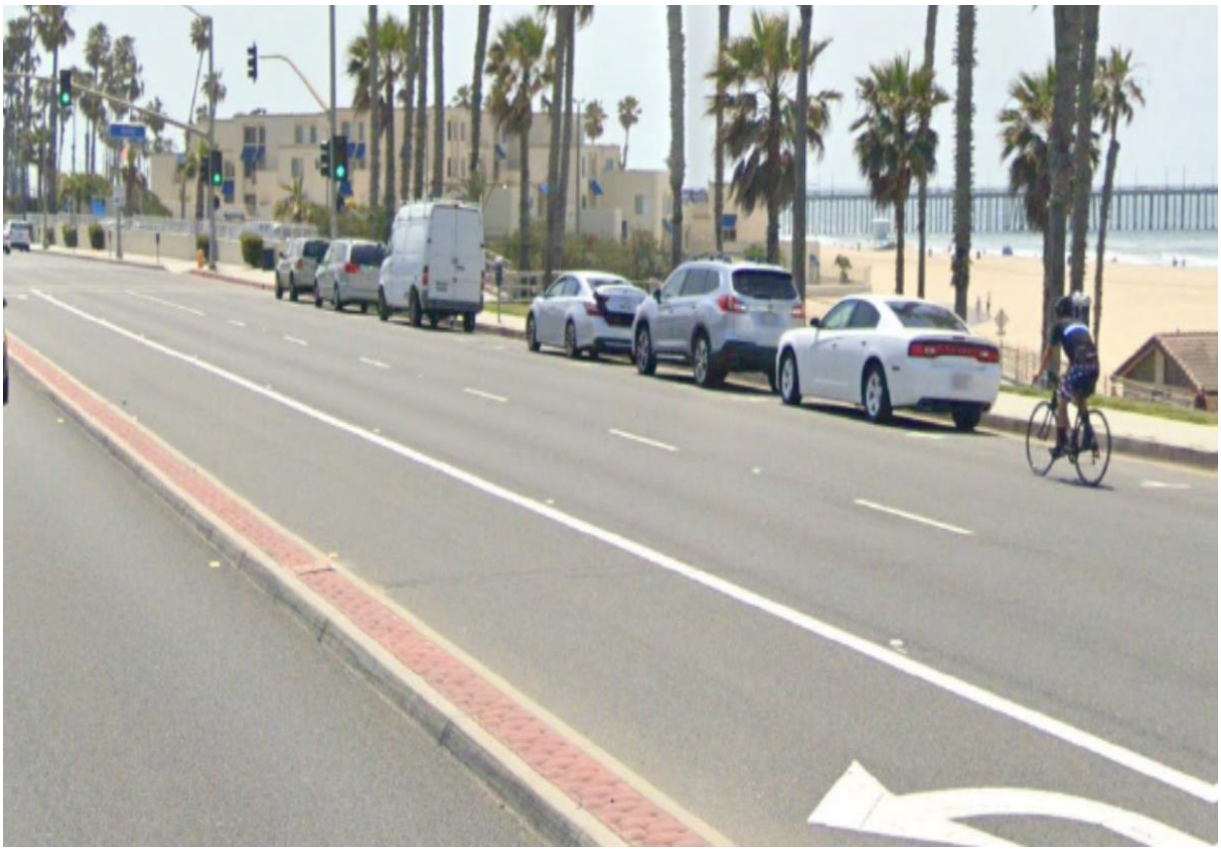
State Route 1 Class II Bike Lane Facility Improvements

ORANGE COUNTY, CALIFORNIA
DISTRICT 12 – ORA – 1 (PM 21.5/ 31.1; 32.7)
EA 0S1400 / 1219000098

Initial Study with [Proposed] Mitigated Negative Declaration



Prepared by the
State of California, Department of Transportation

Caltrans

October 2021

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General Information About this Document

What's in this document:

The California Department of Transportation (Caltrans) has prepared this Initial Study (IS), which examines the potential environmental impacts of the alternatives being considered for the proposed project located in Orange County, California. Caltrans is the lead agency under the California Environmental Quality Act (CEQA). The document tells you why the project is being proposed, what alternatives we have considered for the project, how the existing environment could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

What you should do:

- Please read this document.
- Additional copies of the document, as well as the technical studies we relied on to prepare it, are available for review at the district office and at the following locations listed below:
  - Huntington Beach City Hall, Planning Department
    2000 Main Street, Huntington Beach, CA 92648
  - Huntington Beach Central Library
    7111 Talbert Avenue, Huntington Beach, CA 92648
  - California Department of Transportation, District 12 Office
    1750 E. Fourth Street, Suite 100, Santa Ana, CA 92705
- Project information is available at: https://www.dot.ca.gov/caltrans-near-me/district-12/district-12-programs/district-12-environmental/sr-1-bike-lane-project
- We'd like to hear what you think. If you have any comments about the proposed project, please send your written comments to Caltrans by the deadline.
  - Send comments via postal mail to:

    Caltrans District 12, Division of Environmental Analysis
    1750 East 4th Street, Suite 100
    Santa Ana, California 92705
    Attn: Carmen Lo
  - Send comments via email to: CTD12_SR1.Bike.Lane.Project@dot.ca.gov
- Be sure to send comments by the deadline: November 19, 2021

What happens next:

- After comments are received from the public and reviewing agencies, Caltrans may: (1) give environmental approval to the proposed project, (2) do additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is obtained, Caltrans could design and construct all or part of the project.

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans District 12, Division of Environmental Analysis, 1750 East 4th Street, Suite 100, Santa Ana, California 92705, Attn: Carmen Lo; (657) 328-6162 (voice), or use the California Relay Service, 1 (800) 735-2929 (TTY), 1 (800) 735-2922 (voice), or 711.

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SCH #_____

12-ORA-1, PM 21.5 / 31.1; 32.7
0S1400 (EFIS 1219000098)

Add a comprehensive Class II bicycle lane in NB & SB directions of SR-1 between Santa Ana River Bridge (PM 21.5) and Anderson Street (PM 31.1); and Seal Beach Boulevard (PM 32.7) in Orange County, California

INITIAL STUDY WITH [PROPOSED] MITIGATED NEGATIVE DECLARATION

Submitted Pursuant to: (State) Division 13, California Public Resources Code

THE STATE OF CALIFORNIA
Department of Transportation

Responsible Agency:
California Transportation Commission

October 13, 2021
Date

Chris Flynn
Deputy District Director
California Department of Transportation
CEQA Lead Agency

The following person may be contacted for more information about this document:

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SCH #_____

PROPOSED MITIGATED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to add comprehensive Class II bike lane in both directions along SR-1 within the stated limits to move towards Caltrans' Complete Streets directive. This safety project is located along SR-1 within the City of Huntington Beach between the Santa Ana River Bridge (PM 21.5) and Anderson Street (PM 31.1) and Seal Beach Boulevard (PM 32.7) in Orange County, California.

Determination

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is Caltrans's intent to adopt an MND for this project. This does not mean that Caltrans's decision regarding the project is final. This MND is subject to modification based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study for this project; and pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

The proposed project would have **no impact** on:

Agricultural Resources, Mineral Resources, Population/ Housing, Tribal Cultural Resources, Wildlife, and Utilities and Service Systems.

In addition, the proposed project would have **less than significant impact** on:

Aesthetics, Air Quality, Hazards and Hazardous Materials, Geology, Hydrology and Water Quality, Energy, Land Use/Planning, Noise, Greenhouse Gas Emissions, Transportation, Cultural Resources, Public Services, and Recreation.

The Proposed project would have a **less than significant impact with mitigation** on:

Biological Resources because the project will implement avoidance, minimization and mitigation measures as discussed in sections 2.4

_____ _____

Chris Flynn
Deputy District Director
District 12
California Department of Transportation

Date

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Chapter 1 – Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans) proposes a safety improvement project on State Route 1 (SR-1) between the Santa Ana River Bridge (PM 21.5) and Anderson Street (PM 31.1); in the City of Huntington Beach (City); and a traffic signal upgrade at Seal Beach Boulevard (32.7) in City of Seal Beach, in the County of Orange. The project proposes to reduce bicyclist fatalities and serious injuries on the California State Highway System by adding comprehensive Class II bike lanes in both directions along SR-1 within the stated limits to move towards Caltrans' Complete Streets directive. The total length of the project is approximately 10 miles (mi). In addition to the Class II bike lane enhancements, the project will also replace and upgrade an existing traffic signal pole at the northwest corner of SR-1 and Seal Beach Boulevard in the City of Seal Beach. This improvement was previously environmentally evaluated as part of a separate safety project (EA 0N850) and has been incorporated by reference (Appendix G); therefore, environmental analysis of this improvement is not included further in this document. However, this upgraded traffic signal pole will be constructed as part of this project.

Caltrans is the Lead Agency under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). An Initial Study (IS) with proposed Mitigated Negative Declaration (MND) has been prepared pursuant to CEQA and a Categorical Exclusion (CE) will be prepared pursuant to NEPA. There are 2 alternatives, Build and No Build Alternatives. Alternative 1 are the proposed improvements as discussed under Project Description below and is often referred to as the Build Alternative, and Alternative 2 (No Build Alternative) retains the existing conditions. Figures 1-1 shows the project location and vicinity map.

This proposed project is included in the Southern California Association of Governments (SCAG) 2016/2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and the 2019 Federal Transportation Improvement Program (FTIP) (RTIP/FTIP ID # ORA001102) listed as Grouped Project for Safety Improvements. (see Appendix E). The FTIP is included by reference in the Certified Federal Statewide Transportation Improvement Program (FSTIP). The project is proposed to be federally, and state funded through the 2020 State Highway Operation and Protection Plan (SHOPP) under program code 20.10.201.010 the Bicycle Safety Improvement Monitoring program with construction slated for the 2023/2024 fiscal year (FY).

SR-1, also known as Pacific Coast Highway (PCH), is a four to six lane Conventional Highway that runs through Orange County beginning at Interstate 5 (I-5) in the City of Dana Point up to the Los Angeles/Orange county line. In addition to providing a scenic route to numerous attractions along the seashore, the route also serves as a thoroughfare, connecting coastal cities and communities and providing access to beaches and parks in several urban areas. In its run across Orange County, Route 1 passes through the Cities of Dana Point, Laguna Beach, Newport Beach, Huntington Beach and Seal Beach.

Within the limits of this project, SR-1 functions as a 4-to-6 lane highway with intermittent left and right turn pockets. All lanes in both northbound (NB) and southbound (SB) directions are paved with asphalt concrete, and both directions are separated by a combination of striped median, raised median islands, and Type 50 concrete barrier throughout the project. Striped shoulder widths vary across the project limits with a maximum right shoulder width of 10' and maximum

left shoulder width of 2'. Beginning from NB of the Beach Boulevard intersection with SR-1, there exists designated 8' street parking in both the NB and SB direction—this street parking continues periodically until the intersection at Goldenwest Street and resumes at Warner Street up to the project end limit at Anderson Street.

Street lighting is placed at signalized intersections as well as throughout the residential and commercial areas that the route passes through, mainly from Beach Boulevard to Goldenwest Street and Warner Street to Anderson Street.

There are existing designated Class II bike lanes (minimum 4' width) in both NB and SB directions beginning at Huntington Street until 7th Street as well as a brief continuation of designated bike lane from Warner Avenue onto NB SR-1. The corridor from the intersection at Warner Avenue up until the northern project limit at Anderson Street serves as a comprehensive Class II bicycle lane. The Huntington Beach Bike Trail (Class I Path) also runs parallel to SR-1 along the beachfront through most of the project limits, beginning at the Santa Ana River Bridge and ending near Warner Avenue.

1.2 Project History

The 2018 Bicyclist Safety Improvement Monitoring Program was developed as a part of the State Highway Operation and Protection Program with the intent of identifying bicyclists involved high collision concentration locations and providing traffic safety measures to reduce bicyclist fatalities and serious injuries on the California State Highway System. In 2018 Caltrans Headquarter (HQ) initiated Traffic Safety investigations and was able to identify 10 various locations along SR-1 within Orange County that had higher than average collisions, injuries and fatalities involving bicycles. These ten (10) locations are a combination of spot locations and corridors on SR-1 throughout the Cities of Newport Beach, Huntington Beach, and Seal Beach.

District 12's Traffic Operations Northwest Branch initiated a Project Initiation Package, proposing to install a comprehensive Class II bike lane in both directions from Dover Drive in the City of Newport Beach to Los Angeles/Orange county line in the City of Seal Beach. The HQ Office of Traffic Safety has reviewed and concurred.

In the late stages of the Planning phase, District Management decided to move the 2.5-mile (mi) segment from Anderson Street to Los Angeles/Orange county line in the city of Seal Beach to the CAPM project EA 0P590. The proposed widening of the right-turn pocket at Northbound SR-1 to Northbound Seal Beach Boulevard that would require Coastal Commission approval and utility relocation is to be addressed in another project (EA 0P590). The Project Initiation Report was approved in October 2020 with this amendment in effect. Additionally, the segment of this project running between Dover Drive in Newport Beach and the Santa Ana River Bridge in City of Huntington Beach was moved to another CAPM project (EA 0R410). As a result, the current limits for this project lie from the Santa Ana River Bridge (PM 21.5) to Anderson Street (PM 31.1) along SR-1 in the City of Huntington Beach.

1.3 Purpose and Need

Purpose: The purpose of this project is to reduce bicyclist fatalities and serious injuries on the California State Highway System

Need: Per the 2018 Bicyclist Safety Improvement Monitoring Program, there are spot locations and corridors within the project limits that involve high concentrations of bicyclist-involved collisions.

Collision Analysis
Traffic Accident Surveillance and Analysis System (TASAS) data involving bicyclists on PCH from PM R18.59 to PM 33.45 are summarized below, which includes collisions that occurred during the five-year period from January 1, 2010 to December 31, 2014.

Table 1-1 Traffic Accident Surveillance and Analysis System (TASAS) - Bicycle Data

Location	Number of Accident			Persons	
	Total	Fatal	Injury	Killed	Injured
SR-1 Northbound	79	1	78	1	96
SR-1 Southbound	86	1	85	1	98

Source: Draft Project Report (DPR; September 2021), Caltrans.

The above table for the five-year period showed a total of 194 collisions a total of two fatalities.

1.4 Project Description

This section describes the proposed action and the project alternatives that were developed to meet the identified purpose and need of the project, while avoiding or minimizing environmental impacts.

The California Department of Transportation (Caltrans) proposes a safety improvement project on State Route 1 (SR-1) between the Santa Ana River Bridge (PM 21.5) and Anderson Street (PM 31.1) in the City of Huntington Beach (City), in the County of Orange. The project proposes to add comprehensive Class II bike lanes in both directions along SR-1 within the stated limits to move towards Caltrans' Complete Streets directive. Additional proposed safety elements for bicyclists are widening of right-turn pockets, widening of existing shoulders, and reducing median island widths to accommodate bike lane treatments; removing existing sand deposits along the roadway; replacing and refreshing lane and shoulder striping; implementing bicyclist detection sensors at signalized intersections; upgrading curb side grated inlets to be bike-rated; installing signage; and install census stations at the intersections of SR-1 at Goldenwest Street and SR-1 at Warner Avenue. Other elements proposed include upgraded guardrail and relocation of traffic signal and lighting poles. There are 2 alternatives, Build and No Build Alternatives. Proposed improvements of the Alternative 1 (Build Alternative) are discussed in detail below. Alternative 2 (No Build Alternative) retains the existing conditions; and does not satisfy the purpose and need of the project.

Figure 1-1: Project Location and Vicinity Map

Alternative 1 (Build Alternative) proposes to address bicyclist safety throughout the corridor by introducing various improvements involving new delineation, signage, and other roadway modifications. The following improvements are included in Alternative 1 and shown on Appendix E (Layout Plans).

- Install a comprehensive Class II bike lane in both directions of SR-1 within project limits. These improvements will provide bicyclists riding on the highway with more continuity in using designated bike travelled ways. Accommodation of new bike lanes and marked shared lanes will require modifying delineation, signage, and existing roadway sections (e.g. reducing existing raised median width, widening existing roadway section at spot locations).
    - Existing raised median width on SR-1 from Twin Dolphin Drive to Beach Boulevard will be reduced by approximately 2' in each direction.
    - Additional roadway section will be added on SB SR-1 after the Warner Avenue intersection to accommodate the proposed buffered Class II bike lane.
- Widen right-turn pockets on NB SR-1 at 3 intersections (SR-1 and Brookhurst Street, SR-1 and Magnolia Street and SR-1 and Warner Avenue) to accommodate new bike lane treatments. Proposed bike lane treatments will further improve the continuity for cyclists using bike lane facilities on SR-1, as well as improve safety at the following major intersections:
    - Brookhurst Street (Widening required)
    - Magnolia Street (Widening required)
    - Warner Avenue (Widening required)
    - Goldenwest Street
    - Huntington Street
    - Twin Dolphin Drive
    - Beach Boulevard

  Widening at these intersections will require right-of-way (ROW) acquisitions involving property owned by California State Lands Commission (SLC) and Huntington Beach Wetlands Conservancy. In addition, combined bike and right-turn lanes are proposed at right-turn locations, where there is insufficient space for a dedicated bike lane treatment.
- Construct median barrier in place of existing raised median on SR-1 between Warner Avenue and Seapoint Street. This would provide more travelled roadway width along both the NB and SB directions of SR-1 through this high-speed section. Along with adjusted lane line delineation, this proposal will provide more space for bicyclists and vehicles to operate through this area.

  The Type 60M concrete barrier would follow Caltrans Standard (RSP A76A) and will stand 3.5' in height with a width of 2'. As a result of Design Variation, 450 sqft of PE will no longer be required and the TCE will be reduced from 2,200 sqft to 1,250 sqft.

  The project in itself is considered a Transportation Demand Management (TDM) tool as it proposes to add a comprehensive Class II bike lane in both directions of SR-1 and proposes to improve various bicycle safety measures throughout the project limits as discussed above.
- Install bike detection sensors at signalized intersections within the project limit. This addition falls under the Complete Streets initiative in providing bicyclists with an improved experience in using state highway facilities.

- Relocate traffic signal poles and reconstruct Americans with Disabilities Act (ADA) facilities at locations affected by the Class II bike lane improvements. The following locations that will require further reconfiguration as a result of the bike facility improvements.
    - **Southeast curb return of SR-1 and Warner Avenue intersection.** Curb ramp reconstruction will be required at this intersection as a result of the proposed bike lane treatment and widening will be required at this intersection.
    - **Southwest curb return of SR-1 and Warner Avenue intersection.** Curb ramp and sidewalk reconstruction, as well as traffic signal and lighting pole relocations to accommodate installation of buffered Class II bike lane in SB SR-1 direction.
    - **Southeast curb return of SR-1 and Magnolia Street intersection**. Curb ramp and sidewalk reconstruction, as well as traffic signal and lighting pole relocations as a result of the proposed bike lane treatment and widening.
    - **Southeast curb return of SR-1 and Brookhurst Street intersection.** Curb ramp and sidewalk reconstruction, as well as traffic signal and lighting pole relocations will be required at this intersection as a result of the proposed bike lane treatment and widening.
- Refresh bike and vehicle lane delineations, where needed and added signage. In addition to the striping, marking, and signage accompanying the Class II bike lanes and shared lanes, this project proposes safety measures through enhancing visibility for bike facilities on SR-1. Proposed improvements include green bike-lane treatment areas between through-lane and right-turn-lanes as mentioned previously, green merging zones to identify potential areas of conflict. At high speed segments of SR-1, there is “No Parking Anytime” signage to be added to discourage illegal parking that would compromise the proposed bike facilities. Vehicle lane lines are to be restriped as needed.
- Other safety elements proposed include upgraded bike-friendly grates for curb side inlets, high visibility crosswalks at heavily used pedestrian crossings from Anderson Street to Santa Ana River Bridge, and a guardrail upgrade at the Bolsa Chica Ecological Reserve to meet current standards.
- Existing sand deposits along Beach Boulevard to Brookhurst Street and Warner Avenue to Seapoint Street will be cleaned up to prevent accumulation of sand and debris onto the roadway that may interfere with the movement of bicyclists on SB SR-1.
- Install two additional traffic census stations at the intersection of SR-1 at Goldenwest Street and SR-1 at Warner Avenue.

1.5 Transportation System Management (TSM) and Transportation Demand Management (TDM)

TSM strategies increase the efficiency of existing facilities; they are actions that increase the number of vehicle trips a facility can carry without increasing the number of through lanes. Examples of TSM strategies include ramp metering, auxiliary lanes, turning lanes, reversible lanes, and traffic signal coordination. TSM also promotes automobile, public and private transit, ridesharing programs, and bicycle and pedestrian improvements as elements of a unified urban transportation system. Modal alternatives integrate multiple forms of transportation modes (e.g., pedestrian, bicycle, automobile, rail, and mass transit).

TDM focuses on regional means of reducing the number of vehicle trips and VMT as well as increasing vehicle occupancy. It facilitates higher vehicle occupancy or reduces traffic congestion by expanding the traveler's transportation options in terms of travel method, travel

time, travel route, travel costs, and the quality and convenience of the travel experience. A typical activity would be providing funds to regional agencies that are actively promoting ridesharing, maintaining rideshare databases, and providing limited rideshare services to employers and individuals.

The project in itself is considered a TDM tool as it proposes to add a comprehensive Class II bike lane in both directions of SR-1 and proposes to improve various bicycle safety measures throughout the project limits as discussed above.

Other Project Elements (Standardized Project Measures)

The Build Alternative contains several standardized project measures that are employed on most, if not all, Caltrans projects. The use of these measures with the Build Alternative is described in more detail in Chapter 2 of this Initial Study as Project Features (PF) are numbered. For example, a Project Feature applicable to water quality would be titled and listed as PF-WQ-1.

Air Quality

- **Caltrans Standard Specifications in Section 14-9 Air Quality:**

  PF-AQ-1 The construction contractor must comply with the Caltrans' Standard Specifications in Section 14-9 (2018) for reducing impacts from the construction activities. Section 14-9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances. The proposed project would comply with SCAQMD Rule 403 requiring the implementation of best available dust control measures during active operations capable of generating fugitive dust.

Biology

- **Caltrans Standard Specification 14-1.02 Environmentally Sensitive Area:**

  PF-BIO-1: Delineation of Environmental Sensitive Areas. Prior to project activities, highly visible barriers (e.g., orange construction fencing) will be installed along the boundaries of the project footprint/equipment access routes to designate Environmentally Sensitive Areas (ESAs) that are to be preserved. This will include ESA fencing along jurisdictional aquatic resources located at the intersections of SR-1 at Warner Avenue, Magnolia Street, and Brookhurst Street. No project activity of any type will be permitted within these ESAs. In addition, heavy equipment, including motor vehicles, will not be allowed to operate within the ESAs. All construction equipment will be operated in a manner to prevent accidental damage to ESAs. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within these protected zones.

- **Caltrans Standard Specification 21-2.01 Erosion Control Work:**

  PF-BIO-2: Invasive Species Control. Only certified weed-free straw, mulch, and/or fiber rolls will be used for erosion control. Invasive species will not be used in any landscaping palettes for the project.

- **Caltrans Standard Specification 13.101A General Water Pollution Control:**

  PF-BIO-3: Equipment Staging Best Management Practices (BMPs). All equipment maintenance, staging, and dispensing of fuel, oil, or any other such activities will occur in developed or designated non-sensitive upland areas. The designated upland areas will be located in such a manner as to prevent any loose soil or spill runoff from entering jurisdictional waterways or adjacent sensitive vegetation communities. All construction materials will be removed from worksites following completion of project activities.

- **Caltrans Standard Specification 13-1.01D (2)-Regulatory Requirements:**

  PF-BIO-4: Water Quality BMPs. In order to avoid impacts to water quality during construction, stormwater and erosion control BMPs are recommended to prevent loose soil or pollutants associated with the project from inadvertently entering the aquatic resources located within and adjacent to the BSA. Example BMPs include silt fencing and straw wattle placed in such a manner that they are able to catch or filter sediment or other construction-related debris to prevent it from eroding into the nearby drainage channels.

- **Caltrans Standard Specification 14-6.03B Bird Protection:**

  PF-BIO-5: Avoidance of Breeding and Nesting Bird Season. Project activities will occur outside the nesting season (February 1– September 30) to the fullest practicable extent.

- **Caltrans Standard Specification 14-10.10 Solid Waste Disposal and Recycling:**

  PF-BIO-6: Trash and Waste Removal. During construction, trash and food waste will be removed from work sites on a daily basis to avoid the attraction of predators that prey on sensitive wildlife species.

Cultural

- **Caltrans Standard Specification 14-2.03A Discovery of Cultural Materials:**

  PF-CUL-1: If cultural materials are discovered during construction activities, the construction Contractor will divert all earthmoving activity within and around the immediate discovery area until a qualified archaeologist can assess the nature and significance of the find. At that time, coordination will be maintained with the California Department of Transportation District 12 Environmental Branch Chief or the District 12 Native American Coordinator to determine an appropriate course of action.

- **Caltrans Standard Specification 14-2.03A Discovery of Human Remains:**

  PF-CUL-2 If human remains are discovered during construction activities, California State Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the Orange County Coroner shall be contacted. If the remains are thought to be Native American, the Coroner will notify the Native American Heritage Commission (NAHC), who pursuant to California Public Resources Code (PRC) Section 5097.98, will then notify the Most Likely Descendant (MLD). At that time, the persons who discovered the remains will contact the Caltrans District 12 Environmental Branch Chief or the District 12 Native American Coordinator so that they may work with the MLD on the respectful treatment and disposition of the

remains. Further provisions of California PRC 5097.98 are to be followed as applicable.

Geology and Soils

- **Caltrans Standard Specification 48-2.02. B and Section 19 Earthwork General:**

  PF-GEO-1: The project will comply with the most current Caltrans procedures and design criteria regarding seismic design to mitigate any adverse effects related to seismic ground shaking. Earthwork will be performed in accordance with Caltrans Standard Specifications, Section 19, which require standardized measures related to compacted fill, over-excavation, and re-compaction, among other requirements. Moreover, Caltrans Highway Design Manual (HDM) Topic 113, requires the project engineer to review a Geotechnical Design Report, if any, to ascertain the scope of geotechnical involvement for a project.

Greenhouse Gas Emissions

- **Caltrans Standard Specification 7-102.C:**

  PF-GHG-1: Emissions Reduction: Submit to the Department the following certification before performing the work: "I am aware of the emissions reduction regulations being mandated by the California Air Resources Board. I will comply with such regulations before commencing the performance of the work and maintain compliance throughout the duration of this Contract." Contract signing constitutes submittal of this certification

Hazardous Materials

- **Caltrans Standard Specification 13.2:**

  PF-HAZ-1: An Aerially Deposited Lead (ADL) Investigation will be conducted at the excavation areas for lead contamination; and then ADL report will be prepared. Based on the ADL contain in the soil, an appropriate Special Provisions will be prepared to provide an instruction to construction contractor on how to handle the ADL impacted soil during construction.

- **Caltrans Standard Specification 13-4.03E (2) and Unknown Hazards Procedures in Caltrans Construction Manual (most updated version):**

  PF-HAZ-2: During construction, the construction contractor will monitor soil excavation for visible soil staining, odor, and the possible presence of unknown hazardous material sources. If hazardous material contamination or sources are suspected or identified during project construction activities, the construction contractor will be required to cease work in the area and to have an environmental professional evaluate the soils and materials to determine the appropriate course of action required, consistent with the Unknown Hazards Procedures in Chapter 7 of the Caltrans' Construction Manual.

- **Caltrans Standard Specification 14-11.14:**

  PF-HAZ-3: During construction, the construction contractor is required to store treated wood waste (TWW) in metal containers approved by the US Department of Transportation for the transportation and temporary storage of hazardous waste until disposal. In addition, TWW could only be disposed at a permitted TWW Resource Conservation and Recovery Act (RCRA) Subtitle C disposal facilities.

Water Quality and Storm Water Runoff

- **Caltrans Standard Specification 13-1.01D (2)-Regulatory Requirements:**

  PF-WQ-1: The project will comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the State of California, Department of Transportation, Order No. 2012-0011-DWQ, NPDES No. CAS00003 and the and any subsequent permits in effect at the time of construction

- **Caltrans Standard Specification 13-3.01D (2)-Regulatory Requirements:**

  PF-WQ-2: A Water Pollution Control Program (WPCP) will be prepared and implemented to address all construction-related activities, equipment, and materials that have the potential impact water quality. The WPCP will identify the sources of pollutants that may affect the quality of storm water and include BMPs to control the pollutants, such as sediment control, catch basin inlet protection, construction materials management and non-storm water BMPs. All work must conform to the Construction Site BMP requirements specified in the latest edition of the Storm Water Quality Handbooks: Construction Site Best Management Practices Manual to control and minimize the impacts of construction and construction related activities, material and pollutants on the watershed. These include, but are not limited to temporary sediment control, temporary soil stabilization, scheduling, waste management, materials handling, and other non-storm water BMPs.

- **Caltrans Standard Specification 13-3 Storm Water Pollution Prevention Plan:**

  PF-WQ-3: Design Pollution Prevention Best Management Practices (BMPs) will be implemented such as preservation of existing vegetation, slope/ surface protection systems (permanent soil stabilization), concentrated flow conveyance systems such as ditches, berms, dikes and swales, overside drains, flared end sections, and outlet protection/ velocity dissipation devices.

  PF-WQ-4: Construction site dewatering discharges must comply with the General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (de minimis) Threat to Water Quality (Order No. R8-2020-0006, NPDES No. CAG998001) and any subsequent updates to the permit at the time of construction. This Permit addresses temporary dewatering operations during construction. Dewatering BMPs will be used to control sediment and pollutants, and the discharges must comply with the WDRs issued by the Santa Ana RWQCB.

Land Use/Planning and Recreation

- **Caltrans Standard Specifications Section 5-1.39:**

  PF-REC-1: The property used for temporary construction easement will be restored to a condition at least as good as it was prior to easement being granted.

- **Caltrans Standard Specifications Section 12-4 Maintaining Traffic:**

  PF-TRA-1: A Transportation Management Plan (TMP) shall be included in the design plans for implementation by the contractor prior to and during construction of any improvements. The TMP shall consist of prior notices, adequate sign posting, detours, phased construction, and temporary driveways where necessary. The TMP shall specify implementation timing of each plan element (e.g., prior notices, sign posting, detours) as determined appropriate by Caltrans. Adequate local emergency

access shall always be provided to adjacent uses. Proper detours and warning signs shall be established to ensure public safety. The TMP shall be devised so that construction shall not interfere with any emergency response or evacuation plans. Construction activities shall proceed in a timely manner to reduce impacts.

Noise

- **Caltrans Standard Specifications Section 14.8-02 Noise Control:**

  PF-N-1 During construction of the Project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Noise associated with construction is controlled by 2018 Caltrans Standard Specification Section 14-8.02, “Noise Control,” which states the following: Control and monitor noise resulting from work activities. Do not exceed 86 dBA Lmax at 50 feet from the job site from 9 p.m. to 6 a.m. No mitigation required.

Traffic

- **Caltrans Standard Specifications Section 12-4 Maintaining Traffic:**

  PF-TRA-1: A Transportation Management Plan (TMP) shall be included in the design plans for implementation by the contractor prior to and during construction of any improvements. The TMP shall consist of prior notices, adequate sign posting, detours, phased construction, and temporary driveways where necessary. The TMP shall specify implementation timing of each plan element (e.g., prior notices, sign posting, detours) as determined appropriate by Caltrans. Adequate local emergency access shall always be provided to adjacent uses. Proper detours and warning signs shall be established to ensure public safety. The TMP shall be devised so that construction shall not interfere with any emergency response or evacuation plans. Construction activities shall proceed in a timely manner to reduce impacts.

1.5.1 Project Schedule and Construction

The Final Environmental Document is anticipated to be approved in March 2022. Project design is anticipated to be completed in March 2024. Construction will occur over a period of 16 months between January 2025 to April 2026.

A Transportation Management Plan (TMP) checklist has been prepared and will be updated during the design phase to minimize potential impacts on emergency services, commuters, and the surrounding communities during construction. The TMP, when implemented, would result in minimized project-related traffic delay and accidents by the effective application of traditional traffic mitigation strategies and innovative combinations of public and motorist information, demand management, incident management, system management, and alternative route and construction strategies. In addition, the TMP will include strategies and measures to avoid and minimize disruption to local access, roadways, and bike and pedestrian facilities during construction.

Staged construction and traffic handling plans will be prepared in the PS&E phase to show the sequence of work activities and maintaining vehicular traffic through the work zone.

No Build Alternative

Under the No Build alternative, the project purpose and need will not be addressed, and it will retain the existing roadway condition. However, it does not preclude the construction of future improvements. This Alternative will not reduce bicyclist fatalities and serious injuries within the project limits.

1.5.2 Final Decision-Making Process

After the public circulation period, all comments will be considered, and Caltrans will select a preferred alternative and make the final determination of the project's effect on the environment. Under CEQA, if no unmitigable significant adverse impacts are identified, Caltrans will prepare either an ND or a Mitigated Negative Declaration (MND) (which has been proposed for this project).

The permits, reviews, and approvals listed in Table 1.2 would be required for project construction.

Table 1-2 Permits and Approvals Needed

The following permits, reviews, and approvals would be required for project construction:

Agency	PLAC	Status
United State Fish and Wildlife Service (USFWS)	Section 7 Consultation for Threatened and Endangered Species	Consultation with the USFWS and a resulting Biological Opinion (BO) would be obtained prior to approval of the Final Environmental Document.
California State Lands Commission (CSLC)	Section 4(f) De Minimis Concurrence	De Minimis concurrence would be obtained prior to the Final Environmental Document. Encroachment permit would be obtained prior to construction.
State Water Resources Control Board (SWRCB)	Caltrans Statewide NPDES Permit Order No. 2012-0011-DWQ, NPDES No. CAS000003	Caltrans Statewide NPDES Permit adopted by SWRCB on September 2012
City of Huntington Beach and California Coastal Commission (CCC)	Coastal Development Permit (CDP)	CDP will be obtained prior to start of construction.
California Transportation Commission (CTC)	Funding approval	Approval will be obtained after approval of the Final Environmental Document.

Design Variations Considered but Eliminated from Further Discussion

The project previously included the following design variations. These design variations were intended to contribute to the various project improvements within the project area; however, after consideration of Caltrans design standards, environmental impacts, and right-of-way requirements, costs and maintenance costs, these design variations described below were either removed from further consideration or revised as part of the current project scope.

SR-1 at Warner Avenue Widen in the Southbound Direction and Reduce Lane Widths

During the project development process, a design variation was developed to reduce the amount of impact to the Bolsa Chica Wetland Conservancy at the southeast quadrant of SR-1/Warner Avenue. The proposal was to widen along southbound SR-1, shift the SR-1 centerline to the west, and reduce existing lane widths to minimize or eliminate right-of-way needs. The existing lane lines along SR-1 in the northbound direction at Warner Avenue are currently below standard widths; therefore, any additional reductions to lane widths could create a visual bottleneck and require non-standard approvals. Shifting the SR-1 centerline to the west poses additional constraints that include shifting right-of-way needs from Bolsa Chica Wetland Conservancy to the Bolsa Chica State Beach. Additionally, lane shifts would introduce more skew to the SR-1/ Warner intersection and create a travel way angled towards the bike lane on the receiving NB direction of SR-1 at this intersection; which could contribute to a new safety risk to cyclists along the NB direction.

Bridge Rail and Barriers California Coastal Commission Approved

A Bridge Rails and Barriers: A Reference Guide for Transportation Projects in the Coastal Zone developed by Caltrans and California Coastal Commission (CCC) was reviewed and this guideline is specifically to railings and barriers that can be implemented on bridges along the coast. Based on review of this document, the guidelines do not apply to the guardrail application in this project to protect a fixed object. The document states that there may be future updates to include variations for other forms of barriers/railings; however, the current version is not applicable to this project.

Planting Vegetation along the Existing Sand Slopes

Established vegetation appears to help slow advancement of sand onto the roadway and this design variation was considered prior to the retaining wall design variation. However, the difficulty of this design variation is getting the plants established and self-sufficient. In addition, there is currently no landscape irrigation system set within this area, and the plant establishment itself has not been successful in previous projects at this specific area. This could be attributed to the soil type, slopes, and heavy winds that this area experiences.

Sand Stabilization Application

A product that acts as a stabilizer when applied to the top layer of sand was considered prior to the retaining wall design variation. The stabilization application was ruled out due to the effectiveness for the existing top layer of sand, which would be quickly overtaken by new sand being blown in. In addition, the same product would be required to apply to the whole beach to meet Caltrans' purpose and need; and this was determined as being unfeasible.

Retaining Walls

A retaining wall design variation was considered to resolve existing beach sand encroachment along SB SR-1 between Warner Avenue and Seapoint Street, and from Beach Boulevard to Brookhurst Avenue. Current and future beach sand intrusion creates a safety hazard for cyclist using the shoulder as a bike path. After considering multiple factors, this design variation deemed an unfeasible solution to the issue of sand encroaching onto the roadway due to the following reasons:

- Sand will accumulate on State Parks side without consistent maintenance and spill over to SR-1 as in existing condition. After discussions with State Parks, Caltrans and State Parks could not reach an agreement of maintaining and cleaning up on the State Parks property along the retaining wall.
- Introducing a fixed object on the side of the road brings up safety concerns; for example, collisions with bicyclists may be less forgiving with wall in place.
- Posing difficulties for Caltrans Maintenance to use heavy equipment for their operations without damaging the wall.
- Sand accumulation at top of the retaining wall may lead to sand being blown onto roadway at eye-level of cyclists and create a safety issue in impairing cyclist vision.
- Removing accumulated sand between the retaining wall and State Park's fence will need to be done manually and is labor intensive for Caltrans Maintenance crews.

As discussed earlier, initial cleanup of existing sand deposits along Beach Boulevard to Brookhurst Street and Warner Avenue to Seapoint Street remains as part of the project scope.

Slope Paving

Slope paving was also considered to resolve the sand issue; however, the existing sand dunes are considered as an environmentally sensitive habitat area. Therefore, this design variation was considered but rejected from further discussion.

Center Median – Thrie Beam Barrier

Thrie beam barrier was considered and would occur at the identical location the Median Concrete Barrier, from Seapoint Street to Warner Avenue along SR-1. This variation consists of installing a thrie-beam barrier. The thrie-beam barrier would follow the Standard Caltrans plan A78A and would stand 2'-8" in height with a width of 2'-2". This design variation would allow for drainage/flow to run through and would reduce the severity of impeding or diverting the flow of water within the 100-year floodplain in comparison to Median Concrete Barrier. This design option; however, could incur higher associated maintenance costs due to restoration needs in the event of a collision.

Silt Fence and Sand Bags

Silt fence and sand bags along State parks fence line from Warner Avenue to Seapoint Street serve as both a storm water and safety benefit in preventing beach side sand on reaching the roadway was considered. This variation was eliminated due to the objection from CSLC.

Chapter 2 – CEQA Checklist

The environmental factors checked below would be potentially affected by this project. Please see the checklist beginning on page 3 for additional information.

☐	Aesthetics	☐	Agriculture and Forestry	☒	Air Quality
☒	Biological Resources	☒	Cultural Resources	☒	Energy
☒	Geology/Soils	☒	Greenhouse Gas Emissions	☒	Hazards and Hazardous Materials
☒	Hydrology/Water Quality	☒	Land Use/Planning	☐	Mineral Resources
☒	Noise	☐	Population/Housing	☒	Public Services
☒	Recreation	☒	Transportation	☐	Tribal Cultural Resources
☐	Utilities/Service Systems	☐	Wildfire	☒	Mandatory Findings of Significance

DETERMINATION:

On the basis of this initial evaluation:

☐	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☒	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature: Smita Deshpande	**Date:** October 12, 2021
Printed Name: Smita Deshpande	**For:**

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects will indicate that there are no impacts to a resource. A NO IMPACT answer in the last column reflects this determination. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project, and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices (BMPs) and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below.

2.1 Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

2.1.1 CEQA Significance Determination for Aesthetics

The potential for the proposed project to result in adverse impacts related to Aesthetics is assessed in the following discussion. This discussion below is based on review of the Visual Impact Assessment (VIA; July 2021) prepared for this project.

The California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide the people of the state "with enjoyment of aesthetic, natural, scenic and historic environmental qualities." (CA Public Resources Code Section 21001[b])

Highway 1 through the project limits is classified as an eligible State Scenic Highway on the State list. The project is within the Coastal Zone, and a sensitive corridor regarding visual resource issues. Ocean views are available from the highway along a majority of the length of

the project. Review of the project and project plans indicate that the project would not result in substantial adverse impacts to the visual environment.

a) **Less Than Significant Impact:** There may be scenic vistas along coast highway; however, the heights and locations of the proposed improvements are such that they would not change the existing conditions significantly, hence there would be no significant adverse effect on a scenic vista.

b) **Less Than Significant Impact:** SR-1 through the project limits is classified as an eligible State Scenic Highway[1] on the State list. The project is within the Coastal Zone, and a sensitive corridor regarding visual resource issues. Ocean views are available from the highway along a majority of the length of the project. The project would not result in significant and unavoidable impacts to the visual environment. The proposed improvements are mostly ground level features including striping for bike lanes, curb work, and guard rail replacement, such that no ocean views would be obstructed. Visual access to coastal resources would be safer for bicyclist due to improved stripping of bicycle lanes and right turn curb returns. Therefore, the proposed project would not cause any substantial damage to scenic resources.

c) **No Impact:** The proposed project will not substantially degrade the existing visual character or quality of public views of the site and its surroundings, or conflict with applicable zoning and other regulations governing scenic quality. This is because the project does not propose new dominant elements or changes to existing major aesthetics features and the visual character will remain similar to existing conditions.

d) **No Impact:** The proposed project will not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area because there will be minimal changes to the existing landscape and driving views within the project limits.

2.1.2 Avoidance, Minimization and/or Mitigation:

No avoidance, minimization, and/or mitigation is required.

2.2 Agriculture and Forest Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

[1] There are 2 designations on the state scenic highway list, "Eligible and officially Designated". An eligible State highway becomes officially designated through a process in which the local governing body applies to Caltrans for scenic highway approval, adopts a Corridor Protection Program (CPP), and receives notification that the highway has been officially designated a State Scenic Highway by the Caltrans Director. This section of Route 1 is listed as "eligible" and does not fall under the protection of the CPP, unless it becomes a "officially designated scenic highway".

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

2.2.1 CEQA Significance Determination for Agriculture and Forest Resources

a) No Impact: According to the California Department of Conservation (DOC) - California Important Farmland Finder database[2] the project is not located in Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, no farmland would be converted to non-agricultural use.

b) No Impact: The project location and surrounding areas are identified as "Urban and Built-Up Land" and do not contain land enrolled in a Williamson Act contract (DOC, 2019). Therefore, the project would not conflict with existing zoning for agriculture uses or any Williamson Act contracts. No impact would occur.

c) No Impact: The project site is located in a highly urbanized setting and does not contain any forest land or timberland. The project site does not support the definitions provided by PRC § 42526 for timberland, PRC § 12220(g) for forest land, or California Government Code § 51104(g) for timberland zoned for production. PRC § 12220(g) defines forest land as "land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits." Therefore, the project would not conflict with existing zoning for forest land or timberland.

[2] California Department of Conservation (DOC) - California Important Farmland Finder database. Accessed March 10, 2021. Webpage: https://maps.conservation.ca.gov/DLRP/CIFF/

d) No Impact: No forest land exists on the project site due to its urban and developed nature. Therefore, project implementation would not result in the loss of forest land or conversion of forest land to non-forest use.

e) No Impact: The proposed project would not involve other changes to the existing environment which due to location or nature could result in conversion of Farmland to a non-agriculture use. Hence, there would be no impacts; therefore, no avoidance, minimization, or mitigation measures are required.

2.2.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation is required.

2.3 Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

2.3.1 CEQA Significance Determination for Air Quality

The potential for the proposed project to result in adverse impacts related to Air Quality is assessed in the following discussion. This discussion below is based on review of the Technical Document for Air Quality (March 2021) prepared for this project:

a) Less Than Significant Impact: The project limits are located in the South Coast Air Basin and is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (CARB). The SCAQMD is the primary agency responsible for writing the Air Quality Management Plan (AQMP) in cooperation with the Southern California Association of Governments (SCAG), local governments, and the private sector. The AQMP provides the blueprint for meeting State and Federal ambient air quality standards. The Build Alternative is included in SCAG's 2016–2040 RTP and the 2019 FTIP, both of which were found to be conforming. Therefore, the Build Alternative would not conflict with the AQMP, violate any air quality standard, result in a net increase of any criteria pollutant, or expose sensitive receptors to substantial pollutant concentrations.

In addition, according to the Code of Federal Regulations (CFR) Title 40 Section 93.126, safety projects such as safety lighting, refreshing lane delineation, installing bike lane are exempt project. This exempt project does not require project submittal to the Transportation Conformity Working Group for interagency Consultation and operational quantitative air quality analysis is also not required.

b) **Less than Significant Impact:** The Build Alternative would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is in nonattainment under an applicable Federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors). No mitigation is required.

c) **Less than Significant Impact:** The Build Alternative would not expose sensitive receptors to substantial pollutant concentrations. Any impacts associated with the Build Alternative would be less than significant. No mitigation is required.

d) **Less than Significant Impact:** During construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment also are anticipated and would include CO, NOX, Volatile. CAL-CET 2020 was used to calculate the construction emission. Total CO2e emission from the construction would be 286 MT. The Build Alternative would comply with construction standards adopted by the South Coast Air Quality Management District (SCAQMD) as well as Caltrans standardized procedures for minimizing air pollutants during construction. See standardized Project Features (PF-AQ-1), below, that would avoid and/or minimize air quality impacts resulting from construction activities. Objectionable odors are not currently present within the project limits and construction activities, including the use of diesel equipment, would be temporary in nature and are not anticipated to emit significant odors. Similarly, impacts from the Build Alternative would be less than significant with the Project Features listed above. No mitigation is required.

2.3.2 Avoidance, Minimization and/or Mitigation Measures:

No avoidance, minimization, and/or mitigation is required; however, the following Project Feature will be implemented.

PF-AQ-1: The construction contractor must comply with the Caltrans' Standard Specifications in Section 14-9 (2018) for reducing impacts from the construction activities. Section 14-9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances. The proposed project would comply with SCAQMD Rule 403 requiring the implementation of best available dust control measures during active operations capable of generating fugitive dust.

2.4 Biological Resources

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service, or NOAA Fisheries?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

2.4.1 CEQA Significance Determination for Biological Resources

The potential for the Build Alternative to result in impacts to biological resources was assessed in the Natural Environment Study (NES; October 2021). The following analyses are based on the information described in that technical study and which impacts to vegetation communities are summarized below in Table 2.4-1.

Table 2.4-1: Vegetation Communities/Land Covers in the BSA and Build Alternative Impacts

Vegetation Communities/Land Cover	Area (acres)	Permanent Impacts (acres)	Temporary Impacts (acres)
Arroyo Willow Thicket	0.03	0	0
Bare Ground	2.4	0.85	0
Coastal Sage Scrub	2.38	<0.01	<0.01
Coastal Sage Scrub/Saltbush Scrub Ecotone	0.17	0	0
Coastal Strands	6.35	1.65	0
Coastal Strands/Coastal Sage Scrub Ecotone	0.93	0	0
Developed	118.43	0.5	<0.01
Disturbed Coastal Sage Scrub	0.25	0	0
Disturbed Coastal Strands	0.48	0.04	<0.01
Disturbed Goldenbush Scrub	0.07	0	0
Disturbed Saltbush Scrub	0.08	<0.01	0
Disturbed Southern Coastal Salt Marsh	0.34	0	0
Goldenbush Scrub	1.20	0.06	0.03
Open Water	5.17	0	0
Ornamental	3.19	0	0
Ruderal/Disturbed	2.63	0	0
Salt Grass Flats	0.05	0	0
Saltbush Scrub	0.36	0	0
Southern Coastal Salt Marsh	5.35	0	0
TOTAL	**149.87**	**3.14**	**0.03**

BSA = Biological Study Area

a) Less Than Significant Impact. The Biological Study Area (BSA) is primarily disturbed or developed. Much of the BSA consists of urban development and other disturbed sites adjacent to a busy highway. There are prominent or natural drainage features (e.g., rivers, creeks, or wetlands) within the BSA including the Santa Ana River, Talbert Marsh Inlet Channel and Bolsa Chica Wetlands Inlet Channel. Undeveloped areas within the BSA are a mix of natural vegetation communities and pockets of ornamental vegetation and ruderal areas along SR-1 and surrounding residential and commercial developments.

Mapped vegetation communities and land cover types in the BSA include arroyo willow thicket, coastal sage scrub, coastal sage scrub/saltbush scrub ecotone, coastal strands, coastal strands/coastal sage scrub ecotone, coastal salt marsh, goldenbush scrub, saltbush scrub, saltgrass flats, open water, ruderal/disturbed, ornamental landscaping, and developed and bare ground. There are also disturbed variants of coastal sage scrub, coastal strands, goldenbush scrub, saltbush scrub and southern coastal marsh present within the BSA. The area surrounding the BSA includes land uses that are residential, commercial, transportation, and undeveloped open space.

The following electronic databases were consulted for species that could potentially occur within the vicinity of the BSA:

- United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) (September 2021)

- National Oceanic and Atmospheric Administration (NOAA) (June 2021)
- California Natural Diversity Database (CNDDB), Rarefind 5 (June 2021)
- California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants (June 2021)

In addition, general biological field surveys were conducted in May and June 2021 to assess the biological condition of the BSA for the presence of various special-status biological resources, including plants and wildlife, and habitat suitability for special-status species. Focused special-status plant and animal habitat suitability assessments and focused surveys for each group were conducted in May and August 2021. Daytime bat suitability assessments were conducted in May and June 2021 along with focused wildlife surveys and general habitat assessments. A jurisdictional delineation was conducted in May 2021.

Based on the database review, 40 special-status plant species and 72 special-status wildlife species were identified as potentially present within the BSA. Of the 40 special-status plant species identified, eight are federally/State-listed as threatened or endangered. Suitable habitat for two federally/State-listed as threatened or endangered wildlife species is present within the BSA including salt marsh bird's beak (Chloropyron maritimum ssp. maritimum) and big-leaved crownbeard (Verbesina dissita). Salt marsh bird's beak and big-leaved crownbeard are discussed in detail below. Suitable habitat for the remaining six federally/State-listed as threatened or endangered plant species is absent within the BSA and is not discussed further.

Of the 72 special-status wildlife species identified as potentially present within the BSA, 32 are federally/State-listed as threatened or endangered. Two federally/State-listed wildlife species were observed within the BSA including Belding's Savannah sparrow (Passerculus californica californica) and California least tern (Sternula antillarum browni). Suitable habitat for an additional seven federally/State-listed as threatened or endangered wildlife species is present within the BSA including green sturgeon (Acipenser medirostris), tidewater goby (Eucyclogobius newberryi), steelhead trout (Oncorhynchus mykiss), western snowy plover (Eremophila alpestris actia), California black rail (Laterallus jamaicensis coturniculus), coastal California gnatcatcher (Polioptila californica), and light-footed Ridgway's rail (Rallus obsoletus levipes). Suitable habitat for the remaining 23 federally/State-listed as threatened or endangered wildlife species is absent within the BSA. With the exception of western snowy plover and coastal California gnatcatcher, implementation of the project would not result in any substantial adverse effects to green sturgeon, tidewater goby, steelhead trout, Belding's Savannah sparrow, California least tern, California black rail, light-footed Ridgway's rail, their potential habitat, or those federally/State-listed as threatened or endangered species lacking suitable habitat in the BSA. This is due in most part to the proximity to roadway infrastructure and residential and commercial development and the project's avoidance of aquatic resources. Western snowy plover and coastal California gnatcatcher are discussed in detail below. The remaining 30 federally/State-listed as threatened or endangered wildlife species identified as potentially present are not discussed further.

Of the remaining 72 non-federally/State-listed special-status species with the potential to occur in the BSA, 21 are considered absent based on lack of suitable habitat, 30 are considered to have a low probability of occurrence, and 11 are considered to have a moderate or greater probability of occurrence based on the presence of suitable

vegetation and/or soils. Five non-federally/State-listed special-status species were observed during the May 2021 surveys including Lewis' evening-primrose (Camissoniopsis lewisii), coast woolly-heads (Nemacaulis denudata var. denudata), estuary seablite (Suaeda esteroa), osprey (Pandion haliaetus), California horned lark (Eremophila alpestris actia) and California brown pelican (Pelecanus occidentalis californicus).

Those non-federally/State-listed special-status species with a moderate or greater probability of occurrence include Horn's milk-vetch (Astragalus hornii var. hornii), southern tarplant (Centromadia parryi ssp. australis), vernal barley (Hordeum intercedens), Coulter's goldfields (Lasthenia glabrata ssp. coulteri), mud nama (Nama stenocarpa), San Bernardino aster (Symphyotrichum defoliatum), wandering (saltmarsh) skipper (Panoquina errans), southern California legless lizard (Anniella stebbinsi), black skimmer (Rynchops niger) and white-tailed kite (Elanus leucurus). With the exception of Lewis' evening-primrose, coast woolly-heads, California horned lark, and southern California legless lizard, implementation of the project would not result in any substantial adverse effects to non-federally/State-listed special-status species with a moderate or higher probability of occurrence in the BSA or their potential habitat. This is due in most part to the proximity to roadway infrastructure and residential and commercial development. Lewis' evening-primrose, coast woolly-heads, California horned lark, and southern California legless lizard are discussed in detail below. The remaining non-federally/State-listed special-status species with potential to occur in the BSA are not discussed further.

Salt Marsh Bird's Beak. Salt marsh bird's beak was not observed during May 2021 surveys and there are no documented historical occurrences of salt marsh bird's beak in the vicinity of the BSA. Some suitable habitat is present within the BSA in the form of southern coastal salt marsh. No permanent or temporary impacts are proposed to suitable habitat as part of project activities, and direct impacts to the species are not anticipated.

Indirect temporary effects to suitable southern coastal salt marsh habitat may include an increase or change in off-site runoff, erosion, and spread of invasive species during construction activities but are not anticipated to affect salt marsh bird's beak. To ensure avoidance and minimization to the greatest extent possible to suitable habitat for this species, project feature Measures PF-BIO-1 through PF-BIO-6 will be implemented during construction.

With implementation of project feature Measures PF-BIO-1 through PF-BIO-6, impacts to salt marsh bird's beak would be less than significant.

Big-Leaved Crownbeard. Big-leaved crownbeard was not observed during May 2021 surveys and there are no documented historical occurrences of big-leaved crownbeard in the vicinity of the BSA. Some marginally suitable habitat is present within the BSA in the form of coastal sage scrub. Permanent and temporary impacts to less than 0.01 acre of marginal suitable coastal sage scrub habitat would occur as part of project activities but are not likely to cause direct impacts to the species due to its absence from the BSA during focused special-status plant species conducted in May 2021.

Indirect temporary effects to suitable coastal sage scrub habitat may include an increase or change in off-site runoff, erosion, and spread of invasive species during construction activities but are not anticipated to affect the species. To ensure avoidance and minimization to the greatest extent possible to suitable habitat for this species, project feature Measures PF-BIO-1 through PF-BIO-6 will be implemented during construction.

With implementation of project feature Measures PF-BIO-1 through PF-BIO-6, impacts to big-leaved crownbeard would be less than significant.

Lewis' Evening-Primrose. Approximately 375 individuals of Lewis' evening-primrose were observed during the May 2021 surveys. Suitable habitat is present in the BSA for the species and includes coastal strands. Permanent impacts to up to 1.65 acres of marginal suitable coastal strands and up to 0.04 acre of disturbed coastal strands habitat, and temporary impacts to less than 0.01 acre to disturbed coastal strands habitat, would occur as part of project activities and are anticipated to have direct impacts on one individual. This would constitute less than 0.3 percent of all Lewis' evening-primrose observed during the May 2021 surveys and a substantially lower impact percentage if considering all occurrences of this species throughout its entire known range. Therefore, the project is not expected to result in a significant adverse impact to Lewis' evening-primrose.

Indirect temporary effects to suitable coastal sage scrub habitat may include an increase or change in off-site runoff, erosion, and spread of invasive species but are not anticipated to affect the species. To ensure avoidance and minimization to the greatest extent possible to suitable habitat for this species, project feature Measures PF-BIO-1 through PF-BIO-6 will be implemented during construction.

With implementation of project feature Measures PF-BIO-1 through PF-BIO-6, impacts to Lewis' evening-primrose would be less than significant.

Coast Woolly-Heads. More than 7,200 individuals of Coast woolly-heads were observed during the May 2021 surveys including groupings that exceeded 2,000 individuals. Suitable habitat is present in the BSA for the species and includes coastal strands. Permanent impacts to up to 1.65 acres of marginal suitable coastal strands and up 0.04 acre of disturbed coastal strands habitat, and temporary impacts to less than 0.01 acre of disturbed coastal strands habitat, would occur as part of project activities and are anticipated to have direct impacts on 100 individuals. This would constitute less than 1.5 percent of all coast woolly-heads observed during the May 2021 surveys. Furthermore, the impact percentage would likely be reduced to an infinitesimal level if it were possible to compare these impacts to all occurrences of coast woolly-heads throughout its entire known range. Therefore, the project is not expected to result in a significant adverse impact to coast woolly-heads.

Indirect temporary effects to suitable coastal sage scrub habitat may include an increase or change in off-site runoff, erosion, and the spread of invasive species during construction activities but are not anticipated to affect the species. To ensure avoidance and minimization to the greatest extent possible to suitable habitat for this species, project feature Measures PF-BIO-1 through PF-BIO-6 will be implemented during construction.

With implementation of project feature Measures PF-BIO-1 through PF-BIO-6, impacts to coast woolly-heads would be less than significant.

Western Snowy Plover. Suitable habitat is present in the BSA for the federally threatened coastal western snowy plover. There are documented historical occurrences of coastal western snowy plover in the vicinity of the BSA within the Bolsa Chica Ecological Reserve and beaches along the Pacific Ocean. Per literature review, coastal strand is considered suitable nesting habitat for this species. However, due to the highly disturbed nature of the coastal strands within the BSA and close proximity of this habitat to SR-1 and its bike lane, and its substantial distance from the Pacific Ocean, the BSA does not support suitable western snowy plover nesting habitat. Suitable foraging habitat is present within the BSA, in the form of southern coastal salt marsh but would not be impacted as part of project activities.

Project activities are anticipated to permanently impact approximately 0.04 acre and temporarily impact 0.03 acre of western snowy plover critical habitat that contains goldenbush scrub. Of these habitat areas within critical habitat, none contains suitable breeding or foraging habitat as they lack all Physical or Biological Features (PBFs) as designated by the USFWS, and compensatory mitigation is not warranted. However, impacts to vegetation communities within the Coastal Zone and documented as Environmentally Sensitive Habitat Areas (ESHAs) under the California Coastal Act, including 0.04 acre of permanent impacts and 0.03 acre of temporary impacts, to western snowy plover critical habitat containing goldenbush scrub, will be mitigated utilizing a minimum compensatory mitigation ratio of 2:1 to offset permanent and temporary effects.

Indirect temporary effects to marginal suitable habitat for western snowy plover may include an increase or change in off-site runoff, erosion, dust, and the spread of invasive species. Indirect temporary effects to the species may include increased noise, vibration, lighting and predation during project activities. Because those activities will be performed over a short period of time on highly traveled portions of SR-1, indirect impacts are expected to be minimal. To ensure this species will not be impacted, project feature Measures PF-BIO-1 through PF-BIO-6 and PF-BIO-10 through PF-BIO-13 will be implemented during construction. Due to anticipated impacts to critical habitat for the species, consultation will be required under Section 7 with the USFWS.

With implementation of project feature Measures PF-BIO-1 through PF-BIO-6 and PF-BIO-10 through PF-BIO-13 and compensatory mitigation for impacts to ESHA under the California Coastal Act outlined above, impacts to western snowy plover would be less than significant with mitigation.

Coastal California Gnatcatcher. Suitable habitat is present in the BSA for the federally threatened coastal California gnatcatcher. There are documented historical occurrences of coastal California gnatcatcher in the vicinity of the BSA within the Bolsa Chica Ecological Reserve. Some marginal suitable nesting and foraging habitat is present within the BSA, and foraging and nesting habitat areas are present in close proximity to the BSA. Permanent and temporary impacts to less than 0.01 acre of marginal suitable coastal sage scrub habitat would occur as part of project activities and are not anticipated to cause direct impacts. Project activities do not occur within critical habitat for the species, which occurs just outside the southernmost portion of the BSA. Direct

effects to coastal California gnatcatcher are not expected to occur as a result of the project because coastal California gnatcatcher were not observed in the BSA, and they are not anticipated to nest within the marginal suitable coastal sage scrub habitat that would be removed by the project. However, impacts to vegetation communities within the Coastal Zone and documented as ESHA under the California Coastal Act, including less than 0.01 acre of permanent and temporary impacts to coastal sage scrub, will be mitigated utilizing a minimum compensatory mitigation ratio of 2:1 to offset permanent and temporary effects.

