWAY CONCRETE PAVEMENT
- STAMPED CONCRETE
- LANDSCAPE

CURVE TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C60	2.00'	6.28'	180°00'00"	INFINITY'
C61	2.00'	6.28'	180°00'00"	INFINITY'
C76	203.72'	44.49'	12°30'42"	22.33'
C77	207.72'	45.36'	12°30'42"	22.77'
C78	218.05'	46.22'	12°08'40"	23.20'
C79	213.53'	45.37'	12°10'25"	22.77'

GENERAL NOTES

1. FOR CURB RAMP DETAILS, SEE SHEETS 7–16.
2. FOR BIKEWAY DETAILS, SEE SHEETS 17–19.
3. FOR MEDIAN DETAILS, SEE SHEETS 20–25.
4. FOR ON–SITE DETAILS, SEE SHEETS 26–27.
5. FOR DEMOLITION PLANS, SEE SHEETS 3–4.
6. FOR STREET IMPROVEMENT PLANS, SEE SHEETS 5–6.

CONSTRUCTION NOTES

(3) CONSTRUCT 6" AC OVER 8" CLASS 2 AB.

(11) CONSTRUCT 8"TYPE B–1 CURB (MEDIAN) PER CITY OF FULLERTON STD PLAN NO. 120.

NORTH

GRAPHIC SCALE IN FEET
0 5 10 20

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUYNH No. C 96168 EXP. 12-30-25 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	SR	10/26/2025
			DESIGNED	SR	10/26/2025
			REVIEWED	BC	10/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS–BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

MEDIAN DETAILS

APPROVED:
DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED:
DATE PUBLIC WORKS DIRECTOR

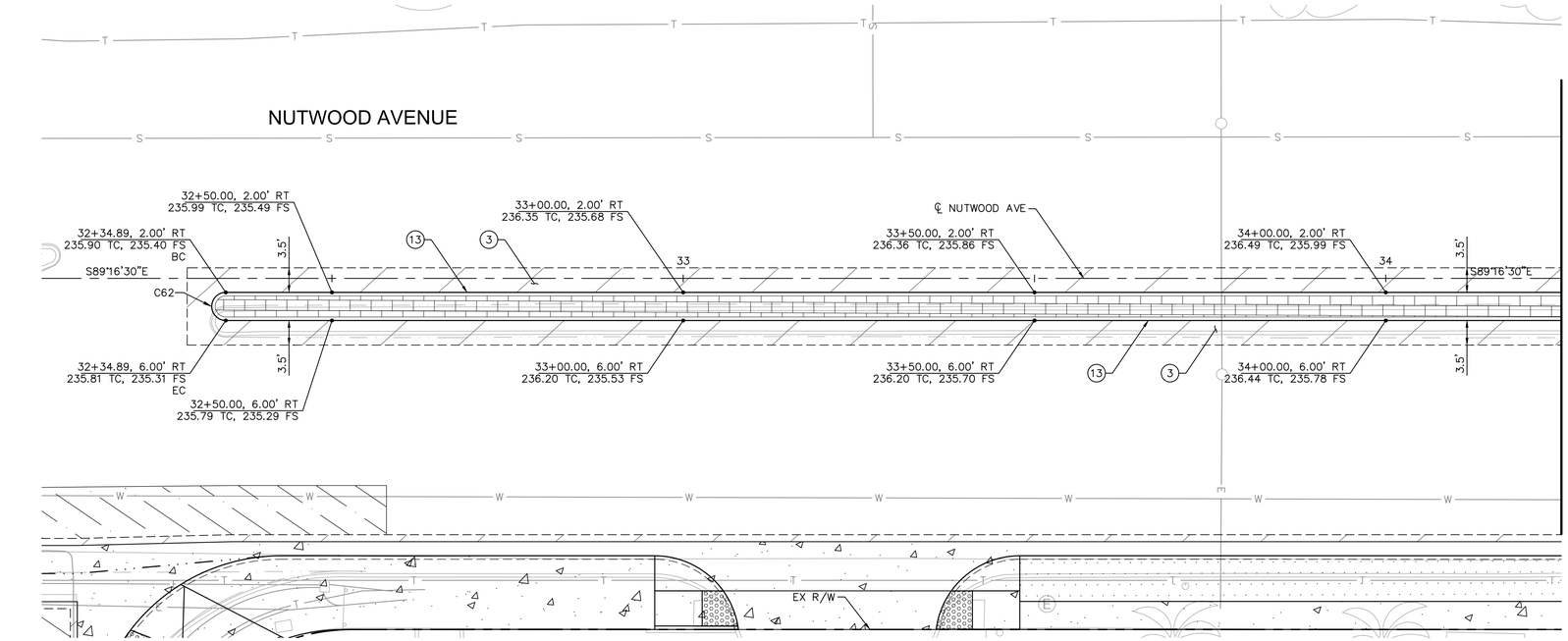
SCALE: AS NOTED

SHEET 23 OF 65 SHEETS

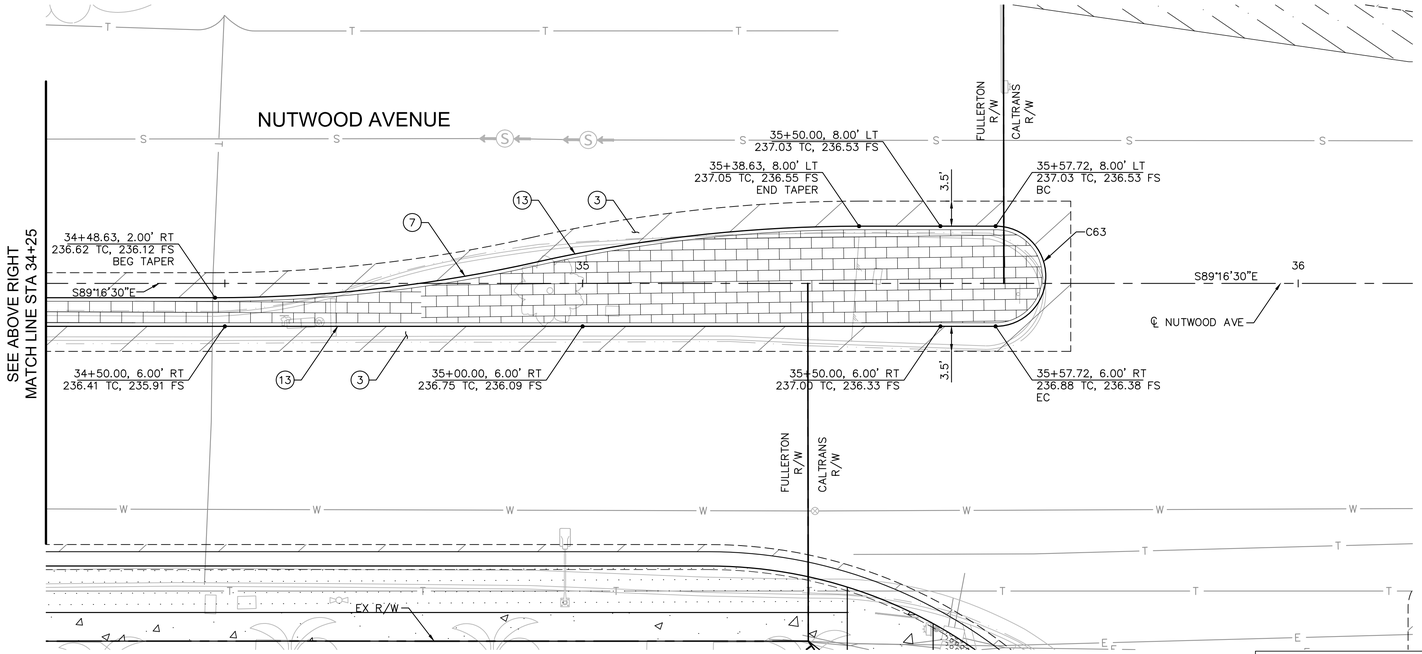
B.M.: ORANGE COUNTY BM NO.: 2D–29–70 ELEV = 250.172'

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



DETAIL #25



DETAIL #25

LEGEND

- CENTERLINE
- EXISTING RIGHT OF WAY
- CALTRANS RIGHT OF WAY
- RETAINING WALL LOL
- GRADING LIMIT
- SAWCUT

- ASPHALT CONCRETE PAVEMENT
- AC OVERLAY
- THICKENED AC PAVEMENT
- PEDESTRIAN CONCRETE PAVEMENT (4)
- COLORED BIKEWAY CONCRETE PAVEMENT
- STAMPED CONCRETE
- LANDSCAPE

CONSTRUCTION NOTES

(3) CONSTRUCT 6" AC OVER 8" CLASS 2 AB.

(7) CONSTRUCT MEDIAN TAPER PER SPPWC STD PLAN NO. 140-3.

(13) CONSTRUCT A1-6 CURB PER CALTRANS STD PLAN NO. A87A.

CURVE TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C62	2.00'	6.28'	180°00'00"	INFINITY'
C63	7.00'	21.99'	180°00'00"	INFINITY'

GENERAL NOTES

1. FOR CURB RAMP DETAILS, SEE SHEETS 7-16.
2. FOR BIKEWAY DETAILS, SEE SHEETS 17-19.
3. FOR MEDIAN DETAILS, SEE SHEETS 20-25.
4. FOR ON-SITE DETAILS, SEE SHEETS 26-27.
5. FOR DEMOLITION PLANS, SEE SHEETS 3-4.
6. FOR STREET IMPROVEMENT PLANS, SEE SHEETS 5-6.

NORTH

GRAPHIC SCALE IN FEET
0 5 10 20

60% PLANS - NOT FOR CONSTRUCTION - 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUTSON No. 73109 EXP. 6-30-25 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	SR	10/26/2025
			DESIGNED	SR	10/26/2025
			REVIEWED	BC	10/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

MEDIAN DETAILS

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: DATE PUBLIC WORKS DIRECTOR

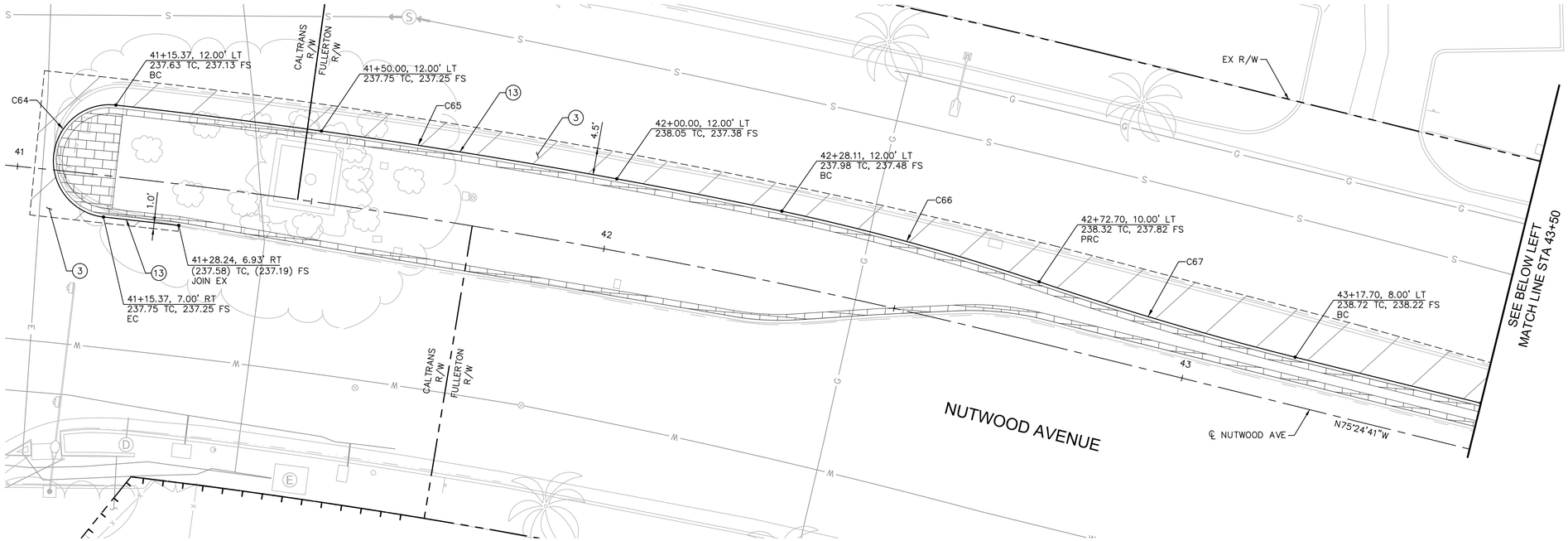
SCALE: AS NOTED

SHEET 24 OF 65 SHEETS

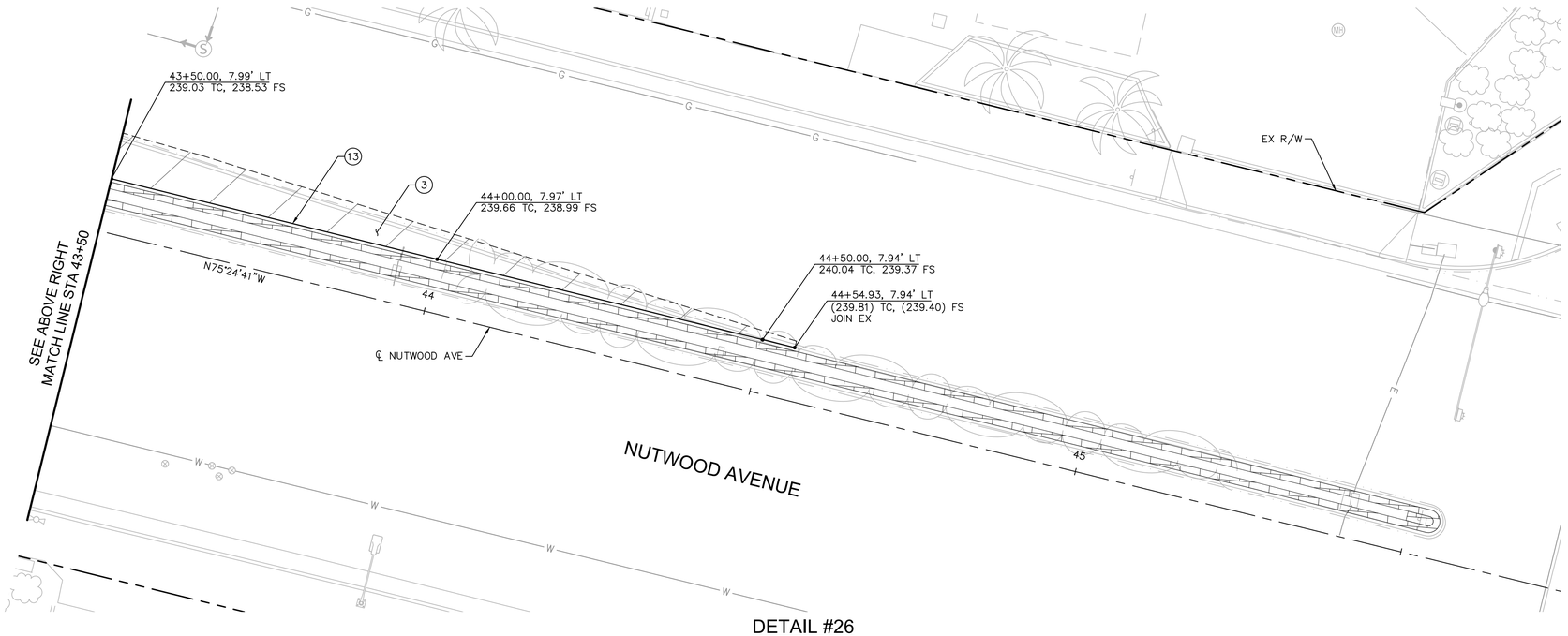
B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



DETAIL #26



DETAIL #26

LEGEND

- CENTERLINE
- EXISTING RIGHT OF WAY
- CALTRANS RIGHT OF WAY
- RETAINING WALL LOL
- GRADING LIMIT
- SAWCUT

- ASPHALT CONCRETE PAVEMENT
- AC OVERLAY
- THICKENED AC PAVEMENT
- PEDESTRIAN CONCRETE PAVEMENT
- COLORED BIKEWAY CONCRETE PAVEMENT
- STAMPED CONCRETE
- LANDSCAPE

CONSTRUCTION NOTES

(3) CONSTRUCT 6" AC OVER 8" CLASS 2 AB.

(13) CONSTRUCT A1-6 CURB PER CALTRANS STD PLAN NO. A87A.

CURVE TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C64	9.50'	29.85'	180°01'03"	61745.73'
C65	1215.98'	113.86'	5°21'55"	56.97'
C66	393.47'	45.07'	6°33'45"	22.56'

GENERAL NOTES

1. FOR CURB RAMP DETAILS, SEE SHEETS 7-16.
2. FOR BIKEWAY DETAILS, SEE SHEETS 17-19.
3. FOR MEDIAN DETAILS, SEE SHEETS 20-25.
4. FOR ON-SITE DETAILS, SEE SHEETS 26-27.
5. FOR DEMOLITION PLANS, SEE SHEETS 3-4.
6. FOR STREET IMPROVEMENT PLANS, SEE SHEETS 5-6.

NORTH

GRAPHIC SCALE IN FEET
0 5 10 20

60% PLANS - NOT FOR CONSTRUCTION - 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUTCHINSON No. 87308 EXP. 6-30-25 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE			
			DRAWN	SR	10/26/2025
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			REVIEWED	BC	10/26/2025
			STREET		
			SEWER		
			DRAINAGE		
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			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

MEDIAN DETAILS

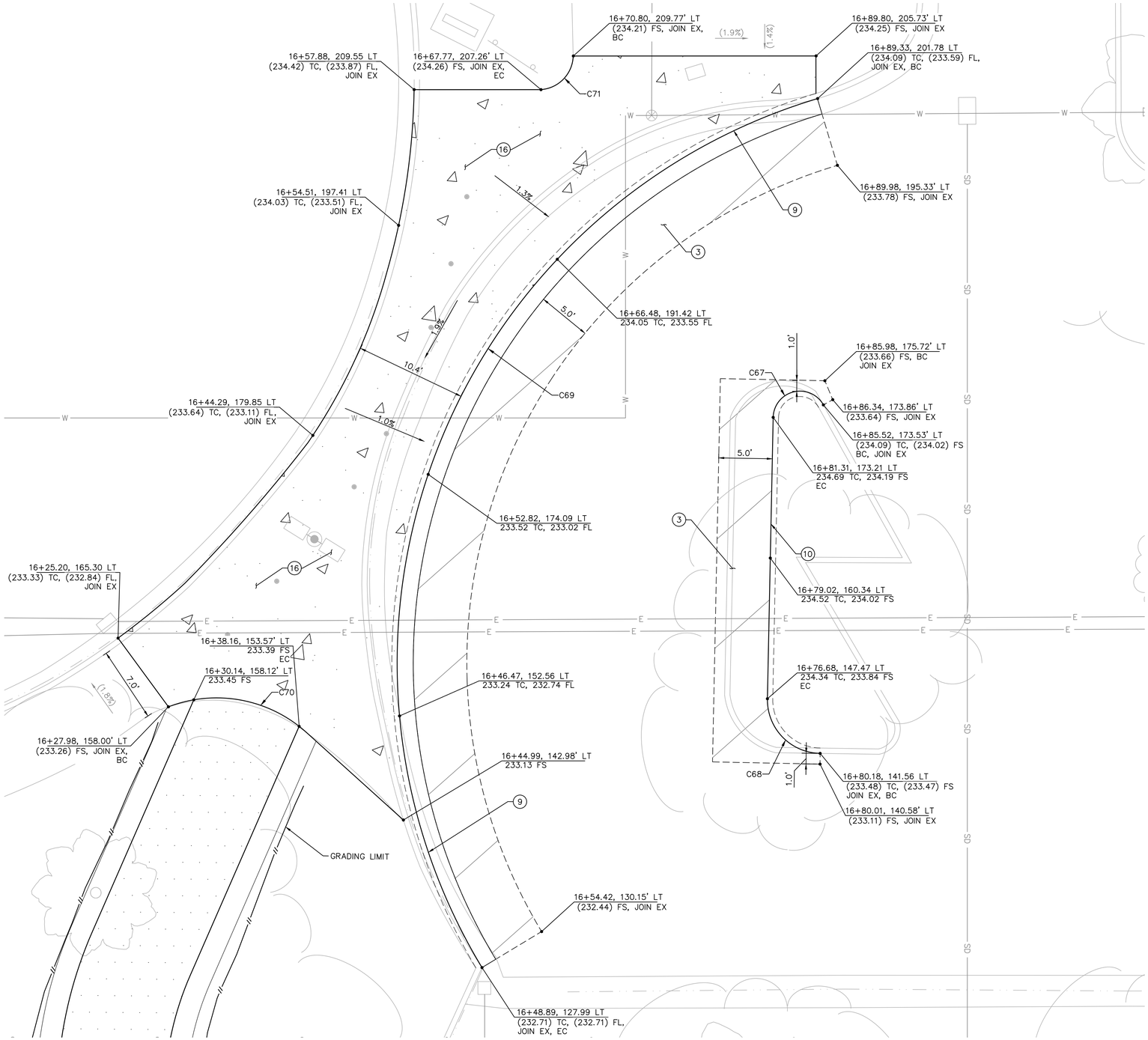
APPROVED: ACCEPTED:

DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED SHEET 25 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172' FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



DETAIL #27

LEGEND

- CENTERLINE
- EXISTING RIGHT OF WAY
- CALTRANS RIGHT OF WAY
- RETAINING WALL LOL
- GRADING LIMIT
- SAWCUT

- ASPHALT CONCRETE PAVEMENT
- AC OVERLAY
- THICKENED AC PAVEMENT
- PEDESTRIAN CONCRETE PAVEMENT
- COLORED BIKEWAY CONCRETE PAVEMENT
- STAMPED CONCRETE
- LANDSCAPE

CONSTRUCTION NOTES

(3) CONSTRUCT 6" AC OVER 8" CLASS 2 AB.

(9) CONSTRUCT 6"TYPE A CURB & GUTTER PER CITY OF FULLERTON STD PLAN NO. 120.

(10) CONSTRUCT 6"TYPE B-1 CURB PER CITY OF FULLERTON STD PLAN NO. 120.

(16) CONSTRUCT 4"PCC SIDEWALK PER CITY OF FULLERTON STD PLAN NO. 122.

CURVE TABLE			
CURVE	RADIUS	LENGTH	DELTA
C67	2.50'	6.53'	149°43'06"
C68	5.00'	7.88'	90°17'56"
C69	55.00'	100.25'	104°26'17"
C70	12.50'	13.77'	63°08'19"
C71	3.24'	4.76'	84°18'35"

GENERAL NOTES

1. FOR CURB RAMP DETAILS, SEE SHEETS 7-16.
2. FOR BIKEWAY DETAILS, SEE SHEETS 17-19.
3. FOR MEDIAN DETAILS, SEE SHEETS 20-25.
4. FOR ON-SITE DETAILS, SEE SHEETS 26-27.
5. FOR DEMOLITION PLANS, SEE SHEETS 3-4.
6. FOR STREET IMPROVEMENT PLANS, SEE SHEETS 5-6.

NORTH

GRAPHIC SCALE IN FEET
0 2.5 5 10

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUYNH No. 93189 9-30-25 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE			
			DRAWN	SR	10/26/2025
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			STREET		
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			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

ON-SITE DETAILS

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED

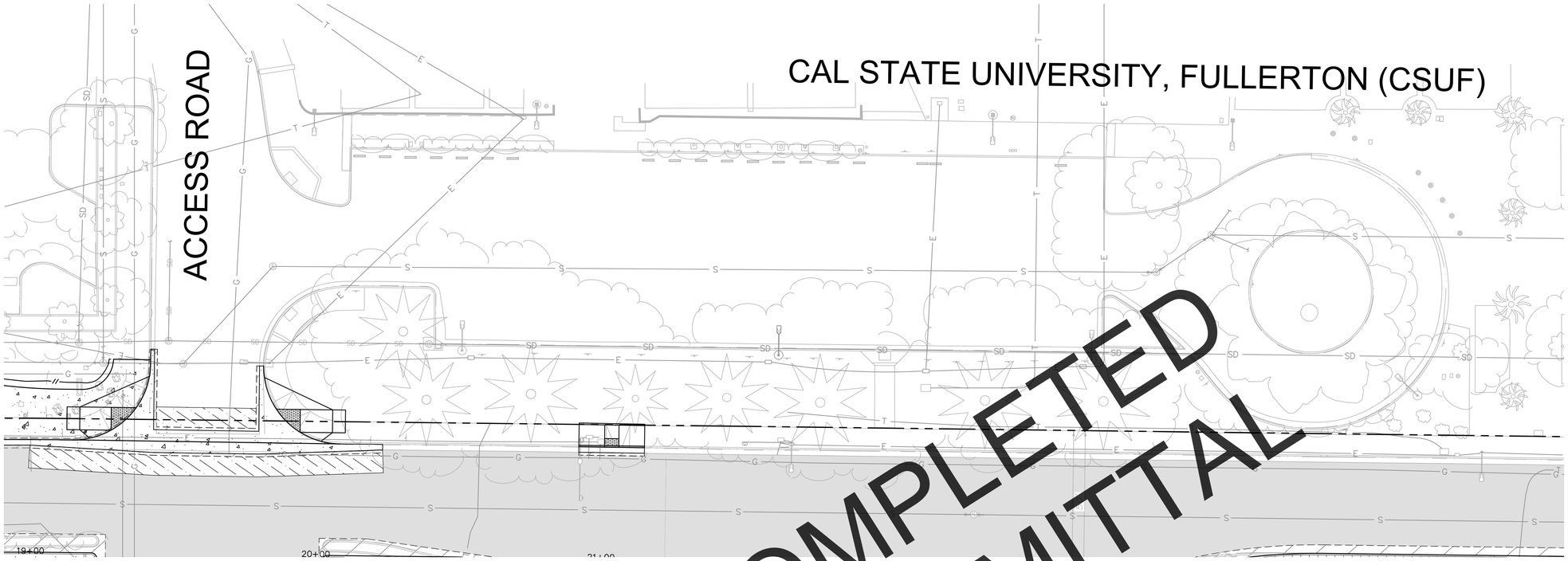
SHEET 26 OF 65 SHEETS

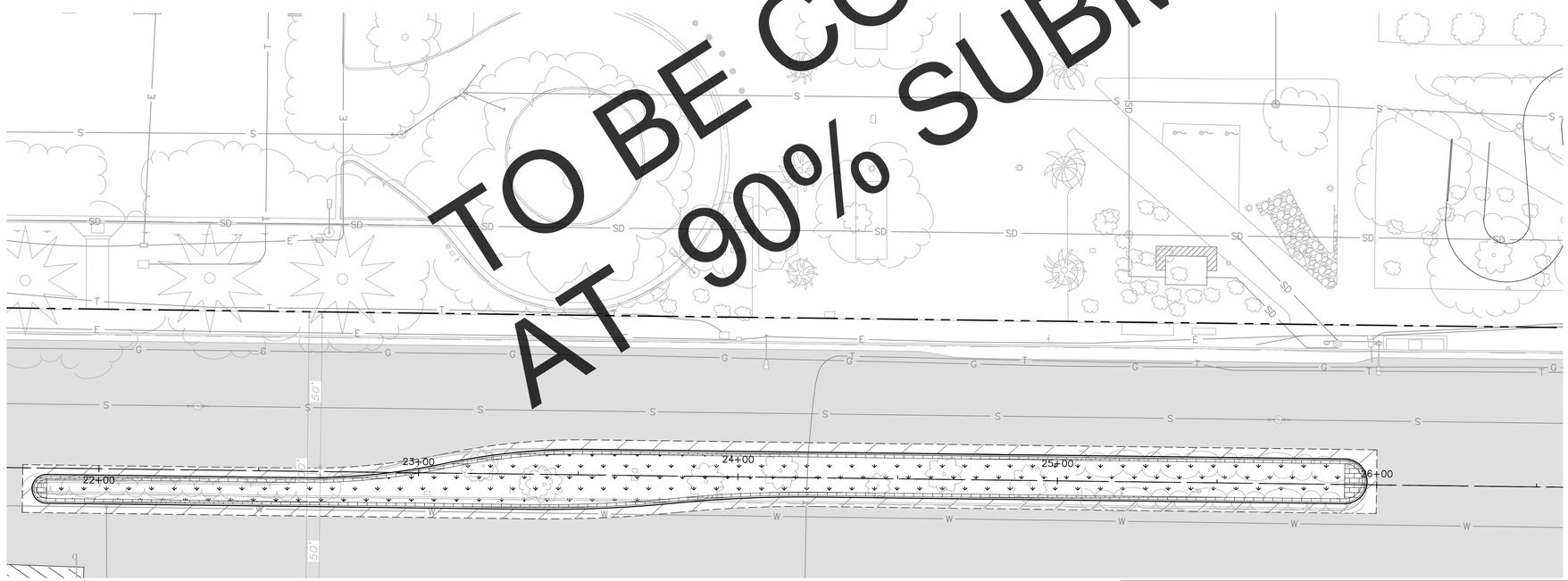
B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

FILE: XXXXX

CAL STATE UNIVERSITY, FULLERTON (CSUF)

ACCESS ROAD





TO BE COMPLETED AT 90% SUBMITTAL

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER
ALAN HEUSINKVELD
No. C 30-25
CIVIL
STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS

NUMBER	DESCRIPTION	DATE

	INITIALS	DATE
DRAWN	SR	10/26/2025
DESIGNED	SR	10/26/2025
REVIEWED	BC	10/26/2025
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WATER		
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FACILITIES		
GENERAL ENG		
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INSPECTION		
PARKS & REC		
AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

ON-SITE DETAILS

APPROVED: ACCEPTED:

DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED

SHEET 27 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

FILE: XXXXX

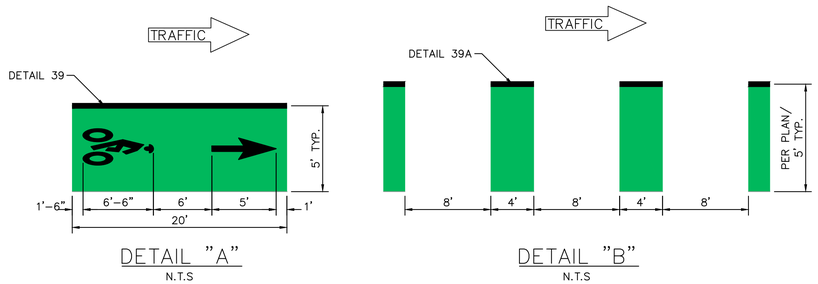
GENERAL SIGNING AND STRIPING NOTES

1. ALL MATERIAL AND WORK SHALL CONFORM TO THE LATEST EDITIONS OF CALTRANS STANDARD PLANS AND STANDARD SPECIFICATIONS AND CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
2. ALL TRAFFIC LINES AND PAVEMENT MARKINGS SHOWN SHALL BE INSTALLED AS THERMOPLASTIC BY THE CONTRACTOR (OR AGENCY), UNLESS OTHERWISE NOTED. ALL BIKE LANE "GREEN" LANES SHALL BE PAINT.
3. ALL CONFLICTING LINES AND MARKINGS SHALL BE REMOVED BY GRINDING. ALL CONFLICTING LINES AND MARKINGS SHALL BE REMOVED BY WET SANDBLASTING, AND INCLUDES REMOVAL OF RAISED PAVEMENT MARKERS.
4. ALL TURN ARROW MARKINGS SHALL BE TYPE IV (L OR R) UNLESS OTHERWISE NOTED.
5. ALL LANE STRIPING AT INTERSECTION APPROACHES WITHOUT CROSSWALKS OR LIMIT LINES SHALL END 10 FEET FROM THE EXTENSION OF THE INTERSECTING CURB LINE.
6. ALL LANE LINES AT INTERSECTION APPROACHES AND DEPARTURES SHALL BEGIN AND END WITH 50 FEET OF 6-INCH SOLID WHITE LINE.
7. PROPOSED LIMIT LINE SHOULD BE INSTALLED AT A MINIMUM OF 4 FEET BEHIND THE EXISTING CURB EXTENSION OR EDGE OF TRAVEL WAY (NO EXISTING CURB RAMP). IN THE CASE OF AN INTERSECTION WITH A CURB RAMP, THE LIMIT LINE SHALL BE PLACED BEHIND THE RAMP'S LANDING AREA, BUT IN NO CASE GREATER THAN 30 FEET BACK.
8. ALL SIGNING SHOWN HEREON SHALL BE INSTALLED, RELOCATED, OR REMOVED BY THE CONTRACTOR, UNLESS OTHERWISE NOTED.
9. ALL SIGNS ARE TO BE PER THE STATE OF CALIFORNIA SIGN SPECIFICATIONS AND SHALL BE MINIMUM 0.1 INCH THICK ALUMINUM SHEETING.
10. STRIPING SHALL BE MARKED OUT BY THE CONTRACTOR BY USE OF A THIN PAINTED LINE OVER A PULLED ROPE OR STRING. YELLOW MARKOUT IS TO BE USED FOR CENTERLINES AND YELLOW CROSSWALKS AND WHITE MARKOUT IS TO BE USED FOR ALL OTHER LINES. THE MARKOUT FOR DOUBLE YELLOW LIENS AND BARRIER LINES IS TO BE A SOLID THIN LINE. AT INTERSECTIONS WITH CURVES OR WIDTH CHANGES THE MARKOUT SHOULD BE PULLED ACROSS THE INTERSECTION TO ENSURE NO OFFSETS IN THE STRIPING. THE MARKOUT IS TO BE APPROVED BY THE CITY TRAFFIC ENGINEER FOR ALIGNMENT PRIOR TO FINAL INSTALLATION. A MINIMUM OF ONE WEEK NOTICE BY THE CITY TRAFFIC ENGINEER FOR APPROVAL OF STRIPING.
11. LOCATIONS OF PROPOSED SIGNS ARE SHOWN TO SCALE ON THE PLAN, UNLESS OTHERWISE NOTED.

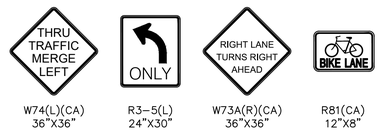
SIGNING AND STRIPING CONSTRUCTION NOTES

(1) INSTALL BIKE LANE ARROW PER CALTRANS STANDARD PLAN A24C.
(2) INSTALL BIKE LANE SYMBOL WITH PERSON PER CALTRANS STANDARD PLAN A24C.
(3) INSTALL PAVEMENT MARKING AS NOTED PER CALTRANS STANDARD PLAN A24A.
(4) INSTALL 12" LIMIT LINE PER CALTRANS STANDARD PLAN A24G.
(5) INSTALL "KEEP" LEGEND PER CALTRANS STANDARD PLAN A24E.
(6) INSTALL WHITE CONTINENTAL CROSSWALK PER CALTRANS STANDARD A24F.
(7) INSTALL 6" WHITE STRIPE. LENGTH NOTED PER PLAN.
(8) INSTALL 6" WHITE LANE LINE PATTERN (DETAIL 9) PER CALTRANS STANDARD PLAN A20A.
(9) INSTALL 6" YELLOW TWO-DIRECTIONAL NO PASSING PATTERN (DETAIL 22) PER CALTRANS STANDARD PLAN A20A.
(10) INSTALL 8" WHITE LANE LINE PATTERN (DETAIL 37B) PER CALTRANS STANDARD PLAN A20C.
(11) INSTALL 8" WHITE CHANNELIZING LINE PATTERN (DETAIL 38) PER CALTRANS STANDARD PLAN A20D. LENGTH NOTED PER PLAN.
(12) INSTALL 6" WHITE BIKE LANE LINE PATTERN (DETAIL 39) PER CALTRANS STANDARD PLAN A20D.
(13) INSTALL 6" WHITE INTERSECTION LINE BIKE LANE PATTERN (DETAIL 39A) PER CALTRANS STANDARD PLAN A20D. LENGTH NOTED PER PLAN. SEE DETAIL "B" ON SHEET 28.
(14) INSTALL 6" WHITE DIAGONAL LINES AT 45 DEG, 20' ON CENTER.
(15) INSTALL GREEN PAINT WITH CHROMACITY COORDINATES PER FHWA INTERIM APPROVAL IA-14, PER DETAILS "A" OR "B" ON SHEET 28.
(16) FURNISH AND INSTALL NEW SIGN AND POST AS NOTED. MOUNT TO EXISTING POST IF APPLICABLE.
(17) REMOVE CONFLICTING STRIPING OR PAVEMENT MARKING WITH WET SANDBLASTING.
(18) INSTALL "CLEAR" LEGEND PER CALTRANS STANDARD PLAN A24E.
(19) INSTALL 8" WHILE LANE LINE PATTERN (DETAIL 38A) PER CALTRANS STANDARD PLAN A20D.
(20) INSTALL 8" WHILE LANE LINE PATTERN (DETAIL 38) PER CALTRANS STANDARD PLAN A20D.
(21) INSTALL 6" YELLOW DOUBLE LANE LINE PATTERN (DETAIL 29) PER CALTRANS STANDARD PLAN A20B.
(22) INSTALL 4" YELLOW DASHED CENTERLINE STRIPING PER CA MUTCD FIGURE 9C-2.
(23) INSTALL PEDESTRIAN STENCIL.
(24) INSTALL 4" WHITE SOLID EDGELINE (DETAIL 27B) PER CALTRANS STANDARD PLAN A20B.
(25) INSTALL TYPE IV(DOUBLE ARROW) PAVEMENT MARKING AS SHOWN.