Indirect temporary effects to suitable coastal California gnatcatcher habitat may include an increase or change in off-site runoff, erosion, dust, and spread of invasive species. Indirect temporary effects to the species may include increased noise, vibration, lighting, and predation during project activities. Because those activities will be performed over a short period of time on highly traveled portions of SR-1, indirect impacts are expected to be minimal. To ensure this species will not be impacted, project feature Measures PF-BIO-1 through PF-BIO-6 and PF-BIO-10 through PF-BIO-13 will be implemented during construction.

With implementation of project feature Measures PF-BIO-1 through PF-BIO-6 and PF-BIO-10 through PF-BIO-13, impacts to coastal California gnatcatcher would be less than significant.

California Horned Lark. California horned lark was observed foraging adjacent to the BSA, and suitable habitat is present in the BSA for the species. There are documented historical occurrences of California horned lark in the vicinity of the BSA including within the Bolsa Chica Ecological Reserve. Some suitable nesting and foraging habitat is present within the BSA, and foraging and nesting habitat areas are present in close proximity to the BSA. Due to the highly disturbed nature of the coastal strands within the BSA and close proximity of this habitat to SR-1 and its bike lane, the BSA does not support suitable California horned lark nesting habitat. Permanent impacts to up to 1.65 acres of marginal suitable coastal strands and up to 0.04 acre of disturbed coastal strands habitat, and temporary impacts to less than 0.01 acre of disturbed coastal strands habitat, would occur as part of project activities and are not anticipated to cause direct impacts to nesting individuals. However, impacts to vegetation communities within the Coastal Zone and documented as ESHA under the California Coastal Act, including up to 1.69 acres of combined permanent and temporary impacts to coastal strands, will be mitigated utilizing a minimum compensatory mitigation ratio of 2:1 to offset permanent and temporary effects.

Indirect temporary effects to suitable California horned lark habitat may include an increase or change in off-site runoff, erosion, dust, and spread of invasive species. Indirect temporary effects to the species may include increased noise, vibration, lighting, and predation during project activities. Because those activities will be performed over a short period of time on highly traveled portions of SR-1, indirect impacts are expected to be minimal. To ensure this species will not be impacted, project feature Measures PF-BIO-1 through PF-BIO-6 and PF-BIO-10 through PF-BIO-13 will be implemented during construction.

With implementation of project feature Measures PF-BIO-1 through PF-BIO-6 and PF-BIO-10 through PF-BIO-13, impacts to California horned lark would be less than significant.

Southern California Legless Lizard. Suitable habitat is present in the BSA for the southern California legless lizard. There are documented historical occurrences of southern California legless lizard in the vicinity of the BSA. Permanent impacts to up to 1.65 acres of marginal suitable coastal strands and up to 0.04 acre of disturbed coastal strands habitat, and temporary impacts to less than 0.01 acre to disturbed coastal strands habitat, would occur as part of project activities and may cause direct impacts in the absence of avoidance and minimization measures.

Indirect temporary effects to suitable southern California legless lizard habitat may include an increase or change in off-site runoff, erosion, dust, and spread of invasive species. Indirect temporary effects to the species may include increased noise, vibration, lighting, and predation during project activities. Because those activities will be performed over a short period of time on highly traveled portions of SR-1, indirect impacts are expected to be minimal. To ensure this species will not be impacted, project feature Measures PF-BIO-1 through PF-BIO-6 and avoidance and minimization Measure BIO-5 will be implemented during construction.

With implementation of project feature Measures PF-BIO-1 through PF-BIO-6 and avoidance and minimization BIO-5, impacts to southern California legless lizard would be less than significant.

Non-Listed Special-Status Bird Species and Nesting Birds. Although non-listed special-status bird species do not have suitable nesting habitat within the BSA, potential effects to nesting raptors and other migratory bird species may occur during the bird-breeding season (February 1 through September 30). Direct impacts may include removal of active nests located in shrubs and on the ground to be removed as a result of project implementation. Indirect temporary effects to active nests in the vicinity may include increased noise, vibration, dust, lighting, and predation during construction activities. Because those activities will be performed over a short period of time on highly traveled portions of SR-1, indirect impacts are expected to be minimal.

With implementation of project feature Measures PF-BIO-1 through PF-BIO-6 and PF-BIO-10 through PF-BIO-13, impacts to non-listed special-status bird species and other migratory birds would be less than significant.

Bat Species. No special-status bat species with suitable habitat have more than a low potential to be present in the BSA: western mastiff bat (Eumops perotis californicus), hoary bat (Lasiurus cinereus), and western yellow bat (Lasiurus xanthinus). In addition, non-special-status bat species such as California myotis (Myotis californicus) and big brown bat (Eptesicus fuscus) also have low potential to roost within the BSA.

Bat-roosting habitat will not be subject to direct impacts from construction activities. Construction activities at bridge structures consist of restriping lanes on surface portions of the bridges and the suitable roosting habitats occur underneath the bridges, away from proposed activities. Because those activities will be performed over a short period

of time on highly traveled portions of SR-1, indirect impacts (i.e., noise and lighting) to bat-roosting habitat are expected to be minimal.

The BSA is entirely located within the Coastal Zone and the activities proposed are anticipated to constitute "coastal development" would require a Coastal Development Permit (CDP) or authorization under a Local Coastal Program (LCP). Impacts to ESHAs, that provide suitable habitat for some special-status wildlife species, in the form of vegetation removal are proposed including permanent impacts to coastal sage scrub, coastal strands, disturbed coastal strands, and goldenbush scrub. It should be noted that temporary impacts to coastal sage scrub, coastal strands and goldenbush scrub are considered a permanent impact. As such, they will be mitigated in the same fashion as other permanent impacts to ESHA. A minimum compensatory mitigation ratio of 2:1 to offset permanent and temporary impacts is anticipated to be utilized. Coordination with the California Coastal Commission (CCC) will be conducted to determine the final compensatory mitigation ratio. To offset unavoidable acres of impacts to ESHA, Caltrans proposes to contribute funds for restoration projects. There is ongoing coordination and discussions between Caltrans and the CCC regarding ESHA impacts and potential mitigation locations. Some suggested mitigation locations include, but are not limited to, the Bolsa Chica Ecological Reserve owned by State Parks and/or within parcels managed/owned by The Huntington Beach Wetlands Conservancy. As the project advances to design, Caltrans and the CCC as well as the USFWS will continue to collaborate to solidify mitigation ratios and sites prior to obtaining the CDP.

b) Less Than Significant Impact with Mitigation. The BSA contains the following vegetation communities/land covers: arroyo willow thicket, coastal sage scrub, coastal sage scrub/saltbush scrub ecotone, coastal strands, coastal strands/coastal sage scrub ecotone, coastal salt marsh, goldenbush scrub, saltbush scrub, saltgrass flats, open water, ruderal/disturbed, ornamental landscaping, and developed and bare ground. There are also disturbed variants of coastal sage scrub, coastal strands, goldenbush scrub, saltbush scrub and southern coastal marsh present within the BSA. Arroyo willow thicket is considered riparian habitat under Section 1602 of the California Fish and Game Code. Coastal sage scrub, goldenbush scrub, coastal strands, southern coastal salt marsh, and saltgrass flats are considered sensitive natural communities by the CDFW. No remaining vegetation communities/ land covers are identified as sensitive natural communities by the USFWS, the CDFW, the CNDDB, or other local or regional plans.

The project would not result in permanent or temporary impacts to riparian natural communities, including arroyo willow thicket, within the BSA. The project would result in permanent impacts to the following sensitive natural communities within the BSA: coastal sage scrub (less than 0.01 acre), coastal strands (up to 1.65 acres), disturbed coastal strands (up to 0.04 acre), and goldenbush scrub (0.06 acre). The project would also result in temporary impacts to coastal sage scrub (less than 0.01 acre), disturbed coastal strands (less than 0.01 acre), and goldenbush scrub (up to 0.03 acre). It should be noted that temporary impacts to goldenbush scrub are considered a permanent impact. As such, they will be mitigated in the same fashion as permanent impacts to goldenbush scrub. Temporary indirect impacts to sensitive natural communities during project activities may include an increase or change in off-site runoff, erosion, and spread of invasive species.

As discussed under checklist response a), compensatory mitigation for permanent and temporary impacts to coastal sage scrub, coastal strands, and goldenbush scrub, all of which are considered ESHA by the CCC, will ultimately be developed in consultation with the CCC through the submittal and issuance of a CDP or authorization under an LCP and will not be less than a ratio of 2:1 for areas impacted.

With implementation of project feature Measures PF-BIO-1 through PF-BIO-6 and compensatory mitigation discussed above, impacts to sensitive natural communities would be less than significant with mitigation.

c) No Impact. Potential jurisdictional waters of the United States were found to be present in the BSA. This includes 3.75 acres of United State Army Corps of Engineers (USACE) waters of the United States. In addition, 4.293 acres of CCC wetlands/streams, 3.233 acres of CDFW streams/rivers, and 3.803 acres of Regional Water Quality Control Board (RWQCB) wetlands/waters of the State were found to be present in the BSA.

Neither equipment access nor direct impacts to wetlands or non-wetland waters of the United States or other jurisdictional aquatic resource would be required, and fill or discharge of waste within jurisdictional waters is not anticipated. Therefore, the project is not anticipated to require jurisdictional authorizations or permits from the USACE, the RWQCB, and the CDFW. As discussed under checklist responses IV.a and IV.b the project will require a CDP or authorization under an LCP due to impacts to ESHA. However, none of the ESHAs anticipated to be impacted are waters of the United States or other jurisdictional wetland/waters.

With implementation of project feature Measures PF-BIO-7 through PF-BIO-9, no impacts to federally protected wetlands or other jurisdictional aquatic resourced are anticipated to occur.

d) Less Than Significant Impact. Wildlife movement of species, such as coyotes (Canis latrans), is expected within portions of the BSA, particularly habitats associated with Bolsa Chica Ecological Reserve. The Santa Ana River is not considered suitable for wildlife movement other than local wildlife movement as it is lacks substantial vegetative cover and contains large stretches that are concrete-lined and maintained upstream of the BSA. The Bolsa Chica Ecological Reserve provides habitat and cover for movement of animals within the Orange County Central-Coastal Natural Community Conservation Plan/ Habitat Conservation Plan (NCCP/HCP) reserve areas.

No existing barriers to anadromous fish are present within the BSA. Three streams that have potential to support anadromous fish are present within the BSA at the Santa Ana River, Talbert Marsh Inlet Channel, and Bolsa Chica Wetlands Inland Channel. No modifications to the streambed/habitat are proposed, and no barriers to fish passage would be created by the project. Therefore, there are no impacts to anadromous fish associated with the proposed project.

Implementation of the proposed project is not expected to permanently impact wildlife movement or decrease the functionality of any wildlife crossings. Active construction/maintenance activities may temporarily deter wildlife movement in select areas near aquatic resources and coastal wetlands due to increased noise and human activity, but wildlife is expected to continue to use corridors when construction work is

not occurring, particularly at dawn and dusk. No permanent barriers would be placed within any known wildlife movement corridors. As such, implementation of the proposed project is not expected to permanently impact wildlife movement or decrease the functionality of any wildlife crossings and no project-specific mitigation is warranted. Therefore, implementation of the project would have a less than significant impact on wildlife movement through the BSA.

The BSA contains potentially suitable habitat for migratory birds and raptors protected under the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code. These species may nest in the trees and shrubs within the BSA. The adjacent Bolsa Chica Ecological Reserve, including its wetlands, mudflats, and other cover types, is a bird sanctuary and known nursery site for a variety of bird species. Impacts to nesting birds could occur in the form of direct mortality, particularly from the destruction of nests and mortality of young if construction occurs during the breeding season, or from habitat loss. Indirect temporary effects to suitable nesting habitats may include an increase or change in off-site runoff, erosion, dust, and spread of invasive species. Indirect effects to nesting birds may include increased noise, vibration, lighting, and predation during project activities. No impacts to Bolsa Chica wetlands are anticipated as part of project activities. However, if construction activities are scheduled during the breeding season, pre-construction nesting bird surveys would be required in order to prevent any impacts to nesting birds, as specified in project feature Measures PF-BIO-10 through PF- BIO-13. Therefore, with implementation of project feature Measures PF-BIO-10 through PF-BIO-13, potential construction-related impacts to nesting birds would be less than significant levels.

e) **No Impact**. There are no known local policies or ordinances (e.g., tree protection regulations) applicable to the project. Therefore, the project would not conflict with such policies, and no impacts would result.

f) No Impact. The southeastern tip of the BSA is located within the boundary of the NCCP/HCP and the entire BSA occurs within the Orange County Transportation Authority M2 NCCP/HCP. These plans represent collaborative planning efforts among a variety of parties, including landowners, developers, local governments, and resource agencies. The NCCP/HCP covers a variety of habitat types and plant and animal species, designates conservation areas, and provides regulatory processes for plan signatories (and in some cases, non-participating landowners such as Caltrans) for projects impacting covered resources within specific land designations. No project work besides lane restriping is proposed within the NCCP/HCP including those identified as designated reserve lands, special linkages, existing use areas, or other conservation areas identified in the M2 NCCP/HCP. Maintenance of existing infrastructure is an allowed activity within the areas covered by these regional plans. No impacts to any covered species or habitat types are anticipated, and project avoidance and minimization measures would be implemented to avoid take of any covered resources. As such, the proposed project would not conflict with the NCCP/HCP or M2 NCCP/HCP, and no further compliance besides that described in this document is required.

2.4.2 Avoidance, Minimization and/or Mitigation Measures:

The following project features, minimization/avoidance measures, and mitigation measures will be implemented:

Project Feature Measures

PF-BIO-1: **Delineation of Environmentally Sensitive Areas.** Prior to project activities, highly visible barriers (e.g., orange construction fencing) will be installed along the boundaries of the project footprint/equipment access routes to designate Environmentally Sensitive Areas (ESAs) that are to be preserved. This will include ESA fencing along jurisdictional aquatic resources located at the intersections of SR-1 at Warner Avenue, Magnolia Street, and Brookhurst Street. No project activity of any type will be permitted within these ESAs. In addition, heavy equipment, including motor vehicles, will not be allowed to operate within the ESAs. All construction equipment will be operated in a manner to prevent accidental damage to ESAs. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within these protected zones.

PF-BIO-2: **Erosion Control Material Sourcing.** Only certified weed-free straw, mulch, and/or fiber rolls will be used for erosion control. Invasive species will not be used in any landscaping palettes for the project.

PF-BIO-3: **Equipment Staging Best Management Practices (BMPs).** All equipment maintenance, staging, and dispensing of fuel, oil, or any other such activities will occur in developed or designated non-sensitive upland areas. The designated upland areas will be located in such a manner as to prevent any loose soil or spill runoff from entering jurisdictional waterways or adjacent sensitive vegetation communities. All construction materials will be removed from worksites following completion of project activities.

PF-BIO-4: **Water Quality BMPs.** In order to avoid impacts to water quality during construction, stormwater and erosion control BMPs are recommended to prevent loose soil or pollutants associated with the project from inadvertently entering the aquatic resources located within and adjacent to the BSA. Example BMPs include silt fencing and straw wattle placed in such a manner that they are able to catch or filter sediment or other construction-related debris to prevent it from eroding into the nearby drainage channels.

PF-BIO-5: **Avoidance of Breeding and Nesting Bird Season**. Project activities will occur outside the nesting season (February 1–September 30) to the fullest practicable extent.

PF-BIO-6: **Trash and Waste Removal.** During construction, trash and food waste will be removed from work sites on a daily basis to avoid the attraction of predators that prey on sensitive wildlife species.

Avoidance and Minimization Measures

BIO-1: **Invasive Species Control.** All construction equipment accessing unpaved areas will be cleaned with water to remove dirt, seeds, vegetative material, or other debris that could contain or hold seeds of noxious weeds before arriving to and leaving the project site.

BIO-2: **Pre-Construction Clearance Surveys.** A qualified biologist will conduct pre-construction surveys to confirm the absence of sensitive biological resources within the work areas. The pre-construction surveys will take place no more than 24 hours prior to commencement of work activities. If listed species are observed within the work area (or areas potentially indirectly affected by project activities as determined by the qualified biologist) the work cannot be postponed until appropriate measures are implemented and the species is no longer present.

BIO-3: **Biological Monitoring.** A qualified biologist will monitor project activities within sensitive natural communities for the duration of work activities to ensure that practicable measures are being employed to avoid and minimize incidental disturbance to habitat and covered species inside and outside the project footprint.

BIO-4: **On-Site Training.** All personnel involved in the on-site project construction will be required to participate in a pre-construction environmental training program to understand the avoidance and minimization measures and environmental regulations pertinent to the project.

BIO-5: **Aquatic Resource Protection.** Prior to project activities adjacent to jurisdictional aquatic resources located at the intersections of SR-1 at Warner Avenue, Magnolia Street, and Brookhurst Street, a barrier will be installed between the project footprint and adjacent jurisdictional aquatic resources. The barrier will be constructed of materials to prevent incidental soil discharges into adjacent jurisdictional aquatic resources such as silt fence, plywood, or similar. The barrier will be installed downslope of the ESA fencing as noted in Measure BIO-1. Installation and removal of the barrier will be monitored by a qualified biologist to ensure the barrier's installation/removal does not cause incidental discharge of soils or other materials into the adjacent jurisdictional aquatic resources. The barrier will be maintained in place at each of the three locations noted until project activities have been completed at each of the respective project footprints.

BIO-6: **Pre-Construction Nesting Bird Survey.** If project activities with potential to indirectly disturb suitable avian nesting habitat within or adjacent to the work area during the nesting season (as determined by a qualified biologist), a qualified biologist with experience in conducting breeding bird surveys will conduct a nesting bird survey no more than 3 days prior to the initiation of project activities to detect the presence/absence of migratory and resident bird species occurring in suitable nesting habitat. Project activities may begin no more than 3 days after the completion of the nesting bird survey in the absence of active bird nests. An additional nesting bird survey will be conducted if project activities fail to start within 3 days of the completion of the pre-construction nesting bird survey.

BIO-7: **Nesting Bird Exclusionary Buffers.** Should nesting birds be found during the pre-construction nesting bird survey, an exclusionary buffer will be established by the qualified biologist. This buffer will be clearly marked in the field by construction personnel under the guidance of the biologist, and construction will not be conducted in this zone until the biologist determines that the young have fledged or the nest is no longer active. Work may only occur during the breeding season if nesting bird surveys indicate the absence of any active nests within the work area. No work will occur if listed or fully protected bird species are found to be actively nesting within or adjacent to the areas subject to construction activities.

BIO-8: **Night Work Lighting**. If night work (i.e., between dusk and dawn) is anticipated within 100 ft of structures where bat roosting is confirmed, night lighting will be used only in areas of active work, and focused on the direct area(s) of work and away from the culvert entrances to the greatest extent practicable.

BIO-9: **Construction Equipment Staging.** To the extent practicable, internal combustion equipment, such as generators and vehicles, is not to be parked or operated beneath or adjacent to the structures unless it is required for project-related work on that structure.

BIO-10: **Replacement Lighting Locations.** The proposed project includes the replacement of lighting in various areas. Siting of these lights should avoid overspill into bat-roosting sites to avoid permanent impacts to roosting and foraging bats.

BIO-11: **Tree Trimming and Removal.** To the greatest extent feasible, tree trimming/removal activities will be performed outside the bat maternity season (April 1–August 31) to avoid direct impacts to non-volant (flightless) young that may roost in trees within the study area. This period also coincides with the typical bird nesting season. If trimming or removal of trees during the bat maternity season cannot be avoided, a qualified biologist will monitor tree trimming and removal activities.

BIO-12: **Pre-Construction California Legless Lizard Surveys.** A qualified biologist will conduct pre-construction surveys for California legless lizards no more than 48 hours before initial grading and ground-disturbing activities in or near areas of sandy, friable soil. This survey will include systematic subsurface searching, as legless lizards are fossorial (burrowing), and staking and fencing the limits of the survey areas with small-mesh construction fencing buried to a minimum depth of 6 to 10 inches below grade would reduce the likelihood of lizards reentering the construction zone.

CZ-1 This project lies within the coastal zone. Construction or maintenance activities shall not commence until a coastal permit exemption determination or coastal development permit has been obtained from the California Coastal Commission, and/or the Certified Local Coastal Program agency(s) that hold jurisdiction. This should be completed during the PS&E phase for delivery projects.

CZ-2 Construction must be completed between Labor Day weekend and Memorial Day weekend to avoid impacts to coastal access during the high season.

CZ-3 Equipment/materials shall not be stored within unpaved areas.

Compensatory Mitigation Measures

CM-BIO-1: Coastal Sage Scrub – Compensatory Mitigation. Impacts to coastal sage scrub proposed as part of the project associated with paving activities; therefore, compensatory mitigation is required as it is considered an ESHA under the California Coastal Act. A small fraction of the total acreage of temporary impacts proposed to disturbe coastal sage scrub. Coastal sage scrub impacted is considered marginal for coastal California gnatcatcher and other special-status species that have potential to occur and prefer to inhabit coastal sage scrub due to its location adjacent to SR-1 where elevated levels of human activity, dust, noise, and vibration occur. Coastal sage scrub temporarily impacted will be restored in place after the completion of project activities. As compensatory mitigation for permanently removed habitat, permanently removed habitat will be replaced (through off-site habitat restoration and/or conservation) at a minimum 2:1 ratio.

CM-BIO-2: Goldenbush Scrub – Compensatory Mitigation. There is a total of up to 0.06 acre of permanent and 0.03 acre of temporary impacts to goldenbush scrub proposed as part of the project associated with paving activities and staging; therefore, compensatory mitigation is required as it is considered an ESHA under the California Coastal Act. Goldenbush scrub temporarily impacted will be restored in place after the completion of project activities. As compensatory mitigation for permanently removed habitat, permanently removed habitat will be replaced (through off-site habitat restoration and/or conservation) at a minimum 2:1 ratio.

CM-BIO-3: Coastal Strands – Compensatory Mitigation. There is a total of 1.71 acre of permanent or direct impacts to coastal strands proposed as part of the project; therefore, compensatory mitigation is required as it is considered a sensitive natural community by CDFW and an ESHA under the California Coastal Act. As compensatory mitigation for permanently removed habitat, permanently removed habitat will be replaced (through offsite habitat restoration and/or conservation) at a minimum 2:1 ratio.

2.5 Cultural Resources

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☐	☒

The discussion and analysis in this section is based on findings as documented in the Historic Property Survey Report (HPSR), Archaeological Survey Report (ASR), and Finding of No Adverse Effect (FNAE) for the project (October 2021).

The Area of Potential Effects (APE) is 128.61 acres and was established as all areas in which the project has the potential to directly or indirectly affect historic properties if any such properties exist. The APE is located on State Route 1 (SR-1) between the Santa Ana River Bridge (Post Mile [PM] 21.5) and Anderson Street (PM 31.1) in the City of Huntington Beach (City), in the County of Orange. The APE is set in an area previously developed for transportation and urban uses and contains limited open and undeveloped areas.

To meet the regulatory requirements of the project, the cultural resources investigation was conducted pursuant to the provisions for the treatment of cultural resources contained within Title 14, California Code of Regulations (CCR), Article 5, Section 15064.5 of the State CEQA Guidelines. A project may have a significant effect on the environment if the project would cause a substantial adverse change in the significance of a Historical Resource. Per CCR Section 15064.5, in order for a cultural resource to be considered a Historical Resource, it must meet at least one of four criteria that define eligibility for listing on either the National Register of Historic Places (National Register) (36 Code of Federal Regulations [CFR] 60.4) or the California Register of Historical Resources (California Register) (14 CCR 15064.5(a)). Cultural resources eligible for listing on the National Register are automatically eligible for the California Register. Resources listed on or eligible for inclusion in the California Register are considered Historical Resources under CEQA (14 CCR 15064.5(a)). Impacts to a Historical Resource are significant if the resource is demolished or destroyed or if the characteristics that made the resource eligible are materially impaired (14 CCR 15064.5(b)).

Any project that may cause a substantial adverse change in the significance of a Historical Resource, either directly or indirectly, would require avoidance or mitigation of impacts to those affected resources.

2.5.1 CEQA Significance Determination for Cultural Resources

a) Less Than Significant Impact. CEQA defines a Historical Resource as a resource that meets one or more of the following criteria: (1) listed in, or determined eligible for listing in, the California Register; (2)listed in a local register of historical resources as defined in Public Resources Code(PRC) Section 5020.1(k); (3) identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (4) determined to be a historical resource by a project's Lead Agency (PRC Section 21084.1 and State CEQA Guidelines Section 15064.5(a)). On May 18, 2021, a records search was conducted at the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton. One cultural resource was identified within the 128.61-acre Area of Potential Effects (APE) as a result of a records search; however, this resource was not actually recorded within Caltrans' right-of-way (ROW) and was incorrectly mapped as within the APE by the SCCIC. No archaeological cultural resources were identified in the APE as a result of the field survey.

A segment of SR-1 within the project's APE was assumed eligible for listing in the National Register of Historic Places (National Register) for purposes of this project only. Resources listed in the National Register are automatically listed in the California Register; as such, the segment of SR-1 in the APE is being considered a Historical Resource for purposes of this project. Subsequently, in October 2021, a Finding of Effect

report was prepared for the project. The segment of SR-1 in the APE is assumed eligible for listing in the National Register in accordance with Section 106 PA Stipulation VIII.C.4 under Criterion A for the role it played in development of the coastal communities that intersect the APE. Its period of significance is 1926, when it opened, to 1971, the current end of the historic period.

The character-defining features of this property include:

- General road alignment; and
- Right-of-way (ROW) features, such as streetlights, signs, sidewalks, curbs, and gutters, constructed during the period of significance (1926-1971).

According to the Finding of Effect report, no character defining features will be physically impacted by the project. For the undertaking as a whole, Caltrans has applied the Criteria of Adverse Effect and proposes that a Finding of No Adverse Effect (FNAE) without Standard Conditions is appropriate.

The project will not have an adverse effect on the segment of SR-1 in the APE and, as such, the proposed project would not cause a substantial change in the significance of a Historical Resource as defined in State CEQA Guidelines Section 15064.5. No mitigation is required.

b) No Impact. As documented in the ASR, no archaeological resources were identified in the APE as a result of the SCCIC records search or archaeological field survey, and the likelihood of encountering intact buried archaeological resources during project implementation is low. As such, the proposed project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5. No mitigation is required; however, Caltrans standard provisions for Late Discoveries (Standard Environmental Reference [SER] Volume 2, Section 2.7.12.1) apply.

c) No Impact. No human remains or burial sites were identified in the APE as a result of the SCCIC record search or archaeological field survey. No mitigation is required; however, there is a possibility that unanticipated human remains may be encountered during ground-disturbing project-related activities. In such cases, State Health and Safety Code 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC 5097.98, which governs the actions Caltrans must take when Native American burials are accidentally discovered.

2.5.2 Avoidance, Minimization and/or Mitigation Measures:

No avoidance, minimization, and/or mitigation is required; however, the following Project Feature will be implemented.

PF-CUL-1 If cultural materials are discovered during construction activities, the construction Contractor will divert all earthmoving activity within and around the immediate discovery area until a qualified archaeologist can assess the nature and significance of the find. At that time, coordination will be maintained with the California Department of Transportation District 12 Environmental Branch Chief or the District 12 Native American Coordinator to determine an appropriate course of action.

PF-CUL-2 If human remains are discovered during construction activities, California State Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the Orange County Coroner shall be contacted. If the remains are thought to be Native American, the Coroner will notify the Native American Heritage Commission (NAHC), who pursuant to California Public Resources Code (PRC) Section 5097.98, will then notify the Most Likely Descendant (MLD). At that time, the persons who discovered the remains will contact the Caltrans District 12 Environmental Branch Chief or the District 12 Native American Coordinator so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of California PRC 5097.98 are to be followed as applicable.

2.6 Energy

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

The Traffic Operations Review of the Environmental Study Request (May 2021) and the Technical Document for Air Quality, Noise, and Hazardous Waste (March 2021) were consulted for this Energy analysis.

The California Environmental Quality Act (CEQA) Guidelines section 15126.2(b) and Appendix F, Energy Conservation, require an analysis of a project's energy use to determine if the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy resources.

2.6.1 CEQA Significance Determination for Energy

a) Less Than Significant Impact. Regarding short-term and temporary energy consumption, construction activities would primarily consume diesel and gasoline through operation of construction activities. Energy use associated with proposed project construction is estimated to increase the short-term energy demand through related construction activities. This represents a small demand on local and regional fuel supplies that would be easily accommodated, and this demand would cease once construction is complete. Moreover, construction-related energy consumption would be temporary, and no permanent new source of energy demand would result from project construction activities. While construction would result in a short-term increase in energy use, construction-related fuel use would have no noticeable effect on peak or baseline demands for energy; and construction design features would help conserve energy. For

example, recycled materials will be used where feasible. Recycled products typically have lower manufacturing and transport energy costs since they do not utilize raw materials, which must be mined and transported to a processing facility.

Regarding long-term and permanent energy consumption, the project would not contribute to additional energy needs; as the project's objective is to provide a contiguous bike lane facility throughout the project limits. The project will not increase vehicular capacity by adding lanes; therefore, post construction vehicular operation will continue to operate as existing condition and will not contribute to long term and permanent energy consumption. The proposed project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources. The impact would be less than significant, and no mitigation is required.

b) No impact. The project would be consistent with regional and State energy conservation plans. Planning documents with relevant energy assessments include the 2020–2045 RTP/SCS published by SCAG and the 2018 IERP (CEC 2018). The 2020–2045 RTP/SCS includes a comprehensive assessment of regional energy consumption primarily focused on residential and commercial electricity, natural gas, and water use. The 2020–2045 RTP/SCS Draft EIR (SCAG 2015b) includes a brief analysis of transportation fuel consumption. SCAG concluded in the Draft EIR that the 2020–2045 RTP/SCS would have a less than significant impact on increasing petroleum and non-renewable fuel usage due to increases in conventional fuel efficiency and the adoption of alternative fuel vehicle will reduce overall fuel consumption. These increases in vehicle fuel efficiency is expected to reduce fuel consumption by 1 percent per year. The project would be consistent with the energy findings in the 2020-2045 RTP/SCS and would not interfere with implementation of the 2020-2045 RTP/SCS.

2.6.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation is required.

2.7 Geology and Soils

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒

b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

A Geotechnical Design Report (May 2021) for this project was prepared and reviewed; the report was utilized for the discussion below.

The site lies on the Pacific Coast in the Peninsular Ranges geomorphic province. This province is generally characterized by northwest-southeast trending mountain ranges and valleys parallel to and associated with the San Andreas Fault. The site is located southeast of Palos Verdes Peninsula and northwest of Newport Bay. The Brookhurst Street and Magnolia Street intersections geology is mapped as Quaternary-aged eolian and dune deposits - Qe (USGS, 2006). The Warner Ave. intersection is mapped as Quaternary-aged alluvial deposits – Qal (CDMG, 1962).

Surface conditions in the project area are generally flat lying and a few feet above sea level. SR-1 runs parallel to the coast in a northwest-southeast direction. To the southwest of SR-1 are parking lots and beaches. To the northwest of Brookhurst Street and Magnolia Street intersections is a natural wetland. To the southeast of Warner Avenue intersection is a natural wetland, and to the north is commercial development and Huntington Harbor.

Huntington Beach Channel is roughly 1,000 ft northeast of Magnolia Street, 500 ft northeast of Brookhurst Street, and makes a 90° turn towards the ocean to outlet 1,200 ft southeast of Brookhurst Street. The Santa Ana River outlets to the ocean approximately 2,500 ft southeast of Brookhurst Street.

Sand from the coastal beach is blown by the strong offshore wind onto SR-1 along the project limits. At some locations, small retaining walls (approximately 2’ high) have been built between the beach parking lots and SR-1, but they have been buried by the wind-blown sands. According to Maintenance, this sand intrusion onto SR-1 is an ongoing concern.

2.7.1 CEQA Significance Determination for Geology and Soils

i) No Impact: None of the sites are mapped within a Seismic Hazard Zone by the State of California Geological Survey. Therefore, there is no risk of surface fault rupture.

ii) **Less Than Significant Impact:** The location of the project is an area that could experience moderate seismic ground shaking from possible earthquakes. The Peak Ground Acceleration (PGA) for this site is about 0.5g. Although no new structures are proposed, due to its location, the project area could experience seismic ground shaking. Therefore, less than significant impact is anticipated, and Project Feature PF-GEO-1 will be implemented, no mitigation is necessary.

iii) **Less Than Significant Impact:** The project is mapped within a zone that is considered susceptible to liquefaction during a seismic event by the California Geological Survey. The traffic signals are minor structures and are usually not designed for seismic loading. Hence, there is less than significant impact and no mitigation is required.

iv) **No Impact:** Surface conditions in the project area are generally flat lying and SR-1 runs parallel to the coast in a northwest-southeast direction. The project is not located in an area with high steep slopes that would be potentially vulnerable to deep-seated landslides. No mitigation is required.

b) **Less Than Significant Impact:** Only three locations within the project will require grading of new embankment with slopes. These slopes are less than 10 ft in height. New slopes will be designed according to Caltrans Requirements for erosion control and would not result in substantial soil erosion or loss in topsoil.

c) **No Impact:** The project site is located on relatively flat terrain and proposes to construct no new embankments. The potential for landslides, lateral spreading, collapse and subsidence is minimal at the project site. Based on this discussion, mitigation is not considered necessary for this project.

d) **Less Than Significant Impact:** The underlying soil is expected to be predominantly cohesionless soil that is not prone to expansion. However, cohesive, expansive soil may be encountered mostly near the wetlands area between Warner Avenue. and Seapoint Street. Due to the shallow depth to groundwater throughout the site, any underlying expansive soils are expected to be mostly saturated and not prone to further expansion.

e) **No Impact:** The project does not propose to install any septic or wastewater systems. Therefore, no impacts are anticipated.

f) **No Impact**: Paleontological resources will not be impacted as a result of this project as no fossiliferous geological sediments, or soils, are within the project prism footprint. The only soils present within the project prism footprint are non-native fill material, and disturbed Holocene alluvial deposits.

2.7.2 Avoidance, Minimization and/or Mitigation Measures:

No avoidance, minimization, and/or mitigation is required; however, the following Project Feature will be implemented.

PF-GEO-1 The project will comply with the most current Caltrans procedures and design criteria regarding seismic design to mitigate any adverse effects related to seismic ground shaking. Earthwork will be performed in accordance with Caltrans Standard Specifications, Section 19, which require standardized measures related to compacted fill, over-excavation, and re-compaction, among other

requirements. Moreover, Caltrans Highway Design Manual (HDM) Topic 113, requires the project engineer to review a Geotechnical Design Report, if any, to ascertain the scope of geotechnical involvement for a project.

2.8 Greenhouse Gas Emissions

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Assembly Bill 32 (AB 32), Chapter 488, 2006: Núñez and Pavley, The Global Warming Solutions Act of 2006: Assembly Bill 32 codified the 2020 GHG emissions reduction goals as outlined in State Executive Order S-3-05, while further mandating that ARB create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code Section 38551(b)). The law requires ARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

CEQA Guidelines Section 15064.4 states that when assessing the significance of impacts from Greenhouse Gas (GHG) emissions on the environment, the lead agency should consider, among other factors, the extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting. While comparing future build to future no-build conditions may be useful in determining significant and in establishing the extent of project-level measures to reduce GHG emissions from the project, CEQA and the CEQA Guidelines remain in focused on the comparison of future conditions with the project compared to existing conditions.

2.8.1 CEQA Significance Determination for Greenhouse Gas Emissions

a) **Less Than Significant Impact:** This is a non-capacity increasing project. The purpose of this proposed safety project is to reduce vehicle and bicyclist incidents by proposing a comprehensive Class II bike lane along SR-1 from the Santa Ana River to Anderson Street in Huntington Beach, California. Based on the Office of Planning and Research (OPR)'s Technical Advisory, bicycle and pedestrian infrastructure projects generally reduce VMT and causes no increase in operational GHG emissions. Additionally, because the project would not increase the number of travel lanes along SR-1, no increase in vehicle miles traveled (VMT) would occur as result of project implementation. While some GHG emissions during the construction period is expected and would be unavoidable, no increase in operational GHG emissions is expected. Therefore, impacts to generating GHG emissions both directly and indirectly to the environment would be less than

significant with the implementation of Project Feature PF-AQ-1, PF-GHG-1, and minimization measures GHG-1 though GHG –7 as stated below.

b) Less Than Significant Impact: The project would incur minor emissions during construction. However, the project does not conflict with plans to reduce GHGs because as a project supporting alternative mode of transportation, the project would not increase VMT or contribute to an increase in operational greenhouse gas emissions. The project conforms with the City of Huntington Beach Bicycle Master Plan and the Greenhouse Reduction Program; Transportation Strategy T-1 Bike Ridership of the City of Huntington Beach General Plan, which increases the capacity of bicycle lanes and bicycle infrastructure within Huntington Beach. No mitigation is required.

2.8.2 Avoidance, Minimization and/or Mitigation Measures:

The following project feature and minimization measures will be implemented.

PF-AQ-1: The construction contractor must comply with the Caltrans' Standard Specifications in Section 14-9 (2018) for reducing impacts from the construction activities. Section 14-9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances. The proposed project would comply with SCAQMD Rule 403 requiring the implementation of best available dust control measures during active operations capable of generating fugitive dust.

PF-GHG-1: **Emissions Reduction:** Comply with Caltrans Standard Specification Section 7-1.02C.

GHG-1: **Vehicle Idle time:** Limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment [California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.

GHG-2: **Truck Schedule:** Schedule truck trips outside of peak morning and evening commute hours.

GHG-3: **Construction Waste:** Reduce construction waste and maximize the use of recycled materials (reduces consumption of raw materials, reduces landfill waste, and encourages cost savings).

GHG-4: **Recycled Materials:** Maximize use of recycled materials (e.g., tire rubber).

GHG-5: **Earthwork Balance:** Reduce the need for transport of earthen materials by balancing cut and fill quantities**.**

GHG-6: **Fuel Efficiency:** Encourage Improved fuel efficiency from construction equipment:

- Maintain equipment in proper tune and working condition
- Right size equipment for the job

GHG-7: **Construction Environmental Training:** Supplement existing training with information regarding methods to reduce GHG emissions related to construction.

2.9 Hazards and Hazardous Materials

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

2.9.1 CEQA Significance Determination for Hazards and Hazardous Materials

This discussion is based on the Initial Site Assessment (ISA) Memorandum (March 2021) and ISA Checklist (March 2021).

Hazardous materials, including hazardous substances and wastes, are regulated by state and federal laws. Statutes govern the generation, treatment, storage and disposal of hazardous materials, substances, and waste, and also the investigation and mitigation of waste releases, air and water quality, human health, and land use.

California regulates hazardous materials, waste, and substances under the authority of the CA Health and Safety Code and is also authorized by the federal government to implement

Resource Conservation and Recovery Act (RCRA) in the state. California law also addresses specific handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning of hazardous waste.

California regulations address waste management and prevention and cleanup of contamination include Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection.

Worker and public health and safety are key issues when addressing hazardous materials that may affect human health and the environment. Proper management and disposal of hazardous material is vital if it is found, disturbed, or generated during project construction.

a) **Less Than Significant Impact:** Although the project will require transportation and/or disposal of hazardous materials, the Contractor will be required to comply with Caltrans Standards and Special Provisions for Hazardous Waste Management. An Aerially Deposited Lead Investigation (ADL) will be conducted at areas of excavation during which soil samples will be collected, tested and analyzed for lead contamination. Therefore, PF-HAZ-1 will be implemented to address the ADL concern. In addition, this project involves yellow traffic stripe paint removal between Warner Avenue and Seapoint in the Median Barrier construction activities. Yellow traffic stripe placed prior to 2004 was considered as hazardous materials. After reviewing available information, the yellow paint was confirmed that it was placed in 2018. Based on this information, the yellow traffic stripe is not considered as an impact; and no mitigation will be required; however, PF-HAZ-2 will still be implemented for any possible presence of unknown hazardous material sources during construction.

   This project proposes to remove existing wood posts for Guard Rail supports, which contain chemical preservatives; therefore, the wood is considered as treated wood wastes (TWW). Management of Treated Wood Wastes must follow Department of Toxic Substances Control (DTSC) regulations. All standard measures per PF-HAZ-3 would apply and such routine transport, use, or disposal of hazardous materials would be carried out in compliance with all Caltrans standards, practices and policies as well as State of California regulations under the authority of the CA Health and Safety Code and as also authorized by the federal government to implement RCRA in the state. California law also addresses specific handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning of hazardous waste. All relevant water quality standards also apply. Once construction is completed, there are no plans to routinely transport, use, or dispose of hazardous materials. Following construction of the proposed project in and of itself would not create a hazard to the public or the environment.

b) **Less Than Significant Impact:** The project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The Contractor will comply with the requirements for unanticipated asbestos and hazardous substances discovery. Impacts will be less than significant, and no mitigation is required.

c) **No Impact:** Record search on CalEPA Cortese List Data Resources was conducted; and a total of 10 sites were previously contaminated with hazardous waste, and cases of these sites have been closed. In addition, based on the site visual inspection on March 1, 2021, no evidence of contamination was observed at the widening improvements at the corners of Brookhurst Street, Magnolia Street; and Warner Avenue for the right-turn bike lane.

Any hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste will be temporary in nature and last only for duration of construction of the project. The contractor will adhere to Caltrans standards as discussed below.

d) No Impact: The project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, the project would not create any significant hazard to the public or environment. There are no impacts and no mitigation required.

e) No Impact: The project is not located within an airport land use plan or, where such a plan has not within two miles of a public airport or public use airport. The project would not result in a safety hazard or excessive noise for people residing or working in the project area. No impacts are anticipated, and no mitigation is required.

f) No Impact: The project will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. However, during and throughout construction, travelers, including emergency responders, could experience minor, temporary delays and detours due to construction. City emergency response times could be slightly longer; however, City adopted Emergency Response Plans and Evacuation Plans would still function during an emergency event. The TMP would be closely coordinated with the City of Huntington Beach, taking into consideration approved detour routes for emergency responders. Advance message signs would be used in the event of an unplanned emergency situation, to inform and safely guide travelers to alternate routes. With the implementation of the PF-TRA-1, any impact would be temporary in nature, hence no mitigation is required.

Safety Plans. Access for Emergency Response must always be maintained throughout construction of the project, and a Traffic Management Plan (TMP; PF-TRA-1) will be updated and implemented. No impacts are anticipated to occur, and no mitigation is required.

g) No Impact: The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. The project will comply with Caltrans standards for Fire Protection. No impacts are anticipated, and no mitigation is required. Refer to Section 2.20 Wildfire.

2.9.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation is required; however, the following Project Features will be implemented.

PF-TRA-1: A Transportation Management Plan (TMP) shall be included in the design plans for implementation by the contractor prior to and during construction of any improvements. The TMP shall consist of prior notices, adequate sign posting, detours, phased construction, and temporary driveways where necessary. The TMP shall specify implementation timing of each plan element (e.g., prior notices, sign posting, detours) as determined appropriate by Caltrans. Adequate local emergency access shall always be provided to adjacent uses. Proper detours and warning signs shall be established to ensure public safety. The TMP shall be devised so that construction shall not interfere with any emergency response or

evacuation plans. Construction activities shall proceed in a timely manner to reduce impacts.

PF-HAZ-1: An Aerially Deposited Lead (ADL) Investigation will be conducted at the excavation areas for lead contamination; and then ADL report will be prepared. Based on the ADL contain in the soil, an appropriate Special Provisions will be prepared to provide an instruction to construction contractor on how to handle the ADL impacted soil during construction.

PF-HAZ-2: During construction, the construction contractor will monitor soil excavation for visible soil staining, odor, and the possible presence of unknown hazardous material sources. If hazardous material contamination or sources are suspected or identified during project construction activities, the construction contractor will be required to cease work in the area and to have an environmental professional evaluate the soils and materials to determine the appropriate course of action required, consistent with the Unknown Hazards Procedures in Chapter 7 of the Caltrans' Construction Manual.

PF-HAZ-3: During construction, the construction contractor is required to store treated wood waste (TWW) in metal containers approved by the US Department of Transportation for the transportation and temporary storage of hazardous waste until disposal. In addition, TWW could only be disposed at a permitted TWW Resource Conservation and Recovery Act (RCRA) Subtitle C disposal facilities.

2.10 Hydrology and Water Quality

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐

(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
(iv) impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

2.10.1 CEQA Significance Determination for Hydrology and Water Quality

The proposed project is located on Pacific Coast Highway (SR-1) and within Santa Ana Regional Water Quality Control Board (RWACB). The project is within the Lower Santa Ana River Hydrological Area (801.11) and lies within the Huntington Harbor/Anaheim Bay Watershed which includes the coastal areas between the Santa Ana River Watershed and the San Gabriel River/ Coyote Creek Watershed. Water bodies within the project limits include Talbert Marsh, Brookhurst Marsh, Magnolia Marsh and Newland Marsh at the southern limits of the project and Outer Bolsa Bay and Huntington Harbor to at the northern limits. A Water Quality Technical Memorandum (August 2021) was reviewed in order to respond to the CEQA questions.

a) Less Than Significant Impact

Construction: The proposed project is anticipated to have a Disturbed Soil Area (DSA) of 0.59 acres (ac). Temporary impacts to water quality that can be anticipated during construction for the Build Alternative includes soil disturbing activities such as excavation and trenching, soil compaction, cut and fill activities and grading. These type of construction activities are anticipated for the widening right turn pockets for the proposed bike lane at Warner Ave, Goldenwest Street, Huntington Street, Twin Dolphin Drive, Beach Boulevard, Magnolia Street and Brookhurst Street. Other minor soil disturbing activities include concrete median barrier construction. The DSA created by these activities are susceptible to high rates of erosion from wind and rain that result in sediment transport during rain events via storm water runoff.

The project is in an area with high groundwater, any excavations may require the discharge of groundwater to surface waters. Construction site dewatering discharges must comply with the General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (de minimus) Threat to Water Quality (Order No. R8-2020-0006, NPDES No. CAG998001) and any subsequent updates to the permit at the time of construction. This Permit addresses temporary dewatering operations during construction. Dewatering Best Management Plans (BMPs) will be used to control sediment and pollutants, and the discharges must comply with the Waste Discharge Requirements (WDRs) issued by the Santa Ana RWQCB.

The project will also have to manage materials and wastes associated with a construction project such as oil and grease spills or leaks from heavy equipment or vehicle used for construction, trash from workers and construction waste, petroleum products from construction equipment and/or vehicles, sanitary wastes from portable toilets and any

other chemicals used for construction such as coolants used for equipment and/or concrete curing compounds.

The Build Alternative will have a DSA of less than 1.0 ac and will be required to comply with the Caltrans Statewide NPDES permit and prepare and implement a Water Pollution Control Program (WPCP). The WPCP will identify temporary Best Management Practices (BMPs) to address the potential temporary impacts to water quality. The BMPs identified in the project's WPCP will include measures such as temporary soil stabilization measures, linear sediment barriers (i.e. silt fence, gravel bag berms, fiber rolls), and construction site waste management (i.e. concrete washout, construction materials storage, litter/ waste management). The project features (PF-WQ-1, PF-WQ-2, and PF-WQ-4) would address any temporary impacts to water quality.

Operation: The operation of the proposed project will result in increase in impervious surface which will result in an increase in storm water runoff. The new impervious surface created by the project is 0.22 ac. This alternative does not involve any lane additions thus the increase of impervious surface will solely be from the widening of the bike lane.

To address the build alternative long-term impacts, Caltrans will incorporate Design Pollution Prevention (source control) BMPs to ensure that adequate measures are included to minimize pollutant sources such as erosion from the project improvements.

The project features (PF-WQ-3) would address any permanent impacts to water quality.

b) **Less than Significant Impact:** It is anticipated that the build alternatives may encounter groundwater during construction. The project will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. The project is located near the Pacific Ocean where tidal flows and saltwater intrusion is likely. If project requires the discharge of groundwater encountered/ extracted during the construction, the discharge must comply with the General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (de minimus) Threat to Water Quality (Order No. R8-2020-0006, NPDES No. CAG998001) and any subsequent updates to the permit at the time of construction. This WDR addresses temporary dewatering operations during construction. Dewatering BMPs must be used to control sediment and pollutants, and the discharges must comply with the WDRs issued by the Santa Ana RWQCB. The project feature (PF-WQ-4) would minimize any temporary impact due to the discharge of groundwater to surface water.

c) (i) **Less than Significant Impact:** The project will not result in substantial erosion or siltation on-or off-site. Any erosion and siltation that can occur during construction will be from Disturbed Soil Areas (DSA) created by the project's excavation/grading. The potential erosion/siltation will be addressed by the installation and implementation of temporary Best Management Practices (BMPs) identified in the project's Water Pollution Control Program (PF-WQ-2). Post construction erosion/ siltation is addressed by the installation of permanent soil stabilization BMPs (PF-WQ-3).

(ii) **Less than Significant Impact:** The project will not substantially increase the rate or amount of surface water runoff in a manner which would result in flooding on- or

offsite. The project will increase the impervious surface by 0.22 acres based on the build alternative. This increase will not substantially increase the rate or amount of runoff in a manner that would result in flooding on or off site.

(iii) Less than Significant Impact: The proposed project will not exceed the capacity of the existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. As indicated previously, the project may contribute additional sources of pollutants during construction. Potential temporary impacts to water quality that can be anticipated during construction include sediments from grading and excavation operations, trash from workers and construction waste, petroleum products from construction equipment and/or vehicles, concrete waste, sanitary wastes from portable toilets and any other chemicals used for construction such as coolants used for equipment and/or concrete curing compounds.

The project may contribute additional sources of pollutants upon completion of construction. Pollutants typically generated during the operation of a transportation facility include sediment/ turbidity, nutrients, trash and debris, bacteria and viruses, oxygen demanding substances, organic compounds, oil and grease, pesticides and metals. The project will incorporate Design Pollution Prevention (source control) BMPs as required by the Caltrans NPDES permit to ensure that adequate measures are included to minimize any potential long-term impacts.

With the implementation of a WPCP and selected temporary BMPs during construction (WQ-PF-2) as well as evaluating and implementing post construction BMP (WQ-PF-3), the project will not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide additional sources of polluted runoff.

With the implementation of the Caltrans NPDES Permit, a Water Pollution Control Program (WPCP) and temporary and permanent BMPs, the project will not substantially degrade water quality (PF-WQ1, PF-WQ-2, PF-WQ-3, PF-WQ-4).

(iv) No Impact: The project will not impede or redirect flood flows.

d) No Impact. The project is located in a flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation. Current conditions rely on sheet flow to drain rainwater during a storm events into the Outer Bolsa Bay. Based on the Location Hydraulics Study (2021), the project does not require additional median drainage features. During a 100-year flood event, SR-1 could experience flooding at various locations within the project limit; however, the proposed project will not significantly alter the water surface elevation of the 100-year flood; therefore, the improvement will not cause additional interruption or termination of the transportation facility beyond the exiting condition.

e) No Impact: The project will not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. The project will comply with

the Statewide Construction General Permit for temporary impacts to water quality (PF-WQ-2) and the Caltrans Statewide NPDES Storm Water Permit (PF-WQ-1).

2.10.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation is required; however, the following Project Feature will be implemented.

PF-WQ-1: The project will comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the State of California, Department of Transportation, Order No. 2012-0011-DWQ, NPDES No. CAS00003 and the and any subsequent permits in effect at the time of construction.

PF-WQ-2: A Water Pollution Control Program (WPCP) will be prepared and implemented to address all construction-related activities, equipment, and materials that have the potential impact water quality. The WPCP will identify the sources of pollutants that may affect the quality of storm water and include BMPs to control the pollutants, such as sediment control, catch basin inlet protection, construction materials management and non-storm water BMPs. All work must conform to the Construction Site BMP requirements specified in the latest edition of the Storm Water Quality Handbooks: Construction Site Best Management Practices Manual to control and minimize the impacts of construction and construction related activities, material and pollutants on the watershed. These include, but are not limited to temporary sediment control, temporary soil stabilization, scheduling, waste management, materials handling, and other non-storm water BMPs.

PF-WQ-3: Design Pollution Prevention Best Management Practices (BMPs) will be implemented such as preservation of existing vegetation, slope/ surface protection systems (permanent soil stabilization), concentrated flow conveyance systems such as ditches, berms, dikes and swales, overside drains, flared end sections, and outlet protection/ velocity dissipation devices.

PF-WQ-4: Construction site dewatering discharges must comply with the General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (de minimis) Threat to Water Quality (Order No. R8-2020-0006, NPDES No. CAG998001) and any subsequent updates to the permit at the time of construction. This Permit addresses temporary dewatering operations during construction. Dewatering BMPs will be used to control sediment and pollutants, and the discharges must comply with the WDRs issued by the Santa Ana RWQCB.

2.11 Land Use and Planning

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for avoiding or mitigating an environmental effect?	☐	☐	☒	☐

2.11.1 CEQA Significance Determination for Land Use and Planning

a) **No Impact:** Existing land uses within the study area include a mix of commercial, residential, state beaches and other recreation facilities. The majority of the project is occupied by roadway facilities, which is considered Caltrans right-of-way (ROW) and some intersections (refer to the Project Description for details), ecological reserve that is known as Bolsa Chica Ecological Reserve, where ROW acquisition would be required due to widening. The widening of right-turn pocket at the southwest corner of SR-1 and Warner Avenue would require approximately 50 square feet (sf) of permanent easements (PE), and 5 sf of permanent easements will also be required at the southeast corner of SR-1 and Brookhurst Street and southeast corner of SR-1 and Magnolia Street for the project. In addition, construction of the Build Alternative would also require TCEs at three intersections at southeast Curb Return at SR-1 and Brookhurst Street (20 sf), southeast Curb Return at SR-1 and Warner Avenue (1,250 sf) and southwest Curb Return at SR-1 and Warner Avenue (80 sf); see table below for detailed ROW acquisitions.

Table 2.11-1 ROW Acquisitions within the Project Limits

Locations	Assessor Parcel Number (APN)	ROW Requirements	Area Required (sf)
Southeast (SE) Corner/ Warner Avenue	110-017-01	Temporary Construction Easement (TCE)	820
SE Corner/Warner Avenue	110-017-02	TCE	430
Southwest (SW) Corner/ Warner Avenue	110-017-03	Permanent Easement (PE)	50
		TCE	80
Magnolia Street	114-160-77	PE	5
		TCE	20
Brookhurst Street	114-160-72	PE	5
		TCE	20

Source: Draft Project Report (DPR; September 2021), Caltrans.

Comparing to the planning phase of the project, ROW requirements have been reduced from 300 sf of PE and 4,000 sf of TCE, to only 5 sf of PE at southwest corner of SR-

1/Magnolia Street; and reduced from 100 sf of PE and 500 sf of TCE, to 5 sf of PE at Southwest corner of SR-1/Brookhurst Street. As a result, the proposed project is not going to change the general land use of the project limits. Therefore, the land use compatibility impacts are considered to be minimal after implementation of minimization measure. These minor impacts would not physically divide an established community.

In addition, detours will be provided for any temporary impacts to access of the beach on existing public right of way as part of the PF-TRA-1. With the implementation of PF-REC-1 and PF-TRA-1, the permanent easement and temporary use of such land for construction activities would not adversely affect community character, divide existing land uses or existing communities, or create barriers between existing communities. No mitigation is required.

b) **Less than Significant Impact:** The proposed improvements are consistent with the latest Caltrans' Mission, Vision and Goals outlined in the 2020-2024 Strategic Plan. This project is also in alignment with the Caltrans' Complete Streets policy (DD 64-R2), which aims to improve the accessibility, mobility, and safety for all travelers in California. Overall, the project advances the purpose of the State's Strategic Highway Safety Plan (SHSP), which highlights Caltrans' role in providing a safe transportation system with the goal of zero deaths—reducing bicyclist fatalities and serious injuries on the State Highway System falls under this platform. In addition, this project is consistent with the City General Plan (October 2, 2017) Goals LU-3, CIRC-4, CIRC-5 and CIRC-6.

The project limits are zoned as transportation and Bolsa Chica wetlands and that would not change as a result of the proposed improvements. The project limits are also located within the Coastal Zone and is subject to the City's Local Coastal Program as well as the California Coastal Commission's (CCC) original jurisdiction. As such, Caltrans has been coordinating with the CCC and the City to obtain a Coastal Development Permit (CDP) prior to the start of project. Furthermore, the project is considered a safety improvement project and does not conflict with any land use plan, policy, or regulation adopted for the purposes of avoiding or mitigating an environmental effect, nor will the project cause any significant environmental impact pertaining to any land use plan, policy or regulation. Implementation of CZ-1 through CZ-3, any impacts related to the coastal zone will be less than significant.

2.11.2 Avoidance, Minimization, and/or Mitigation Measures

The following project feature and minimization measures will be implemented.

PF-TRA-1: A Transportation Management Plan (TMP) shall be included in the design plans for implementation by the contractor prior to and during construction of any improvements. The TMP shall consist of prior notices, adequate sign posting, detours, phased construction, and temporary driveways where necessary. The TMP shall specify implementation timing of each plan element (e.g., prior notices, sign posting, detours) as determined appropriate by Caltrans. Adequate local emergency access shall always be provided to adjacent uses. Proper detours and warning signs shall be established to ensure public safety. The TMP shall be devised so that construction shall not interfere with any emergency response or evacuation plans. Construction activities shall proceed in a timely manner to reduce impacts.

PF-REC-1 The property used for temporary construction easement will be restored to a condition at least as good as it was prior to easement being granted.

CZ-1 This project lies within the coastal zone. Construction or maintenance activities shall not commence until a coastal permit exemption determination or coastal development permit has been obtained from the California Coastal Commission, and/or the Certified Local Coastal Program agency(s) that hold jurisdiction. This should be completed during the PS&E phase for delivery projects.

CZ-2 Construction must be completed between Labor Day weekend and Memorial Day weekend to avoid impacts to coastal access during the high season.

CZ-3 Equipment/materials shall not be stored within unpaved areas.

2.12 Mineral Resources

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

2.12.1 CEQA Significance Determination for Mineral Resources

The Mineral Resources section is based in part on the Geotechnical Design Report for Relocated Traffic Signal Poles (May 2021) and a Preliminary Geotechnical Report (February 2021). In addition, the following references were consulted: State of California Department of Conservation State Mining and Geology Board Maps; the California Department of Conservation Division of Oil, Gas, and Geothermal Resources Well Finder; and the City of Huntington Beach General Plans and Zoning Maps,

a) and b) No Impact: The Resources Element of the Orange County General Plan[3] identified construction aggregate resources are available in undisclosed portions of San Juan Creek, Trabuco Canyon, and the Santa Ana River. No construction aggregate resources are within or immediately adjacent to the project limits. According to the California Department of Conservation Division of Oil, Gas, & Geothermal Resources Well Finder[4], oil and gas fields, and wells (active, idle, plugged, multi-purpose, and waterflood wells) are highly concentrated immediately adjacent and throughout the project limits. The City of

[3] County of Orange General Plan. 2013. Chapter VI. Resources Element. Accessed March 10, 2021 Webpage: https://www.ocgov.com/civicax/filebank/blobdload.aspx?blobid=40235

[4] California Department of Conservation Division of Oil, Gas, & Geothermal Resources Well Finder. Accessed March 10, 2021. Webpage: https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-117.96141/33.69230/13

Huntington Beach General Plan[5] includes discussion about the preservation of mineral resources such as oil, natural gas, sand, gravel, and peatmoss either currently or historically extracted within the City of Huntington Beach. The proposed project involves the construction and operation of a contiguous 10-mile Class II bike lane facility to provide coastal bikeway continuity. The project does not involve any mining activities and is not located on a mineral resource recovery site. Therefore, the project would have no impact on the availability of known mineral resources of value to the region or state residents and to any locally important mineral resource recovery sites.

2.12.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation is required.

2.13 Noise

Would the project result in:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels near the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

2.12.3 CEQA Significance Determination for Noise

This discussion is based on the technical document for Noise (March 2021):

a) Less Than Significant Impact: According to FHWA 23 CFR772, this project does not qualify as a Type I project, as such a traffic noise study was not needed. Short-term construction-related noise impacts would occur during the construction of the build alternative. However, construction noise will be controlled by Caltrans' standard specifications section PF-N-1; and therefore, temporary noise impacts are also considered less than significant. No mitigation measures are required.

b) Less Than Significant Impact: The project will not use high vibration causing equipment's and operation methods such as crack and seat operation, and pile driving near the buildings. These operations will have vibration effect to the older buildings if the equipment or operation methods are used at a distance of 100 ft or less. Thus, the project will not generate 0.5 in/sec of peak particle velocity (PPV) near the residential structures to

[5] City of Huntington Beach General Plan. 2017. Environmental Resources and Conservation. Accessed October 4, 2022.Webpage:https://www.huntingtonbeachca.gov/files/users/planning/environmental_resources_conservation_element.pdf

cause the damage to the building structures. This indicates low potential for structural damage to the building. Residential will not experience even 0.03 in/sec of vibration that is barely to distinctly perceptible annoyance levels and would indicate that the activity will result to low level of annoyance to building occupants. This project does not generate additional vehicles in the project limits, thus there is no operational vibration and noise will be generated from this project. Therefore, ground-borne vibration and ground borne noise generated by the project and its construction would be less than significant. No mitigation measures are required.

c) No Impact: The project is not located within the vicinity of a private airstrip. The closest airport is John Wayne Airport and it is located approximately 10 mi from the project; no other airport or airport land use plan is located within 2 miles from the proposed project. Therefore, implementation of the project would not expose people residing or working in the project area to excessive noise levels. No impact and no mitigation measures are required.

2.13.1 Avoidance, Minimization and/or Mitigation

No avoidance, minimization, and/or mitigation is required; however, the following Project Feature will be implemented.

PF-N-1: During construction of the Project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Noise associated with construction is controlled by 2018 Caltrans Standard Specification Section 14-8.02, "Noise Control," which states the following: Control and monitor noise resulting from work activities. Do not exceed 86 dBA L_{max} at 50 feet from the job site from 9 p.m. to 6 a.m. No mitigation required.

2.14 Population and Housing

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

2.14.1 CEQA Significance Determination for Population and Housing

a) and b) No Impact. The Build Alternative would provide bikeway improvements along SR-1 to provide a continuous bike lane between Anderson Street to the Santa Ana River. The project will not displace people or housing, induce population growth by proposing new homes or businesses, nor indirectly through roadway infrastructure or extensions. The proposed project will require three PEs from the State Lands Commission [450 square feet (ft^2) - Accessor Parcel No. (APN) 110-017-01], Huntington Beach Wetland Conservancy

(300 ft^2 – APN 114-160-73), and Huntington Beach Wetland (100 ft^2 – APN 114-160-72); and three TCEs, one from the State Lands Commission (2,200 ft^2 at APN 110-017-01), and two TCE's from the Huntington Beach Wetland Conservancy (4,000 ft^2 at APN 114-160-73 and 500 ft^2 at APN 114-160-72). The PEs nor TCEs will displace or relocate numbers of people or houses necessitating the construction of replacement housing elsewhere. Therefore, there will be no impacts to populations and housing. No mitigation required.

2.14.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation is required.

2.15 Public Services

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
i. Fire protection?	☐	☐	☒	☐
ii. Police protection?	☐	☐	☒	☐
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☒	☐	☐
v. Other public facilities?	☐	☐	☐	☒

2.15.1 CEQA Significance Determination for Public Services

Based on the City of Huntington Beach GIS files, public services within the study area, including the project limits and 0.25 mi from the project limits, are summarized in the table below. All of these public services are not located within the project limits, but within the 0.25 mi from the project limits. In addition, no medical facilities, community centers and senior centers, schools and libraries are within the study area.

Table 2.15-1 Public Services within the Study Area

Name	Location
Fire Stations	
HB Station #7	3831 Warner Ave, Huntington Beach, CA 92649
Police Departments	
Pacific City Substation	21010 Pacific Coast Hwy, Huntington Beach, CA 92648
South Substation	downtown area, at 5th and Walnut Streets, Huntington Beach, CA
Parks and Recreation Facilities	
Ron Pattison Park	6200 Palm Ave, Huntington Beach, CA 92648
Banning/Magnolia Park	22012 Magnolia Street, Huntington Beach, CA
Sunset Beach Linear Park	17084 N Pacific Ave., Huntington Beach, CA 92649
11th St Beach Park	11th Street and Pacific Coast Highway, Huntington Beach, CA
Santa Ana River Trail	Pacific Coast Hwy, Huntington Beach, CA
West Newport beach	5700 Seashore Dr, Newport Beach, CA 92663
Huntington State Beach	21601 Pacific Coast Hwy, Huntington Beach, CA 92646
Huntington City Beach	103 Pacific Coast Highway, Huntington Beach, CA 92648-5183
Bolsa Chica State Beach	17851 Pacific Coast Hwy, Huntington Beach, CA 92649
Sunset Beach	166635 Pacific Coast Hwy, Sunset Beach, CA 90742
Bluff Top Park	2201 Pacific Coast Hwy, Huntington Beach, CA
Bolsa Chica Ecological Reserve	18000 CA-1, Huntington Beach, CA 92648

Source: City of Huntington Beach GIS Files; accessed in April 2021.

i. **Fire Protection - Less Than Significant Impact.** The proposed project will not permanently impact acceptable service ratios, response times or other performance objectives for fire protection. Due to the nature of construction activities certain lanes of the highway facility may be temporarily closed for construction. Thus, fire protection services may be temporarily impacted. However, a Transportation Management Plan (TMP) will be prepared to minimize construction activity-related delays by the effective application of traditional traffic handling practices. As part of the TMP, Caltrans District 12 would coordinate with emergency response providers to ensure the project does not interfere with emergency response times. Therefore, no mitigation is required.

ii. **Police Protection - Less Than Significant Impact.** The proposed project will not permanently impact acceptable service ratios, response times or other performance objectives for police protection. Due to the nature of construction activities certain lanes of the highway facility may be temporarily closed for construction. Thus, fire protection services may be temporarily impacted. However, a Transportation Management Plan (TMP) will be prepared to minimize construction activity-related delays by the effective application of traditional traffic handling practices. As part of the TMP, Caltrans District 12 Orange County office would coordinate with emergency response providers to ensure the project does not interfere with emergency response times. Therefore, no mitigation is required.

iii. **Schools - No Impact.** There are no schools within in the project limits. Therefore, no schools will be impacted. No mitigation is required.

iv. **Parks - Less Than Significant Impact with Mitigation Incorporated.** Although there are 10 parks and recreational facilities located within the study area, the proposed

project will not permanently impact these facilities. Due to the nature of construction activities certain lanes of the highway facility may be temporarily closed for construction. However, access to these recreational facilities will not be impacted. Therefore, no mitigation is required.

The proposed project would require a 1,250 sqft of TCE from the Bolsa Chica Ecological Reserve at the corner of northbound SR-1 and Warner Avenue. The Parcel impacted by the TCE belongs to the California State Lands Commission and managed by the California Department of Fish and Wildlife with several non-profit organizations assisting in the future ecological viability of the wetlands. The TCE would not change the underlying fee ownership of the property and duration of occupancy will be temporary and required for the construction of the Class II bike lane, right turn pocket, and revegetation efforts. As described in detail in Sections 2.4 Biological Resources and 2.16 Recreation, impacts associated with the construction and expansion of the bike facility along SR-1 would be less than significant with mitigation incorporated. Impacted areas will be restored to and near preconstruction conditions as practicable; therefore, no substantial changes would be made to the property and no adverse physical impacts would occur once mitigation measures are implemented.

v. **Other Public Facilities - No Impact.** There are no religious facilities or health care facilities within in the project limits. Therefore, none of these facilities will be impacted. No mitigation is required.

2.15.2 Avoidance, Minimization, and/or Mitigation Measures

Please refer to Sections 2.4 Biological Resources and 2.16 Recreation for avoidance, minimization, and/or mitigations and project features.

2.16 Recreation

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

The Park Preservation Act (California Public Resources Code [PRC] Sections 5400-5409) prohibits local and state agencies from acquiring any property which is in use as a public park at the time of acquisition unless the acquiring agency pays sufficient compensation or land, or both, to enable the operator of the park to replace the park land and any park facilities on that land.

2.16.1 CEQA Significance Determination for Recreation

The potential for the Build Alternative to result in impacts related to recreation was assessed in the Section 4(f) de Minimis Determination and Resources Evaluated Relative to the Requirements of Section 4(f). The following analyses are based on the information described in those studies.

The Park Preservation Act (California Public Resources Code [PRC] Sections 5400-5409) prohibits local and state agencies from acquiring any property which is in use as a public park at the time of acquisition unless the acquiring agency pays sufficient compensation or land, or both, to enable the operator of the park to replace the park land and any park facilities on that land.

a) **Less than Significant Impact -** Several public and recreational facilities/trails are located within the project area (see Table 15-1). The implementation of the proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. By providing a continuous bike lane with safety improvements throughout the project corridor, the project is expected to increase usage of the proposed bike lane to connect several adjacent public parks and recreational areas. The expected usage of these facilities is expected to be nominal and will not attribute to the physical deterioration of these facilities other than wear and tear from daily and seasonal usage. During the design phase and prior to construction, Caltrans would coordinate with the project stakeholders and implement of minimization measure PF-REC-1. With this project feature, construction impacts would be less than significant, and no mitigation is required.

b) **Less than Significant Impact -** The proposed project includes expansion of existing bike lanes to provide a continuous recreational bikeway facility along SR-1. Existing striped bike lanes along SR-1 within the project area are not contiguous and have underperforming safety features which will be enhanced by the proposed project. The proposed project would require a 450 sqft PE and 2,200 sqft of TCE from the Bolsa Chica Ecological Reserve at the corner of northbound SR-1 and Warner Avenue.

As described in detail in Section 2.4 Biological Resources and with avoidance, minimization, and mitigation measures provided below, impacts associated with the construction and expansion of the bike facility along SR-1 would be less than significant. Therefore, no e mitigation measures are proposed.

2.16.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation is required; however, the following project features will be implemented.

PF-REC-1: **T**he property used for temporary construction easement will be restored to a condition at least as good as it was prior to easement being granted.

PF-TRA-1: A Transportation Management Plan (TMP) shall be included in the design plans for implementation by the contractor prior to and during construction of any improvements. The TMP shall consist of prior notices, adequate sign posting, detours, phased construction, and temporary driveways where necessary. The

TMP shall specify implementation timing of each plan element (e.g., prior notices, sign posting, detours) as determined appropriate by Caltrans. Adequate local emergency access shall always be provided to adjacent uses. Proper detours and warning signs shall be established to ensure public safety. The TMP shall be devised so that construction shall not interfere with any emergency response or evacuation plans. Construction activities shall proceed in a timely manner to reduce impacts.

2.17 Transportation/Traffic

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? NOTE: While public agencies may immediately apply Section 15064.3 of the updated Guidelines, statewide application is not required until July 1, 2020. In addition, uniform statewide guidance for Caltrans projects is still under development. The PDT may determine the appropriate metric to use to analyze traffic impacts pursuant to section 15064.3(b). Projects for which an NOP will be issued any time after December 28th, 2018 should consider including an analysis of VMT/induced demand if the project has the potential to increase VMT (see page 20 of OPR's updated SB 743 Technical Advisory), particularly if the project will be approved after July 2020.	☐	☐	☐	☒
c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☒	☐

2.17.1 CEQA Significance Determination for Transportation/Traffic

The potential for the Build Alternative to result in impacts related to transportation was assessed in the Traffic Memo (May 2021) and in the Transportation Management Plan (TMP) Data Sheet (September 2021). The following analyses are based on the information described in those documents.

a) No Impact. The project is consistent with the Goals of CIRC-5 and CIRC-6 of the City of Huntington's General Plan Circulation element; and the project is also included in the 2019 FTIP. In addition, the proposed improvements are consistent with the latest Caltrans' Mission, Vision and Goals outlined in the 2020-2024 Strategic Plan. This project is also in

alignment with the Caltrans' Complete Streets policy (DD 64-R2), which aims to improve the accessibility, mobility, and safety for all travelers in California. Overall, the project advances the purpose of the State's Strategic Highway Safety Plan (SHSP), which highlights Caltrans' role in providing a safe transportation system with the goal of zero deaths—reducing bicyclist fatalities and serious injuries on the State Highway System falls under this platform.

The California Coastal Trail (CCT) is a planned continuous interconnected public trail system along the California Coastline from Mexico to Oregon led by the California Coastal Conservancy designed to foster appreciation and stewardship of the scenic and natural resources of the coast through hiking and other complementary modes of nonmotorized transportation. Currently, statewide mapping of the CCT is an ongoing collaborated effort between the California Coastal Conservancy and the California Coastal Commission, with support from other state and local agencies. Preliminary mapping[6] of the CCT show trail alignments along the coast of Orange County within the limits of the proposed project.

The CCT is planned to provide a multi-use trail to be used as a walking and hiking trail as close to the ocean as possible and consist of various terrain types, including along dirt footpaths, paved sidewalks, and separated bicycle paths. When no other alternative exists, it could also connect along road shoulders. Although primarily for pedestrians, the CCT would accommodate a variety of additional user groups, such as bicyclists, wheelchair users, equestrians, and others as opportunities allow.

The purpose of the proposed project is to reduce high concentrations of bicycle involved collisions along SR-1. Due to additional safety concerns based on stretches along SR-1 considered high speed areas (>55mph), the lack of available right-of way to support the CCT plan of being an independent trail separated from a vehicular travel way, and close proximity of the Huntington Beach Bike Trail as an alternative option for the CCT; designating the proposed on-roadway combined Class II/ a comprehensive Class II bikeway facility as part of the CCT is not recommended as part of the scope of this project.

Based on these considerations, the proposed project will not conflict with any transportation program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, or bicycle and pedestrian facilities.

b) No Impact. The intent of the project is a safety bike improvement project on SR-1. The improvements are not considered capacity increasing, hence no impact on Vehicle Miles Travelled (VMT); please refer to the tables below for traffic volumes data.

[6] https://www.coastal.ca.gov/access/coastal-trail-map.pdf

Table 2.17-1 2018 Traffic Volumes

PM	Location	Peak Hour (Back)	Peak Month (Back)	Annual Daily Traffic (AADT) (Back)	Peak Hourv (Ahead)	Peak Month (Ahead)	AADT (Ahead)
21.549	Santa Ana River	4,650	42,500	39,800	4,650	42,500	39,800
22.090	Brookhurst Street	4,750	43,000	40,300	4,800	43,000	40,300
23.739	Jct. SR-39 North	4,400	40,000	37,200	4,400	40,000	37,200
25.890	Goldenwest Street	4,500	41,000	38,200	4,500	41,000	38,200
29.890	Warner Avenue	5,500	49,000	45,700	4,850	44,000	41,200

Source: Caltrans. Draft Project Report (DPR) (2021).

Table 2.17-2 2018 Truck Traffic Annual Daily Traffic (AADT)

PM	Location	Vehicle AADT (Total)	Truck AADT (Total)	% Truck
21.549	Santa Ana River	38,800	272	0.70
23.739	Jct. SR-39 North	38,300	306	0.80

Source: Caltrans. Draft Project Report (DPR) (2021).

c) No Impact. The project will not introduce any new or substantial hazards due to geometric design features or incompatible uses. All components of the project will meet Caltrans design standards. Therefore, no impact and no mitigation is required.

d) Less than Significant Impact. See Response to 2.15 (i) and (ii) above, in addition, the project will not result in inadequate emergency access. Project feature PF-TRA-1 will be implemented so that traffic (e.g. emergency vehicles) will be appropriately managed through the project area during construction, at all times.

2.17.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation is required; however, the following project feature will be implemented.

PF-TRA-1: A Transportation Management Plan (TMP) shall be included in the design plans for implementation by the contractor prior to and during construction of any improvements. The TMP shall consist of prior notices, adequate sign posting, detours, phased construction, and temporary driveways where necessary. The TMP shall specify implementation timing of each plan element (e.g., prior notices, sign posting, detours) as determined appropriate by Caltrans. Adequate local emergency access shall always be provided to adjacent uses. Proper detours and warning signs shall be established to ensure public safety. The TMP shall be devised so that construction shall not interfere with any emergency response or evacuation plans. Construction activities shall proceed in a timely manner to reduce impacts.

2.18 Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☐	☒
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒

The discussion and analysis in this section is based on findings as documented in the Historic Property Survey Report (HPSR), Archaeological Survey Report (ASR), and Finding of No Adverse Effect (FNAE) for the project (October 2021).

Environmental Setting

The Area of Potential Effects (APE) is 128.61 acres and was established as all areas in which the project has the potential to directly or indirectly affect historic properties if any such properties exist. The APE is located on State Route 1 (SR-1) between the Santa Ana River Bridge (Post Mile [PM] 21.5) and Anderson Street (PM 31.1) in the City of Huntington Beach (City), in the County of Orange. The APE is located within the ancestral territory of the Gabrieliño and Juaneño Indians.

Regulatory Setting

The project is subject to compliance with Assembly Bill (AB) 52. As required under CEQA, specifically Public Resources Code (PRC) 21080.3.1 and the Chapter 532 Statutes of 2014 (i.e., AB 52), Native American consultation is required for any CEQA project that has a Notice of Preparation, a Notice of Negative Declaration, or a Notice of Mitigated Negative Declaration filed on or after July 1, 2015.

2.18.1 CEQA Significance Determination for Tribal Cultural Resources

a) No impact. On May 18, 2021, a records search was conducted at the South-Central Coastal Information Center (SCCIC) located at California State University, Fullerton. One cultural resource was identified within the 128.61-acre Area of Potential Effects (APE) as a result of a records search; however, this resource was not actually recorded within Caltrans' right-of-way (ROW) and was incorrectly mapped as within the APE by the SCCIC. No archaeological cultural resources were identified in the APE as a result of the field survey. The only cultural resource identified in the APE as a result of the cultural

studies for the project is built environment resource State Route 1 (SR-1), which was not identified a tribal cultural resource as a result of the cultural studies for the project.

The project will not have an adverse effect on the segment of SR-1 in the APE and, as such, the proposed project would not cause a substantial change in the significance of this built environment Historical Resource as defined in State CEQA Guidelines Section 15064.5. Additionally, no tribal cultural resources listed or eligible for listing in the California Register were identified within the APE as a result of the cultural studies for the project. No mitigation is required.

b) No Impact. Native American consultation per AB 52 was conducted for the project. The Native American Heritage Commission (NAHC) was contacted to conduct a Sacred Lands File (SLF) search and provide a Native American Tribal Consultation List for the project. The NAHC's results letter stated that the SLF search was completed with positive results in a letter dated April 29, 2021. The NAHC recommended that the following tribes be contacted, and letters were sent dated May 4, 2021 to the following individuals:

- Campo Band of Diegueño Mission Indians, Ralph Goff, Chairperson
- Ewiiaapaayp Band of Kumeyaay Indians, Michael Garcia, Vice Chairperson
- Ewiiaapaayp Band of Kumeyaay Indians, Robert Pinto, Chairperson
- Gabrieleño Band of Mission Indians – Kizh Nation, Andrew Salas, Chairperson
- Gabrieleño/Tongva San Gabriel Band of Mission Indians, Anthony Morales, Chairperson
- Gabrieliño/Tongva Nation, Sandonne Goad, Chairperson
- Gabrieliño Tongva Indians of California Tribal Council, Robert Dorame, Chairperson
- Gabrieliño-Tongva Tribe, Charles Alvarez
- Juaneño Band of Mission Indians Acjachemen Nation – Belardes, Matias Belardes, Chairperson
- La Posta Band of Diegueño Mission Indians, Gwendolyn Parada, Chairperson
- La Posta Band of Diegueño Mission Indians, Javaughn Miller, Tribal Administrator
- Manzanita Band of Kumeyaay Nation, Angela Elliott Santos, Chairperson
- Mesa Grande Band of Diegueño Mission Indians, Michael Linton, Chairperson
- Pala Band of Mission Indians, Shasta Gaughen, Tribal Historic Preservation Officer
- Santa Rosa Band of Cahuilla Indians, Lovina Redner, Tribal Chair
- Soboba Band of Luiseño Indians, Isaiah Vivanco, Chairperson
- Sycuan Band of the Kumeyaay Nation, Cody Martinez, Chairperson

No responses were received as a result of the initial project notification letter or follow-up emails and phone calls. As such, no sacred lands or tribal cultural resources were identified as a result of the Native American consultation process. Therefore, there will be no impact to significant tribal cultural resources as a result of the proposed project. No mitigation is required.

2.18.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation is required.

2.19 Utilities and Service Systems

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒
c) (originally (e)) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒
e) (originally (g)) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

2.19.1 CEQA Significance Determination for Utilities and Service Systems

The potential for the proposed project to result in adverse impacts related to Utilities and Service Systems is assessed in the following discussions. Information from the Water Quality Assessment Report (WQAR) completed in August 2021, Utility Management Data Matrix included in Appendix G, and the Draft Project Report were used to prepare the following sections. In addition, information from County and City General Plans were also used.

a) No Impact: The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. There is no impact and no mitigation required.

b) No Impact: The project which is construction of a bike lane would not demand any additional water supplies already available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. The use of water for project during construction would be minimal and temporary and would be limited to water trucked to the site for dust control and other construction activities No mitigation is required.

c) No Impact: The project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. No mitigation is required.

d) No Impact: The project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. No mitigation is required.

e) No Impact: Any hazardous waste generated during construction of the proposed project, collected during normal waste collection activities, or collected as a result of an accidental release on SR-1 would be collected, handled, transported, and disposed of in a manner consistent with applicable federal, state, regional, and local regulations. Hazardous wastes would not be co-mingled with green waste or non-hazardous trash. No impacts are anticipated.

2.19.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation is required.

2.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

2.20.1 CEQA Significance Determination for Wildlife

Senate Bill 1241 required the Office of Planning and Research, the Natural Resources Agency, and the California Department of Forestry and Fire Protection to develop amendments to the "CEQA Checklist" for the inclusion of questions related to fire hazard impacts for projects located on lands classified as very high fire hazard severity zones.

According to the California Department of Forestry and Fire Protection's (Cal Fire's) Orange County Fire Hazard Severity Zone Maps[7], the proposed project is not located in or near a state responsibility area (SRA) or land classified as very high fire hazard severity zone (VHFHSZ). The proposed project is approximately 9.5 miles from a designated VHFHSZ in the SRA, within Crystal Cove State Park. The proposed project is approximately 6.5 miles from a very high fire hazard severity zone in the City of Newport Beach VHFHSZ local responsibility area (LRA)[8], within and surrounding the Buck Gully Reserve and the Pelican Hill Golf Club. In addition, the project is adjacent to urbanized coastal communities and areas of open space wetlands.

a) **No Impact.** The project site is located approximately 9.5 miles away from a designated SRA VHFHSZ and approximately 6.5 miles away from an LRA VHFHSZ in the City of Newport Beach. Access through the project area will be maintained at all times during construction and emergency response and evacuation plans will not be impeded. Therefore, the proposed project would not substantially impair an adopted state emergency response plan or state emergency evacuation plan with regards to wildfire. The project would have no impact and no mitigation is required.

b) **No Impact.** Areas surrounding the project areas consists of urban coastal communities with no substantive fire fuel sources. Prevailing Santa Ana winds which create hot and dry conditions increases for wildfire. However, there is a potential that in the event of a wildfire, the project location contains areas of sparse vegetation and lacks suitable habitat to increase the chance of fire spreading. The project would have no impact and no mitigation is required.

c) **No Impact**: As detailed above, the proposed is not located in a VHFHSZ under SRA or LRA. The proposed alignment does not include roads, fuel breaks, emergency water sources, power lines or other utilities that may exacerbate fire risk or result in temporary or ongoing impacts to the environment. Therefore, the proposed project would have no impact and no mitigation is required.

d) **No Impact:** The project will not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. No impacts are anticipated, no mitigation is required.

2.20.1 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation is required.

[7] Cal FIRE Fire Hazard Severity Zones in State Responsibility Areas – Orange County. Accessed March 10, 2021. Webpage: https://osfm.fire.ca.gov/media/6737/fhszs_map30.pdf

[8] Cal FIRE Fire Hazard Severity Zones in Local Responsibility Areas – Orange County. Accessed March 10, 2021. Webpage: https://osfm.fire.ca.gov/media/6739/fhszl_map30.pdf

2.21 Mandatory Findings of Significance

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

The California Environmental Quality Act (CEQA) requires the analysis of a project's mandatory findings of significance. The analysis of the mandatory findings of significance of the project is based on the findings of the project's impacts on all the required issue areas.

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor, but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, and highway development. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, and disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

California Environmental Quality Act (CEQA) Guidelines, Section 15130, describes when a cumulative impact analysis is warranted and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts, under CEQA, can be found in Section 15355 of the CEQA Guidelines.

2.21.1 Discussion of Environmental Evaluation Questions

a) **Less Than Significant with Mitigation:** As stated in Section 2.4 earlier, the project is located within the natural community (Bolsa Chica Ecological Reserve), which provides habitat and cover for movement of animals within the Orange County Central-Coastal Natural Community Conservation Plan/ Habitat Conservation Plan (NCCP/HCP) reserve areas. In addition, the project is also located within the Coastal Zone and the activities proposed are anticipated to constitute "coastal development" would require a Coastal Development Permit (CDP) or authorization under a Local Coastal Program (LCP). Temporary and permanent impacts to some biological resources are anticipated; refer to Section 2.4 for details; however, with implementation of all the listed avoidance and/or minimization measures and project features in Section 2.4, the impacts will be less than significant.

b) **Less Than Significant Impact** Although the project may have impacts that are individually limited, these impacts will not be cumulatively considerable, and impacts will be less than significant. As summarized in Table 2.21-1, below, there are currently no capacity increasing or operational improvement projects in construction or in planning within or in the vicinity of the project limits. There are some maintenance or safety projects near or around the project location and vicinity; however, these project work activities are for maintenance purposes minimal in scale and Caltrans will coordinate with the projects within and adjacent to the project limits, impact and duration of construction would be temporary and short in nature; thus, having a less than significant impact relative to projects of the past, present in future in the project area.

Table 2.21-1 Cumulative Projects within or in vicinity of the Proposed Project

Project Title/Information	Address	Applicants	Status
Pierside Pavilion Expansion	300 Pacific Coast Hwy	Michael C. Adams	Under Construction
Magnolia Tank Farm	21845 Magnolia Street (west side of Magnolia Street at Banning Avenue)	Shopoff Realty Investments	Planning
OC Water District Groundwater Replenishment System	22212 Brookhurst Street	OC Water District	Planning
Park Avenue Residential	16926 Park Ave, 92649 (terminus of Park Avenue in Huntington Harbor)	Michael C. Adams Associates	Planning
Short-Term Rentals	Citywide	City of Huntington Beach	Planning
Parkside Estates	West side of Graham St., south of Warner Ave., along the East Garden Grove Wintersburg Flood Channel	Shea Homes	Under Construction
Gisler Residential	21141 Strathmoor Lane (west side, south of Bluefield Drive)	Brookfield Residential	Planning
Autumn Care Assisted Living	9960 Garfield (southwest corner	AMG and Associates	Planning

	of Garfield Ave. and Brookhurst St. behind Walgreens)		
Harmony Cove (Proposed Huntington Harbor Marina and Eating Establishment)	3901 Warner Ave (North side of Warner Ave, west of Weatherly Ln)- Former Percy Park	Joe Daichendt, Harmony cove, LLC	Planning
Poseidon Desalination Plant	21730 Newland Street	Poseidon Resource Corporation	Planning
PCH Mixed Use Development	602-620 Pacific Coast Highway (between 6th Street and 7th Street)	Houshang Moghimi, Euro26, Inc.	Planning
Main Street Mixed-Use	414-424 Main St.	Rhonda Neely	Plan check
Hardin Hyundai	17242 Beach Blvd.	J.C. Marvick	Plan check
Peter's Landing	16330-16470 Pacific Coast Highway	Kevin Hayes, Pendulum Property Partners	Under construction
Local Coastal Program Update	Citywide	City of Huntington Beach	Planning
Seal Beach	Seal Beach	City of Huntington Beach	Planning
2021-2029 (6th Cycle) Housing Element	Citywide	City of Huntington Beach	Planning
Sunset Beach Hotel	17145 Pacific Coast Highway	Cliff Neiman	Planning
PCH Mixed Use Building	16655 Pacific Coast Highway, 92649 (northeast corner of PCH and 18th St. – Sunset Beach)	Cheryl DeMarco	Planning
Group Homes Ordinance	Citywide	City of Huntington Beach	Planning
CAPM – resurface and rehabilitate, including stripping and bike facilities	SR-1; in City of Newport Beach on SR-1 from Jamboree Road to Santa Ana River Bridge	Caltrans	Design
Safety – traffic signal modification and safety lighting	SR-1; in Cities of Newport Beach and Huntington Beach, on SR-1 at Superior Avenue/Balboa Boulevard and Beach Boulevard	Caltrans	Completion of Design
CAPM – resurface and rehabilitate; includes striping and bike facilities	SR-1; Cities of Huntington Beach and Seal Beach, from Warner Avenue to LA County Line	Caltrans	Planning
Pedestrian Bridge Overcrossing for Coast Community College near Dover Dr.	SR-1	Caltrans	Planning; locally funded PEER project
Safety project proposes to remove and upgrade the existing traffic signals utilizing high visibility LEDs and safety lighting.	SR-1	Caltrans	Planning

Project proposes to remove and replace the Laguna Canyon Channel Bridge (Bridge No. 55-1106)	SR-1	Caltrans	Planning
Project proposes to replace the existing temporary railing (Type K) at two locations with new concrete portable Barriers (Type 60K) and to comply with both the General and the Caltrans Statewide NPDES permit regulations, and the SWRCB's Ocean Plan as legally mandated.	SR-1	Caltrans	Planning
Project proposes to upgrade Sidewalk to Americans with Disabilities Act Standards	SR-1	Caltrans	Planning
Project includes: (1) Modify signals (2) Install safety lighting (3) Update ADA to current standards (4) Refresh striping and pavement markings.	SR-1	Caltrans	Planning
Project includes repair/replace (1) the collapsed concrete slope paving at the west side of the abutment 1, and (2) the failed asphalt section of the bike path underneath the bridge and construct a cut-off wall adjacent to bike path to support and protect the bike path from tidal erosion.	SR-1	Caltrans	Planning
Project proposes to modify existing signals, install high visibility LED for improved visibility, add safety lighting, refresh pavement delineation and ADA if needed.	SR-1	Caltrans	Planning
Project proposes to resurface & Rehabilitate 14.9 lane mile	SR-1, Cities Huntington Beach and Seal Beach, from Warner Ave. to Los Angeles/Orange County Line.	Caltrans	Planning
This project proposes to modify the traffic signals, install additional lighting, refresh existing pavement stripes, align intersection stripes, update ADA features to current standards and upgrade ground mounted signs to the current required reflectivity at two locations on SR-1.	SR-1, Cities of Seal Beach and Huntington Beach	Caltrans	Under construction; the traffic signal improvement at PM 32.7 was not included during construction of the Project 0N850; and it is now part of this project.
Signals rehabilitation - Replace heads and fitter and upgrade poles due to damages caused by saltwater.	SR-1	Caltrans	Planning
Project proposes to place outer separation barrier, AC dike, shoulder rumble strip and delineators.	SR-1 at Bolsa Chica State Beach, in the City of Huntington Beach.	Caltrans	Planning
Project proposes to upgrade sidewalk, driveway, and bike lane improvements	SR-1 from Warner Ave. to the LA/ORA county line	Caltrans	Planning
Project proposes to modify signals and drainage inlet as needed, refresh pavement delineation, refresh signage, and ADA Improvements.	SR-1	Caltrans	Planning
Project proposes to relocate facilities away from traffic and improve worker safety and improve storm water runoff. Multi Asset Project	SR-1	Caltrans	Planning
AC overlay and cold plane, ADA curb ramps and safety devices upgrade, pavement restripe, remove and replace traffic loops.	SR-1 from Jamboree Rd to Santa Ana River Bridge	Caltrans	Planning
Signals rehabilitation at various locations on Route 1 Pacific Coast Highway. Resurface & Rehabilitate 14.9 lane miles.	SR-1 in City of Huntington Beach and Seal Beach, from Warner Ave. to Los	Caltrans	Planning

	Angeles/Orange County Line.		
Minor B project to provide a Protected Left Turn.	SR-1	Caltrans	Planning
Add Lighting to 5 intersections in HB: Brookhurst St. Magnolia St. Newland St. 1st St. Warner Ave.	SR-1, City of Huntington Beach	Caltrans	Planning
This project will replace signal poles damaged by sea salt.	SR-1 and Seapoint	Caltrans	Planning
Install comprehensive Class II bike way facility	SR-1 between Dover and LA county line.	Caltrans	Planning
Complete Street at Doheny PARK	SR-1	Caltrans	Planning
Metrolink Project to add a 2nd track for 1 mile.	SR-1	Caltrans	Planning
Drainage Project	SR-1 to LA County Line	Caltrans	Planning

Source: City of Huntington Beach Projects List, https://www.huntingtonbeachca.gov/government/departments/planning/major/; accessed in May 2021.
Caltrans, PRSM, Active Projects List along SR-1; accessed in May 2021.

c) No Impact. This project will not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. Refer to the discussion in the other sections for additional information that supports this finding.

2.21.2 Avoidance, Minimization, and/or Mitigation Measures

Implementation of the Avoidance, Minimization and/or Mitigation measures and Project Features as stated in the previous sections would apply.

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Chapter 3 – Climate Change

3.1 Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas (GHG) emissions, particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988 led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs generated by human activity, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF_6), and various hydrofluorocarbons (HFCs). CO_2 is the most abundant GHG; while it is a naturally occurring component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO_2.

Two terms are typically used when discussing how we address the impacts of climate change: "greenhouse gas mitigation" and "adaptation." Greenhouse gas mitigation covers the activities and policies aimed at reducing GHG emissions to limit or "mitigate" the impacts of climate change. Adaptation, on the other hand, is concerned with planning for and responding to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels). This analysis will include a discussion of both.

3.2 Regulatory Setting

This section outlines federal and state efforts to comprehensively reduce GHG emissions from transportation sources.

Federal

To date, no national standards have been established for nationwide mobile-source GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level.

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea-level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA; therefore, supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (FHWA 2019). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental,

economic, and social values — “the triple bottom line of sustainability” (FHWA n.d.). Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects. The most important of these was the Energy Policy and Conservation Act of 1975 (42 USC Section 6201) and Corporate Average Fuel Economy (CAFE) Standards. This act establishes fuel economy standards for on-road motor vehicles sold in the United States. Compliance with federal fuel economy standards is determined through the CAFE program based on each manufacturer’s average fuel economy for the portion of its vehicles produced for sale in the United States.

Energy Policy Act of 2005, 109th Congress H.R.6 (2005–2006): This act sets forth an energy research and development program covering: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) the establishment of the Office of Indian Energy Policy and Programs within the Department of Energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology.

The U.S. EPA in conjunction with the National Highway Traffic Safety Administration (NHTSA) is responsible for setting GHG emission standards for new cars and light-duty vehicles to significantly increase the fuel economy of all new passenger cars and light trucks sold in the United States. Fuel efficiency standards directly influence GHG emissions.

State

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate and Assembly bills and executive orders (EOs) including, but not limited to, the following:

EO S-3-05 (June 1, 2005): The goal of this EO is to reduce California’s GHG emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill (AB) 32 in 2006 and Senate Bill (SB) 32 in 2016.

Assembly Bill (AB) 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals outlined in EO S-3-05, while further mandating that the California Air Resources Board (ARB) create a scoping plan and implement rules to achieve “real, quantifiable, cost-effective reductions of greenhouse gases.” The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code [H&SC] Section 38551(b)). The law requires ARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

EO S-01-07 (January 18, 2007): This order sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California’s transportation fuels is to be reduced by at least 10 percent by the year 2020. ARB re-adopted the LCFS regulation in

September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the governor's 2030 and 2050 GHG reduction goals.

Senate Bill (SB) 375, Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires ARB to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land-use, and housing policies to plan how it will achieve the emissions target for its region.

SB 391, Chapter 585, 2009, California Transportation Plan: This bill requires the State's long-range transportation plan to identify strategies to address California's climate change goals under AB 32.

EO B-16-12 (March 2012) orders State entities under the direction of the Governor, including ARB, the California Energy Commission, and the Public Utilities Commission, to support the rapid commercialization of zero-emission vehicles. It directs these entities to achieve various benchmarks related to zero-emission vehicles.

EO B-30-15 (April 2015) establishes an interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 GHG emissions reductions targets. It also directs ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent ($MMTCO_2e$).[9] Finally, it requires the Natural Resources Agency to update the state's climate adaptation strategy, *Safeguarding California*, every 3 years, and to ensure that its provisions are fully implemented.

SB 32, Chapter 249, 2016, codifies the GHG reduction targets established in EO B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

SB 1386, Chapter 545, 2016, declared "it to be the policy of the state that the protection and management of natural and working lands … is an important strategy in meeting the state's greenhouse gas reduction goals, and would require all state agencies, departments, boards, and commissions to consider this policy when revising, adopting, or establishing policies, regulations, expenditures, or grant criteria relating to the protection and management of natural and working lands."

AB 134, Chapter 254, 2017, allocates Greenhouse Gas Reduction Funds and other sources to various clean vehicle programs, demonstration/pilot projects, clean vehicle rebates and projects, and other emissions-reduction programs statewide.

SB 743**,** Chapter 386 (September 2013): This bill changes the metric of consideration for transportation impacts pursuant to CEQA from a focus on automobile delay to alternative

[9] GHGs differ in how much heat each trap in the atmosphere (global warming potential, or GWP). CO2 is the most important GHG, so amounts of other gases are expressed relative to CO2, using a metric called "carbon dioxide equivalent" (CO2e). The global warming potential of CO2 is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO2.

methods focused on vehicle miles travelled, to promote the state's goals of reducing greenhouse gas emissions and traffic related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety.

SB 150**,** Chapter 150, 2017, Regional Transportation Plans: This bill requires ARB to prepare a report that assesses progress made by each metropolitan planning organization in meeting their established regional greenhouse gas emission reduction targets.

EO B-55-18 (September 2018) sets a new statewide goal to achieve and maintain carbon neutrality no later than 2045. This goal is in addition to existing statewide targets of reducing GHG emissions.

EO N-19-19 (September 2019) advances California's climate goals in part by directing the California State Transportation Agency to leverage annual transportation spending to reverse the trend of increased fuel consumption and reduce GHG emissions from the transportation sector. It orders a focus on transportation investments near housing, managing congestion, and encouraging alternatives to driving. This EO also directs ARB to encourage automakers to produce more clean vehicles, formulate ways to help Californians purchase them, and propose strategies to increase demand for zero-emission vehicles.

EO N-79-20 (September 2020) establishes goals for 100 percent of in-state sales of new passenger cars and trucks to be zero-emissions vehicles by 2035, that the state transition to 100 percent zero-emission off-road vehicles and equipment by 2035 where feasible, and that 100 percent of medium- and heavy-duty vehicles in the state be zero-emissions by 2045 where feasible.

3.3 Environmental Setting

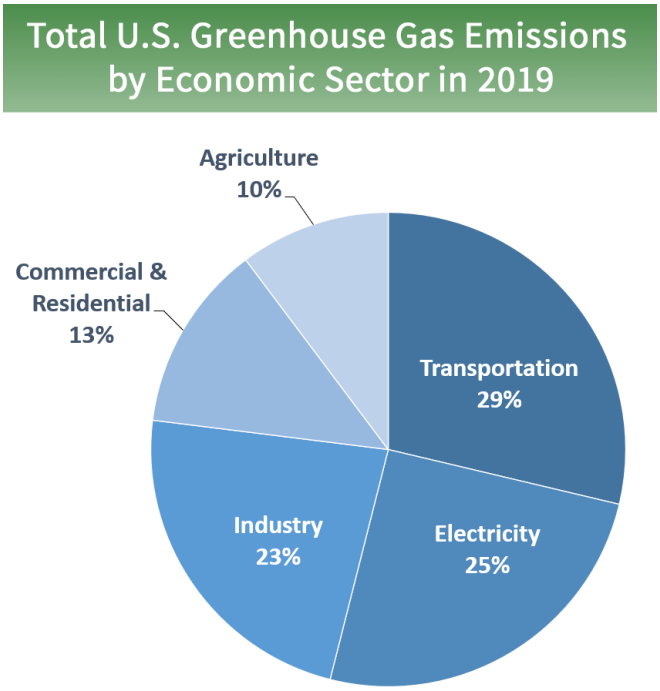
The proposed project is within the City of Huntington Beach, an urban area of Orange County with a developed road and street network. The project area includes residential and commercial buildings. Traffic congestion during peak hours and during the seasonal summer period is common within the project area as State Route 1 is a main artery serving coastal communities and beach activities in the heart of Orange County. Within project limits, SR-1 is a 4-to-6 lane highway with intermittent left and right turn pockets, varying median and shoulder widths, and intermittent street parking in both directions. NB and SB directions are separated by a combination of striped median, raised median islands, and Type 50 concrete barrier throughout the project. The Huntington Beach Bike Trail (Class I Path) also runs parallel to SR-1 along the beachfront through most of the project limits. The Southern California Association of Governments (SCAG) RTP/SCS guides transportation in the project area. The RTP/SCS sets forth a regional development pattern that addresses GHGs in the region.

A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time, such as a calendar year. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. U.S. EPA is responsible for documenting GHG emissions nationwide, and the ARB does so for the state, as required by H&SC Section 39607.4.

National GHG Inventory

The U.S. EPA prepares a national GHG inventory every year and submits it to the United Nations in accordance with the Framework Convention on Climate Change. The inventory provides a comprehensive accounting of all human-produced sources of GHGs in the United States, reporting emissions of CO_2, CH_4, N_2O, HFCs, perfluorocarbons, SF_6, and nitrogen trifluoride. It also accounts for emissions of CO_2 that are removed from the atmosphere by "sinks" such as forests, vegetation, and soils that uptake and store CO_2 (carbon sequestration). The 1990-2019 inventory found that overall GHG emissions were 6,558 million metric tons (MMT) in 2019, down 1.7 percent from 2018 but up 1.8% from 1990 levels. Of these, 80 percent were CO_2, 10 percent were CH_4, and 7 percent were N_2O; the balance consisted of fluorinated gases. CO_2 emissions in 2019 were 2.2 percent less than in 2018, but 2.8 percent more than in 1990. As shown on **Error! Reference source not found.**, the transportation sector accounted for 29 percent of U.S. GHG emissions in 2019 (U.S. EPA 2021a, 2021b)

Figure 3-1. U.S. 2019 Greenhouse Gas Emissions (Source: U.S. EPA 2021c)



U.S. Environmental Protection Agency (2021). Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019

State GHG Inventory

ARB collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals.

The 2020 edition of the GHG emissions inventory reported emissions trends from 2000 to 2018. It found total California emissions were 425.3 $MMTCO_2e$ in 2018, 0.8 $MMTCO_2e$ higher than 2017 but 6 $MMTCO_2e$ lower than the statewide 2020 limit of 431 MMT CO_2e.

The transportation sector was responsible for 41 percent of total GHGs. Transportation emissions decreased in 2018 compared to the previous year, which is the first year over year decrease since 2013. Overall statewide GHG emissions declined from 2000 to 2018 despite growth in population and state economic output (ARB 2020a).

Figure 3-2. California 2018 Greenhouse Gas Emissions by Economic Sector (Source: ARB 2020b)

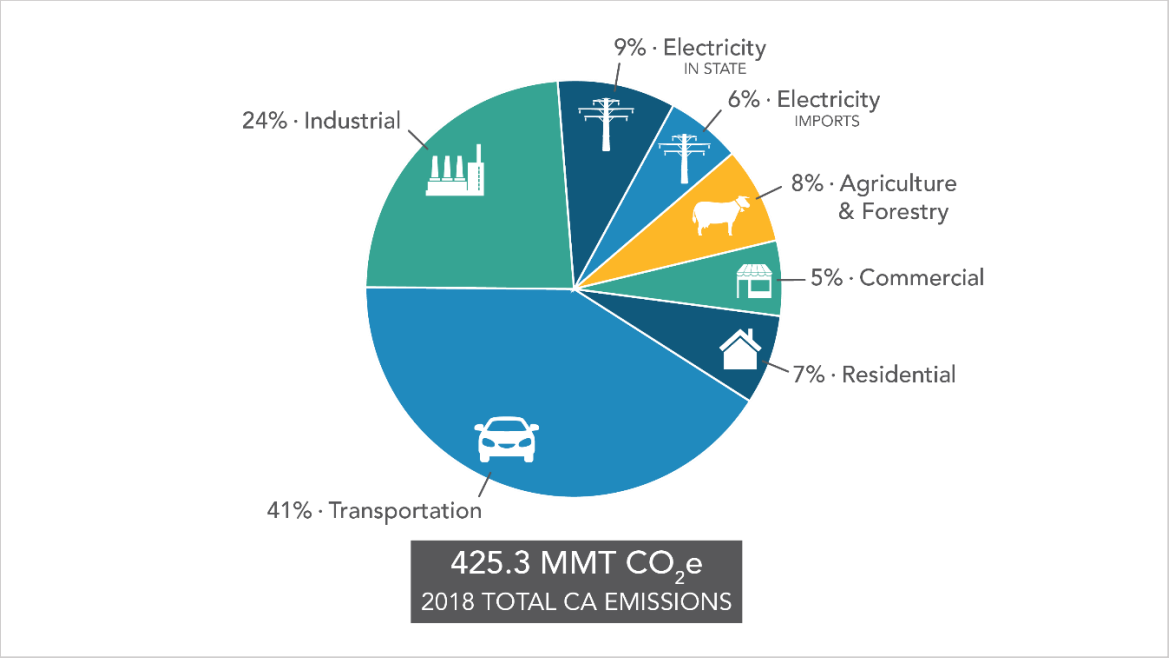
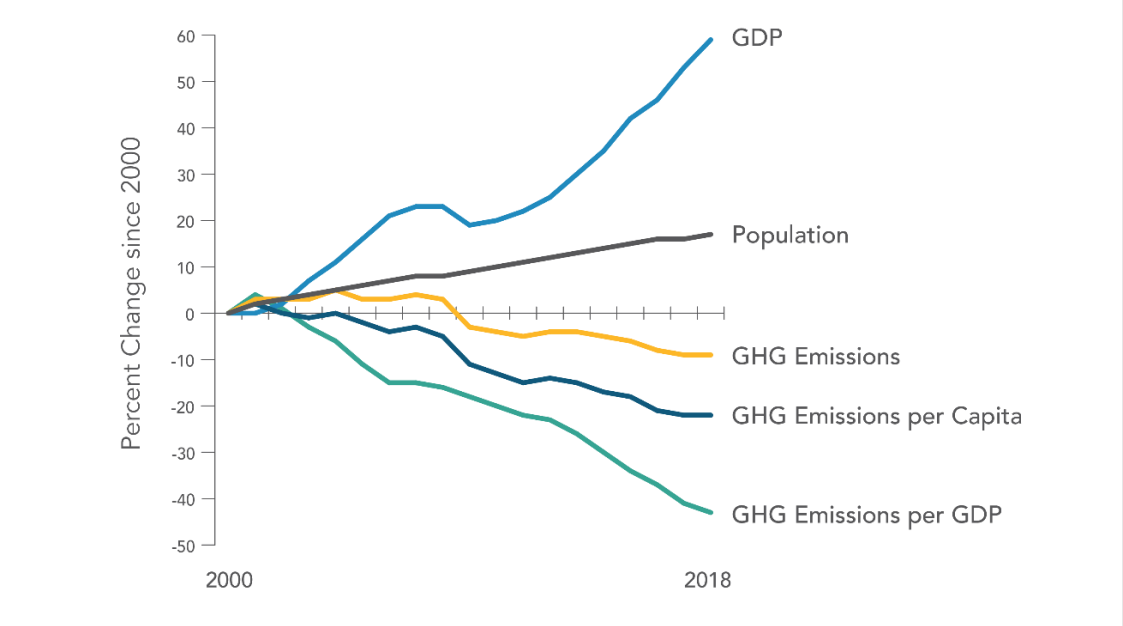


Figure 3-3. Change in California GDP, Population, and GHG Emissions since 2000 (Source: ARB 2020b)



AB 32 required ARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020, and to update it every 5 years. ARB adopted the first scoping plan in 2008. The second updated plan, *California's 2017 Climate Change Scoping Plan*, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15 and SB 32. The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions.

Regional Plans

ARB sets regional targets for California's 18 MPOs to use in their Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) to plan future projects that will cumulatively achieve GHG reduction goals. Targets are set at a percent reduction of passenger vehicle GHG emissions per person from 2005 levels. The proposed project is included in the SCAG RTP/SCS for 2016/2040. The regional reduction target for SCAG is -8% for 2020 and -19% for 2035 (ARB 2019c). Table 3.1 shows the regional and local greenhouse gas reduction plans.

The Orange County Transportation Authority and Orange County Council of Governments published the *Orange County Sustainable Communities Strategy* in 2011, developed to be integrated with the SCAG SCS. The Orange County SCS offers sustainability strategies to reduce GHG emissions from land use and transportation.

The City of Huntington Beach has a plan for implementing the provisions of AB-32, SB-375, and the regional Sustainable Communities Strategy (SCS) in its General Plan Update, which has goals to reduce its total GHG emissions to 15 percent below 2005 levels by 2020, and 53.33 percent below the 2020 target by 2040 to match the state's long term 2050 GHG reduction goals. These policies are included in the Environmental Resources and Conservation Element under Policy ERC-5A. The City's also has an adopted Greenhouse Gas Reduction Program (GGRP) which establishes Huntington Beach's existing, projected, and target levels of GHG emissions and identifies how the City can achieve target levs through a set of strategies. Overall strategy and goals of the GGRP are expanding upon by General Plan Policy ERC-5 E and Implementation Programs ERC-P.1, ERC-P.2, and ERC-P.3.

Table 3-1. Regional and Local Greenhouse Gas Reduction Plans

Plan Title	GHG Reduction Policies or Strategies
Southern California Association of Governments (SCAG) *2016–2040 Regional Transportation Plan/Sustainable Communities Strategy* (adopted April 7, 2016)	● Congestion Management Process ● Integrated multi-modal network ● Strategic capacity and technology enhancements to existing highways ● Transportation Systems Management and Transportation Demand Management ● New Infrastructure ● Livable Corridors/Neighborhood Mobility Areas
OC Go (OCTA Measure M Renewal Ordinance) (Amended March 2016)	● Reduce congestion, improve mobility, and enhance safety in freeways ● Synchronized traffic lights mean less stop and more go on streets and roads ● Permanently protected open space properties and restoration projects preserve the land and ensure that valuable animal and plant species can thrive forever for future generations ● Context-sensitive (including environment) design, for example, environmentally friendly, local, and native landscaping
OCTA Designing Tomorrow Long Range Transportation Plan (adopted November 2018)	● Support sustainability ● Coordination with partner agencies on implementation of sustainability strategies ● Explore environmental and emission reduction strategies ● System maintenance
OCTA & Orange County Council of Governments *Orange County Sustainable Communities Strategy* (SCS) (June 2011)	● Increase regional accessibility to reduce vehicle miles traveled ● Eliminate bottlenecks and reduce delay on freeways, toll roads, and arterials ● Apply Transportation System Management and Complete Street practices to arterials and freeways to maximize efficiency ● Implement near-term and long-term transportation improvements to provide mobility choices and sustainable transportation options ● Acknowledge current local sustainability strategies that will result in or support the reduction of GHG emissions. ● Deliver committed projects including M2
City of Huntington Beach *2017 General Plan* (adopted October 2, 2017)	● Improve pedestrian network ● Inclusionary housing units ● Expand bike lane network ● Shared parking ● Transportation Demand Management Ordinance ● Traffic Calming ● Traffic Signalization synchronization

The proposed project is also within the jurisdiction of the Orange County Transportation Authority (OCTA) Regional Transportation Planning Agency (RTPA). The 2016/2040 RTP identifies several mitigation measures that are consistent with provisions of Section 15091 of the State CEQA Guidelines, local air districts, and lead agencies to address greenhouse gas emissions and climate change (SCAG, 2016). These measures include, but are not limited to:

Reduce emissions from a project through project features, design, and/or other measures

Minimize greenhouse gas emissions by incorporating Best Available Control Technology (BACT) throughout project design, construction, and operation.

Use vehicles and equipment that are fuel and energy efficient

Reduce energy consumption and the use of greenhouse gas emitting construction materials.

3.4 Project Analysis

GHG emissions from transportation projects can be divided into those produced during operation of the SHS and those produced during construction. The primary GHGs produced by the transportation sector are CO_2, CH_4, N_2O, and HFCs. CO_2 emissions are a product of the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of CH_4 and N_2O are emitted during fuel combustion. In addition, a small amount of HFC emissions are included in the transportation sector.

The CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Pub. Resources Code, § 21083(b)(2)). As the California Supreme Court explained, “because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself.” (Cleveland National Forest Foundation *v.* San Diego Assn. of Governments (2017) 3 Cal.5th 497, 512.) In assessing cumulative impacts, it must be determined if a project’s incremental effect is “cumulatively considerable” (CEQA Guidelines Sections 15064(h)(1) and 15130).

To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. Although climate change is ultimately a cumulative impact, not every individual project that emits greenhouse gases must necessarily be found to contribute to a significant cumulative impact on the environment.

The following represents a best faith effort to describe the potential GHG emissions related to the proposed project.

Operational Emissions

The purpose of this proposed safety project is to reduce vehicle and bicyclist incidents by proposing a comprehensive continuous Class II bike lane along SR-1 from the Santa Ana River to Anderson Street in Huntington Beach, California; therefore, this project is considered a non-capacity increasing project. Based on the Office of Planning and Research (OPR)’s Technical Advisory, bicycle and pedestrian infrastructure projects generally reduce VMT and cause no increase in operational GHG emissions. Additionally, because the project would not increase the number of travel lanes along SR-1, no increase in vehicle miles traveled (VMT) would occur as result of project implementation. While some GHG emissions during the construction period are expected and would be unavoidable, no increase in operational GHG emissions is expected.

Construction Emissions

Construction GHG emissions would result from material processing, on-site construction equipment, and traffic delays due to construction. These emissions will be produced at

different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

Construction of the project is planned to commence in January 2025 and is anticipated to be completed in April 2026. The duration of construction is approximately 16 months. Construction would occur in phases due to the scale of the project and the need to minimize traffic impacts and maintain traffic during construction. GHG emissions related to construction would be mainly from CO_2, nitrous oxide (N_2O), and methane (CH_4) (reported together as CO_2e) contained in exhaust from off-road diesel construction equipment/vehicles (e.g., idling and operation of backhoes), from on-road trucks used by vendors (to deliver materials to the site) and on-site workers, and from use of portable equipment (e.g., generators). An estimate of GHG emissions generated by construction of the Build Alternative was conducted using the Caltrans Construction Emission Tool (CAL-CET2020). Total CO_2e emissions for project construction are estimated to be 286 metric tons. In accordance with SCAQMD guidance, the total emissions are amortized over a 30-year period to represent annual emissions.

Table 3.4. Construction Greenhouse Gas Emissions for Build Alternative

Alternative	TOG Total Emissions MT	ROG Total Emissions MT	CO Total Emissions MT	NOX Total Emissions MT	PM10 Total Emissions MT	PM2.5 Total Emissions MT	CO2e Total Emissions MT
Build Alternative	0.152	0.141	0.761	1.132	0.954	0.158	286

Source: Technical Memo for Air Quality (March 2021)
TOG = Total Organic Gases
ROG = Reactive Organic Gases
CO = Carbon Monoxide
NOX = Nitrogen Oxide
PM10 = Particulate Matter 10 microns
PM2.5 = Particulate Matter 2.5 microns
CO_2e = carbon dioxide equivalent

All construction contracts include Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all ARB emission reduction regulations; and Section 14-9.02, Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions.

The proposed project will generate GHG emissions from construction activities. Thus, to address these construction emissions the following Best management practices will be incorporated into the project as conditions for construction to reduce construction GHG emissions.

3.5 CEQA Conclusion

While the proposed project will result in GHG emissions during construction, it is anticipated that the project will not result in any increase in operational GHG emissions. The proposed project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With implementation of construction GHG-reduction measures, the impact would be less than significant.

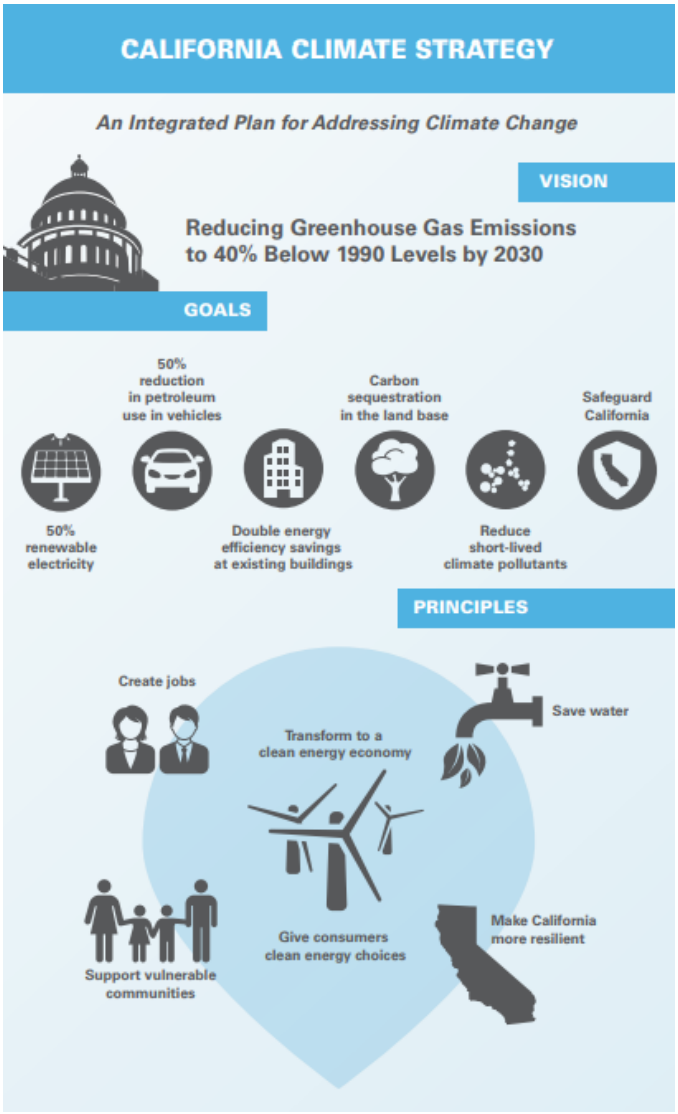
Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

GREENHOUSE GAS REDUCTION STRATEGIES

Statewide Efforts

Major sectors of the California economy, including transportation, will need to reduce emissions to meet the 2030 and 2050 GHG emissions targets. Former Governor Edmund G. Brown promoted GHG reduction goals that involved (1) reducing today's petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to 50 percent our electricity derived from renewable sources; (3) doubling the energy efficiency savings achieved at existing buildings and making heating fuels cleaner; (4) reducing the release of methane, black carbon, and other short-lived climate pollutants; (5) managing farms and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the state's climate adaptation strategy, *Safeguarding California*.

Figure 3-4. California Climate Strategy



The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of vehicle miles traveled (VMT). A key state goal for reducing GHG emissions is to reduce today's petroleum use in cars and trucks by up to 40 percent by 2030 (California Environmental Protection Agency 2015).

In addition, SB 1386 (Wolk 2016) established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forests, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above- and below-ground matter. Subsequently, Governor Gavin Newsom issued Executive Order N-82-20 to combat the crises in climate change and biodiversity. It instructs state agencies to use existing authorities and resources to identify

and implement near- and long-term actions to accelerate natural removal of carbon and build climate resilience in our forests, wetlands, urban greenspaces, agricultural soils, and land conservation activities in ways that serve all communities and in particular low-income, disadvantaged and vulnerable communities. Each agency is to develop a Natural and Working Lands Climate Smart Strategy that serves as a framework to advance the State's carbon neutrality goal and build climate resilience.

Caltrans Activities

Caltrans continues to be involved on the Governor's Climate Action Team as the ARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. EO B-30-15, issued in April 2015, and SB 32 (2016), set an interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

California Transportation Plan

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. It serves as an umbrella document for all the other statewide transportation planning documents. The CTP 2050 presents a vision of a safe, resilient, and universally accessible transportation system that supports vibrant communities, advances racial and economic justice, and improves public and environmental health. The plan's climate goal is to achieve statewide GHG emissions reduction targets and increase resilience to climate change. It demonstrates how GHG emissions from the transportation sector can be reduced through advancements in clean fuel technologies; continued shifts toward active travel, transit, and shared mobility; more efficient land use and development practices; and continued shifts to telework (Caltrans 2021a).

SB 391 (Liu 2009) requires the CTP to meet California's climate change goals under AB 32. Accordingly, the CTP identifies the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the state's transportation needs. While MPOs have primary responsibility for identifying land use patterns to help reduce GHG emissions, the CTP identifies additional strategies.

Caltrans Strategic Plan

The Caltrans *2020–2024 Strategic Plan* includes goals of stewardship, climate action, and equity. Climate action strategies include developing and implementing a Caltrans Climate Action Plan; a robust program of climate action education, training, and outreach; partnership and collaboration; a VMT monitoring and reduction program; and engaging with the most vulnerable communities in developing and implementing Caltrans climate action activities (Caltrans 2021b).

Funding and Technical Assistance Programs

In addition to developing plans and performance targets to reduce GHG emissions, Caltrans also administers several sustainable transportation planning grants. These grants encourage local and regional multimodal transportation, housing, and land use planning that furthers the region's RTP/SCS; contribute to the State's GHG reduction targets and advance

transportation-related GHG emission reduction project types/strategies; and support other climate adaptation goals (e.g., Safeguarding California).