PROPOSED BIKE LANE STRIPING DETAILS



PROPOSED SIGN LEGEND



W74(L)(CA) 36"X36" | R3-5(L) 24"X30" | W73A(R)(CA) 36"X36" | R81(CA) 12"X8"

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER RYAN PALE NOT FOR CONSTRUCTION CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

REVISIONS

NUMBER	DESCRIPTION	DATE

	INITIALS	DATE
DRAWN	SP	11/26/2025
DESIGNED	RL	11/26/2025
REVIEWED	RC	11/26/2025
STREET		
SEWER		
DRAINAGE		
WATER		
TRAFFIC		
UTILITY/ELEC		
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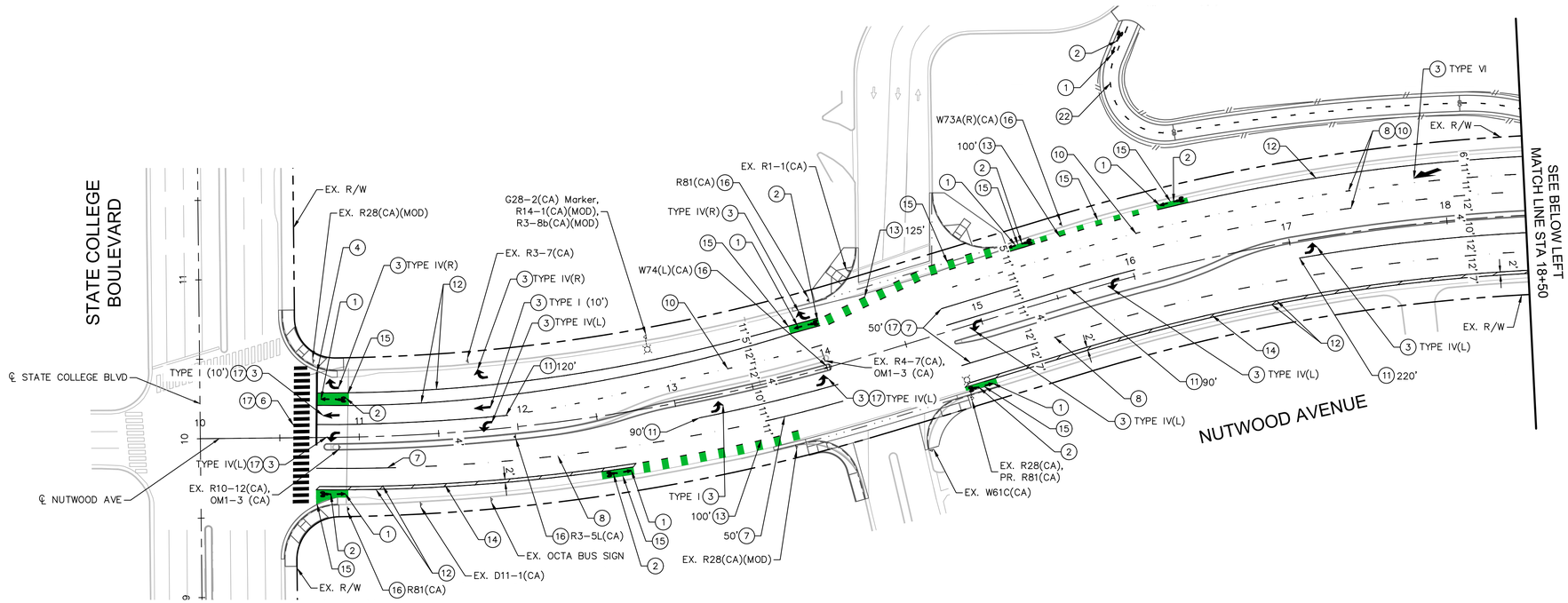
CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

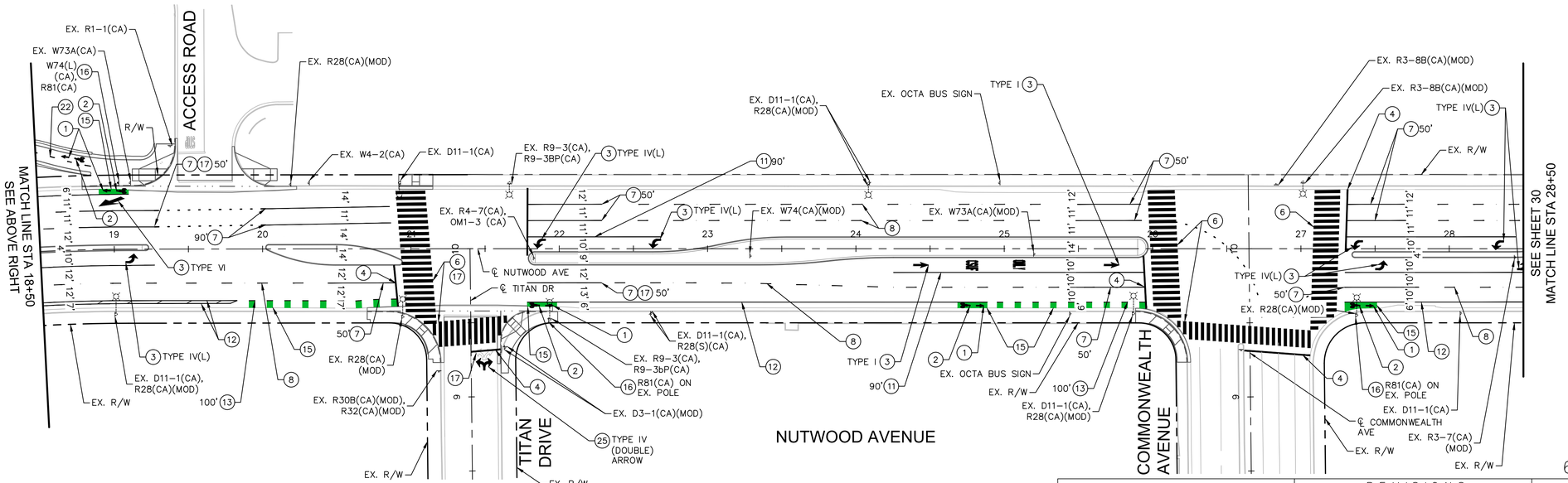
SIGNING AND STRIPING PLANS
GENERAL NOTES AND DETAILS

APPROVED: _____ DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR
ACCEPTED: _____ DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED
SHEET 28 OF 65 SHEETS
B.M.: CITY OF FULLERTON BM NO.: XX-XX ELEV = XXX.XX' DESCRIPTION
FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT





SIGNING AND STRIPING CONSTRUCTION NOTES

1. INSTALL BIKE LANE ARROW PER CALTRANS STANDARD PLAN A24C.
2. INSTALL BIKE LANE SYMBOL WITH PERSON PER CALTRANS STANDARD PLAN A24C.
3. INSTALL PAVEMENT MARKING AS NOTED PER CALTRANS STANDARD PLAN A24A.
4. INSTALL 12" LIMIT LINE PER CALTRANS STANDARD PLAN A24G.
5. INSTALL "KEEP" LEGEND PER CALTRANS STANDARD PLAN A24E.
6. INSTALL WHITE CONTINENTAL CROSSWALK PER CALTRANS STANDARD A24F.
7. INSTALL 6" WHITE STRIPE. LENGTH NOTED PER PLAN.
8. INSTALL 6" WHITE LANE LINE PATTERN (DETAIL 9) PER CALTRANS STANDARD PLAN A20A.
9. INSTALL 6" YELLOW TWO-DIRECTIONAL NO PASSING PATTERN (DETAIL 22) PER CALTRANS STANDARD PLAN A20A.
10. INSTALL 8" WHITE LANE LINE PATTERN (DETAIL 37B) PER CALTRANS STANDARD PLAN A20C.
11. INSTALL 8" WHITE CHANNELIZING LINE PATTERN (DETAIL 38) PER CALTRANS STANDARD PLAN A20D. LENGTH NOTED PER PLAN.
12. INSTALL 6" WHITE BIKE LANE LINE PATTERN (DETAIL 39) PER CALTRANS STANDARD PLAN A20D.
13. INSTALL 6" WHITE INTERSECTION LINE BIKE LANE PATTERN (DETAIL 39A) PER CALTRANS STANDARD PLAN A20D. LENGTH NOTED PER PLAN. SEE DETAIL "B" ON SHEET 28.
14. INSTALL 6" WHITE DIAGONAL LINES AT 45 DEG, 20' ON CENTER.
15. INSTALL GREEN PAINT WITH CHROMACITY COORDINATES PER FHWA INTERIM APPROVAL IA-14, PER DETAILS "A" OR "B" ON SHEET 28.
16. FURNISH AND INSTALL NEW SIGN AND POST AS NOTED. MOUNT TO EXISTING POST IF APPLICABLE.
17. REMOVE CONFLICTING STRIPING OR PAVEMENT MARKING WITH WET SANDBLASTING.
18. INSTALL "CLEAR" LEGEND PER CALTRANS STANDARD PLAN A24E.
19. INSTALL 8" WHILE LANE LINE PATTERN (DETAIL 38A) PER CALTRANS STANDARD PLAN A20D.
20. INSTALL 8" WHILE LANE LINE PATTERN (DETAIL 38) PER CALTRANS STANDARD PLAN A20D.
21. INSTALL 6" YELLOW DOUBLE LANE LINE PATTERN (DETAIL 29) PER CALTRANS STANDARD PLAN A20B.
22. INSTALL 4" YELLOW DASHED CENTERLINE STRIPING PER CA MUTCD FIGURE 9C-2.
23. INSTALL PEDESTRIAN STENCIL.
24. INSTALL 4" WHITE SOLID EDGELINE (DETAIL 27B) PER CALTRANS STANDARD PLAN A20B.
25. INSTALL TYPE IV(DOUBLE ARROW) PAVEMENT MARKING AS SHOWN.

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER RYAN PAUL CIVIL STATE OF CALIFORNIA
NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS

NUMBER	DESCRIPTION	DATE

	INITIALS	DATE
DRAWN	SP	11/26/2025
DESIGNED	RL	11/26/2025
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STREET		
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TRAFFIC		
UTILITY/ELEC		
LANDSCAPE		
FACILITIES		
GENERAL ENG		
DESIGN ENG		
INSPECTION		
PARKS & REC		
AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

SIGNING AND STRIPING PLANS
NUTWOOD AVENUE 10+00 TO 28+50

APPROVED: _____ DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: _____ DATE PUBLIC WORKS DIRECTOR

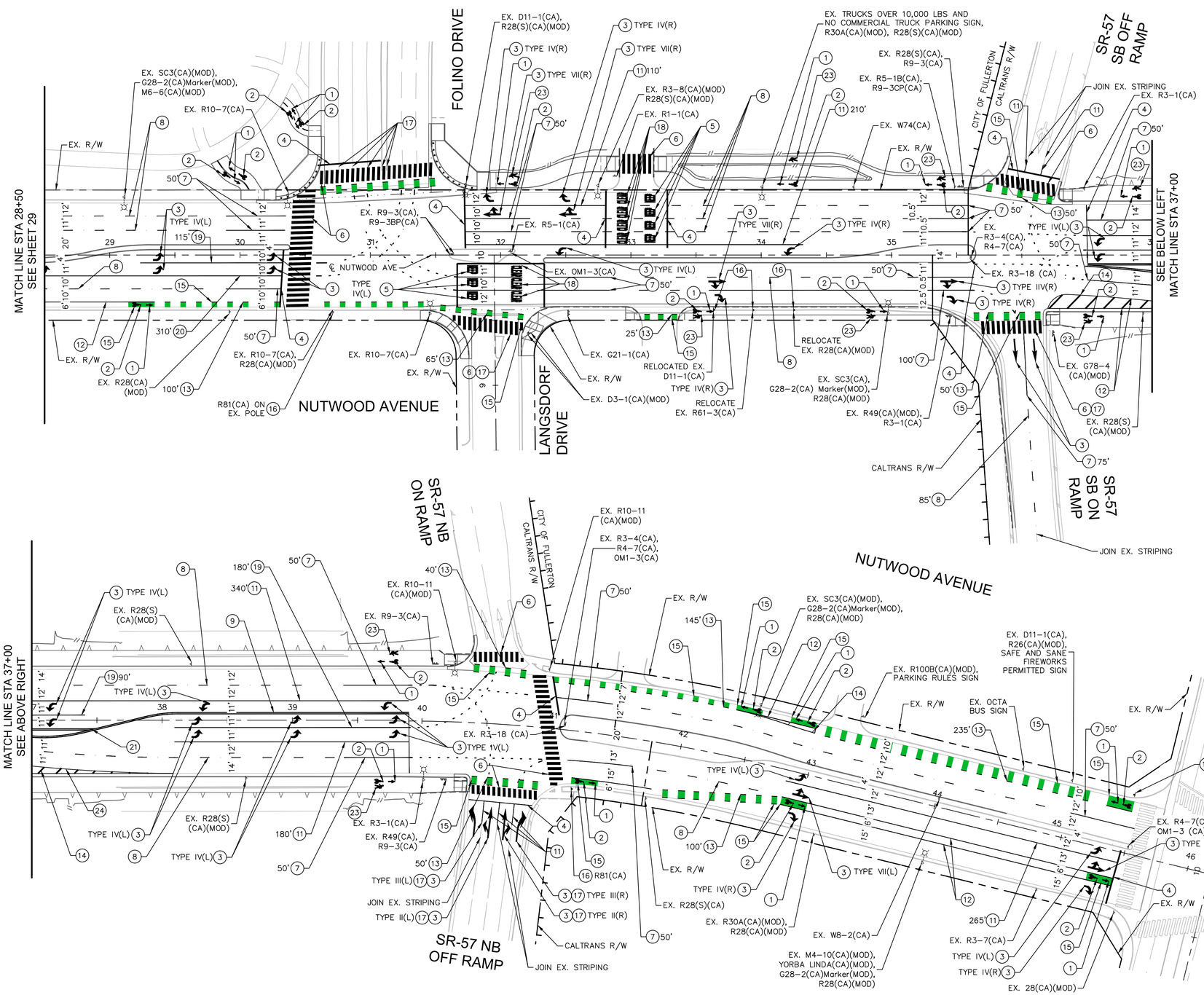
SCALE: AS NOTED

SHEET 29 OF 65 SHEETS

B.M.: CITY OF FULLERTON BM NO.: XX-XX ELEV = XXX.XX' DESCRIPTION

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



SIGNING AND STRIPING CONSTRUCTION NOTES

1. INSTALL BIKE LANE ARROW PER CALTRANS STANDARD PLAN A24C.
2. INSTALL BIKE LANE SYMBOL WITH PERSON PER CALTRANS STANDARD PLAN A24C.
3. INSTALL PAVEMENT MARKING AS NOTED PER CALTRANS STANDARD PLAN A24A.
4. INSTALL 12" LIMIT LINE PER CALTRANS STANDARD PLAN A24G.
5. INSTALL "KEEP" LEGEND PER CALTRANS STANDARD PLAN A24E.
6. INSTALL WHITE CONTINENTAL CROSSWALK PER CALTRANS STANDARD A24F.
7. INSTALL 6" WHITE STRIPE. LENGTH NOTED PER PLAN.
8. INSTALL 6" WHITE LANE LINE PATTERN (DETAIL 9) PER CALTRANS STANDARD PLAN A20A.
9. INSTALL 6" YELLOW TWO-DIRECTIONAL NO PASSING PATTERN (DETAIL 22) PER CALTRANS STANDARD PLAN A20A.
10. INSTALL 8" WHITE LANE LINE PATTERN (DETAIL 37B) PER CALTRANS STANDARD PLAN A20C.
11. INSTALL 8" WHITE CHANNELIZING LINE PATTERN (DETAIL 38) PER CALTRANS STANDARD PLAN A20D. LENGTH NOTED PER PLAN.
12. INSTALL 6" WHITE BIKE LANE LINE PATTERN (DETAIL 39) PER CALTRANS STANDARD PLAN A20D.
13. INSTALL 6" WHITE INTERSECTION LINE BIKE LANE PATTERN (DETAIL 39A) PER CALTRANS STANDARD PLAN A20D. LENGTH NOTED PER PLAN. SEE DETAIL "B" ON SHEET 28.
14. INSTALL 6" WHITE DIAGONAL LINES AT 45 DEG, 20' ON CENTER.
15. INSTALL GREEN PAINT WITH CHROMACITY COORDINATES PER FHWA INTERIM APPROVAL IA-14, PER DETAILS "A" OR "B" ON SHEET 28.
16. FURNISH AND INSTALL NEW SIGN AND POST AS NOTED. MOUNT TO EXISTING POST IF APPLICABLE.
17. REMOVE CONFLICTING STRIPING OR PAVEMENT MARKING WITH WET SANDBLASTING.
18. INSTALL "CLEAR" LEGEND PER CALTRANS STANDARD PLAN A24E.
19. INSTALL 8" WHILE LANE LINE PATTERN (DETAIL 38A) PER CALTRANS STANDARD PLAN A20D.
20. INSTALL 8" WHILE LANE LINE PATTERN (DETAIL 38) PER CALTRANS STANDARD PLAN A20D.
21. INSTALL 6" YELLOW DOUBLE LANE LINE PATTERN (DETAIL 29) PER CALTRANS STANDARD PLAN A20B.
22. INSTALL 4" YELLOW DASHED CENTERLINE STRIPING PER CA MUTCD FIGURE 9C-2.
23. INSTALL PEDESTRIAN STENCIL.
24. INSTALL 4" WHITE SOLID EDGELINE (DETAIL 27B) PER CALTRANS STANDARD PLAN A20B.
25. INSTALL TYPE IV(DOUBLE ARROW) PAVEMENT MARKING AS SHOWN.

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER RYAN PAUL CIVIL STATE OF CALIFORNIA NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS

NUMBER	DESCRIPTION	DATE

	INITIALS	DATE
DRAWN	SP	11/26/2025
DESIGNED	RL	11/26/2025
REVIEWED	RC	11/26/2025
STREET		
SEWER		
DRAINAGE		
WATER		
TRAFFIC		
UTILITY/ELEC		
LANDSCAPE		
FACILITIES		
GENERAL ENG		
DESIGN ENG		
INSPECTION		
PARKS & REC		
AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

SIGNING AND STRIPING PLANS
NUTWOOD AVENUE 28+50 TO 46+00

APPROVED:
DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED:
DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED

SHEET 30 OF 65 SHEETS

B.M.: CITY OF FULLERTON BM NO.: XX-XX ELEV = XXX.XX'
DESCRIPTION

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

GENERAL TRAFFIC SIGNAL NOTES:

1. ALL MATERIALS AND EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
2. THE GPS UNIVERSAL TIME BASE UNIT AND ANTENNA SHALL BE MOUNTED PER MANUFACTURER'S GUIDELINES. THE GPS UNIVERSAL TIME BASE UNIT ANTENNA SHALL BE LOCATED ON THE STREET SIDE OF THE TOP OF THE CONTROLLER CABINET.
3. ALL WIRING SHALL BE MARKED (TAGGED) WITHIN THE CONTROLLER CABINET FOR PHASE IDENTIFICATION.
4. ALL SIGNAL EQUIPMENT SHALL BE WIRED IN ACCORDANCE WITH THE SIGNAL PHASE DIAGRAM.
5. (XXXX) INDICATES LOOP ASSIGNMENT IN THE CONTROLLER CABINET. EACH LOOP ASSIGNMENT SHALL HAVE A SEPARATE LEAD–IN CABLE TO THE CONTROLLER.
6. ALL NEW POLES, CONDUIT, AND PULL BOXES SHALL BE INSTALLED OUTSIDE OF CURB RAMPS.
7. ALL NEW UNDERGROUND CONDUITS SHALL BE SCHEDULE 80 PVC, CONFORMING TO 86–1.02B OF THE CALTRANS STANDARD SPECIFICATIONS 2024 EDITION UNLESS OTHERWISE APPROVED BY THE ENGINEER.
8. NEW VEHICLE HEADS SHALL BE 12" L.E.D. (LIGHT EMITTING DIODE) PER LOS ANGELES COUNTY DPW SPECIFICATIONS.
9. ALL NEW PEDESTRIAN PUSH BUTTONS SHALL BE INSTALLED IN CONFORMANCE WITH ADA REQUIREMENTS.
10. THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (USA) BY DIALING 811 DURING USA'S BUSINESS HOURS ON OR BEFORE THE THIRD WORK DAY PRIOR TO ANY EXCAVATION. THE CONTRACTOR IS REQUIRED TO ASCERTAIN THE EXACT LOCATION OF THE UNDERGROUND FACILITIES PRIOR TO DOING WORK THAT MAY DAMAGE THE FACILITIES OR INTERFERE WITH THEIR SERVICE.
11. ALL TRAFFIC LINES AND PAVEMENT MARKINGS SHALL BE INSTALLED WITH THERMOPLASTIC BY THE CONTRACTOR (OR AGENCY), UNLESS OTHERWISE NOTED.
12. EXISTING RAISED PAVEMENT MARKERS DAMAGED DURING REMOVAL SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE AGENCY.

TRAFFIC SIGNAL CONSTRUCTION NOTES:

1 REUSE EXISTING CONTROLLER AND EQUIPMENT. REWIRE INTERSECTION FOR INTENDED OPERATION. CONTRACTOR TO IMPLEMENT LEADING PEDESTRIAN INTERVAL (LPI). INTERVAL TO BE DETERMINED BY THE CITY ENGINEER.

2 NOT IN USE.

3 FURNISH AND INSTALL PER SPECIFICATIONS NEW R1–5 BLANK OUT SIGN, MOUNTED ON SIGNAL POLE. CONNECT NEW BLANK OUT SIGN TO THE TRAFFIC SIGNAL CABINET OUTPUT TERMINAL.

4 NOT IN USE.

5 INSTALL NO. 5 PULL BOX.

6 FURNISH AND INSTALL 2" PVC CONDUIT.

7 REMOVE AND SALVAGE EXISTING PUSH BUTTON. FURNISH AND INSTALL ADA COMPLIANT PUSH BUTTON (POLARA iNS2 OR CITY APPROVED EQUAL) ON POLE. REUSE EXISTING WIRES IF APPLICABLE. SEE POLE SCHEDULE FOR DETAILS.

8 FURNISH AND INSTALL 4"PVC CONDUIT.

9 FURNISH AND INSTALL TYPE E LOOP DETECTOR PER CALTRANS STANDARD PLAN ES–5B.

10 REUSE EXISTING CONTROLLER AND EQUIPMENT. REWIRE INTERSECTION FOR INTENDED OPERATION. CONTRACTOR TO IMPLEMENT LEADING PEDESTRIAN INTERVAL (LPI). INTERVAL TO BE DETERMINED BY CALTRANS.

11 SPLICE NEW LOOP WIRES TO EXISTING DLC(S) FOR INTENDED OPERATION. REUSE EXISTING DLC STUB OUTS.

12 NOT IN USE.

13 RELOCATE EXISTING TYPE 332 CABINET TO NEW FOUNDATION. REUSE EXISTING CONTROLLER AND EQUIPMENT. REWIRE INTERSECTION FOR INTENDED OPERATION. CONTRACTOR TO IMPLEMENT LEADING PEDESTRIAN INTERVAL (LPI). INTERVAL TO BE DETERMINED BY CALTRANS.

14 REMOVE EXISTING STANDARD FOUNDATION COMPLETE AS INDICATED ON PLANS.

15 NOT IN USE.

16 NOT IN USE.

17 NOT IN USE.

18 NOT IN USE.

19 INSTALL NO. 6 PULL BOX.

20 FURNISH AND INSTALL 1.5" PVC CONDUIT.

21 REUSE EXISTING CONTROLLER AND EQUIPMENT. REWIRE INTERSECTION FOR INTENDED OPERATION. CONTRACTOR TO IMPLEMENT LEADING PEDESTRIAN INTERVAL (LPI). INTERVAL TO BE DETERMINED BY THE CITY ENGINEER. CONTRACTOR TO ADJUST VIDEO DETECTION ZONES AS SHOWN ON PLANS.

22 REMOVE AND SALVAGE EXISTING PUSH BUTTON. FURNISH AND INSTALL ADA COMPLIANT PUSH BUTTON (POLARA iNS2 OR CALTRANS APPROVED EQUAL) ON POLE. REUSE EXISTING WIRES IF APPLICABLE. SEE POLE SCHEDULE FOR DETAILS.

23 FURNISH AND INSTALL 3.5" PVC CONDUIT.

AB ABANDON. IF APPLIED TO CONDUIT, REMOVE CONDUCTORS.

BC INSTALL PULL BOX IN EXISTING CONDUIT RUN.

CC CONNECT NEW AND EXISTING CONDUIT. REMOVE EXISTING WIRES AND INSTALL WIRES AS INDICATED.

PP PROTECT IN PLACE.

RC REMOVE AND BECOME PROPERTY OF CONTRACTOR.

RL RELOCATE EQUIPMENT.

RS REMOVE AND SALVAGE.

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER RYAN PAUL CIVIL STATE OF CALIFORNIA NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS					
NUMBER	DESCRIPTION	DATE		INITIALS	DATE
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			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS–BUILT		

CITY OF FULLERTON

PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

TRAFFIC SIGNAL PLAN

GENERAL AND CONSTRUCTION NOTES

APPROVED: _____ DATE
CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: _____ DATE
PUBLIC WORKS DIRECTOR

SCALE: AS NOTED

SHEET 31 OF 65 SHEETS

B.M.: CITY OF FULLERTON BM NO.: XX–XX ELEV = XXX.XX'
DESCRIPTION

FILE: XXXXX

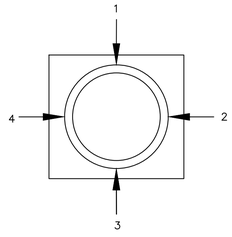
CONDUCTOR SCHEDULE							
AWG	CIRCUIT	1	2	3	4	5	6
#14	ø2	3	3	3	–	–	3
	ø4	3	3	3	3	3	6
	ø8	–	3	3	–	–	3
	ø2P	–	2	2	–	–	4
	ø4P	–	–	2	2	2	4
	ø2PPB	–	1	1	–	–	1
	ø4PPB	–	–	1	–	–	2
	PPB COMMON	–	1	1	–	–	2
	SPARES	3	3	3	3	3	6
	TOTAL	9	16	16	8	8	38
DLC	ø2 DETECTOR	–	–	–	–	1	1
	ø4 DETECTOR	–	–	2	–	–	2
	ø8 DETECTOR	2	2	2	1	1	3
	TOTAL	2	2	4	1	2	6
#10	LUMINAIRE	2	2	2	2	2	2
	SIGNAL COMMON	1	1	1	1	1	1
	TOTAL	3	3	3	3	3	3
CONDUIT SIZE(INCH)		2"	2"	2"	2"	2"	2–3"
EXISTING FILL PERCENT		13%	18%	22%	10%	10%	9%

ALL CONDUIT AND CONDUCTORS ARE EXISTING UNLESS OTHERWISE NOTED.
(N)=INDICATES NEW EQUIPMENT.

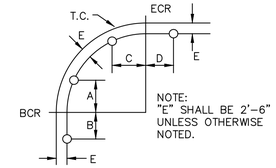
CONDUCTOR SCHEDULE IS PROVIDED FOR AN INSTALLATION GUIDE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FURNISH THE CORRECT CONDUCTORS FOR THE INTENDED OPERATION WITH 3 SPARES PER POLE.

PHASE DIAGRAM

	GROUP A		GROUP B	
RING A	BLANK		BLANK	
	ø1	ø2	ø3	ø4
RING B	BLANK	BLANK	BLANK	
	ø5	ø6	ø7	ø8



QUADRANT
PEDESTRIAN PUSH BUTTON LOCATION



POLE LOCATION
(NO SCALE)

POLE SCHEDULE													
NO.	STANDARD			LUMINAIRE HPSV	VEH. SIG. MTG		PED SIGNAL	PPB*(N)			S.N.S	POLE LOCATION (SEE DETAIL "A")						REMARKS
	TYPE	SIG. M.A	LUM. M.A.		MAST ARM	POLE	MTG.	ARROW	ø	QUAD		A	B	C	D	E		
(A)	19–3–70	30'	12'	200W	MAS	SV–1–T	SP–1–CS	–	–	–	Nutwood Ave	EXISTING						–
(B)	19–3–100(N)	30'(N)	12'(N)	200W(N)	2–MAS(N)	SV–1–T(N)	SP–1–CS(N)	⟵	2	2	Titan Dr(N)	SEE DETAIL "A"						–
(C)	15–15–88	–	12'	200W	–	–	–	⟶	4	2	–	EXISTING						–
(D)	1A	–	–	–	–	–	TP–1–T	⟶	2	1	–	EXISTING						–
(E)	TYPE 2 POST	–	–	–	–	–	–	–	–	1	–	EXISTING						–
(F)	19–2–129	30'	12'	200W	MAS	SV–2–TB	SP–1–CS	⟵	4	–	Titan Dr	EXISTING						–

ALL EQUIPMENT IS EXISTING UNLESS OTHERWISE NOTED.
(N)=INDICATES NEW EQUIPMENT.
(R)=INDICATES REMOVE EQUIPMENT.

ALL NEW SIGNAL MOUNTINGS SHALL BE PER CALTRANS STANDARD PLANS 2025 EDITION. SEE PLANS ES–4A TO ES–4E.

*ALL NEW PEDESTRIAN PUSH BUTTONS SHALL BE ACCESSIBLE PEDESTRIAN SIGNAL COMPLIANT WITH AUDIBLE SPEECH AND VIBROTACTILE FEATURES ACTIVE.

LEGEND

- PROPOSED VEHICLE SIGNAL HEAD, THREE 12" SECTIONS (R, Y, G)
- EXISTING VEHICLE SIGNAL HEAD, THREE 12" SECTIONS (R, Y, G)
- PROPOSED TYPE E LOOP DETECTOR
- EXISTING LOOP DETECTOR

CONSTRUCTION NOTES: (THIS SHEET ONLY)

1 REUSE EXISTING CONTROLLER AND EQUIPMENT. REWIRE INTERSECTION FOR INTENDED OPERATION. CONTRACTOR TO IMPLEMENT LEADING PEDESTRIAN INTERVAL (LPI). INTERVAL TO BE DETERMINED BY THE CITY ENGINEER.

6 FURNISH AND INSTALL 2" PVC CONDUIT.

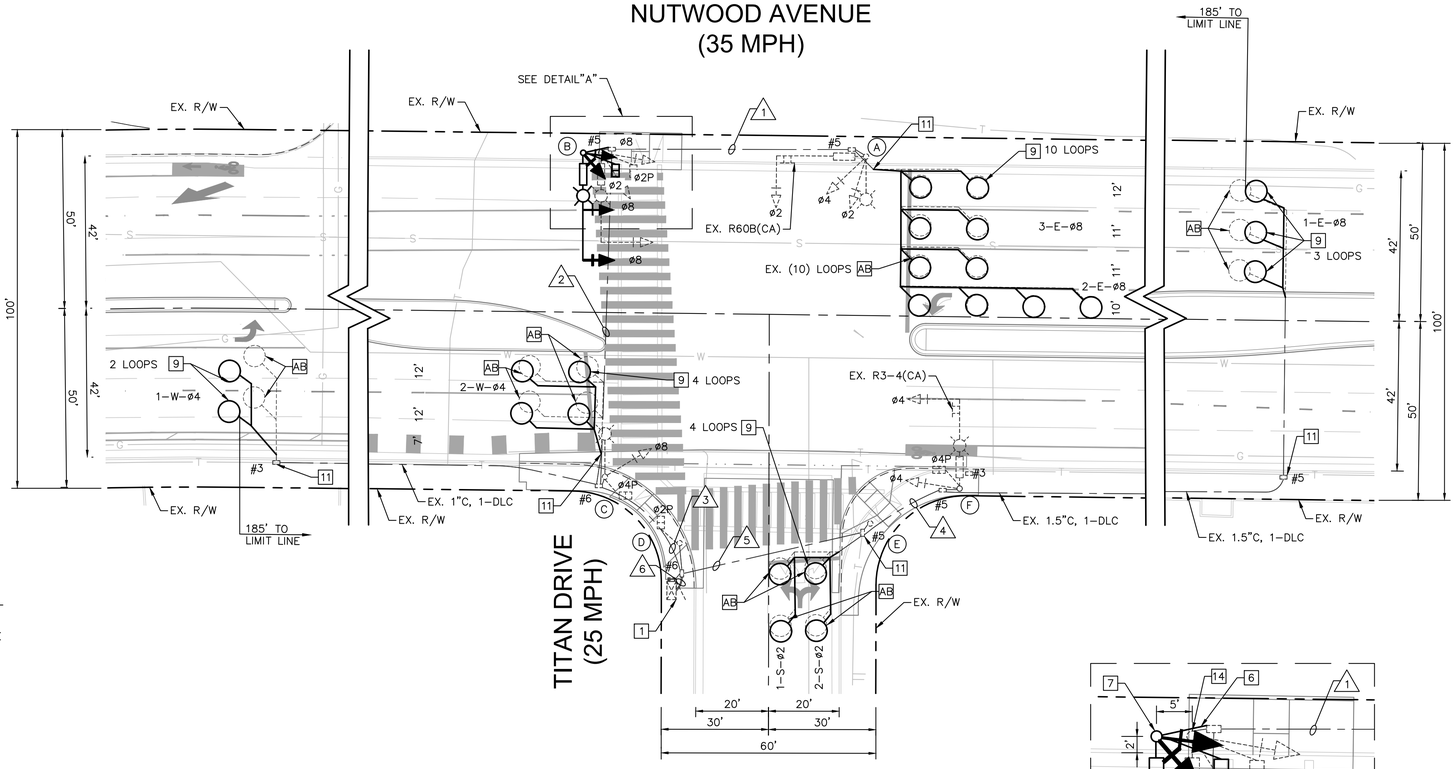
7 REMOVE AND SALVAGE EXISTING PUSH BUTTON. FURNISH AND INSTALL ADA COMPLIANT PUSH BUTTON (POLARA iNS2 OR CITY APPROVED EQUAL) ON POLE. REUSE EXISTING WIRES IF APPLICABLE. SEE POLE SCHEDULE FOR DETAILS.

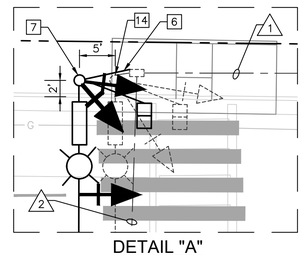
9 FURNISH AND INSTALL TYPE E LOOP DETECTOR PER CALTRANS STANDARD PLAN ES–5B.

11 SPLICE NEW LOOP WIRES TO EXISTING DLC(S) FOR INTENDED OPERATION. REUSE EXISTING DLC STUB OUTS.

14 REMOVE EXISTING STANDARD FOUNDATION COMPLETE AS INDICATED ON PLANS.

AB ABANDON. IF APPLIED TO CONDUIT, REMOVE CONDUCTORS.





NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER RYAN PAUL NOT FOR CONSTRUCTION CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE			
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			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS–BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

TRAFFIC SIGNAL PLAN
NUTWOOD AVENUE AT TITAN DRIVE

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR
ACCEPTED: DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED
SHEET 32 OF 65 SHEETS
B.M.: CITY OF FULLERTON BM NO.: XX–XX ELEV = XXX.XX' DESCRIPTION
FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

CONDUCTOR SCHEDULE									
AWG SIZE OR CABLE TYPE	POLE	CIRCUIT	CONDUIT RUN						
			1	2	3	4	5	6	7
CONDUCTORS: NO. 14 CABLES / 12 / 3	(A)	ø6,ø6P	1 / 1	– / –	1 / 1	1 / 1	1 / 1	– / –	– / –
	(B)	ø4,ø4P	1 / 1	– / –	1 / 1	1 / 1	– / –	– / –	– / –
	(D)	ø5,ø6P	1 / 1	1 / 1	– / –	– / –	– / –	– / –	– / –
	(E)	ø5,ø2,ø4	3 / –	– / –	– / –	– / –	– / –	3 / –	– / –
	(F)	ø4,ø6,ø4P	– / –	– / –	– / –	– / –	– / –	2 / 1	2 / 1
TOTAL CABLES 12–CONDUCTOR/3–CONDUCTOR			6 / 3	1 / 1	2 / 2	2 / 2	1 / 1	5 / 1	2 / 1
BLANK OUT SIGN CABLE(N)			1(N)	–	1(N)	1(N)	1(N)	–	–
#10	LUMINAIRE		2	2	2	2	2	2	2
RG59U	VIDEO DET. COAX		3	–	1	1	1	2	1
#16	VIDEO DET. SERVICE		3	–	1	1	1	2	1
6PR#9	INTERCONNECT		1	–	–	–	–	1	–
CONDUIT SIZE(INCH)			2–4"	3"	3"	3"	3"	4"	3"
EXISTING FILL PERCENT			10%	7%	13%	13%	8%	16%	12%

ALL CONDUIT AND CONDUCTORS ARE EXISTING UNLESS OTHERWISE NOTED.
(N)=INDICATES NEW EQUIPMENT.

CONDUCTOR SCHEDULE IS PROVIDED FOR AN INSTALLATION GUIDE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FURNISH THE CORRECT CONDUCTORS FOR THE INTENDED OPERATION WITH 3 SPARES PER POLE.

CONSTRUCTION NOTES: (THIS SHEET ONLY)

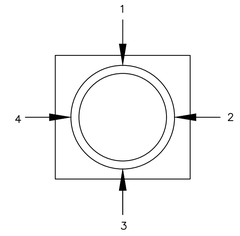
3 FURNISH AND INSTALL PER SPECIFICATIONS NEW R1–5 BLANK OUT SIGN, MOUNTED ON SIGNAL POLE. CONNECT NEW BLANK OUT SIGN TO THE TRAFFIC SIGNAL CABINET OUTPUT TERMINAL.

7 REMOVE AND SALVAGE EXISTING PUSH BUTTON. FURNISH AND INSTALL ADA COMPLIANT PUSH BUTTON (POLARA iNS2 OR CITY APPROVED EQUAL) ON POLE. REUSE EXISTING WIRES IF APPLICABLE. SEE POLE SCHEDULE FOR DETAILS.

21 REUSE EXISTING CONTROLLER AND EQUIPMENT. REWIRE INTERSECTION FOR INTENDED OPERATION. CONTRACTOR TO IMPLEMENT LEADING PEDESTRIAN INTERVAL (LPI). INTERVAL TO BE DETERMINED BY THE CITY ENGINEER. CONTRACTOR TO ADJUST VIDEO DETECTION ZONES AS SHOWN ON PLANS.

PHASE DIAGRAM

	GROUP A		GROUP B	
RING A	BLANK	→	BLANK	ø6+ø4
	ø1	ø2	ø3	ø4
RING B	ø4+ø5	←→	BLANK	BLANK
	ø5	ø6	ø7	ø8



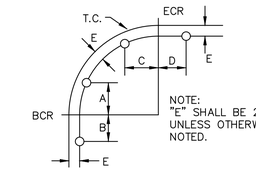
QUADRANT
PEDESTRIAN PUSH BUTTON LOCATION

POLE SCHEDULE											
NO.	STANDARD			LUMINAIRE HPSV	VEH. SIG. MTG		PED SIGNAL	7 PPB*			S.N.S	POLE LOCATION (SEE DETAIL "A")					REMARKS
	TYPE	SIG. M.A	LUM. M.A.		MAST ARM	POLE	MTG.	ARROW	ø	QUAD		A	B	C	D	E	
(A)	19–4–129	25'	12'	200W	MAS	SV–1–T	SP–1–CS	→	4	2	Folino Dr	EXISTING					–
(B)	15	–	12'	200W	–	SV–1–T	SP–1–CS	←	6	3	–	EXISTING					–
(C)	15	–	12'	200W	–	–	–	–	–	3	–	EXISTING					–
(D)	15	–	12'	200W	–	SV–2–TA	SP–1–CS	←	6	–	–	EXISTING					–
(E)	24–4–129	35'	12'	200W	MAS/MAS	SV–2–TB	–	–	–	–	Folino Dr	EXISTING					R73–6(CA)
(F)	19–2–129	25'	12'	200W	MAS	SV–2–TB	SP–1–CS	→	4	4	Nutwood Ave	EXISTING					–

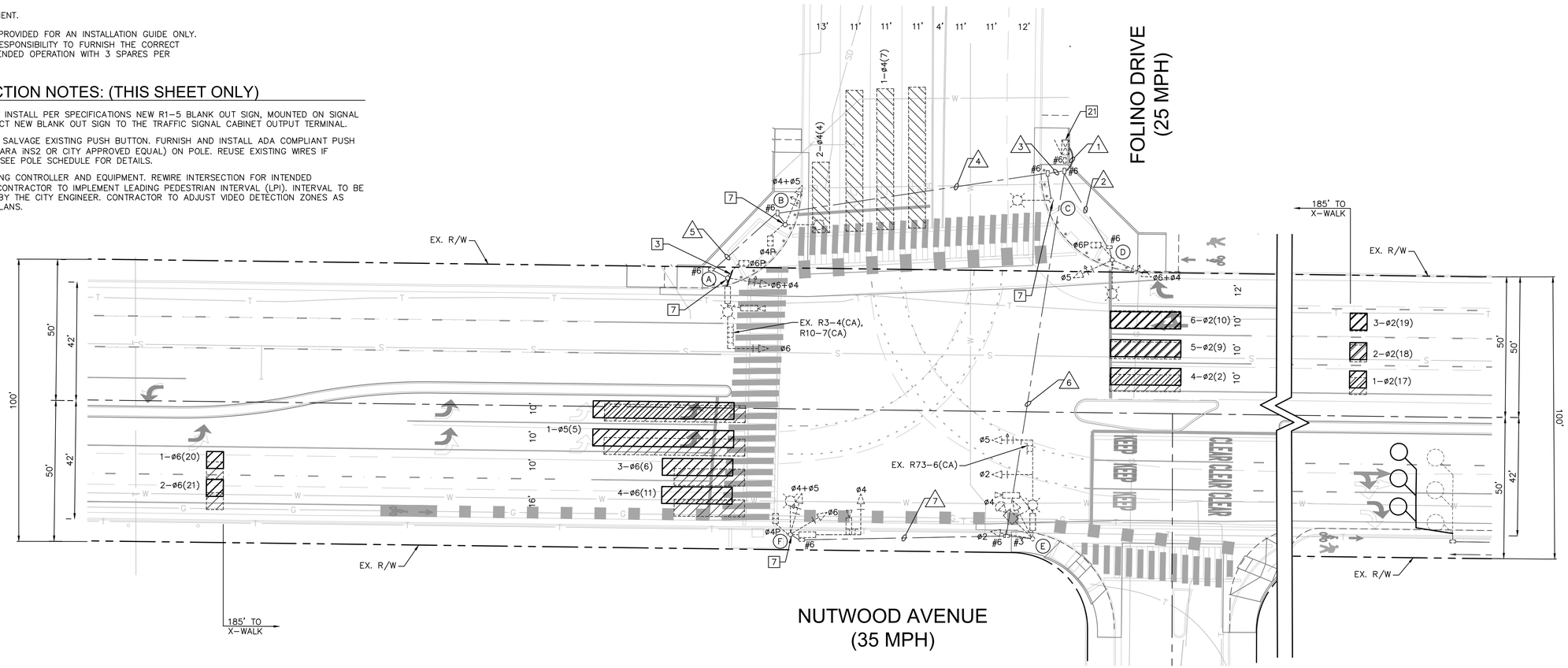
ALL EQUIPMENT IS EXISTING UNLESS OTHERWISE NOTED.
(N)=INDICATES NEW EQUIPMENT.
(R)=INDICATES REMOVE EQUIPMENT.

ALL NEW SIGNAL MOUNTINGS SHALL BE PER CALTRANS STANDARD PLANS 2025 EDITION. SEE PLANS ES–4A TO ES–4E.

*ALL NEW PEDESTRIAN PUSH BUTTONS SHALL BE ACCESSIBLE PEDESTRIAN SIGNAL COMPLIANT WITH AUDIBLE SPEECH AND VIBROTACTILE FEATURES ACTIVE.



POLE LOCATION
(NOT TO SCALE)



LEGEND

- EXISTING VEHICLE SIGNAL HEAD, THREE 12" SECTIONS (R, Y, G)
- PROPOSED VIDEO DETECTION ZONE
- EXISTING VIDEO DETECTION ZONE

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER RYAN PALE NOT FOR CONSTRUCTION CIVIL STATE OF CALIFORNIA EXP.

SIGNATURE DATE

REVISIONS		
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AS–BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

TRAFFIC SIGNAL PLAN
NUTWOOD AVENUE AT FOLINO DRIVE

APPROVED: ACCEPTED:

DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED SHEET 33 OF 65 SHEETS

B.M.: CITY OF FULLERTON BM NO.: XX–XX ELEV = XXX.XX' DESCRIPTION FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

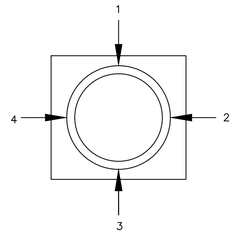
CONDUCTOR SCHEDULE										
AWG SIZE OR CABLE TYPE	POLE	CIRCUIT	CONDUIT RUN							
			1	2	3	4	5	6	7	8
NO. 14 CABLES (CONDUCTORS 12 / 3 CONDUCTORS)	(A)	ø2,ø2P	1 / 1	1 / 1	1 / 1	1 / 1	– / –	– / –	– / –	1 / 1
	(B)	ø4	– / –	1 / –	1 / –	1 / –	– / –	– / –	– / –	1 / –
	(C)	ø4,ø1	– / –	– / –	2 / –	2 / –	– / –	– / –	– / –	2 / –
	(D)	ø2,ø2P	– / –	– / –	1 / 1	1 / 1	– / –	– / –	– / –	1 / 1
	(E)	ø1,ø6,ø6P	– / –	– / –	– / –	2 / 1	– / –	– / –	– / –	2 / 1
	(F)	ø4	– / –	– / –	– / –	– / –	– / –	– / –	1 / –	1 / –
	(G)	ø4,ø6P	– / –	– / –	– / –	– / –	– / –	1 / 1	– / –	1 / 1
	(H)	ø6,ø2	– / –	– / –	– / –	– / –	2 / –	2 / –	– / –	2 / –
TOTAL CABLES 12–CONDUCTOR/3–CONDUCTOR			1 / 1	2 / 1	5 / 2	7 / 3	2 / –	2 / 1	1 / –	11 / 3
#10	LUMINAIRE		2	2	2	2	2	2	–	4
#6	SIGNAL SERVICE		–	–	–	–	–	–	2	–
DLC	ø1		–	–	–	–	1	1	–	1
	ø2		–	–	6	6	–	–	–	6
	ø4		–	–	–	–	–	–	3	3
	ø6		–	–	–	–	4	4	–	4
12PR#19	SIC		–	–	–	–	1	–	–	1
CONDUIT SIZE(INCH)			2.5"	2.5"	3.5"	3.5"	2"	2.5"	2.5"	2–4"
EXISTING FILL PERCENT			10%	16%	23%	30%	44%	23%	14%	19%

ALL CONDUIT AND CONDUCTORS ARE EXISTING UNLESS OTHERWISE NOTED.
(N)=INDICATES NEW EQUIPMENT.

CONDUCTOR SCHEDULE IS PROVIDED FOR AN INSTALLATION GUIDE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FURNISH THE CORRECT CONDUCTORS FOR THE INTENDED OPERATION WITH 3 SPARES PER POLE.

PHASE DIAGRAM

	GROUP A		GROUP B	
RING A			BLANK	
	ø1	ø2	ø3	ø4
RING B	BLANK		BLANK	BLANK
	ø5	ø6	ø7	ø8



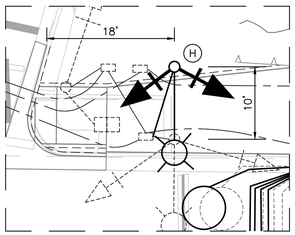
QUADRANT
PEDESTRIAN PUSH BUTTON LOCATION

POLE SCHEDULE																
NO.	STANDARD			LUMINAIRE HPSV	VEH. SIG. MTG		PED SIGNAL	PPB*22			POLE LOCATION (SEE DETAIL "A")					REMARKS
	TYPE	SIG. M.A	LUM. M.A.		MAST ARM	POLE	MTG.	ARROW	ø	QUAD	A	B	C	D	E	
(A)	26–3–100(N)	40'(N)	12'(N)	200W(N)	MAT(N)	SV–1–T(N)	SP–1–T(N)	–	–	3	8'–4"	–	15'–4"	–	17'–3"	–
(B)	1–A	–	–	–	–	TV–1–T	–	←	2	–	EXISTING					–
(C)	26–3–100	40'	12'	200W	MAT	SV–2–T	SP–1–T	→	2	–	EXISTING					–
(D)	1–A(N)	–	–	–	–	TV–1–T	SP–1–T	→	2	3	31'–8"	–	48'–9"	–	14'–8"	–
(E)	26–3–113	40'	12'	200W	MAT/ MAS	SV–1–T	SP–1–T	–	–	1	EXISTING					–
(F)	1–A	–	–	–	–	TV–1–T	–	→	6	–	EXISTING					–
(G)	1–A	–	–	–	–	TV–1–T	SP–1–T	←	6	–	EXISTING					–
(H)	15(N)	–	12'(N)	200W(N)	–	SV–2–T(N)	–	–	–	–	SEE DETAIL "D"					–

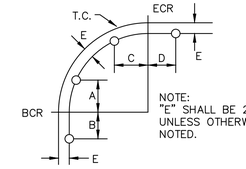
ALL EQUIPMENT IS EXISTING UNLESS OTHERWISE NOTED.
(N)=INDICATES NEW EQUIPMENT.
(R)=INDICATES REMOVE EQUIPMENT.

ALL NEW SIGNAL MOUNTINGS SHALL BE PER CALTRANS STANDARD PLANS 2025 EDITION. SEE PLANS ES–4A TO ES–4E.

*ALL NEW PEDESTRIAN PUSH BUTTONS SHALL BE ACCESSIBLE PEDESTRIAN SIGNAL COMPLIANT WITH AUDIBLE SPEECH AND VIBROTACTILE FEATURES ACTIVE.



DETAIL "D"
(SCALE: 1"= 10')



POLE LOCATION

CONSTRUCTION NOTES: (THIS SHEET ONLY)

5 INSTALL NO. 5 PULL BOX.

6 FURNISH AND INSTALL 2" PVC CONDUIT.

9 FURNISH AND INSTALL TYPE E LOOP DETECTOR PER CALTRANS STANDARD PLAN ES–5B.

10 REUSE EXISTING CONTROLLER AND EQUIPMENT. REWIRE INTERSECTION FOR INTENDED OPERATION. CONTRACTOR TO IMPLEMENT LEADING PEDESTRIAN INTERVAL (LPI). INTERVAL TO BE DETERMINED BY CALTRANS.

11 SPLICE NEW LOOP WIRES TO EXISTING DLC(S) FOR INTENDED OPERATION. REUSE EXISTING DLC STUB OUTS.

14 REMOVE EXISTING STANDARD FOUNDATION COMPLETE AS INDICATED ON PLANS.

19 INSTALL NO. 6 PULL BOX.

20 FURNISH AND INSTALL 1.5" PVC CONDUIT.

22 REMOVE AND SALVAGE EXISTING PUSH BUTTON. FURNISH AND INSTALL ADA COMPLIANT PUSH BUTTON (POLARA iNS2 OR CALTRANS APPROVED EQUAL) ON POLE. REUSE EXISTING WIRES IF APPLICABLE. SEE POLE SCHEDULE FOR DETAILS.

23 FURNISH AND INSTALL 3.5" PVC CONDUIT.

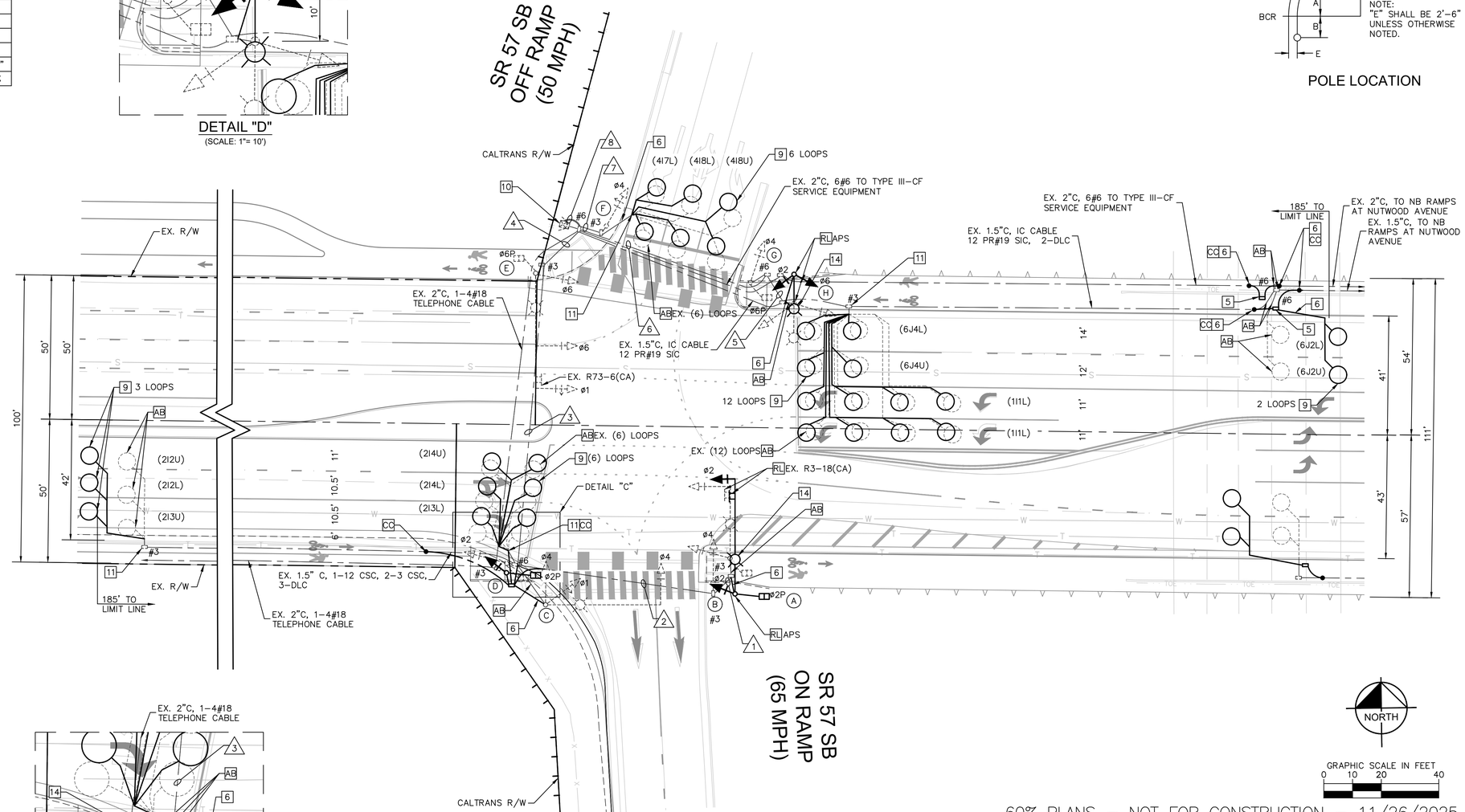
AB ABANDON. IF APPLIED TO CONDUIT, REMOVE CONDUCTORS.

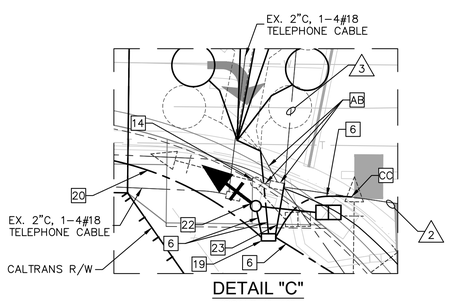
CC CONNECT NEW AND EXISTING CONDUIT. REMOVE EXISTING WIRES AND INSTALL WIRES AS INDICATED.

RL RELOCATE EQUIPMENT.

LEGEND

- PROPOSED VEHICLE SIGNAL HEAD, THREE 12" SECTIONS (R, Y, G)
- EXISTING VEHICLE SIGNAL HEAD, THREE 12" SECTIONS (R, Y, G)
- PROPOSED TYPE E LOOP DETECTOR
- EXISTING LOOP DETECTOR





DETAIL "C"
(SCALE: 1"= 10')

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER RYAN PAUL CIVIL STATE OF CALIFORNIA NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE			
			DRAWN	SP	11/26/2025
			DESIGNED	RL	11/26/2025
			REVIEWED	RC	11/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS–BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

TRAFFIC SIGNAL PLAN
NUTWOOD AVENUE AT SR 57 SB OFF–RAMP/ SR 57 SB ON–RAMP

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR
ACCEPTED: DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED
SHEET 34 OF 65 SHEETS
B.M.: CITY OF FULLERTON BM NO.: XX–XX ELEV = XXX.XX' DESCRIPTION
FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

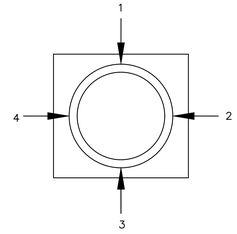
CONDUCTOR SCHEDULE									
AWG SIZE OR CABLE TYPE	POLE	CIRCUIT	CONDUIT RUN						
			1	2	3	4	5	6	7
NO. 14 CABLES — CONDUCTORS 12 / CONDUCTORS 3	A	ø4,ø4P	1 / 1	– / –	1 / 1	– / –	– / –	– / –	1 / 1
	B	ø4,ø2P	– / –	1 / 1	1 / 1	– / –	– / –	– / –	1 / 1
	C	ø2,ø6	– / –	– / –	2 / –	– / –	– / –	– / –	2 / –
	D	ø4,ø6,ø6P	– / –	– / –	– / –	– / –	– / –	2 / 1	2 / 1
	E	ø4,ø5,ø4P	– / –	– / –	– / –	2 / 1	2 / 1	– / –	2 / 1
	F	ø6,ø6P	– / –	– / –	– / –	– / –	1 / 1	– / –	1 / 1
	G	ø2,ø5,ø2P	2 / 1	– / –	2 / 1	– / –	– / –	– / –	2 / 1
TOTAL CABLES 12–CONDUCTOR/3–CONDUCTOR			3 / 2	1 / 1	6 / 3	2 / 1	3 / 2	2 / 1	11 / 6
#10		LUMINAIRE	2	–	2	2	2	2	2
#6		SERIVCE LIGHTING	–	2	2	–	–	2	2
DLC		ø2	–	–	4	–	–	–	4
		ø4	2	2	4	–	–	–	4
		ø5	–	–	2	–	–	–	2
		ø6	–	–	–	4	–	–	–
12PR#19		SIC	–	–	–	–	–	–	2
CONDUIT SIZE(INCH)			3"	3"	4"	2.5"	2.5"	4"	2–4"(N)
EXISTING FILL PERCENT			19%	8%	23%	22%	24%	6%	22%

ALL CONDUIT AND CONDUCTORS ARE EXISTING UNLESS OTHERWISE NOTED.
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CONDUCTOR SCHEDULE IS PROVIDED FOR AN INSTALLATION GUIDE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FURNISH THE CORRECT CONDUCTORS FOR THE INTENDED OPERATION WITH 3 SPARES PER POLE.

PHASE DIAGRAM

	GROUP A		GROUP B	
RING A	BLANK		BLANK	
	ø1	ø2	ø3	ø4
RING B			BLANK	BLANK
	ø5	ø6	ø7	ø8

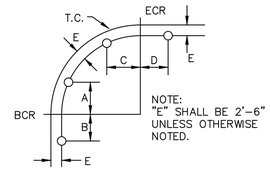


QUADRANT
PEDESTRIAN PUSH BUTTON LOCATION

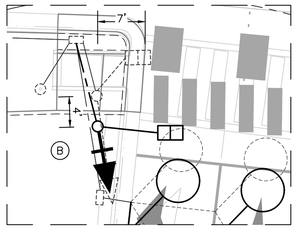
POLE SCHEDULE																
NO.	STANDARD			LUMINAIRE HPSV	VEH. SIG. MTG		PED SIGNAL	PPB*			POLE LOCATION (SEE DETAIL "A")					REMARKS
	TYPE	SIG. M.A	LUM. M.A.		MAST ARM	POLE	MTG.	ARROW	ø	QUAD	A	B	C	D	E	
A	1–A	–	–	–	–	TV–1–T	SP–1–T	→	2	–	EXISTING					–
B	1–A(N)	–	–	–	–	TV–1–T	SP–1–T(N)	←	2RL	1	SEE DETAIL "F"					–
C	15	–	12'	200W	–	SV–2–T	–	–	–	–	EXISTING					–
D	19–2–100(N)	30'(N)	12'(N)	200W(N)	MAS(N)	SV–2–T(N)	SP–1–T(N)	←	6RL	–	9'–5"	–	7'–9"	–	9'–11"	–
E	19–2–129	25'	12'	310W	MAT	SV–2–T	SP–1–T	←	6	–	EXISTING					–
F	1–A	–	–	–	–	TV–1–T	SP–1–T	→	4	–	EXISTING					–
G	29–5–129	55'	15'	310W	MAT	SV–1–T	SP–1–T	←	–	–	EXISTING					–
I	PPB POST	–	–	–	–	–	–	→	6	3	EXISTING					–
J	PPB POST	–	–	–	–	–	–	→	4	4	EXISTING					–
K	PPB POST	–	–	–	–	–	–	–	–	3	EXISTING					–

ALL EQUIPMENT IS EXISTING UNLESS OTHERWISE NOTED.
(N)=INDICATES NEW EQUIPMENT.
(R)=INDICATES REMOVE EQUIPMENT.
(RL)=INDICATES RELOCATE EQUIPMENT
ALL NEW SIGNAL MOUNTINGS SHALL BE PER CALTRANS STANDARD PLANS 2025 EDITION. SEE PLANS ES–4A TO ES–4E.

*ALL NEW PEDESTRIAN PUSH BUTTONS SHALL BE ACCESSIBLE PEDESTRIAN SIGNAL COMPLIANT WITH AUDIBLE SPEECH AND VIBROTACTILE FEATURES ACTIVE.



POLE LOCATION



DETAIL "F"
(SCALE: 1"= 10')

CONSTRUCTION NOTES: (THIS SHEET ONLY)

5 INSTALL NO. 5 PULL BOX.

6 FURNISH AND INSTALL 2" PVC CONDUIT.

8 FURNISH AND INSTALL 4"PVC CONDUIT.

9 FURNISH AND INSTALL TYPE E LOOP DETECTOR PER CALTRANS STANDARD PLAN ES–5B.

11 SPLICE NEW LOOP WIRES TO EXISTING DLC(S) FOR INTENDED OPERATION. REUSE EXISTING DLC STUB OUTS.

13 RELOCATE EXISTING TYPE 332 CABINET TO NEW FOUNDATION. REUSE EXISTING CONTROLLER AND EQUIPMENT. REWIRE INTERSECTION FOR INTENDED OPERATION. CONTRACTOR TO IMPLEMENT LEADING PEDESTRIAN INTERVAL (LPI). INTERVAL TO BE DETERMINED BY CALTRANS.

14 REMOVE EXISTING STANDARD FOUNDATION COMPLETE AS INDICATED ON PLANS.

17 NOT IN USE.

19 INSTALL NO. 6 PULL BOX.

AB ABANDON. IF APPLIED TO CONDUIT, REMOVE CONDUCTORS.

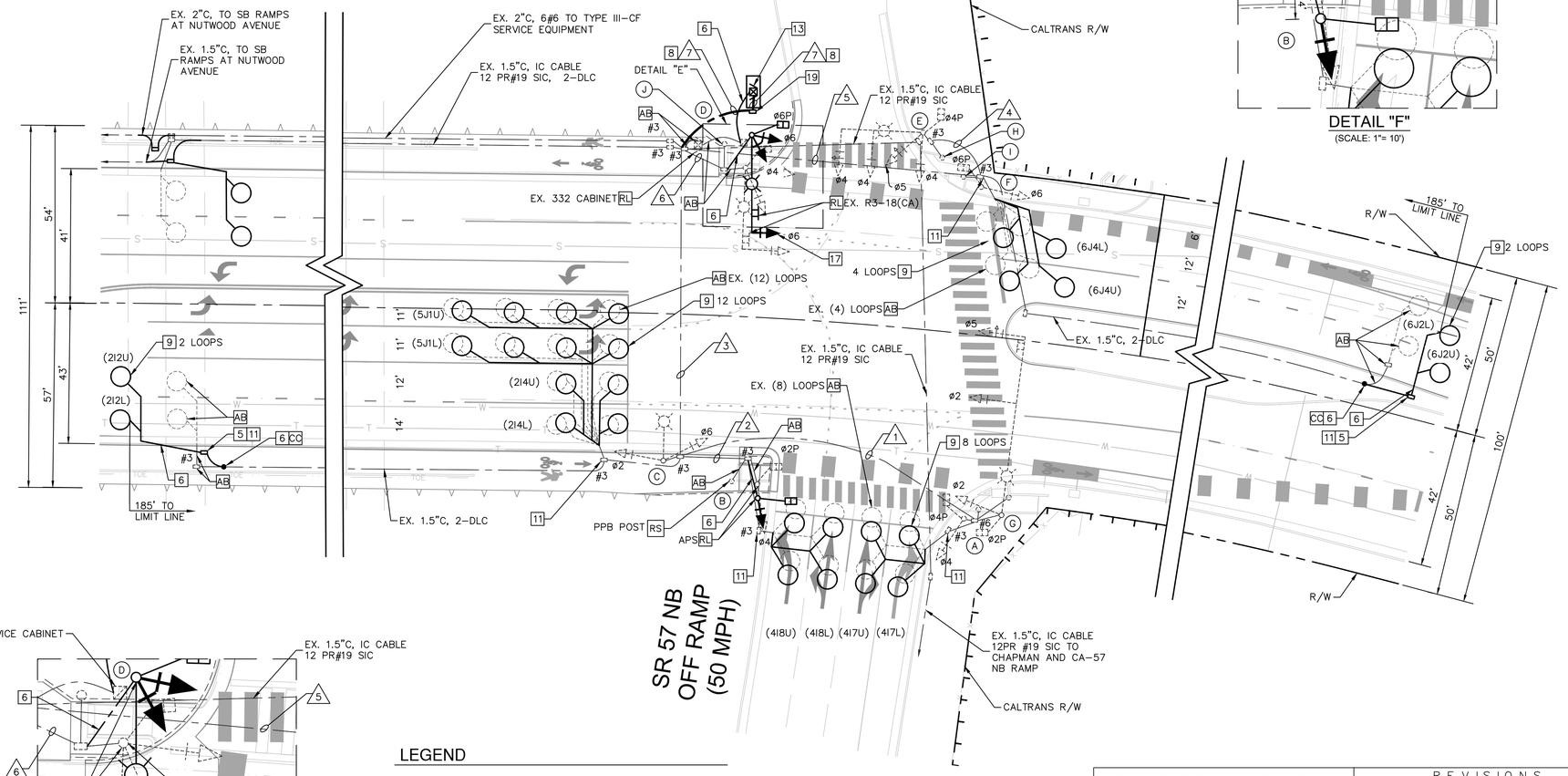
CC CONNECT NEW AND EXISTING CONDUIT. REMOVE EXISTING WIRES AND INSTALL WIRES AS INDICATED.

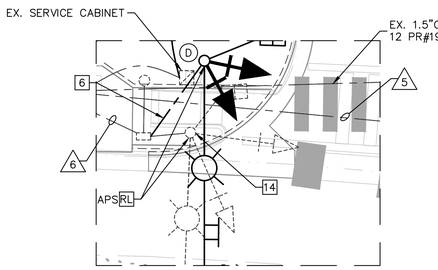
RL RELOCATE EQUIPMENT.

NUTWOOD AVENUE (35 MPH)

SR 57 NB ON RAMP (65 MPH)

SR 57 NB OFF RAMP (50 MPH)





DETAIL "E"
(SCALE: 1"= 10')

LEGEND

- PROPOSED VEHICLE SIGNAL HEAD, THREE 12" SECTIONS (R, Y, G)
- EXISTING VEHICLE SIGNAL HEAD, THREE 12" SECTIONS (R, Y, G)
- PROPOSED TYPE E LOOP DETECTOR
- EXISTING LOOP DETECTOR

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER RUHI PAUL NOT FOR CONSTRUCTION CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	SP	11/26/2025
			DESIGNED	RL	11/26/2025
			REVIEWED	RC	11/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS–BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

TRAFFIC SIGNAL PLAN
NUTWOOD AVENUE AT SR 57 NB OFF–RAMP/ SR 57 NB ON–RAMP

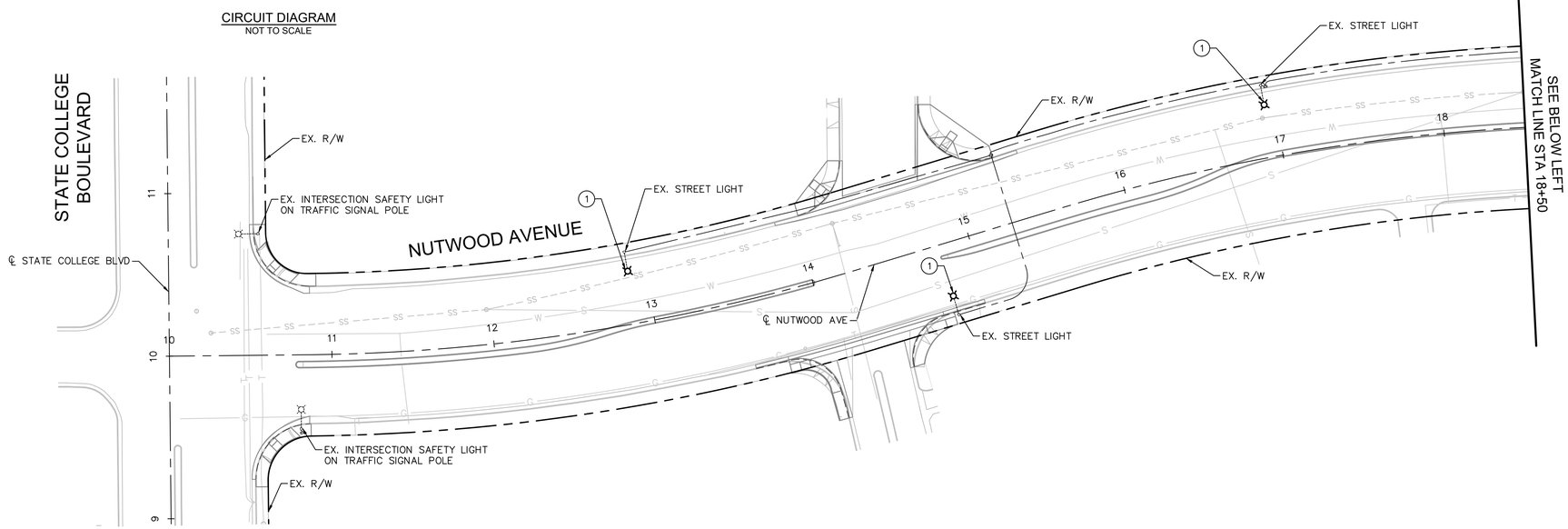
APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR
ACCEPTED: DATE PUBLIC WORKS DIRECTOR

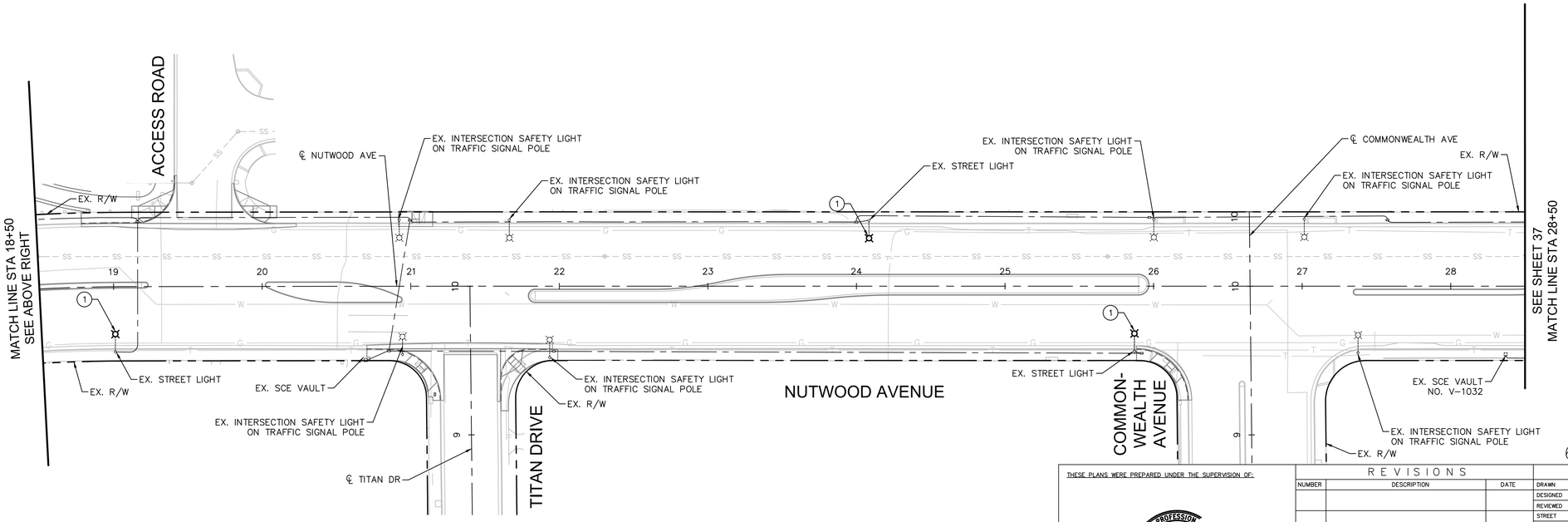
SCALE: AS NOTED
SHEET 35 OF 65 SHEETS
CITY OF FULLERTON BM NO.: XX–XX ELEV = XXX.XX' B.M.: DESCRIPTION
FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

TO BE COMPLETED AT 90% SUBMITTAL

CIRCUIT DIAGRAM
NOT TO SCALE





STREET LIGHTING CONSTRUCTION NOTES

(1) REMOVE AND SALVAGE EXISTING STREET LIGHT LUMINAIRE. FURNISH AND INSTALL NEW STREET LIGHT LUMINARIE AS SHOWN. LUMINAIRE SHALL BE LED EQUIVALENT FOR (250) WATT HPSV OR MORE STREETLIGHTS ON CONCRETE POLES (ACUITY ATBS P30 MVOLT R3 4B 27K MP NL P7 JP RFD320422 OR AGENCY APPROVED EQUAL 4000K).

STREET LIGHTING GENERAL NOTES

1. EXISTING STREET LIGHTING SYSTEMS SHALL REMAIN IN OPERATION DURING ANY MODIFICATION. ANY PROPOSED TEMPORARY STREET LIGHTING SYSTEM MUST BE APPROVED BY THE CITY OF FULLERTON PUBLIC WORKS.
2. FIVE (5) FOOT CLEARANCE TO BE MAINTAINED FROM FIRE HYDRANT.
3. FOUR (4) FOOT CLEARANCE TO BE MAINTAINED FROM TOP OF SLOPE AT COMMERCIAL DRIVEWAY, AND TWO (2) FOOT CLEARANCE FROM RESIDENTIAL DRIVEWAY.
4. TWO (2) FOOT CLEARANCE TO BE MAINTAINED FROM TOP OF CURB RAMPS.
5. A MINIMUM OF TWENTY (20) FOOT CLEARANCE TO BE MAINTAINED FROM CENTER OF OR A MINIMUM OF FIVE (5) FOOT CLEARANCE FROM THE ULTIMATE TREE CANOPY.
6. ALL EXISTING AND PLANNED TREES TO BE SHOWN ON STREET LIGHTING PLAN.
7. CONTRACTOR SHALL REMOVE WIRE, CONDUIT, AND PULL BOXES AS NEEDED FROM EXISTING 5KV SERIES CIRCUIT AND COORDINATE WITH SCE TO HAVE EXISTING 5KV SERIES CIRCUIT DISCONNECTED.
8. CONTRACTOR SHALL EPOXY FILL ALL PULLBOXES JOINTS.
9. CONTRACTOR SHALL INSTALL WATERPROOF FUSE HOLDER WITH 5 AMP FUSE IN HANDHOLE ON POLE.

LEGEND

- PROPOSED LED STREET LIGHT
- PROPOSED LED LIGHT WITH EXISTING POLE
- EXISTING STREET LIGHT/SAFETY LIGHT
- PROPOSED CONDUIT
- EXISTING CONDUIT
- EXISTING SERVICE VAULT
- EXISTING PULL BOX

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER KIM PAUL SO CIVIL STATE OF CALIFORNIA
NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS					
NUMBER	DESCRIPTION	DATE		INITIALS	DATE
			DRAWN	SP	11/26/2025
			DESIGNED	RL	11/26/2025
			REVIEWED	RC	11/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

STREET LIGHTING PLANS
NUTWOOD AVENUE 10+00 TO 28+50

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: DATE PUBLIC WORKS DIRECTOR

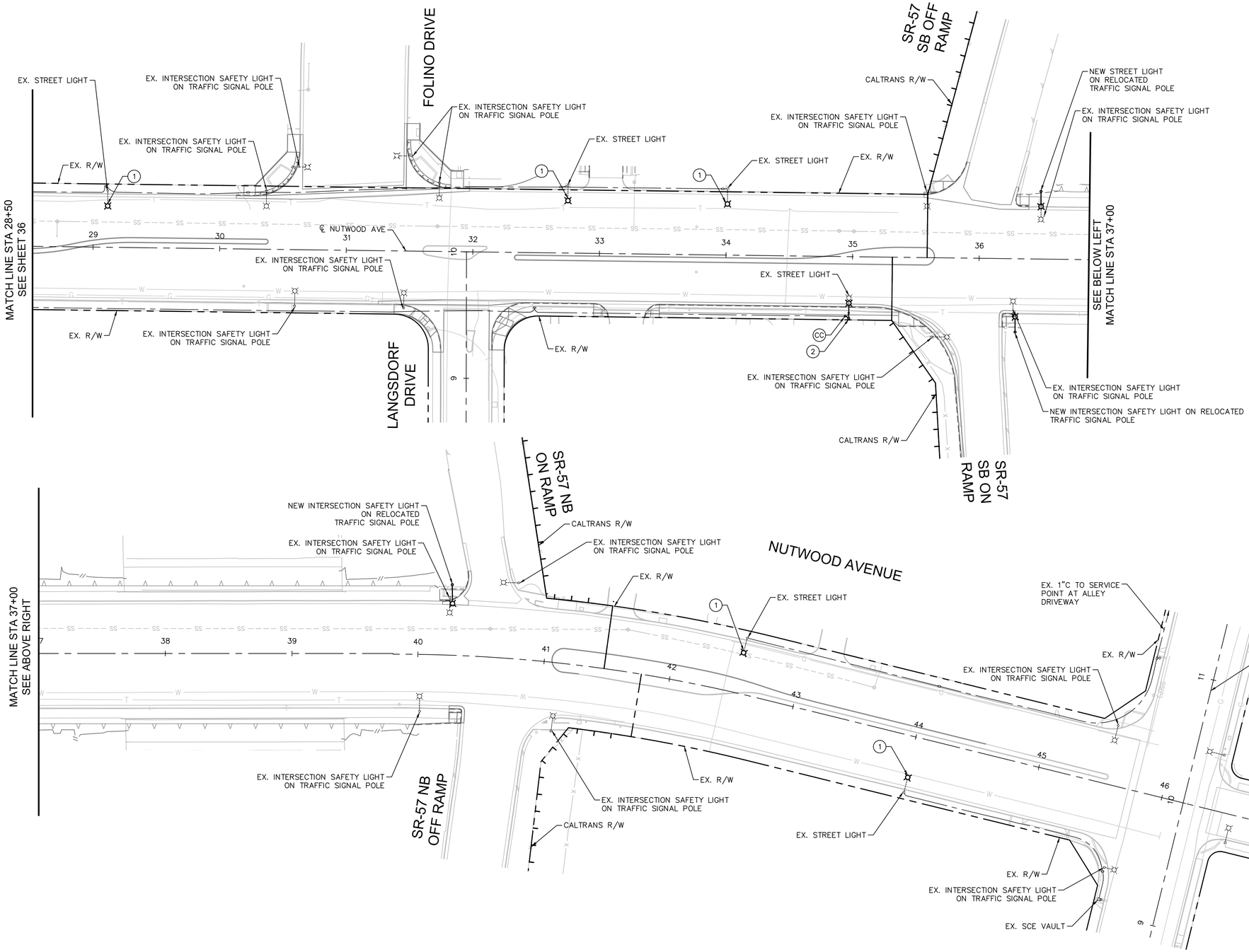
SCALE: AS NOTED

SHEET 36 OF 65 SHEETS

B.M.: CITY OF FULLERTON BM NO.: XX-XX ELEV = XXX.XX' DESCRIPTION

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



STREET LIGHTING CONSTRUCTION NOTES

(1) REMOVE AND SALVAGE EXISTING STREET LIGHT LUMINAIRE. FURNISH AND INSTALL NEW STREET LIGHT LUMINARIE AS SHOWN. LUMINAIRE SHALL BE LED EQUIVALENT FOR (250) WATT HPSV OR MORE STREETLIGHTS ON CONCRETE POLES (ACUITY ATBS P30 MVOLT R3 4B 27K MP NL P7 JP RFD320422 OR AGENCY APPROVED EQUAL 4000K).

(2) REMOVE AND RELOCATE EXISTING POLE TO NEW FOUNDATION AS SHOWN ON PLAN.

(CC) CONNECT NEW AND EXISTING CONDUIT. REMOVE EXISTING WIRES AND INSTALL WIRES AS INDICATED.

STREET LIGHTING GENERAL NOTES

1. EXISTING STREET LIGHTING SYSTEMS SHALL REMAIN IN OPERATION DURING ANY MODIFICATION. ANY PROPOSED TEMPORARY STREET LIGHTING SYSTEM MUST BE APPROVED BY THE CITY OF FULLERTON PUBLIC WORKS.
2. FIVE (5) FOOT CLEARANCE TO BE MAINTAINED FROM FIRE HYDRANT.
3. FOUR (4) FOOT CLEARANCE TO BE MAINTAINED FROM TOP OF SLOPE AT COMMERCIAL DRIVEWAY, AND TWO (2) FOOT CLEARANCE FROM RESIDENTIAL DRIVEWAY.
4. TWO (2) FOOT CLEARANCE TO BE MAINTAINED FROM TOP OF CURB RAMPS.
5. A MINIMUM OF TWENTY (20) FOOT CLEARANCE TO BE MAINTAINED FROM CENTER OF OR A MINIMUM OF FIVE (5) FOOT CLEARANCE FROM THE ULTIMATE TREE CANOPY.
6. ALL EXISTING AND PLANNED TREES TO BE SHOWN ON STREET LIGHTING PLAN.
7. CONTRACTOR SHALL REMOVE WIRE, CONDUIT, AND PULL BOXES AS NEEDED FROM EXISTING 5KV SERIES CIRCUIT AND COORDINATE WITH SCE TO HAVE EXISTING 5KV SERIES CIRCUIT DISCONNECTED.
8. CONTRACTOR SHALL EPOXY FILL ALL PULLBOXES JOINTS.
9. CONTRACTOR SHALL INSTALL WATERPROOF FUSE HOLDER WITH 5 AMP FUSE IN HANDHOLE ON POLE.