Caltrans Policy Directives and Other Initiatives

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) is intended to establish a Department policy that will ensure coordinated efforts to incorporate climate change into Departmental decisions and activities. *Caltrans Activities to Address Climate Change* (April 2013) provides a comprehensive overview of Caltrans' statewide activities to reduce GHG emissions resulting from agency operations.

Project-Level GHG Reduction Strategies

The following project feature will be implemented, in addition the following measures will also be implemented in the project to reduce GHG emissions and potential climate change impacts from the project.

PF-AQ-1: The construction contractor must comply with the Caltrans' Standard Specifications in Section 14-9 (2018) for reducing impacts from the construction activities. Section 14-9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances. The proposed project would comply with SCAQMD Rule 403 requiring the implementation of best available dust control measures during active operations capable of generating fugitive dust.

PF-GHG-1: **Emissions Reduction.** Comply with Caltrans Standard Specification Section 7-1.02C

GHG-1: **Vehicle Idle time.** Limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment [California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.

GHG-2: **Truck Schedule.** Schedule truck trips outside of peak morning and evening commute hours.

GHG-3: **Construction Waste** Reduce construction waste and maximize the use of recycled materials (reduces consumption of raw materials, reduces landfill waste, and encourages cost savings).

GHG-4: **Recycled Materials**. Maximize use of recycled materials (e.g., tire rubber).

GHG-5: **Earthwork Balance.** Reduce the need for transport of earthen materials by balancing cut and fill quantities.

GHG-6: **Fuel Efficiency.** Encourage Improved fuel efficiency from construction equipment:

- Maintain equipment in proper tune and working condition

- Right size equipment for the job

GHG-7: Construction Environmental Training. Supplement existing training with information regarding methods to reduce GHG emissions related to construction.

3.6 Adaptation

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges combined with a rising sea level can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

Federal Efforts

Under NEPA assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance.

The U.S. Global Change Research Program (USGCRP) delivers a report to Congress and the president every 4 years, in accordance with the Global Change Research Act of 1990 (15 U.S.C. ch. 56A § 2921 et seq). The *Fourth National Climate Assessment*, published in 2018, presents the foundational science and the "human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways." Chapter 12, "Transportation," presents a key discussion of vulnerability assessments. It notes that "asset owners and operators have increasingly conducted more focused studies of particular assets that consider multiple climate hazards and scenarios in the context of asset-specific information, such as design lifetime" (USGCRP 2018).

The U.S. DOT Policy Statement on Climate Adaptation in June 2011 committed the federal Department of Transportation to "integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT in order to ensure that taxpayer resources are invested wisely, and that transportation infrastructure, services and operations remain effective in current and future climate conditions" (U.S. DOT 2011).

FHWA order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events,* December 15, 2014) established FHWA policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. FHWA has developed guidance and tools for transportation planning that foster resilience to climate effects and sustainability at the federal, state, and local levels (FHWA 2019).

State Efforts

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. *California's Fourth Climate Change Assessment* (2018) is the state's effort to "translate the state of climate science into useful information for action" in a variety of sectors at both statewide and local scales. It adopts the following key terms used widely in climate change analysis and policy documents:

- *Adaptation* to climate change refers to adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.
- *Adaptive capacity* is the "combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities."
- *Exposure* is the presence of people, infrastructure, natural systems, and economic, cultural, and social resources in areas that are subject to harm.
- *Resilience* is the "capacity of any entity – an individual, a community, an organization, or a natural system – to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience". Adaptation actions contribute to increasing resilience, which is a desired outcome or state of being.
- *Sensitivity* is the level to which a species, natural system, or community, government, etc., would be affected by changing climate conditions.
- *Vulnerability* is the "susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt." Vulnerability can increase because of physical (built and environmental), social, political, and/or economic factor(s). These factors include, but are not limited to: ethnicity, class, sexual orientation and identification, national origin, and income inequality. Vulnerability is often defined as the combination of sensitivity and adaptive capacity as affected by the level of exposure to changing climate.

Several key state policies have guided climate change adaptation efforts to date. Recent state publications produced in response to these policies draw on these definitions.

EO S-13-08, issued by then-governor Arnold Schwarzenegger in November 2008, focused on sea-level rise and resulted in the *California Climate Adaptation Strategy* (2009), updated in 2014 as *Safeguarding California: Reducing Climate Risk* (Safeguarding California Plan). The Safeguarding California Plan offers policy principles and recommendations and continues to be revised and augmented with sector-specific adaptation strategies, ongoing actions, and next steps for agencies.

EO S-13-08 also led to the publication of a series of sea-level rise assessment reports and associated guidance and policies. These reports formed the foundation of an interim *State of California Sea-Level Rise Interim Guidance Document* (SLR Guidance) in 2010, with instructions for how state agencies could incorporate "sea-level rise (SLR) projections into planning and decision making for projects in California" in a consistent way across agencies. The guidance was revised and augmented in 2013. *Rising Seas in California – An Update on Sea-Level Rise Science* was published in 2017 and its updated projections of sea-level rise and new understanding of processes and potential impacts in California were incorporated into the *State of California Sea-Level Rise Guidance Update* in 2018.

EO B-30-15, signed in April 2015, requires state agencies to factor climate change into all planning and investment decisions. This EO recognizes that effects of climate change other than sea-level rise also threaten California's infrastructure. At the direction of EO B-30-15, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies* in 2017, to encourage a uniform and systematic approach. Representatives of Caltrans participated in the multi-agency, multidisciplinary technical advisory group that developed this guidance on how to integrate climate change into planning and investment.

AB 2800 (Quirk 2016) created the multidisciplinary Climate-Safe Infrastructure Working Group, which in 2018 released its report, *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. The report provides guidance to agencies on how to address the challenges of assessing risk in the face of inherent uncertainties still posed by the best available science on climate change. It also examines how state agencies can use infrastructure planning, design, and implementation processes to address the observed and anticipated climate change impacts.

Caltrans Adaptation Efforts

Caltrans Vulnerability Assessments

Caltrans conducted climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects including precipitation, temperature, wildfire, storm surge, and sea-level rise. The approach to the vulnerability assessments was tailored to the practices of a transportation agency, and involves the following concepts and actions:

- *Exposure* – Identify Caltrans assets exposed to damage or reduced service life from expected future conditions.
- *Consequence* – Determine what might occur to system assets in terms of loss of use or costs of repair.
- *Prioritization* – Develop a method for making capital programming decisions to address identified risks, including considerations of system use and/or timing of expected exposure.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of

climate science. The findings of the vulnerability assessments will guide analysis of at-risk assets and development of adaptation plans to reduce the likelihood of damage to the State Highway System, allowing Caltrans to both reduce the costs of storm damage and to provide and maintain transportation that meets the needs of all Californians.

Project Adaptation Analysis

Climate-change risk analysis involves uncertainties as to the timing and intensity of the potential risks. Relevant uncertainties may be documented in the project risk register to capture future consequences. Caltrans District 12 Orange County has prepared a report that identifies priorities to address in regard to the impact of climate change stressors on the transportation assets of Caltrans. Caltrans' development of the proposed project does not conflict with any adopted plans.

The Caltrans Climate Change Vulnerability Assessment (August 2019) indicates that the project area is subject to climate change effects. Several climate stressors were evaluated in the vulnerability assessment. The vulnerability assessment evaluated climate stressors for the years 2025, 2055, and 2085 that in turn reflect the expected timing of GHG concentration in the atmosphere.

The following climate stressors identified in the Caltrans Climate Change Vulnerability Assessment for Caltrans District 12 of Orange County have been evaluated for project level contribution and resulting climate change effects:

Temperature

The assessment looked at how high temperatures could impact Caltrans' selection of pavement binder grade. Binder is the "glue" used to bind the asphalt together. Thus, the selection of binder is important as asphalt in locations with anticipated higher temperatures would need a higher-temperature rated binder. The entirety of Orange County is subject to increasing high temperatures and higher 7-day averages. The proposed project is subject to the same forecasted temperature changes.

Precipitation

Indicates the percentage change for the 100-year storm precipitation depth for the years 2025, 2055, and 2085. Heavy storm events can create severe impacts to the State Highway System The project limits fall within the greater Orange County and is subject to increased 100-year storm precipitation depth ranging from 0.0% to 4.9%.

Wildfire

Wildfires pose a direct concern for driver safety, State Highway System operations, and the integrity of Caltrans infrastructure. Additionally, wildfires indirectly contribute to landslide and flooding due to exposed soil from burnt vegetation as well as poor air quality and smoke that can affect visibility and health of the public. According to the California Department of Forestry and Fire Protection's (Cal Fire's) Orange County Fire Hazard Severity Zone Maps, the proposed project is not located in or near a state responsibility area (SRA) or land classified as very high fire hazard severity zone (VHFHSZ).

Sea Level Rise

Sea level rise is one of the most threatening impacts of climate change for coastal areas. Caltrans District 12 includes an extensive coastline for which Caltrans facilities provide access, and sea level rise will exacerbate flooding that could occur in these areas during regular tidal or storm events and pose risks to coastal roads and bridges. Historic sea level rise in the Los Angeles area (closest tidal gauge to Orange County) has seen rates of approximately 0.33 inch per year. By the end of the century, the Los Angeles area sea level rise is projected to be anywhere from 0.7 to 6.7 ft above current sea levels. The Coastal Storm Modeling System (CoSMos) model developed by the US Geological Survey (USGS) evaluated SLR levels from 0.00 to 2.00 meters, in quarter-meter increments, and for 5.00 meters to reflect longer-term change. Analysis of the SHS in the District 12 study was completed for all CoSMoS increments and three specific increments from the model were chosen.

Sea level rise impacts to the SHS were assessed for three scenarios of sea level rise: 1.64 ft (0.50m), 3.28 ft (1.00m), and 5.75 ft (1.75m). Under those scenarios, approximately 2.8, 5.2, and 8.7 miles, respectively, along SR-1 in Caltrans District 12 would be potentialy exposed to sea level rise effects. Bridges, culverts, and roadways would be subject to sea level rise at various locations. Caltrans has also conducted a Climate Adaptation Priorities Report which prioritizes District 12 Departmental assets found to be exposed to potential future climate hazards. The prioritization considers the timing of the climate impacts, their severity and extensiveness, the condition of each asset (a measure of the sensitivity of the asset to damage), the number of system users affected, and the level of network redundancy in the area. Of the assets identified the Climate Adaptation Priorities Report, two bridges (55-001 - Santa Ana River bridge and 55-0658_ Talbert Channel bridge) and SR-1 (excluding Beach Blvd. to Goldenwest St.) are classified Priority 1 assets found within the project limits.

Storm Surge

Storm surge resulting from a warming ocean and atmosphere has the potential to affect storm intensities. Storm surge, coupled with sea level rise, has the potential to impact the SHS and related infrastructure such as bridges, culverts, and roadway. The project limits are within areas vulnerable to sea level rise with storm surge.

CoSMoS data was used to assess sea level rise and storm surge impacts to the State Highway System in District 12. The model provides outputs for a variety of storm events, including an annual storm, a 20-year storm, a 100-year storm, and a King Tide (highest high tide of the year). Storm surge impacts to SHS were also assessed with sea level rise of 1.64 ft (0.50m), 3.28 ft (1.00m), and 5.75 ft (1.75m) with added approximate height of a 100-year storm event. Those scenarios increased the number of lane miles of exposed roadway from 2.8 miles at SLR of 1.64ft to 3.7 miles, 5.2 miles at SLR of 3.28 ft to 6.2 miles and 8.7 miles at SLR of 5.75ft to 11.9 miles along the entirety of SR-1 within the County of Orange; and also includes areas within the limits of the project.

Cliff Retreat

Cliff retreat poses a great concern for transportation infrastructure as the impacts from soil erosion on the soil foundation for roads and bridges are jeopardized. Given the geography of Orange County, there are limited locations where cliff retreat will impact the SHS. Under

the three sea level rise scenarios (1.64 ft, 3.28 ft, and 5.74 ft), there are 1.0 mile of District 12 highway centerline miles exposed to cliff retreat if sea level rises to 5.74 ft. Cliff retreat along impacted portions of SR-1 include a northern segment near Huntington Beach and several areas between Corona Del Mar and Monarch Beach. Within the project area, District 12 has already faced ongoing issues with cliff retreat near SR-1/Seapoint Street in Huntington Beach where preventative measures have been used to protect the roadway from erosion.

3.7 Sea-Level Rise

The project is entirely within the Coastal Zone with areas along SR-1 between Anderson Street (PM 31.1) and Warner Avenue (PM 29.9) designated as LCP Not Certified – Coastal Commission, a small 0.2 mile portion of SR-1 just south of Warner Avenue from PM 29.3 to 29.5 as Permit Jurisdiction CDP – Coastal Commission, and the remaining stretch of SR-1 from PM 21.7 to 29.3 designated as the City of Huntington Beach LCP. As such, a Sea Level Rise analysis is required in accordance with the California Coastal Commission, California Ocean Protection Council, and the Caltrans Sea-Level Rise Guidance. This SLR analysis was prepared in accordance with the California Ocean Protection Council's *State of California Sea-Level Rise Guidance 2018* Update, the 2011 Caltrans Guidance on Incorporating Sea Level Rise, and the Caltrans District 12 Climate Change Vulnerability Assessment. Sea level rise visualizations for the project area available on the Cal-Adapt website, which provides a range of sea level rise scenarios and resulting coastal inundation was also referenced. The discussion of potential sea level rise impacts also relies on the 2018 California Coastal Commission's *Sea Level Rise Policy Guidance: Interpretive Guidelines for Addressing Sea Level Rise in Local Coastal Programs and Coastal Development permits.*

According to the 2011 Caltrans Guidance on Incorporating Sea Level Rise, the process to determine and document whether to incorporate SLR into Design is based on the following:

Determining Impact

- Is the project located on the coast or in an area vulnerable to SLR?
- Will the project be impacted by the stated SLR?
- Is the design life of the project beyond year 2030?

Balancing Potential Impacts with the Level of Risk and Potential Consequences

- Time Frame: For projects with timeframes beyond 2050, it is important to consider adaptive capacity, impacts and risk tolerance to guide decisions whether to use low, medium, or high SLR projections
- Consequences = Adaptive Capacity + Impacts: The consequences of failing to address sea level rise for a particular project will depend on both adaptive capacity and the potential impacts of sea level rise to public health and safety, public investments, and the environment.
- Adaptive capacity: A project that has high adaptive capacity and/or low potential impacts will experience fewer consequences. For example, an unpaved trail built within a rolling easement has high adaptive capacity (because the trail can be relocated as sea level rises); and therefore, will experience fewer harmful consequences. In contrast, a new wastewater treatment facility located on a

shoreline with no space to relocate inland has low adaptive capacity and high potential impacts from flooding (related to public health and safety, public investments, and the environment). The negative consequences for such a project of failing to consider sea level rise would therefore be high.

- Risk Tolerance: Risk involved in a decision depending on consequences and actual impacts that may result from sea level rise. While factoring in projection uncertainties versus actual projections of SLR, agencies must base risk tolerance and balance risks with under and/or over estimating SLR in making decisions.

Screening

Based on concepts in the 2011 Caltrans Guidance on Incorporating Sea Level Rise, Table 3.2 was developed to help determine when SLR poses enough of an overall threat to warrant avoiding or mitigating the identified risks. The table below is not an exhaustive list of factors; other factors may need to be balanced based on the nature and location of the project. Although this list provides considering factors, factors other than those listed shall also be considered and balanced based on the location and nature of the project.

Table 3-3. Factors to Consider Whether to Incorporate SLR in Project Design

	Factors	Towards incorporating SLR into project design	Towards NOT incorporating SLR into project design
1	**Project Design Life**	Long (20+ years)	Short (less than 20 years)
2	**Redundancy/Alternative Routes**	No redundant/alternative route	Redundant/alternative route
3	**Anticipated travel delays**	Substantial delays	Minor or no delay
4	**Good and movement/interstate commerce**	Critical route for commercial goods movement	Non-critical route for commercial goods movement
5	**Evacuations/emergencies**	Vital for emergency evacuations; loss of route would result in major increases to emergency response time	Minor or no delay in the event of an emergency or evacuation
6	**Traveler safety (delaying the project to incorporate SLR would lead to on-going or new safety concerns)**	Safety project in which little or no delay would result; non safety project	Safety project and delay would be substantial
7	**Expenditure of public funds**	Large investment	Small investment
8	**Scope of project– "point" vs. "linear"**	Project scope is substantial–e.g. new section of roadway	Project scope is substantial–e.g. new section of roadway
9	**Effect of incorporating SLR on non-state highway (interconnectivity issues with local streets and roads)**	Minor or no effect–adjacent local street and roads would not have to be modified	Substantial interconnectivity issues
10	**Environmental constraints**	Minor or no increase in project footprint in Environmentally Sensitive Area (ESA)	Substantial increase in project footprint in ESAs

The proposed project is located within a coastal area expected to experience SLR impacts within the next 50 years, and according to the Caltrans District 12 Climate Adaptation Priorities Report, the project area along PCH, excluding the stretch between Beach Blvd. and Goldenwest Street, is classified as a Caltrans District 12 Priority 1 asset. Because the PCH is a Priority 1 asset, factors such as project type and design life were considered to determine whether SLR adaptation measures would be necessary.

To determine how Table 3.2 factors, apply to the project if SLR adaptation measures are to be incorporated, the following were considered:

Project design life: Projects with design life of 20+ years should be evaluated to include further SLR analysis since the likelihood of being impacted by SLR at some point during their lifespan is greater. The shorter lifespan projects may be less likely to face SLR impacts, making large-scale or long-term adaptation measures unnecessary in the near term. The proposed project has a design life of 20 years and does not propose high cost infrastructure.

Redundancy/alternative route(s): Traveler and goods movement are typically easily facilitated when redundant parallel routes are available. Construction activities along route without redundant routes could cause increased travel times for emergency services and goods movement throughout a given corridor. Construction duration is expected to be 1 year and be conducted in phases. Transportation Management Plans will be administered to reduce the impact to the traveling public. Additionally, several major arterials connect to SR-1 along the project limits, which allows goods movement and travelers to navigate to and from their desired destinations during construction. The lack of a redundant/parallel route does not prohibit access to and from the project area during construction or project open year.

Anticipated travel delays: During high tides or storm events coastal roadways are subject to flooding and travel delays, especially when considering SLR projections. Historically, flooding during high tide and storm events that occurs at spot locations along SR-1 has been temporary. The Bolsa Chica Ecological Reserve, Magnolia Marsh, Brookhurst Marsh, and Talbert Marsh located immediately adjacent to SR-1 serve as water basins for water runoff, which reduces the severity of flooding along SR-1. In addition, existing vegetated sand berms along the westside of SR-1 at the Bolsa Chica State Beach, Huntington City Beach, and Huntington State Beach provides additional protection of the roadway during high tide and storm events.

Goods movement /interstate commerce: SR-1 is not a high priority route for commercial goods movement and interstate commerce. It serves as a main artery for beach going travelers and visitors to and through beach communities.

Evacuations /emergencies: SR-1 is a main artery for beach going travelers and visitors to and through beach communities. Although SR-1 serves as a primary north and south route along the coast, evacuation and emergency routes in response to SLR would be expected to travel inland and not along coastal communities impacted by SLR. Response times during an evacuation emergency could be delayed, however, existing protective features would play an important role with reducing roadway inundation that could reduce response times.

Traveler safety (delaying the project to incorporate SLR would lead to on-going or new safety concerns): The proposed project is a safety enhancement project to address Caltrans long-term goal of reducing cyclist/vehicle incidents within the City of Huntington Beach by providing a safe continuous bike lane along SR-1. Incorporation of SLR adaptation measures could delay the safety project getting to construction and incur additional project costs which could further delay project reprogramming efforts. The risk to pedestrian/traveler safety takes precedent with this project since there are existing minimizing features along SR-1.

Expenditure of public funds: Future allocation of resources should consider SLR impacts on the State Highway System and Caltrans' facilities. The goal of the proposed project is to address an immediate need for pedestrian safety along SR-1. The current expenditure of public funds is considered a small investment with high returns in terms of safety.

Scope of project "point" vs. "linear": The proposed project is a linear project with spot locations at major intersections to improve crosswalk and signal safety components, and not considered a project with substantial scope.

Effect of incorporating SLR on non-state highway (interconnectivity issues with local streets and roads): When incorporating SLR adaptation measures into projects, consideration should be given to whether the infrastructure around Caltrans' facility (adjacent local streets and roads) is being adapted for SLR. Due to close proximity of connecting local streets and roads throughout the project area to incorporate SLR adaptation measures such as elevating SR-1 would result in major infrastructure costs to provide a consistent roadway cross section. Interconnectivity would be significantly interrupted as extensive construction delays would be expected.

Environmental constraints: The portion of SR-1 within proposed project limits is surrounded by residential and sensitive environmental resources. Adapting the project to SLR may mean an increase in the environmental impacts of the project due to design adaptation features, such as more reinforced bridge structures, larger culverts, or elevated roadways. There is also the potential that adapting the project to SLR may mean modifying the hydrology in the area in ways that could be beneficial to some species while doing greater harm to others.

Ocean Protection Council Five Step Process

In addition to the 2011 Caltrans Guidance on Incorporating Sea Level Rise, the California Ocean Protection Council's State of California Sea Level Rise Policy Guidance was used. This guidance outlines a five-step process to help assess risk by evaluating a range of sea-level rise projections and impacts or consequences associated with those projections. The goal of these steps is to ensure that projects are designed and built in a way that minimizes risks to the development and avoids impacts to coastal resources in light of current conditions and the changes that may arise over the life of the project.

Step 1: Identify the nearest tide gauge.

The nearest tide gauge to the project location is Los Angeles, approximately about 23 miles north.

Step 2: Evaluate project lifespan.

The project opening year is planned for 2025 and the design/horizon year is 2045. Sea Level Rise Projections for this project were considered in 2030, 2040, 2050, and 2100. Extending the planning horizon beyond 2100, was unnecessary based on a higher degree of uncertainty while considering current global trends to combat climate change, and the project's projected horizon year and design life prior to 2050.

Step 3: For the nearest tide gauge and project lifespan, identify range of sea-level rise projections.

A range of sea level rise projections were considered for the Los Angeles tide gauge in 2030, 2040, 2050, and 2100 for both low and high emissions scenarios in 2100, and high emission scenarios for 2030, 2040, and 2050 with low, medium/high, and extreme risk aversion approaches. Low-risk aversion values correspond to a 66 percent probability that sea level rise would be up to the specified height by the associated year. Medium high-risk aversion corresponds to a 0.5 percent probability that Sea Level Rise meets or exceeds the

specified height (i.e., 99.5 percent change sea level rise will be at or below this height). The extreme risk aversion is based on a single, maximally conservative estimate of sea level rise by the associated year with no associated probability of occurrence.

- Low risk aversion scenario: the upper value for the "likely range" (has approximately 17% chance of being exceeded); may be used for projects that would have limited consequences or have a higher ability to adapt, such as sections of unpaved coastal trail, public accessways, and other small or temporary structures that are easily removable and would not have high costs if damaged.
- Medium-high risk aversion scenario: 1 in 200 chance (0.5% probability of exceedance); should be used for projects with greater consequences and/or a lower ability to adapt such as residential and commercial structures.
- Extreme risk aversion: should be used for projects with little to no adaptive capacity that would be irreversibly destroyed or significantly costly to repair, and/or would have considerable public health, public safety, or environmental impacts should that level of sea level rise occur. In the Coastal Commission's jurisdiction, this could include new wastewater treatment plants, power stations, highways, or other critical infrastructure.

Table 3-4. Los Angeles Sea Level Rise Projections

Year	Emissions Scenario	Low-Risk Aversion Sea Level Rise Projections (Feet)	Medium/High-Risk Aversion Sea Level Rise Projections (Feet)	Extreme Risk Aversion Sea Level Rise Projections (Feet)
2030	High	0.5	0.7	1.0
2040	High	0.7	1.2	1.7
2050	High	1.0	1.8	2.6
2100	High	2.1	6.7	9.9
2100	Low	3.2	5.4	Not available

Table 3.3 shows that in a high emissions scenario, sea level rise projections range from 0.5 feet to 1.0 feet in 2030, from 0.7 feet to 1.7 feet in 2040, from 1.1 feet to 2.7 feet in 2050, and from 2.3 feet to 10.1 feet in 2100, depending on the risk-aversion level selected.

Step 4: Evaluate potential impacts and adaptive capacity across a range of sea-level rise projections and emissions scenarios.

According to the Caltrans District 12 Climate Adaptation Priorities Report, the project area along SR-1, excluding the stretch between Beach Boulevard and Goldenwest Street is classified as a Caltrans District 12 Priority 1 asset. Therefore, factors described in the screening methodology and project type were considered to determine whether SLR adaptation measures would apply.

Figure 3-5. NOAA Sea Level Rise Viewer – PCH North Portion of Project Limits

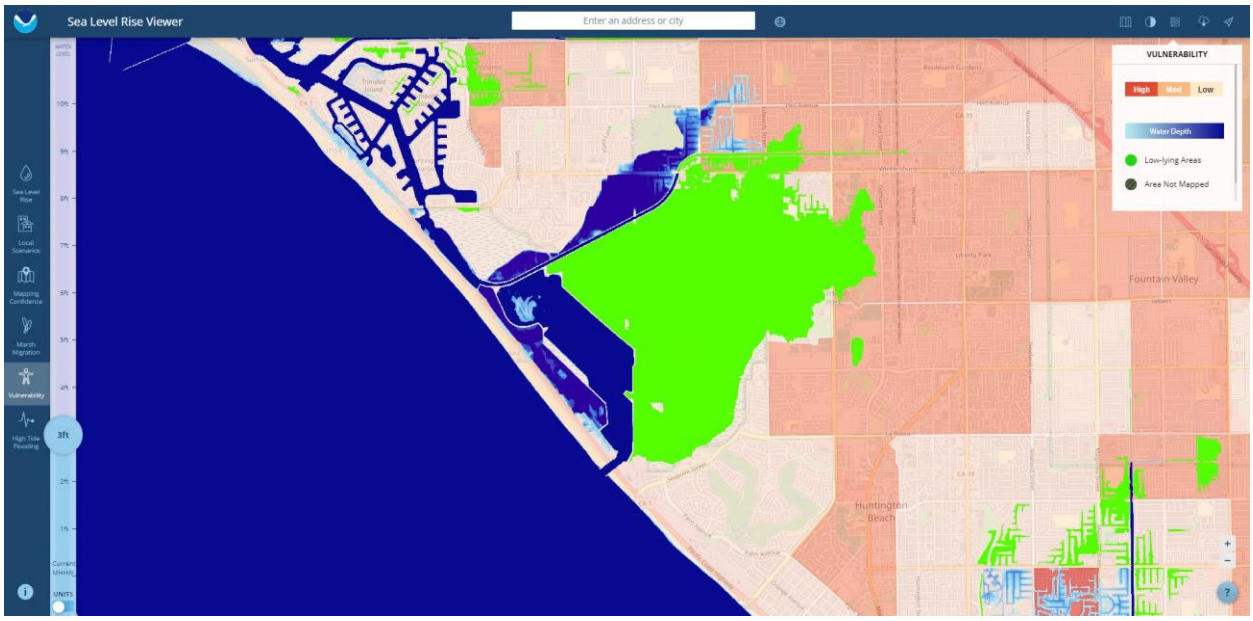
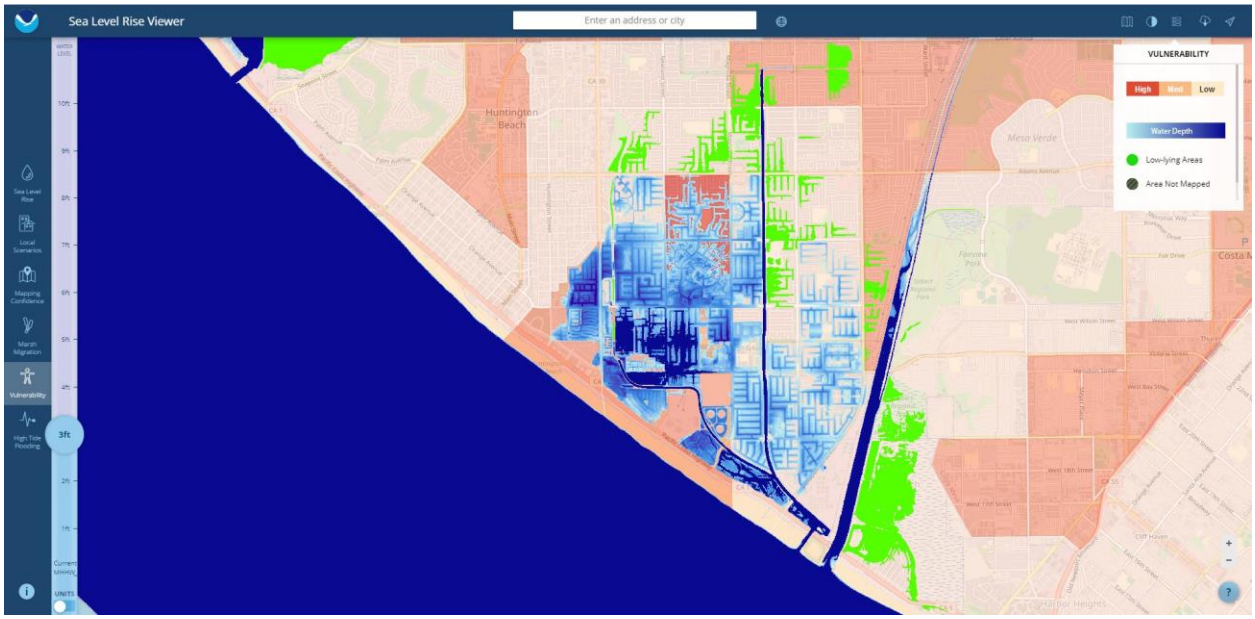


Figure 3-6. NOAA Sea Level Rise Viewer – PCH South Portion of Project Limits



The National Oceanic and Atmospheric Administration Sea Level Rise Viewer identifies the project area with low vulnerability for much of the SR-1 with the exception of the area just south of the Huntington Beach Pier to Magnolia Street which is indicated as medium vulnerability to sea level rise. The Sea Level Rise Viewer shows that with about 3 feet of sea level rise, project facilities could be impacted from Sunset Beach to Warner Avenue by 2050 under high emissions and the extreme risk scenario. The Cal-Adapt web tool also identified similar areas of impact during a 100-year storm in combination with 1-meter (approximately 3 feet) of sea level rise. Under the medium-high risk aversion scenario of about 2 feet of sea level rise by 2050, the maximum sea level rise projection of 2.6 feet by 2050 falls below the

3-foot threshold where inundation is projected to occur. Therefore, the proposed project is not likely to be affected by sea level rise during its design life.

Step 5: Select Sea Level Rise projections based on risk tolerance and, if necessary, develop adaptation pathways that increase resiliency to sea level rise and include contingency plans if projections are exceeded.

Based on the range of sea level rise projections and the analytical resources available (Cal-Adapt web tool, the National Oceanic and Atmospheric Administration Sea Level Rise Viewer, 2019 Caltrans Vulnerability Assessment, and OPC's 2018 Sea Level Rise Guidance), the maximum sea level rise projection of 2.6 feet by 2050 falls below the 3 foot threshold where inundation is projected to occur. Therefore, the proposed project is not likely to be affected by sea level rise during its design life.

Although portions of SR-1 are considered a Priority 1 asset to District 12, the project would be considered low risk as it relates to potential impacts associated with projected sea level rise. As a safety project with a 20-year design life that proposes restriping and does not involve high-cost infrastructure, the project would have high adaptive capacity (e.g. the ability to restripe if pavement is damage by storms). Projects with higher adaptive capacity reduce risk as negative consequences subside with the better ability to adapt without excessive costs.

Based on the guidance and recommendations in the Caltrans Guidance on Incorporating Sea Level Rise and OPC's 2018 State of California Sea Level Rise Guidance to evaluate project level SLR, it has been determined SLR adaptation measures are not warranted for the proposed project.

The project does not increase vehicular capacity and will not worsen localized greenhouse gas emissions that contribute to climate change and sea level rise. Given the relatively low investment of public funds, short design life, and high adaptive capacity, the proposed project to restripe for a continuous bike lane and provide pedestrian safety elements does not warrant including additional adaptation measures. Additionally, existing features like the adjacent wetlands, vegetated sand berms, and sand walls along SR-1 will help protect the project from effects of sea level rise. Incorporating additional effective measure such as elevating the roadway or building high sea walls would incur additional costs and present new challenges that would delay the project to address existing safety concerns along SR-1.

Floodplains

The proposed project limits are within flood zones identified on the Flood Insurance Rate Map from the Federal Emergency Management Agency's National Flood Insurance Program. SR-1 on the north end of the project limits from Anderson Street to Warner Avenue is within Zone AE, Elevation (EL) 8ft, SR-1 from the Tidal Inlet Bridge to just south out Warner Avenue is within Zone AE, EL 7.9 ft on the northbound side of SR-1. The southbound side of SR-1 is within Zone VE, EL 23ft between 0.25 mile south of Warner Avenue to 0.9 mile south of Warner Avenue (PM 29.0), and Zone VE, EL 17ft between 0.9 mile south of Warner Avenue to Seapoint Street (PM 27.55). Additionally, the Talbert Channel Bridge and Santa Ana River Bridge are within Zones, AE and A, respectively. All areas indicted above are areas subject to inundation by the 1-percent-annual-chance (100-year) flood event.

The Talbert Channel Bridge (Br. No. 55-0658) and Santa Ana River Bridge (Br. No. 55-0001_ have been identified as Priority 1 assets in the Caltrans District 12 Adaptation Priorities Report. Of the various climate change stressors identified in the Caltrans D12 Climate Change Vulnerability Assessment, only sea level rise and storm events were identified as potential stressors for these two bridges. The District 12 Climate Change Vulnerability Assessment maps projected changes in the 100-year storm event under a high-emissions climate change scenario in 2025, 2055, and 2085. Mapping shows that 100-year storm precipitation is projected to increase by less than 5% over that entire time span. In the project area, increased storm intensity may cause storm surge that combined with sea-level rise could affect the roadway in the project area.

The proposed median concrete barrier lies along the boundary of Zone VE, EL 23, from Warner Avenue (PM 29.88) to 0.9 miles south of Warner Avenue (PM 29.0) and has an existing ground elevation from 8 to 17 feet. Since the improvement lies along the boundary and not within a floodplain, this location will not impact the floodplain. The proposed median concrete barrier also runs along the inland limits of Zone VE, EL17 with no residential property nearby from 0.9 miles south of Warner Avenue (PM 29.0) to Seapoint Street (PM 27.55) with an existing ground elevation previously described of 8 to 18 feet. Along this stretch of SR-1, the location of the concrete barrier is very close to the inland boundary of Zone VE. The height of the concrete barrier is 3.5', not significantly higher compared to the existing fence on the beach-facing shoulder and the existing ground elevation adjacent to the highway; therefore, the water surface elevation change caused by this improvement will be minimal and will only have negligible impact on the floodplain.

Current conditions rely on sheet flow to drain rainwater during a storm events into the Outer Bolsa Bay. Based on the Location Hydraulics Study (2021), the project does not require additional median drainage features. During a 100-year flood event, SR-1 could experience flooding at various locations within the project limit; however, the proposed project will not significantly alter the water surface elevation of the 100-year flood; therefore, the improvement will not cause additional interruption or termination of the transportation facility beyond the exiting condition.

Wildfire

According to the Caltrans Vulnerability Assessment Summary Report for District 12, SR-1 within the proposed project limits is located within an area of Medium Level of concern in 2025 and 2055. In coastal areas, wildfire risk is considered limited. According to the California Department of Forestry and Fire Protection's (Cal Fire's) Orange County Fire Hazard Severity Zone Maps, the proposed project is not located in or near a state responsibility area (SRA) or land classified as a very high fire hazard severity zone (VHFHSZ). The proposed project is approximately 9.5 miles from a designated VHFHSZ in the SRA within Crystal Cove State Park. The proposed project is approximately 6.5 miles from VHFHSZ in the City of Newport Beach local responsibility area (LRA), within and surrounding the Buck Gully Reserve and the Pelican Hill Golf Club.

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Chapter 4 – Comments and Coordination

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation and the level of analysis required, and to identify potential impacts and avoidance, minimization, and/or mitigation measures and related environmental requirements. Agency and tribal consultation and public participation for this project is accomplished through a variety of formal and informal methods, including interagency coordination meetings, public meetings, public notices, and Project Development Team (PDT) meetings. This chapter summarizes the results of the Department's efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

4.1 Project Development Team Meetings

During the preparation of the environmental document for the proposed project, interdisciplinary Project Development Team (PDT) meetings were held to discuss the proposed project design, factors to be considered during the environmental study process, key issues, and project schedule. The PDT was responsible for conducting/approving of studies and the accumulation of data throughout project development. Regularly scheduled PDT meetings assisted in maintaining group dynamics and communication. Besides, focused PDT meetings were called as necessary to resolve specific project issues. More meetings were necessary during initial periods, with decreasing need during the technical studies, and increasing again during completion and analysis of results prior to completing the draft Initial Study.

4.2 Cultural Resources and Native American Consultation

As part of the cultural investigation, a record search was conducted in May 18, 2021 at the South-Central Coastal Information Center (SCCIC) of the California Historical Resources Information System at California State University, Fullerton. The Native American Heritage Commission (NAHC) was contacted on April 29, 2021 to conduct a Sacred Lands File (SLF) search and to request a California Environmental Quality Act Tribal Consultation List under AB 52. Consultation with a number of Native American Tribes (groups and individuals) was conducted on May 12, 2021 in compliance with Section 106 of the National Historic Preservation Act. Assembly Bill 52 (AB 52), which amended the California Environmental Quality Act (CEQA) to require consultation with Native American Tribes, became effective July 1, 2015. The consultation with the Native American Heritage Commission (NAHC) and Native American representatives is summarized in Table 4.1.

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Table 4.21: Summary of Native American Consultation

Tribal Group	Date Letter Sent to Tribes via Certified Mail	Date Tribal Response to Letter Received	Date and Results of Follow-up Telephone Calls and/or Emails
Campo Band of Digueno Mission Indians Ralph Goff, Chairperson - *Diegueno*	5/12/2021	N/A	06/09/2021: A follow-up email was sent. An automatic response was received that the email address was not found. A follow-up phone call was made and a detailed voicemail was left. No response was received.
Ewilaapaayp Band of Kumeyaay Indians Michael Garcia, Vice Chairperson - *Diegueno*	5/12/2021	N/A	06/09/2021: A follow-up email was sent. No response was received.
Ewilaapaayp Band of Kumeyaay Indians Robert Pinto, Chairperson - *Diegueno*	5/12/2021	N/A	06/09/2021: A follow-up email was sent. No response was received.
Gabrieleno Band of Mission Indians-Kizh Nation, Andrew Salas, Chairperson - *Gabrieleno*	5/12/2021	N/A	06/09/2021: A follow-up email was sent. No response was received.
Gabrieleno/Tongva San Gabriel Band of Mission Indians Anthony Morales, Chairperson - *Gabrieleno*	5/12/2021	N/A	06/09/2021: A follow-up email was sent. No response was received.
Gabrielino/Tongva Nation Sandonne Goad, Chairperson - *Gabrielino*	5/12/2021	N/A	06/09/2021: A follow-up email was sent. No response was received.
Gabrielino Tongva Indians of California Tribal Council Robert Dorame, Chairperson – *Gabrielino*	5/12/2021	N/A	06/09/2021: A follow-up email was sent. No response was received.
Gabrielino-Tongva Tribe Charles Alvarez – *Gabrielino*	5/12/2021	N/A	06/09/2021: A follow-up email was sent. No response was received.

Tribal Group	Date Letter Sent to Tribes via Certified Mail	Date Tribal Response to Letter Received	Date and Results of Follow-up Telephone Calls and/or Emails
Juaneño Band of Mission Indians Acjachemen Nation – Belards Matias Belardes, Chairperson - *Juaneño*	5/12/2021	N/A	06/09/2021: A follow-up email was sent. No response was received.
La Posta Band of Diegueño Indians Gwendolyn Parada, Chairperson - *Diegueño*	5/12/2021	N/A	06/09/2021: A follow-up email was sent. No response was received.
La Posta Band of Diegueño Indians Javaughn Miller, Tribal Administrator - *Diegueño*	5/12/2021	N/A	06/09/2021: A follow-up email was sent. No response was received.
Manzanita Band of Kumeyaay Nation Angela Elliott Santos, Chairperson - *Diegueno*	5/12/2021	N/A	06/09/2021: A follow-up phone call was made and a detailed voicemail was left. No response was received.
Mesa Grande Band of Diegueño Mission Indians Michael Linton, Chairperson - *Diegueno*	5/12/2021	N/A	06/09/2021: A follow-up email was sent. An automatic response as received that the recipient's mailbox is full and cannot accept messages. A follow-up phone call was made and a detailed message was left. No response was received.
Pala Band of Mission Indians Shasta Gaughen, Tribal Historic Preservation Officer - *Cupeño Luiseño*	5/12/2021	N/A	06/09/2021: A follow-up email was sent. No response was received.
Santa Rosa of Cahuilla Indians Lovina Redner, Tribal Chair - *Cahuilla*	5/12/2021	N/A	06/09/2021: A follow-up email was sent. No response was received.
Soboba Band of Luiseño Indians Isaiah Vivanco, Chairperson – *Cahuilla, Luiseño*	5/12/2021	N/A	06/09/2021: A follow-up email was sent. No response was received.
Sycuan Band of the Kumeyaay Nation Cody Martinez, Chairperson - *Kumeyaay*	5/12/2021	N/A	06/09/2021: A follow-up email was sent. No response was received.

4.3 United States Fish and Wildlife Service

Official species lists were received from the USFWS and the National Oceanic and Atmospheric Administration (NOAA) on June 8, 2021 (NES 2021). Lists of special status species were generated from the California Department of Fish and Wildlife's California Natural Diversity Database, the California Native Plant Society (CNPS) electronic inventory, current listings for special status species from the United States Fish and Wildlife Service (USFWS) electronic inventory and from the Information Planning and Consultation (IPAC) System in June and September 2021. The National Marine Fisheries Service (NMSF) Species List was downloaded in June 2021 from the National Oceanic and Atmospheric Administration. A copy of the Species List can be found in Appendix H.

4.4 Public Participation

The Initial Study (IS) will be publicly circulated for review to solicit comments for a 30-day review period. The IS will be made available to the public and circulated to regional and local agencies and all stakeholders to provide opportunity for their comments. The document will be available at the City of Huntington Beach Central Library, Huntington Beach City Hall and the Caltrans District 12 office, and also at the following url: https://www.dot.ca.gov/caltrans-near-me/district-12/district-12-programs/district-12-environmental/sr-1-bike-lane-project

4.5 Section 4(f) Consultation

The subject document is an Initial Study; however, Caltrans is also preparing a Categorical Exclusion subject to NEPA, hence triggers Section 4(f) pursuant to 23 Code of Federal Regulations (CFR) 774. As part of the analysis for potential impacts related to Section 4(f) resources, Caltrans concludes that there are permanent and temporary impacts to these resources. The project will require a PE and TCE at the Bolsa Chica Ecological Reserve.

Caltrans sent a coordination letter to notify California State Lands Commission and California Department of Fish and Wildlife on May 5, 2021 (included at the end of the chapter) about Caltrans proposal regarding the proposed project, potential proposed permanent and temporary impacts to the Bolsa Chica Ecological Reserve, as discussed above, and its preliminary De minimis Determination prior to finalizing the IS/CE. Further consultation and approval from the California State Lands Commission and the California Department of Fish and Wildlife is necessary to confirm a de minimis impact finding under Section 4(f). The Section 4(f) Analysis will be circulated to the public with this IS for a 30-day review period. Subsequent to the public review process and prior to finalizing the Final Environmental Document, Caltrans will coordinate the concurrence of the Section 4(f) De Minimis Determination.

4.6 City and Coastal Commission Coordination

Caltrans has been in coordination with the City of Huntington Beach and the California Coastal Commission (CCC) since the beginning of the environmental phase. On April 28, 2021, Caltrans held an introduction coastal coordination meeting via Microsoft Teams to introduce the project and discuss concerns that the City and the CCC may have. On June 30, 2021, a virtual quarterly coastal coordination meeting was held by Caltrans; the meeting focused on providing the City and the CCC updates of the project, including but not limited to project design variations, biological resources status, hydrological resources status and sea level preliminary

determination. The CCC concurred with Caltrans that a Sea Level Rise study was not necessary for this project.

4.7 Orange County Bicycle Coalition Coordination

Caltrans project management and design staff have been in coordination with the Orange County Bicycle Coalition (OCBC) since July 2021. On July 28, 2021, Caltrans held a virtual meeting with OCBC to further introduce the project as being proposed and to receive any comments or concerns from OCBC

Chapter 5 – List of Preparers

This document has been prepared by the California Department of Transportation as the lead agency under CEQA and NEPA. The following individuals were involved in the preparation of this Initial Study:

5.1 California Department of Transportation, District 12

Aurasteh, Reza, Senior Environmental Engineer. P.E., Ph.D. in Engineering, Utah State University. 30 years of experience in consulting engineering, academics, transportation engineering, and environmental engineering. Contribution: Senior Review of the Initial Site Assessment (ISA), Air Quality, and Noise.

Bade, Rabindra, Environmental Engineer. Ph. D. Kumoh National Institute of Technology, South Korea, 20 years of experience in research, design, consulting, academics in the field of Environmental Engineering and Civil Engineering. Contribution: Hazardous waste, Air Quality and Noise.

Baker, Charles, Senior Environmental Planner. B.A. in Anthropology, Cal State University, Fullerton. MA in History, Cal State University, Fullerton. 20 years of experience in environmental planning. Contribution: Senior review for Biological Sciences, Cultural and Paleontological Resources.

Baker, Lynn, Associate Environmental Planner. B.A. in Sociology, Cal State University, Fullerton. 13 years of experience in environmental planning. Contribution: Assist in preparation of the environmental document.

Barker, Kristopher, Engineering Geologist. B.S. in Earth Sciences. University of Southern California. 20 years of experience. Contribution: Preparation of the Preliminary Geotechnical Assessment.

Deshpande, Smita, Senior Environmental Planner. B.A. in Geography, University of Pune, India; M.S. in Regional Planning, Indiana University of Pennsylvania, Indiana, Pennsylvania. 30 years of experience in environmental planning. Contribution: Oversight preparation and management of the IS/MND.

Dinh, Phi, Senior Transportation Engineer. MSCE, University of California, Los Angeles. 22 years of experience in Caltrans Hydraulics, Design and Construction, 3.5 years in Environmental Engineering with the Department of Navy. Contribution: Preparation of the Hydraulic Memo.

Ketsela, Kedest, Associate Environmental Planner (Natural Science). B.S. Natural Science, California State University Los Angeles, 20 years' experience with Caltrans. Contribution: Reviewer of Biological Resources Reports.

Kinaly, Steve, P.E, Senior Transportation Engineer. B.S. and M.S in Civil Engineering, California State University, Fullerton. 22 years of experience with Caltrans. Contribution: Project Manager.

Liu, Brian, Associate Environmental Planner. B.A. in Geography, California State University Long Beach. 16 years of experience in environmental planning. Contribution: Preparer of IS MND sections and the De Minimis Section 4(f).

Lo, Carmen, Associate Environmental Planner. B.A. in Environmental Analysis and Design, University of California, Irvine. 15 years of experience conducting research and preparing technical sections of environmental documents. Contribution: Preparation of the environmental document.

Mikhail, Niveen G., Transportation Engineer, Traffic Operations Northwest Unit. B.S. in Civil Engineering, California State University, Long Beach. 19 years of experience in various Traffic engineering areas. Contribution: Safety Project Initiation proposal, design, and review.

Piña-Garrett, Grace, Senior Transportation Engineer, National Pollutant Discharge Elimination System Unit. B.S. in Civil Engineering, California State University, Long Beach. 23 years of experience in engineering and water quality. Contribution: Senior review of the Water Quality Technical Memo.

Salas, Hector B., Associate Environmental Planner. B.A. in Environmental Analysis and Design, University of California, Irvine. 20 years of experience. Contribution: Preparer of the Water Quality Technical Memo.

Villanueva, Alma, Senior Right of Way Agent, Relocation Assistance Program. B.A. in International Business with a concentration in Spanish, California State University, Fullerton. 10 years of experience in Relocation Assistance of Residential, Business and Farms. Contribution: Preparer/reviewer of the Relocation Impact Document.

Wong, Ron, Landscape Associate. B.S. in Landscape Architecture, California State Polytechnic University, Pomona. 22 years of experience with Caltrans. Contribution: Preparer of the VIA Memo and reviewer of the Visual section.

Wright, Jonathan, Associate Environmental Planner. B.A. in Anthropology, San Diego State University, San Diego. 15 years of experience. Contribution: Reviewer of Historic Property Survey Report (HPSR), and Archaeological Survey Report (ASR).

5.2 LSA Associates, Inc.

Canterbury, Meredith, Senior GIS Analyst, B.A. in Geography, Specialization in Environmental Analysis, California State University, Fullerton. 14 years of experience with data creation, analysis and ad-hoc mapping development. Contribution: Managed GIS data, and prepared maps and GIS exhibits for the MND.

Collison, Kerrie, Associate/Senior Cultural Resources Manager. B.S. in Social Sciences, California Polytechnic State University, San Luis Obispo; M.A. in Anthropology, California State University, Northridge. 14 years of experience in Native American consultation, conducting cultural resource surveys for cultural resources and preparing cultural resource documents including HPSRs and ASRs for Caltrans projects. Contribution: Prepared the HPSR and assisted Caltrans staff with Native American consultation.

Estores, Jazmine, Assistant Environmental Planner, B.A. in Geography, Certificate in Urban Studies/Planning, California State University, Long Beach. 2 years of experience with environmental and transportation planning project assistance. Contribution: Provided project management assistance to process the technical studies and the MND and assistance for public circulation of the MND.

Gould, Bo, Associate Biologist. B.A., Environmental Studies and Science, Whittier College. 7 years of experience in biological monitoring; regulatory compliance documentation; environmental permitting; natural resource management and ecological research; preparation of biological impact assessments and habitat conservation plans; jurisdictional delineations; wildlife monitoring; focused insect, bird, mammal and plant surveys, habitat conservation planning; botanical surveys; construction monitoring; environmental regulatory compliance; GPS, and GIS. Contribution: Assisted with biological resource services in support of the NES, BA and responses to the CEQA checklist biological resource questions.

Harrison, Jim, Senior Biologist. B.A., Biological Sciences, California State University, Fullerton. 31 years of experience in a variety of biological resources surveys, conducting Jurisdictional Delineations, report preparation and preparing permits. Contribution: Led the Jurisdictional Delineation and plant-focused surveys, primary author of the Jurisdictional Delineation Report, assisted with the preparation of the NES, BA and responses to the CEQA checklist biological resource questions.

Inloes, Beverly, Associate/Senior Technical Editor and Word Processor. 50 years of experience editing and formatting a variety of geotechnical and environmental documentation, including BAs, BOs, BRMPs, Biological Resources Studies, HCPs, HMPs, HMMPs, JDs, MSHCPs, NESs, NES/MIs, SWDRs, and WQARs, as well as EIRs, EISs, Floodplain Evaluation Reports, IS/EAs, and Programmatic Section 4(f) Evaluations. Contribution: Performed technical editing and formatting of technical reports.

Johnson, Lauren, Technical Editor, B.A. English, University of California, Santa Barbara. 30 years of experience as an editor for technical documents, proposals, and environmental documents of various size and scope.

Krieg, Eric, Associate Biologist. B.S., Biology, Frostburg State University, Maryland; M.S., Biology (Ecology and Conservation), Illinois State University. 24 years of experience in habitat restoration and biological resource monitoring, preparing restoration plans, for contracting and overseeing all aspects of a plan's implementation, conducting Jurisdictional Delineations, and preparing permits. Contribution: Assisted with biological resource services in support of the NES, BA and responses to the CEQA checklist biological resource questions.

Lieuw, Jessica, Biologist, B.A. in Environmental Science, Minor in Urban and Regional Planning University of California, Irvine. 3 years of experience with conducting biological monitoring and qualitative assessments related to species surveys and habitat assessments. Contribution: Assisted with bat habitat assessment and nighttime bat surveys in support of the NES. Assisted with the biological surveys in support of the NES, BA and responses to the CEQA checklist biological resource questions.

Phillips, Matt, Graphic Designer, B.A. in Anthropology, California State University, Long Beach. 28 years of experience with the design and production of technical graphics for CEQA and NEPA environmental documents planning documents, land use plants, and identity branding and logo design. Contribution: Managed GIS data and prepared maps and GIS exhibits for the MND.

Pracilio, Deborah, Principal, Environmental. B.A. in Social Ecology, University of California, Irvine. 35 years of experience in environmental assessment processing procedures for CEQA/NEPA. Contribution: Quality control review of the technical studies and the MND.

Rodriguez, Lonnie, Senior Biologist, B.S. in Environmental Science, Humboldt State University. 18 years of experience with conducting biological surveys and performing biological monitoring. Specializes in performing species surveys, developing jurisdictional delineations and vegetation mapping. Contribution: Assisted with jurisdictional delineation and led the wildlife-focused surveys, assisted with the preparation of the NES, BA and responses to the CEQA checklist biological resource questions.

Roos, Justin, Associate/GIS Specialist. B.S., Geography, California Polytechnic University, Pomona. 17 years of experience in GIS project management, impacts analysis, ad-hoc mapping requests, project-specific website creation, and data creation/conversion to a Geodatabase format. Contribution: Managed GIS data and prepared maps and GIS exhibits for the MND.

Selna, Blake, Principal/Biologist. B.S. in Environmental and Resource Sciences University of California, Davis. 21 years of experience in biological resources and natural resource management. Contribution: Quality control review of the NES, BA and responses to the CEQA checklist biological resource questions.

Strudwick, Ivan, Associate/Archaeologist. B.A. in Anthropology, California State University, Long Beach; M.A. in Anthropology, Magna cum Laude, with specialization in Archaeology, California State University, Long Beach. 38 years of experience in the archaeology field, preparing cultural resource documents including ASRs for Caltrans projects. Contribution: Preparer of the Archaeological Survey Report (ASR) and conducted archaeological field survey.

Tibbet, Casey, Associate/Architectural Historian, M.A. in History/Historic Preservation, University of California, Riverside. 24 years of experience in architectural history, preparing cultural resources documents including HRERs, HPSRs, and FOEs for Caltrans projects. Contribution: Preparer of the Finding of Effect (FOE).

Thomas, King, Associate. B.A. in Social Ecology, Specialization in Environmental Health and Planning, University of California, Irvine. 32 years of experience in environmental and transportation planning. Contribution: Consultant Environmental Project Manager and conducted quality control and quality assurance review of the technical studies and the MND.

Villanueva, Ryan, Senior Biologist, B.S. in Biology, B.A. in Environmental Studies, University of California, Santa Cruz. 15 years of experience in biological resources and natural resource management which includes the preparation of Jurisdictional Delineations, Natural Environment Studies, and biological resources surveys. Contribution: Primary author of the NES, BA and responses to the CEQA checklist biological resource questions.

Virgil, Chantik, Senior Word Processor. 14 years of experience word processing and formatting reports, correspondence, proposals, Statements of Qualifications, resumes, and other documents from the Environmental Planning, Biological Resources, Cultural Resources, Traffic, and Administrative groups at the LSA Irvine office as well as LSA's other offices, as needed.

5.3 Advanced Civil Technologies

Cohoe, Karen, Principal/Design Engineer IV. M.S. in Civil Engineering, University of California, Irvine. 16 years of experience in civil engineering, floodplain study and transportation infrastructure projects. Contribution: Task Order Manager and conducted quality control and quality assurance review of the Location Hydraulic Study.

Kirkup, Kaitlyn, Staff Engineer. B.S. in Environmental Engineering, San Diego State University. 4 years of experience in civil engineering and transportation infrastructure projects. Contribution: Staff Engineer and collected data, prepared floodplain exhibits.

Lee, David, Staff Engineer. B.S. in Civil Engineering, University of California, Irvine. 3 years of experience in civil engineering and transportation infrastructure projects. Contribution: Staff Engineer and prepared the Location Hydraulic Study and conducted hydraulic modeling.

Nguyen, David, Staff Engineer. B.S. in Civil Engineering, Cal State University, Fullerton. 4 years of experience in civil engineering and public works projects. Contribution: Staff Engineer and prepared the Location Hydraulic Study and conducted hydraulic modeling.

Shen, David, Design Engineer III – Water Quality/Floodplain Specialist. M.S. in Civil and Environmental Engineering, Cornell University.18 years of experience in civil engineering projects, hydrology/hydraulics reports, water quality reports and floodplain study. Contribution: Project Engineer and coordinated with FEMA and Caltrans Hydraulics, prepared the Location Hydraulics Study.

Ting, Kimberly, Staff Engineer. B.S. in Civil Engineering, University of California, Irvine. 2 years of experience in civil engineering and transportation infrastructure projects. Contribution: Staff Engineer and collected data, prepared floodplain exhibit

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Chapter 6 – Distribution List

The following entities have been notified that this Draft Initial Study (IS) is available for public review. In addition, all property owners and occupants, who are relevant to the project area, will be provided the Notice of the Availability (NOA) of the Draft IS.

6.1 Federal Agencies

U.S. Fish & Wildlife Service
Scott Sobiech, Field Supervisor
2177 Salk Avenue, Suite 250
Carlsbad, CA 92008

U.S. Army Corps of Engineers
Mark Cohen, Chief Operations Division
915 Wilshire Blvd Ste 1101
Los Angeles, CA 9001

6.2 State Agencies

California State Lands Commission
Southern California & Bay Area
Kenneth Foster, Public Land Manager
Kenneth.Foster@slc.ca.gov
100 Howe avenue, Suite 100
South Sacramento, CA 95825

California State Clearinghouse
Office of Planning and Research
1400 Tenth Street
Sacramento, CA 95814
P.O. Box 3044
Sacramento, CA 95812-3044
state.clearinghouse@opr.ca.gov

California State Parks and Recreation
Orange Coast District
3030 Avenida del Presidente
San Clemente, CA 92672-4433

California Coastal Commission
Shannon Fiala, Coastal Program Manager
301 E. Ocean Blvd, Suite 300
Long Beach, CA 90802
SouthCoast@coastal.ca.gov

California Department of Fish and Wildlife
Ed Pert, Regional Manager
South Coast Region (Region 5)
3883 Ruffin Road
San Diego, CA 92123

California Coastal Commission
Jordan Sanchez, District Analyst
301 E. Ocean Blvd, Suite 300
Long Beach, CA 90802
SouthCoast@coastal.ca.gov

California Department of Fish and Wildlife
Simona Altman, Sr Environmental Scientist
South Coast Region (Region 5)
3883 Ruffin Road Road
San Diego, CA 92123
simona.altman@wildlife.ca.gov

California Highway Patrol
13200 Goldenwest Street
Westminster, CA 92683

6.3 Regional Agencies

South Coast Air Quality Management District
Debra Ashby
21865 Copley Drive
Diamond Bar, CA 91765
dashby@aqmd.gov

Santa Ana Regional Water Quality Control Board
Hope Smythe, Ombudsman
3737 Main St. Ste 500
Riverside, CA 92501-3348
santana@waterboards.ca.gov

Department of Toxic Substance Control
Perry Myers, P.E., Project Manager
Engineering & Special Office Projects Office
8800 Cal Center Drive
Sacramento, CA 95826

Orange County Flood Control District (OCFCD)
Orange County Public Works, Development Services/Planning
Cindy Salazar, Senior Planner
300 N. Flower Street
Santa Ana, CA 92703
Cindy.Salazar@ocpw.ocgov.com

6.4 Local Agencies

City of Huntington Beach
Community Development Department
Hayden Beckman, Senior Planner
2000 Main Street
Huntington Beach, CA 92648
Hayden.Beckman@surfcity-hb.org

City of Huntington Beach
Public Works Department
Darren Sam, Senior Traffic Engineer
2000 Main Street
Huntington Beach, CA 92648
Darren.Sam@surfcity-hb.org

County of Orange
OC Development Services, Land Development
601 North Ross Street
Santa Ana, CA 92701

Orange County Clerk-Recorder
County Administration South Building
601 N. Ross Street
Santa Ana, CA 92701

City of Seal Beach
City Administration Building
211 8th Street
Seal Beach, CA 90740

Orange County Transportation Authority
Fernando Chavarria, Manager of Public Outreach
550 S. Main Street
Orange, CA 92868
P.O. Box 14184
Orange, CA 92863-1584
fchavarria@octa.net

Orange County Fire Authority
1 Fire Authority Road
Irvine, CA 92602

City of Huntington Beach Fire Department
2000 Main Street
Huntington Beach, CA 92648
Fire.department@surfcity-hb.org

City of Huntington Beach Police Department
2000 Main Street
Huntington Beach, CA 92648
hbpdinfo@hbdp.org

6.5 Libraries

Huntington Beach Central Library
7111 Talbert Ave
Huntington Beach, CA 92648
library@hbpl.org

6.6 Federal Legislators

United States Senate
Dianne Feinstein, Member
11111 Santa Monica Blvd., Suite 915
Los Angeles, CA 90025-3343

United States Senate
Alex Padilla, Member
11845 West Olympic Blvd, Suite 1250W
Los Angeles, CA 90064
5011 Street, Suite 7-800
Sacramento, CA 95814

48th Congressional District
Michelle Steel, Member
17011 Beach Boulevard, Suite 570
Huntington Beach, CA 92647

6.7 State Legislators

34th Assembly District
Thomas Umberg, Member
1000 E. Santa Ana Blvd., Ste. 220B
Santa Ana, CA 92701
Christy.Le@sec.ca.gov

74th Assembly District
Cottie Petrie-Norris, Member
19712 MacArthur Boulevard
Irvine, CA 92612
Alexander.kim@asm.ca.gov
Robbie.LaBounty@asm.ca.gov

37th Senate District
Dave Min
940 South Coast Drive, Suite 185
Costa Mesa, CA 92626
Kelly.Jones@sen.ca.gov

6.8 Local Elected Officials

Huntington Beach City Council
Kim Carr, Mayor
2000 Main Street,
Huntington Beach, CA 92648
Kim.Carr@surfcity-hb.org
CFikes@surfcity-hb.org

Erik Peterson, Council Member
2000 Main Street,
Huntington Beach, CA 92648
erik.peterson@surfcity-hb.org

Dan Kalmick, Council Member
2000 Main Street,
Huntington Beach, CA 92648
Dan.Kalmick@surfcity-hb.org

Barbara Delgleize, Mayor Pro Tem
2000 Main Street,
Huntington Beach, CA 92648
barbara.delgleize@surfcity-hb.org

Mike Posey, Council Member
2000 Main Street,
Huntington Beach, CA 92648
mike.posey@surfcity-hb.org

Natalie Moser, Council Member
2000 Main Street,
Huntington Beach, CA 92648
Natalie.Moser@surfcity-hb.org

Orange County Board of Supervisors

2nd District
Katrina Foley
Hall of Administration
333 W. Santa Ana Blvd.
Santa Ana, CA 92701
Katrina.Foley@ocgov.com

6.9 Interested Groups, Organizations, Utilities, Services, Businesses, and Individuals

Huntington Beach Wetlands Conservancy
21900 PCH (corner of PCH and Newland)
Huntington Beach, CA 92646
PO Box 5903
Huntington Beach, CA 92615
info@hbwetlands.org

Bolsa Chica Conservancy
3842 Warner Ave
Huntington Beach, CA 92649
info@bolsachica.org

Bolsa Chica Land Trust
Jennifer Thomas, President
5200 Warner Ave, Suite 108
Huntington Beach, CA 92649
info@BCLandTrust.org

Amigos de Bolsa Chica
PO Box 1563
Huntington Beach, CA 92647
Info@amigosdebolsachica.org

Orange County Business Council
2 Park Plaza Suite 100
Irvine, CA 92614

Orange County Bicycle Coalition
Bill Sellin
2400 Calle Monte Carlo
San Clemente, CA 92672

Orange Coast Velo
P.O. Box 15
Huntington Beach, CA 92648
info@ocvelo.com

Bicycle Club of Irvine
P.O. Box 50206
Irvine, CA 92619-0206
info@bikeirvine.org

AT&T California
1265 N. Van Buren Street
Anaheim, CA 92807

Metropolitan Water District, Orange County
Attn: Substructures Team/MWD
Environmental Planning
700 N. Alameda St
Los Angeles, CA 90012
ep@mwdh2o.com

Orange County Sanitation District
P.O Box 8127
Fountain Valley, CA 92728
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Appendix A - Section 4(f)

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PRELIMINARY SECTION 4(F) DE MINIMIS FINDING

State Route 1 Bike Lane Facility Improvements

State California Department of Transportation

12-0S140_SR-1 (PM 21.5-31.1)

The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried out by the California Department of Transportation (Caltrans) under its assumption of responsibility pursuant to 23 United States Code (USC) 327.