LEGEND

- PROPOSED LED STREET LIGHT
- PROPOSED LED LIGHT WITH EXISTING POLE
- EXISTING STREET LIGHT/SAFETY LIGHT
- PROPOSED CONDUIT
- EXISTING CONDUIT
- EXISTING SERVICE VAULT
- EXISTING PULL BOX

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

TO BE COMPLETED
AT 90% SUBMITTAL

CIRCUIT DIAGRAM
NOT TO SCALE

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER RYAN PAUL 78544 CIVIL STATE OF CALIFORNIA
NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	SP	11/26/2025
			DESIGNED	RL	11/26/2025
			REVIEWED	RC	11/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

STREET LIGHTING PLANS
NUTWOOD AVENUE STA 28+50 TO 35+32 AND 41+70 TO 46+17

APPROVED: _____ DATE _____ CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

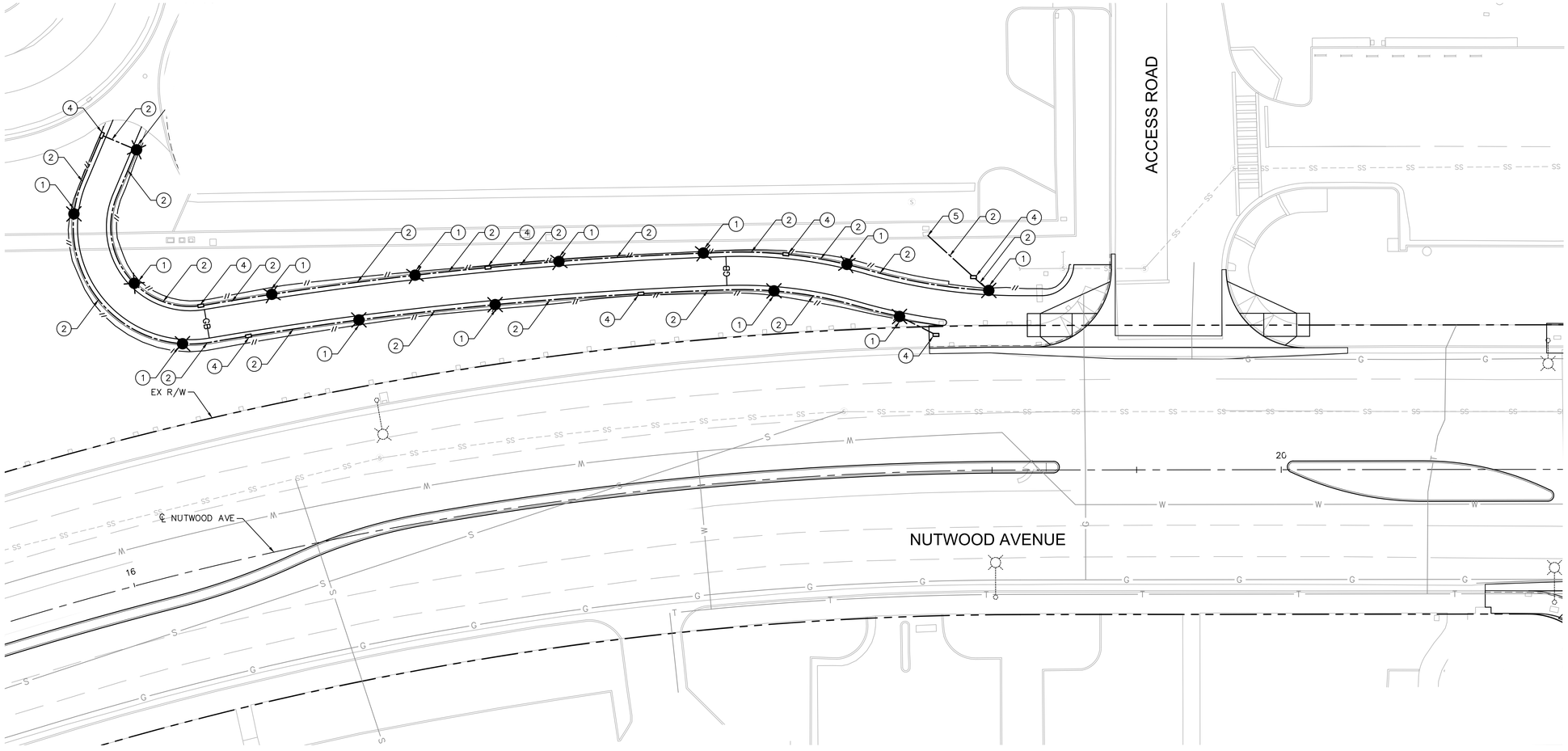
ACCEPTED: _____ DATE _____ PUBLIC WORKS DIRECTOR

SCALE: AS NOTED

SHEET 37 OF 65 SHEETS

B.M.: CITY OF FULLERTON BM NO.: XX-XX ELEV = XXX.XX' DESCRIPTION

FILE: XXXXX



BIKE PATH LIGHTING CONSTRUCTION NOTES

(1) FURNISH AND INSTALL BEELINE BOLLARD TYPE BEEB-63-36-20W-U-27K-T2-IBP-BZ-PC-BAA

(2) FURNISH AND INSTALL 1.5"C, #6 (CIR 1A) & #12 E/G.

(4) FURNISH AND INSTALL #3 PULL BOX. PULL BOX SHALL BE FIBRELYTE COMPOSITE.

(5) CONNECT TO EXISTING PULL BOX. CSUF TO COORDINATE WITH SCE TO PROVIDE POWER TO LIGHTING SYSTEM.

BIKE PATH LIGHTING GENERAL NOTES

1. EXISTING STREET LIGHTING SYSTEMS SHALL REMAIN IN OPERATION DURING ANY MODIFICATION. ANY PROPOSED TEMPORARY STREET LIGHTING SYSTEM MUST BE APPROVED BY THE CITY OF FULLERTON PUBLIC WORKS.
2. FIVE (5) FOOT CLEARANCE TO BE MAINTAINED FROM FIRE HYDRANT.
3. FOUR (4) FOOT CLEARANCE TO BE MAINTAINED FROM TOP OF SLOPE AT COMMERCIAL DRIVEWAY, AND TWO (2) FOOT CLEARANCE FROM RESIDENTIAL DRIVEWAY.
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5. A MINIMUM OF TWENTY (20) FOOT CLEARANCE TO BE MAINTAINED FROM CENTER OF OR A MINIMUM OF FIVE (5) FOOT CLEARANCE FROM THE ULTIMATE TREE CANOPY.
6. ALL EXISTING AND PLANNED TREES TO BE SHOWN ON STREET LIGHTING PLAN.
7. CONTRACTOR SHALL REMOVE WIRE, CONDUIT, AND PULL BOXES AS NEEDED FROM EXISTING 5KV SERIES CIRCUIT AND COORDINATE WITH SCE TO HAVE EXISTING 5KV SERIES CIRCUIT DISCONNECTED.
8. CONTRACTOR SHALL EPOXY FILL ALL PULLBOXES JOINTS.
9. CONTRACTOR SHALL INSTALL WATERPROOF FUSE HOLDER WITH 5 AMP FUSE IN HANDHOLE ON POLE.

LEGEND

- PROPOSED BOLLARD LIGHT
- PROPOSED CONDUIT
- PROPOSED SERVICE PEDESTAL
- PROPOSED PULL BOX
- EXISTING PULL BOX

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER RYAN PAUL LEE CIVIL STATE OF CALIFORNIA NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	SP	11/26/2025
			DESIGNED	RL	11/26/2025
			REVIEWED	RC	11/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON

PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

BIKE PATH LIGHTING PLAN - OPTION 1

APPROVED: _____ DATE / CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: _____ DATE / PUBLIC WORKS DIRECTOR

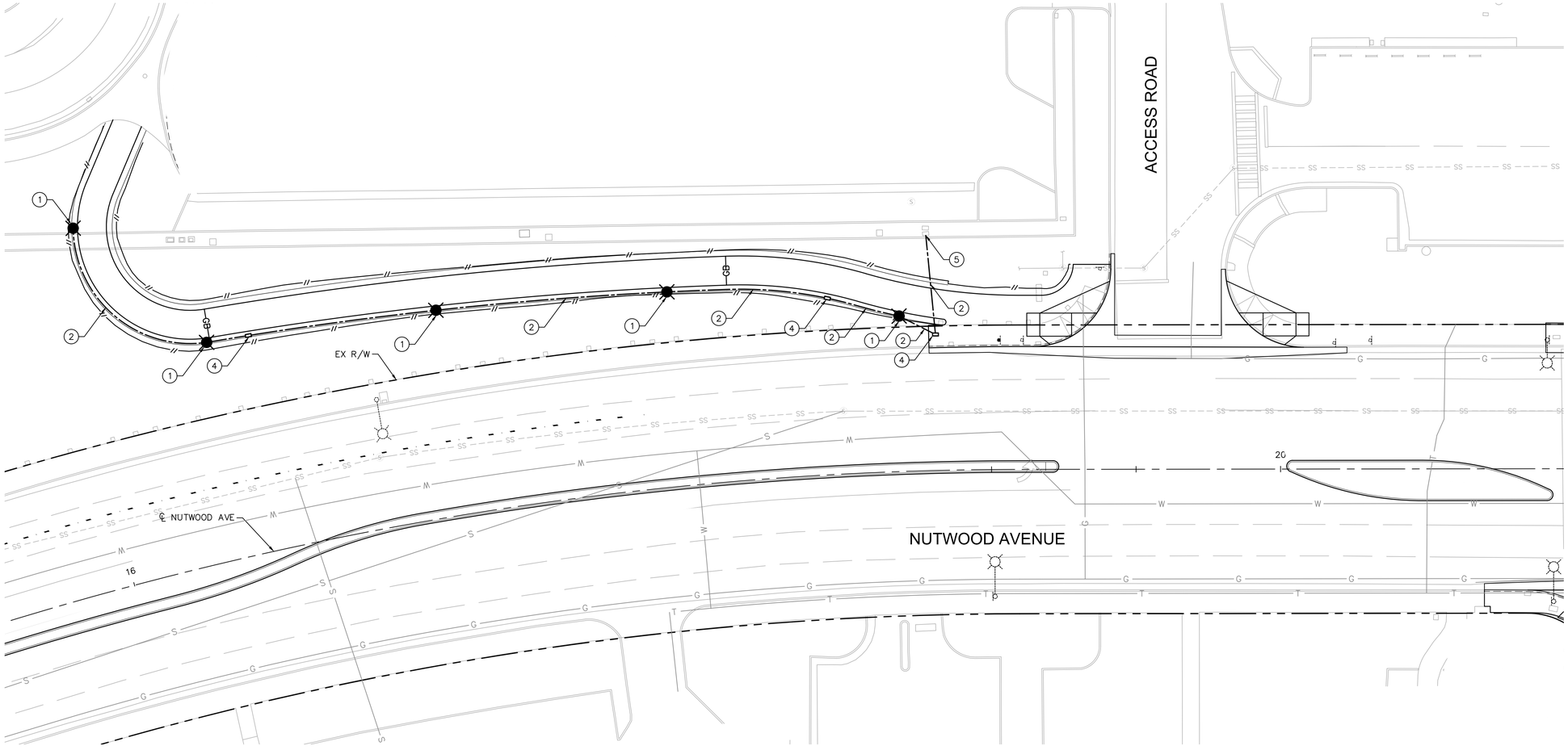
SCALE: AS NOTED

SHEET 38 OF 65 SHEETS

B.M.: CITY OF FULLERTON BM NO.: XX-XX ELEV = XXX.XX' DESCRIPTION

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



BIKE PATH LIGHTING CONSTRUCTION NOTES

1. FURNISH AND INSTALL BEELINE BOLLARD TYPE BEEB-63-36-20W-U-27K-T2-IBP-BZ-PC-BAA
2. FURNISH AND INSTALL 1.5"C, ⅜ (CIR 1A) & ½ E/G.
4. FURNISH AND INSTALL #3 PULL BOX. PULL BOX SHALL BE FIBRELYTE COMPOSITE.
5. CONNECT TO EXISTING PULL BOX. CSUF TO COORDINATE WITH SCE TO PROVIDE POWER TO LIGHTING SYSTEM.

BIKE PATH LIGHTING GENERAL NOTES

1. EXISTING STREET LIGHTING SYSTEMS SHALL REMAIN IN OPERATION DURING ANY MODIFICATION. ANY PROPOSED TEMPORARY STREET LIGHTING SYSTEM MUST BE APPROVED BY THE CITY OF FULLERTON PUBLIC WORKS.
2. FIVE (5) FOOT CLEARANCE TO BE MAINTAINED FROM FIRE HYDRANT.
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8. CONTRACTOR SHALL EPOXY FILL ALL PULLBOXES JOINTS.
9. CONTRACTOR SHALL INSTALL WATERPROOF FUSE HOLDER WITH 5 AMP FUSE IN HANDHOLE ON POLE.

LEGEND

- PROPOSED BOLLARD LIGHT
- PROPOSED CONDUIT
- PROPOSED SERVICE PEDESTAL
- PROPOSED PULL BOX
- EXISTING PULL BOX

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER RYAN PAUL LEE CIVIL STATE OF CALIFORNIA NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
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			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

BIKE PATH LIGHTING PLAN - OPTION 2

APPROVED: _____ DATE / CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: _____ DATE / PUBLIC WORKS DIRECTOR

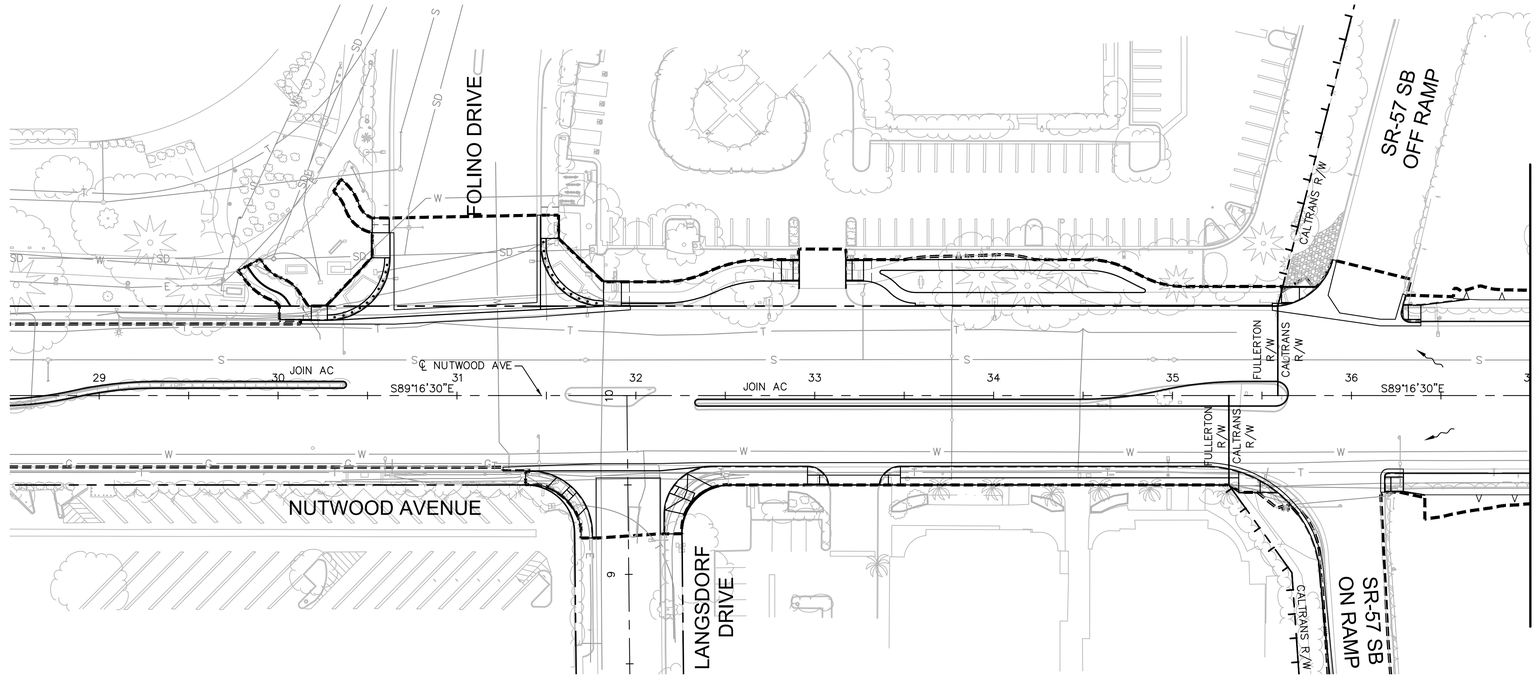
SCALE: AS NOTED

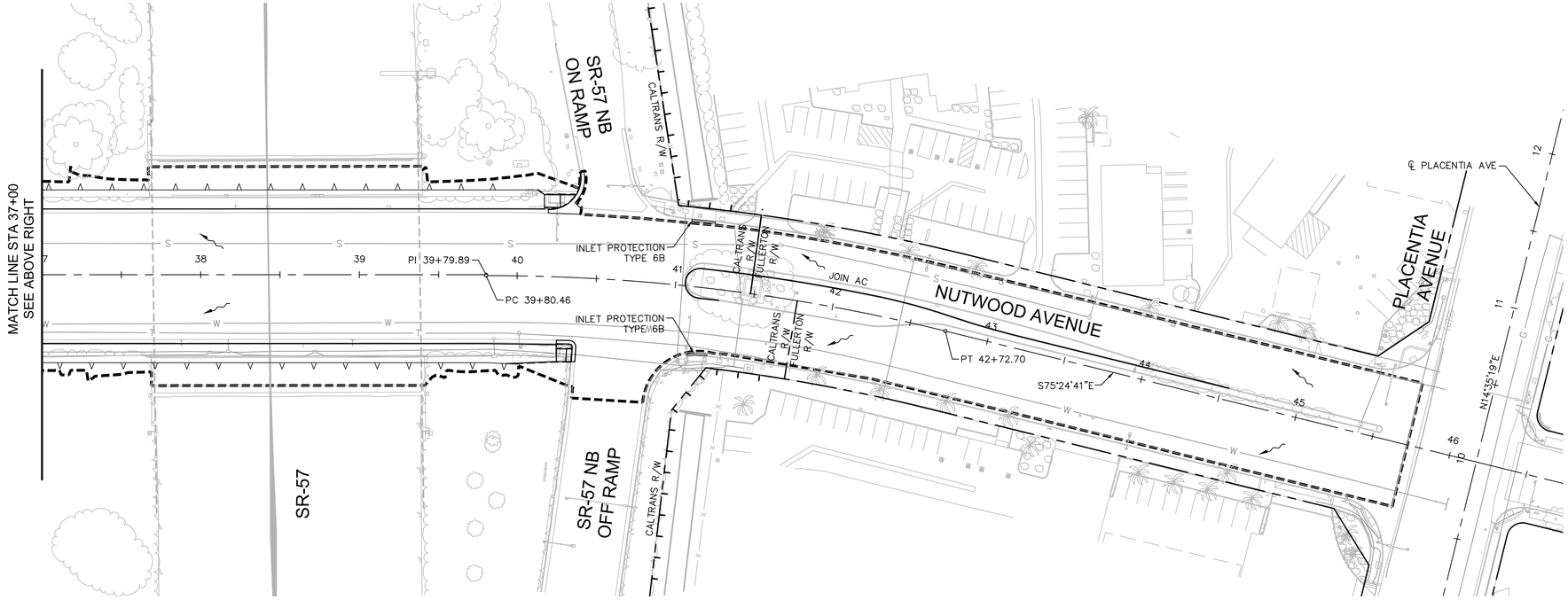
SHEET 39 OF 65 SHEETS

B.M.: CITY OF FULLERTON BM NO.: XX-XX ELEV = XXX.XX' DESCRIPTION

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT





NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

LEGEND

- CENTERLINE
- EXISTING RIGHT OF WAY
- CALTRANS RIGHT OF WAY
- RETAINING WALL LOL
- GRADING LIMIT
- SAWCUT
- LIMITS OF WORK
- DIRECTION OF FLOW
- TEMPORARY INLET PROTECTION TYPE 6B
- ASPHALT CONCRETE PAVEMENT
- AC OVERLAY
- THICKENED AC PAVEMENT
- PEDESTRIAN CONCRETE PAVEMENT
- COLORED BIKEWAY CONCRETE PAVEMENT
- STAMPED CONCRETE
- LANDSCAPE

EROSION CONTROL LEGEND

PRIOR TO COMPLETION OF FINAL SITE STABILIZATION, TEMPORARY WATER POLLUTION CONTROL MEASURES SHALL BE PERFORMED AS INDICATED BELOW AND IN THE APPROVED SWPPP BY THE CONTRACTOR (NOT ALL REQUIRED BMPS ARE SHOWN IN THE PLAN FOR CLARITY):

1. CONTRACTOR RESPONSIBLE FOR TRAFFIC CONTROL AND PEDESTRIAN CONTROL WHILE PERFORMING WORK IN THE PUBLIC RIGHT-OF-WAY.
2. BMP LOCATIONS MAY BE ALTERED BY QUALIFIED SWPPP PRACTITIONER (QSP) OR CONTRACTOR PER PHASING SCHEDULE AND ACTUAL SITE CONDITIONS
3. CONTRACTOR SHALL PROVIDE TEMPORARY DRAINAGE INLET PROTECTION PER CALTRANS 2024 STANDARD PLANS T61, T62, T63 AND T64, AS APPLICABLE, FOR ALL DRAINAGE INLETS ADJACENT TO ACTIVE WORK AREAS AND AS SHOWN ON PLANS.
4. TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE PER CALTRANS 2024 STANDARD PLANS T59 UNLESS OTHERWISE SPECIFIED ON PLANS.
5. CONTRACTOR SHALL PROVIDE TEMPORARY COVER FOR ALL STOCKPILING PER CALTRANS 2024 STANDARD PLAN T53.
6. CONTRACTOR SHALL DESIGNATE STAGING AREA(S) FOR CONSTRUCTION MATERIAL STORAGE.
7. ALL LINES, SYMBOLS, AND ABBREVIATIONS WILL FOLLOW CALTRANS 2024 STANDARD PLANS, AS AUGMENTED BY THE ABBREVIATIONS AND SYMBOLS ON THIS SHEET.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTINUOUS CLEANUP OF SILT AND MUD AT THE SITE, ADJACENT ROADWAY, AND IN THE STORM DRAIN SYSTEM.
9. CONTRACTOR SHALL REMOVE SILT AND DEBRIS FROM TEMPORARY WATER POLLUTION CONTROL BMPS AFTER EACH QUALIFIED RAIN EVENT.
10. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING QUALIFIED RAIN EVENTS. ALL NECESSARY TEMPORARY WATER POLLUTION CONTROL BMPS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO
11. FACILITATE RAPID CONSTRUCTION AND MAINTENANCE OF ALL TEMPORARY DEVICES WHEN RAIN IS ANTICIPATED.
12. CONTRACTOR SHALL RESTORE ALL TEMPORARY WATER POLLUTION CONTROL BMPS TO WORKING ORDER BEFORE AND AFTER EACH RAIN EVENT.
13. CONTRACTOR SHALL INSTALL TEMPORARY WATER POLLUTION CONTROL BMPS AS REQUIRED DUE TO INCOMPLETE OPERATION OR UNFORESEEN CIRCUMSTANCES, WHICH MAY ARISE.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
15. ALL TEMPORARY WATER POLLUTION CONTROL BMPS SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN RAIN IS ANTICIPATED.
16. CONTRACTOR SHALL ADJUST THE LOCATION LIMITS OF TEMPORARY WATER POLLUTION CONTROL BMPS AS NECESSARY FOR THE VARIOUS PHASES OF CONSTRUCTION AS IDENTIFIED IN THE APPROVED SWPPP AND SPECIFICATIONS.
17. PROJECT BORDER ONLY FOR EROSION CONTROL/WATER POLLUTION CONTROL IMPROVEMENTS.
18. TEMPORARY EROSION CONTROL MEASURE AND LENGTH OF TEMPORARY FIBER ROLLS MAY BE ADJUSTED TO MEET FIELD CONDITIONS AS DETERMINED BY RESIDENT ENGINEER.
19. FOR OTHER IMPROVEMENTS (DEMOLITIONS, RELOCATIONS, GRADING AND DRAINAGE, STREET IMPROVEMENTS, RETAINING WALLS, ETC.) REFER TO APPLICABLE PLAN SET.
20. CONTRACTOR SHALL PROVIDE TEMPORARY CONSTRUCTION ENTRANCE PER CALTRANS STANDARD PLAN T58.
21. STREET SWEEPING AND VACUUMING PER TRACKING CONTROL BMPS.

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

REGISTERED PROFESSIONAL ENGINEER ALAN HUTNEY No. 69809 EXP. 6-30-25 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	SR	10/26/2025
			DESIGNED	SR	10/26/2025
			REVIEWED	BC	10/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

WATER POLLUTION & EROSION CONTROL
EROSION CONTROL PLAN

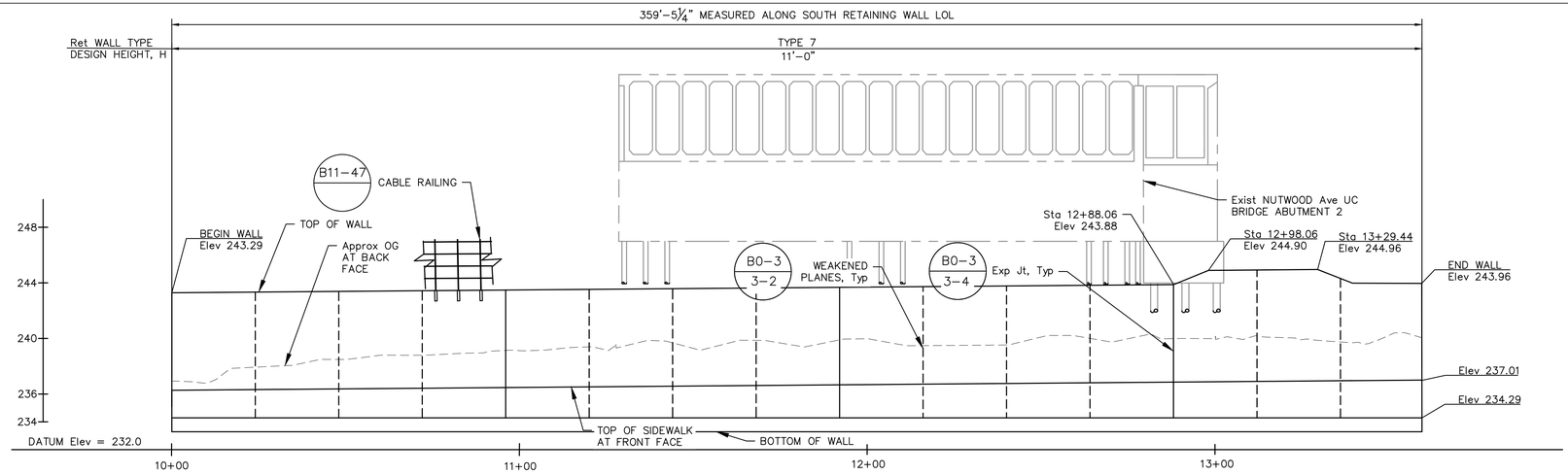
APPROVED: ACCEPTED:

DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED SHEET 40 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172' FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

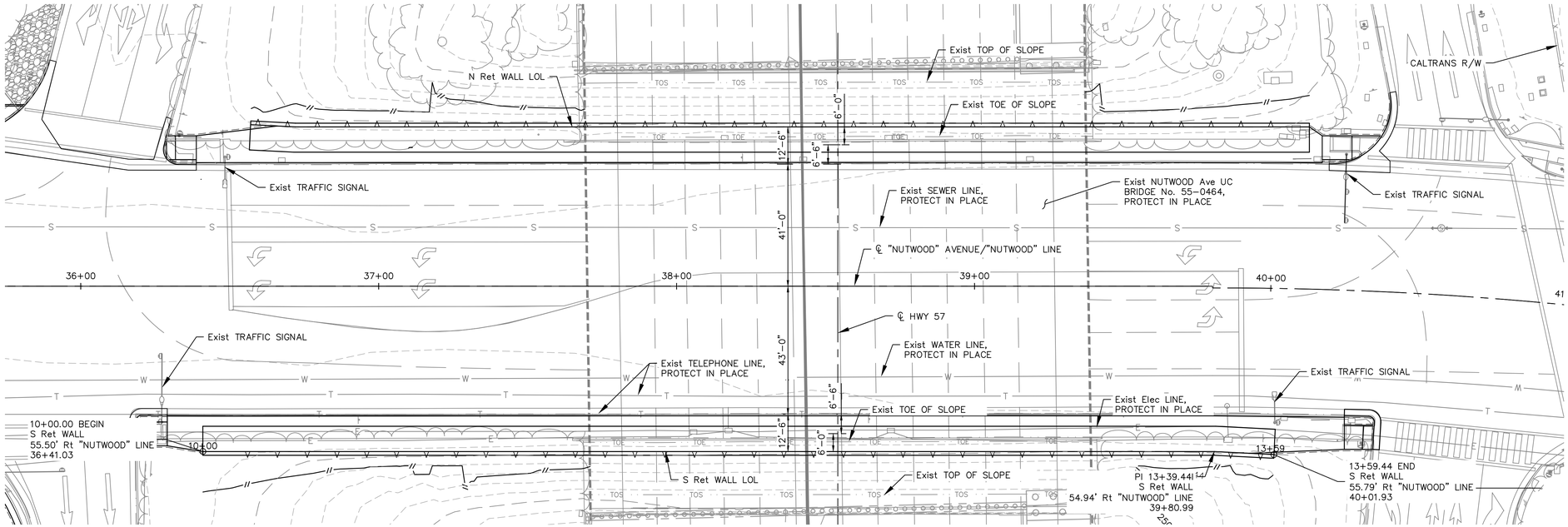


DEVELOPED MIRRORED ELEVATION (SOUTH RW)

1" = 20' (HORIZONTAL)
1" = 4' (VERTICAL)

WALL ELEVATIONS

WALL LOL STATION	PROFILE GRADE	
	TOP OF WALL Elev	FINISHED GRADE Elev AT WALL FACE
10+00.00	243.29	237.10
10+25.00	243.34	238.45
10+50.00	243.39	239.18
10+75.00	243.44	239.56
11+00.00	243.49	239.81
11+25.00	243.54	240.14
11+50.00	243.59	239.88
11+75.00	243.65	240.02
12+00.00	243.70	240.14
12+25.00	243.75	240.20
12+50.00	243.80	240.25
12+75.00	243.85	240.50
13+00.00	244.90	240.83
13+25.00	244.95	240.61
13+50.00	242.67	241.73
13+59.44	243.96	240.72



PLAN VIEW

1" = 20'

NOTES:

1. FOR NORTH RETAINING WALL INFORMATION, SEE "NORTH RETAINING WALL GENERAL PLAN" SHEET.
2. FOR "TYPICAL SECTION", SEE "RETAINING WALL TYPICAL SECTION" SHEET.
3. BOTTOM OF WALL ELEVATION IS MEASURED AT THE TOP OF FOOTING.
4. UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS AND ELEVATIONS PRIOR TO WALL CONSTRUCTION.

STANDARD PLAN SHEET No.

DETAIL No.

NORTH

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

60% PLANS - NOT FOR CONSTRUCTION - 11/26/2025

DESIGN OVERSIGHT	
SIGN OFF DATE	
DIST-COUNTY-ROUTE-POST MILE	12-ORA-57-PM 17.59
PID	12 2500 0108
ERS NAME	RW NORTH/SOUTH
55EXXXX	ERS NUMBER

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

LICENSED PROFESSIONAL ENGINEER ANDRES C. CUEVAS JR. C 91635 EXP 12/31/26 CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

NUMBER	DESCRIPTION	DATE

REVISIONS

	INITIALS	DATE
DRAWN	RMC	11/05/2025
DESIGNED	ACM	11/05/2025
REVIEWED	SRJ	11/14/2025
STREET		
SEWER		
DRAINAGE		
WATER		
TRAFFIC		
UTILITY/ELEC		
LANDSCAPE		
FACILITIES		
GENERAL ENG		
DESIGN ENG		
INSPECTION		
PARKS & REC		
AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

NUTWOOD AVENUE ATP
SOUTH RETAINING WALL GENERAL PLAN

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: DATE PUBLIC WORKS DIRECTOR

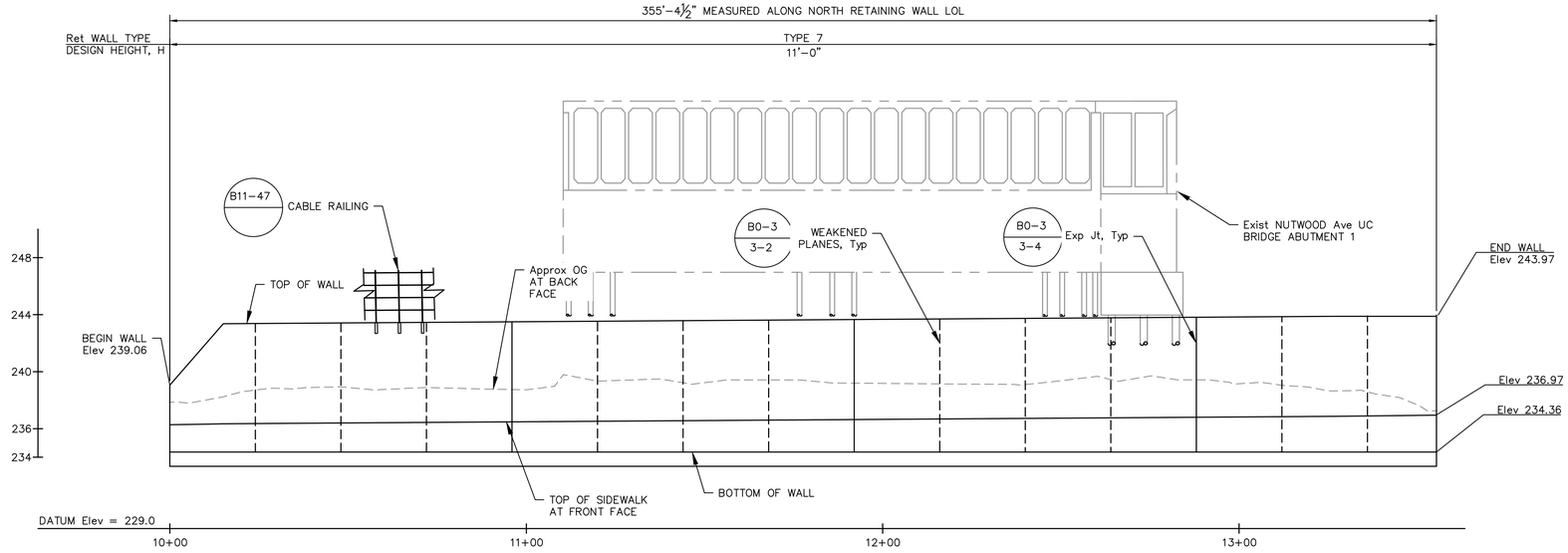
SCALE: AS NOTED

SHEET 41 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

FILE: XXXXX

NOTE: THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

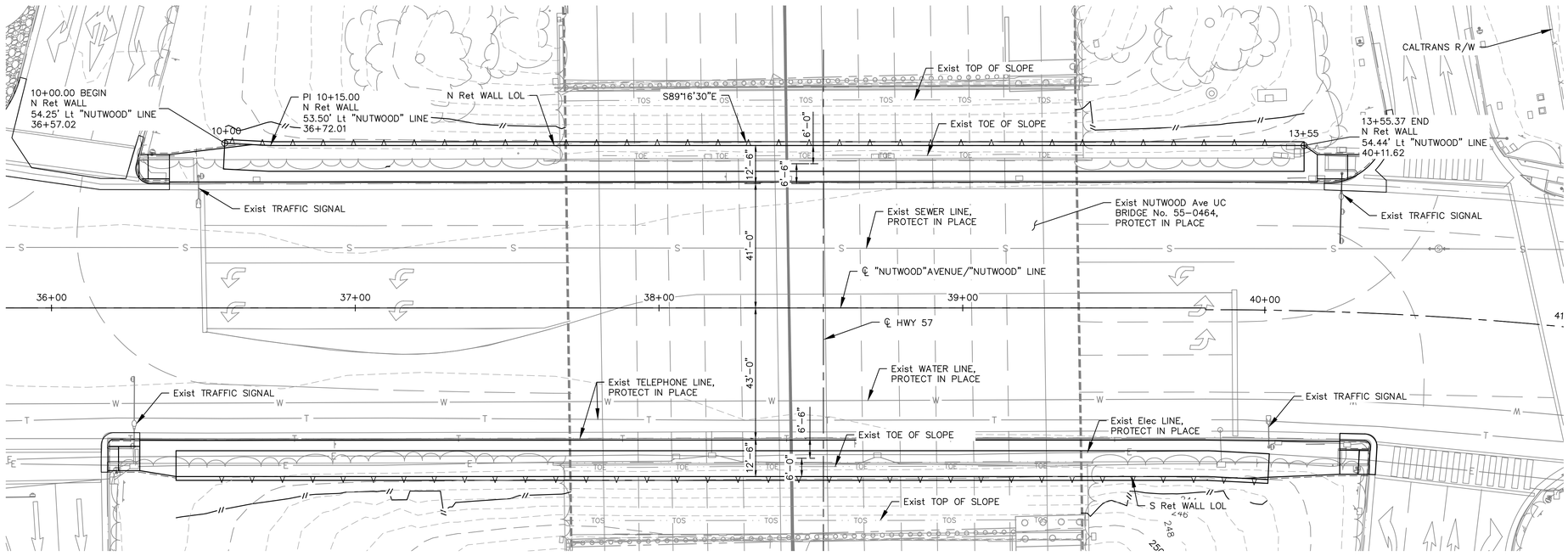


WALL ELEVATIONS

WALL LOL STATION	PROFILE GRADE	
	TOP OF WALL Elev	FINISHED GRADE Elev AT WALL FACE
10+00.00	239.06	238.06
10+25.00	243.36	236.36
10+50.00	243.42	236.42
10+75.00	243.46	236.46
11+00.00	243.50	236.50
11+25.00	243.55	236.55
11+50.00	243.59	236.59
11+75.00	243.63	236.63
12+00.00	243.67	236.67
12+25.00	243.71	236.71
12+50.00	243.76	236.75
12+75.00	243.80	236.80
13+00.00	243.84	236.84
13+25.00	243.88	236.88
13+50.00	243.95	236.95
13+55.37	243.97	236.97

DEVELOPED ELEVATION (NORTH RW)

1" = 20' (HORIZONTAL)
1" = 4' (VERTICAL)



PLAN VIEW

1" = 20'

NOTES:

1. FOR SOUTH RETAINING WALL INFORMATION, SEE "SOUTH RETAINING WALL GENERAL PLAN" SHEET.
2. FOR "TYPICAL SECTION", SEE "RETAINING WALL TYPICAL SECTION" SHEET.
3. BOTTOM OF WALL ELEVATION IS MEASURED AT THE TOP OF FOOTING.
4. UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS AND ELEVATIONS PRIOR TO WALL CONSTRUCTION.

STANDARD PLAN SHEET No.
DETAIL No.

NORTH

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

60% PLANS - NOT FOR CONSTRUCTION - 11/26/2025

NOTE: THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN OVERSIGHT	
SIGN OFF DATE	
DIST-COUNTY-ROUTE-POST MILE	12-ORA-57-PM 17.59
PID	12 2500 0108
ERS NAME	RW NORTH/SOUTH
55EXXXX	ERS NUMBER

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

LICENSED PROFESSIONAL ENGINEER ANDRES CUEVAS CONSTRUCTIONS C 91635 EXP 12/31/26 CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE			
			DRAWN	RMC	11/05/2025
			DESIGNED	ACM	11/05/2025
			REVIEWED	SRJ	11/14/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
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			PARKS & REC		
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CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

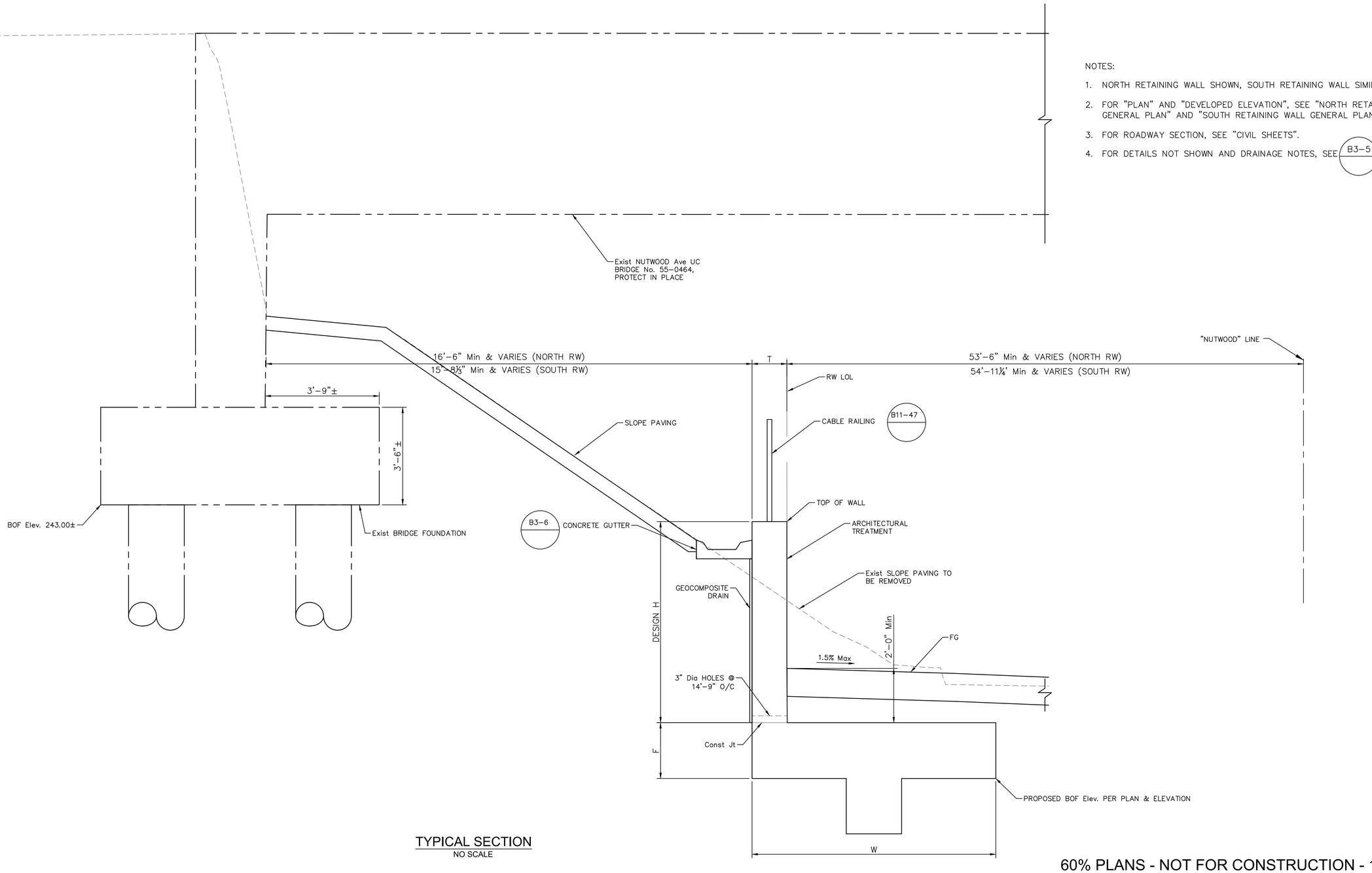
NUTWOOD AVENUE ATP
NORTH RETAINING WALL GENERAL PLAN

APPROVED: ACCEPTED:

DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED SHEET 42 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172' FILE: XXXXX



NOTES:

1. NORTH RETAINING WALL SHOWN, SOUTH RETAINING WALL SIMILAR.
2. FOR "PLAN" AND "DEVELOPED ELEVATION", SEE "NORTH RETAINING WALL GENERAL PLAN" AND "SOUTH RETAINING WALL GENERAL PLAN" SHEETS.
3. FOR ROADWAY SECTION, SEE "CIVIL SHEETS".
4. FOR DETAILS NOT SHOWN AND DRAINAGE NOTES, SEE B3-5

TYPICAL SECTION
NO SCALE

60% PLANS - NOT FOR CONSTRUCTION - 11/26/2025

NOTE: THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN OVERSIGHT	
SIGN OFF DATE	
DIST-COUNTY-ROUTE-POST MILE	12-ORA-57-PM 17.59
PID	12 2500 0108
ERS NAME	RW NORTH/SOUTH
55EXXXX	ERS NUMBER

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

LICENSED PROFESSIONAL ENGINEER ANDRES CUEVAS JR. C 91835 EXP 12/31/26 CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

REVISIONS

NUMBER	DESCRIPTION	DATE

	INITIALS	DATE
DRAWN	RMC	11/05/2025
DESIGNED	ACM	11/05/2025
REVIEWED	SRJ	11/14/2025
STREET		
SEWER		
DRAINAGE		
WATER		
TRAFFIC		
UTILITY/ELEC		
LANDSCAPE		
FACILITIES		
GENERAL ENG		
DESIGN ENG		
INSPECTION		
PARKS & REC		
AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

NUTWOOD AVENUE ATP
RETAINING WALL TYPICAL SECTION

APPROVED: _____ DATE / CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: _____ DATE / PUBLIC WORKS DIRECTOR

SCALE: AS NOTED

SHEET 43 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

INDEX TO PLANS

STRUCTURAL PLANS

SHEET NO.	TITLE
41	NORTH RETAINING WALL GENERAL PLAN
42	SOUTH RETAINING WALL GENERAL PLAN
43	RETAINING WALL TYPICAL SECTION
44	INDEX TO PLANS
45	FOUNDATION PLAN
46	RETAINING WALL TYPE 7 DETAIL
47	SLOPE PAVING DETAIL
48	LOG OF TEST BORINGS

STAGED CONSTRUCTION NOTES

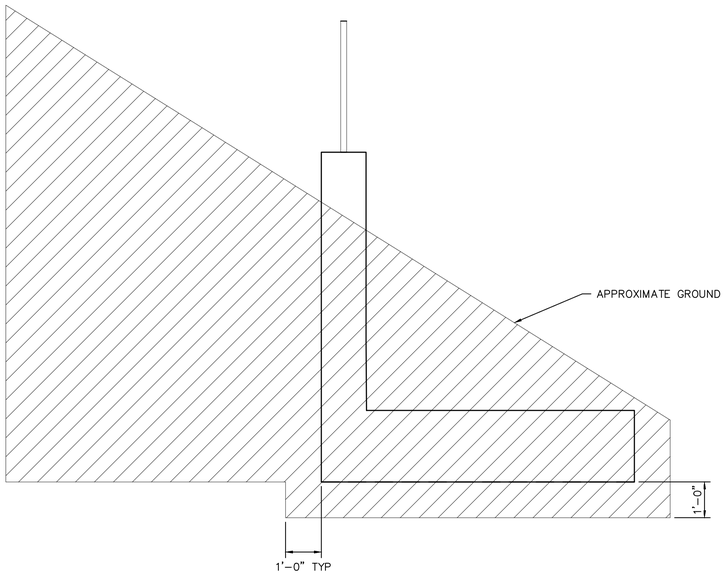
1. Horizontal excavation of 1' from the face of retaining wall is required. 4' benches shall be constructed while maintaining 2' minimum of soil cover on existing bridge abutments.
2. Contractor shall perform a survey of the existing slope paving and bridge prior to excavation.
3. The slope paving shall be removed first.
4. Contractor to create 4' cuts for the benches into the existing slope.
5. Contractor must backfill behind the retaining walls.
6. Contractor to construct slope paving to match existing conditions.

GENERAL NOTES
LOAD & RESISTANCE FACTOR DESIGN

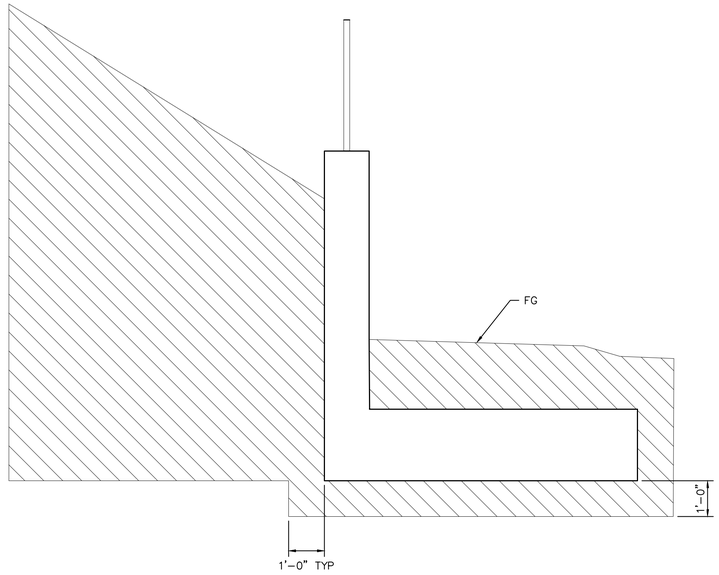
DESIGN: AASHTO LRFD Bridge Design Specifications, 8th edition with California Amendments, prefaced dated September 2025.

SOIL PARAMETERS:
- ϕ = 34°
- γ = 120 pcf
- c = 0 psf
- q_{ult} = 2.96 ksf
- k_h =
- k_a =
- k_{AE} = 0.88

k_h = horizontal ground acceleration
k_a = active earth pressure coefficient
k_{AE} = seismic earth pressure coefficient
q_{ult} = bearing capacity equivalent 1–inch of settlement



EXCAVATION



BACKFILL

NOTE: THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

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SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE			
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			DESIGNED	ACM	11/05/2025
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			PARKS & REC		
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60% PLANS - NOT FOR CONSTRUCTION - 11/26/2025

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

INDEX TO PLANS

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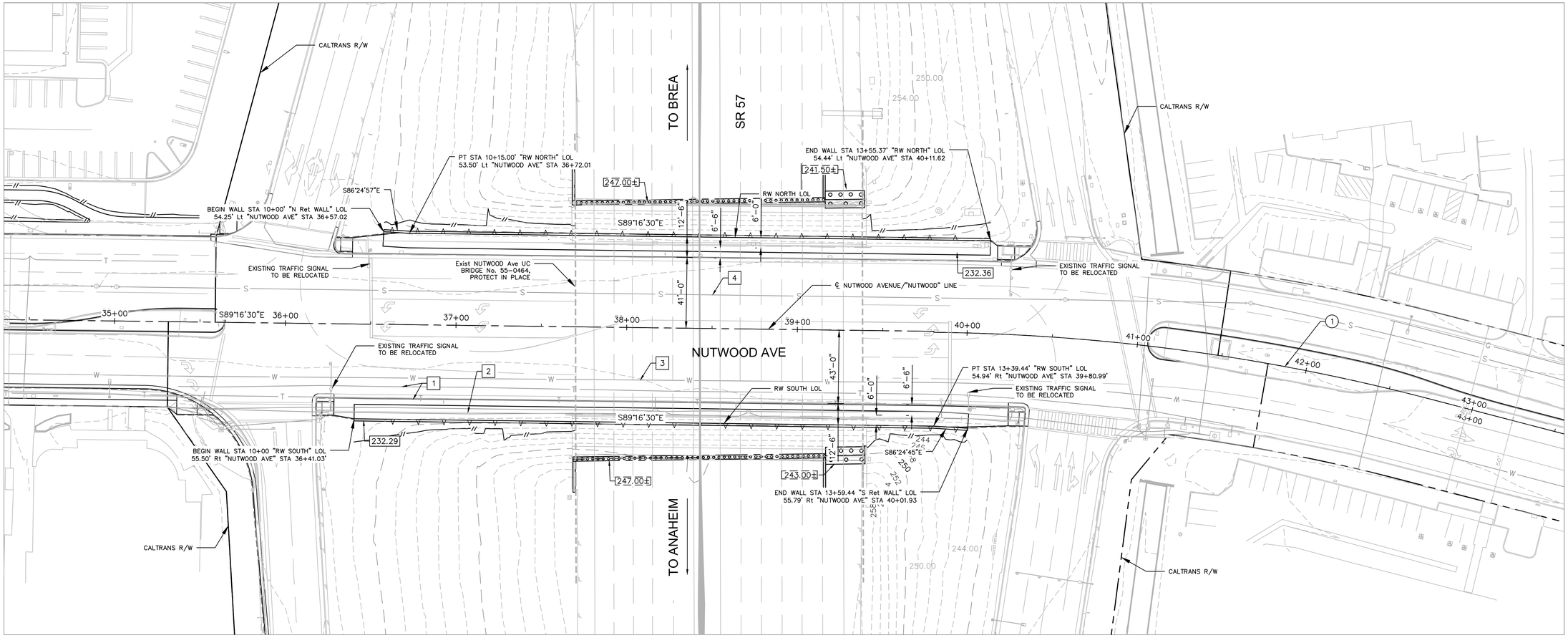
SCALE: AS NOTED

SHEET 44 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D–29–70 ELEV = 250.172'

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



PLAN
1"=30'

CURVE DATA – "NUTWOOD AVE" LINE				
No.	R [ft]	Δ	T [ft]	L [ft]
(1)	1200	13°57'12"	298.16	292.24

SPREAD FOOTING DATA TABLE					
WALL STATION	DESIGN HEIGHT (ft)	BOTTOM OF FOOTING ELEVATION (ft)	SERVICE PERMISSIBLE NET CONTACT STRESS (SETTLEMEN) (ksf)	STRENGTH/CONSTRUCTION FACTORED GROSS NOMINAL BEARING RESISTANCE (ϕb = 0.55) (ksf)	EXTREME EVENT I FACTORED GROSS NOMINAL BEARING RESISTANCE (ϕb = 0.8) (ksf)
NORTH RW	8	23	2.3	3.1	4.5
SOUTH RW	8	25.7	1.9	3.1	4.5

NOTES

1. Service permissible net stress is greater than or equal to the service load presented in the Foundation Data table above, This load does not account for traffic live load.

LEGEND

XX.XX — BOTTOM OF FOOTING ELEVATION

XX.XX± — BOTTOM OF EXISTING FOOTING ELEVATION

UTILITY NOTES

1. EXISTING TELEPHONE LINE
2. EXISTING ELECTRICAL LINE, TO BE RELOCATED
3. EXISTING WATER LINE, PROTECT IN PLACE
4. EXISTING SEWER LINE, PROTECT IN PLACE

NORTH

NOTES

1. SURVEY MONUMENTS SHOWN ARE FOR FOR DESIGN PURPOSES ONLY. FOR THE COMPLETE LIST OF SURVEY MONUMENTS FOR THIS PROJECT, SEE ROADWAY PLANS.
2. UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE, SEE ROADWAY PLANS FOR DETAILS.

BASIS OF COORDINATES

Bearings and Coordinates as shown hereon are in terms of the California Coordinate System of 1983 (CC283, Epoch 1991.35), Zone 6; based locally upon the following Control Stations as published by the County of Orange:

NAME	NORTHING (FT.)–GRID	EASTING (FT.)–GRID
2001 OCS 3282	2247998.8400	6069149.2900
2017 OCS 0560	2260355.8100	6065880.4300
2023 OCS 0111	2270990.2300	6066809.1800

All coordinates and Distances are in terms of the U.S. Survey Foot, 1 meter = 39.37/12 feet.

BENCHMARKS

Designation: 1L–54–82 Elev = 153.171
Described by OCS 2002 – Found 3 3/4" OCS Aluminum Benchmark Disk Stamped "1L–54–82", set in the Top of a 6 in. by 6 in. Concrete Post. Monument is located along the Westerly Levee of the Santa Ana River, 0.25 Miles Northerly along Levee from the Centerline of Orangewood Avenue, 200 ft. Northeasterly of the Easterly Leg of the Anaheim Angels 200 ft. tall sign, 69 ft. Westerly of the Centerline of the Bike Trail and 1.5 ft. Westerly of a Steel OCS Witness Post. Monument is set 0.3 below the Ground.

Designation: 2G–25–70 Elev = 275.872
Described by OCS 2003 – Found 3 3/4" OCS Aluminum Benchmark Disk Stamped "2G–25–70", set in the Southeasterly Corner of a 4 ft. by 6 ft. Concrete Catch Basin. Monument is located in the Northwesterly Corner of the Intersection of Yorba Linda Boulevard and Deerpark Drive, 75 ft. Westerly of the Centerline of Deerpark and 46 ft. Northerly of the Centerline of Yorba Linda. Monument is set Level with the Sidewalk.

NOTE: THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

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THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

LICENSED PROFESSIONAL ENGINEER — ANDRES CUEVAS CRUZ — C 91335 — EXP. 12/31/26 — CIVIL — STATE OF CALIFORNIA

SIGNATURE DATE

REVISIONS					
NUMBER	DESCRIPTION	DATE		INITIALS	DATE
			DRAWN	RMC	11/05/2025
			DESIGNED	ACM	11/05/2025
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			DESIGN ENG		
			INSPECTION		
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60% PLANS - NOT FOR CONSTRUCTION - 11/26/2025

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

FOUNDATION PLAN

APPROVED: _____ DATE — CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: _____ DATE — PUBLIC WORKS DIRECTOR

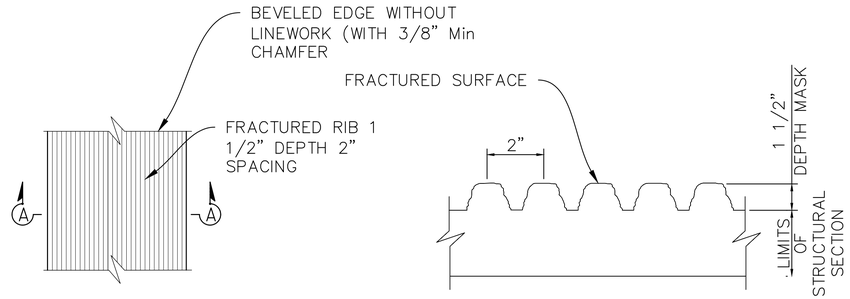
SCALE: AS NOTED

B.M.: ORANGE COUNTY BM NO.: 2D–29–70 ELEV = 250.172'

SHEET 45 OF 65 SHEETS

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



FRACTURED RIB TEXTURE DETAIL

NO SCALE

SECTION A–A

NO SCALE

DESIGN DATA

Design: AASHTO LRFD Bridge Design Specifications, 8th edition with California Amendments, Preface dated April 2019

LS: Varied surcharge on level ground surface

EQE: Mononabe–Okabe Method
K_h = 0.2
K_v = 0.0

Soil: $\emptyset$ = 34°
γ = 120 pcf

Reinforced Concrete: f'c = 3600 psi
fy = 60,000 psi

Load Combinations and Limit States

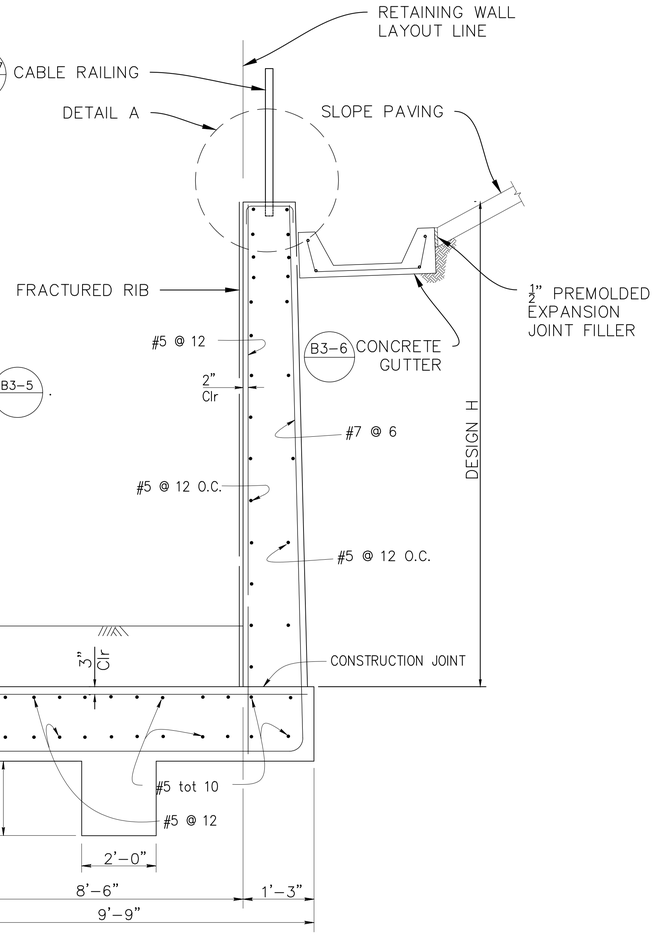
Service I Q = 1.00DC+1.00EV+1.00EH+1.00ES

Strength I Q = aDC+βEV+1.5EH+1.75LS

Extreme I Q = 1.00DC+1.00EV+1.00EH+1.00EQD+1.00EQE

Where: Q: Force Effects
Q: 1.25 or 0.90, Which ever Controls Design
β: 1.35 or 1.00, Which ever Controls Design
DC: Dead Load of Structure Components
EV: Vertical Earth Fill Pressure
LS: Live Load Surcharge
EQE: Seismic Earth Pressure
EQD: Soil and Structure Components Inertia. Soil inertia ignored for stem design

NOTES:
1. For details not shown and drainage notes, see B3-5. substitution of geocomposite drain for pervious backfill material is not permitted.
2. Footing cover, 2'–0" minimum.
3. Provide #6 @ 12"X16'–0" @ bar over a distance of 8'–0" measured from all expansion joints begin wall and end wall locations.

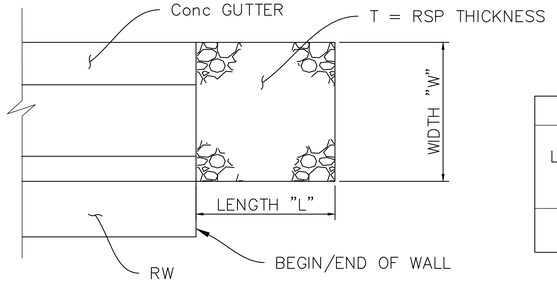


SPREAD FOOTING SECTION

NO SCALE

ELEVATION

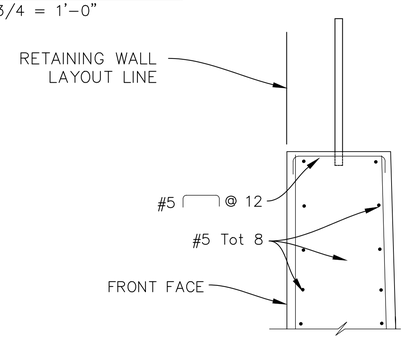
NO SCALE



RSP SCHEDULE				
LENGTH "L"	WIDTH "W"	RSP CLASS	METHOD OF PLACEMENT	RSP THICKNESS "T"
2'	2'	1	B	292.24

ROCK SLOPE PROTECTION

3/4 = 1'–0"



DETAIL A

3/4 = 1'–0"

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LICENSED PROFESSIONAL ENGINEER ANDRES CUEVAS C 91825 EXP. 12/31/26 CIVIL STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	RMC	11/05/2025
			DESIGNED	ACM	11/05/2025
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			INSPECTION		
			PARKS & REC		
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60% PLANS - NOT FOR CONSTRUCTION - 11/26/2025

CITY OF FULLERTON

PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

RETAINING WALL TYPE 7 DETAIL 1

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: DATE PUBLIC WORKS DIRECTOR

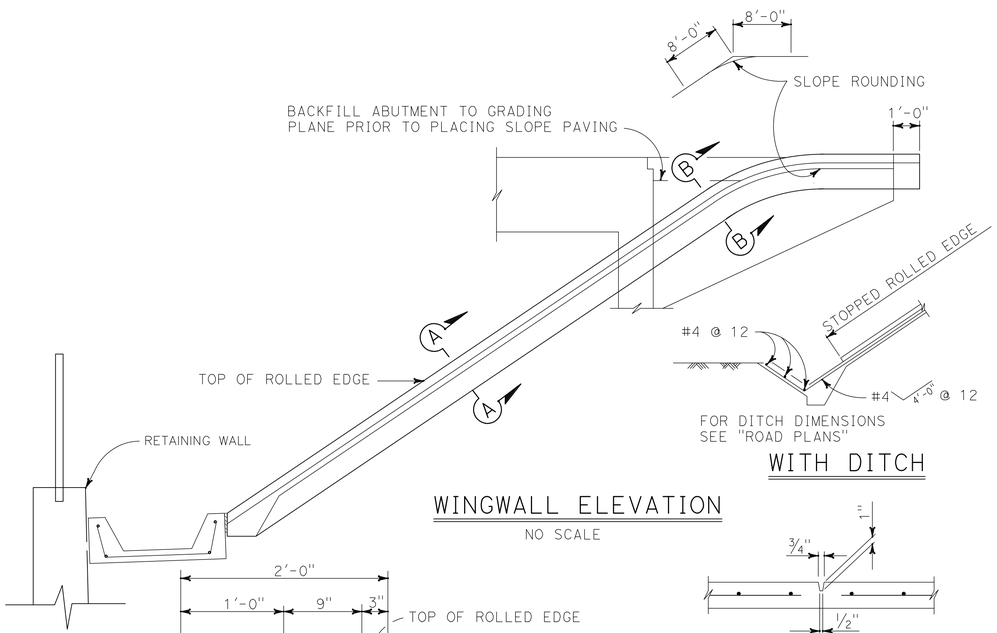
SCALE: AS NOTED

B.M.: ORANGE COUNTY BM NO.: 2D–29–70 ELEV = 250.172'

SHEET 46 OF 65 SHEETS

FILE: XXXXX

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

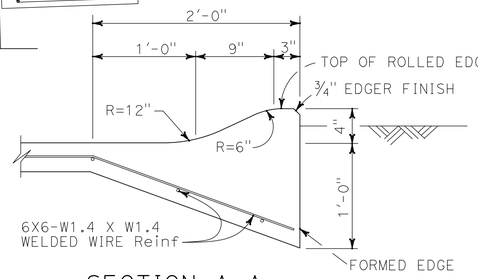


WITH DITCH

WINGWALL ELEVATION

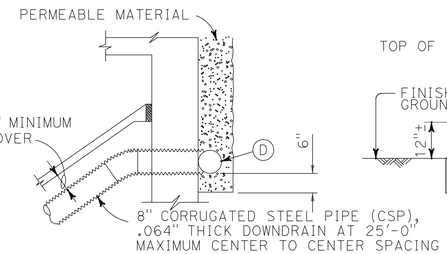
NO SCALE

PREFORMED GROOVE



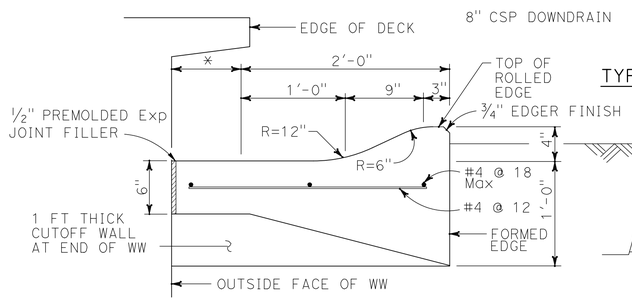
SECTION A-A

NO SCALE



TYPICAL - DRAIN CONNECTION

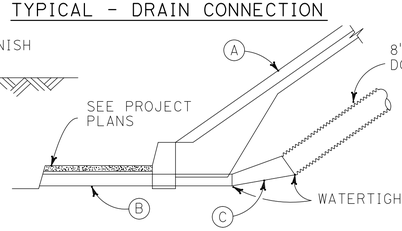
TYPICAL - NO CURB



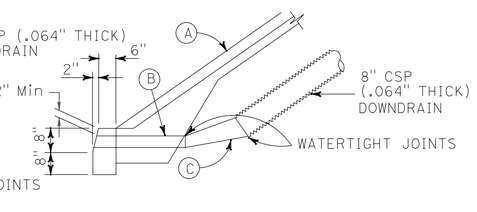
SECTION B-B

NO SCALE

* THIS DIMENSION BECOMES ZERO WHEN EDGE OF DECK IS AT OUTSIDE FACE OF WW



TYPICAL - WITH SIDEWALK



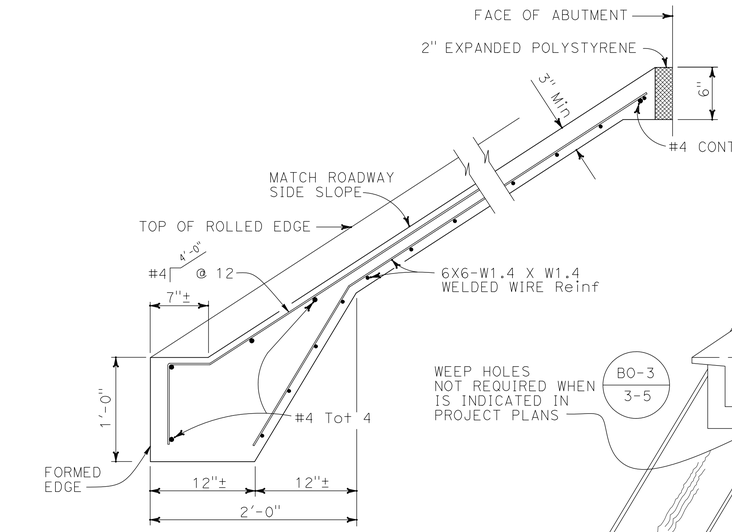
TYPICAL - WITH CURB

DRAINAGE DETAILS

NO SCALE

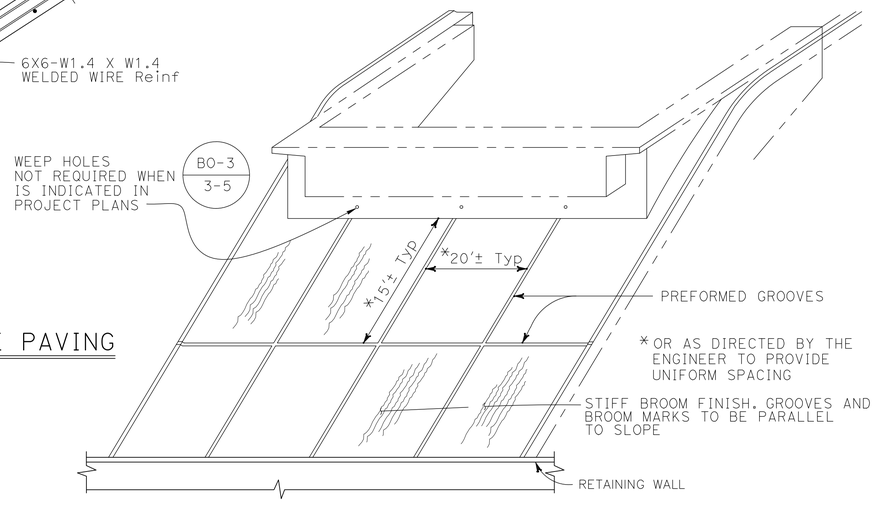
Drainage details are only applicable when is indicated in project plans

BO-3 / 3-5



TYPICAL SECTION - CONCRETE PAVING

NO SCALE



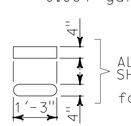
PICTORIAL VIEW OF TYPICAL INSTALLATION

See Note (E)

NOTES

(A) Top of rolled edge

(B) Conduit:
0.064" galv corrugated steel or 0.109" smooth galv steel



(C) Taper: { 0.064" galv corrugated steel or 0.109" smooth galv steel

(D) 8" perforated steel pipe (0.064" thick) underdrain behind abutment.

(E) See Project Plans for limits of Slope Paving & Drainage layout.

NOTE: THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

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			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

RETAINING WALL TYPE 7 DETAIL 2

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED

SHEET 47 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

FILE: XXXXX

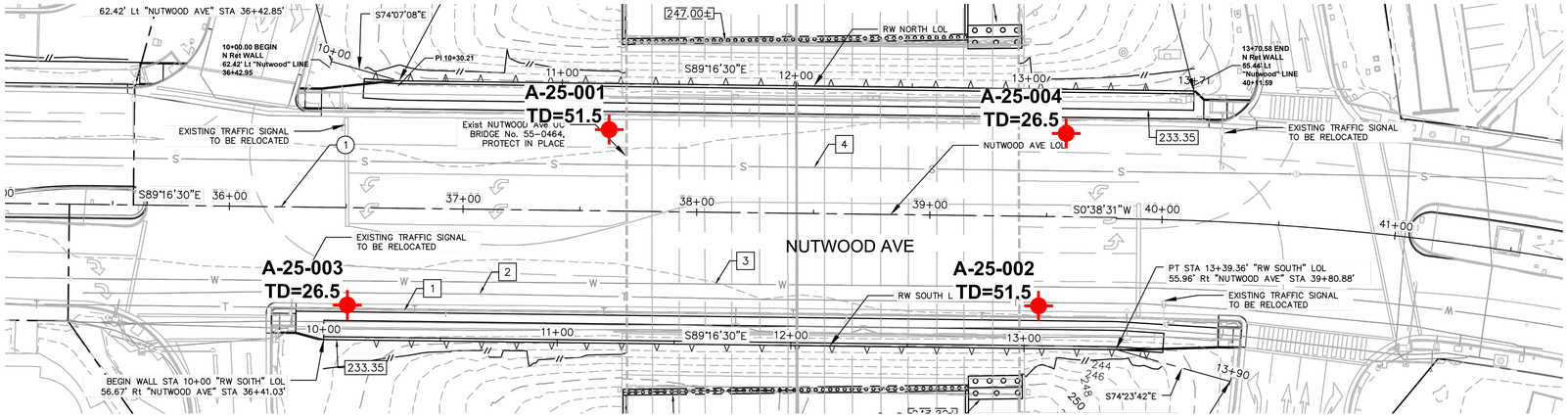
60% PLANS - NOT FOR CONSTRUCTION - 11/26/2025

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

THE CITY OF COLTON OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC OR SCANNED COPIES OF THIS PLAN SHEET.

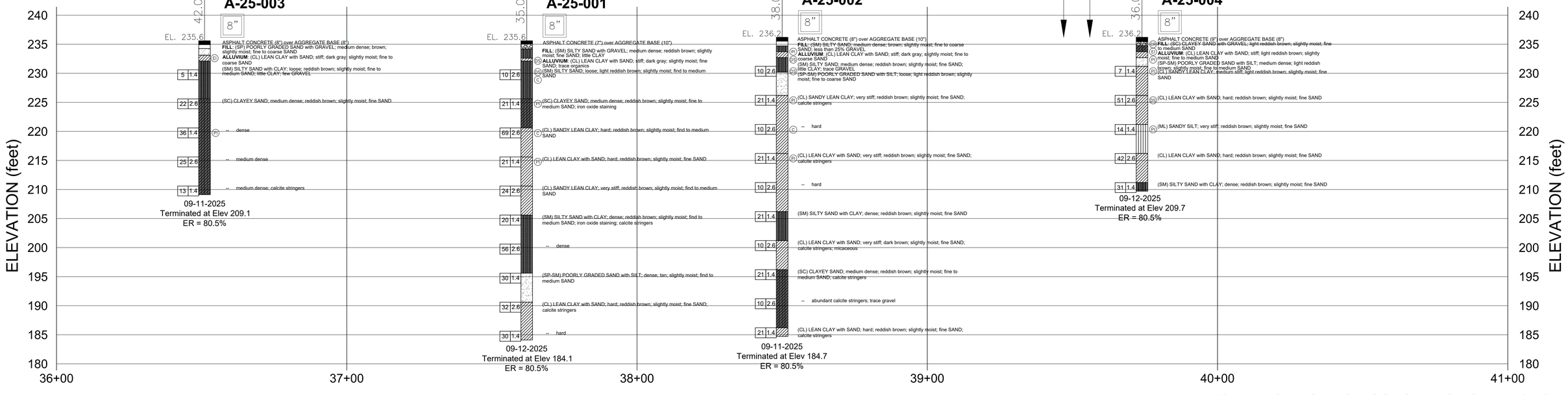
NOTES:

1. THIS LOTB SHEET WAS PREPARED IN ACCORDANCE WITH THE CALTRANS SOIL AND ROCK LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL (2022).
2. SAMPLES OBTAINED WITH A CALIFORNIA DRIVE SAMPLER (2.41 INCH I.D., 3-INCH O.D.) LINED WITH BRASS RINGS AND STANDARD PENETRATION TEST (SPT) SPLIT BARREL SAMPLER (1.37-INCH I.D., 2-INCH O.D.) N=BLOW COUNT.
3. SAMPLERS ADVANCED WITH A CME AUTOMATIC HAMMER SYSTEM EQUIPPED WITH 140-LB WEIGHT, 30-INCH FREE FALL DROP, ANVIL AND DRILL RODS.
4. UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D-2488) USED FOR SOIL CLASSIFICATION; AND SUGGESTED METHODS FOR THE DESCRIPTION OF ROCK MASSES, JOINTS AND DISCONTINUITIES, AFTER CALTRANS SOIL AND ROCK LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL (2022).



PLAN
SCALE: 1" = 30'

PROFILE
HORIZ.: 1" = 16'
VERT.: 1" = 8'



CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

60% PLANS - NOT FOR CONSTRUCTION - 11/26/2025

DESIGN OVERSIGHT	
SIGN OFF DATE	
DIST-COUNTY-ROUTE-POST MILE	12-ORA-57-PM 17.59
PID	12 2500 0108
ERS NAME	RW NORTH/SOUTH
55EXXXX	ERS NUMBER

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

TWINING
4811 Airport Plaza Drive, Suite 220
Long Beach, California 90815
562-426-3355

REGISTERED PROFESSIONAL ENGINEER ADRIAN M. MORENO C 87057 12/31/27 CIVIL STATE OF CALIFORNIA

ADRIAN MORENO, P.E. NO. 87057, PROJECT MANAGER DATE

REVISIONS

NUMBER	DESCRIPTION	DATE

	INITIALS	DATE
DRAWN		
DESIGNED		
REVIEWED		
STREET		
SEWER		
DRAINAGE		
WATER		
TRAFFIC		
UTILITY/ELEC		
LANDSCAPE		
FACILITIES		
GENERAL ENG		
DESIGN ENG		
INSPECTION		
PARKS & REC		
AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

NUTWOOD AVENUE ATP
LOG OF TEST BORINGS

APPROVED: _____ DATE
CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: _____ DATE
PUBLIC WORKS DIRECTOR

SCALE: AS NOTED

B.M.: ORANGE COUNTY BM NO.: 20-29-70 ELEV = 250.172'

SHEET 48 OF 65 SHEETS

FILE: XXXXX

IRRIGATION NOTES

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3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE ANY AND ALL PERMITS REQUIRED TO PERFORM THEIR SCOPE OF WORK.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES WITHIN THE LIMIT OF WORK PRIOR TO COMMENCING ANY WORK. LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND THE LANDSCAPE ARCHITECT MAKES NO GUARANTEES ABOUT THEIR ACTUAL LOCATIONS. NOTIFY THE OWNER'S AUTHORIZED REPRESENTATIVE IN THE EVENT DISCREPANCIES ARE FOUND BETWEEN THE PLANS AND CONDITIONS IN THE FIELD.
5. THE IRRIGATION DESIGN SHOWN HERE-IN IS DIAGRAMMATIC AND SHOWN FOR GRAPHIC CLARITY ONLY. ALL MAINLINE, SLEEVING, VALVES, ETC. SHALL BE INSTALLED WITHIN THE LIMIT OF WORK AND LOCATED IN LANDSCAPE AREAS WHERE EVER POSSIBLE. CONTRACTOR WILL BE EXPECTED TO MAKE ADJUSTMENTS IN THE FIELD TO AVOID CONFLICTS WITH PROPOSED PLANTING AND ARCHITECTURAL IMPROVEMENTS.
6. CONTRACTOR SHALL INSTALL ALL PIPE UNDER PAVED AREAS (HARDSCAPE, PARKING LOTS, ETC.) INSIDE SLEEVING AS SHOWN ON THE LEGEND AND SPECIFICATIONS. INSTALL PER DETAILS PROVIDED. AT A MINIMUM, SLEEVES ARE TO BE 2X THE DIAMETER OF THE PIPE OR WIRE BUNDLE CARRIED. SLEEVES SHALL EXTEND 6" MIN. PAST THE EDGE OF PAVED AREAS ABOVE.
7. IRRIGATION HEADS SHALL BE INSTALLED WITH THE NOZZLE, SCREEN, AND ARCS SHOWN ON THE LEGEND. CONTRACTOR IS EXPECTED TO PERFORM MINOR ADJUSTMENTS IN THE FIELD TO LIMIT THE AMOUNT OF OVER-SPRAY ONTO ANY HARDSCAPE ELEMENT. WHERE OCCURS, AND AT NO ADDITIONAL COST TO THE OWNER, CONTRACTOR IS HEREBY DIRECTED TO REPLACE NOZZLES, SCREENS, ETC. WITH MORE APPROPRIATE RADIUS EQUIPMENT TO BETTER FIT ACTUAL FIELD CONDITIONS ENCOUNTERED.
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9. CONTRACTOR TO CONFIRM EXISTING SYSTEM SOURCE AND BACKFLOW ARE FULLY OPERATIONAL.
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12. DO NOT TRENCH UNDER EXISTING TREES. HAND TRENCH LATERALLY TO INSTALL HEADS, DRIP, ETC.
13. ALL EXISTING IRRIGATION SHOWN TO REMAIN SHOULD BE PROTECTED DURING CONSTRUCTION. CONTRACTOR TO CONFIRM100 PERCENT COVERAGE ON EXISTING AND MODIFY IF NEEDED.
14. MODIFY ZONES PER REVISED CHANGES. CAP LINES WHERE NECESSARY. ADD HEADS AS NEEDED, REPLACE HEADS/NOZZLES TO PROVIDE FULL COVERAGE.
15. DO NOT REMOVE EXISTING SLEEVED LINES UNDER PAVEMENT UNLESS SPECIFIED.
16. CONTRACTOR TO NUMBER EXISTING VALVES AND PROPOSED VALVES IN NUMERICAL ORDER STARTING FROM THE METER AND GOING IN A CLOCKWISE CIRCLE.