October 2021

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1.1 INTRODUCTION

The purpose of this report is to describe the potential impacts on public resources protected under Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 USC 303, that may be associated with the proposed State Route 1 Class II Bike Lanes Project. The project is proposed by the California Department of Transportation – District 12 Orange County and would receive funding from the State Highway Operational and Protection Program, which are funds from the U.S. Department of Transportation, Federal Highway Administration (FHWA), as administered by the California Department of Transportation (Caltrans); therefore, documentation of compliance with Section 4(f) is required.

Section 4(f) declares that

> *"[I]t is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."*
>
> *The Secretary [of Transportation] may approve a transportation program or project…requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance – as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site – only if:*
>
> - *There is no prudent and feasible alternative to using that land; and*
> - *The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.*

Section 4(f) further requires consultation with the Department of the Interior and, as appropriate, the involved offices of the Department of Agriculture and the Department of Housing and Urban Development, in developing transportation projects and programs that use lands protected by Section 4(f).

The Safe, Accountable, Flexible, Efficient Transportation Equity Act (SAFETEA), a federal transportation reauthorization bill signed into law in 2005, simplified the procedures for projects that would have de minimis impacts on Section 4(f) properties. An analysis is not required, and the Section 4(f) evaluation is complete once it is determine that the use of a Section 4(f) property would result in de minimis impacts. The definition of a de minimis impact, as set forth is 23 Code of Federal Regulation (CFR) §774.17, is as follows:

> *For parks, recreation areas, and wildlife and waterfowl refuges, a de minimis impact is one that will not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f).*

Responsibility for compliance with Section 4(f) has been assigned to Caltrans pursuant to the National Environmental Policy Act (NEPA) (23 USC 327) and CE Assignment (23 USC 326) Memorandum of Understanding (MOU).

1.2 SECTION 4(F) DE MINIMIS DETERMINATION(S)

A de minimis impact to a Section 4(f) resource is a nominal impact that would not be adverse. De minimis impacts to a historic property under Section 4(f) would be either no impact to the property or a "no adverse effect" finding under 36 CFR Part 800. For other Section 4(f) protected resources including publicly owned parks, recreation areas, and wildlife and waterfowl refuges, de minimis impacts are defined when the transportation use of the Section 4(f) resource, together with any impact avoidance, minimization, and mitigation or enhancement measures incorporated into the project, does not adversely affect the activities, features, or attributes of the Section 4(f) resource. To reach a de minimis finding, the official(s) with jurisdiction over the Section 4(f) resource must provide written concurrence that the project would not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f). The public must be afforded the opportunity to review and comment on the effects of the project on the identified Section 4(f) resource(s).

1.3 PROPOSED ACTION

1.3.1 Project Purpose and Need

The purpose of this project originated from the Bicyclist Safety Improvement Monitoring Program which identified and addressed bicyclist-involved high collision concentration locations and corridors with the long-term goal of substantially reducing bicyclist fatalities and serious injuries on the California State Highway System. Caltrans HQ initiated Traffic Safety investigations in late 2018, which concluded a higher than state average incidents involving cyclists at various locations along State Route 1 in the cities of Newport Beach, Huntington Beach, and Seal Beach, California. The purpose of this proposed safety project is to reduce vehicle versus bicyclist incidents by proposing a comprehensive and continuous Class 2 bike lane along State Route 1 from the Santa Ana River to Anderson Street in Huntington Beach, California.

1.3.2 Project Description

The California Department of Transportation (Caltrans) proposes a safety improvement project on State Route 1 (SR-1) between the Santa Ana River Bridge (PM 21.5) and Anderson Street (PM 31.1) in the City of Huntington Beach (City), in the County of Orange. The project proposes to add a comprehensive Class II bike lane in both directions along SR-1 within the stated limits to move towards Caltrans' Complete Streets directive. Additional proposed safety elements for bicyclists are widening of right-turn pockets, widening of existing shoulders, and reducing median island widths to accommodate bike lane treatments; constructing new sand wall along bike lanes; replacing and refreshing lane and shoulder striping; implementing bicyclist detection sensors at signalized intersections; upgrading curb side grated inlets to be bike-rated; and installing signage. Other elements proposed include upgraded guardrail at spot locations. There are 2 alternatives, Build and No Build Alternatives.

The Build Alternative proposes to address bicyclist safety throughout the corridor by introducing various improvements involving new delineation, signage, and other roadway modifications.

- Install a continuous Class II bike lane in both directions of SR-1 within project limits. These improvements will provide bicyclists riding on the highway with more continuity in using designated bike travelled ways. Accommodation of new bike lanes and routes will require

modifying delineation, signage, and existing roadway sections (e.g. reducing existing raised median width, widening existing roadway section at spot locations).

- Widen right-turn pockets on NB SR-1 at three intersections (SR-1 and Brookhurst Street, SR-1 and Magnolia Street and SR-1 and Warner Avenue) to accommodate new bike lane treatments. Proposed bike lane treatments will further improve the continuity for cyclists using bike lane facilities on SR-1, as well as improve safety at the following major intersections:
    - Warner Avenue; Goldenwest Street; Huntington Street; Twin Dolphin Drive; Beach Boulevard; Magnolia Street; and Brookhurst Street

  Widening at these intersections will require right-of-way (ROW) acquisitions involving property owned by California State Lands Commission (CSLC) and Huntington Beach Wetlands Conservancy.
- Install bike detection sensors at signalized intersections within the project limit. This addition falls under the Complete Streets initiative in providing bicyclists with an improved experience in using state highway facilities.
- Relocate traffic signal poles and reconstruct Americans with Disabilities Act (ADA) facilities at locations affected by the Class II bike lane improvements. The following locations that will require further reconfiguration as a result of the bike facility improvements.
    - **Southeast curb return of SR-1 and Warner Avenue intersection.** Curb ramp reconstruction will be required at this intersection as a result of the proposed bike lane treatment and widening will be required at this intersection;
    - **Southwest curb return of SR-1 and Warner Avenue intersection.** Curb ramp and sidewalk reconstruction, as well as traffic signal and lighting pole relocations to accommodate installation of buffered Class II bike lane in SB SR-1 direction;
    - **Southeast curb return of SR-1 and Magnolia Street intersection**. Curb ramp and sidewalk reconstruction, as well as traffic signal and lighting pole relocations as a result of the proposed bike lane treatment and widening.
    - **Southeast curb return of SR-1 and Brookhurst Street intersection.** Curb ramp and sidewalk reconstruction, as well as traffic signal and lighting pole relocations will be required at this intersection as a result of the proposed bike lane treatment and widening.
- Refresh bike lane delineations where needed and added signage. In addition to the striping, marking, and signage accompanying the Class II bike lanes, this project proposes safety measures through enhancing visibility for bike facilities on SR-1. Proposed improvements include green bike-lane treatment areas between through-lane and right-turn-lanes as mentioned previously, green merging zones to identify potential areas of conflict. At high speed segments of SR-1, there is proposed green block spacing on bike lanes to further promote visibility for bicyclists; “Emergency Parking Only” signage is also to be added in these segments to discourage illegal parking that would compromise the proposed bike facilities.
- Other safety elements proposed include upgraded bike-friendly grates for curb side inlets, high visibility crosswalks at heavily used pedestrian crossings from Anderson Street to Santa Ana River Bridge, and guardrail upgrade at the Bolsa Chica Ecological Reserve to meet current standards.
- Existing sand deposits along Beach Boulevard to Brookhurst Street and Warner Avenue to Seapoint Street will be cleaned up to prevent accumulation of sand and debris onto the roadway that may interfere with the movement of bicyclists on SB SR-1.

- Install two additional traffic census stations at the intersection of SR-1 at Goldenwest Street and SR-1 at Warner Avenue.

Design Variation – Concrete Median Barrier

The purpose of Design Variation is to conform with Caltrans Safety Standards as they relate to separating opposing vehicular travel in high speed zones and provide a safety feature to reduce the potential for vehicular traffic crossing over to oncoming traffic. The stretch of highway along SR-1 has a posted speed limit of 60 mph between Seapoint Street and Warner Avenue. Design Variation includes the option to install a Type 60M concrete barrier (approximately 42 in in height with total width of approximately 19 in) between Seapoint Street to Warner Avenue. The Type 60M concrete barrier would follow Caltrans Standard (RSP A76A) and will stand 3' in height with a width of 2'. As a result of Design Variation, 450 sqft of PE will no longer be required and the TCE will be reduced from 2,200 sqft to 1250 sqft.

1.4 APPLICABILITY OF SECTION 4(F)

This section of the document discusses *de minimis* impact determinations under Section 4(f). Section 6009(a) of SAFETEA-LU amended Section 4(f) legislation at 23 United States Code (USC) 138 and 49 USC 303 to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). This amendment provides that once the U.S. Department of Transportation (USDOT) determines that a transportation use of Section 4(f) property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a *de minimis* impact on that property, an analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete. FHWA's final rule on Section 4(f) *de minimis* findings is codified in 23 Code of Federal Regulations (CFR) 774.3 and CFR 774.17.

Responsibility for compliance with Section 4(f) has been assigned to the Department pursuant to 23 USC 326 and 327, including *de minimis* impact determinations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action.

This section describes and analyzes how the project would affect the Bolsa Chica Ecological Reserve, a Section 4(f) resource. The analysis determines whether any permanent or temporary occupation of a property would occur and whether the proximity of the project would cause any access disruption, noise, vibration, or aesthetic effects that would substantially impair the features or attributes that qualify the resource for protection under Section 4(f).

1.4.1 Bolsa Chica Ecological Reserve

The Bolsa Chica Ecological Reserve has been identified as a Section 4(f) resource owned by the California State Lands Commission in conjunction with the California Department of Fish and Wildlife (CDFW) as the managing state agency; and is the only Section 4(f) resource.

1.4.1.1 Description of Activities, Features, and Attributes

The Bolsa Chica Ecological Reserve (Reserve) is an approximately 1,300-acre coastal estuary reserve natural public land, owned and governed by the state of California located in the Orange County with local, state, and regional importance; established to protect and preserve wetland

habitat. Boundaries of the reserve are Warner Avenue to the north, Seapoint Avenue to the south, State Route 1 (SR-1) to the west, and residential developments to the east. The reserve has been designated by the California Department of Fish and Wildlife (CDFW) to protect a coastal wetland, with migratory and resident threatened and endangered species of wildlife. Habitats include open water, mudflats, salt marsh, coastal dunes, seabird nesting islands, riparian, and freshwater marsh; and home to year-round residents and thousands of birds using the Reserve as a rest stop during their long migrations along the Pacific flyway from their nesting grounds in the Arctic to their wintering grounds in South America.

Various public activities are allowed at the reserve which include wildlife viewing, hiking, photography, fishing, and nature tours. The Reserve includes an approximate 4-mile network of public hiking trails open from 6am to 8pm Monday through Sunday, include various scenic overlooks, restrooms, and interpretive maps. An interpretive center operated by the Bolsa Chica Conservancy is located at the north end of the reserve at Warner and provides public parking for visitors. Additional parking is provided along SR-1 across from the Bolsa Chica State Beach. Free docent-led tours are provided by three non-government organizations: Amigos de Bolsa Chica, Bolsa Chica Conservancy and Bolsa Chica Land Trust. Each parking lot features educational interpretive signs and trail information.

1.4.1.2 Bolsa Chica Ecological Reserve - Proposed "Use"

Project construction activities would occur immediately adjacent to and within the Bolsa Chica Ecological Reserve and will require temporary access within the Reserve to build the Class II bike lane along northbound SR-1 and provide a standard geometric right turn lane at the northbound SR-1 to eastbound Warner Avenue transition.

The proposed project will require approximately 1,250 sqft of Temporary Construction Easement from the Bolsa Chica Ecological Reserve (Attachment A – Bolsa Chica Wetland Temporary Construction Easement Figure). The temporary construction easement would not change the underlying fee ownership of the property and duration of occupancy will be temporary and required for the construction of the Class II bike lane, right turn pocket, and revegetation efforts. The estimated duration of construction for work within and adjacent to the Bolsa Chica Ecological Reserve is approximately 10 working days. Staging areas for vehicle parking and equipment storage will be located within the existing roadway and in previously disturbed areas; and access to the Reserve, the northern reserve parking lot, and the Bolsa Chica Wetland Conservancy Interpretive Center will be maintained throughout construction. Advance signage will be provided along SR-1, Warner Avenue, and along adjacent streets during construction.

Impacts to vegetation within the Reserve is anticipated, however, to offset impacts from the temporary construction easement, minimization, avoidance, and mitigation is proposed and further defined in Section 1.6. Impacts within the Reserve are expected to be minimal and construction will not interfere with the use of, or the activities, features, and attributes of the Reserve as a whole. The affected portions of the Reserve that are within the project limits will be fully restored and the resource returned to its existing condition and revegetation of the temporarily disturbed area would occur where feasible.

1.4.1.3 Bolsa Chica Ecological Reserve – Preliminary "De Minimis Finding"

As discussed above the proposed project would result in 1,250 sqft of temporary construction easement (TCE) adjacent to the Department Right of Way within the Bolsa Chica Ecological

Reserve. The parcel impacted by the temporary construction easement belongs to the California State Lands Commission and managed by the California Department of Fish and Wildlife with several non-profit organizations assisting in the future ecological viability of the wetlands. The biological ecology within the 1,250 sqft TCE contains areas classified as goldenbush scrub. This area although predominately goldenbush scrub, has a noticeable level of weedy plants including sea rocket (*Cakile maritima*) and black mustard (*Brassica nigra*). A disturbed variety of this community occurs within the biological study area and has been altered in some way or contains a higher amount of non-native vegetation cover. A total of up to 0.06 acre of permanent and 0.03 acre of temporary impact to goldenbush scrub is proposed as part of the project associated with paving activities and staging; therefore, compensatory mitigation is required as it is considered an environmentally sensitive habitat area (ESHA) under the California Coastal Act. Temporary impacts to Goldenbush scrub will be treated the same as other permanent impacts to ESHA.

Impacted areas will be restored to and near preconstruction conditions as practicable, therefore no substantial changes would be made to the park property and no adverse physical impacts would occur. Based on the measures proposed, the impacted areas will not adversely affect or diminish its functional use. Vehicular and pedestrian detours will be required during construction, however all recreational use and public access to the Bolsa Chica Ecological Reserve will be maintained throughout construction activities.

For traffic noise analysis purposes, within the Bolsa Chica Ecological Reserve, no sensitive receptors or frequent human use receptors are recognized within 100 feet of the vicinity of the proposed project. The projected noise level increase attributable to the proposed project on noise sensitive Section 4(f) activities such as recreation and picnic use is 0.4 dBA and thus “barely perceptible. Also, projected vibration levels are not anticipated to have a substantial impairment on recreational activities within the proposed area of acquisition because of the infrequent nature of the activities within that specific area.

Based on the above considerations, temporary use will not diminish the function of the Bolsa Chica Ecological Reserve and its associated facilities; therefore, there will be no impacts that adversely affect the recreational activities, features, or attributes that qualify the property for protection under Section 4(f). The avoidance, minimization, and mitigation measures discussed below would be implemented prior to, during, and post construction to ensure impacts to the Reserve are fully reciprocated. Based on this, a Preliminary De Minimis Determination has been made.

1.4.1.4 Bolsa Chica Ecological Reserve - Public Notice Process

This Preliminary Section 4(f) de minimis Finding and Notice of Intent to Adopt a de minimis Finding will be publicly circulated for review to solicit comments for a 30-day public review period. It will be made available to the public and circulated to regional and local agencies and all stakeholders to provide opportunity for their comments. The availability of the Preliminary Section 4(f) de minimis Finding will be published in a newspaper of local circulation (including Orange County Register) and direct mailers will be sent. In addition, the document will be available at the City of Huntington Beach Central Library, Huntington Beach City Hall and the Caltrans District 12 office, and also at the following url: https://www.dot.ca.gov/caltrans-near-me/district-12/district-12-programs/district-12-environmental/sr-1-bike-lane-project

1.4.1.5 Bolsa Chica Ecological Reserve - Avoidance, Minimization and Mitigation Measures/Environmental Commitments Record (ECR)

The following AMMs are needed to make this a 'De minimis Finding". The project contains several standardized project measures that are employed on most, if not all, Caltrans projects. Standardized measures are indicated as Project Features (PF). For example, a Project Feature applicable to air quality would be titled and listed as PF-AQ-1, etc. Other measures listed not identified as (PF) are minimization measures.

PF-AQ-1: The construction contractor must comply with the Caltrans' Standard Specifications in Section 14-9 (2018) for reducing impacts from the construction activities. Section 14-9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances. The proposed project would comply with SCAQMD Rule 403 requiring the implementation of best available dust control measures during active operations capable of generating fugitive dust.

PF-TRA-1: A Transportation Management Plan (TMP) shall be included in the design plans for implementation by the contractor prior to and during construction of any improvements. The TMP shall consist of prior notices, adequate sign posting, detours, phased construction, and temporary driveways where necessary. The TMP shall specify implementation timing of each plan element (e.g., prior notices, sign posting, detours) as determined appropriate by Caltrans. Adequate local emergency access shall always be provided to adjacent uses. Proper detours and warning signs shall be established to ensure public safety. The TMP shall be devised so that construction shall not interfere with any emergency response or evacuation plans. Construction activities shall proceed in a timely manner to reduce impacts

PF-BIO-1: **Delineation of Environmentally Sensitive Areas.** Prior to project activities, highly visible barriers (e.g., orange construction fencing) will be installed along the boundaries of the project footprint/equipment access routes to designate Environmentally Sensitive Areas (ESAs) that are to be preserved. This will include ESA fencing along jurisdictional aquatic resources located at the intersections of SR-1 at Warner Avenue, Magnolia Street, and Brookhurst Street. No project activity of any type will be permitted within these ESAs. In addition, heavy equipment, including motor vehicles, will not be allowed to operate within the ESAs. All construction equipment will be operated in a manner to prevent accidental damage to ESAs. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within these protected zones.

PF-BIO-2: **Erosion Control Material Sourcing.** Only certified weed-free straw, mulch, and/or fiber rolls will be used for erosion control. Invasive species will not be used in any landscaping palettes for the project.

PF-BIO-3: **Equipment Staging Best Management Practices (BMPs)**. All equipment maintenance, staging, and dispensing of fuel, oil, or any other such activities will occur in developed or designated non-sensitive upland areas. The designated upland areas will be located in such a manner as to prevent any loose soil or spill runoff from entering jurisdictional waterways or adjacent sensitive vegetation communities. All construction materials will be removed from worksites following completion of project activities.

PF-BIO-4: **Water Quality BMPs**. In order to avoid impacts to water quality during construction, stormwater and erosion control BMPs are recommended to prevent loose soil or pollutants associated with the project from inadvertently entering the aquatic resources located within and adjacent to the BSA. Example BMPs include silt fencing and straw wattle placed in such a manner that they are able to catch or filter sediment or other construction-related debris to prevent it from eroding into the nearby drainage channels.

PF-BIO-5: **Avoidance of Breeding and Nesting Bird Season.** Project activities will occur outside the nesting season (February 1– September 30) to the fullest practicable extent.

PF-BIO-6: **Trash and Waste Removal.** During construction, trash and food waste will be removed from work sites on a daily basis to avoid the attraction of predators that prey on sensitive wildlife species.

PF-HAZ-2: During construction, the construction contractor will monitor soil excavation for visible soil staining, odor, and the possible presence of unknown hazardous material sources. If hazardous material contamination or sources are suspected or identified during project construction activities, the construction contractor will be required to cease work in the area and to have an environmental professional evaluate the soils and materials to determine the appropriate course of action required, consistent with the Unknown Hazards Procedures in Chapter 7 of the Caltrans' Construction Manual.

PF-REC-1: The property used for temporary construction easement will be restored to a condition at least as good as it was prior to easement being granted.

PF-WQ-1: The project will comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the State of California Department of Transportation, Order No. 2012-0011-DWQ, NPDES No. CAS000003 and any subsequent permits in effect at the time of construction.

PF-WQ-2: A Water Pollution Control Program (WPCP) will be prepared and implemented to address all construction-related activities, equipment, and materials that have the potential impact water quality. The WPCP will identify the sources of pollutants that may affect the quality of storm water and include BMPs to control the pollutants, such as sediment control, catch basin inlet protection, construction materials management and non-storm water BMPs. All work must conform to the Construction Site BMP requirements specified in the latest edition of the Storm Water Quality Handbooks: Construction Site Best Management Practices Manual to control and minimize the impacts of construction and construction related activities, material and pollutants on the watershed. These include, but are not limited to temporary sediment control, temporary soil stabilization, scheduling, waste management, materials handling, and other non-storm water BMPs.

PF-WQ-3: Design Pollution Prevention Best Management Practices (BMPs) will be implemented such as preservation of existing vegetation, slope/ surface protection systems (permanent soil stabilization), concentrated flow conveyance systems such as ditches, berms, dikes and swales, overside drains, flared end sections, and outlet protection/ velocity dissipation devices.

PF-WQ-4: Construction site dewatering discharges must comply with the General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (DE MINIMUS) Threat to Water Quality (Order No. R8-2020-0006, NPDES No.

CAG998001) and any subsequent updates to the permit at the time of construction. This Permit addresses temporary dewatering operations during construction. Dewatering BMPs will be used to control sediment and pollutants, and the discharges must comply with the WDRs issued by the Santa Ana RWQCB.

PF-N-1: During construction of the Project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Noise associated with construction is controlled by 2018 Caltrans Standard Specification Section 14-8.02, "Noise Control," which states the following: Control and monitor noise resulting from work activities. Do not exceed 86 dBA Lmax at 50 feet from the job site from 9 p.m. to 6 a.m.

BIO-1: **Invasive Species Control.** All construction equipment accessing unpaved areas will be cleaned with water to remove dirt, seeds, vegetative material, or other debris that could contain or hold seeds of noxious weeds before arriving to and leaving the project site.

BIO-2: **Pre-Construction Clearance Surveys**. A qualified biologist will conduct pre-construction surveys to confirm the absence of sensitive biological resources within the work areas. The preconstruction surveys will take place no more than 24 hours prior to commencement of work activities. If listed species are observed within the work area (or areas potentially indirectly affected by project activities as determined by the qualified biologist) and the work cannot be postponed until the species is no longer present, the California Department of Transportation (Caltrans) will obtain written approval from the United States Fish and Wildlife Service (USFWS) or the California Department of Fish and Wildlife (CDFW), as applicable, prior to completing project work at these locations.

BIO-3: **Biological Monitoring**. A qualified biologist will monitor project activities with sensitive natural communities for the duration of work activities to ensure that practicable measures are being employed to avoid and minimize incidental disturbance to habitat and covered species inside and outside the project footprint.

BIO-4: **On-Site Training**. All personnel involved in the on-site project construction will be required to participate in a pre-construction environmental training program to understand the avoidance and minimization measures and environmental regulations pertinent to the project.

BIO-5: **Aquatic Resource Protection.** Prior to project activities adjacent to jurisdictional aquatic resources located at the intersections of SR-1 at Warner Avenue, Magnolia Street, and Brookhurst Street, a barrier will be installed between the project footprint and adjacent jurisdictional aquatic resources. The barrier will be constructed of materials to prevent incidental soil discharges into adjacent jurisdictional aquatic resources such as silt fence, plywood, or similar. The barrier will be installed downslope of the ESA fencing as noted in Measure BIO-1. Installation and removal of the barrier will be monitored by a qualified biologist to ensure the barrier's installation/removal does not cause incidental discharge of soils or other materials into the adjacent jurisdictional aquatic resources. The barrier will be maintained in place at each of the three locations noted until project activities have been completed at each of the respective project footprints.

BIO-6: **Pre-Construction Nesting Bird Survey**. If project activities with potential to indirectly disturb suitable avian nesting habitat within 500 feet (ft) of the work area would occur during the nesting season (as determined by a qualified biologist), a qualified biologist with experience in conducting breeding bird surveys will conduct a

nesting bird survey no more than 3 days prior to the initiation of project activities to detect the presence/ absence of migratory and resident bird species occurring in suitable nesting habitat. Project activities may begin no more than 3 days after the completion of the nesting bird survey in the absence of active bird nests. An additional nesting bird survey will be conducted if project activities fail to start within 3 days of the completion of the pre-construction nesting bird survey.

BIO-7: **Nesting Bird Exclusionary Buffers**. Should nesting birds be found during the pre-construction nesting bird survey, an exclusionary buffer will be established by the qualified biologist. This buffer will be clearly marked in the field by construction personnel under the guidance of the biologist, and construction will not be conducted in this zone until the biologist determines that the young have fledged or the nest is no longer active. Work may only occur during the breeding season if nesting bird surveys indicate the absence of any active nests within the work area. Without the written approval of the CDFW and/or the USFWS, no work will occur if listed or fully protected bird species are found to be actively nesting within 500 ft of the areas subject to construction activities.

BIO-8: **Night Work Lighting**. If night work (i.e., between dusk and dawn) is anticipated within 100 ft of structures where bat roosting is confirmed, night lighting will be used only in areas of active work, and focused on the direct area(s) of work and away from the culvert entrances to the greatest extent practicable.

BIO-CM-2: **Goldenbrush Scrub – Compensatory Mitigation**. There is a total of up to 0.05 acre of permanent and 0.03 acre of temporary impacts to goldenbush scrub proposed as part of the project associated with paving activities and staging; therefore, compensatory mitigation is required as it is considered an ESHA under the California Coastal Act. Goldenbush scrub temporarily impacted will be restored in place after the completion of project activities. As compensatory mitigation for permanently removed habitat, permanently removed habitat will be replaced (through off-site habitat restoration and/or conservation) at a minimum 1:1 ratio.

CZ-1: This project lies within the coastal zone. Construction or maintenance activities shall not commence until a coastal permit exemption determination or coastal development permit has been obtained from the California Coastal Commission, and/or the Certified Local Coastal Program agency(s) that hold jurisdiction. This should be completed during the PS&E phase for delivery projects.

CZ-2: Construction must be completed between Labor Day weekend and Memorial Day weekend to avoid impacts to coastal access during the high season.

CZ-3: Equipment/materials shall not be stored within unpaved areas.

1.4.1.6 Consultation and Coordination with the Official Jurisdiction and Concurrence Process

Caltrans has initiated consultation with the California State Lands Commission (SLC) and California Department of Fish and Game (CDFW) with regards to the characterization of effects of the project in the context of this Section 4(f) analysis, consistent with 49 USC 303(d)(3)(B). Caltrans sent a Preliminary Section 4(f) Resource Analysis coordination letter to the California State Lands Commission (agency with official jurisdiction) and the California Department of Fish and Wildlife on May 25, 2021. The Draft Environmental Document and Section 4(f) preliminary De Minimis Determination will be sent SLC and CDFW for a 30-day period for review and comment. After completion of the public review period and prior to the approval of the Categorical

Exclusion, a request will be sent to the SLC and CDFW for concurrence on this de minimis determination. This Section 4(f) De minimis documentation will be included as an attachment of NEPA Categorical Exclusion.

All letters referenced in this section are included in Attachment B (Consultation Correspondence).

1.5 RESOURCES EVALUATED RELATIVE TO THE REQUIREMENTS OF SECTION 4(F): NO-USE DETERMINATION(S)

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 United States Code (USC) 303, declares that "it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

Table 1 below discusses parks, recreational facilities, wildlife refuges, and historic properties found within or next to the project area within 0.25 mile of the project area that do not trigger Section 4(f) protection because: 1) they are not publicly owned, 2) they are not open to the public, 3) they are not eligible historic properties, or 4) the project does not permanently use the property and does not hinder the preservation of the property (See Attachment C – Section 4(f) Resources Map).

Table 1: Properties Subject to Section 4(f) within 0.25 mile of the Study Area

No	Property	Address	City	Facilities	Use
1	11th Street Beach Park	16884 SR-1, Huntington Beach	Huntington Beach, CA	Coastal access beach. Primary use is for launching kayaks and paddleboards.	No Use will occur
2	Sunset Beach Linear Park	N/A	Huntington Beach, CA	City public park with playground grass green belt, bike path restrooms and public parking.	No Use will occur
3	Sunset Beach	N/A	Huntington Beach, CA	Public beach for various beach activities that includes public restrooms, outdoor showers and a playground.	No Use will occur
4	Bolsa Chica State Beach	NA	Huntington Beach, CA	Public beach for various beach activities. Amenities include a visitor center, parking, fishing, volleyball courts, bonfire pits, Huntington Beach Pier, RV camping, picnic tables, public restrooms, outdoor showers, and the Huntington Beach	No Use will occur
5	Ron Pattinson Park	6200 Palm Ave.	Huntington Beach, CA	Public neighborhood park that includes a parking lot, playground, picnic shelter with tables, various picnic tables through the park and a	No Use will occur
6	Huntington City Beach	N/A	Huntington Beach, CA	Beach activities with parking, volleyball courts, bonfire pits, Huntington Beach Pier, RV camping, public restrooms, outdoor showers, and the Huntington Beach Bike Trail.	No Use will occur

No	Property	Address	City	Facilities	Use
7	Bluff Top Park	2201 SR-1, Huntington Beach, CA	Huntington Beach, CA	City park with walking path along the beach with park benches and picnic tables	No Use will occur
8	Huntington State Beach	21601 SR-1, Huntington Beach, CA	Huntington Beach, CA	Beach activities with parking, volleyball courts, bonfire pits, RV camping, surf fishing, picnic ramadas, basketball courts, barbecue grills, public restrooms, outdoor showers, and the Huntington	No Use will occur
9	Banning/ Magnolia Park	22012 Magnolia St.	Huntington Beach, CA	City owned minipark consisting of green space with several walkways.	No Use will occur
10	West Newport Beach	N/A	Newport Beach, CA	Beach activities with public parking and a multi-use sports complex.	No Use will occur
11	Santa Ana River Trail	N/A	Huntington Beach, CA	30-mile multi-use Class 1 trail.	No Use will occur

There will be no use of land from these properties under Section 4(f) (permanent incorporation of land from the property into the transportation facility), and there are no TCEs or other temporary occupancies within the boundaries of all the above mentioned in Table 1 under the Build Alternative.

1.5.1 Cultural Resources Relative to Section 4(f)

One cultural resource was identified within the 128.61-acre Area of Potential Effects (APE) as a result of a records search at the South Central Coastal Information Center (SCCIC); however, this resource was not actually recorded within Caltrans' right-of-way (ROW) and was incorrectly mapped as within the APE by the SCCIC. No archaeological cultural resources were identified in the APE as a result of the field survey. No input on tribal cultural resources was received as a result of Native American consultation.

In terms of proximity or constructive use impacts, no staging areas or vehicular access near these resources are proposed, no substantial short-term or long term visual impacts will occur, no adverse effects to water quality from construction activities area anticipated, project construction activities would not produce substantial operational air quality impacts, and no long-term substantial noise impacts are anticipated. Due to geographic distances, including intervening natural and built features, and because of the limited nature of construction activities, there would be no impacts that would rise to the level of substantial impairment. The properties listed above are Section 4(f) properties, but no "use" will occur. Therefore, the provisions and requirements for protection under Section 4(f) are not triggered.

ATTACHMENT A

(BOLSA CHICA WETLAND TEMPORARY CONSTRUCTION EASEMENT FIGURE)

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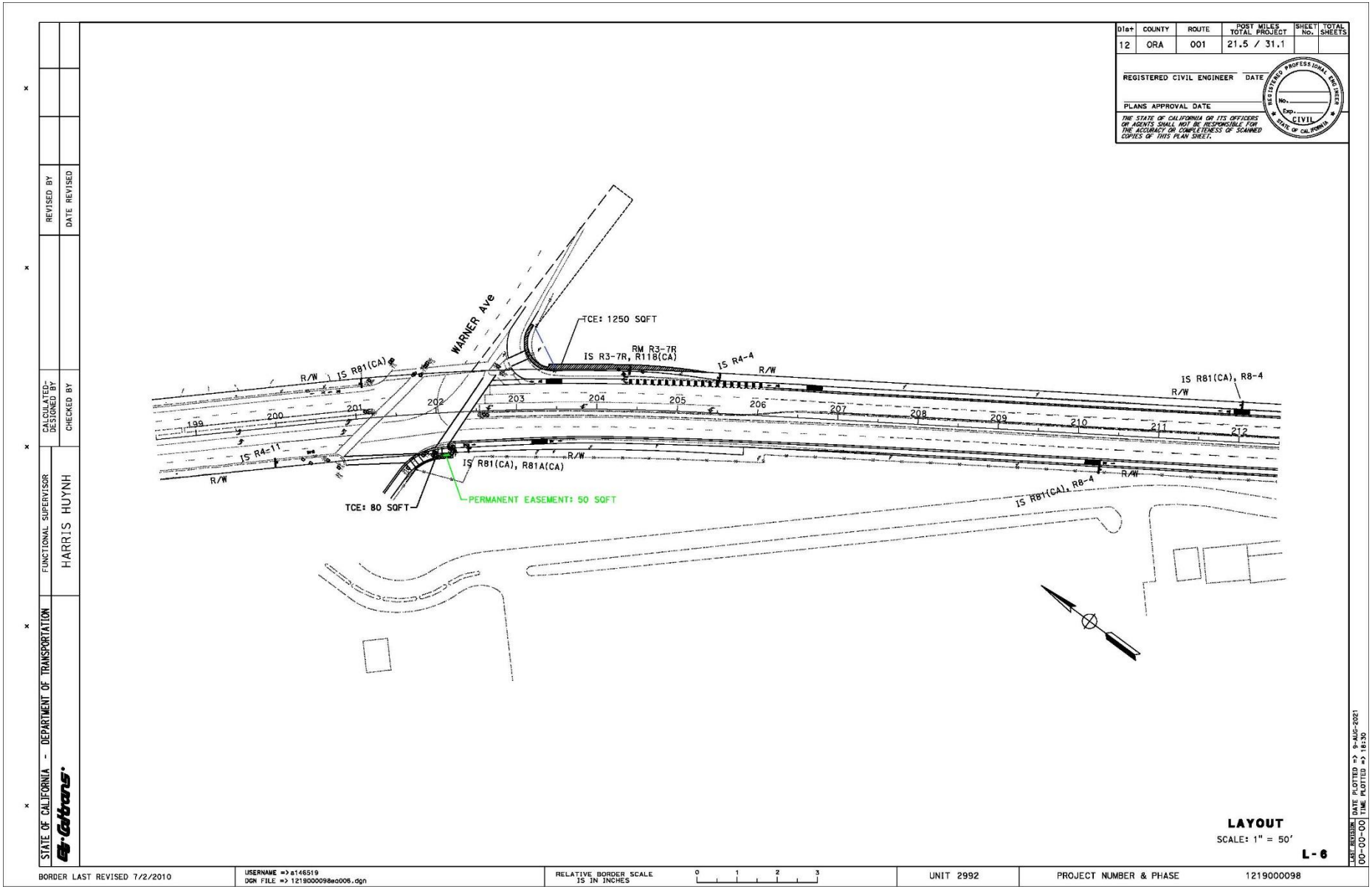
Dist
12
COUNTY
ORA
ROUTE
001
POST MILES TOTAL PROJECT
21.5 / 31.1
SHEET No.
TOTAL SHEETS
REGISTERED CIVIL ENGINEER
DATE
PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.
REGISTERED PROFESSIONAL ENGINEER
No.
EXP.
CIVIL
STATE OF CALIFORNIA
REVISED BY
DATE REVISED
CALCULATED-DESIGNED BY
CHECKED BY
FUNCTIONAL SUPERVISOR
HARRIS HUYNH
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
WARNER Ave
TCE: 1250 SQFT
RM R3-7R
IS R3-7R, R118(CA)
IS R4-4
R/W
IS R81(CA), R8-4
IS R4-11
IS R81(CA), R81A(CA)
TCE: 80 SQFT
PERMANENT EASEMENT: 50 SQFT
199
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211
212
LAYOUT
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L-6
LAST REVISION
DATE PLOTTED => 9-AUG-2021
00-00-00
TIME PLOTTED => 18:50
BORDER LAST REVISED 7/2/2010
USERNAME => a146519
DGN FILE => 1219000098ea006.dgn
RELATIVE BORDER SCALE IS IN INCHES
0 1 2 3
UNIT 2992
PROJECT NUMBER & PHASE
1219000098

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ATTACHMENT B

(CONSULTATION CORRESPONDENCE)

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STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 12
1750 EAST 4TH STREET, SUITE 100
SANTA ANA, CA 92705
PHONE (657) 328-6000
FAX (657) 328-6522
TTY 711
www.dot.ca.gov/caltrans-near-me/district12

Making Conservation a California Way of Life.

May 25, 2021

Ms. Nicole Dobroski
Chief of Environmental Planning and Management Division
California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento, CA 95825

Subject: State Route 1 Class II Bike Lane Facility Improvements Project – Section 4(f) Resource Coordination Letter

Dear Ms. Dobroski:

The California Department of Transportation (Caltrans), as the lead agency under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) [as assigned by the Federal Highway Administration (FHWA)] is in the process of preparing a CEQA Initial Study (IS) (with/proposed Mitigated Negative Declaration [MND]) and NEPA Categorical Exclusion (CE) for a Class II Bike Lane Facility Improvements Project (Project) along State Route 1 (SR-1) between post miles (PM 21.5/31.1) – Santa Ana River to Anderson Street within the City of Huntington Beach, County of Orange. (see Figure 1 - Project Vicinity Map). The purpose of this letter is to share information about the draft Preliminary Section 4(f) Resource Analysis process and start early dialogue/coordination efforts in hope to streamline the projects' environmental process while protecting and enhancing the environment and ultimately receiving Section 4(f) concurrence from the California State Lands Commission.

Since 2007, Caltrans has performed federal responsibilities for environmental decisions and approvals under NEPA for highway projects in California that have a federal nexus (i.e. receive federal funding). These responsibilities have been assigned to Caltrans by FHWA pursuant to two Memorandum of Understandings (MOU) signed by FHWA. The 23 USC 326 MOU allows Caltrans to approve 326 Categorical Exclusions (CEs); the 23 USC 327 MOU allows Caltrans to approve Environmental Assessments (EA) and Environmental Impact Statements (EIS), and Categorical Exclusions that cannot be approved as 326 CEs. As part of the

23 USC 327 MOU, Caltrans has also been assigned responsibility for compliance under 23 USC 138 and 49 U.S.C 303 as they pertain to Section 4(f) of The Department of Transportation Act (DOT Act) of 1966.

Section 4(f) declares that:

"[I]t is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

The Secretary [of Transportation] may approve a transportation program or project…requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance – as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site – only if:

- *There is no prudent and feasible alternative to using that land; and*
- *The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.*

The Project may receive federal funding and/or discretionary approvals through the U.S. Department of Transportation (i.e., FHWA); therefore, documentation of compliance with Section 4(f) is required. Section 4(f) of the federal Department of Transportation Act of 1966 (49 U.S.C. § 303), declares that "it is the policy of the United States government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

Project Description

Based on the Caltrans 2018 Bicyclist Safety Improvement Monitoring Program, spot locations and corridors along SR-1 within the project limits experienced high concentrations of bicyclist-involved collisions. To rectify, the Project was developed to address this safety issue and reduce bicyclist fatalities and serious injuries along SR-1.

The Project proposes to add Class II bike lanes and Class III bike routes in both directions along SR-1 within the stated limits to provide additional safety and move towards Caltrans' Complete Streets directive. Proposed safety elements

for bicyclists are widening of right-turn pockets, widening of existing shoulders, and reducing median island widths to accommodate bike lane treatments; constructing new sand wall along bike lanes; replacing and refreshing lane and shoulder striping; implementing bicyclist detection sensors at signalized intersections; upgrading curb side grated inlets to be bike-rated; and installing signage. Other elements proposed include upgraded guardrail at spot locations. There are 2 alternatives, Build and No Build Alternatives.

Potential Project Impacts

Project construction activities would occur immediately adjacent to and within the Bolsa Chica Ecological Reserve. Based on the current project design and information, the Project will potentially require a permanent easement (approximately 450 square feet [sqft]) and a temporary construction easement (TCE) (approximately 2,200 sqft) within the Reserve to construct the Class II bike lane along northbound SR-1 and provide a standard geometric right turn lane at the northbound SR-1 to eastbound Warner Avenue transition.

While the extent of project improvements are currently under review, and options to reduce the proposed permanent and temporary impacts to the Bolsa Chica Ecological Reserve currently underway; based on the current project design, permanent and temporary use will not diminish the function of the Bolsa Chica Ecological Reserve and its associated facilities; therefore, there will be no impacts that adversely affect the recreational activities, features, or attributes that qualify the property for protection under Section 4(f). As such, Caltrans has made a preliminary determination that permanent and temporary impacts to the Bolsa Chica Ecological Reserve will be considered *de minimis* per 49 U.S.C 303(d).

Based on the current project design, Caltrans District 12 has made a preliminary determination that impacts to 4(f) resources will not adversely affect the activities, features, and attributes that qualify the property for protection under the requirements of Section 4(f). Accordingly, a Preliminary Section 4(f) *de minimis* Analysis is currently being prepared by Caltrans. During the public review period of the Initial Study/CE (September 2021), and in accordance with 49 U.S.C 303(d), a public notice and an opportunity for public review and comment on Caltrans preliminary Section 4(f) *de minimis* determination will be provided. Caltrans will need your concurrence for the *de minimis* determination prior to finalizing the CE. Hence, upon completion of the public review period,

Ms. Nicole Dobroski
May 25, 2021
Page 4

Caltrans will send a follow-up letter to the public agency with ownership/jurisdiction over the Section 4(f) resource, which is the California State Lands Commission, asking for concurrence to the determination made of the resource. The Section 4(f) Analysis will be included as an attachment to the CE per FHWA and Caltrans guidelines.

If you have any questions about this letter, please contact Brian Liu, Associate Environmental Planner at (657) 328-6135, or I can be reached at (657) 328-6151.

Sincerely,

Smita Deshpande

SMITA DESHPANDE
Senior Environmental Planner
Division of Environmental Analysis

Enclosures
Figure – Project Area and Limits Map

c. Kyle Rice, California Department of Fish and Wildlife

Ms. Nicole Dobroski
May 25, 2021
Page 5

Figure – Project Area and Vicinity Map

Project Area and Vicinity Map

ATTACHMENT C

(SECTION 4(F) RESOUCES MAP)

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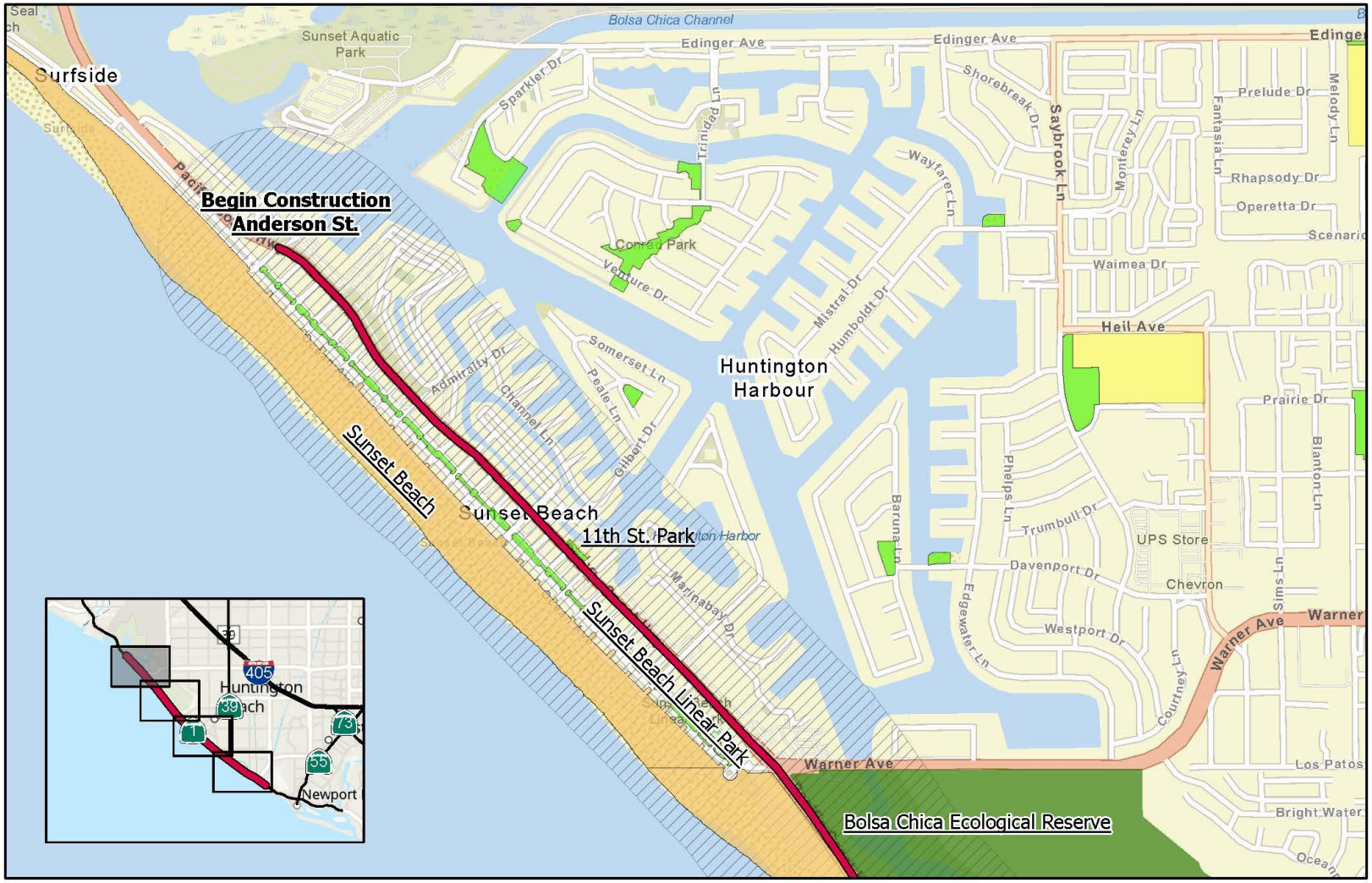
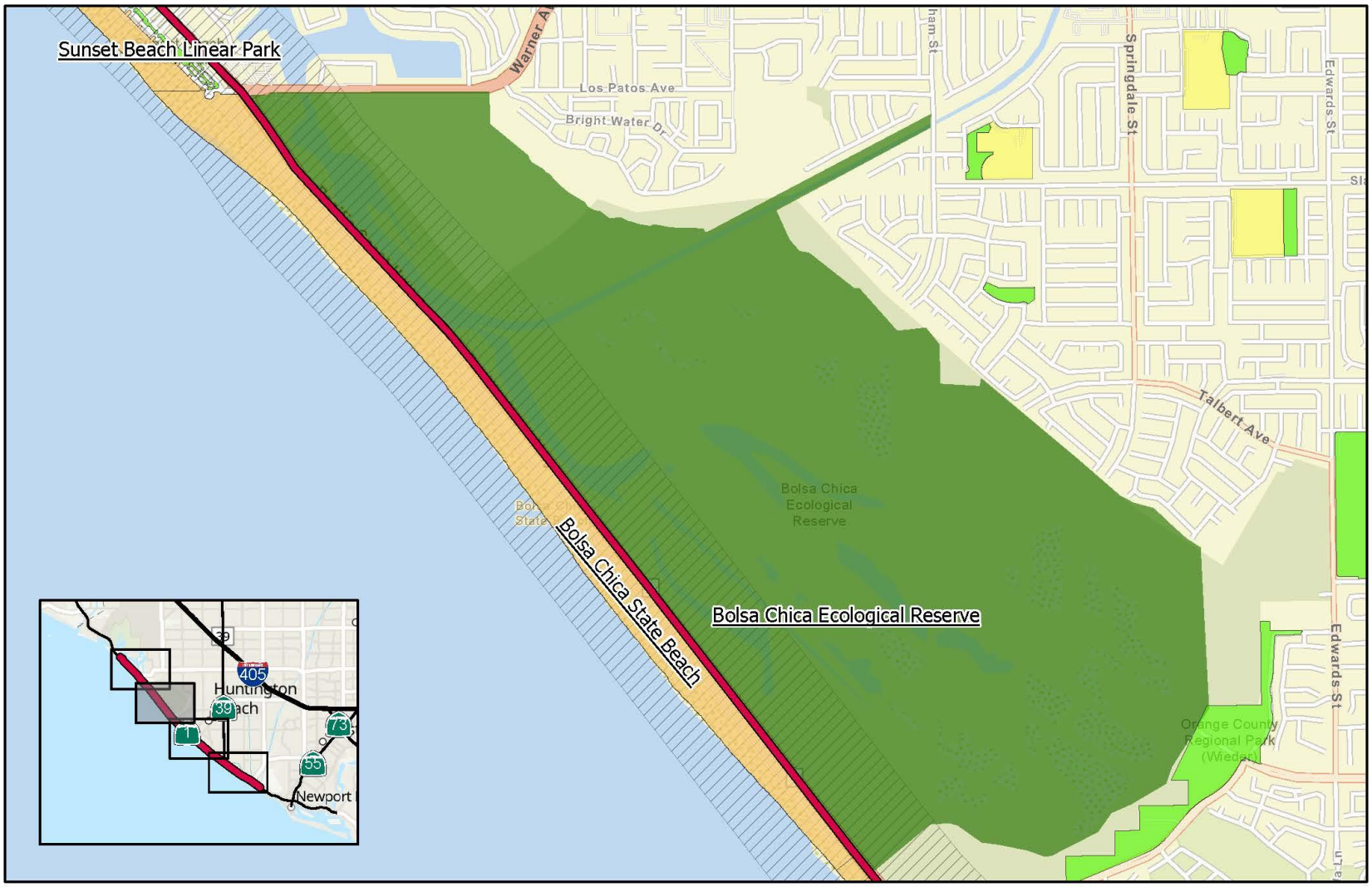


Esri, CGIAR, USGS, City of Huntington Beach, County of Los Angeles, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, Esri Community Maps Contributors, City of Huntington Beach, City of Long Beach, County of Los Angeles, Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA



N

Section 4(f) Resources in Project Area

0 0.25 0.5 1 Miles

- Project Area and Limits
- 0.25 mile Buffer
- Beaches
- Ecological Reserve
- Public Schools
- Public Parks

State Route 1 Class II Bike Lane Facility Improvement Project
12-0S140
Sheet 2 of 4

City of Huntington Beach, County of Los Angeles, Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, Esri, CGIAR, USGS, City of Huntington Beach, County of Los Angeles, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS

N

Section 4(f) Resources in Project Area

0 0.25 0.5 1 Miles

Project Area and Limits
0.25 mile Buffer
Beaches
Ecological Reserve
Public Schools
Public Parks

State Route 1 Class II Bike Lane Facility Improvement Project
12-0S140
Sheet 3 of 4

City of Huntington Beach, County of Los Angeles, Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, Esri, CGIAR, USGS, City of Huntington Beach, County of Los Angeles, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS

N

Section 4(f) Resources in Project Area

0 0.25 0.5 1 Miles

Project Area and Limits
0.25 mile Buffer
Beaches
Santa Ana River Trail
Public Schools
Public Parks

State Route 1 Class II Bike Lane Facility Improvement Project
12-0S140
Sheet 4 of 4

City of Huntington Beach, County of Los Angeles, Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, Esri, CGIAR, USGS, City of Huntington Beach, County of Los Angeles, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS

Appendix B - Title VI Policy Statement

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STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY Gavin Newsom, Governor

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS-49
SACRAMENTO, CA 94273-0001
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FAX (916) 653-5776
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

August 2020

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures "*No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.*"

Caltrans will make every effort to ensure nondiscrimination in all of its services, programs and activities, whether they are federally funded or not, and that services and benefits are fairly distributed to all people, regardless of race, color, or national origin. In addition, Caltrans will facilitate meaningful participation in the transportation planning process in a nondiscriminatory manner.

Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 324-8379 or visit the following web page: https://dot.ca.gov/programs/civil-rights/title-vi.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Civil Rights, at 1823 14th Street, MS-79, Sacramento, CA 95811; (916) 324-8379 (TTY 711); or at <Title.VI@dot.ca.gov>.

Original signed by
Toks Omishakin
Director

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY Gavin Newsom, Governor

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
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www.dot.ca.gov

Making Conservation a California Way of Life.

Agosto de 2020

DECLARACIÓN DE POLÍTICA DE NO DISCRIMINACIÓN

El Departamento de Transporte de California, bajo el Título VI de la Ley de Derechos Civiles de 1964, asegura que "*Ninguna persona en los Estados Unidos, debido a su raza, color u origen nacional, será excluída de participar, ni se le negarán los beneficios, o será objeto de discriminación, en ningún programa o actividad que reciba ayuda financiera federal.*"

Caltrans hará todos los esfuerzos para asegurar que no exista discriminación en ninguno de sus servicios, programas y actividades, ya sea que reciban fondos del gobierno federal o no, y que los servicios y beneficios sean justamente distribuidos a todas las personas sin importar su raza, color, u origen nacional. Adicionalmente, Caltrans facilitará la participación significativa en el proceso de planeación de los programas de transporte de manera no discriminatoria.

Los estatutos federales relacionados, los remedios, y la ley estatal refuerzan estas protecciones para incluir el sexo, la discapacidad, la religión, la orientación sexual y la edad.

Para información u orientación sobre cómo presentar una queja o para obtener más información relacionada con el Título VI, por favor comuníquese con el Gerente del Título VI al teléfono (916) 324-8379 o visite la siguiente página de Internet: https://dot.ca.gov/programs/civil-rights/title-vi.

Para obtener esta información en un formato alternativo como el Braille o en un lenguaje diferente al inglés, por favor póngase en contacto con la Oficina de Derechos Civiles del Departamento de Transporte de California, al 1823 14th Street, MS-79, Sacramento, CA 95811; al teléfono (916) 324-8379 (Teléfono de Texto TTY: 711); o al email: Title.VI@dot.ca.gov

Original signed by
Toks Omishakin
Director

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Appendix C - RTP-FTIP

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				ALONG FIRST STREET, 1.1 MILE CORRIDOR.
ORANGE	LOCAL HIGHWAY	ORA170803	0	CITY OF SANTA ANA - WEST WILLITS STREET PROTECTED BICYCLE LANES - INSTALL MEDIAN AND PARKING PROTECTED BICYCLE LANES ALONG WEST WILLITS STREET, AND SEPARATE BICYCLE ONLY PHASE WILL BE INSTALLED WITH DEDICATED BIKE SIGNAL HEADS AT THE INTERSECTION OF WILUTS AND SULLIVAN. ATP TOLL CREDITS.	$2,970
ORANGE	LOCAL HIGHWAY	ORA170804	0	CITY OF SANTA ANA - SRTS DAVIS ELEMENTARY ADA COMPLIANCE - INSTALLATION OF BULB-OUTS AT CROSSINGS ADJACENT TO DAVIS ELEMENTARY, RECONSTRUCTION AND INSTALLATION OF ADA COMPLIANT CURB RAMPS, SECTIONS OF SIDEWALK AND DRIVEWAYS ALONG THE SAFE ROUTES TO SCHOOL. ATP TOLL CREDITS.	$5,754
ORANGE	LOCAL HIGHWAY	ORA171602	0	BUENA PARK SCHOOL DISTRICT SRTS IMPROVEMENTS - PLANNING, OUTREACH, DEVELOPMENT OF SRTS MAPS, IMPROVE PEDESTRIAN INFRASTRUCTURE AROUND SCHOOLS AND BUS STOPS	$1,654
ORANGE	LOCAL HIGHWAY	ORA172202	0	OC LOOP EL CAJON BIKEWAY GAP CLOSURE (SEGMENT H) - INSTALL CLASS II, III & IV BIKEWAY FACILITIES WITHIN THE CITY OF YORBA LINDA, ANAHEIM & UNICORPORATED ORANGE COUNTY SPANNING 1.2 MILES FROM FAIRLYNN BLVD TO THE TERMINUS OF THE EXISTING SANTA ANA RIVER REGIONAL RIDING & HIKING TRAIL AND BIKEWAY.	$2,395
ORANGE	LOCAL HIGHWAY	ORA172203	0	NEWPORT BEACH BICYCLE AND PEDESTRIAN BRIDGE PROJECT - CITY PROPOSES TO CONSTRUCT A BICYCLE AND PEDESTRIAN BRIDGE OVER THE EIGHT-LANE SUPERIOR AVENUE AT THE INTERSECTION OF PACIFIC COAST HIGHWAY AND BALBOA AVENUE. PROPOSED BRIDGE DECK WILL BE APPROXIMATELY 240 FEET LONG AND STRIPED FOR BICYCLE AND PEDESTRIAN USE. IMPROVEMENTS WILL ALSO INCLUDE SIGNAGE AND STRIPING; TRAFFIC SIGNAL MODIFICATIONS; AND BICYCLE NODE AMENITIES.	$2,937
ORANGE	STATE HIGHWAY	10254	73	SAN JOAQUIN HILLS TRANSPORTATION CORRIDOR (SJHTC – SR 73). 15 MI TOLL RD BETWEEN I-5 IN SAN JUAN CAPISTRANO & RTE 73 IN IRVINE, CONSISTENT WITH SCAG/TCA MOU 4/5/01. EXISTING 3 M/F EA DIR. 1 ADDITIONAL M/F EA DIR, PLUS CLIMBING & AUX LANES BY 2020.	$351,188
ORANGE	STATE HIGHWAY	ORA000820	57	SR-57 TRUCK CLIMBING AUX LANE FROM LAMBERT TO LA CO. LINE (PE ONLY)(PPNO 3847A)	$124,600
ORANGE	STATE HIGHWAY	ORA001102	999	GROUPED PROJECTS FOR SAFETY IMPROVEMENTS - SHOPP COLLISION REDUCTION PROGRAM SCOPE: PROJECTS ARE CONSISTENT WITH 40 CFR PART 93.126 EXEMPT TABLES 2 AND TABLE 3 CATEGORIES - RAILROAD/HIGHWAY CROSSING,SHOULDER IMP, TRAFFIC CONTROL DEVICES,OPS ASSISTANCE INTERSECTION SIGNALIZATION PROJECTS PAVEMENT MARKING, LIGHTING IMPROVEMENTS	$206,186
ORANGE	STATE HIGHWAY	ORA001103	999	GROUPED PROJECTS FOR PAVEMENT RESURFACING AND/OR REHABILITATION - SHOPP ROADWAY PRESERVATION PROGRAM. SCOPE: PROJECTS ARE CONSISTENT WITH 40 CFR PART 93.126 EXEMPT TABLES 2 CATEGORIES - PAVEMENT RESURFACING AND/OR REHABILITATION, EMERGENCY RELIEF (23 U.S.C. 125), WIDENING NARROW PAVEMENTS OR RECONSTRUCTING BRIDGES (NO ADDITIONAL TRAVEL LANES)	$94,293
ORANGE	STATE HIGHWAY	ORA001104	999	GROUPED PROJECTS FOR SHOULDER IMPROVEMENTS - SHOPP ROADSIDE PRESERVATION PROGRAM. SCOPE: PROJECTS ARE CONSISTENT WITH 40 CFR PART 93.126 EXEMPT TABLES 2 CATEGORIES - FENCING, SAFETY ROADSIDE REST AREAS	$1,260
ORANGE	STATE HIGHWAY	ORA001105	999	GROUPED PROJECTS FOR SAFETY IMPROVEMENTS - SHOPP MOBILITY PROGRAM. SCOPE: PROJECTS ARE CONSISTENT WITH 40 CFR PART 93.126 EXEMPT TABLES 2 AND TABLE 3 CATEGORIES - RAILROAD/HIGHWAY CROSSING, SAFER NON-FEDERAL AID SYSTEM ROADS, SHOULDER IMP, TRAFFIC CONTROL DEVICES OPS ASSISTANCE,INTERSECTION SIGNALIZATION PROJECTS, PAVEMENT MARKING DEMO,LIGHTING	$180,188

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State Highway Operation and Protection Program

Orange County
Document Year 2020, Version Number 2
PPNO: 2385A
(Dollars in Thousands)

DIST:	PPNO:	EA:	CTIPS ID:	TCRP NO.:
12	2385A	0S140	109-0000-4852	

CT PROJECT ID: 1219000098

COUNTY:	ROUTE:	PM:
Orange County	1	R18.500 / 32.800

TITLE (DESCRIPTION):
(In and near Newport Beach, Huntington Beach, and Seal Beach, from Dover Drive to north of Seal Beach Boulevard. Construct and upgrade bicycle facilities to improve safety.)

ELEMENT: SHOPP Major Const.

SPONSOR: Caltrans

MPO: Southern California Association of Governments

CORRIDOR:

PRJ MGR: Steve Kinaly

PHONE: (949) 279-8800

EMAIL: steve.kinaly@dot.ca.gov

MPO ID:	LAW:
9	20

ASSEMBLY: 72,74
SENATE: 34,37
CONGRESS: 48

IMPLEMENTING AGENCIES:

PAED **RW**

PSE **CON**

Program Code	Quantity	Performance Measure	Asset Class
201.010	264.0	Collision(s) reduced	N/A

	Unit	Good/operational	Fair	Poor/non-operational	Quantity
Existing Condition					
Post Condition					

PROJECT VERSION HISTORY *(Printed Version is Shaded)* (Last 9 versions displayed)

Programmed Dollars in Thousands - Total for Project

Version	Status	Date	Updated By	Change Reason	Amend No.	Vote	Cum Award	Prog Con	Prog RW	PA & ED	PS & E	RW Sup	Con Sup
2	Official	01/27/2021	RSTONE	Allocation - CTC Vote	FP-20-44	1,430		8,110	1,515	1,430	1,700	400	1,100
1	Official	01/27/2021	RSTONE	Amendment - New Project	20H-005			8,110	1,515	1,430	1,700	400	1,100

Fund Source 1 of 1 SHOPP - Collision Reduction

20.XX.201.010 - Safety Improvements

Fund Type
Surface Transportation Program

Funding Agency

VOTE	DATE	AMOUNT
PAED	01/27/2021	1,430

	PRIOR	20-21	21-22	22-23	23-24	24-25	25-26	FUTURE	TOTAL
PA&ED		1,430							1,430
PS&E			1,700						1,700
R/W SUP			400						400
CON SUP					1,100				1,100
R/W					1,515				1,515
CON					8,110				8,110
Total:		1,430	2,100		10,725				14,255

HQ Comments:
1/28/21 Made COS allocation (PA&ED) official. -RS
******** Version 2 - 01/28/2021 ********
Entered COS allocation (PA&ED) ? RW
1/25/21 Made new SHOPP project official. -RS
^^^^^^^^ Version 1 - 01/25/2021 ^^^^^^^^
Entered new 2020 SHOPP project - RW

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Appendix D - List of Technical Studies

The technical studies listed below were used in the preparation of this Initial Study with Proposed Mitigated Negative Declaration.

Air Quality, Noise, and Hazardous Waste Memorandum (March 2021)
Prepared by Caltrans District 12

Draft Relocation Impact Document (May 2021)
Prepared by Caltrans District 12

Geotechnical Design Report for Relocated Traffic Signal Poles (May 2021)
Prepared by Caltrans District 12

Historic Property Survey Report and Archaeological Survey Report (ASR) (October 2021)
Prepared by LSA, Associates (LSA)

ISA memo for the project 0S140 (March 2021)
Prepared by Caltrans District 12

Location Hydraulic Study (August 2021)
Prepared by Advanced Civil Tech

Natural Environment Study (NES) (October 2021)
Prepared by LSA

Traffic Operations Review of Environmental Study Request (May 2021)
Prepared by Caltrans District 12

Visual Impact Assessment Memorandum (March 2021)
Prepared by Caltrans District 12

Water Quality Technical Memorandum (August 2021)
Prepared by Caltrans District 12

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Appendix E - Avoidance, Minimization, and/or Mitigation Summary

In order to be sure that all of the environmental measures identified in this document are executed at the appropriate times, the following mitigation program (as articulated on the proposed Environmental Commitments Record [ECR] which follows) would be implemented. During project design, avoidance, minimization, and /or mitigation measures will be incorporated into the project's final plans, specifications, and cost estimates, as appropriate. All permits will be obtained prior to implementation of the project. During construction, environmental and construction/engineering staff will ensure that the commitments contained in this ECR are fulfilled. Following construction and appropriate phases of project delivery, long-term mitigation maintenance and monitoring will take place, as applicable. As the following ECR is a draft, some fields have not been completed, and will be filled out as each of the measures is implemented.

Note: Some measures may apply to more than one resource area. Duplicative or redundant measures have not been included in this ECR.

Note: Mitigation measures are used to lessen a significant impact under CEQA

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Avoidance, Minimization, and/or Mitigation Measures Summary

Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
PF-AQ-1	Air Quality	The construction contractor must comply with the Caltrans' Standard Specifications in Section 14-9 (2018) for reducing impacts from the construction activities. Section 14-9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances. The proposed project would comply with SCAQMD Rule 403 requiring the implementation of best available dust control measures during active operations capable of generating fugitive dust.	Caltrans Project Engineer and Resident Engineer/ Construction Contractor	During PS&E and construction	No
PF-BIO-1	Biological Resources	**Delineation of Environmentally Sensitive Areas.** Prior to project activities, highly visible barriers (e.g., orange construction fencing) will be installed along the boundaries of the project footprint/equipment access routes to designate Environmentally Sensitive Areas (ESAs) that are to be preserved. This will include ESA fencing along jurisdictional aquatic resources located at the intersections of SR-1 at Warner Avenue, Magnolia Street, and Brookhurst Street. No project activity of any type will be permitted within these ESAs. In addition, heavy equipment, including motor vehicles, will not be allowed to operate within the ESAs. All construction equipment will be operated in a manner to prevent accidental damage to ESAs. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within these protected zones.	Caltrans Resident Engineer/ Construction Contractor	During construction	No
PF-BIO-2	Biological Resources	**Erosion Control Material Sourcing.** Only certified weed-free straw, mulch, and/or fiber rolls will be used for erosion control. Invasive species will not be used in any landscaping palettes for the project.	Caltrans Project Biologist	During PS&E and construction	No
PF-BIO-3	Biological Resources	**Equipment Staging Best Management Practices (BMPs).** All equipment maintenance, staging, and dispensing of fuel, oil, or any other such activities will occur in developed or designated non-sensitive upland areas. The designated upland areas will be located in such a manner as to prevent any loose soil or spill runoff from entering jurisdictional waterways or adjacent sensitive vegetation communities. All construction materials will be removed from worksites following completion of project activities.	Resident Engineer/ Caltrans Project Biologist	During PS&E and prior to construction	No

Avoidance, Minimization, and/or Mitigation Measures Summary

Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
PF-BIO-4	Biological Resources	**Water Quality BMPs.** In order to avoid impacts to water quality during construction, stormwater and erosion control BMPs are recommended to prevent loose soil or pollutants associated with the project from inadvertently entering the aquatic resources located within and adjacent to the BSA. Example BMPs include silt fencing and straw wattle placed in such a manner that they are able to catch or filter sediment or other construction-related debris to prevent it from eroding into the nearby drainage channels.	Resident Engineer/ Caltrans Project Biologist	During PS&E and construction	No
PF-BIO-5	Biological Resources	**Avoidance of Breeding and Nesting Brid Season.** Project activities will occur outside the nesting season (February 1–September 30) to the fullest practicable extent.	Resident Engineer/ Caltrans Project Biologist	During PS&E and construction	No
PF-BIO-6	Biological Resources	**Trash and Waste Removal.** During construction, trash and food waste will be removed from work sites on a daily basis to avoid the attraction of predators that prey on sensitive wildlife species	Resident Engineer/ Caltrans Project Biologist	During PS&E and construction	No
BIO-1	Biological Resources	**Invasive Species Control.** All construction equipment accessing unpaved areas will be cleaned with water to remove dirt, seeds, vegetative material, or other debris that could contain or hold seeds of noxious weeds before arriving to and leaving the project site.	Resident Engineer/ Caltrans Project Biologist	During PS&E and construction	No
BIO-2	Biological Resources	**Pre-Construction Clearance Surveys.** A qualified biologist will conduct pre-construction surveys to confirm the absence of sensitive biological resources within the work areas. The preconstruction surveys will take place no more than 24 hours prior to commencement of work activities. If listed species are observed within the work area (or areas potentially indirectly affected by project activities as determined by the qualified biologist) and the work cannot be postponed until the species is no longer present, the California Department of Transportation (Caltrans) will obtain written approval from the United States Fish and Wildlife Service (USFWS) or the California Department of Fish and Wildlife (CDFW), as applicable, prior to completing project work at these locations.\	Resident Engineer/ Caltrans Project Biologist	During PS&E and construction	No
BIO-3	Biological Resources	**Biological Monitoring.** A qualified biologist will monitor project activities with sensitive natural communities for the duration of work activities to ensure that practicable measures are being employed to avoid and minimize incidental disturbance to habitat and covered species inside and outside the project footprint.	Resident Engineer/ Caltrans Project Biologist	During PS&E and construction	No

Avoidance, Minimization, and/or Mitigation Measures Summary

Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
BIO-4	Biological Resources	**On-Site Training.** All personnel involved in the on-site project construction will be required to participate in a pre-construction environmental training program to understand the avoidance and minimization measures and environmental regulations pertinent to the project.	Resident Engineer/ Caltrans Project Biologist	During PS&E and construction	No
BIO-5	Biological Resources	**Aquatic Resource Protection.** Prior to project activities adjacent to jurisdictional aquatic resources located at the intersections of SR-1 at Warner Avenue, Magnolia Street, and Brookhurst Street, a barrier will be installed between the project footprint and adjacent jurisdictional aquatic resources. The barrier will be constructed of materials to prevent incidental soil discharges into adjacent jurisdictional aquatic resources such as silt fence, plywood, or similar. The barrier will be installed downslope of the ESA fencing as noted in Measure BIO-1. Installation and removal of the barrier will be monitored by a qualified biologist to ensure the barrier's installation/removal does not cause incidental discharge of soils or other materials into the adjacent jurisdictional aquatic resources. The barrier will be maintained in place at each of the three locations noted until project activities have been completed at each of the respective project footprints.	Resident Engineer/ Caltrans Project Biologist	During PS&E and construction	No
BIO-6	Biological Resources	**Pre-Construction Nesting Bird Survey.** If project activities with potential to indirectly disturb suitable avian nesting habitat within or adjacent to the work area during the nesting season (as determined by a qualified biologist), a qualified biologist with experience in conducting breeding bird surveys will conduct a nesting bird survey no more than 3 days prior to the initiation of project activities to detect the presence/ absence of migratory and resident bird species occurring in suitable nesting habitat. Project activities may begin no more than 3 days after the completion of the nesting bird survey in the absence of active bird nests. An additional nesting bird survey will be conducted if project activities fail to start within 3 days of the completion of the pre-construction nesting bird survey.	Resident Engineer/ Caltrans Project Biologist	During PS&E and construction	No
BIO-7	Biological Resources	**Nesting Bird Exclusionary Buffers.** Should nesting birds be found during the pre-construction nesting bird survey, an exclusionary buffer will be established by the qualified biologist. This buffer will be clearly marked in the field by construction personnel under the guidance of the biologist, and construction will not be conducted in this zone until the biologist determines that the	Resident Engineer/ Caltrans Project Biologist	During PS&E and construction	No

Avoidance, Minimization, and/or Mitigation Measures Summary

Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
		young have fledged or the nest is no longer active. Work may only occur during the breeding season if nesting bird surveys indicate the absence of any active nests within the work area. No work will occur if listed or fully protected bird species are found to be actively nesting within or adjacent to the areas subject to construction activities.			
BIO-8	Biological Resources	**Night Work Lighting.** If night work (i.e., between dusk and dawn) is anticipated within 100 ft of structures where bat roosting is confirmed, night lighting will be used only in areas of active work, and focused on the direct area(s) of work and away from the culvert entrances to the greatest extent practicable.	Resident Engineer/ Caltrans Project Biologist	During PS&E and construction	No
BIO-9	Biological Resources	**Construction Equipment Staging.** To the extent practicable, internal combustion equipment, such as generators and vehicles, is not to be parked or operated beneath or adjacent to the structures unless it is required for project-related work on that structure.	Resident Engineer/ Caltrans Project Biologist	During PS&E and construction	No
BIO-10	Biological Resources	**Replacement Lighting Locations.** The proposed project includes the replacement of lighting in various areas. Siting of these lights should avoid overspill into bat-roosting sites to avoid permanent impacts to roosting and foraging bats.	Resident Engineer/ Caltrans Project Biologist	During PS&E and construction	No
BIO-11	Biological Resources	**Tree Trimming and Removal.** To the greatest extent feasible, tree trimming/removal activities will be performed outside the bat maternity season (April 1–August 31) to avoid direct impacts to non-volant (flightless) young that may roost in trees within the study area. This period also coincides with the typical bird nesting season. If trimming or removal of trees during the bat maternity season cannot be avoided, a qualified biologist will monitor tree trimming and removal activities.	Resident Engineer/ Caltrans Project Biologist	During PS&E and construction	No
BIO-12	Biological Resources	**Pre-Construction California Legless Lizard Surveys.** A qualified biologist will conduct pre-construction surveys for California legless lizards no more than 48 hours before initial grading and ground-disturbing activities in or near areas of sandy, friable soil. This survey will include systematic subsurface searching, as legless lizards are fossorial (burrowing), and staking and fencing the limits of the survey areas with small-mesh construction fencing buried to a minimum depth of 6 to 10 inches below grade would reduce the likelihood of lizards reentering the construction zone.	Resident Engineer/ Caltrans Project Biologist	During PS&E and construction	No

Avoidance, Minimization, and/or Mitigation Measures Summary

Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
Compensatory Mitigation **BIO-CM-1**	Biological Resources	**Coastal Sage Scrub – Compensatory Mitigation** Impacts to coastal sage scrub proposed as part of the project associated with paving activities; therefore, compensatory mitigation is required as it is considered an ESHA under the California Coastal Act. A small fraction of the total acreage of temporary impacts proposed is to disturbed coastal sage scrub. Coastal sage scrub impacted is considered marginal for coastal California gnatcatcher and other special-status species that have potential to occur and prefer to inhabit coastal sage scrub due to its location adjacent to SR-1 where elevated levels of human activity, dust, noise, and vibration occur. Coastal sage scrub temporarily impacted will be restored in place after the completion of project activities. As compensatory mitigation for permanently removed habitat, permanently removed habitat will be replaced (through off-site habitat restoration and/or conservation) at a minimum 2:1 ratio.	Resident Engineer/ Caltrans Project Biologist	During PS&E, construction, and post construction	No
Compensatory Mitigation **BIO-CM-2**	Biological Resources	**Goldenbrush Scrub – Compensatory Mitigation** There is a total of up to 0.05 acre of permanent and 0.03 acre of temporary impacts to goldenbush scrub proposed as part of the project associated with paving activities and staging; therefore, compensatory mitigation is required as it is considered an ESHA under the California Coastal Act. Goldenbush scrub temporarily impacted will be restored in place after the completion of project activities. As compensatory mitigation for permanently removed habitat, permanently removed habitat will be replaced (through off-site habitat restoration and/or conservation) at a minimum 1:1 ratio.	Resident Engineer/ Caltrans Project Biologist	During PS&E, construction, and post construction	No
Compensatory Mitigation **BIO-CM-3**	Biological Resources	**Coastal Strands – Compensatory Mitigation** There is a total of 1.71 acre of permanent or direct impacts to coastal strands proposed as part of the project; therefore, compensatory mitigation is required as it is considered a sensitive natural community by CDFW and an ESHA under the California Coastal Act. As compensatory mitigation for permanently removed habitat, permanently removed habitat will be replaced (through offsite habitat restoration and/or conservation) at a minimum 2:1 ratio.	Resident Engineer/ Caltrans Project Biologist	During PS&E, construction, and post construction	No

Avoidance, Minimization, and/or Mitigation Measures Summary

Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
PF-CULT-1	Cultural Resources	If cultural materials are discovered during site preparation, grading, or excavation, the construction Contractor will divert all earthmoving activity within and around the immediate discovery area until a qualified archaeologist can assess the nature and significance of the find. At that time, coordination will be maintained with the California Department of Transportation (Caltrans) District 12 Environmental Branch Chief or the District 12 Native American Coordinator to determine an appropriate course of action. If the discovery of cultural materials occurs outside the Caltrans right-of-way, then coordination with the appropriate local agency will be conducted as well.	Caltrans Project Engineer and Resident Engineer	During PS&E and construction	No
PF-CULT-2	Cultural Resources	If human remains are discovered during site preparation, grading, or excavation, California State Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the Orange County Coroner shall be contacted. If the remains are thought to be Native American, the Coroner will notify the Native American Heritage Commission (NAHC), who pursuant to California Public Resources Code (PRC) Section 5097.98, will then notify the Most Likely Descendant (MLD). At that time, the persons who discovered the remains will contact the Caltrans District 12 Environmental Branch Chief or the District 12 Native American Coordinator so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of California PRC 5097.98 are to be followed as applicable.	Caltrans Project Engineer and Resident Engineer	During PS&E and construction	No
PF-GEO-1	Geology	The project will comply with the most current Caltrans procedures and design criteria regarding seismic design to mitigate any adverse effects related to seismic ground shaking. Earthwork will be performed in accordance with Caltrans Standard Specifications, Section 19, which require standardized measures related to compacted fill, over-excavation, and re-compaction, among other requirements. Moreover, Caltrans Highway Design Manual (HDM) Topic 113, requires the project engineer to review a Geotechnical Design Report, if any, to ascertain the scope of geotechnical involvement for a project.	Caltrans Project Engineer and Resident Engineer	During PS&E and construction	No

Avoidance, Minimization, and/or Mitigation Measures Summary

Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
PF-GHG-1	Greenhouse Gas	**Emissions Reduction**. Comply with Caltrans Standard Specification Section 7-1.02C	Caltrans Project Engineer/Caltrans Project Engineer	During PS&E and construction	No
GHG-1	Greenhouse Gas	**Vehicle Idle time.** Limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment [California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.	Caltrans Project Engineer/Caltrans Project Engineer	During construction	No
GHG-2	Greenhouse Gas	**Truck Schedule.** Schedule truck trips outside of peak morning and evening commute hours.	Caltrans Project Engineer/Caltrans Project Engineer	During construction	No
GHG-3	Greenhouse Gas	**Construction Waste.** Reduce construction waste and maximize the use of recycled materials (reduces consumption of raw materials, reduces landfill waste, and encourages cost savings).	Caltrans Project Engineer/Caltrans Project Engineer	During construction	No
GHG-4	Greenhouse Gas	**Recycled Materials**. Maximize use of recycled materials (e.g., tire rubber).	Caltrans Project Engineer/Caltrans Project Engineer	During PS&E and construction	No
GHG-5	Greenhouse Gas	**Earthwork Balance.** Reduce the need for transport of earthen materials by balancing cut and fill quantities.	Caltrans Project Engineer/Caltrans Project Engineer	During construction	No
GHG-6	Greenhouse Gas	**Fuel Efficiency.** Encourage Improved fuel efficiency from construction equipment: ▪ Maintain equipment in proper tune and working condition Right size equipment for the job	Caltrans Project Engineer/Caltrans Project Engineer	During construction	No
GHG-7	Greenhouse Gas	**Construction Environmental Training.** Supplement existing training with information regarding methods to reduce GHG emissions related to construction.	Caltrans Project Engineer/Caltrans Project Engineer	During construction	No
PF-HAZ-1	Hazardous Waste	An Aerially Deposited Lead (ADL) Investigation will be conducted at the excavation areas for lead contamination; and then ADL report will be prepared. Based on the ADL contain in the soil, an appropriate Special Provisions will be prepared to provide an	Caltrans Project Engineer, Certified Specialist	During PS&E	No

Avoidance, Minimization, and/or Mitigation Measures Summary

Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
		instruction to construction contractor on how to handle the ADL impacted soil during construction.			
PF-HAZ-2	Hazardous Waste	During construction, the construction contractor will monitor soil excavation for visible soil staining, odor, and the possible presence of unknown hazardous material sources. If hazardous material contamination or sources are suspected or identified during project construction activities, the construction contractor will be required to cease work in the area and to have an environmental professional evaluate the soils and materials to determine the appropriate course of action required, consistent with the Unknown Hazards Procedures in Chapter 7 of the Caltrans' Construction Manual.	Caltrans Project Engineer, Certified Specialist	During PS&E	No
PF-HAZ-3	Hazardous Waste	During construction, the construction contractor is required to store treated wood waste (TWW) in metal containers approved by the US Department of Transportation for the transportation and temporary storage of hazardous waste until disposal. In addition, TWW could only be disposed at a permitted TWW Resource Conservation and Recovery Act (RCRA) Subtitle C disposal facilities.	Construction Contractor	During PS&E and construction (if necessary)	No
PF-WQ-1	Water Quality	The project will comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the State of California, Department of Transportation, Order No. 2012-0011-DWQ, NPDES No. CAS00003 and the and any subsequent permits in effect at the time of construction.	Caltrans Resident Engineer/ Construction Contractor	Prior to construction	No
PF-WQ-2	Water Quality	A Water Pollution Control Program (WPCP) will be prepared and implemented to address all construction-related activities, equipment, and materials that have the potential impact water quality. The WPCP will identify the sources of pollutants that may affect the quality of storm water and include BMPs to control the pollutants, such as sediment control, catch basin inlet protection, construction materials management and non-storm water BMPs. All work must conform to the Construction Site BMP requirements specified in the latest edition of the Storm Water Quality Handbooks: Construction Site Best Management Practices Manual to control and minimize the impacts of construction and construction related activities, material and pollutants on the	Caltrans Resident Engineer/ Construction Contractor	Prior to construction	No

Avoidance, Minimization, and/or Mitigation Measures Summary

Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
		watershed. These include, but are not limited to temporary sediment control, temporary soil stabilization, scheduling, waste management, materials handling, and other non-storm water BMPs.			
PF-WQ-3	Water Quality	Design Pollution Prevention Best Management Practices (BMPs) will be implemented such as preservation of existing vegetation, slope/ surface protection systems (permanent soil stabilization), concentrated flow conveyance systems such as ditches, berms, dikes and swales, overside drains, flared end sections, and outlet protection/ velocity dissipation devices.	Caltrans Resident Engineer/ Construction Contractor	Prior to and during construction	No
PF-WQ-4	Water Quality	Construction site dewatering discharges must comply with the General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (de minimis) Threat to Water Quality (Order No. R8-2020-0006, NPDES No. CAG998001) and any subsequent updates to the permit at the time of construction. This Permit addresses temporary dewatering operations during construction. Dewatering BMPs will be used to control sediment and pollutants, and the discharges must comply with the WDRs issued by the Santa Ana RWQCB.	Caltrans Resident Engineer/ Construction Contractor	Prior to and during construction	No
CZ-1	Coastal Zone	This project lies within the coastal zone. Construction or maintenance activities shall not commence until a coastal permit exemption determination or coastal development permit has been obtained from the California Coastal Commission, and/or the Certified Local Coastal Program agency(s) that hold jurisdiction. This should be completed during the PS&E phase for delivery projects.	Caltrans Project Engineer/Resident Engineer/ Construction Contractor	Prior to and during construction	No
CZ-2	Coastal Zone	Construction must be completed between Labor Day weekend and Memorial Day weekend to avoid impacts to coastal access during the high season.	Caltrans Project Engineer/Resident Engineer/ Construction Contractor	Prior to and during construction	No
CZ-3	Coastal Zone	Equipment/materials shall not be stored within unpaved areas.	Caltrans Project Engineer/Resident Engineer/ Construction Contractor	Prior to and during construction	No

Avoidance, Minimization, and/or Mitigation Measures Summary

Measure	Resource Area	Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Required
PF-N-1	Noise	During construction of the Project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Noise associated with construction is controlled by 2018 Caltrans Standard Specification Section 14-8.02, "Noise Control," which states the following: Control and monitor noise resulting from work activities. Do not exceed 86 dBA L_{max} at 50 feet from the job site from 9 p.m. to 6 a.m. No mitigation required.	Caltrans Project Engineer/Caltrans Resident Engineer/ Construction Contractor	During PS&E and construction	No
PF-REC-1	Recreation	The property used for temporary construction easement will be restored to a condition at least as good as it was prior to easement being granted.	Caltrans Project Engineer/Caltrans Resident Engineer/ Construction Contractor	During PS&E and construction	No
PF-TRA-1	Traffic	Transportation Management Plan (TMP) shall be included in the design plans for implementation by the contractor prior to and during construction of any improvements. The TMP shall consist of prior notices, adequate sign posting, detours, phased construction, and temporary driveways where necessary. The TMP shall specify implementation timing of each plan element (e.g., prior notices, sign posting, detours) as determined appropriate by Caltrans. Adequate local emergency access shall always be provided to adjacent uses. Proper detours and warning signs shall be established to ensure public safety. The TMP shall be devised so that construction shall not interfere with any emergency response or evacuation plans. Construction activities shall proceed in a timely manner to reduce impacts.	Caltrans Project Engineer/Resident Engineer/ Construction Contractor	Prior to and during construction	No

NSSP = Non-Standard Special Provision

Appendix F – Layout Plan Sheets

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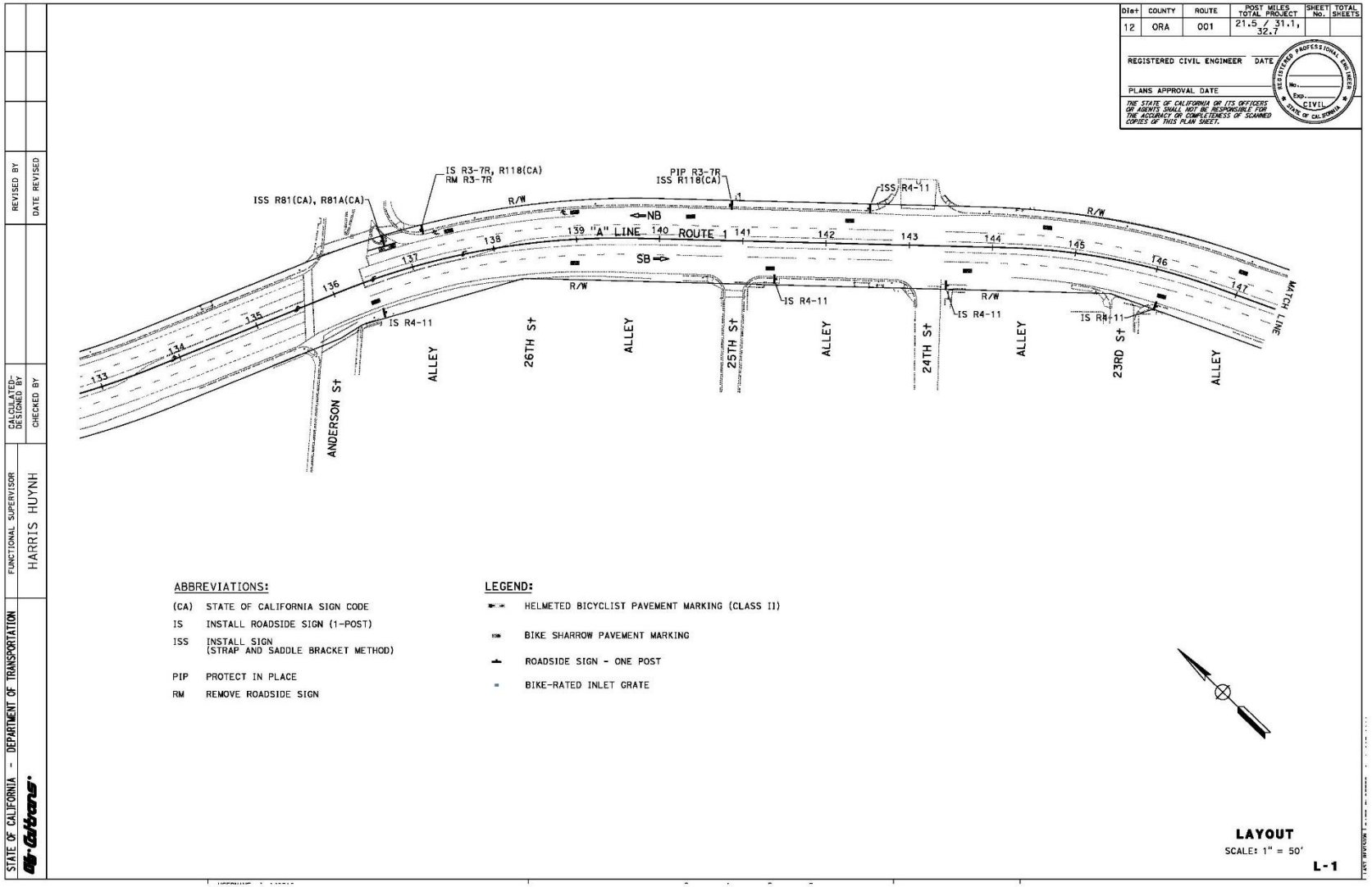
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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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23RD St
ABBREVIATIONS:
(CA) STATE OF CALIFORNIA SIGN CODE
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ISS INSTALL SIGN (STRAP AND SADDLE BRACKET METHOD)
PIP PROTECT IN PLACE
RM REMOVE ROADSIDE SIGN
LEGEND:
HELMETED BICYCLIST PAVEMENT MARKING (CLASS II)
BIKE SHARROW PAVEMENT MARKING
ROADSIDE SIGN - ONE POST
BIKE-RATED INLET GRATE
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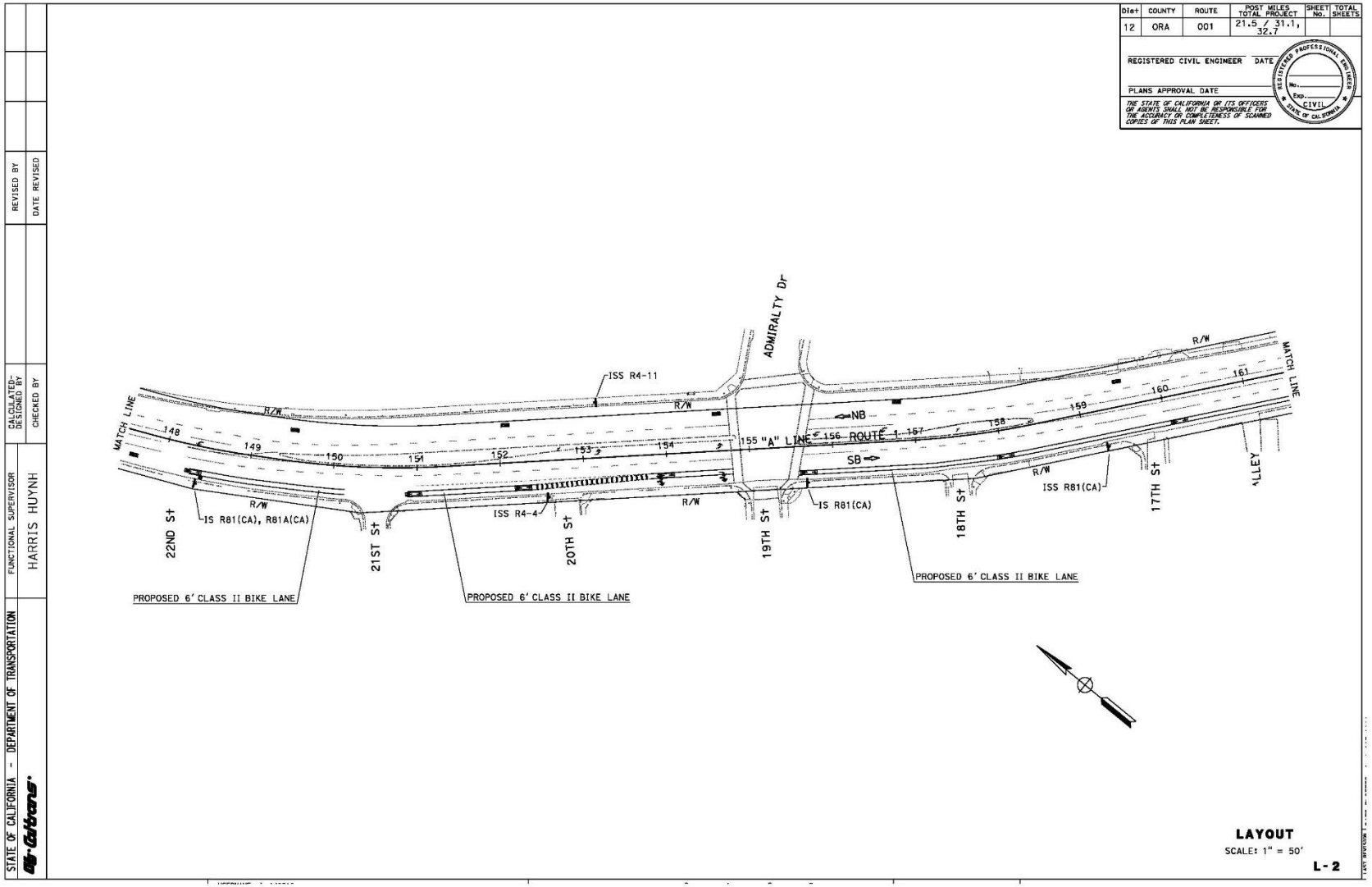
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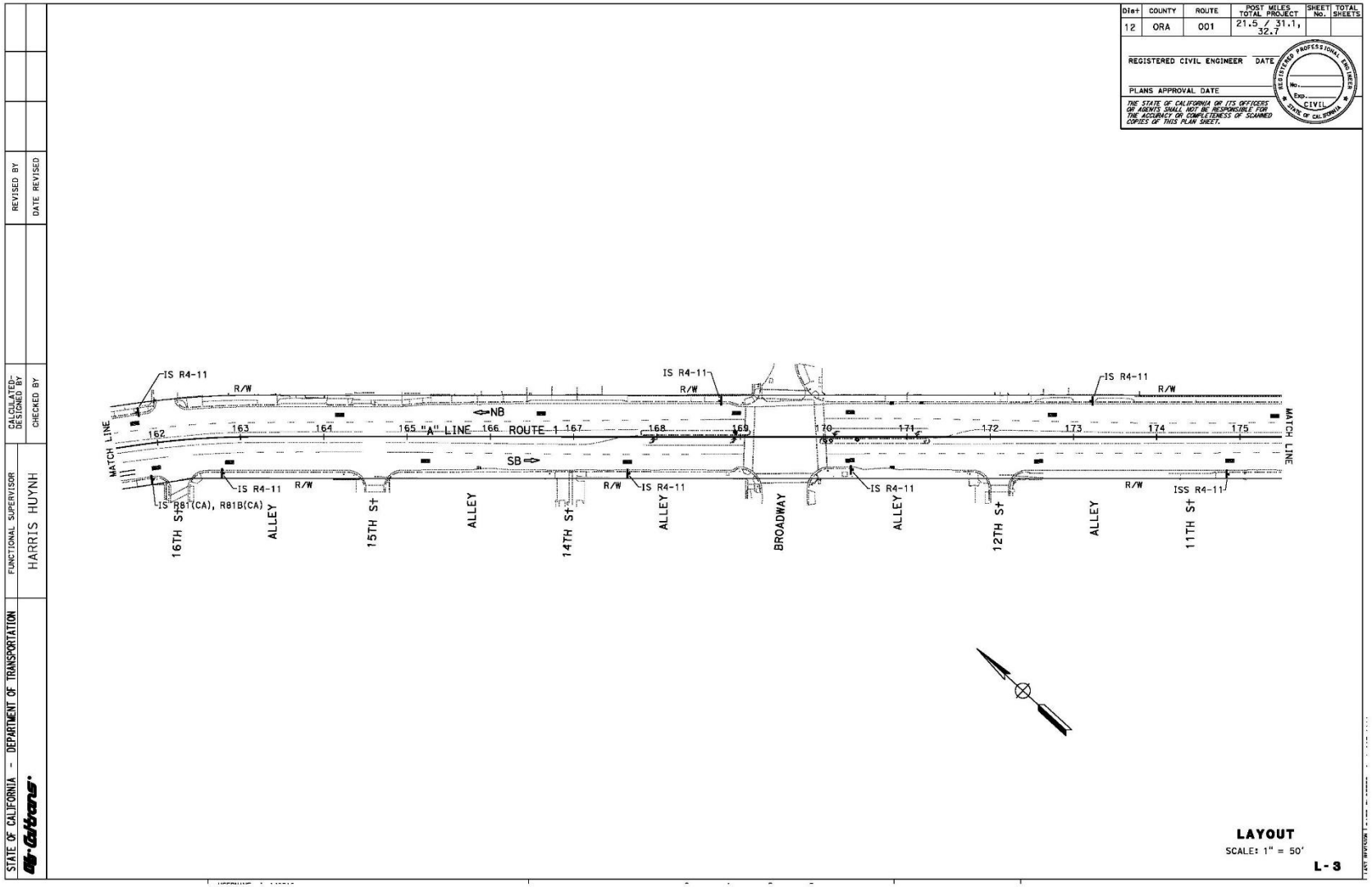
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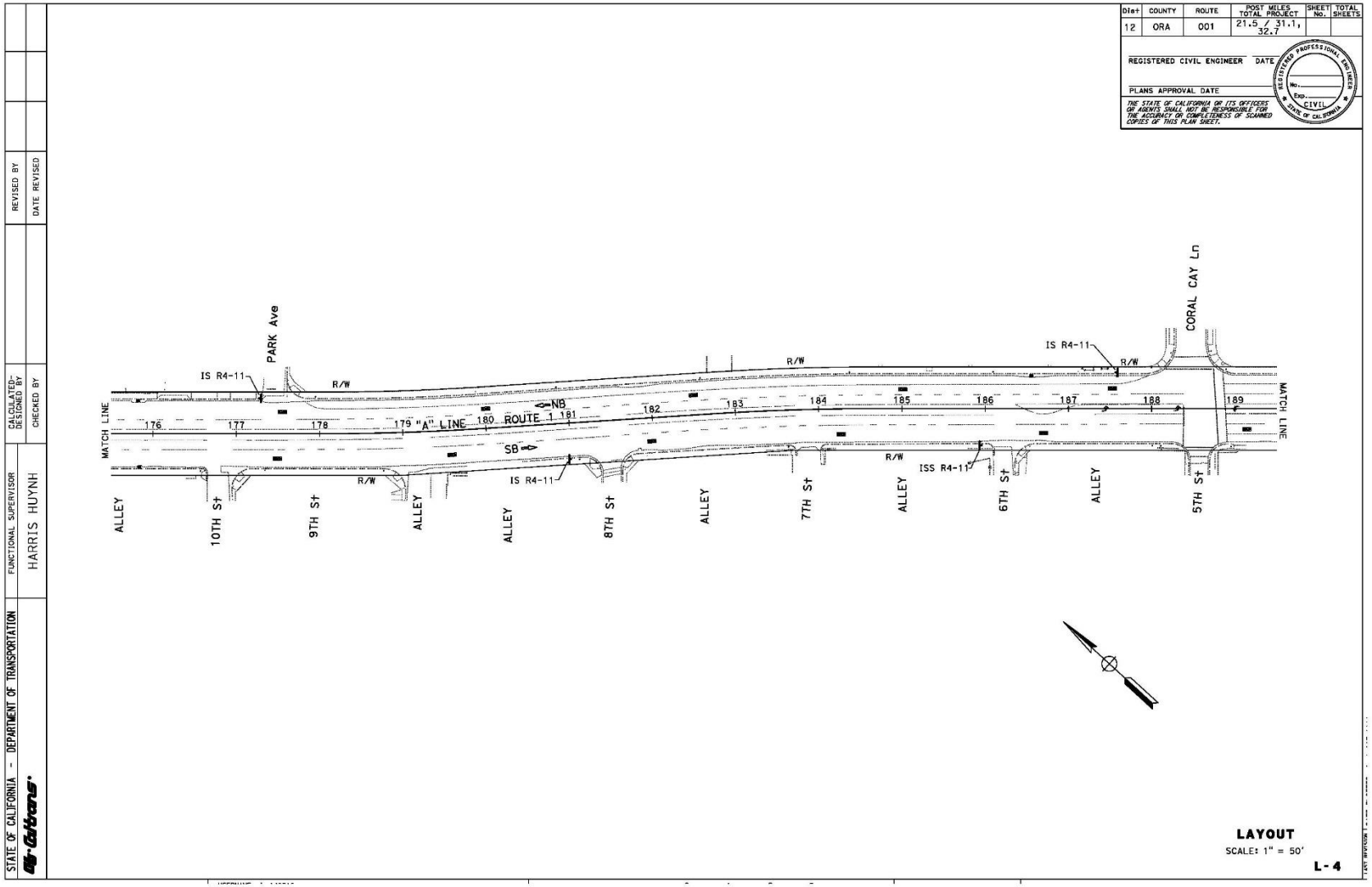
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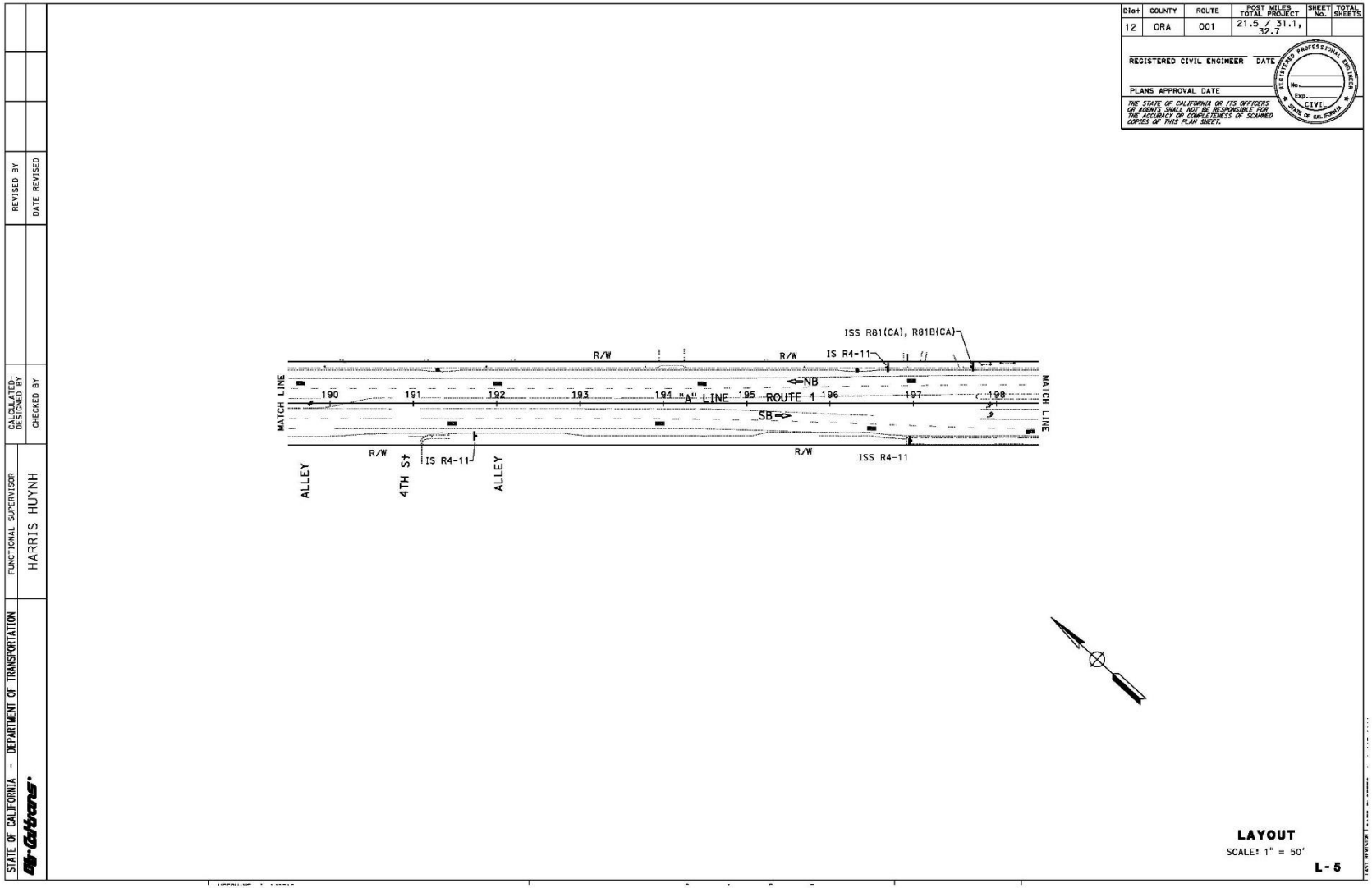
SCALE: 1" = 50'
L-4


Dist
COUNTY
ROUTE
POST MILES TOTAL PROJECT
SHEET No.
TOTAL SHEETS
12
ORA
001
21.5 / 31.1, 32.7
REGISTERED CIVIL ENGINEER
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PLANS APPROVAL DATE
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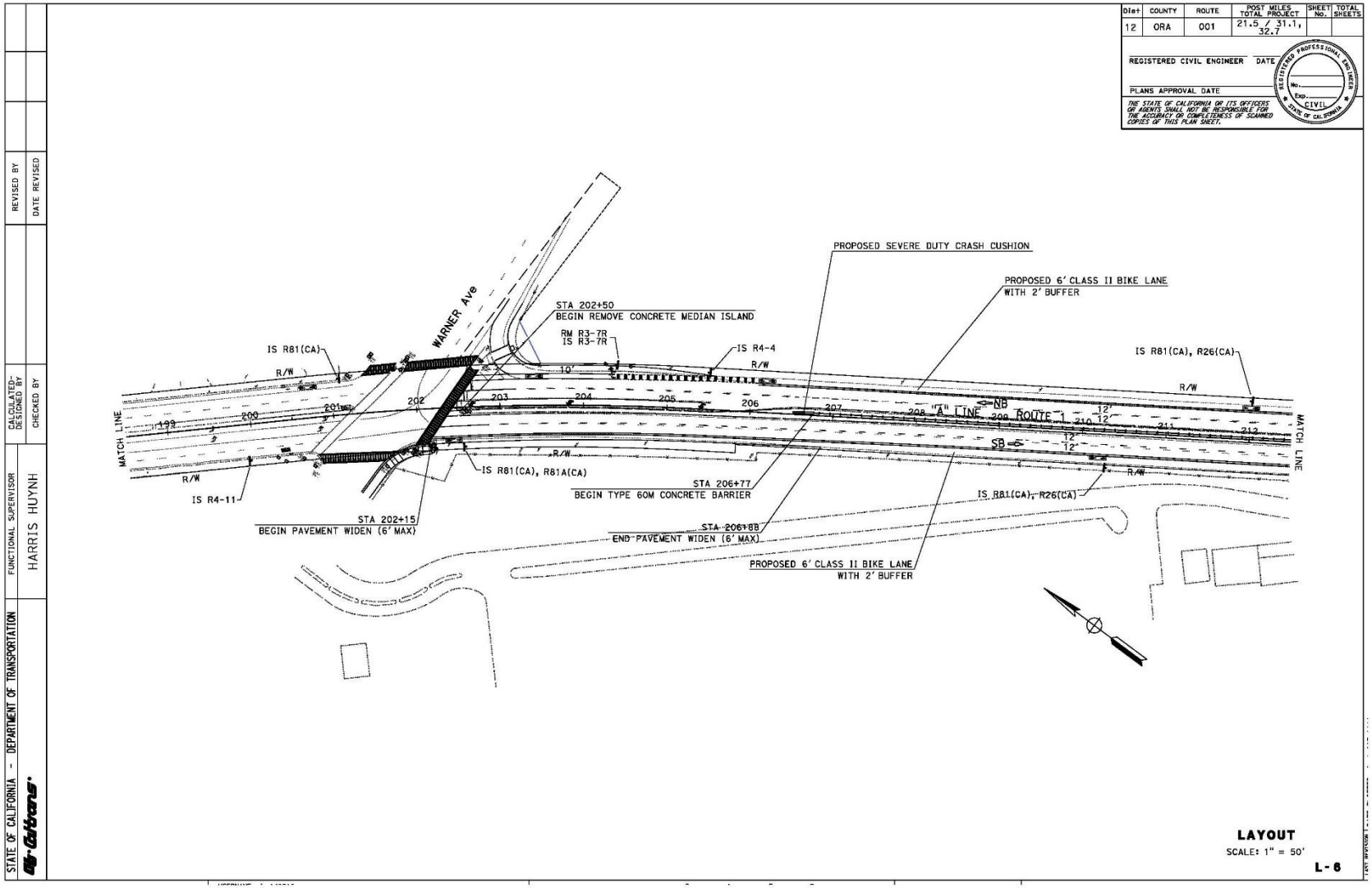
No.
EXP.
CIVIL
STATE OF CALIFORNIA
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
FUNCTIONAL SUPERVISOR
HARRIS HUYNH
CALCULATED-DESIGNED BY
CHECKED BY
REVISED BY
DATE REVISED
ISS R81(CA), R81B(CA)
IS R4-11
R/W
NB
SB
ROUTE 1
"A" LINE
MATCH LINE
190
191
192
193
194
195
196
197
198
ALLEY
4TH St
ALLEY
IS R4-11
ISS R4-11
LAYOUT
SCALE: 1" = 50'
L-5