CRITICAL ANALYSIS

P.O.C. NUMBER: 01
Water Source Information: Median #1 and #2
RELOCATE EAST METER INTO NEW LANDSCAPE MEDIAN

FLOW AVAILABLE	
Water Meter Size:	5/8"
Flow Available	15 GPM
PRESSURE AVAILABLE	
Static Pressure at POC:	70 PSI
Elevation Change:	0.00 ft
Service Line Size:	4"
Length of Service Line:	20 ft
Pressure Available:	70 PSI
DESIGN ANALYSIS	
Maximum Station Flow:	10.95 GPM
Flow Available at POC:	15 GPM
Residual Flow Available:	4.05 GPM
Critical Station:	3
Design Pressure:	30 PSI
Friction Loss:	0.67 PSI
Fittings Loss:	0.07 PSI
Elevation Loss:	0 PSI
Loss through Valve:	13.9 PSI
Pressure Req. at Critical Station:	44.6 PSI
Loss for Fittings:	0.03 PSI
Loss for Main Line:	0.25 PSI
Loss for POC to Valve Elevation:	0 PSI
Loss for Backflow:	12.2 PSI
Loss for Water Meter:	4.37 PSI
Critical Station Pressure at POC:	61.5 PSI
Pressure Available:	70 PSI
Residual Pressure Available:	8.51 PSI

P.O.C. NUMBER: 02
Water Source Information: Median #4
SALVAGED AND REUSE (E) 1" METER

FLOW AVAILABLE	
Water Meter Size:	1"
Flow Available	37.5 GPM
PRESSURE AVAILABLE	
Static Pressure at POC:	70 PSI
Elevation Change:	0.00 ft
Service Line Size:	4"
Length of Service Line:	20 ft
Pressure Available:	70 PSI
DESIGN ANALYSIS	
Maximum Station Flow:	33.6 GPM
Flow Available at POC:	37.5 GPM
Residual Flow Available:	3.9 GPM
Critical Station:	10
Design Pressure:	40 PSI
Friction Loss:	2.86 PSI
Fittings Loss:	0.29 PSI
Elevation Loss:	0 PSI
Loss through Valve:	2.8 PSI
Pressure Req. at Critical Station:	50.9 PSI
Loss for Fittings:	0.02 PSI
Loss for Main Line:	0.17 PSI
Loss for POC to Valve Elevation:	0 PSI
Loss for Backflow:	11.2 PSI
Loss for Water Meter:	2.02 PSI
Critical Station Pressure at POC:	64.4 PSI
Pressure Available:	70 PSI
Residual Pressure Available:	10.62 PSI

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	PSI
LCS SST RCS	RAIN BIRD R-VAN-STRIP 1812-SAM-P45 SHRUB ROTARY, 5FT.X15FT. (LCS AND RCS), 5FT.X30FT. (SST) HAND ADJUSTABLE MULTI-STREAM ROTARY W/ 1800 SHRUB SPRAY BODY ON 12IN. POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2IN. NPT FEMALE THREADED INLET.	40
14 ADJ 14 F	RAIN BIRD R-VAN14 1812-SAM-P45 SHRUB ROTARY, 8FT.-14FT. 45-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 SHRUB SPRAY BODY ON 12IN. POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2IN. NPT FEMALE THREADED INLET.	40
360	TORO 570S-500 FLOOD ADJUSTABLE SHRUB FLOOD BUBBLER ON FIXED RISER. 1/2IN. FIPT THREADS. SERVICEABLE FILTER SCREEN AND DURABLE CONSTRUCTION.	30

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	RAIN BIRD XCZ-100-PRB-COM WIDE FLOW DRIP CONTROL KIT FOR COMMERCIAL APPLICATIONS. 1IN. BALL VALVE WITH 1IN. PESB VALVE AND 1IN. PRESSURE REGULATING 40PSI QUICK-CHECK BASKET FILTER. 5 GPM-20 GPM.
	AREA TO RECEIVE DRIPLINE RAIN BIRD XFS-06-12 XFS SUB-SURFACE PRESSURE COMPENSATING DRIPLINE W/COPPER SHIELD TECHNOLOGY. 0.6 GPH EMITTERS AT 12" O.C. LATERALS SPACED AT 12" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. UV RESISTANT. SPECIFY XF INSERT FITTINGS.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	RAIN BIRD PEB 1IN., 1-1/2IN., 2IN. PLASTIC INDUSTRIAL REMOTE CONTROL VALVE. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION.
	RAIN BIRD 44-RC 1IN. BRASS QUICK-COUPLING VALVE, WITH CORROSION-RESISTANT STAINLESS STEEL SPRING, THERMOPLASTIC RUBBER COVER, AND 2-PIECE BODY.
	NIBCO T-113 CLASS 125 BRONZE GATE SHUT OFF VALVE WITH WHEEL HANDLE, SAME SIZE AS MAINLINE PIPE DIAMETER AT VALVE LOCATION. SIZE RANGE - 1/4IN. - 3IN.
BF	FEBCO 825Y 1" REDUCED PRESSURE BACKFLOW PREVENTER WITH CAGE
C1	DIG CORPORATION LEIT 4004 FOUR STATIONS OPERATE WITH A MASTER VALVE OR PUMP START. SELF-CONTAINED WATER MANAGEMENT IRRIGATION CONTROLLER THAT HARNESSES SOLAR AS A POWER SOURCE. SUSTAINABLE.
C2	DIG CORPORATION LEIT 4006 SIX STATIONS OPERATE WITH A MASTER VALVE OR PUMP START. SELF-CONTAINED WATER MANAGEMENT IRRIGATION CONTROLLER THAT HARNESSES SOLAR AS A POWER SOURCE. SUSTAINABLE.
M	WATER METER 1" MEDIAN #4 SALVAGED AND REUSE (E) 1" METER
M	WATER METER 5/8" MEDIAN #1 AND #2 RELOCATE EAST METER INTO NEW LANDSCAPE MEDIAN
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40
	IRRIGATION MAINLINE: PVC SCHEDULE 40
	PIPE SLEEVE: PVC CLASS 200 TYPICAL PIPE SLEEVE FOR IRRIGATION PIPE. PIPE SLEEVE SIZE SHALL ALLOW FOR IRRIGATION PIPING AND THEIR RELATED COUPLINGS TO EASILY SLIDE THROUGH SLEEVING MATERIAL. EXTEND SLEEVES 18 INCHES BEYOND EDGES OF PAVING OR CONSTRUCTION.

Valve Callout
Valve Number
Valve Flow
Valve Size

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

LICENSED LANDSCAPE ARCHITECT — NOT FOR CONSTRUCTION — STATE OF CALIFORNIA
EXPIRATION DATE 08/31/2027
11/26/2025
DATE

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	JW/CS	11/26/2025
			DESIGNED	ML	11/26/2025
			REVIEWED	PQ	11/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
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CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

IRRIGATION NOTES, LEGEND, AND CALCULATIONS

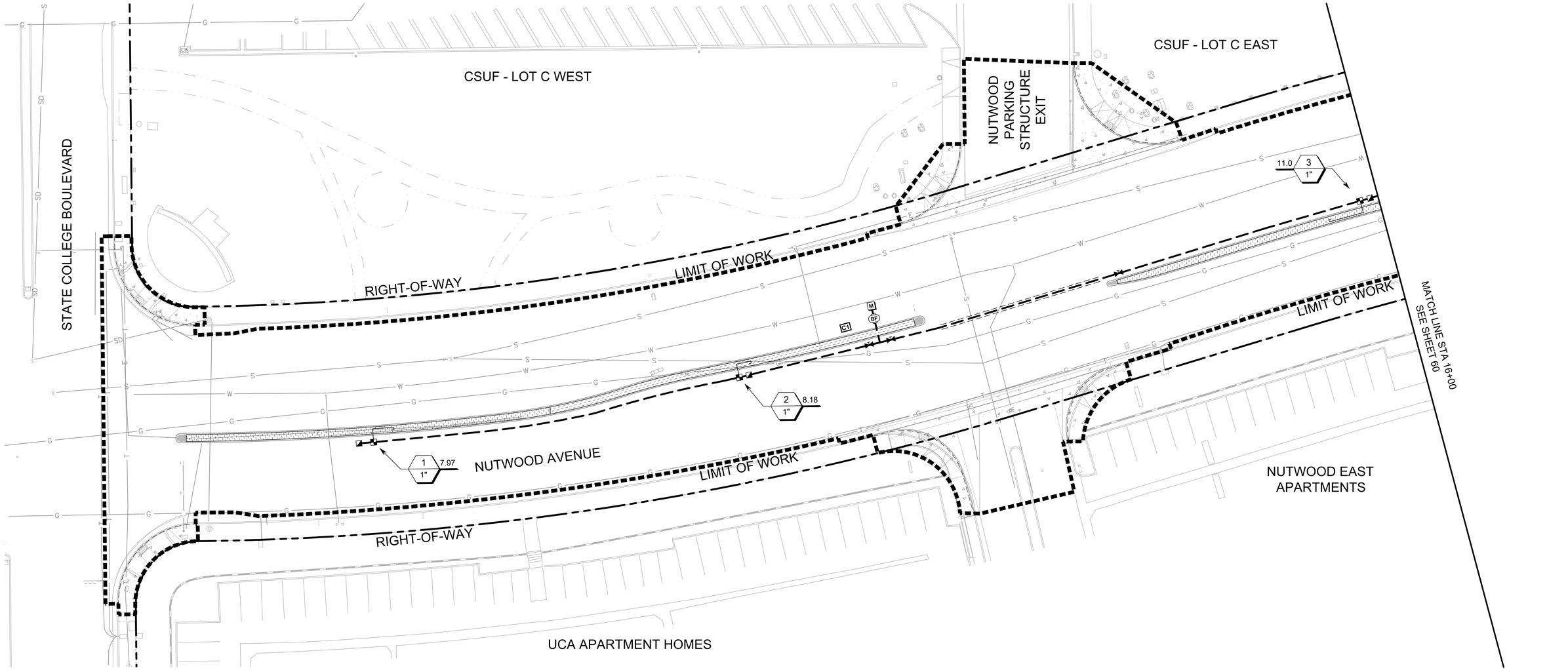
APPROVED: ACCEPTED:

DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED SHEET 49 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172' FILE:

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



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IRRIGATION SCHEDULE

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M	WATER METER 5/8" MEDIAN #1 AND #2 RELOCATE EAST METER INTO NEW LANDSCAPE MEDIAN
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	IRRIGATION MAINLINE: PVC SCHEDULE 40

Valve Callout
- # — Valve Number
- # — Valve Flow
- # — Valve Size

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

LICENSED LANDSCAPE ARCHITECT
NOT FOR CONSTRUCTION
STATE OF CALIFORNIA
SIGNATURE
REGISTRATION EXPIRATION DATE
11/26/2025
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SIGNATURE DATE

REVISIONS

NUMBER	DESCRIPTION	DATE

	INITIALS	DATE
DRAWN	JW/CS	11/26/2025
DESIGNED	ML	11/26/2025
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CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

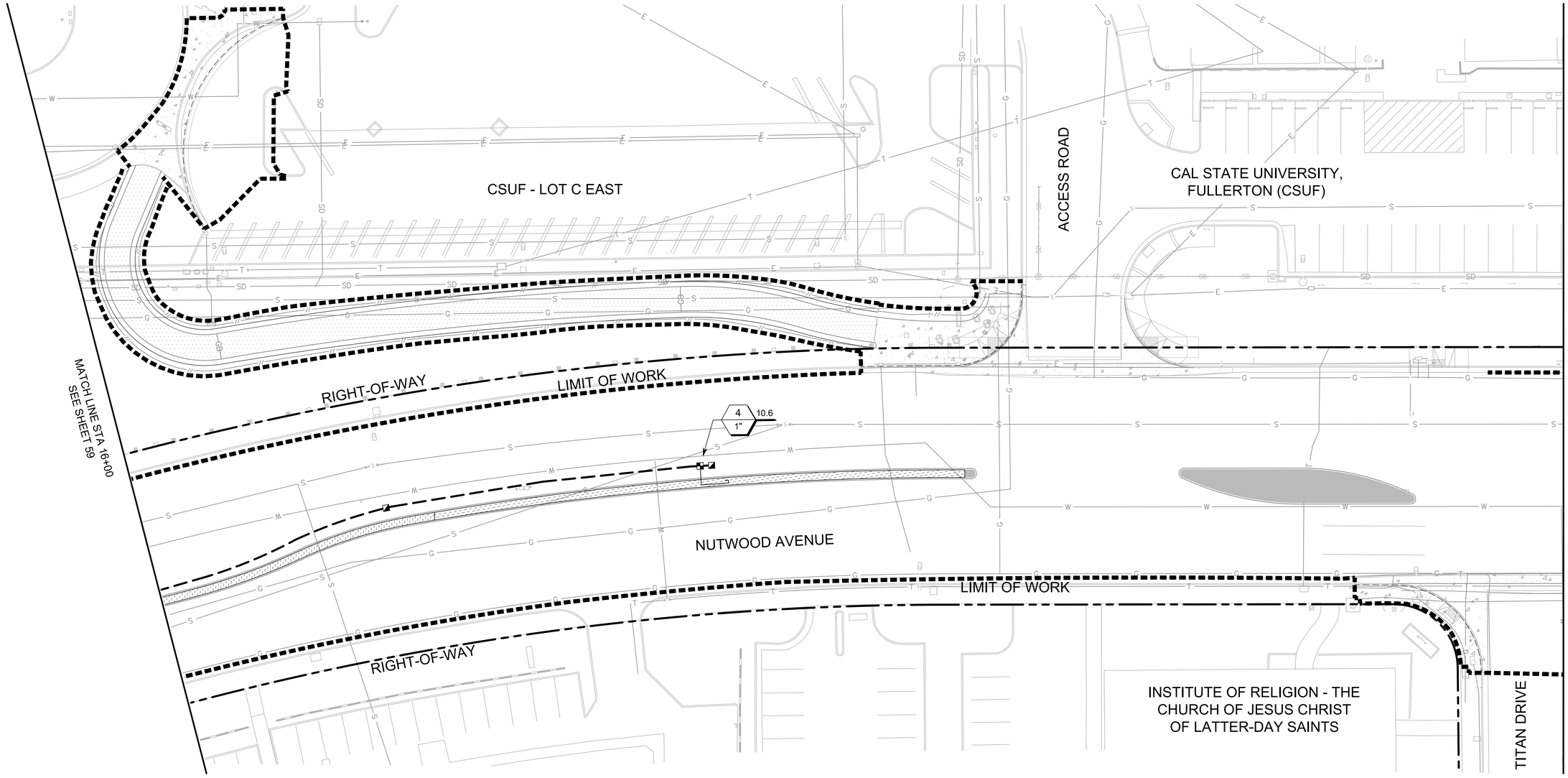
IRRIGATION PLAN

APPROVED:
DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED:
DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED
SHEET 50 OF 65 SHEETS
B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'
FILE:

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

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	IRRIGATION LATERAL LINE: PVC SCHEDULE 40

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Valve Callout
- # — Valve Number
- # — Valve Flow
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NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

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LICENSED LANDSCAPE ARCHITECT
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DATE

SIGNATURE DATE

REVISIONS

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DESIGNED	ML	11/26/2025
REVIEWED	PQ	11/26/2025
STREET		
SEWER		
DRAINAGE		
WATER		
TRAFFIC		
UTILITY/ELEC		
LANDSCAPE		
FACILITIES		
GENERAL ENG		
DESIGN ENG		
INSPECTION		
PARKS & REC		
AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

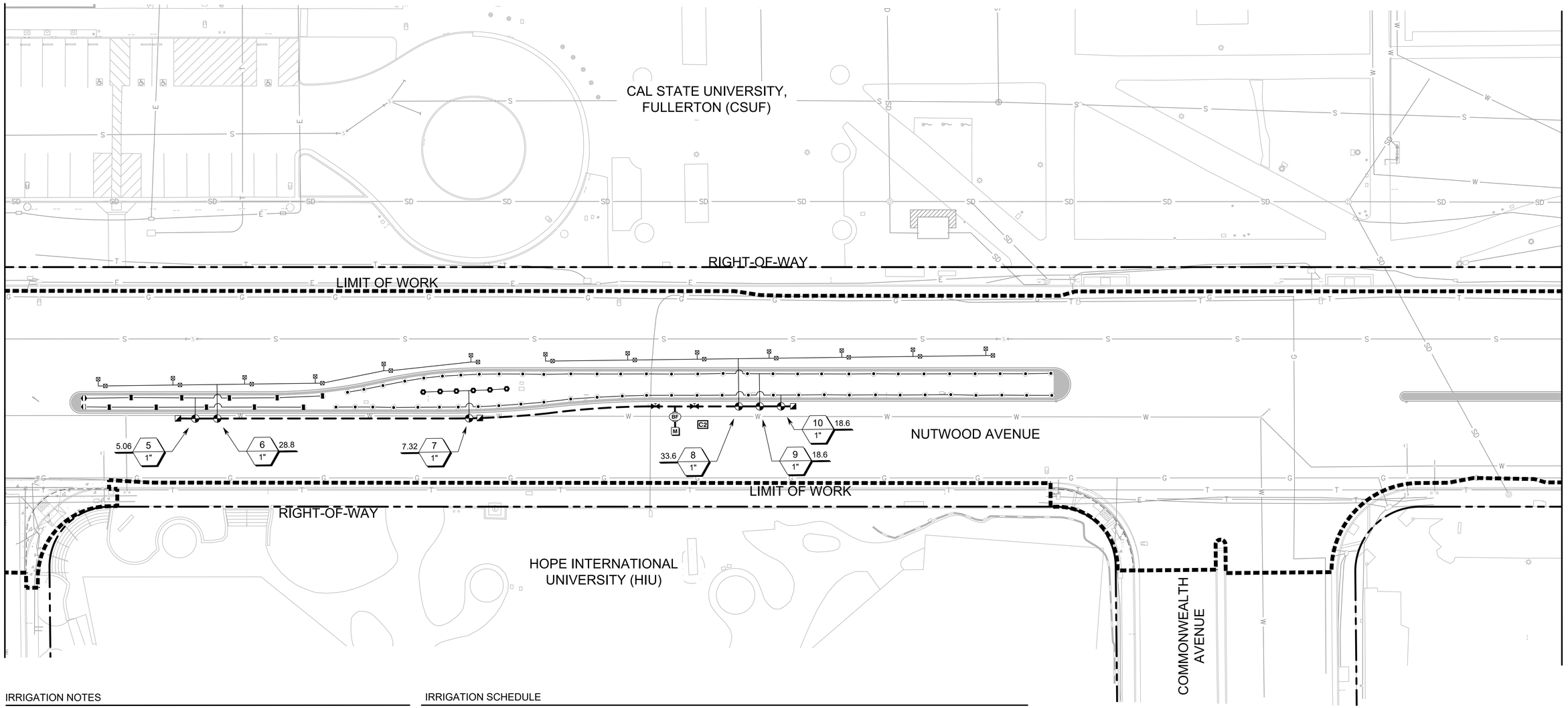
IRRIGATION PLAN

APPROVED:
DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED:
DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED
B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

SHEET 51 OF 65 SHEETS
FILE:



IRRIGATION NOTES

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16. CONTRACTOR TO NUMBER EXISTING VALVES AND PROPOSED VALVES IN NUMERICAL ORDER STARTING FROM THE METER AND GOING IN A CLOCKWISE CIRCLE.

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	PSI
LCS SST RCS	RAIN BIRD R-VAN-STRIP 1812-SAM-P45 SHRUB ROTARY, 5FT.X15FT. (LCS AND RCS), 5FT.X30FT. (SST) HAND ADJUSTABLE MULTI-STREAM ROTARY W/ 1800 SHRUB SPRAY BODY ON 12IN. POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2IN. NPT FEMALE THREADED INLET.	40
14 ADJ 14 F	RAIN BIRD R-VAN14 1812-SAM-P45 SHRUB ROTARY, 8FT.-14FT. 45-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 SHRUB SPRAY BODY ON 12IN. POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR. 1/2IN. NPT FEMALE THREADED INLET.	40
360	TORO 570S-500 FLOOD ADJUSTABLE SHRUB FLOOD BUBBLER ON FIXED RISER. 1/2IN. FIPT THREADS. SERVICEABLE FILTER SCREEN AND DURABLE CONSTRUCTION.	30

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	RAIN BIRD PEB 1IN., 1-1/2IN., 2IN. PLASTIC INDUSTRIAL REMOTE CONTROL VALVE. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION.
	RAIN BIRD 44-RC 1IN. BRASS QUICK-COUPLING VALVE, WITH CORROSION-RESISTANT STAINLESS STEEL SPRING, THERMOPLASTIC RUBBER COVER, AND 2-PIECE BODY.
	NIBCO T-113 CLASS 125 BRONZE GATE SHUT OFF VALVE WITH WHEEL HANDLE, SAME SIZE AS MAINLINE PIPE DIAMETER AT VALVE LOCATION. SIZE RANGE - 1/4IN. - 3IN.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
BF	FEBCO 825Y 1" REDUCED PRESSURE BACKFLOW PREVENTER WITH CAGE
M	WATER METER 1" MEDIAN #4 SALVAGED AND REUSE (E) 1" METER
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40
	IRRIGATION MAINLINE: PVC SCHEDULE 40

Valve Callout
Valve Number
Valve Flow
#" Valve Size

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

LICENSED LANDSCAPE ARCHITECT
NOT FOR CONSTRUCTION
STATE OF CALIFORNIA
CHRISTOPHER SHANE SCHUTTE
No. 6221
EXPIRATION DATE 11/26/2025

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	JW/CS	11/26/2025
			DESIGNED	ML	11/26/2025
			REVIEWED	PQ	11/26/2025
			STREET		
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			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

IRRIGATION PLAN

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: DATE PUBLIC WORKS DIRECTOR

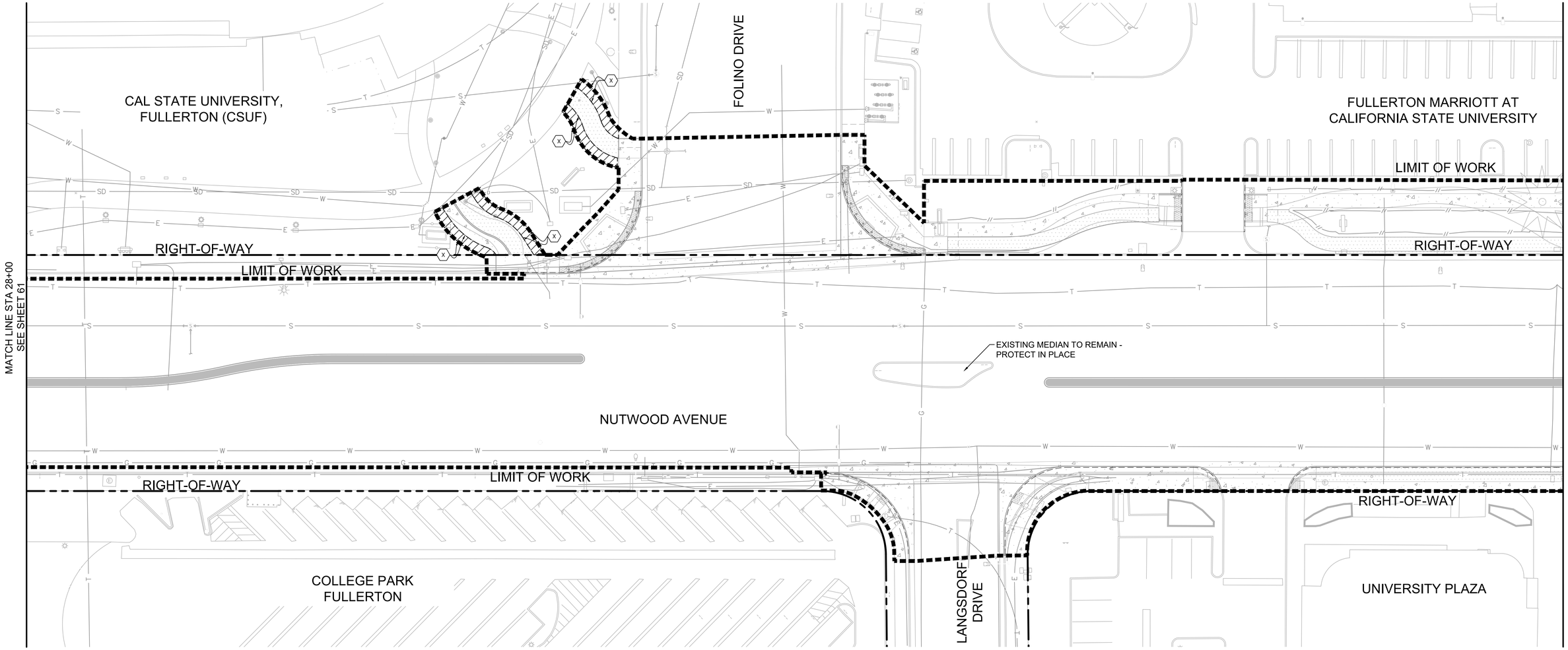
SCALE: AS NOTED

SHEET 52 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

FILE:

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

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NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

LICENSED LANDSCAPE ARCHITECT
CHRISTOPHER JOSEPH SCHULTE
NO. 6423
RENEWAL DATE 08/31/2027
11/26/2025
DATE
NOT FOR CONSTRUCTION
STATE OF CALIFORNIA

SIGNATURE DATE

REVISIONS					
NUMBER	DESCRIPTION	DATE		INITIALS	DATE
			DRAWN	JW/CS	11/26/2025
			DESIGNED	ML	11/26/2025
			REVIEWED	PQ	11/26/2025
			STREET		
			SEWER		
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			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

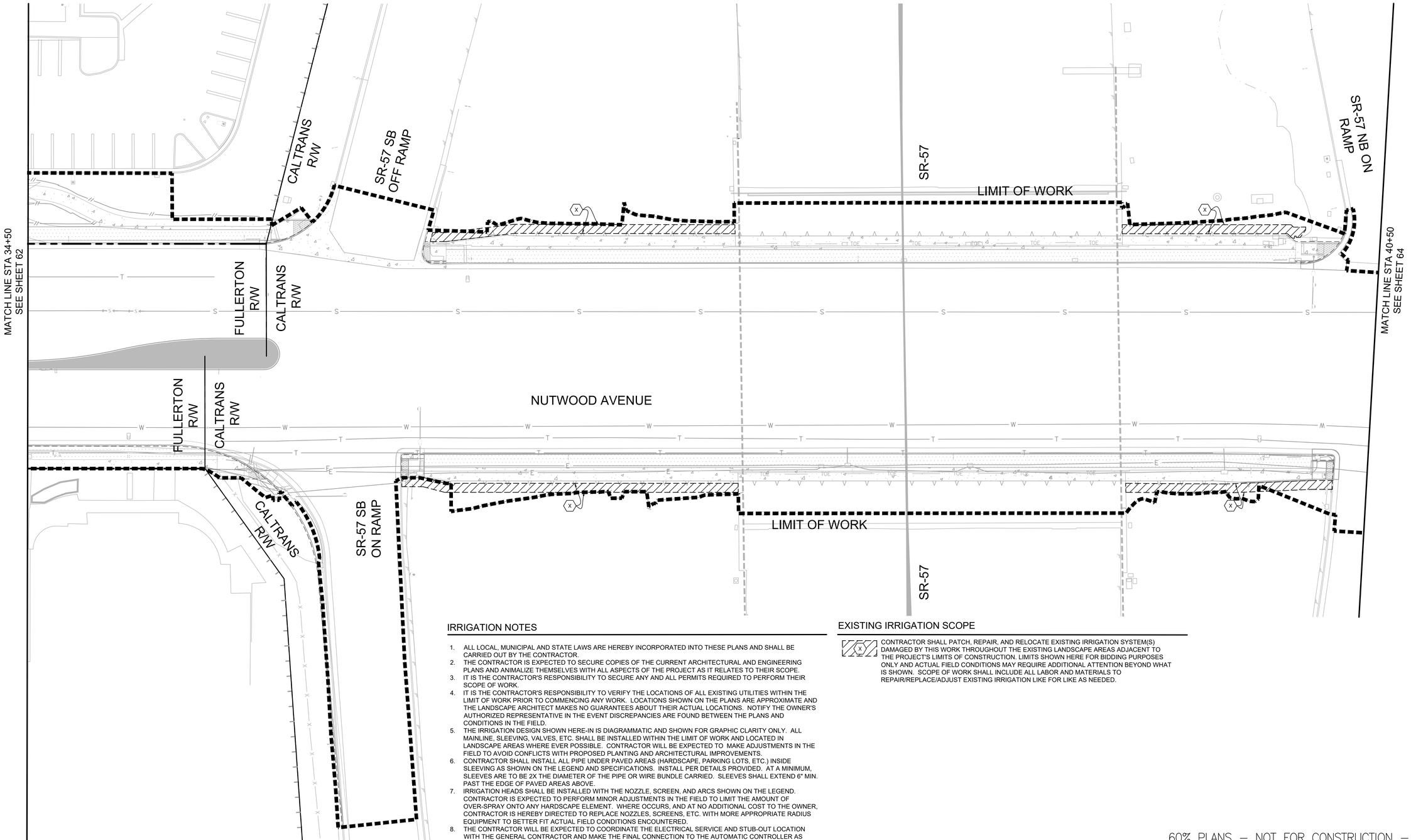
IRRIGATION PLAN

APPROVED: ACCEPTED:

DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED SHEET 53 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172' FILE:



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NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

LICENSED LANDSCAPE ARCHITECT
NOT FOR CONSTRUCTION
STATE OF CALIFORNIA
SIGNATURE
EXPIRATION DATE 06/30/2027
11/26/2025
DATE

SIGNATURE DATE

REVISIONS					
NUMBER	DESCRIPTION	DATE		INITIALS	DATE
			DRAWN	JW/CS	11/26/2025
			DESIGNED	ML	11/26/2025
			REVIEWED	PQ	11/26/2025
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CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

IRRIGATION PLAN

APPROVED: _____ DATE _____ CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: _____ DATE _____ PUBLIC WORKS DIRECTOR

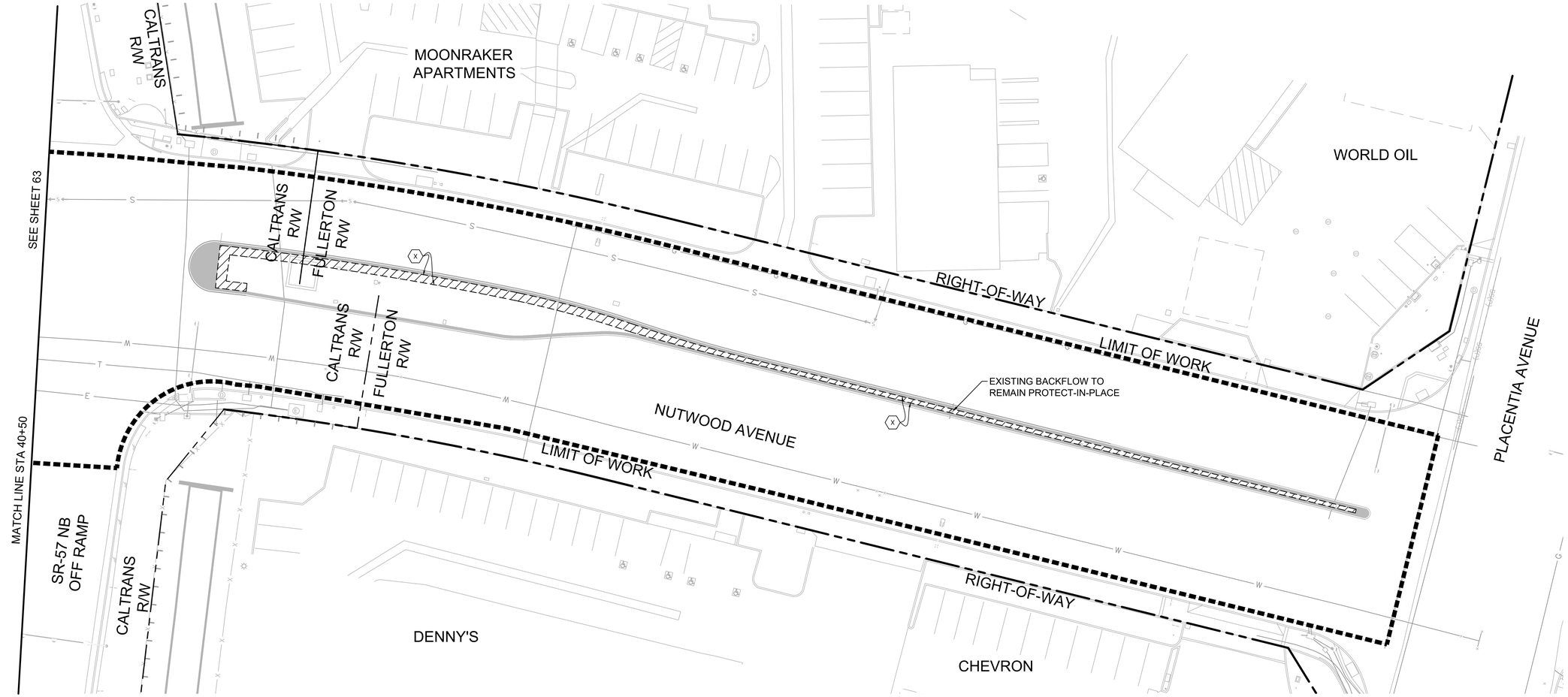
SCALE: AS NOTED

SHEET 54 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

FILE:

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



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LICENSED LANDSCAPE ARCHITECT
NOT FOR CONSTRUCTION
STATE OF CALIFORNIA
SIGNATURE
LICENSURE EXPIRATION DATE
11/26/2025
DATE

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	JW/CS	11/26/2025
			DESIGNED	ML	11/26/2025
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CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

IRRIGATION PLAN

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ACCEPTED: DATE PUBLIC WORKS DIRECTOR

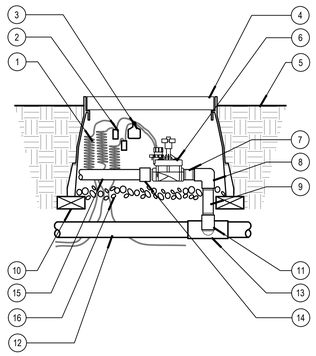
SCALE: AS NOTED

B.M.: ORANGE COUNTY BM NO.: 20-29-70 ELEV = 250.172'

SHEET 55 OF 65 SHEETS

FILE:

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



LEGEND

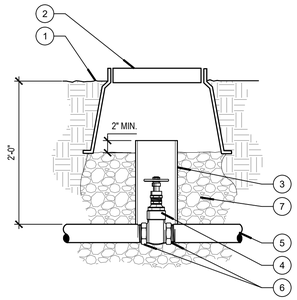
1. 30" LENGTH OF WIRE, COILED.
2. WATERPROOF CONNECTIONS, TYP.
3. VALVE ID TAG, TYP.
4. VALVE BOX W/ LOCKING COVER (SIZE AS REQ'D.)
5. FINISH GRADE - 1" IN LAWN AREAS / 2" IN SHRUB AREAS
6. REMOTE CONTROL VALVE PER LEGEND
7. PVC SCH. 80 NIPPLE (CLOSE)
8. PVC SCH. 40 ELL
9. PVC SCH. 80 NIPPLE (LENGTH AS REQ'D.)
10. BRICK SUPPORT (4 TOTAL)
11. SCH. 80 NIPPLE (2" LENGTH, HIDDEN) AND SCH. 40 ELL
12. PVC MAINLINE PER PLAN AND LEGEND
13. PVC SCH 40 TEE OR ELL
14. PVC SCH 40 MALE ADAPTER
15. PVC LATERAL PIPE
16. 3" MIN. DEPTH OF 3/4" WASHED GRAVEL

NOTES

A. ALL THREADS SHALL BE WRAPPED WITH TEFLON TAPE.

B. CONCRETE VALVE BOX SHALL BE PLACED 12" MIN. FROM ANY ADJACENT HARDSCAPE UNLESS NOTED OTHERWISE.

A REMOTE CONTROL VALVE
SCALE: 1 1/2" = 1'-0"



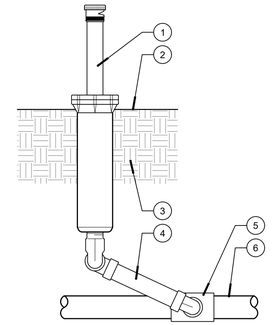
LEGEND

1. FINISH GADE
   - 1" IN TURF AREAS
   - 2" IN SHRUB AREAS
1. ROUND PLASTIC VALVE BOX WITH LOCKING COVER SHALL BE BRANDED "GV" - REFER TO IRRIGATION LEGEND
1. 6" DIAMETER PVC PIPE EXTENSION - LENGTH AS REQUIRED
1. GATE VALVE - REFER TO IRRIGATION LEGEND FOR SPECS
1. PVC MAINLINE - REFER TO IRRIGATION LEGEND
1. PVC MALE ADAPTER - TWO (2) REQUIRED
1. PEA GRAVEL - TWO (2) CUBIC FEET AT BASE OF VALVE

NOTES

A. ALL THREADS SHALL BE WRAPPED WITH TEFLON TAPE

B GATE VALVE
SCALE: 1" = 1'-0"



LEGEND

1. INSTALL POP-UP HEAD - SEE IRRIGATION LEGEND FOR SPECIFICATION
2. FINISH GRADE - SET 1" BELOW TOP OF HEAD TYP.
3. UNDISTURBED SOIL
4. TRIPLE SWING JOINT ASSEMBLY
5. SCH 40 PVC SxSxT TEE FITTING LATERAL X SPRINKLER INLET SIZE
6. LATERAL LINE, SEE LENGEND AND DETAILS FOR TYPE AND DEPTH REQUIRED

NOTES

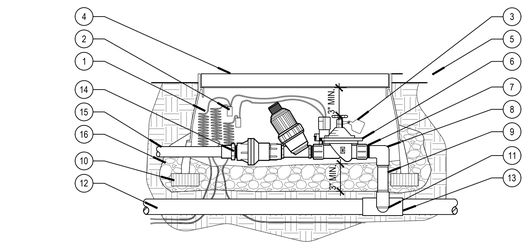
A. INSTALL SPRINKLER HEADS 8" FROM PAVING EDGE IN SHRUB AND GROUNDCOVER AREAS

B. INSTALL SPRINKLER HEADS 4" FROM PAVING EDGE IN TURF AREAS

C. ADJUST SPRAYS OR NOZZLE STREAM SO THERE IS NO OVERSPRAY ONTO ADJACENT HARDSCAPE AND/OR BUILDINGS

D. ALL THREADED CONNECTIONS SHALL HAVE TEFLON TAPE OR PASTE

C POP-UP ROTARY HEAD
SCALE: N.T.S.



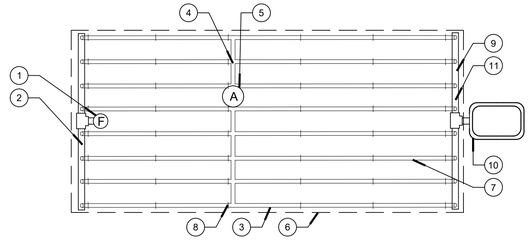
LEGEND

1. 30" LENGTH OF COILED WIRE
2. WATER PROOF CONNECTOR- REFER TO IRRIGATION SPECIFICATIONS
3. ID TAG- REFER TO IRRIGATION SPECIFICATIONS
4. RECTANGULAR, CONCRETE VALVE BOX WITH LOCKING COVER- LID SHALL BE HEAT BRANDED WITH LETTERS "RVC" AND STATION NUMBER- REFER TO IRRIGATION SPECIFICATIONS.
5. FINISH GRADE. - 1" IN TURF AREAS.- 2" IN SHRUB AREAS
6. REMOTE CONTROL VALVE FILTER AND PRV - REFER TO IRRIGATION SPECIFICATIONS
7. SCH. 80 PVC NIPPLE (CLOSE)
8. SCH. 40 PVC ELL
9. SH. 80 PVC NIPPLE (LENGTH AS REQUIRE)
10. BICK (1 OF 4)
11. SCH. 80 OVC NIPPLE (2" LENGTH, HIDDEN) AND SCH. 40 PVC ELL
12. PVC MAINLINE PIPE
13. SCH. 40 PVC TEE OR ELL
14. SCH. 40 PVC MALE ADAPTER
15. PVC LATERAL PIPE
16. (3) CUBIC FEET, MIN OF 3/4" MINUS WASHED GRAVEL

NOTES

A. ALL THREADS SHALL BE WRAPPED WITH TEFLON TAPE

D REMOTE CONTOL DRIP VALVE
SCALE: 1 1/2" = 1'-0"



LEGEND

1. FLUSH VALVE PLUMBED TO PVC OR POLY EXHAUST MANIFOLD
2. PVC OR POLY EXHAUST MANIFOLD
3. PERIMETER LATERALS 2" TO 4" MIN., ½ LATERAL SPACING MAX FROM EDGE
4. BLANK TUBING MANIFOLD FOR AIR VAC RELIEF (CENTERED ON MOUND OR BERM)
5. AIR/VACUUM RELIEF VALVE (INSTALL AT HIGHEST LOCAL ELEVATION)
6. AREA PERIMETER/EDGE OF PLANTER
7. DRIP TUBING LATERAL LINE
8. SECURE SIP LINES WITH JUTE NET STAPLED, OR EQUAL 5" O.C.
9. PVC OR POLY SUPPLY MANIFOLD
10. REMOTE CONTROL VALVE WITH DISC, FILTER AND PRV
11. START CONNECTION AS APPROPRIATE (SEE OTHER DETAILS)

NOTES

A. DRIP LINES TO BE EQUALLY AND UNIFORMLY SPACED FOR ENTIRE LENGTH OR RUN

B. SPACE LINES AS SHOWN AND/OR NOTED ON DRAWINGS AND SPECS

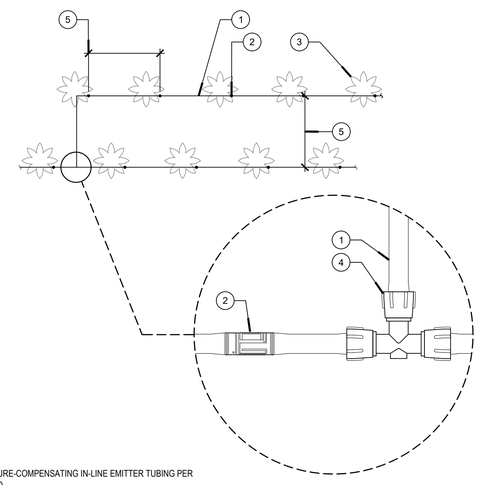
C. SEE MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR ADDITIONAL INFORMATION

D. DRIP LINES TO BE LAID FLAT AND SECURED TO SUBGRADE WITH STAPLES AT 5' CENTERS PRIOR TO BACKFILL

E. USE CAUTION WHEN SECURING DRIP LINE WITH STAPLES. DRIP LINE SHALL NOT BE OBSTRUCTED, KINKED, OR PUNCTURED.

F. DRIP LINE TO BE EQUALLY SPACED THROUGHOUT. SEE NOTES AND LEGEND FOR SPACING.

E DRIP TUBING LAYOUT
N.T.S.



LEGEND

1. PRESSURE-COMPENSATING IN-LINE EMITTER TUBING PER LEGEND
2. EMITTER PRE-INSTALLED IN TUBING
3. PLANT MATERIAL - SEE PLANS FOR SPACING
4. LOCKING INSERT FITTING
5. SPACING PER LEGEND

F DRIP TUBING CONNECTION
SCALE: 1" = 1'-0"

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

LICENSED LANDSCAPE ARCHITECT ★ STATE OF CALIFORNIA ★ NOT FOR CONSTRUCTION
EXPIRATION DATE: 10/31/27
RENEWAL DATE
11/26/2025
DATE

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	JW/CS	11/26/2025
			DESIGNED	ML	11/26/2025
			REVIEWED	PQ	11/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

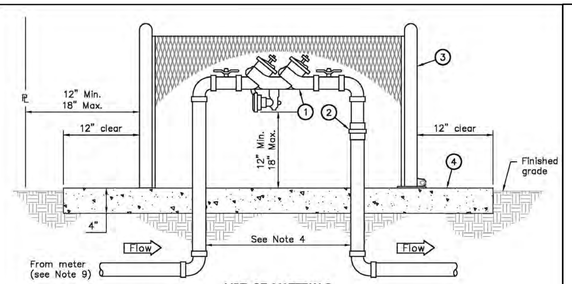
IRRIGATION DETAILS

APPROVED: ACCEPTED:

DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED SHEET 56 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172' FILE:



LIST OF MATERIALS

1. Reduced pressure backflow prevention assembly, USC approved type
2. Brass union required if threaded fittings (elbows) are used
3. Backflow prevention assembly enclosure per manufacturer's recommendations (see Notes 2 and 3)
4. Concrete pad, Class 520-C-2500
   Must be constructed to ensure 12" clearance around the backflow enclosure

NOTES

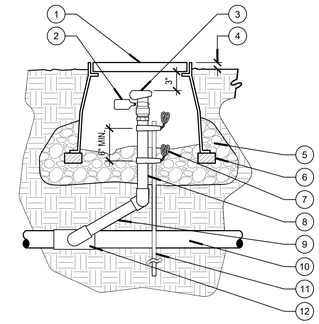
1. Refer to the City of Fullerton's Approved Materials List for approved manufacturers and model numbers.
2. See Section 3 of these Specifications for approved testing requirements, placement of backflow assemblies, and other requirements.
3. Proposed location of the backflow device, protective enclosure and all parts must be approved by the Engineer prior to installation. Failure to comply may result in project delays to correct all unaccepted/unapproved work.
4. All fittings and pipe shall be brass or copper with either IPT or soldered connections, respectively.
5. A wye strainer or hose bibb is not allowed to be installed on backflow assembly piping.
6. A pressure reducer, if required, is only permitted at the building and not on the backflow assembly.
7. There shall be no connections between the meter and the backflow assembly.
8. Final placement of the backflow prevention enclosure must be at least 12" behind the public right-of-way.
9. If a new meter is installed, pipe shall be copper from meter to backflow. If there is existing meter, piping may remain per plumbing code.
10. Backflow size to match service size.
11. New backflow must be tested by a certified backflow device tester as possessing a valid certification issued by the Orange County Environmental Health Agency and an active Fullerton business license.

¾" THROUGH 2½" REDUCED PRESSURE
BACKFLOW PREVENTION ASSEMBLY

STANDARD DETAIL	REVISIONS			
604	NO	DATE	NO	DATE
	1	02/28/18	4	04/30/18
	2	03/31/18	5	06/24/19
SHEET 1 OF 1	3	02/28/17	6	04/22/22

5/9/2022 — CITY ENGINEER — DATE
5/24/2022 — PUBLIC WORKS DIRECTOR — DATE

DEPARTMENT OF PUBLIC WORKS



LEGEND

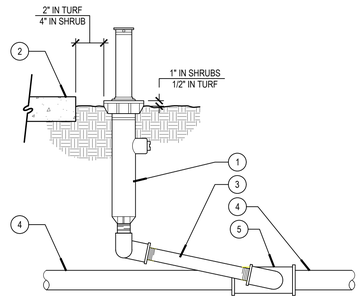
1. GREEN PLASTIC, 10" ROUND VALVE BOX WITH BOLT DOWN COVER, HEAT BRANDED "QCV"
2. ID TAG
3. QUICK COUPLER VALVE - REFER TO IRRIGATION LEGEND
4. FINISH GRADE:
   - 1" BELOW BOX LID IN TURF AREAS
   - 2" BELOW BOX LID IN SHRUB / GC AREAS
5. ONE (1) CU. FT. (MIN.) OF 3/4" CRUSHED ROCK AT BASE OF VALVE BOX
6. SUPPORT - COMMON RED BRICK (4 TOTAL)
7. V.I.T. STAINLESS STEEL TIES - TYPICAL
8. SCH. 80 PVC NIPPLE - LENGTH AS REQUIRED
9. 1" DIAMETER SCH. 80 PVC SWING JOINT - PREASSEMBLED BY SPEARS
10. PVC MAINLINE
11. 1/2" DIA. X 24" LENGTH GALVANIZED PIPE STAKE
12. SCH. 80 PVC TEE FITTING

NOTES

A. ALL THREADS SHALL BE WRAPPED WITH TEFLON TAPE

B. 12" MIN. CLEAR SPACE SHALL BE MAINTAINED BETWEEN THE QUICK COUPLER VALVE BOX AND ANY ADJACENT HARDSCAPE - WHERE OCCURS

A **QUICK COUPLER**
SCALE: 3/4" = 1'-0"



LEGEND

1. IRRIGATION HEAD, REFER TO LEGEND
2. PAVING EDGE, HEADER OR WALL
3. SWING JOINT - 18" MIN FOR 12" POPUPS & 12" MIN. FOR 6" POPUPS
4. PVC ELBOW OR TEE
5. TREE PER PLAN

NOTES

A. ALL THRREADS SHALLBE WRAPPED WITH TEFLON TAPE

B. EQUALLY SPACE (2) POP-UP HEADS PER TREE

* ALL PVC SHALL BE PURPLE PIPE APPROVED FOR NON-POTABLE USES.

B **TREE ROOT WATERING SYSTEM - BUBBLERS**
SCALE: 1 1/2" = 1'-0"

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

LICENSED LANDSCAPE ARCHITECT — NOT FOR CONSTRUCTION — STATE OF CALIFORNIA
SIGNATURE
11/26/2025
DATE

SIGNATURE — DATE

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CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008
IRRIGATION DETAILS

APPROVED: — DATE — CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR
ACCEPTED: — DATE — PUBLIC WORKS DIRECTOR

SCALE: AS NOTED
SHEET 57 OF 65 SHEETS
B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'
FILE:

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

I. CONTRACTOR'S LANDSCAPE WORK RESPONSIBILITIES:

1. SCOPE OF WORK: THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, TRANSPORTATION AND SERVICES NECESSARY TO FURNISH AND INSTALL ALL PLANTING ELEMENTS AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN.
2. CONFORMANCE: ALL PLANTING WORK SHALL CONFORM TO APPLICABLE LOCAL, COUNTY AND/OR STATE CODES, REGULATIONS AND RULES.
3. LICENSE: ALL WORK SHALL BE PERFORMED BY A C-27 CALIFORNIA LICENSED CONTRACTOR.
4. INSURANCE: THE CONTRACTOR SHALL CARRY ALL WORKMEN'S COMPENSATION, PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE AS REQUIRED BY THE SPECIFICATIONS.
5. SITE VERIFICATION: PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL VERIFY, AT THE SITE, ALL CONDITIONS AND DIMENSIONS SHOWN ON THE PLANS AFFECTING THE INTENDED DESIGN OF THE LANDSCAPE WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE CITY'S AUTHORIZED REPRESENTATIVE IMMEDIATELY.
6. LIABLE FOR ENCROACHMENT: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ENCROACHMENT ONTO ADJACENT PROPERTY, RIGHT -OF-WAYS, EASEMENTS, SETBACKS OR ANY OTHER LEGAL PROPERTY RESTRICTION EITHER MARKED OR UNMARKED.
7. COORDINATION OF ACTIVITIES: THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF REQUIRED ACTIVITIES WITH ALL OTHER TRADES THROUGH THE CITY'S AUTHORIZED REPRESENTATIVE.
8. FIELD STAKING: PRIOR TO INSTALLATION, THE CONTRACTOR SHALL LOCATE BY STAKES, OR OTHER MEANS, ALL CONTAINER TREES, SHRUBS AND VINE LOCATIONS AND HEADER BOARD/MOW CURB LAYOUT FOR APPROVAL BY THE CITY'S AUTHORIZED REPRESENTATIVE AND LANDSCAPE ARCHITECT.
9. NOTIFICATION OF DISCREPANCIES: ANY DISCREPANCIES BETWEEN THE FIELD CONDITIONS AND THE CONTRACT DOCUMENTS AND/OR THE DESIGN INTENT AFFECTING THE SUCCESSFUL COMPLETION AND COST OF THE PROJECT SHALL BE REPORTED TO THE CITY'S AUTHORIZED REPRESENTATIVE AND LANDSCAPE ARCHITECT IMMEDIATELY. ALL WORK RELATED TO THE PROBLEM AREA SHALL CEASE UNTIL THE DISCREPANCIES HAVE BEEN RESOLVED BY THE CITY'S AUTHORIZED REPRESENTATIVE OR LANDSCAPE ARCHITECT IN WRITING. ANY CONTINUATION OF WORK IS AT THE CONTRACTOR'S RISK AND EXPENSE.
10. LIABLE FOR DAMAGE: THE CONTRACTOR SHALL BE LIABLE FOR DAMAGE TO ALL UTILITIES, CONSTRUCTION, IRRIGATION AND PLANTING ELEMENTS, EXISTING OR NEW, MARKED OR UNMARKED, AND SHALL REPAIR OR REPLACE ANY DAMAGED IMPROVEMENTS IN MANNER ACCEPTABLE TO THE CITY'S AUTHORIZED REPRESENTATIVE.
11. LIABLE FOR LOSS: THE CONTRACTOR SHALL BE RESPONSIBLE AND LIABLE FOR ANY LOSS TO EQUIPMENT, PARTS AND MATERIALS ON THIS PROJECT UNTIL COMPLETION AND ACCEPTANCE OF THE JOB IN WRITING FROM THE CITY'S AUTHORIZED REPRESENTATIVE.
12. WRITTEN GUARANTEE: ALL WORK SHALL BE GUARANTEED BY THE CONTRACTOR AS TO MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FOLLOWING THE DATE OF FINAL ACCEPTANCE OF PROJECT. THE CONTRACTOR SHALL PROVIDE A WRITTEN GUARANTEE ON HIS LETTERHEAD AT THE TIME OF THE FINAL INSPECTION.
13. STATE CIVIL CODE TITLE 7: TO THE EXTENT THAT THIS PROJECT IS GOVERNED BY TITLE 7 OF THE STATE CIVIL CODE, THE CONTRACTOR SHALL CONFORM WITH THE FUNCTIONALITY REQUIREMENT OF TITLE 7 OF THE CIVIL CODE.

II. GENERAL PLANTING NOTES:

1. SITE PREPARATION: PRIOR TO PROCEEDING WITH ANY WORK UNDER THIS CONTRACT, THE CONTRACTOR SHALL REMOVE ALL ROCKS, WEEDS, DEBRIS, AND OTHER EXTRANEOUS MATERIAL FROM THE JOB SITE AND DISPOSE OF IT OFF-SITE IN A SUITABLE AND LAWFUL MANNER.
2. PLANTING AREAS: UPON COMPLETION OF ALL IRRIGATION WORK, ALL PLANTING AREAS SHALL BE SPRAYED WITH A SYSTEMIC HERBICIDE; CLEARED AND GRUBBED OF SURFACE WEED GROWTH; AND SHALL BE WEED FREE PRIOR TO PROCEEDING WITH ANY PLANTING WORK.
3. FINISH GRADE: THE CONTRACTOR SHALL ESTABLISH FINISH GRADE A MINIMUM OF SIX INCHES (6") BELOW THE FINISH FLOOR OF BUILDINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SMOOTH EVEN FINISH GRADES AT BUILDINGS, WALKS, OTHER PERMANENT OBJECTS AND LIMITS OF WORK. ALL CHANGES IN GRADE SHALL BE BLENDED UNIFORM VERTICAL CURVES. ALL AREAS TO BE PLANTED IN TURF SHALL BE SMOOTHED WITH RAKES AND FLOATS TO THE CITY'S AUTHORIZED REPRESENTATIVE SATISFACTION. OBJECTS SUCH AS ROCKS, DEBRIS, CLODS OR OTHER EXTRANEOUS MATERIAL SHALL BE STOCK-PILED AND REMOVED.
4. DRAINAGE: THE CONTRACTOR SHALL BE RESPONSIBLE FOR DRAINAGE IN ALL PLANTING AREAS IN ACCORDANCE WITH THE PLANS, DETAILS, AND SPECIFICATIONS AT A MINIMUM 2% GRADIENT.
5. IMPORT SOIL: ON-SITE SOIL SHALL BE USED FOR ALL LANDSCAPE AREAS. WHEN ON-SITE SOIL IS NOT AVAILABLE, IMPORT SOIL SHALL MEET THE FOLLOWING SPECIFICATIONS:
   A. SILT PLUS CLAY CONTENT OF THE IMPORT SOIL SHALL NOT EXCEED 20% BY WEIGHT WITH A MINIMUM 95% PASSING THE 2.0 MM. SIEVE. THE SODIUM ABSORPTION RATIO (SAR) SHALL NOT EXCEED 6.0 MM. AND THE ELECTRICAL CONDUCTIVITY (ECE) OF THE SATURATION EXTRACT OF THIS SOIL SHALL NOT EXCEED 3.0 MMHOS./CM AT 250C. THE BORON CONTENT OF THIS SOIL SHALL BE NO GREATER THAN 1 PPM AS MEASURED ON THE SATURATION EXTRACT. IN ORDER TO INSURE CONFORMANCE, SAMPLES OF THE IMPORT SOIL SHALL BE SUBMITTED TO THE SOIL LABORATORY FOR ANALYSIS PRIOR TO IMPORT ON SITE.
6. PLANT MATERIAL: ALL PLANT MATERIAL SHALL BE OF A SIZE, CHARACTER AND QUALITY WHICH MEETS THE ACCEPTED INDUSTRY STANDARDS FOR THAT PLANT AND BE FREE FROM INSECTS, THEIR EGGS, DISEASE, WEEDS, OR OTHER DETRIMENTAL CHARACTERISTICS.
7. HANDLING/STORAGE: ALL PLANTS SHALL BE HANDLED AND STORED SO THEY ARE ADEQUATELY PROTECTED FROM DRYING OUT, SUN, WINDBURN, VANDALISM OR ANY OTHER INJURY. FOR REJECTION OF PLANT MATERIAL, THE CITY'S AUTHORIZED REPRESENTATIVE AND LANDSCAPE ARCHITECT MAY REJECT ANY AND ALL PLANT MATERIAL REGARDED AS UNSUITABLE AT ANY TIME. SUCH PLANTS SHALL BE REMOVED FROM THE JOB SITE IMMEDIATELY AND BE REPLACED AT NO ADDITIONAL COST TO THE OWNER.
9. PLANTING: ALL PLANT MATERIAL SHALL BE AS SPECIFIED AND PLANTED AS DETAILED AND NOTED HEREIN.

III. EXISTING TREE PROTECTION NOTES:

1. THE TREE PROTECTION ZONE (TPZ) SHALL ENCOMPASS THE TREE CANOPY DRIP LINE OR AS RECOMMENDED BY THE CITY ARBORIST.
2. PROVIDE APPROVED MULCH TO THE ENTIRE AREA WITHIN THE TPZ. DURING CONSTRUCTION, MAINTAIN A 4"-6" LAYER OF MULCH OVER THE SOIL SURFACE TO HELP REDUCE SOIL COMPACTION, IMPROVE AERATION, ENHANCE MOISTURE RETENTION AND REDUCE TEMPERATURE EXTREMES.
3. PROVIDE TEMPORARY FENCING ALONG THE TPZ WITH A 6'-0" HIGH CHAIN LINK FENCE WITH GREEN SCREEN FABRIC. PROVIDE SIGNAGE ON FENCE STATING: "TREE PROTECTION ZONE - KEEP OUT".
4. IF TRENCHING BECOMES NECESSARY WITHIN THE TPZ, ALL TRENCHES SHALL BE HAND DUG TO NOT DAMAGE ROOT ZONE. NO ROOTS LARGER THAN 2" IN DIAMETER SHALL BE CUT UNLESS NO OTHER ALTERNATIVE IS FEASIBLE. ALL SMALLER ROOTS THAT REQUIRE CUTTING SHALL BE CUT WITH PRUNING SAWS AND CUTS SHALL BE MADE FLUSH WITH THE SIDE OF THE TRENCH. IF AT ANY TIME 25% OF THE AREA WITHIN THE TPZ IS BEING SEPARATED FROM THE TREE BY THE LARGER TRENCH, THEN THE LINE SHALL BE DETERMINED TO EITHER RELOCATE IT OR FOR IT TO BE INSTALLED BY BORING AS RECOMMENDED BY THE CITY ARBORIST.
5. REMOVAL OF HARDSCAPE AND/OR EXCAVATION WITHIN THE TPZ SHALL BE DONE MANUALLY. NO EXCAVATION TYPE EQUIPMENT SHALL BE ALLOWED FOR THIS WORK.
6. THE MINIMUM DISTANCE BETWEEN AN OPEN TRENCH AND ANY TREE SHALL BE BETWEEN 6" TO 1'-0" FOR EVERY INCH OF TRUNK DIAMETER MEASURED AT 4'-6" ABOVE EXISTING GRADE AND IS DEPENDING ON THE SPECIES OF TREE. REFER TO ARBORIST RECOMMENDATIONS. MINIMUM CLEARANCE SHALL BE 10'-0" FROM THE TRUNK OF THE TREE.
7. IN THE EVENT ROOT PRUNING IS REQUIRED TO ACCOMMODATE GRADE CHANGES OR INSTALLATION OF HARDSCAPE FEATURES, THE ROOT PRUNING PROCEDURES SHALL BE DIRECTED BY THE CITY ARBORIST AS MENTIONED ABOVE.
8. AT NO TIME SHALL ANY EQUIPMENT, MATERIALS, SUPPLIES OR FILL SOIL BE ALLOWED TO BE STAGED WITHIN THE TPZ UNLESS DIRECTED BY THE OWNER.
9. AS RECOMMENDED, PRUNE AND FERTILIZE THE EXISTING TREES AFTER THE COMPLETION OF ALL EXTERIOR SITE WORK ON BUILDING/ STRUCTURES PRIOR TO THE BEGINNING OF ANY PROPOSED LANDSCAPE IMPROVEMENTS.

HORTICULTURAL SOILS TESTING/AMENDMENTS:

CONTRACTOR SHALL PROVIDE A SITE SPECIFIC HORTICULTURAL SOILS REPORT. THIS REPORT IS TO BE PREPARED BY A CITY APPROVED AGRONOMIST.

CONTRACTOR TO SUBMIT THIS SITE SPECIFIC HORTICULTURAL SOILS REPORT TO THE CITY AND LANDSCAPE ARCHITECT 30 DAYS PRIOR TO LANDSCAPE INSTALLATION.

1. SOIL PREPARATION AMENDMENTS
2. TREE AND SHRUB BACKFILL AMENDMENTS
3. POST PLANTING MAINTENANCE FERTILIZER APPLICATIONS
4. INFILTRATION RATE/PERCOLATION RATE

AGRONOMIST OR COMPETENT INDIVIDUAL TO EVALUATE VARIOUS SOIL TYPES, TEXTURES, COLORS, ETC. AND SAMPLE THE SITE ACCORDINGLY. CONTRACTOR TO IDENTIFY/MARK SAMPLE LOCATIONS ON A REDUCED SITE PLAN TO BE ATTACHED TO THE REPORT AND AT A MINIMUM THE FOLLOWING SAMPLES ARE RECOMMENDED:

1. PROJECT ENTRY LOCATION - 1 SAMPLE EACH
2. MEDIAN ISLAND - 2 SAMPLES EACH

BACK FILL SPECIFICATIONS FOR ALL PLANT MATERIAL INCLUDING ORCHARD AND VINEYARDS (RATE PER CUBIC YARD OF MIX):

1. 20% PER CUBIC YARD OF ORGANIC AMENDMENT COMPRISED OF RECYCLED/LANDSCAPE WASTE (NO ANIMAL WASTE)
2. SLOW RELEASE FERTILIZER TABLETS IN THE UPPER 12 INCHES OF BACK FILL.

FOR BIDDING PRIOR TO THE ACTUAL HORTICULTURAL SOILS TEST RESULTS AND REPORT (RATE PER 1,000 SF) - USE AS FOLLOWS:

1. 4 YARDS PER THOUSAND ORGANIC AMENDMENT COMPRISED OF RECYCLED/LANDSCAPE WASTE
2. 20 LBS SOIL SULPHUR
3. 10 LBS GYPSUM
4. 20 LBS 16-16-16 COMMERCIAL FERTILIZER

PLANT LEGEND

SYMBOL	BOTANICAL / COMMON NAME	CONT.	HEIGHT/SPREAD	CAL.	WUCOLS	QTY
TREES						
	EXISTING TREE TO REMAIN. PROTECT IN PLACE.	-	-	-	-	5
	LAGERSTROEMIA INDICA CRAPE MYRTLE	24" BOX	5`-6` HT. X 4`-5` SPR.		L	2
	QUERCUS ENGELMANNII ENGELMANN OAK	24" BOX	9-10` HT. X 4-5` SPR,		VL	10
	TABEBUIA IMPETIGINOSA PINK TRUMPET TREE	24" BOX	9-10` HT. X 4-5` SPR,		M	8

SYMBOL	BOTANICAL / COMMON NAME	CONT.	SPACING	WUCOLS	HEIGHT/SPREAD	QTY
SHRUBS						
	BULBINE FRUTESCENS 'TINY TANGERINE' TINY TANGERINE BULBINE	5 GAL.	72" O.C.	L	1'-2' HT. X 2'-3' SPR.	61
	HESPERALOE PARVIFLORA RED YUCCA	5 GAL.	60" O.C.	VL	2`-3` HT. X 3`-5` SPR.	101
	LOMANDRA LONGIFOLIA 'BREEZE' BREEZE™ MAT RUSH	1 GAL.	72" O.C.	L	2'-3' HT. X 4'-6' SPR.	145
	LOMANDRA X 'PLATINUM BEAUTY' VARIEGATED DWARF MAT RUSH	1 GAL.	72" O.C.	L	2'-3' HT. X 4'-6' SPR.	209

SYMBOL	BOTANICAL / COMMON NAME	CONT.	QTY
GROUND COVERS			
	ROCK COBBLE TO MATCH EXISTING	-	618 SF

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

LICENSED LANDSCAPE ARCHITECT – STATE OF CALIFORNIA – NOT FOR CONSTRUCTION
PAUL QUINE
C-27
LICENSE DATE
11/26/2025
DATE

SIGNATURE DATE

NUMBER	DESCRIPTION	DATE

	INITIALS	DATE
DRAWN	JW/CS	11/26/2025
DESIGNED	ML	11/26/2025
REVIEWED	PQ	11/26/2025
STREET		
SEWER		
DRAINAGE		
WATER		
TRAFFIC		
UTILITY/ELEC		
LANDSCAPE		
FACILITIES		
GENERAL ENG		
DESIGN ENG		
INSPECTION		
PARKS & REC		
AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

PLANTING LEGEND AND SPECIFICATIONS

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

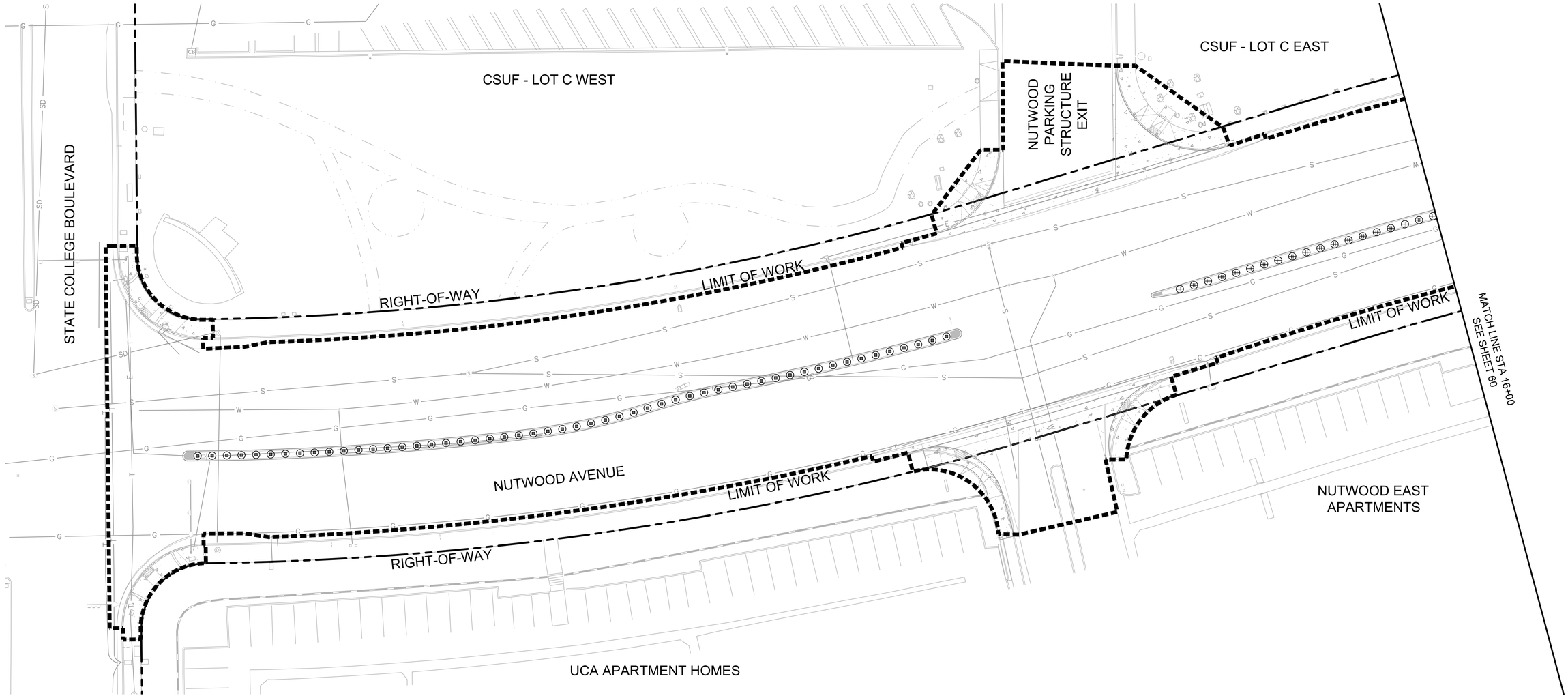
ACCEPTED: DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED

SHEET 58 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

FILE:



PLANT LEGEND

SYMBOL	BOTANICAL / COMMON NAME	CONT.	SPACING	WUCOLS	HEIGHT/SPREAD	QTY
SHRUBS						
⊕	LOMANDRA LONGIFOLIA 'BREEZE' BREEZE™ MAT RUSH	1 GAL.	72" O.C.	L	2'-3' HT. X 4'-6' SPR.	19
⊛	LOMANDRA X 'PLATINUM BEAUTY' VARIEGATED DWARF MAT RUSH	1 GAL.	72" O.C.	L	2'-3' HT. X 4'-6' SPR.	53

HARDSCAPE LEGEND

DESCRIPTION	MATERIAL / MODEL NO.	COLOR / FINISH / PATTERN	MANUFACTURER/ SUPPLIER	REQUIRED SAMPLE/MOCKUP	REMARKS / COMMENTS
	4" THICK STAMPED CONCRETE BOMANITE 12"x12" TILE PATTERN	FRANCISCAN RED COLOR	BOMANITE SHOP	PROVIDE 3'X3' MOCK UP FOR REVIEW AND APPROVAL BY CITY'S AUTHORIZED REPRESENTATIVE	

PLANTING NOTES:

1. REFER TO PLANTING SPECIFICATIONS FOR MORE INFORMATION REGARDING SOIL PREP, FERTILIZING, BACKFILL, PLANT SELECTION, WARRANTY'S, ETC.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FURNISH PLANT MATERIAL THAT IS FREE OF PESTS AND DISEASE. ANY PLANT MATERIAL FOUND AT THE SITE EXHIBITING SIGNS OF PESTS AND/OR DISEASE WILL BE REMOVED AND REPLACED AT NO COST TO THE OWNER.
3. ONCE ROUGH GRADES HAVE BEEN ESTABLISHED IN PLANTING AREAS, CONTRACTOR SHALL BE REQUIRED TO HAVE SOIL SAMPLES TAKEN AND HAVE AGRICULTURAL SUITABILITY TESTS CONDUCTED. TESTS SHALL REVIEW SOIL FERTILITY AND MAKE RECOMMENDATIONS FOR SOIL PREPERATION PRIOT TO PLANTING. SUBMIT SOIL TEST RESULTS TO OWNER AND LANDSCAPE ARCHITECT FOR THEIR RECORDS. SUBMIT EVIDENCE THAT RECOMMENDATIONS PROVIDED IN SOILS REPORT HAVE BEEN FOLLOWED DURING CONSTRUCTION.
4. FINAL LOCATION OF ALL TREES SHALL BE APPROVED IN THE FIELD BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
5. ALL SHRUB AREAS SHALL RECEIVE 3" DARK, HARDWOOD BARK MULCH. CITY MAINTAINED AREAS SHALL RECEIVE GORILLA HAIR MULCH OR APPROVED EQUAL. LANDSCAPE AREAS LOCATED ON CSUF CAMPUS SHALL RECEIVE TLC BROWN BARK CHIP OR APPROVED EQUAL. SUBMIT SAMPLE FOR REVIEW AND APPROVAL PRIOR TO PURCHASE. NO SHREDDED MATERIAL WILL BE ACCEPTED.
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7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH OTHER TRADES AS REQUIRED TO ACCOMPLISH PLANTING OPERATIONS PER THE CONSTRUCTION SCHEDULE.
8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS AND STRUCTURES, 2% MIN.
9. CONTRACTOR SHALL NOT WILLFULLY INSTALL ANY PLANT MATERIAL WHEN IT IS OBVIOUS THAT UNKNOWN CONDITIONS OR GRADE DIFFERENCES EXIST THAT WOULD MAKE THE PROPOSED DESIGN UNACHIEVABLE. NOTIFY THE GENERAL CONTRACTOR IMMEDIATELY IF ANY SUCH CONDITIONS ARE DISCOVERED. FAILURE TO NOTIFY THE APPROPRIATE PARTIES COULD RESULT IN THE REJECTION AND REMOVAL OF FINISHED WORK AT NO COST TO THE OWNER.

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

LICENSED LANDSCAPE ARCHITECT
NOT FOR CONSTRUCTION
STATE OF CALIFORNIA
SIGNATURE
EXPIRATION DATE: 12/31/27
RENEWAL DATE
11/26/2025
DATE

SIGNATURE DATE

REVISIONS

NUMBER	DESCRIPTION	DATE

	INITIALS	DATE
DRAWN	JW/CS	11/26/2025
DESIGNED	ML	11/26/2025
REVIEWED	PQ	11/26/2025
STREET		
SEWER		
DRAINAGE		
WATER		
TRAFFIC		
UTILITY/ELEC		
LANDSCAPE		
FACILITIES		
GENERAL ENG		
DESIGN ENG		
INSPECTION		
PARKS & REC		
AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

PLANTING PLAN

APPROVED: _____ DATE _____ CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: _____ DATE _____ PUBLIC WORKS DIRECTOR

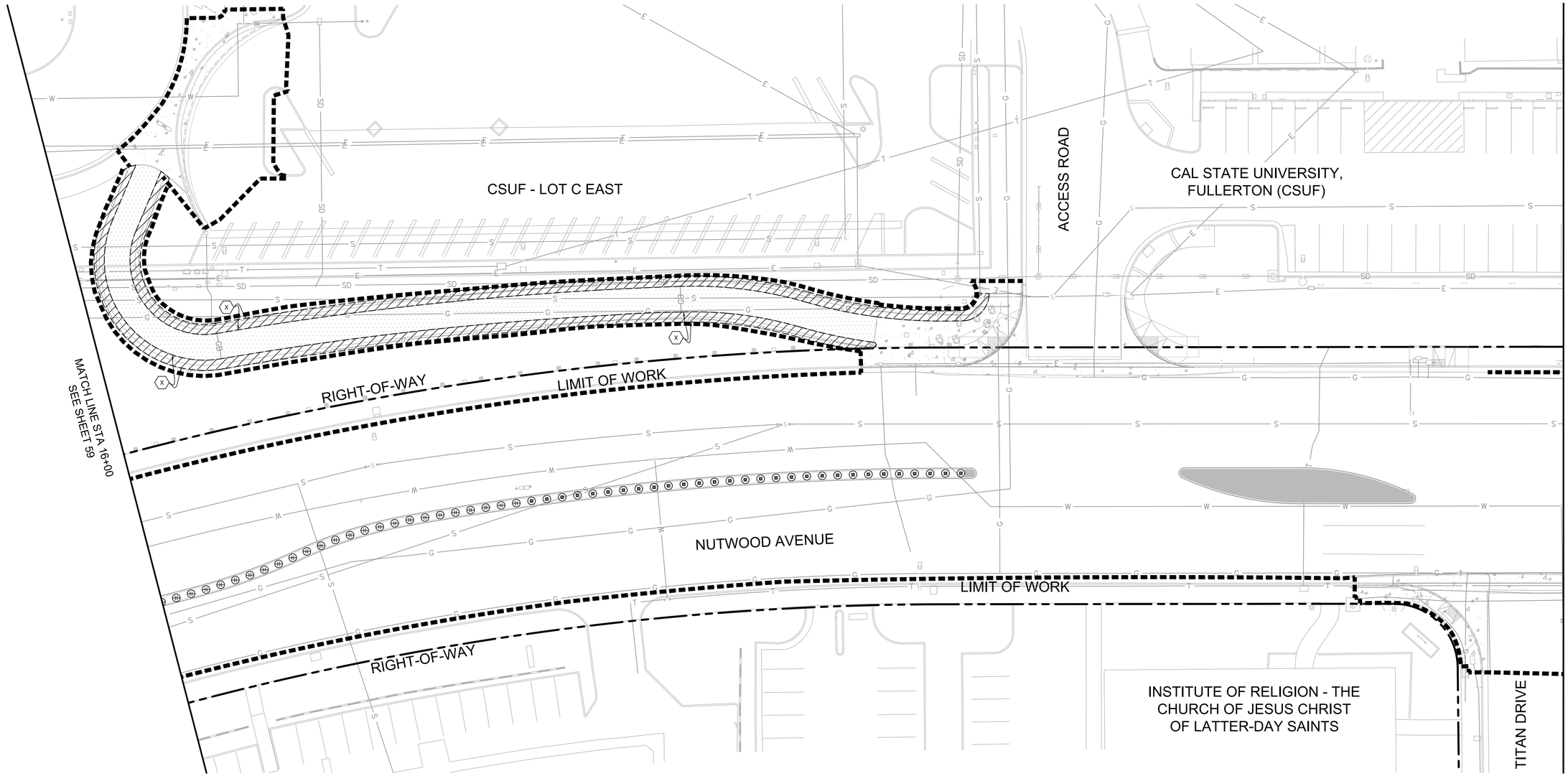
SCALE: AS NOTED

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

SHEET 59 OF 65 SHEETS

FILE:

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



PLANT LEGEND

SYMBOL	BOTANICAL / COMMON NAME	CONT.	SPACING	WUCOLS	HEIGHT/SPREAD	QTY
SHRUBS						
⊕	LOMANDRA LONGIFOLIA 'BREEZE' BREEZE™ MAT RUSH	1 GAL.	72" O.C.	L	2'-3' HT. X 4'-6' SPR.	24
⊛	LOMANDRA X 'PLATINUM BEAUTY' VARIEGATED DWARF MAT RUSH	1 GAL.	72" O.C.	L	2'-3' HT. X 4'-6' SPR.	29

PLANTING NOTES:

1. REFER TO PLANTING SPECIFICATIONS FOR MORE INFORMATION REGARDING SOIL PREP, FERTILIZING, BACKFILL, PLANT SELECTION, WARRANTY'S, ETC.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FURNISH PLANT MATERIAL THAT IS FREE OF PESTS AND DISEASE. ANY PLANT MATERIAL FOUND AT THE SITE EXHIBITING SIGNS OF PESTS AND/OR DISEASE WILL BE REMOVED AND REPLACED AT NO COST TO THE OWNER.
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8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS AND STRUCTURES, 2% MIN.
9. CONTRACTOR SHALL NOT WILLFULLY INSTALL ANY PLANT MATERIAL WHEN IT IS OBVIOUS THAT UNKNOWN CONDITIONS OR GRADE DIFFERENCES EXIST THAT WOULD MAKE THE PROPOSED DESIGN UNACHIEVABLE. NOTIFY THE GENERAL CONTRACTOR IMMEDIATELY IF ANY SUCH CONDITIONS ARE DISCOVERED. FAILURE TO NOTIFY THE APPROPRIATE PARTIES COULD RESULT IN THE REJECTION AND REMOVAL OF FINISHED WORK AT NO COST TO THE OWNER.