Dist COUNTY ROUTE POST MILES TOTAL PROJECT SHEET No. TOTAL SHEETS
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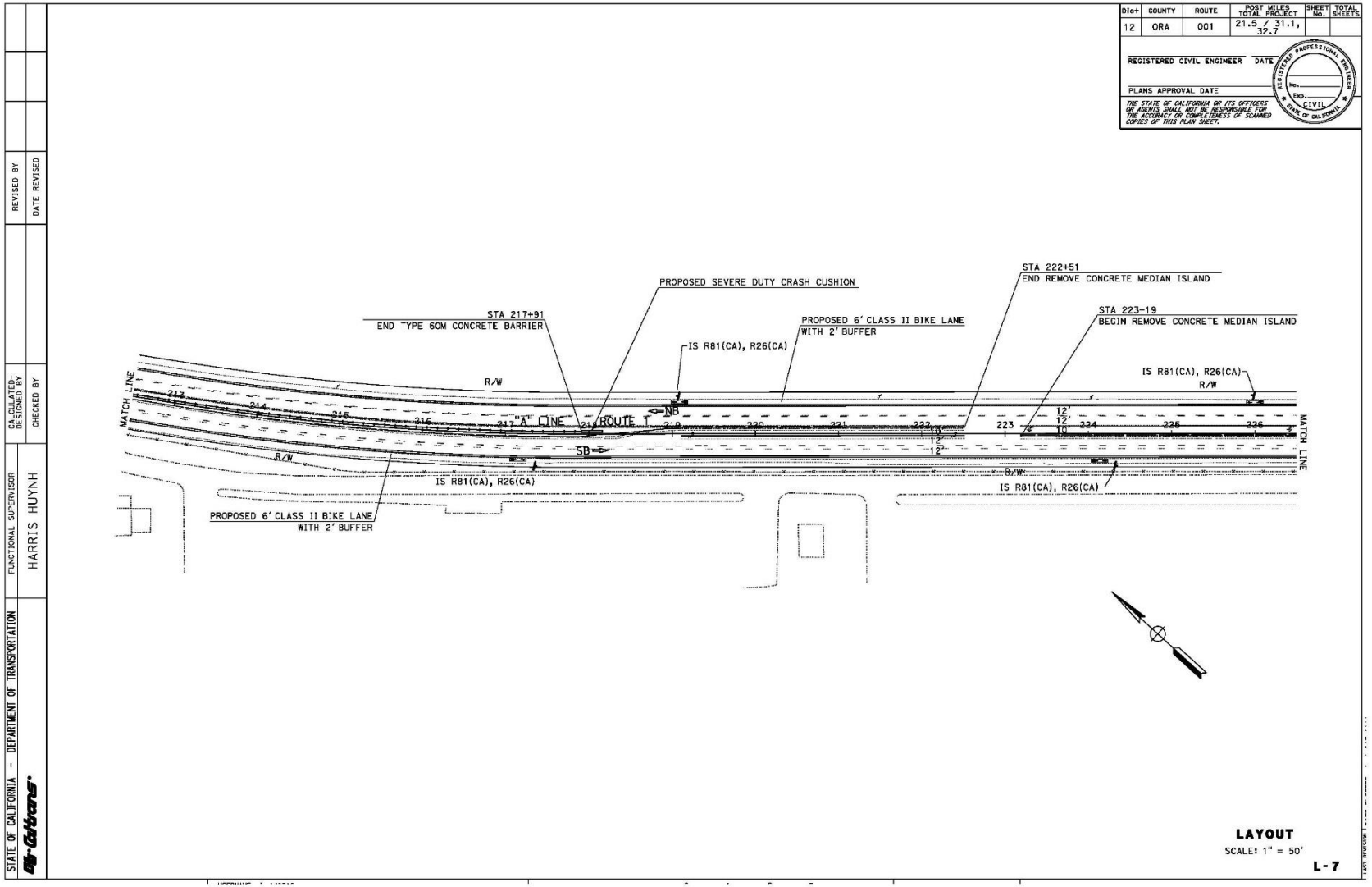
Caltrans
PROPOSED SEVERE DUTY CRASH CUSHION
PROPOSED 6' CLASS II BIKE LANE WITH 2' BUFFER
STA 202+50
BEGIN REMOVE CONCRETE MEDIAN ISLAND
RM R3-7R
IS R3-7R
IS R81(CA)
IS R4-4
IS R81(CA), R26(CA)
WARNER Ave
R/W
MATCH LINE
"A" LINE
NB ROUTE 1
SB
IS R81(CA), R81A(CA)
IS R4-11
STA 202+15
BEGIN PAVEMENT WIDEN (6' MAX)
STA 206+77
BEGIN TYPE 60M CONCRETE BARRIER
STA 206+88
END PAVEMENT WIDEN (6' MAX)
PROPOSED 6' CLASS II BIKE LANE WITH 2' BUFFER
LAYOUT
SCALE: 1" = 50'
L-6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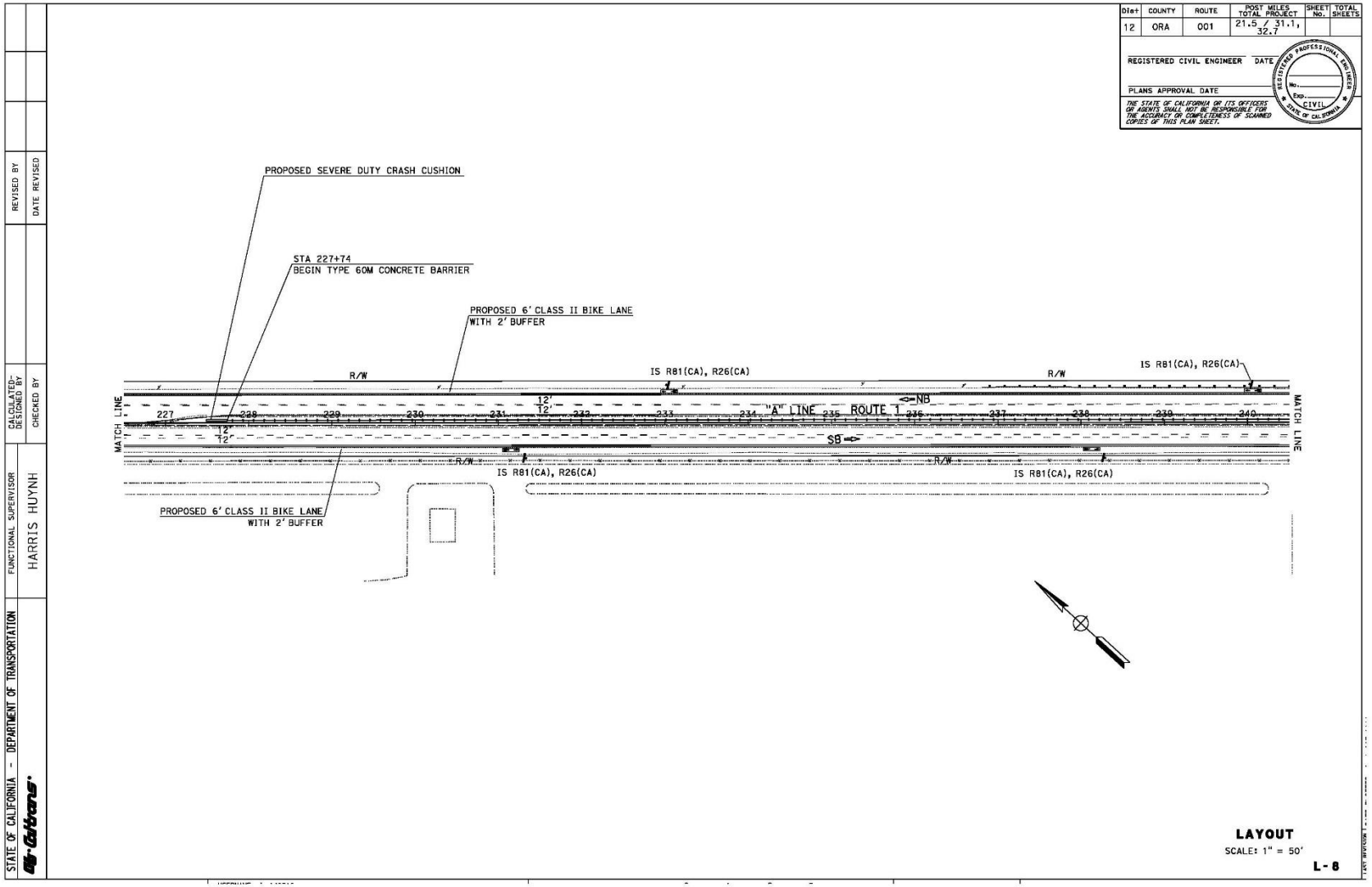
STA 217+91
END TYPE 60M CONCRETE BARRIER
PROPOSED SEVERE DUTY CRASH CUSHION
PROPOSED 6' CLASS II BIKE LANE
WITH 2' BUFFER
IS R81(CA), R26(CA)
STA 222+51
END REMOVE CONCRETE MEDIAN ISLAND
STA 223+19
BEGIN REMOVE CONCRETE MEDIAN ISLAND
R/W
MATCH LINE
"A" LINE
ROUTE 1
NB
SB
PROPOSED 6' CLASS II BIKE LANE
WITH 2' BUFFER
LAYOUT
SCALE: 1" = 50'
L-7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STATE OF CALIFORNIA
PROPOSED SEVERE DUTY CRASH CUSHION
STA 227+74
BEGIN TYPE 60M CONCRETE BARRIER
PROPOSED 6' CLASS II BIKE LANE
WITH 2' BUFFER
R/W
IS R81(CA), R26(CA)
MATCH LINE
227
228
229
230
231
232
233
234
"A" LINE
235
ROUTE 1
236
237
238
239
240
NB
SB
12'
PROPOSED 6' CLASS II BIKE LANE
WITH 2' BUFFER
LAYOUT
SCALE: 1" = 50'
L-8
REVISED BY
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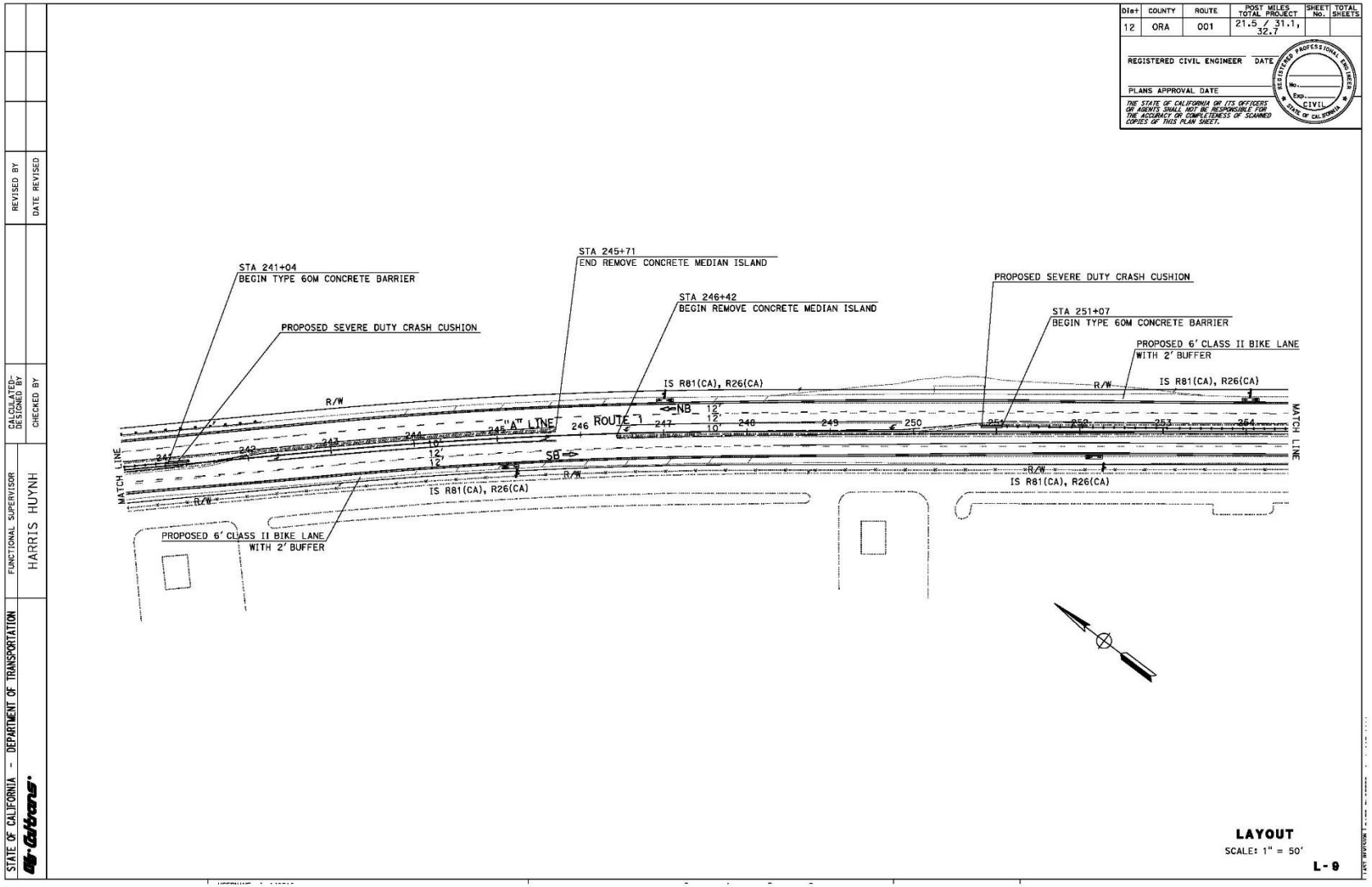
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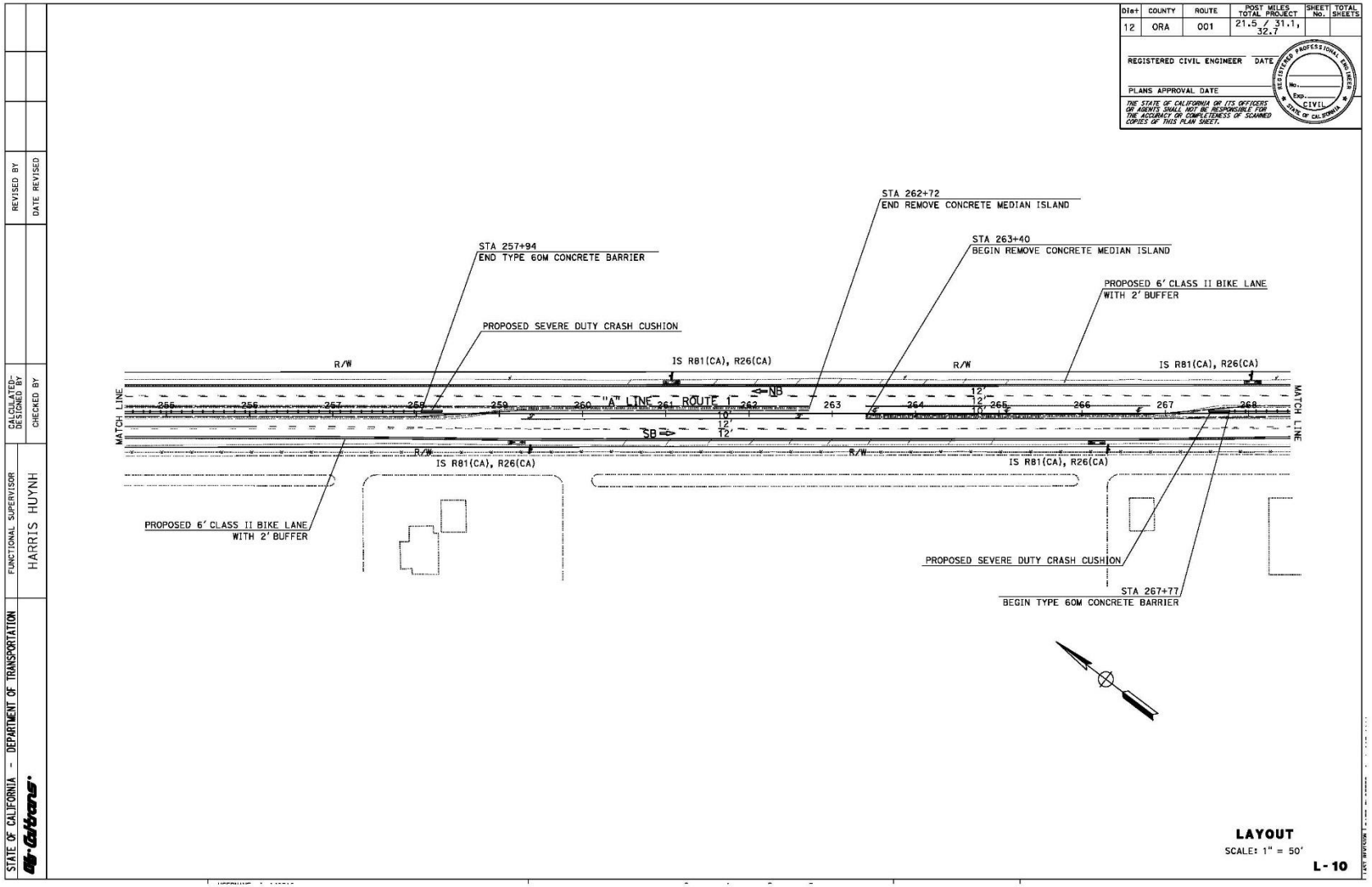
STA 241+04
BEGIN TYPE 60M CONCRETE BARRIER
PROPOSED SEVERE DUTY CRASH CUSHION
STA 245+71
END REMOVE CONCRETE MEDIAN ISLAND
STA 246+42
BEGIN REMOVE CONCRETE MEDIAN ISLAND
PROPOSED SEVERE DUTY CRASH CUSHION
STA 251+07
BEGIN TYPE 60M CONCRETE BARRIER
PROPOSED 6' CLASS II BIKE LANE WITH 2' BUFFER
IS R81(CA), R26(CA)
R/W
"A" LINE
ROUTE 1
NB
SB
MATCH LINE
PROPOSED 6' CLASS II BIKE LANE WITH 2' BUFFER
LAYOUT
SCALE: 1" = 50'
L-9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ORA
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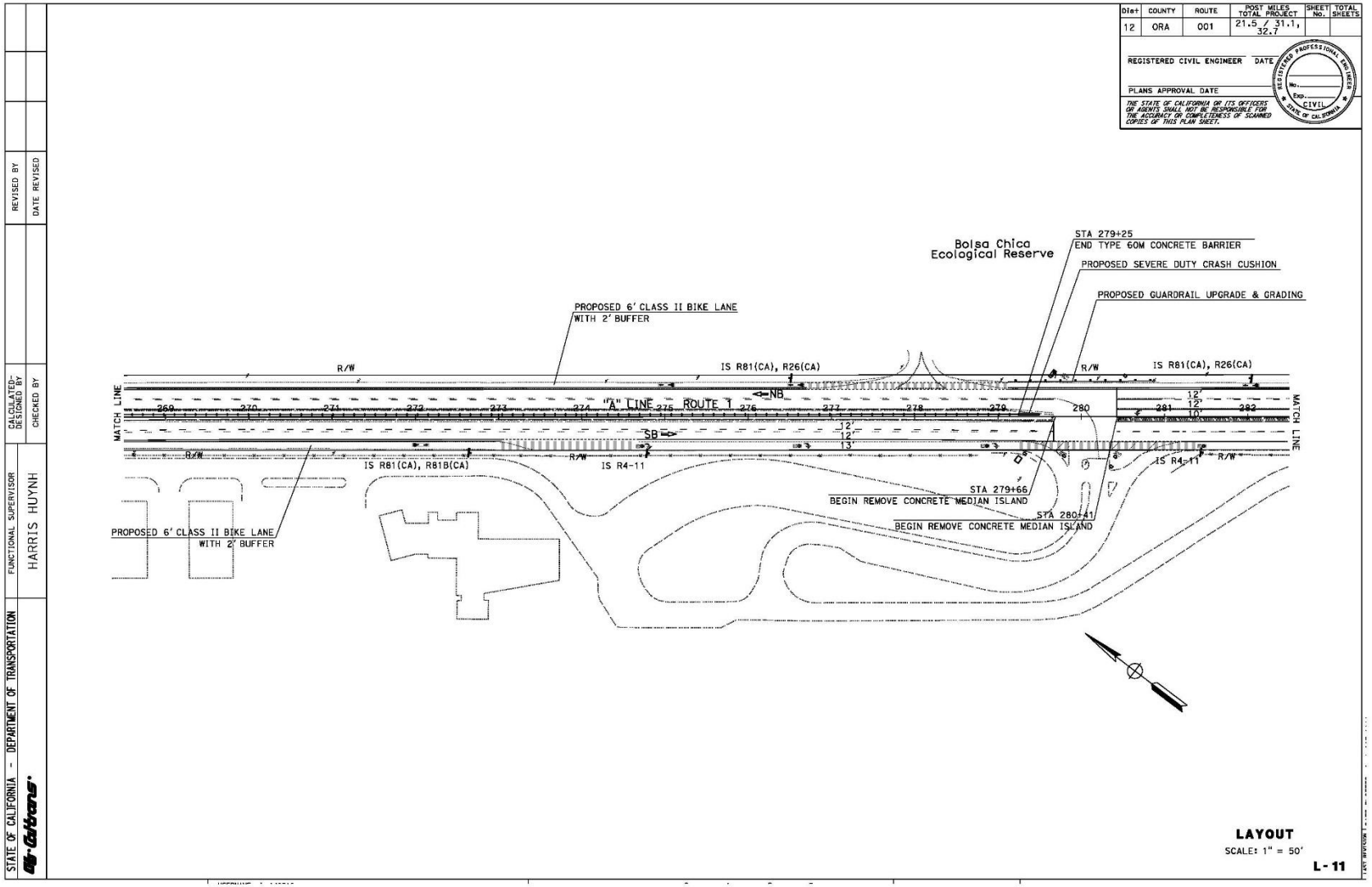
STA 257+94
END TYPE 60M CONCRETE BARRIER
PROPOSED SEVERE DUTY CRASH CUSHION
STA 262+72
END REMOVE CONCRETE MEDIAN ISLAND
STA 263+40
BEGIN REMOVE CONCRETE MEDIAN ISLAND
PROPOSED 6' CLASS II BIKE LANE
WITH 2' BUFFER
R/W
IS R81(CA), R26(CA)
MATCH LINE
"A" LINE
ROUTE 1
NB
SB
PROPOSED 6' CLASS II BIKE LANE
WITH 2' BUFFER
PROPOSED SEVERE DUTY CRASH CUSHION
STA 267+77
BEGIN TYPE 60M CONCRETE BARRIER
LAYOUT
SCALE: 1" = 50'
L-10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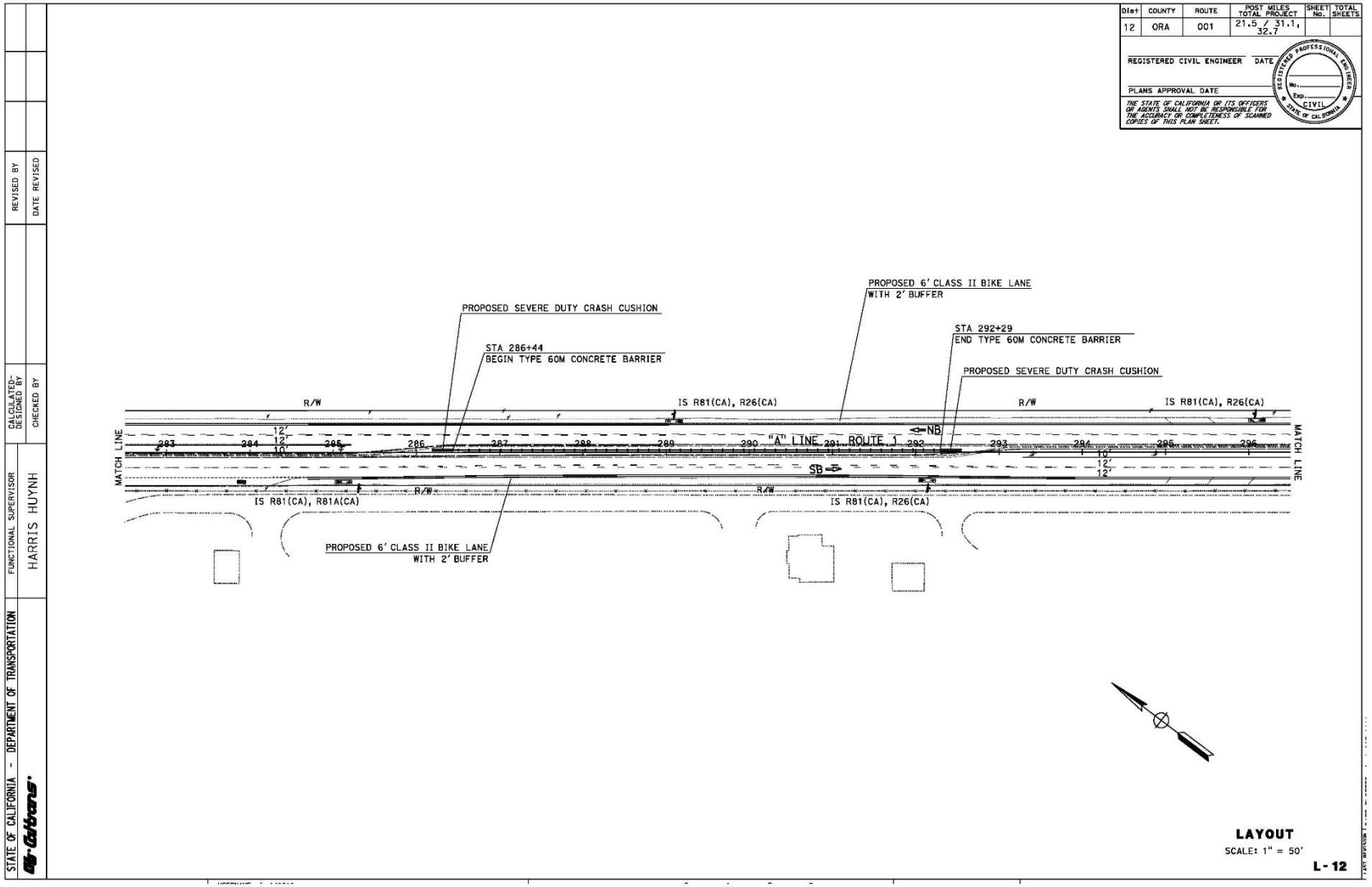
Bolsa Chica Ecological Reserve
STA 279+25
END TYPE 60M CONCRETE BARRIER
PROPOSED SEVERE DUTY CRASH CUSHION
PROPOSED GUARDRAIL UPGRADE & GRADING
PROPOSED 6' CLASS II BIKE LANE WITH 2' BUFFER
R/W
IS R81(CA), R26(CA)
MATCH LINE
269
270
271
272
273
274
"A" LINE
275
ROUTE 1
276
277
278
279
280
281
282
NB
SB
12'
13'
IS R81(CA), R81B(CA)
IS R4-11
STA 279+66
BEGIN REMOVE CONCRETE MEDIAN ISLAND
STA 280+41
BEGIN REMOVE CONCRETE MEDIAN ISLAND
PROPOSED 6' CLASS II BIKE LANE WITH 2' BUFFER
LAYOUT
SCALE: 1" = 50'
L-11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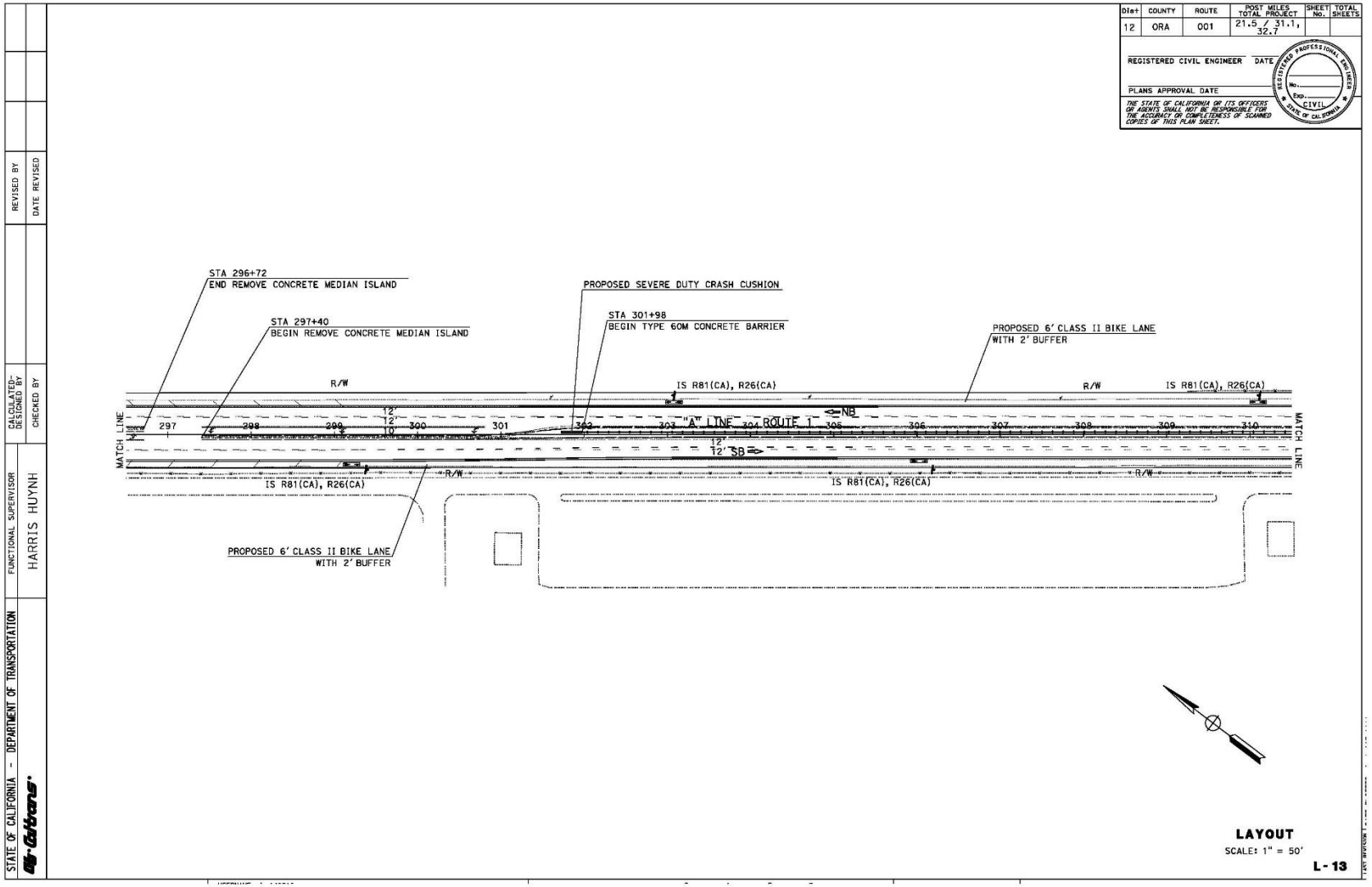
PROPOSED 6' CLASS II BIKE LANE WITH 2' BUFFER
PROPOSED SEVERE DUTY CRASH CUSHION
STA 286+44 BEGIN TYPE 60M CONCRETE BARRIER
STA 292+29 END TYPE 60M CONCRETE BARRIER
PROPOSED SEVERE DUTY CRASH CUSHION
R/W
IS R81(CA), R26(CA)
IS R81(CA), R81A(CA)
MATCH LINE
283 284 285 286 287 288 289 290 "A" LINE, ROUTE 1 291 292 293 294 295 296
NB
SB
12' 12' 10' 10' 12' 12'
PROPOSED 6' CLASS II BIKE LANE WITH 2' BUFFER
LAYOUT
SCALE: 1" = 50'
L-12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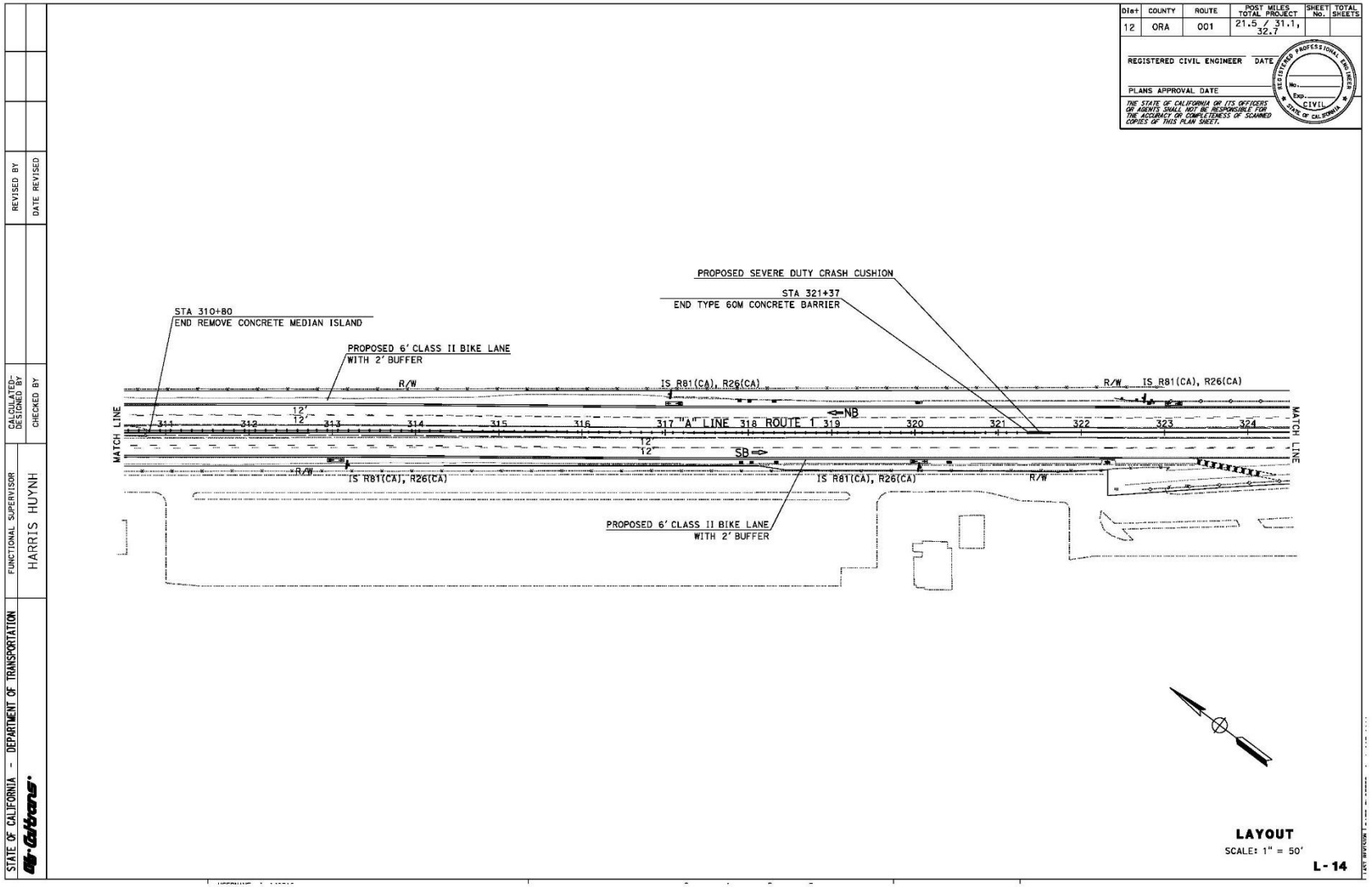
STA 296+72
END REMOVE CONCRETE MEDIAN ISLAND
STA 297+40
BEGIN REMOVE CONCRETE MEDIAN ISLAND
PROPOSED SEVERE DUTY CRASH CUSHION
STA 301+98
BEGIN TYPE 60M CONCRETE BARRIER
PROPOSED 6' CLASS II BIKE LANE
WITH 2' BUFFER
R/W
IS R81(CA), R26(CA)
MATCH LINE
297
298
299
300
301
302
303
"A" LINE ROUTE 1
NB
SB
304
305
306
307
308
309
310
12'
10'
PROPOSED 6' CLASS II BIKE LANE
WITH 2' BUFFER
LAYOUT
SCALE: 1" = 50'
L-13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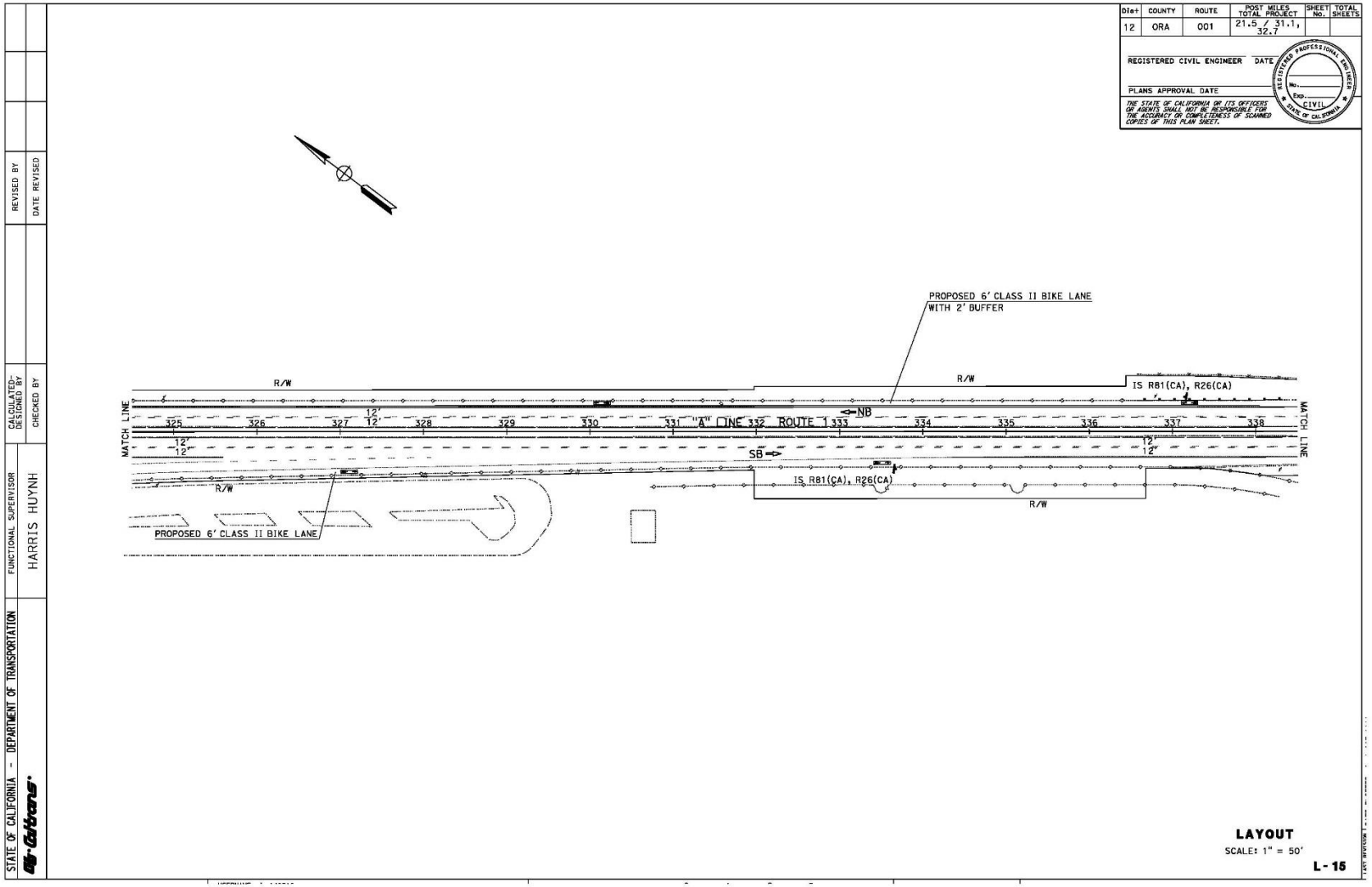
Caltrans
PROPOSED SEVERE DUTY CRASH CUSHION
STA 321+37
END TYPE 60M CONCRETE BARRIER
STA 310+80
END REMOVE CONCRETE MEDIAN ISLAND
PROPOSED 6' CLASS II BIKE LANE
WITH 2' BUFFER
R/W
IS R81(CA), R26(CA)
MATCH LINE
NB
SB
"A" LINE
ROUTE 1
PROPOSED 6' CLASS II BIKE LANE
WITH 2' BUFFER
LAYOUT
SCALE: 1" = 50'
L - 14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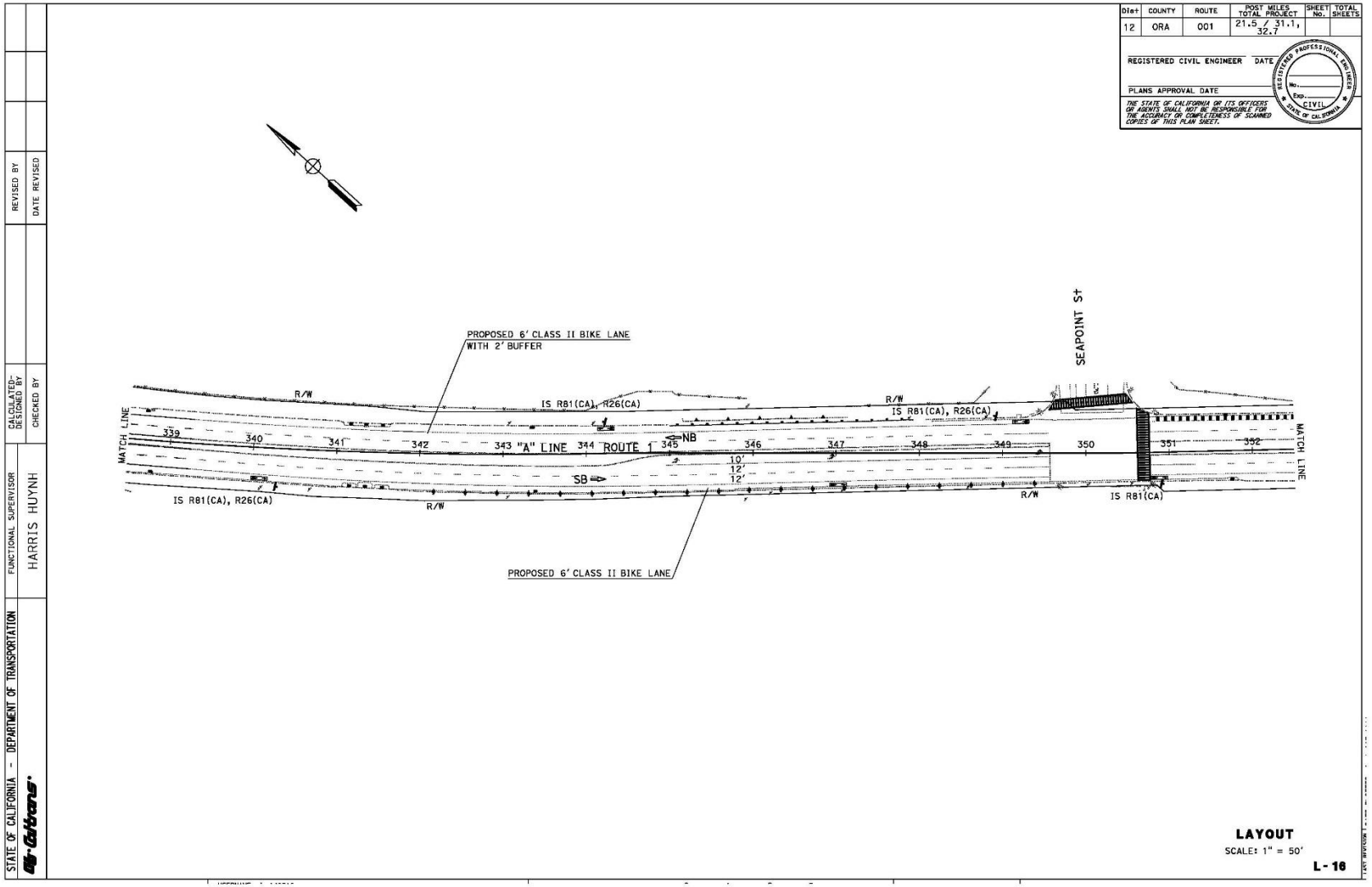
PROPOSED 6' CLASS II BIKE LANE WITH 2' BUFFER
R/W
IS R81(CA), R26(CA)
MATCH LINE
325 326 327 328 329 330 331 "A" LINE 332 ROUTE 1 333 334 335 336 337 338
NB
SB
12' 12'
PROPOSED 6' CLASS II BIKE LANE
LAYOUT
SCALE: 1" = 50'
L - 15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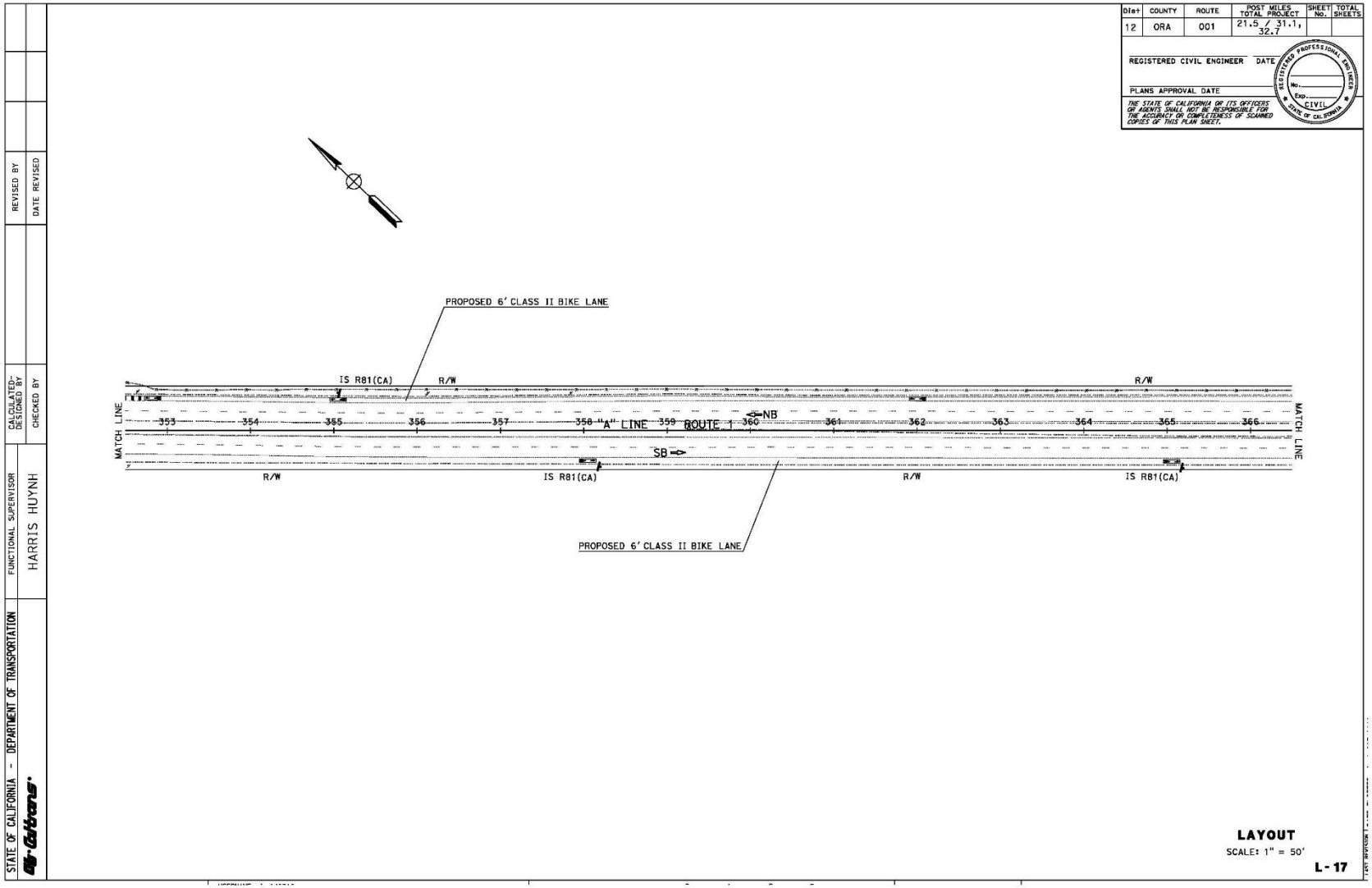
PROPOSED 6' CLASS II BIKE LANE
WITH 2' BUFFER
SEAPOINT St
R/W
IS R81(CA), R26(CA)
MATCH LINE
339
340
341
342
343 "A" LINE 344 ROUTE 1 345
NB
346
347
348
349
350
351
352
10'
12'
SB
PROPOSED 6' CLASS II BIKE LANE
LAYOUT
SCALE: 1" = 50'
L - 16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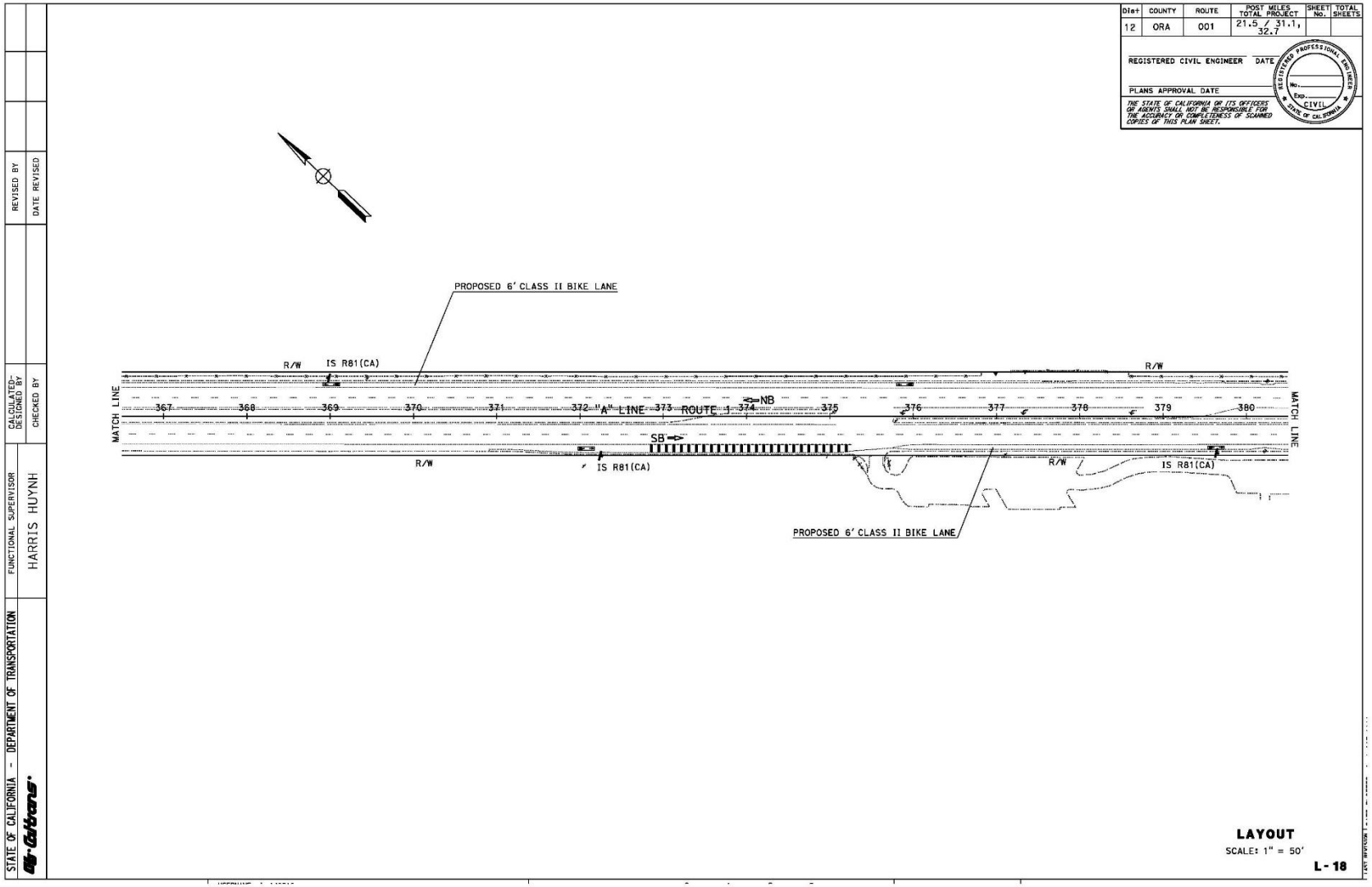
Caltrans
PROPOSED 6' CLASS II BIKE LANE
IS R81(CA)
R/W
R/W
MATCH LINE
353
354
355
356
357
358
"A" LINE
ROUTE 1
359
360
NB
361
362
363
364
365
366
MATCH LINE
SB
R/W
IS R81(CA)
R/W
IS R81(CA)
PROPOSED 6' CLASS II BIKE LANE
LAYOUT
SCALE: 1" = 50'
L - 17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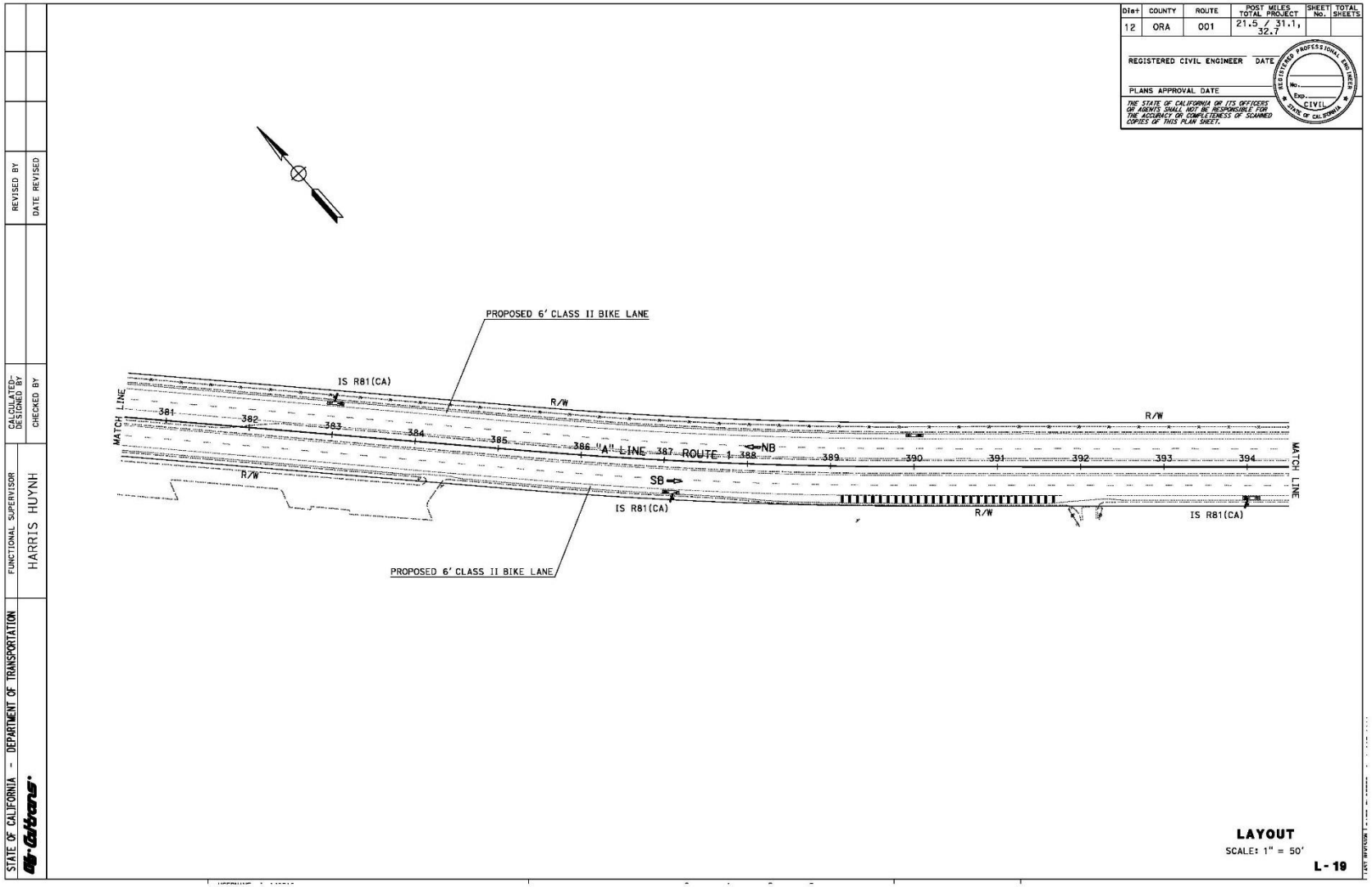
PROPOSED 6' CLASS II BIKE LANE
R/W
IS R81(CA)
MATCH LINE
367
368
369
370
371
372
"A" LINE
373
ROUTE 1
374
NB
SB
375
376
377
378
379
380
PROPOSED 6' CLASS II BIKE LANE
LAYOUT
SCALE: 1" = 50'
L - 18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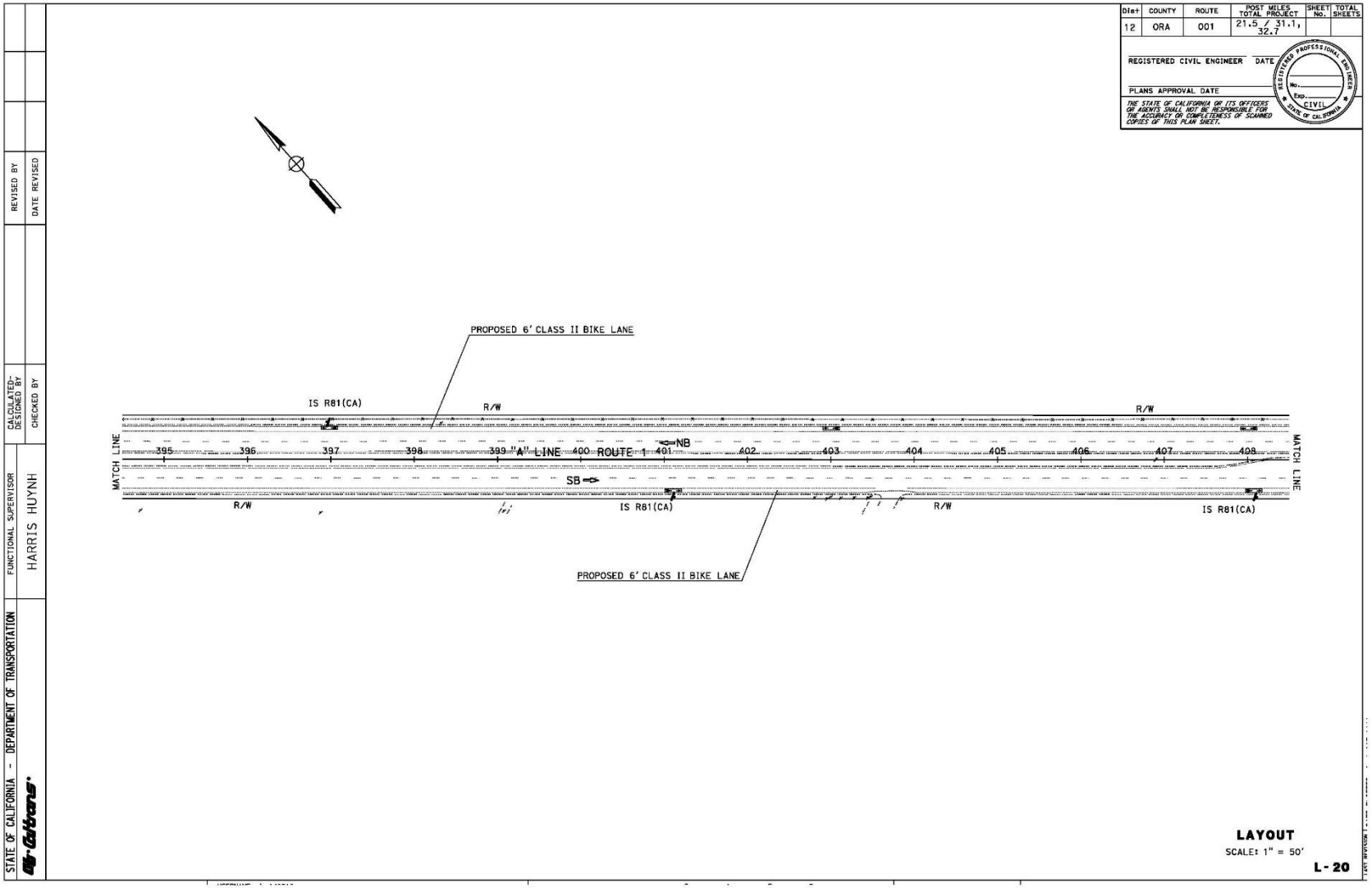
PROPOSED 6' CLASS II BIKE LANE
IS R81(CA)
R/W
MATCH LINE
381
382
383
384
385
386
"A" LINE
387
ROUTE 1
388
NB
SB
389
390
391
392
393
394
PROPOSED 6' CLASS II BIKE LANE
LAYOUT
SCALE: 1" = 50'
L - 19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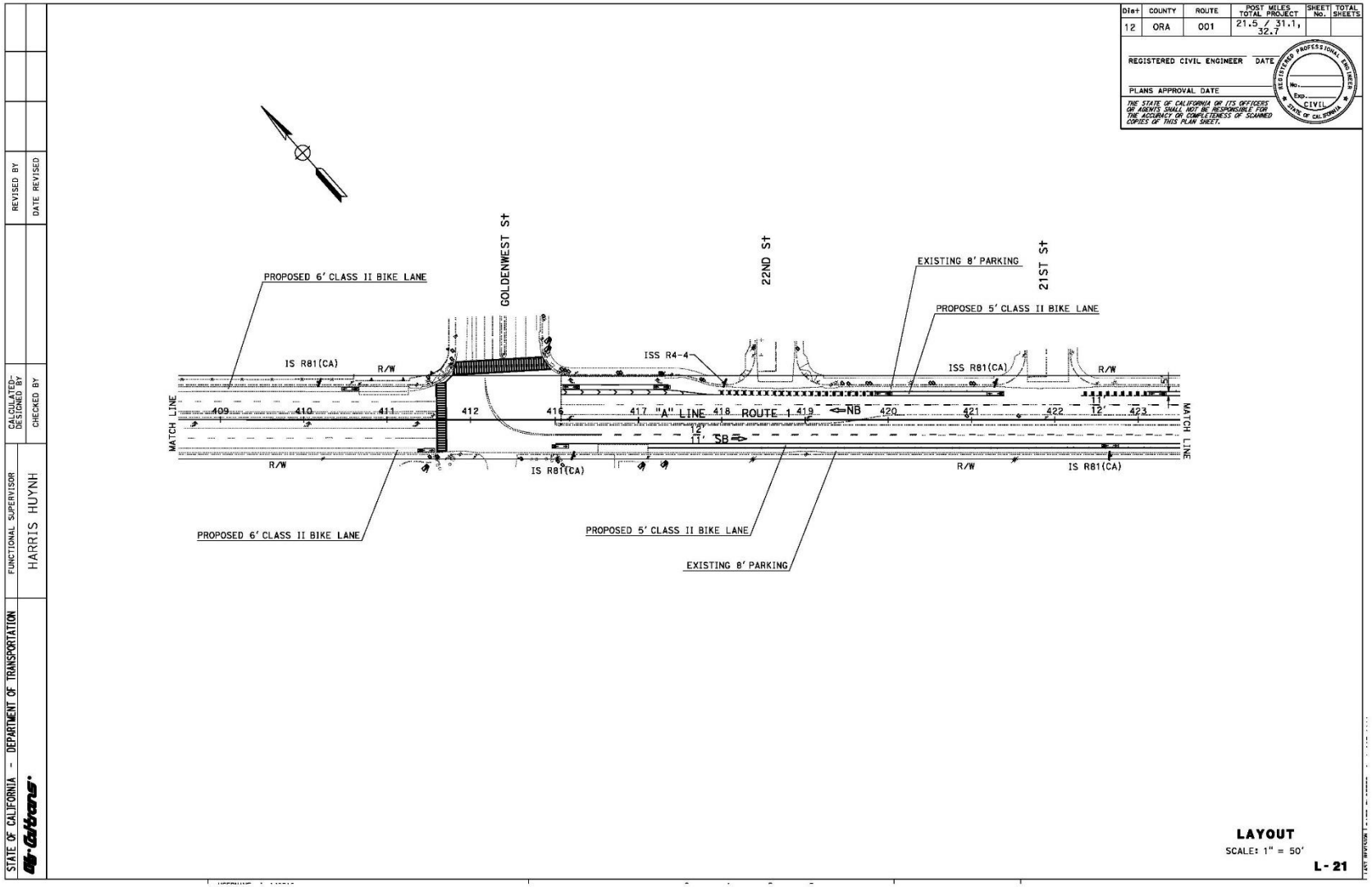
PROPOSED 6' CLASS II BIKE LANE
IS R81(CA)
R/W
R/W
MATCH LINE
395
396
397
398
399 "A" LINE
400
ROUTE 1
NB
401
402
403
404
405
406
407
408
MATCH LINE
SB
R/W
IS R81(CA)
R/W
IS R81(CA)
PROPOSED 6' CLASS II BIKE LANE
LAYOUT
SCALE: 1" = 50'
L-20


Dist
12
COUNTY
ORA
ROUTE
001
POST MILES TOTAL PROJECT
21.5 / 31.1, 32.7
SHEET No.
TOTAL SHEETS
REGISTERED CIVIL ENGINEER
DATE
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CIVIL
STATE OF CALIFORNIA
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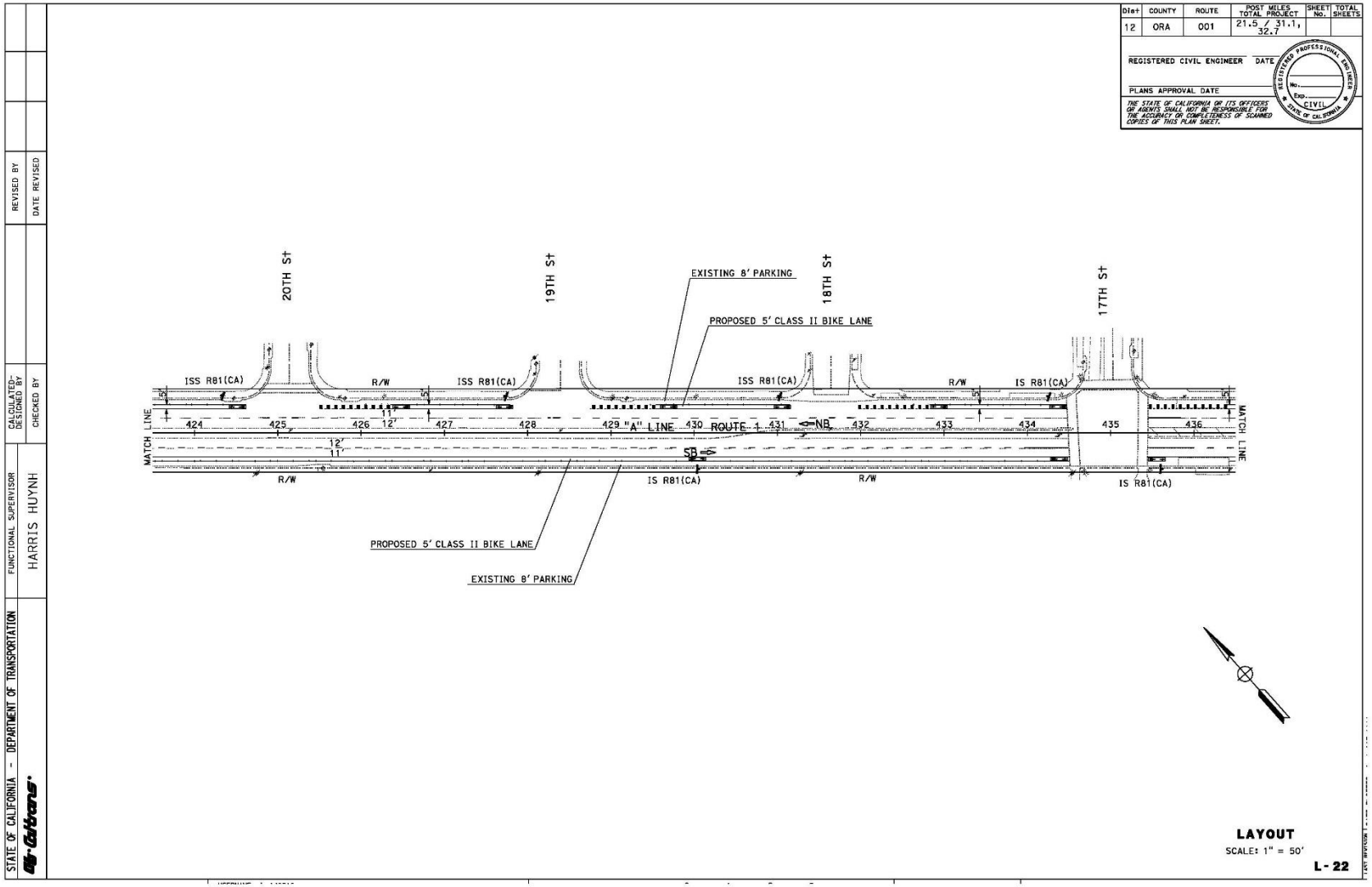
FUNCTIONAL SUPERVISOR
HARRIS HUYNH
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
GOLDENWEST St
22ND St
21ST St
PROPOSED 6' CLASS II BIKE LANE
EXISTING 8' PARKING
PROPOSED 5' CLASS II BIKE LANE
IS R81(CA)
R/W
ISS R4-4
ISS R81(CA)
MATCH LINE
409
410
411
412
416
417
"A" LINE
418
ROUTE 1
419
NB
420
421
422
423
12'
11'
SB
IS R81(CA)
PROPOSED 6' CLASS II BIKE LANE
PROPOSED 5' CLASS II BIKE LANE
EXISTING 8' PARKING
LAYOUT
SCALE: 1" = 50'
L - 21


Dist
12
COUNTY
ORA
ROUTE
001
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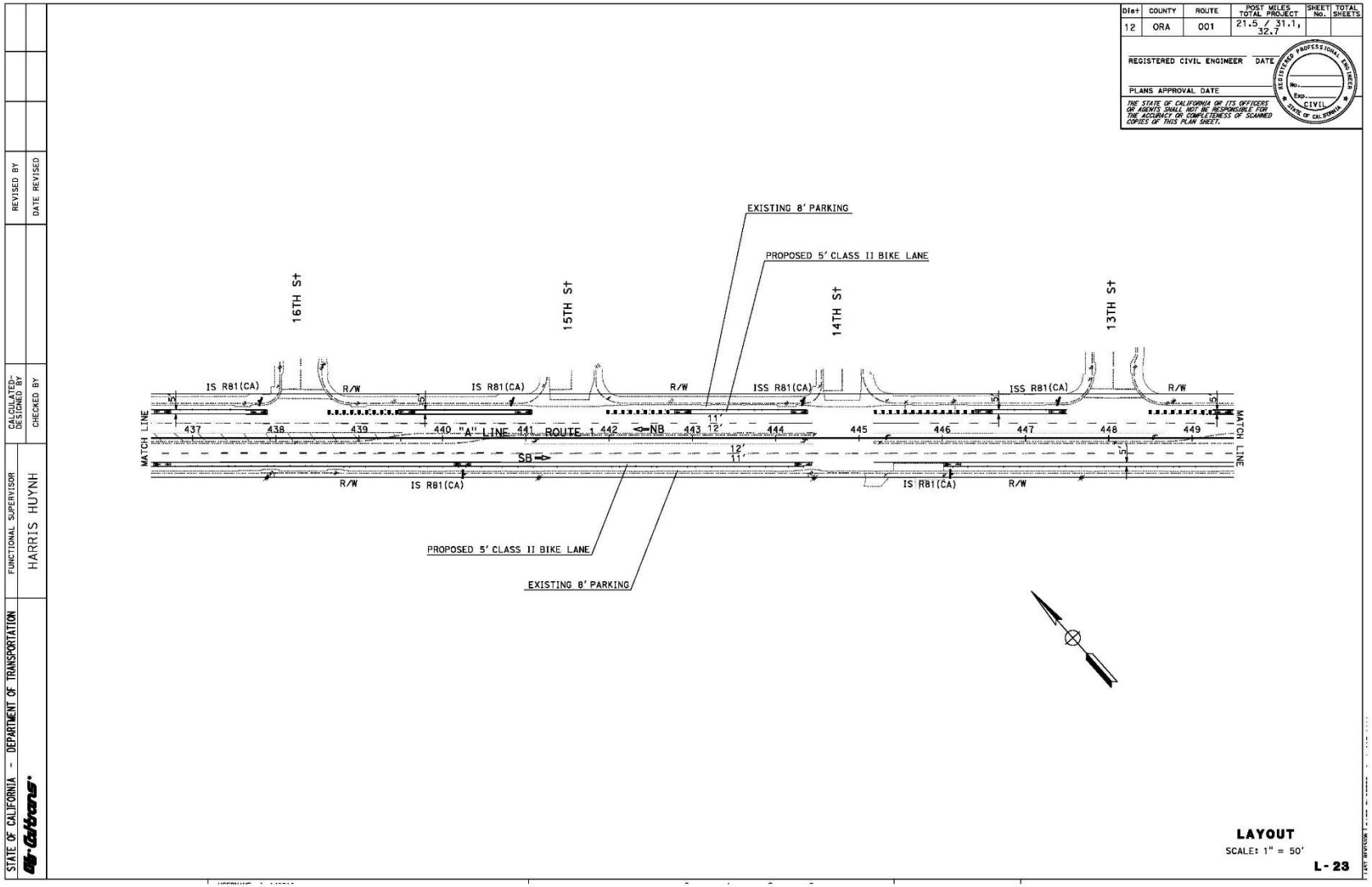
20TH St
19TH St
18TH St
17TH St
EXISTING 8' PARKING
PROPOSED 5' CLASS II BIKE LANE
ISS R81(CA)
R/W
IS R81(CA)
MATCH LINE
424
425
426
427
428
429
"A" LINE
430
ROUTE 1
431
NB
SB
432
433
434
435
436
PROPOSED 5' CLASS II BIKE LANE
EXISTING 8' PARKING
LAYOUT
SCALE: 1" = 50'
L-22


Dist
12
COUNTY
ORA
ROUTE
001
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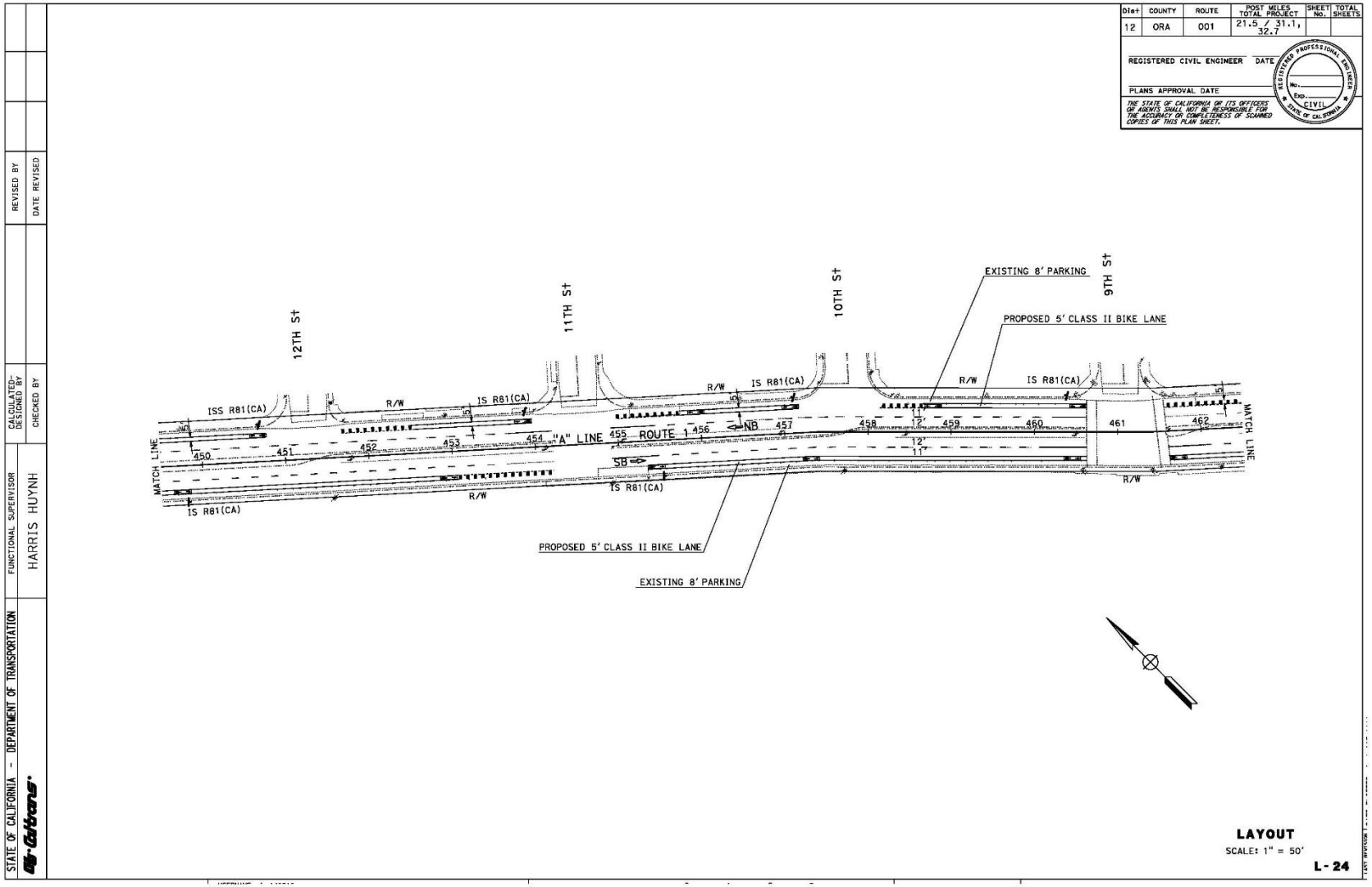
Caltrans
EXISTING 8' PARKING
PROPOSED 5' CLASS II BIKE LANE
16TH St
15TH St
14TH St
13TH St
IS R81(CA)
R/W
ISS R81(CA)
MATCH LINE
437
438
439
440 "A" LINE
441
ROUTE 1
442
NB
443
444
445
446
447
448
449
SB
12'
11'
PROPOSED 5' CLASS II BIKE LANE
EXISTING 8' PARKING
LAYOUT
SCALE: 1" = 50'
L - 23


Dist
12
COUNTY
ORA
ROUTE
001
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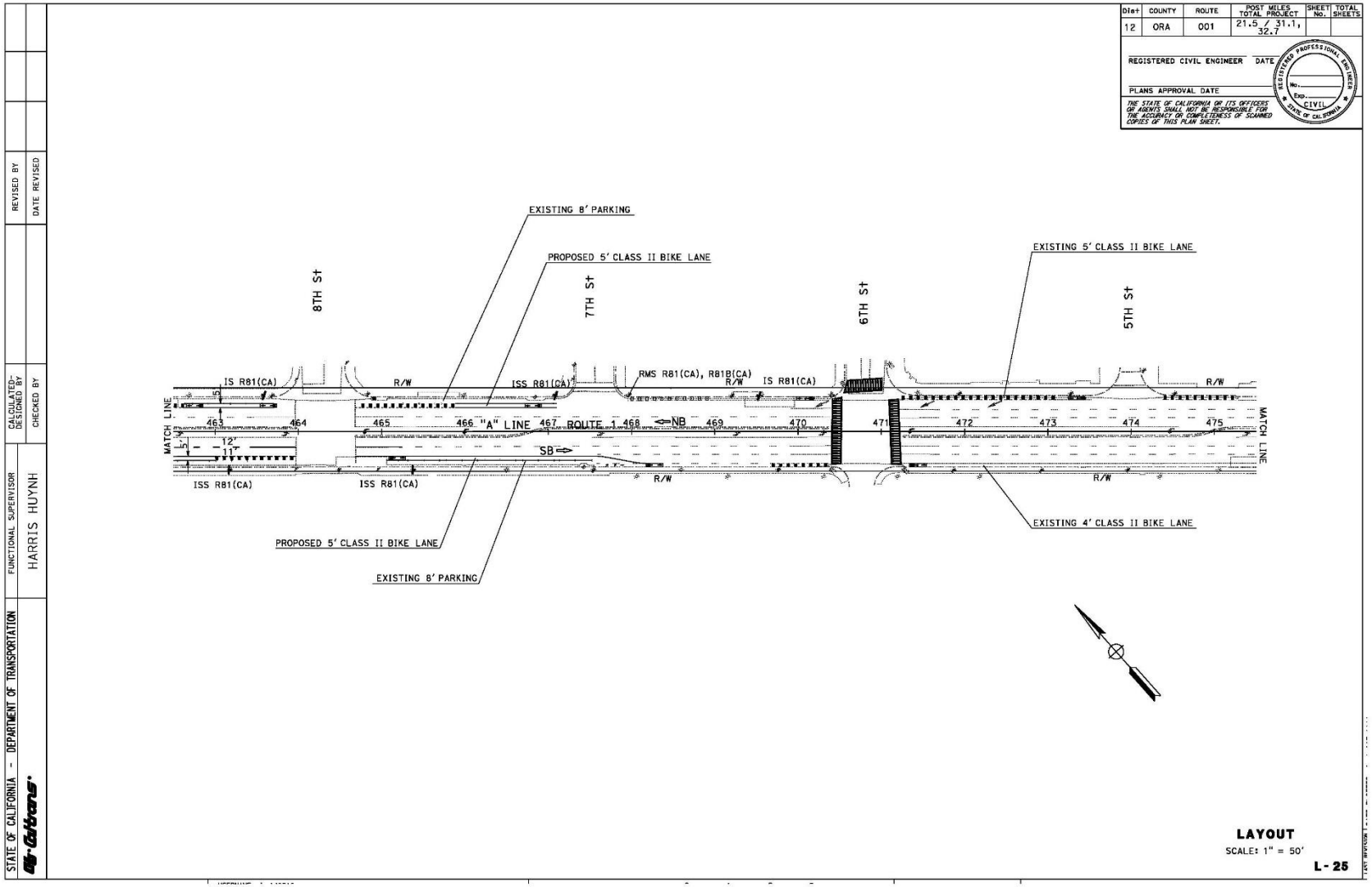
Caltrans
12TH ST
11TH ST
10TH ST
9TH ST
EXISTING 8' PARKING
PROPOSED 5' CLASS II BIKE LANE
ISS R81(CA)
IS R81(CA)
R/W
MATCH LINE
"A" LINE
ROUTE 1
NB
SB
450
451
452
453
454
455
456
457
458
459
460
461
462
12'
11'
PROPOSED 5' CLASS II BIKE LANE
EXISTING 8' PARKING
LAYOUT
SCALE: 1" = 50'
L-24


Dist
12
COUNTY
ORA
ROUTE
001
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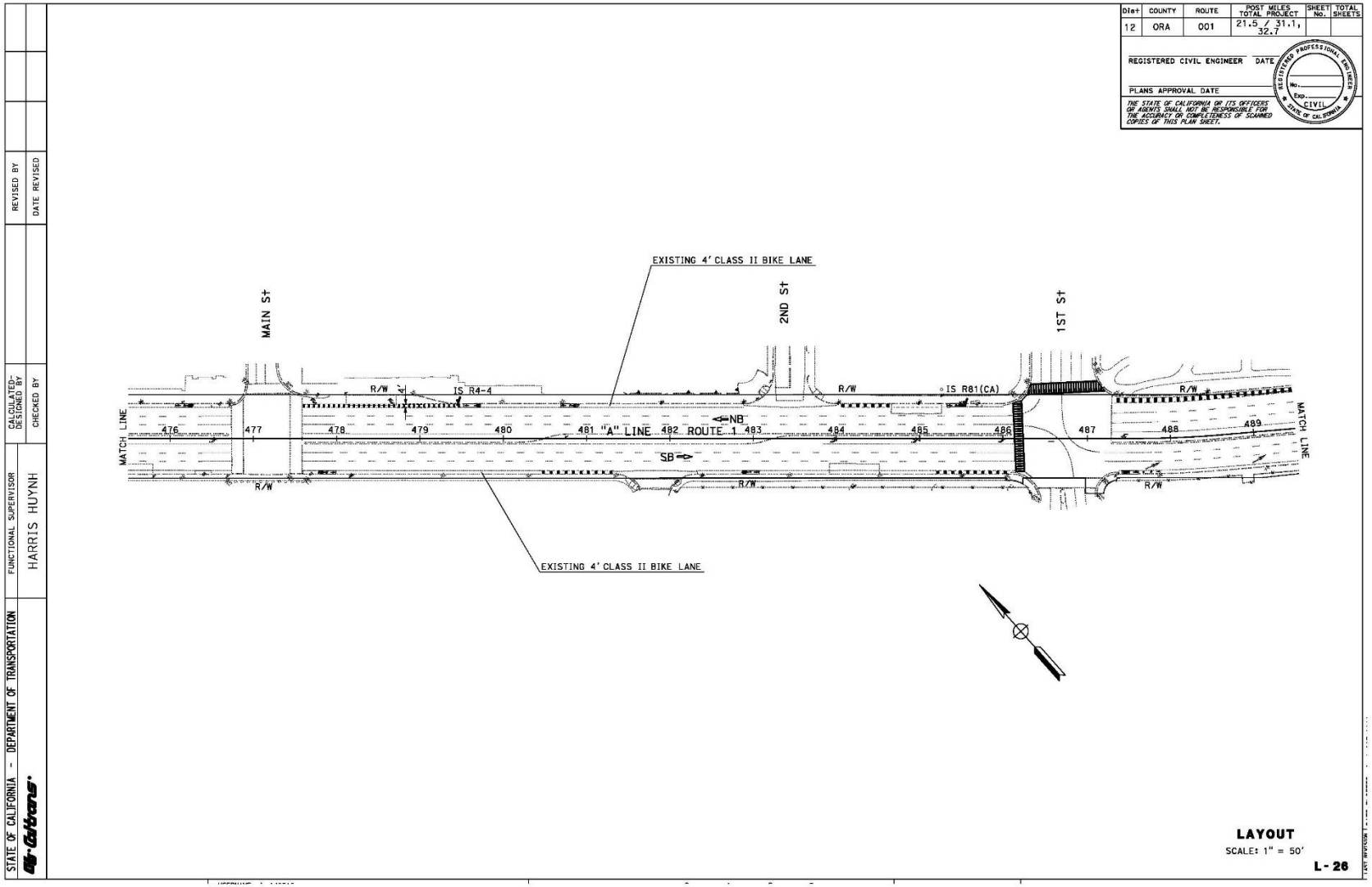
Caltrans
EXISTING 8' PARKING
PROPOSED 5' CLASS II BIKE LANE
EXISTING 5' CLASS II BIKE LANE
8TH St
7TH St
6TH St
5TH St
IS R81(CA)
R/W
ISS R81(CA)
RWS R81(CA), R81B(CA)
MATCH LINE
"A" LINE
ROUTE 1
NB
SB
12'
11'
EXISTING 4' CLASS II BIKE LANE
LAYOUT
SCALE: 1" = 50'
L - 25


Dist
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COUNTY
ORA
ROUTE
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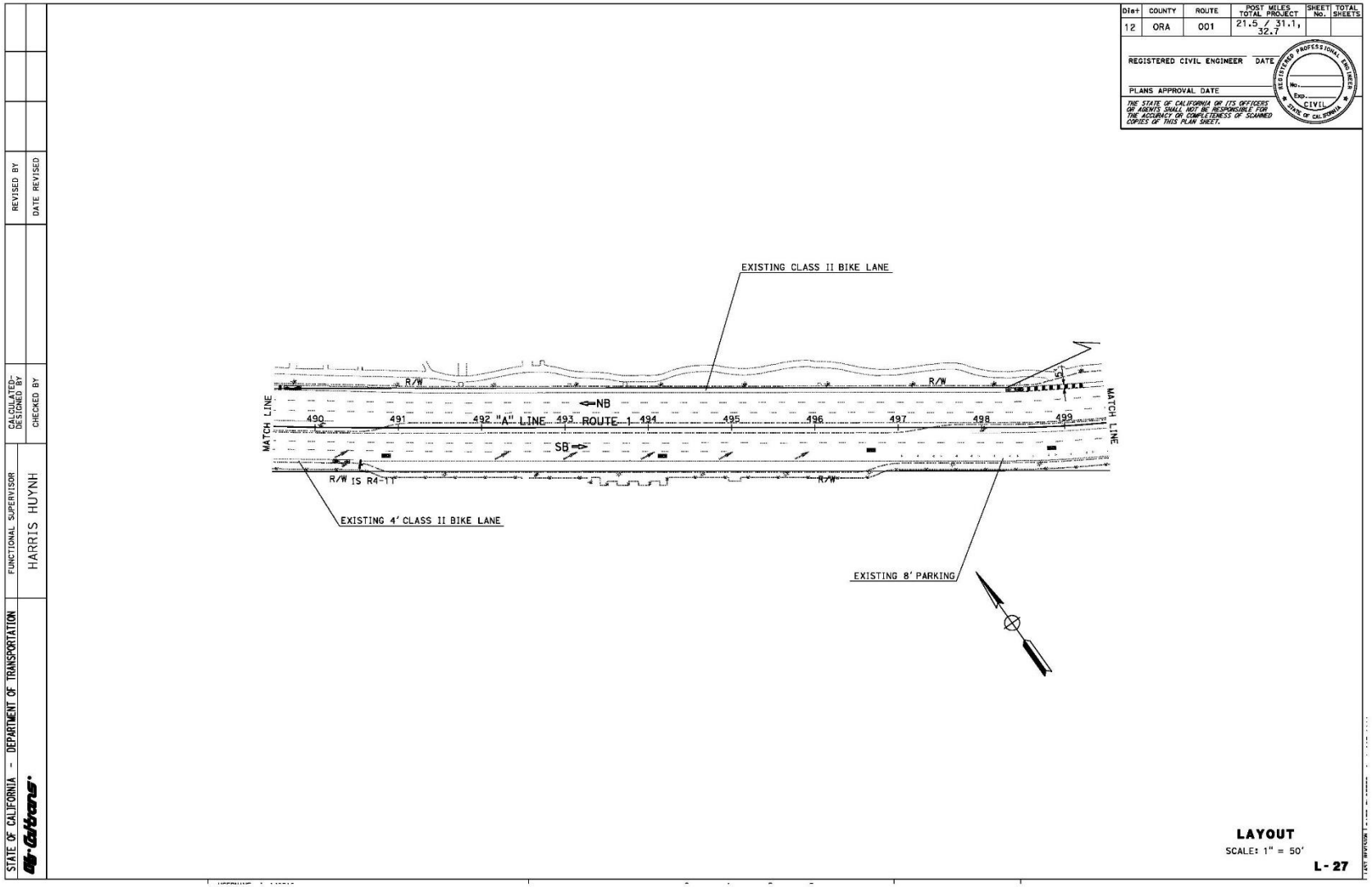
Caltrans
EXISTING 4' CLASS II BIKE LANE
MAIN St
2ND St
1ST St
R/W
IS R4-4
IS R81(CA)
MATCH LINE
476
477
478
479
480
481
"A" LINE
482
ROUTE 1
483
484
485
486
487
488
489
NB
SB
EXISTING 4' CLASS II BIKE LANE
LAYOUT
SCALE: 1" = 50'
L-26


Dist
12
COUNTY
ORA
ROUTE
001
POST MILES TOTAL PROJECT
21.5 / 31.1, 32.7
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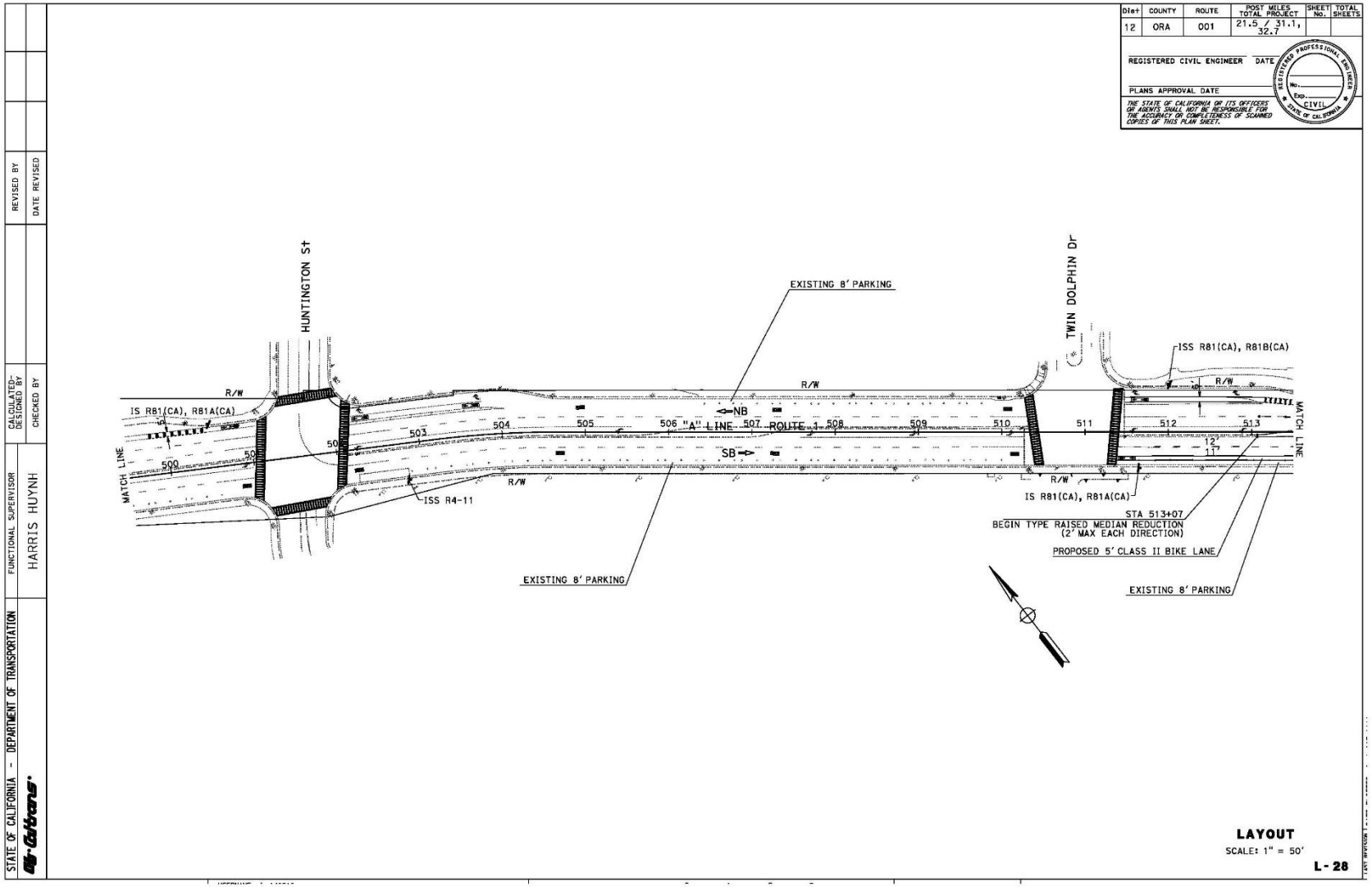
Caltrans
EXISTING CLASS II BIKE LANE
R/W
R/W
NB
MATCH LINE
490
491
492 "A" LINE
493 ROUTE 1
494
495
496
497
498
499
MATCH LINE
SB
R/W IS R4-11'
R/W
EXISTING 4' CLASS II BIKE LANE
EXISTING 8' PARKING
LAYOUT
SCALE: 1" = 50'
L - 27


Dist
12
COUNTY
ORA
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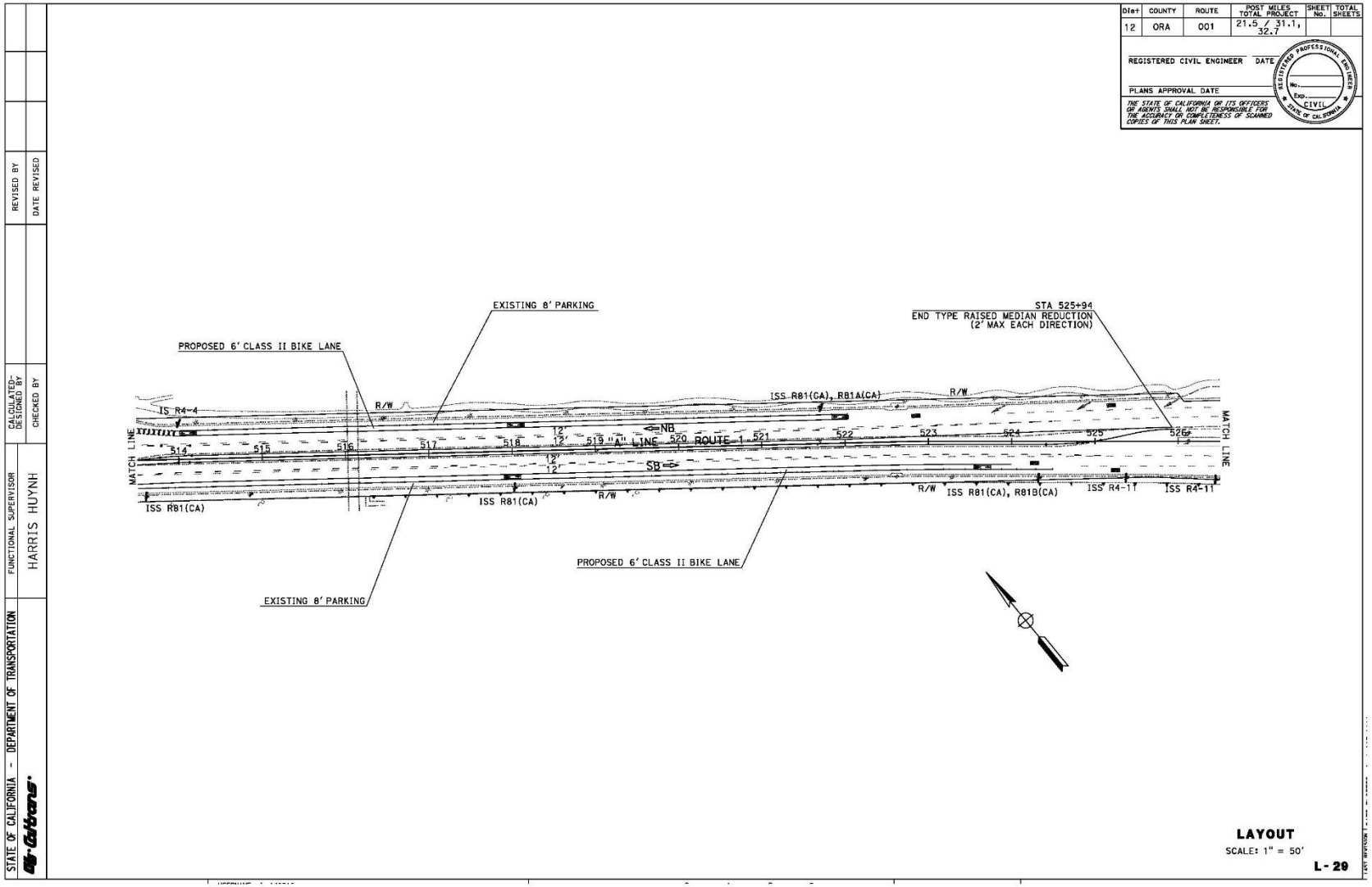
Caltrans
HUNTINGTON St
TWIN DOLPHIN Dr
EXISTING 8' PARKING
ISS R81(CA), R81B(CA)
R/W
IS RB1(CA), RB1A(CA)
NB
SB
ROUTE 1
"A" LINE
MATCH LINE
ISS R4-11
IS R81(CA), R81A(CA)
STA 513+07
BEGIN TYPE RAISED MEDIAN REDUCTION (2' MAX EACH DIRECTION)
PROPOSED 5' CLASS II BIKE LANE
EXISTING 8' PARKING
LAYOUT
SCALE: 1" = 50'
L-28


DIst
12
COUNTY
ORA
ROUTE
001
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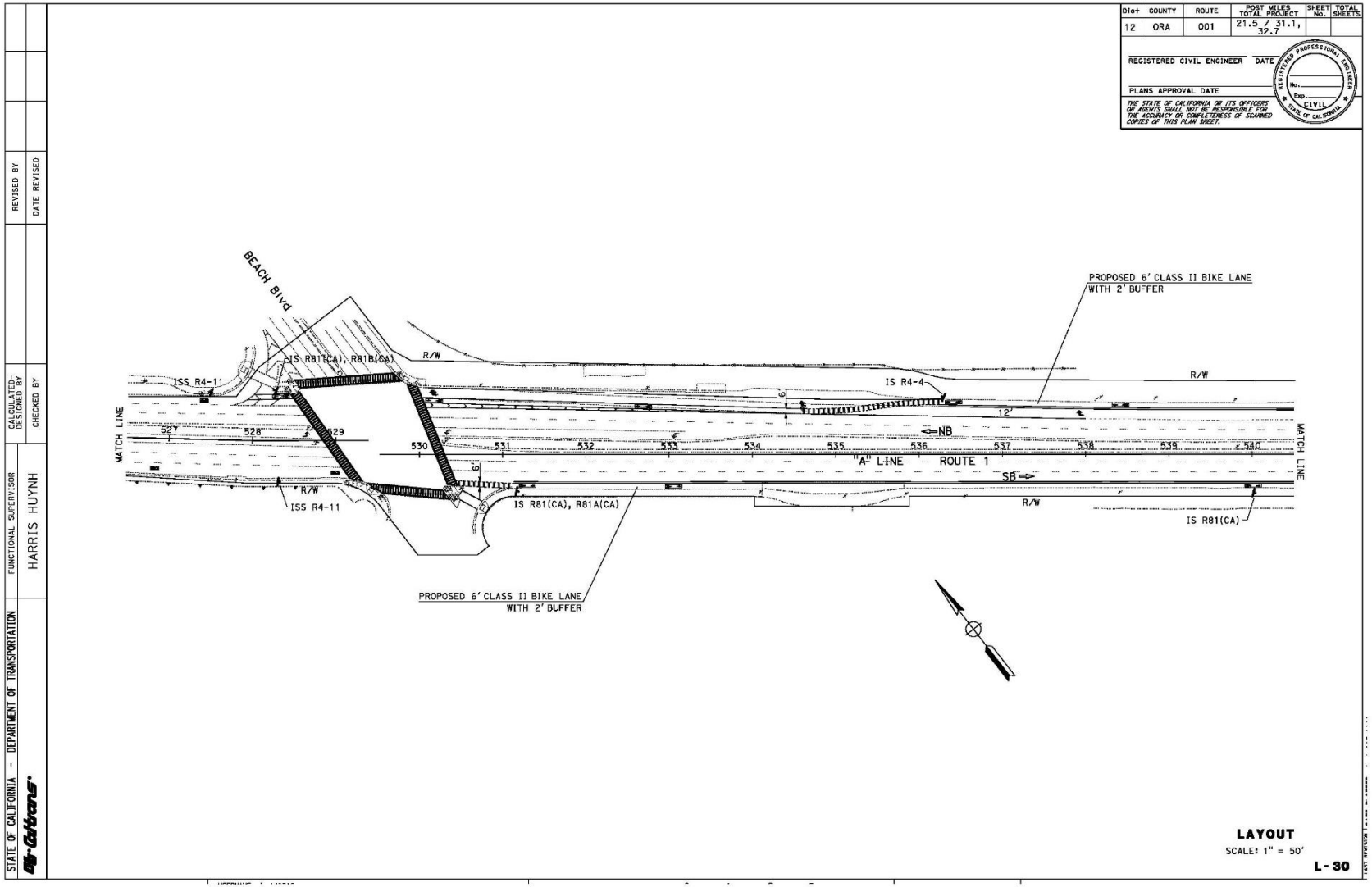
Caltrans
EXISTING 8' PARKING
PROPOSED 6' CLASS II BIKE LANE
STA 525+94
END TYPE RAISED MEDIAN REDUCTION
(2' MAX EACH DIRECTION)
ISS R81(CA), R81A(CA)
R/W
ISS R4-4
NB
SB
ROUTE 1
"A" LINE
MATCH LINE
514
515
516
517
518
519
520
521
522
523
524
525
526
ISS R81(CA)
ISS R81(CA)
R/W
R/W
ISS R81(CA), R81B(CA)
ISS R4-11
ISS R4-11
PROPOSED 6' CLASS II BIKE LANE
EXISTING 8' PARKING
LAYOUT
SCALE: 1" = 50'
L-29


Dist
12
COUNTY
ORA
ROUTE
001
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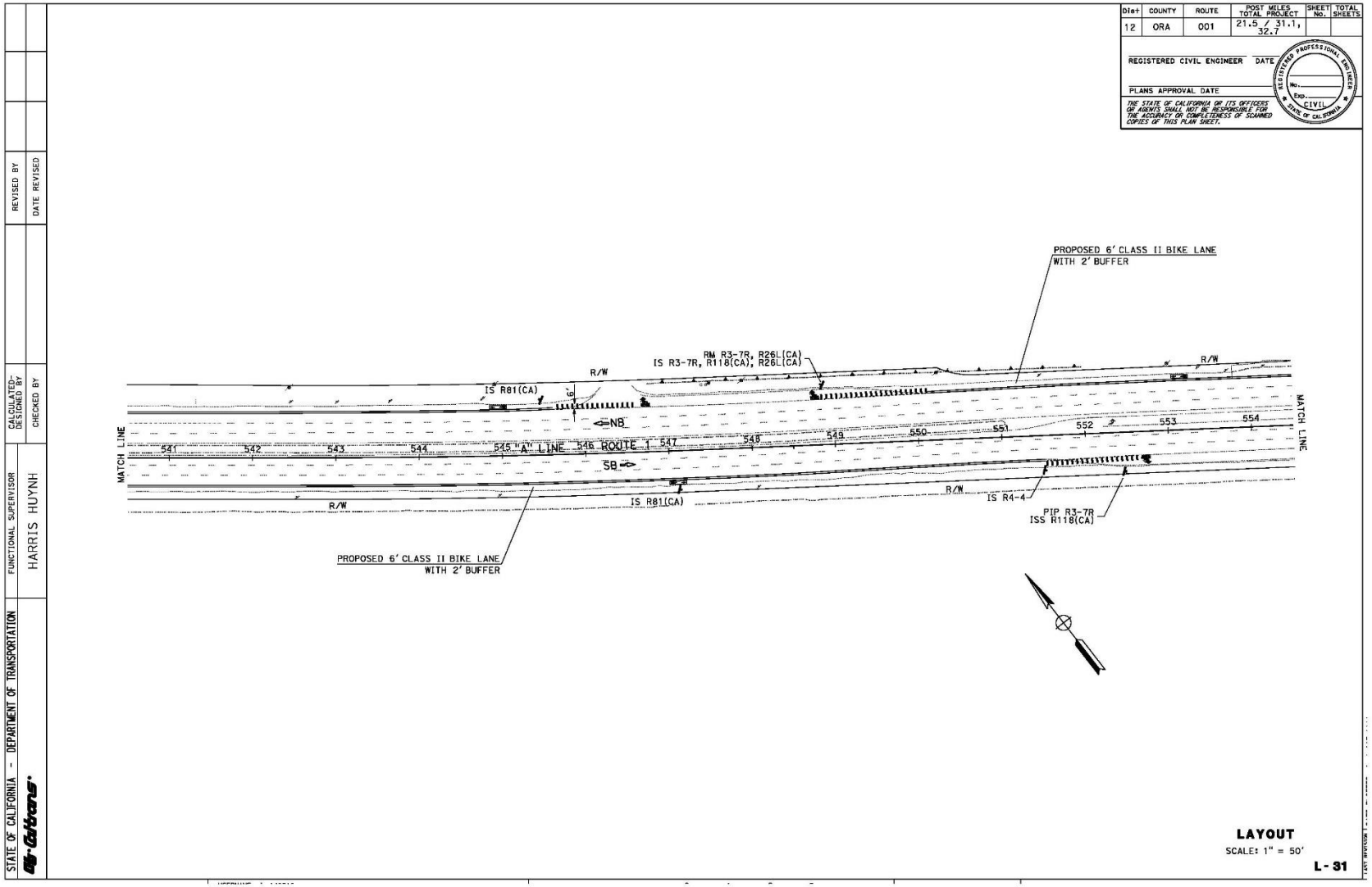
Caltrans
BEACH BLVD
IS R81(CA), R81B(CA)
R/W
ISS R4-11
IS R4-4
PROPOSED 6' CLASS II BIKE LANE
WITH 2' BUFFER
12'
MATCH LINE
527
528
529
530
531
532
533
534
535
536
537
538
539
540
NB
"A" LINE
ROUTE 1
SB
IS R81(CA), R81A(CA)
PROPOSED 6' CLASS II BIKE LANE
WITH 2' BUFFER
LAYOUT
SCALE: 1" = 50'
L - 30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COUNTY
ORA
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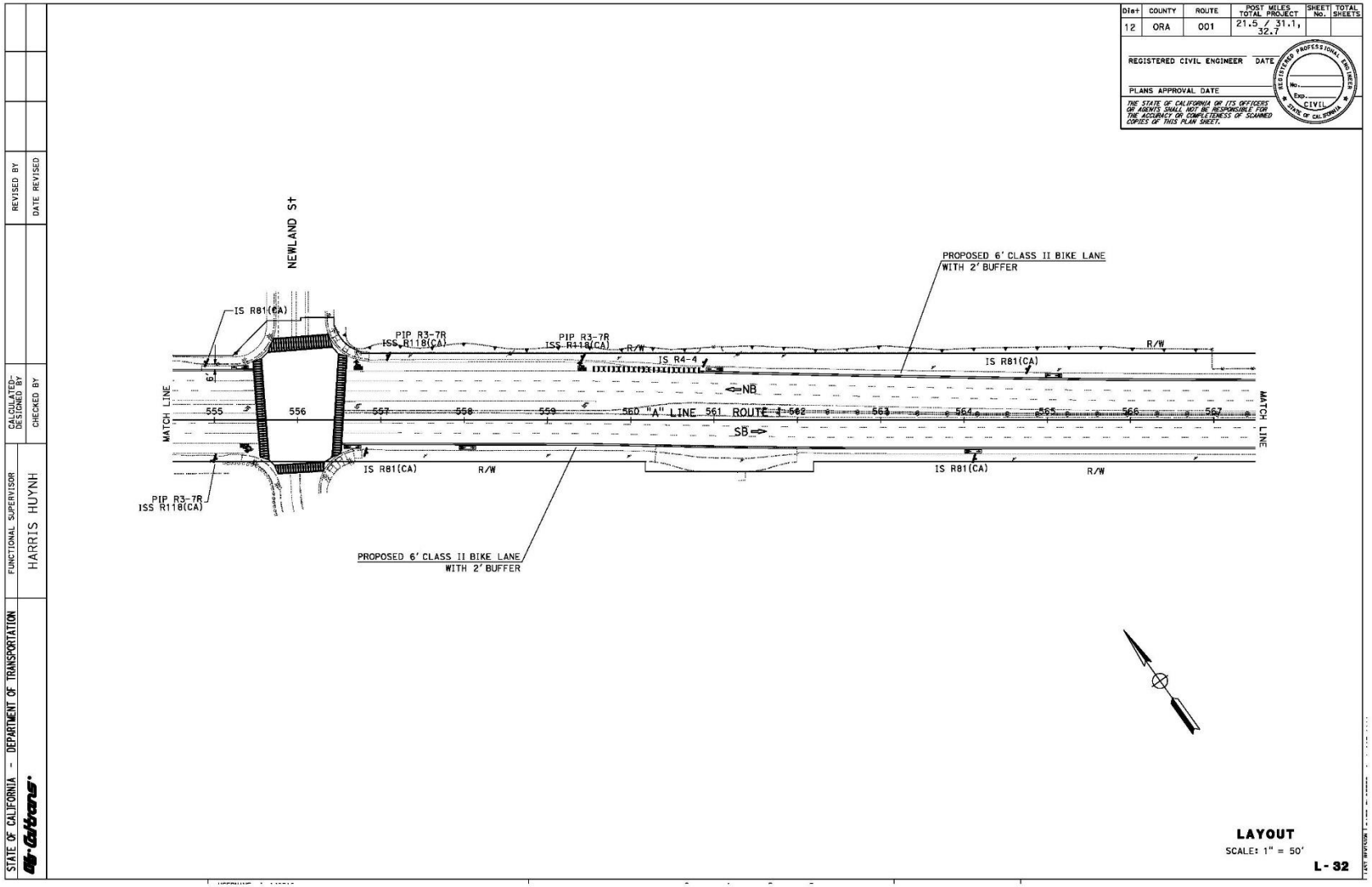
PROPOSED 6' CLASS II BIKE LANE
WITH 2' BUFFER
RM R3-7R, R26L(CA)
IS R3-7R, R118(CA), R26L(CA)
R/W
IS R81(CA)
NB
SB
MATCH LINE
541
542
543
544
545 "A" LINE
546 ROUTE 1
547
548
549
550
551
552
553
554
IS R4-4
PIP R3-7R
ISS R118(CA)
LAYOUT
SCALE: 1" = 50'
L - 31


Dist
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COUNTY
ORA
ROUTE
001
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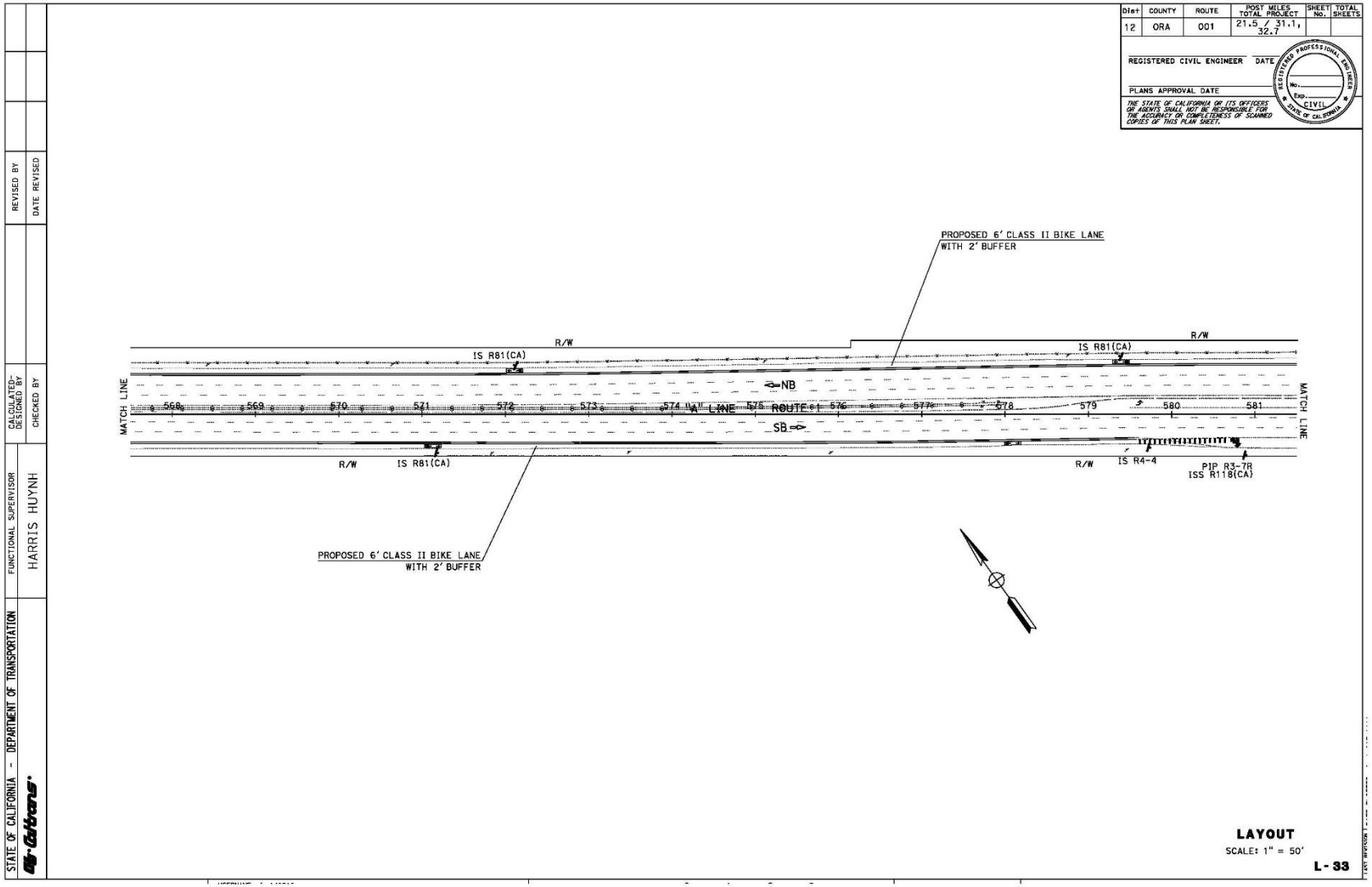
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
NEWLAND St
PROPOSED 6' CLASS II BIKE LANE WITH 2' BUFFER
IS R81(CA)
PIP R3-7R ISS R11B(CA)
PIP R3-7R ISS R11B(CA)
R/W
IS R4-4
IS R81(CA)
R/W
MATCH LINE
555
556
557
558
559
560
"A" LINE
561
ROUTE 1
562
563
564
565
566
567
NB
SB
MATCH LINE
IS R81(CA)
R/W
IS R81(CA)
R/W
PIP R3-7R ISS R11B(CA)
PROPOSED 6' CLASS II BIKE LANE WITH 2' BUFFER
LAYOUT
SCALE: 1" = 50'
L - 32


Dist
12
COUNTY
ORA
ROUTE
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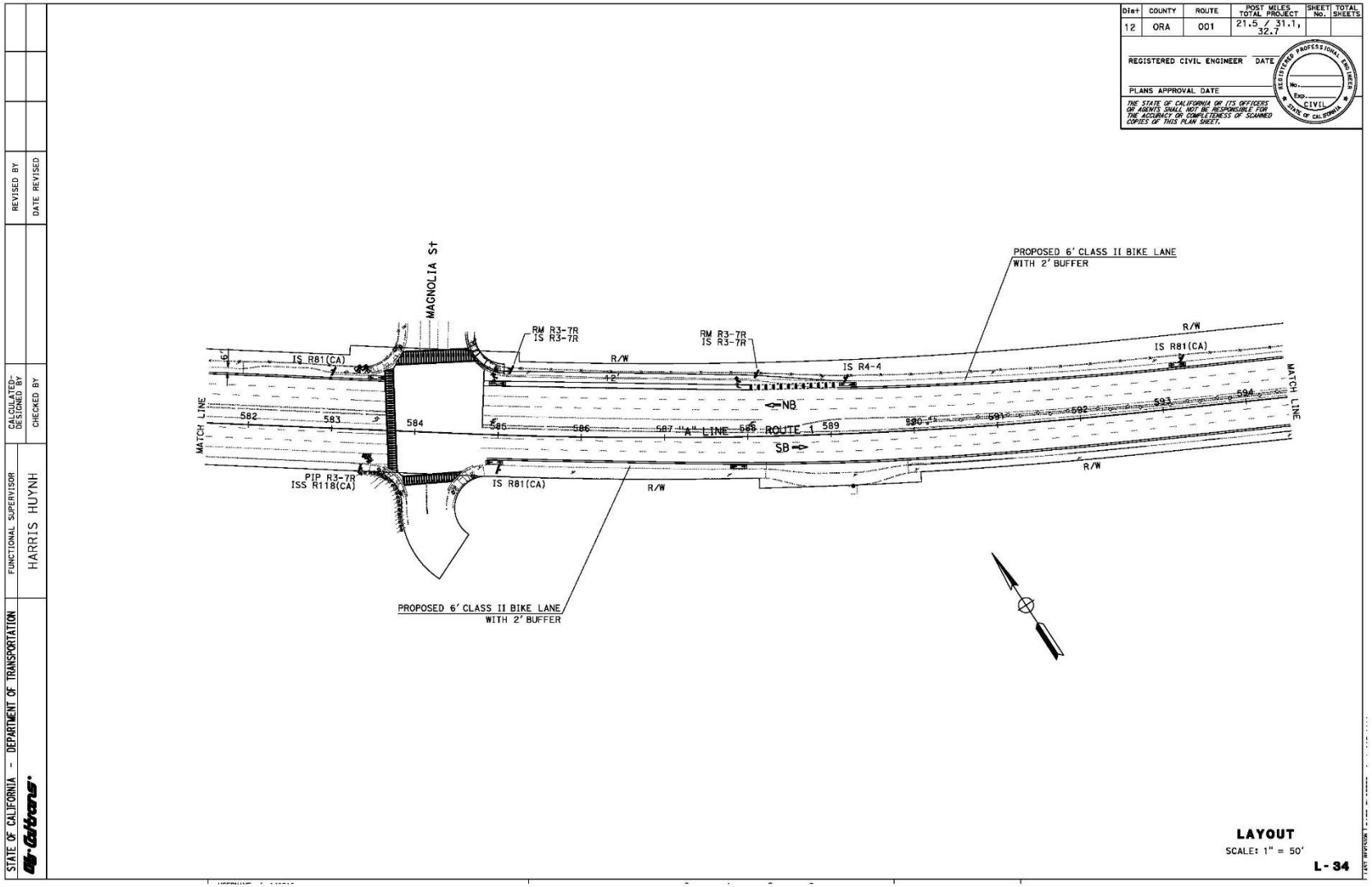
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
PROPOSED 6' CLASS II BIKE LANE
WITH 2' BUFFER
R/W
IS R81(CA)
NB
SB
MATCH LINE
568
569
570
571
572
573
574
"A" LINE
575
ROUTE 1
576
577
578
579
580
581
IS R4-4
PIP R3-7R
ISS R118(CA)
LAYOUT
SCALE: 1" = 50'
L - 33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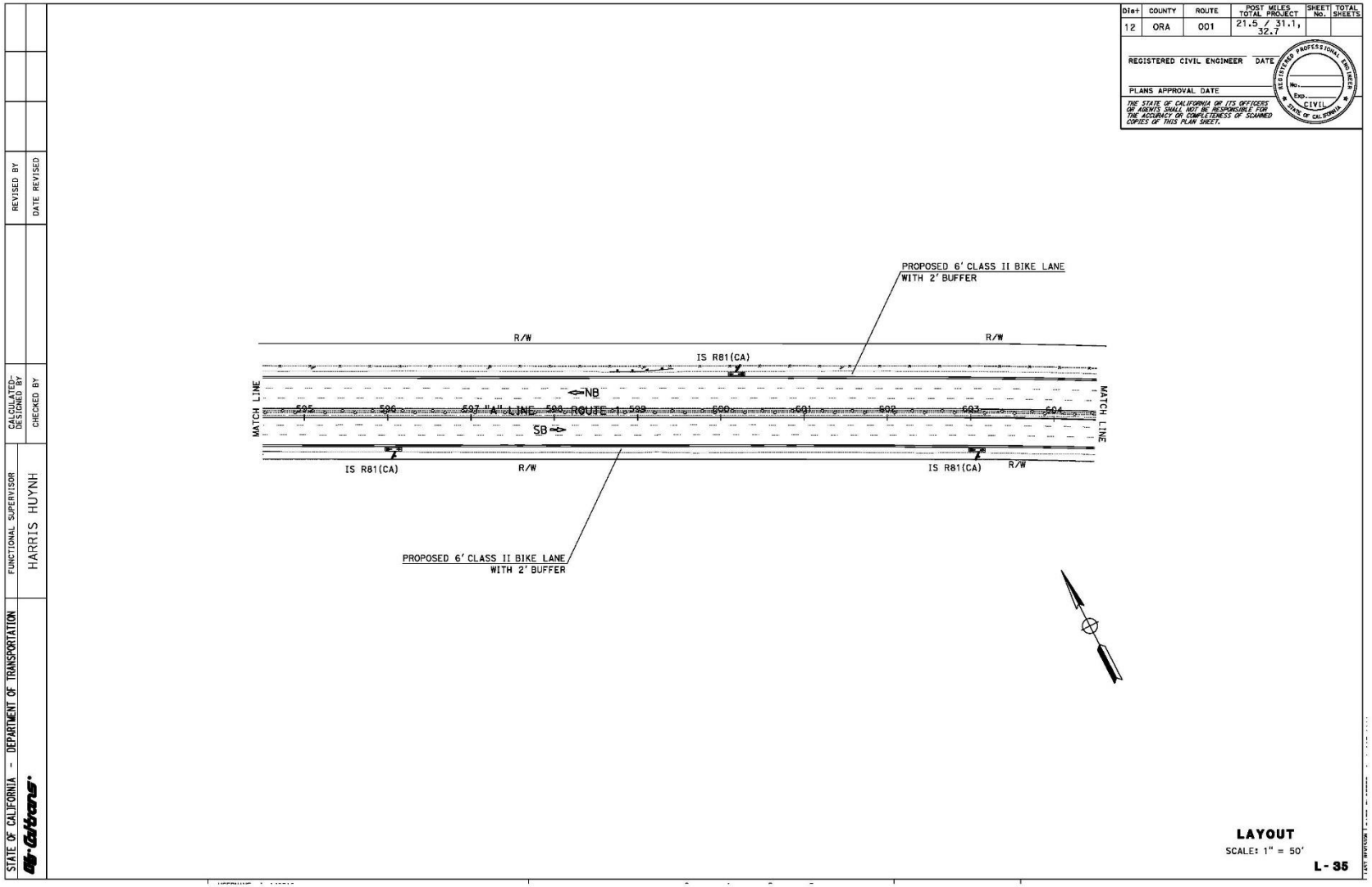
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
MAGNOLIA St
PROPOSED 6' CLASS II BIKE LANE
WITH 2' BUFFER
RW R3-7R
IS R3-7R
RW R3-7R
IS R3-7R
R/W
IS R81(CA)
IS R4-4
R/W
IS R81(CA)
MATCH LINE
582
583
584
585
586
587
"A" LINE
588
ROUTE 1
589
590
591
592
593
594
MATCH LINE
NB
SB
PIP R3-7R
ISS R118(CA)
IS R81(CA)
R/W
R/W
PROPOSED 6' CLASS II BIKE LANE
WITH 2' BUFFER
LAYOUT
SCALE: 1" = 50'
L - 34


Dist
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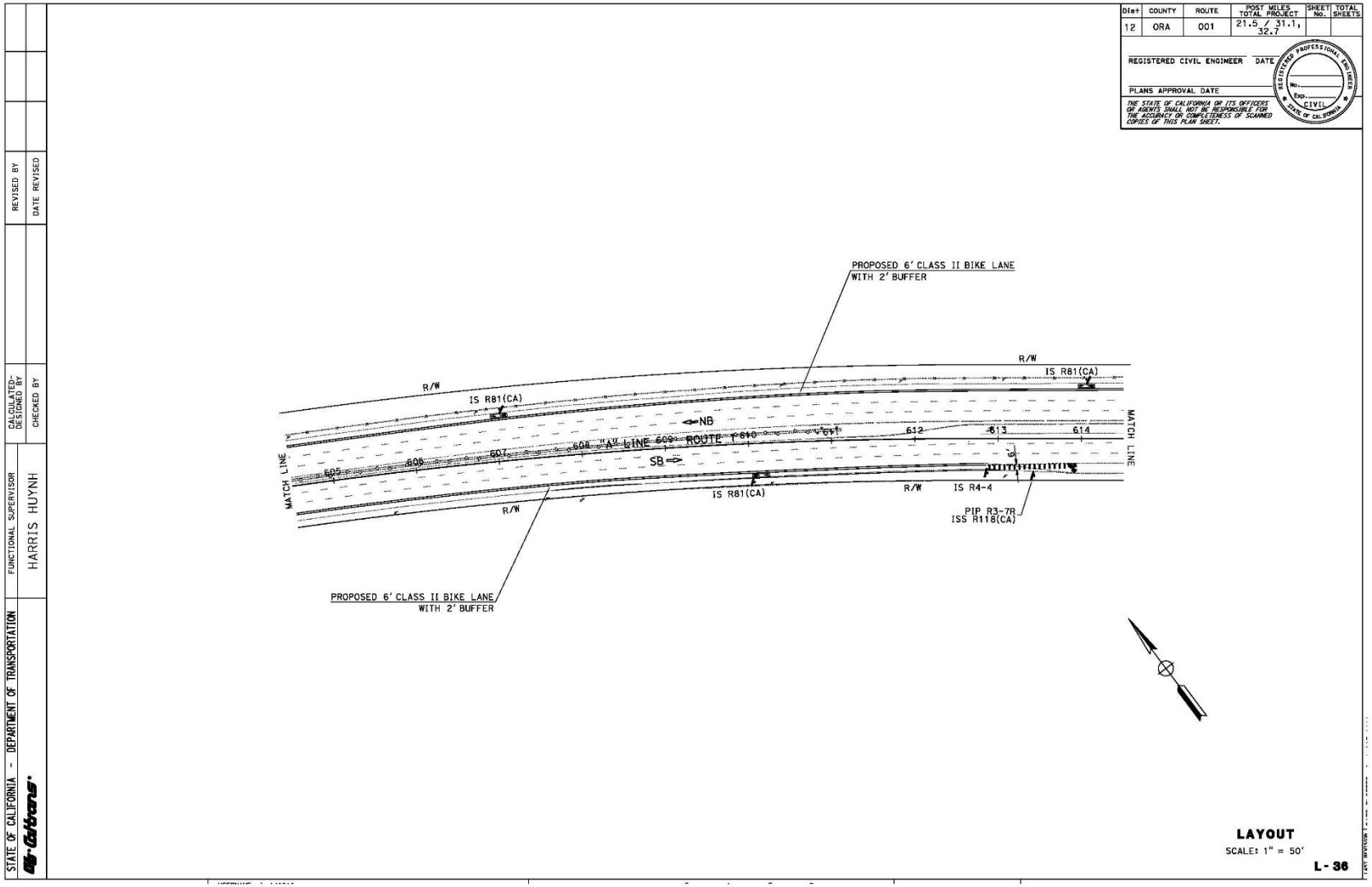
Caltrans
PROPOSED 6' CLASS II BIKE LANE
WITH 2' BUFFER
R/W
R/W
IS R81(CA)
MATCH LINE
NB
595
596
597
"A" LINE
598
ROUTE 1
599
600
601
602
603
604
MATCH LINE
SB
IS R81(CA)
R/W
IS R81(CA)
R/W
PROPOSED 6' CLASS II BIKE LANE
WITH 2' BUFFER
LAYOUT
SCALE: 1" = 50'
L - 35


Dist
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