EXISTING LANDSCAPE SCOPE

CONTRACTOR SHALL PATCH AND REPAIR EXISTING MULCH AREAS DAMAGED BY THIS WORK THROUGHOUT THE EXISTING MULCH AREAS ADJACENT TO THE PROJECT'S LIMITS OF CONSTRUCTION. LIMITS SHOWN HERE FOR BIDDING PURPOSES ONLY AND ACTUAL FIELD CONDITIONS MAY REQUIRE ADDITIONAL ATTENTION BEYOND WHAT IS SHOWN. SCOPE OF WORK SHALL INCLUDE ALL LABOR AND MATERIALS TO PATCH/REPAIR/REPLACE EXISTING MULCH AREAS AS NEEDED TO PROVIDE COMPLETE COVERAGE THROUGHOUT AREAS DISTURBED DURING CONSTRUCTION OPERATIONS.

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

HARDSCAPE LEGEND

DESCRIPTION	MATERIAL / MODEL NO.	COLOR / FINISH / PATTERN	MANUFACTURER/ SUPPLIER	REQUIRED SAMPLE/MOCKUP	REMARKS / COMMENTS
	4" THICK STAMPED CONCRETE BOMANITE 12"x12" TILE PATTERN	FRANCISCAN RED COLOR	BOMANITE SHOP	PROVIDE 3'X3' MOCK UP FOR REVIEW AND APPROVAL BY CITY'S AUTHORIZED REPRESENTATIVE	

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

LICENSED LANDSCAPE ARCHITECT
NOT FOR CONSTRUCTION
STATE OF CALIFORNIA
PAUL QUINTERO
No. 6021
SIGNATURE DATE
11/26/2025
DATE

SIGNATURE DATE

NUMBER	DESCRIPTION	DATE

REVISIONS

	INITIALS	DATE
DRAWN	JW/CS	11/26/2025
DESIGNED	ML	11/26/2025
REVIEWED	PQ	11/26/2025
STREET		
SEWER		
DRAINAGE		
WATER		
TRAFFIC		
UTILITY/ELEC		
LANDSCAPE		
FACILITIES		
GENERAL ENG		
DESIGN ENG		
INSPECTION		
PARKS & REC		
AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

PLANTING PLAN

APPROVED:
DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED:
DATE PUBLIC WORKS DIRECTOR

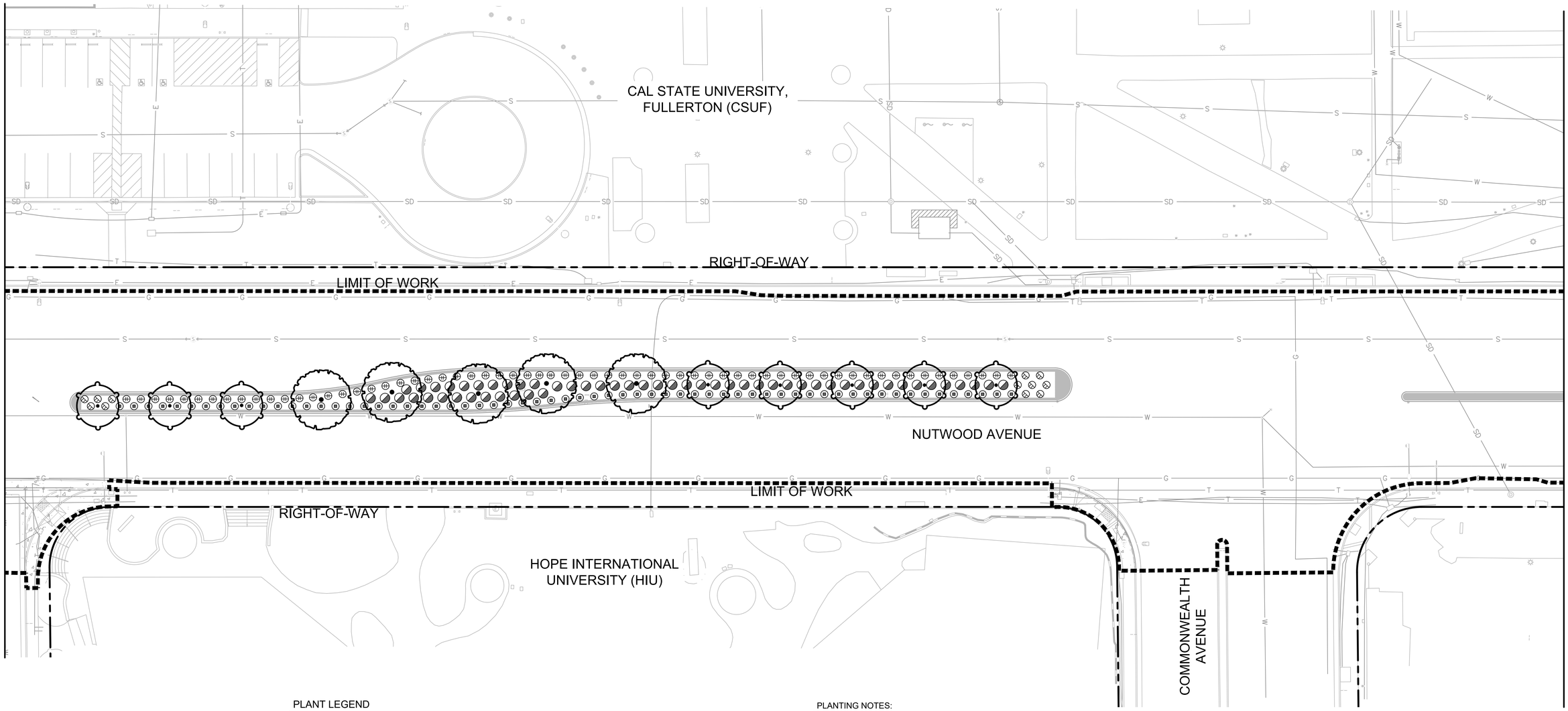
SCALE: AS NOTED

SHEET 60 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

FILE:

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

PLANT LEGEND

SYMBOL	BOTANICAL / COMMON NAME	CONT.	HEIGHT/SPREAD	CAL.	WUCOLS	QTY
TREES						
	QUERCUS ENGELMANNII ENGELMANN OAK	24" BOX	9-10` HT. X 4-5` SPR,		VL	5
	TABEBUIA IMPETIGINOSA PINK TRUMPET TREE	24" BOX	9-10` HT. X 4-5` SPR,		M	8

SYMBOL	BOTANICAL / COMMON NAME	CONT.	SPACING	WUCOLS	HEIGHT/SPREAD	QTY
SHRUBS						
	BULBINE FRUTESCENS 'TINY TANGERINE' TINY TANGERINE BULBINE	5 GAL.	72" O.C.	L	1'-2' HT. X 2'-3' SPR.	12
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	LOMANDRA LONGIFOLIA 'BREEZE' BREEZE™ MAT RUSH	1 GAL.	72" O.C.	L	2'-3' HT. X 4'-6' SPR.	63
	LOMANDRA X 'PLATINUM BEAUTY' VARIEGATED DWARF MAT RUSH	1 GAL.	72" O.C.	L	2'-3' HT. X 4'-6' SPR.	63

HARDSCAPE LEGEND

DESCRIPTION	MATERIAL / MODEL NO.	COLOR / FINISH / PATTERN	MANUFACTURER/ SUPPLIER	REQUIRED SAMPLE/MOCKUP	REMARKS / COMMENTS
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NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

LICENSED LANDSCAPE ARCHITECT
NOT FOR CONSTRUCTION
STATE OF CALIFORNIA
DATE 11/26/2025

SIGNATURE DATE

REVISIONS				INITIALS	DATE
NUMBER	DESCRIPTION	DATE	DRAWN	JW/CS	11/26/2025
			DESIGNED	ML	11/26/2025
			REVIEWED	PQ	11/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
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			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

PLANTING PLAN

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

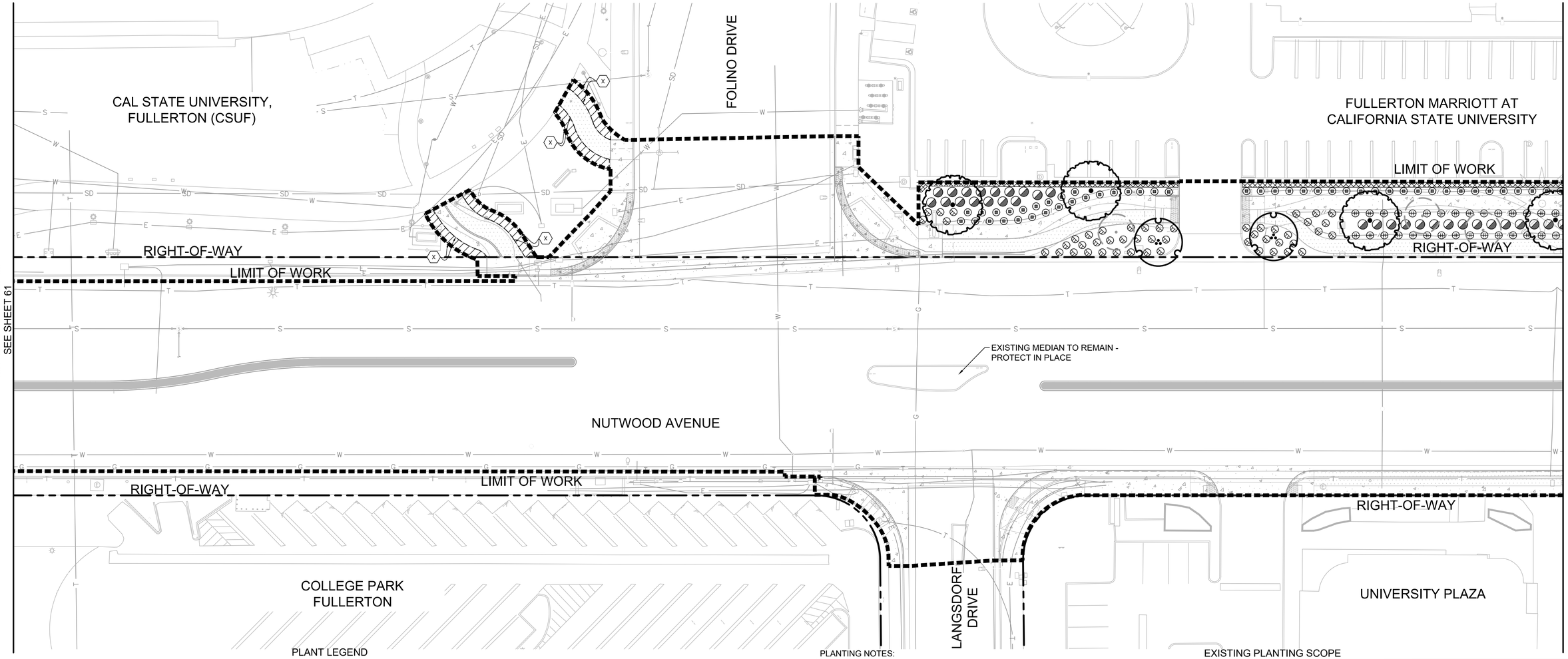
ACCEPTED: DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED

SHEET 61 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

FILE:



CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

PLANT LEGEND

SYMBOL	BOTANICAL / COMMON NAME	CONT.	HEIGHT/SPREAD	CAL.	WUCOLS	QTY
TREES						
	EXISTING TREE TO REMAIN. PROTECT IN PLACE.	-	-	-	-	3
	LAGERSTROEMIA INDICA CRAPE MYRTLE	24" BOX	5`-6` HT. X 4`-5` SPR.		L	2
	QUERCUS ENGELMANNII ENGELMANN OAK	24" BOX	9-10` HT. X 4-5` SPR,		VL	4

SYMBOL	BOTANICAL / COMMON NAME	CONT.	SPACING	WUCOLS	HEIGHT/SPREAD	QTY
SHRUBS						
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SYMBOL	BOTANICAL / COMMON NAME	CONT.	SPACING	WUCOLS	HEIGHT/SPREAD	QTY
GROUND COVERS						
	ROCK COBBLE TO MATCH EXISTING	-				618 SF

PLANTING NOTES:

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EXISTING PLANTING SCOPE

CONTRACTOR SHALL PATCH AND REPAIR EXISTING PLANTING AREAS DAMAGED BY THIS WORK THROUGHOUT THE EXISTING LANDSCAPE AREAS ADJACENT TO THE PROJECT'S LIMITS OF CONSTRUCTION. LIMITS SHOWN HERE FOR BIDDING PURPOSES ONLY AND ACTUAL FIELD CONDITIONS MAY REQUIRE ADDITIONAL ATTENTION BEYOND WHAT IS SHOWN. SCOPE OF WORK SHALL INCLUDE ALL LABOR AND MATERIALS TO PATCH/REPAIR/REPLACE EXISTING PLANTING AREAS AS NEEDED TO PROVIDE COMPLETE COVERAGE THROUGHOUT AREAS DISTURBED DURING CONSTRUCTION OPERATIONS.

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

HARDSCAPE LEGEND

DESCRIPTION	MATERIAL / MODEL NO.	COLOR / FINISH / PATTERN	MANUFACTURER/ SUPPLIER	REQUIRED SAMPLE/MOCKUP	REMARKS / COMMENTS
	4" THICK STAMPED CONCRETE BOMANITE 12"x12" TILE PATTERN	FRANCISCAN RED COLOR	BOMANITE SHOP	PROVIDE 3'X3' MOCK UP FOR REVIEW AND APPROVAL BY CITY'S AUTHORIZED REPRESENTATIVE	

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

LICENSED LANDSCAPE ARCHITECT
NOT FOR CONSTRUCTION
STATE OF CALIFORNIA
EXPIRATION DATE
11/26/2025
DATE

SIGNATURE DATE

REVISIONS					
NUMBER	DESCRIPTION	DATE		INITIALS	DATE
			DRAWN	JW/CS	11/26/2025
			DESIGNED	ML	11/26/2025
			REVIEWED	PQ	11/26/2025
			STREET		
			SEWER		
			DRAINAGE		
			WATER		
			TRAFFIC		
			UTILITY/ELEC		
			LANDSCAPE		
			FACILITIES		
			GENERAL ENG		
			DESIGN ENG		
			INSPECTION		
			PARKS & REC		
			AS-BUILT		

CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

PLANTING PLAN

APPROVED: DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

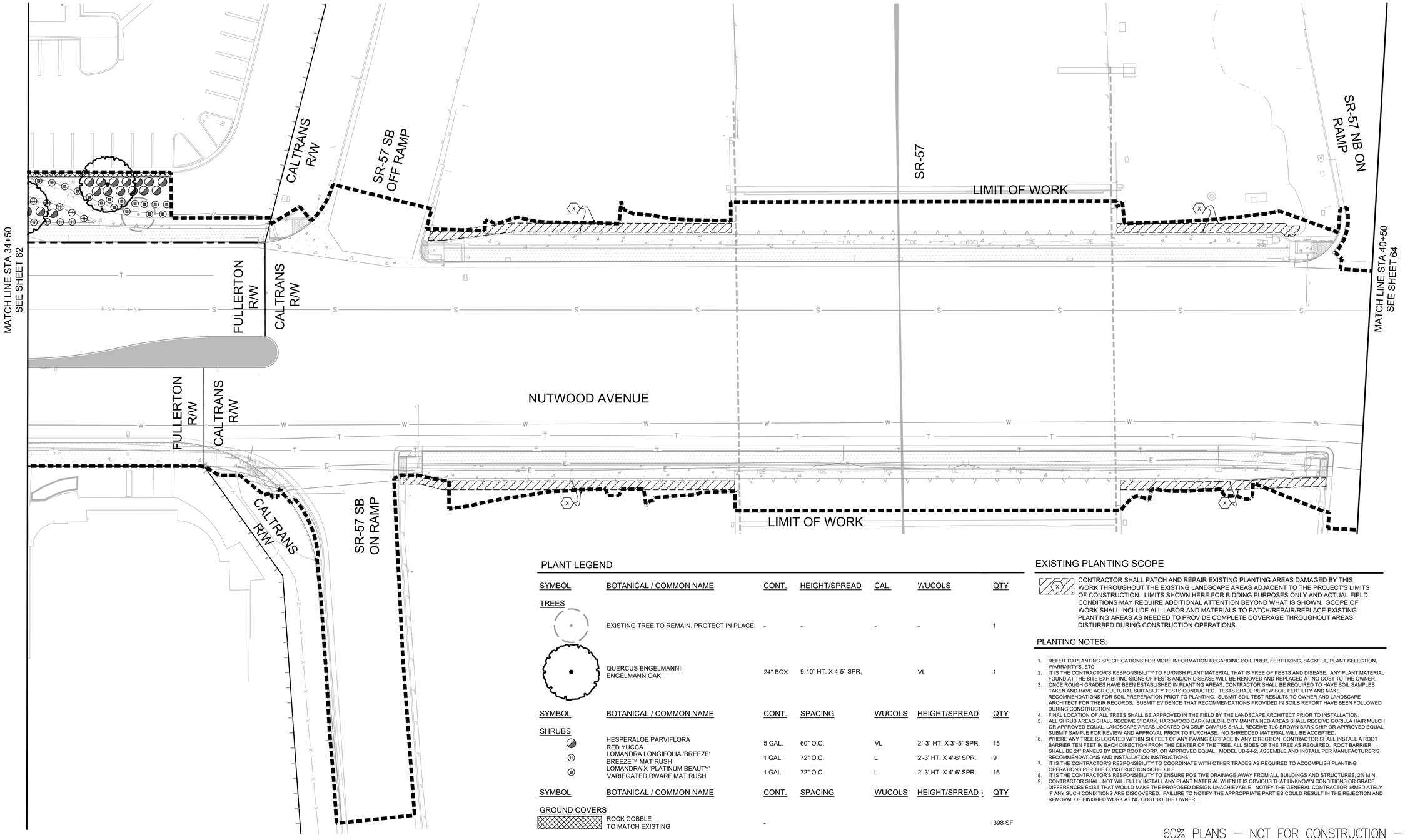
ACCEPTED: DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED

SHEET 62 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

FILE:



PLANT LEGEND

SYMBOL	BOTANICAL / COMMON NAME	CONT.	HEIGHT/SPREAD	CAL.	WUCOLS	QTY
TREES						
	EXISTING TREE TO REMAIN. PROTECT IN PLACE.	-	-	-	-	1
	QUERCUS ENGELMANNII ENGELMANN OAK	24" BOX	9-10` HT. X 4-5` SPR,		VL	1

SYMBOL	BOTANICAL / COMMON NAME	CONT.	SPACING	WUCOLS	HEIGHT/SPREAD	QTY
SHRUBS						
	HESPERALOE PARVIFLORA RED YUCCA	5 GAL.	60" O.C.	VL	2`-3` HT. X 3`-5` SPR.	15
	LOMANDRA LONGIFOLIA 'BREEZE' BREEZE™ MAT RUSH	1 GAL.	72" O.C.	L	2'-3' HT. X 4'-6' SPR.	9
	LOMANDRA X 'PLATINUM BEAUTY' VARIEGATED DWARF MAT RUSH	1 GAL.	72" O.C.	L	2'-3' HT. X 4'-6' SPR.	16

SYMBOL	BOTANICAL / COMMON NAME	CONT.	SPACING	WUCOLS	HEIGHT/SPREAD	QTY
GROUND COVERS						
	ROCK COBBLE TO MATCH EXISTING	-				398 SF

EXISTING PLANTING SCOPE

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PLANTING NOTES:

1. REFER TO PLANTING SPECIFICATIONS FOR MORE INFORMATION REGARDING SOIL PREP, FERTILIZING, BACKFILL, PLANT SELECTION, WARRANTY'S, ETC.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FURNISH PLANT MATERIAL THAT IS FREE OF PESTS AND DISEASE. ANY PLANT MATERIAL FOUND AT THE SITE EXHIBITING SIGNS OF PESTS AND/OR DISEASE WILL BE REMOVED AND REPLACED AT NO COST TO THE OWNER.
3. ONCE ROUGH GRADES HAVE BEEN ESTABLISHED IN PLANTING AREAS, CONTRACTOR SHALL BE REQUIRED TO HAVE SOIL SAMPLES TAKEN AND HAVE AGRICULTURAL SUITABILITY TESTS CONDUCTED. TESTS SHALL REVIEW SOIL FERTILITY AND MAKE RECOMMENDATIONS FOR SOIL PREPERATION PRIOT TO PLANTING. SUBMIT SOIL TEST RESULTS TO OWNER AND LANDSCAPE ARCHITECT FOR THEIR RECORDS. SUBMIT EVIDENCE THAT RECOMMENDATIONS PROVIDED IN SOILS REPORT HAVE BEEN FOLLOWED DURING CONSTRUCTION.
4. FINAL LOCATION OF ALL TREES SHALL BE APPROVED IN THE FIELD BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
5. ALL SHRUB AREAS SHALL RECEIVE 3" DARK, HARDWOOD BARK MULCH. CITY MAINTAINED AREAS SHALL RECEIVE GORILLA HAIR MULCH OR APPROVED EQUAL. LANDSCAPE AREAS LOCATED ON CSUF CAMPUS SHALL RECEIVE TLC BROWN BARK CHIP OR APPROVED EQUAL. SUBMIT SAMPLE FOR REVIEW AND APPROVAL PRIOR TO PURCHASE. NO SHREDDED MATERIAL WILL BE ACCEPTED.
6. WHERE ANY TREE IS LOCATED WITHIN SIX FEET OF ANY PAVING SURFACE IN ANY DIRECTION, CONTRACTOR SHALL INSTALL A ROOT BARRIER TEN FEET IN EACH DIRECTION FROM THE CENTER OF THE TREE, ALL SIDES OF THE TREE AS REQUIRED. ROOT BARRIER SHALL BE 24" PANELS BY DEEP ROOT CORP. OR APPROVED EQUAL., MODEL UB-24-2, ASSEMBLE AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND INSTALLATION INSTRUCTIONS.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH OTHER TRADES AS REQUIRED TO ACCOMPLISH PLANTING OPERATIONS PER THE CONSTRUCTION SCHEDULE.
8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS AND STRUCTURES, 2% MIN.
9. CONTRACTOR SHALL NOT WILLFULLY INSTALL ANY PLANT MATERIAL WHEN IT IS OBVIOUS THAT UNKNOWN CONDITIONS OR GRADE DIFFERENCES EXIST THAT WOULD MAKE THE PROPOSED DESIGN UNACHIEVABLE. NOTIFY THE GENERAL CONTRACTOR IMMEDIATELY IF ANY SUCH CONDITIONS ARE DISCOVERED. FAILURE TO NOTIFY THE APPROPRIATE PARTIES COULD RESULT IN THE REJECTION AND REMOVAL OF FINISHED WORK AT NO COST TO THE OWNER.

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HARDSCAPE LEGEND

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60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

LICENSED LANDSCAPE ARCHITECT
NOT FOR CONSTRUCTION
STATE OF CALIFORNIA
JOSEPH WILLIAM
LICENSE NUMBER 6527
LICENSE DATE 11/26/2025
DATE

SIGNATURE DATE

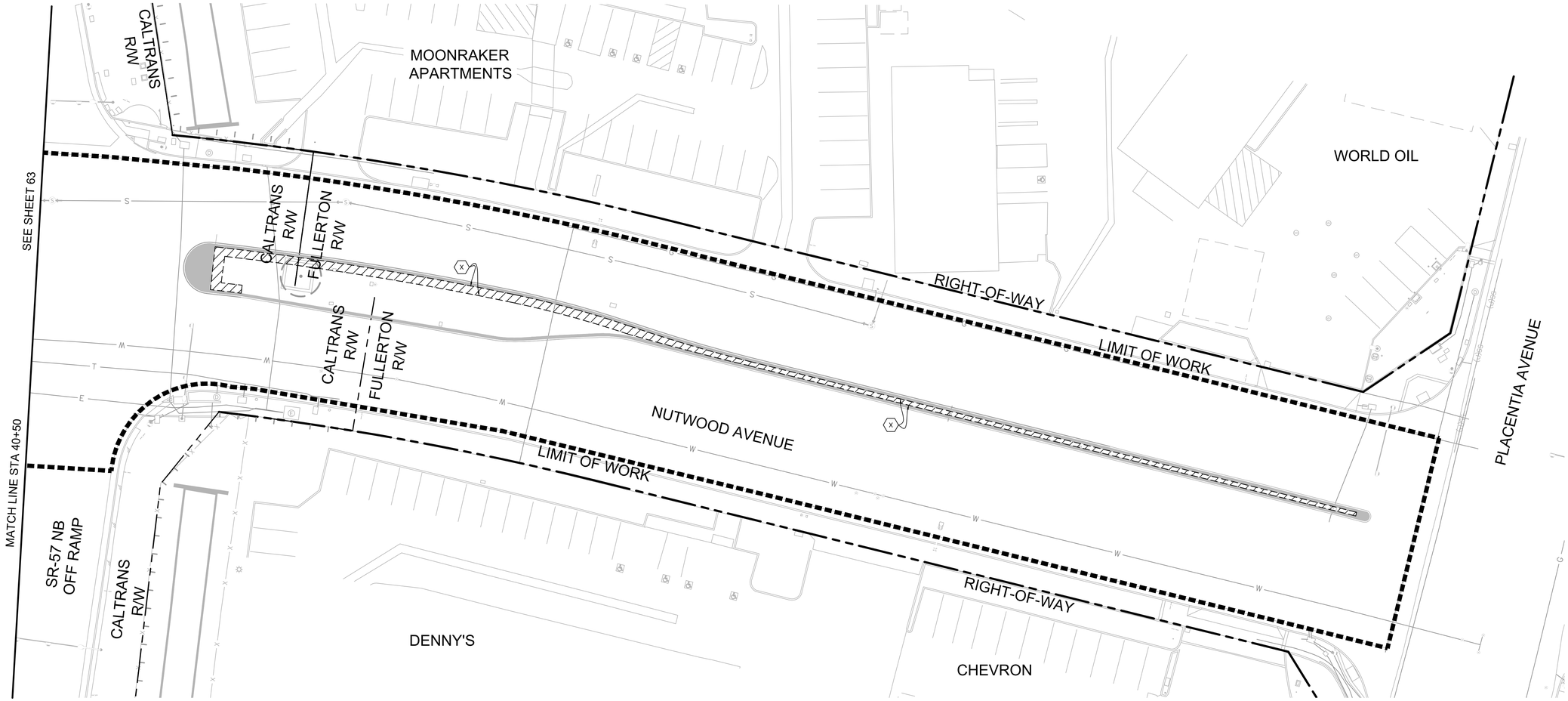
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CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT
NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008
PLANTING PLAN

APPROVED: ACCEPTED:
DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR DATE PUBLIC WORKS DIRECTOR

SCALE: AS NOTED SHEET 63 OF 65 SHEETS
B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172' FILE:

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



PLANT LEGEND

SYMBOL	BOTANICAL / COMMON NAME	CONT.	HEIGHT/SPREAD	CAL.	WUCOLS	QTY
TREES						
	EXISTING TREE TO REMAIN. PROTECT IN PLACE.	-	-	-	-	1

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60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF:

LICENSED LANDSCAPE ARCHITECT
NOT FOR CONSTRUCTION
STATE OF CALIFORNIA
SIGNATURE
EXPIRATION DATE 10/31/27
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SIGNATURE DATE

REVISIONS

NUMBER	DESCRIPTION	DATE

	INITIALS	DATE
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CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT
CIP PROJECT 48008

PLANTING PLAN

APPROVED:

DATE CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED:

DATE PUBLIC WORKS DIRECTOR

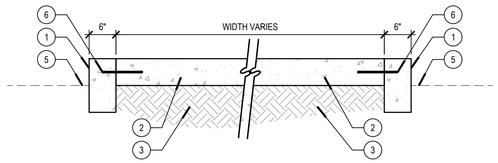
SCALE: AS NOTED

SHEET 64 OF 65 SHEETS

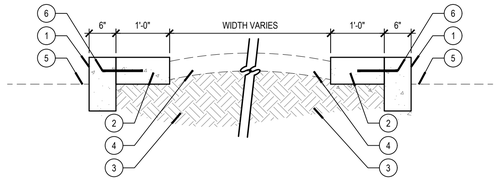
B.M.: ORANGE COUNTY BM NO.: 20-29-70 ELEV = 250.172'

FILE:

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT



STAMPED CONCRETE MEDIAN CONDITION



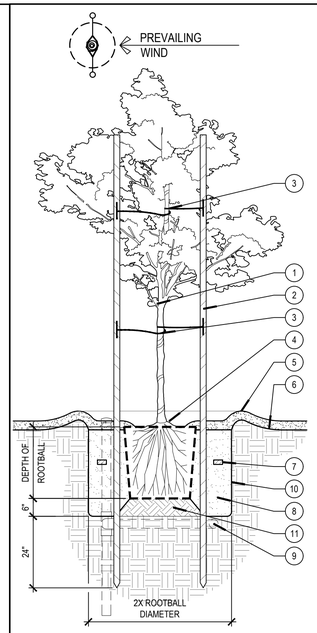
STAMPED CONCRETE MEDIAN STRIP CONDITION

LEGEND

1. INSTALL 8" TYPE B CURB PER CIVIL PLANS.
2. INSTALL 4" THICK STAMPED CONCRETE.
3. COMPACT SUBGRADE
4. INSTALL 4" THICK CLASS A TOPSOIL IN TREE PLANTING AREAS. NATIVE SOIL OTHERWISE. (EXACT LIMITS DETERMINED IN FIELD)
5. AC PAVEMENT
6. 9"L #3 DOWEL @ 36" O.C. - 3" EMBED INTO CURB TYPICAL

A STAMPED CONCRETE

SCALE: 3/4" = 1'-0"



LEGEND

1. PROPOSED TREE
2. LODGE POLE PINE STAKES. ONE (1) - 2" DIA. x 8' LONG STAKE FOR 5 GALLON. TWO (2) - 2" DIA. x 10' LONG STAKES FOR 15 GALLON AND 24" BOX TREES. TWO (2) - 3" DIA. x 12' LONG DIAMETER STAKES FOR 36" BOX AND LARGER.
3. TREE TIE, LOOP TREE TIE AROUND TREE BRANCH, TWIST TIE, THEN LOOP AROUND STAKE & DRIVE NAIL THROUGH THE TIE AT THE BACK OF STAKE. PROVIDE TWO (2) TIES FOR 5 GAL. & THREE (3) TIES 15 GAL. & LARGER TREES.
4. TREE ROOTBALL; INSTALL 5 GAL. & 15 GAL., 1" ABOVE GRADE. 24" BOX & LARGER, 3" ABOVE GRADE. TAPER ROOTBALL EDGE TO GRADE.
5. 4" HIGH WATER RETENTION BASIN. FORM FROM PLANT PIT EXCAVATION. BASIN NO LARGER THAN ROOTBALL.
6. FINISHED GRADE WITH APPROVED MULCH; REFER TO NOTES.
7. PLANTING TABLETS; REFER TO NOTES.
8. PREPARED BACKFILL/NATIVE SOIL MIX; GRADUALLY ADD SOIL AND COMPACT LIGHTLY WHEN BACKFILLING; WATER HALFWAY AND ALLOW TO DRAIN PRIOR TO ADDING MORE SOIL
9. SEE SEPARATE ROOTBALL DRAINAGE AND AERATION DETAIL
10. UNDISTURBED SOIL. SCARIFY SIDES OF PLANT PIT. BREAK UP HARD/COMPACTED SOIL AND LOOSEN SOIL.
11. 6" ZONE OF OVER-EXCAVATED AND RECOMMENDED BACKFILL SOIL

NOTES

A. ALL PLANT AREAS SHALL HAVE A 3" LAYER OF NITROLIZED ORGANIC LANDSCAPE MULCH, TYP. PLACED IN WATER RETENTION BASIN.

B. LIBERALLY DUST SIDES AND BOTTOM OF PITS W/ FINELY GROUND AGRICULTURAL GYPSUM.

C. TREE TIES TO BE "CINCH TIE" BY V.I.T. PRODUCTS OR APPROVED EQUAL.

D. FOR AGENCY MAINTAINED TREES, REFER TO THE GOVERNING AGENCY STANDARD DETAIL FOR TREE TIE REQUIREMENTS.

E. REFER TO THE PROJECT HORTICULTURAL SOILS REPORT FOR ALL REQUIRED BACKFILL SOIL AMENDMENTS.

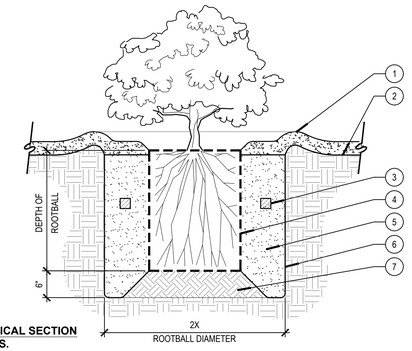
F. PLANT TABS TO BE "SCOTTS-AGRIFORM" OR APPROVED EQUAL AS RECOMMENDED BY THE MANUFACTURER PLANT SIZE TABLET CHART.

G. REFER TO SINGLE STAKE TREE DETAIL FOR LOPHOSTEMON CONFERTUS, CUPRESSUS SEMPERVIRENS AND COLUMNAR TREES.

H. MAINTAIN A MINIMUM 3'-0" RADIUS CLEAR EARTH AREA AROUND TREE TRUNK WHEN PLANTED IN TURF AREAS.

B TREE PLANTING

NOT TO SCALE



TYPICAL SECTION
N.T.S.

LEGEND

1. 3" HIGH WATER RETENTION BASIN, FORMED FROM PLANT PIT SPOILS/MULCH; MAINTAIN 2" MIN. MULCH ATOP ROOTBALL.
2. FINISH GRADE WITH APPROVED MULCH. REFER TO NOTES.
3. PLANTING TABLETS. REFER TO NOTES.
4. ROOTBALL. INSTALL CROWN 1" MINIMUM ABOVE FINISHED GRADE.
5. PREPARED BACKFILL/NATIVE SOIL MIX; GRADUALLY ADD SOIL AND COMPACT LIGHTLY WHEN BACKFILLING; WATER HALFWAY AND ALLOW TO DRAIN PRIOR TO ADDING MORE SOIL.
6. SCARIFY SIDES OF PLANT PIT; BREAK UP HARD/COMPACTED SOIL AND LOOSEN SOIL.
7. 6" ZONE OF OVER-EXCAVATED AND RECOMMENDED BACKFILL SOIL.

NOTES

A. ALL PLANTING AREAS SHALL HAVE A 3" LAYER OF APPROVED NITROLIZED ORGANIC LANDSCAPE MULCH.

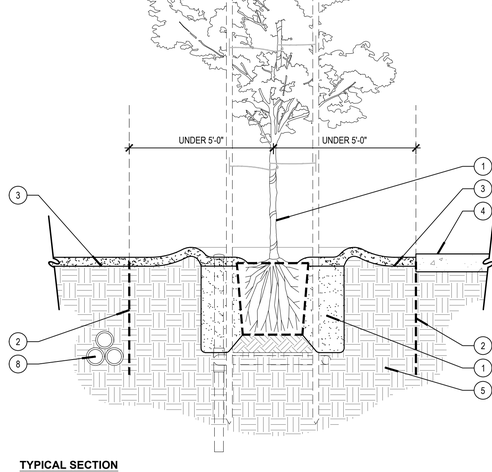
B REFER TO THE PROJECT HORTICULTURAL SOILS REPORT FOR ALL BACKFILL SOIL AMENDMENTS REQUIRED.

C. AVOID PLANT INSTALLATION DIRECTLY IN FRONT OF IRRIGATION SPRAY AND RAKE OUT ALL SOIL EXCAVATION AS REQUIRED.

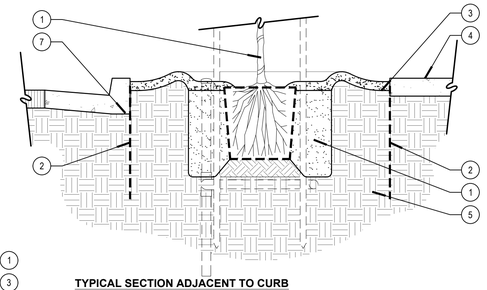
D. PLANT TABS TO BE "SCOTTS-AGRIFORM" OR APPROVED EQUAL. QUANTITY AS RECOMMENDED BY MANUFACTURER SIZE TABLET CHART.

C SHRUB PLANTING

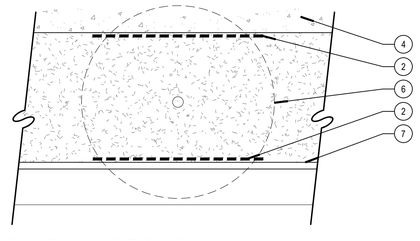
NOT TO SCALE



TYPICAL SECTION
N.T.S.



TYPICAL SECTION ADJACENT TO CURB
N.T.S.



PLAN VIEW - ADJACENT TO CURB
N.T.S.

LEGEND

1. PROPOSED TREE/ROOTBALL WITH STAKES AND TIES; REFER TO TREE PLANTING DETAIL
2. ROOT BARRIER AS REQUIRED. 5' MIN CLEARANCE FROM TREE TRUNK TO ADJACENT HARDSCAPE. PROVIDE A 2'-0" MIN. DEEP HIGH DENSITY POLYETHYLENE BLACK LINEAR BARRIER.
3. FINISH GRADE WITH APPROVED MULCH. REFER TO NOTES
4. ADJACENT HARDSCAPE. REFER TO CONSTRUCTION PLANS FOR ADDITIONAL INFORMATION
5. NATIVE SOIL BACKFILLED FIRMLY ALONG ROOT BARRIER
6. TREE DRIP LINE
7. CONCRETE CURB AND GUTTER, WHERE APPLICABLE
8. ADJACENT UTILITY LINES, WHERE APPLICABLE

NOTES

A. ROOT BARRIER TO BE AVAILABLE AT VIT PRODUCTS OR APPROVED EQUAL. PROVIDE MATERIAL SUBMITTALS FOR REVIEW/ APPROVALS.

B. TOP OF BARRIER SHALL BE 1" ABOVE FINISHED GRADE. DO NOT ENCIRCLE ROOTBALL

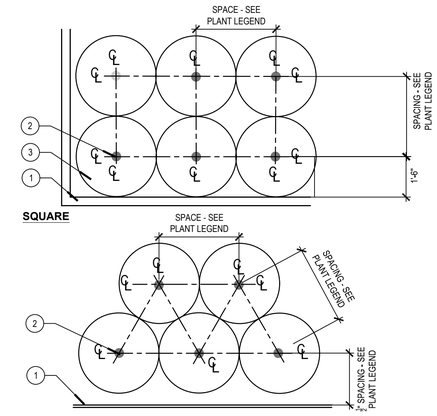
C. PROVIDE MATERIAL SUBMITTALS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

D. LENGTH OF ROOT BARRIER SHALL BE A MINIMUM OF 12' OR EQUAL TO THE DRIP LINE OF THE TREE AT MATURITY, WHICHEVER IS GREATER.

E. ADDITIONAL LOCATIONS FOR ROOT BARRIERS PER THE DIRECTION OF THE LANDSCAPE ARCHITECT,

D ROOT BARRIER INSTALL

NOT TO SCALE



SQUARE

TRIANGULAR

LEGEND

1. EDGE OF CURB/ EDGE OF PAVING/ FACE OF WALL
2. PLANT MATERIAL
3. PLACE ONE SHRUB AT CORNER

NOTES

A. REFERR TO PLANT SCHEDULE AND PLANS FOR SPACING/ LAYOUT

E PLANT SPACING

SCALE: 3/8" = 1"-0"

CIP 48008 - NUTWOOD AVENUE BICYCLE & PEDESTRIAN MOBILITY ENHANCEMENT PROJECT

60% PLANS – NOT FOR CONSTRUCTION – 11/26/2025

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LICENSED LANDSCAPE ARCHITECT
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EXPIRATION DATE 08/31/27
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CITY OF FULLERTON
PUBLIC WORKS DEPARTMENT

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CIP PROJECT 48008

PLANTING DETAILS

APPROVED: DATE — CITY ENGINEER/ASSISTANT PUBLIC WORKS DIRECTOR

ACCEPTED: DATE — PUBLIC WORKS DIRECTOR

SCALE: AS NOTED

SHEET 65 OF 65 SHEETS

B.M.: ORANGE COUNTY BM NO.: 2D-29-70 ELEV = 250.172'

FILE: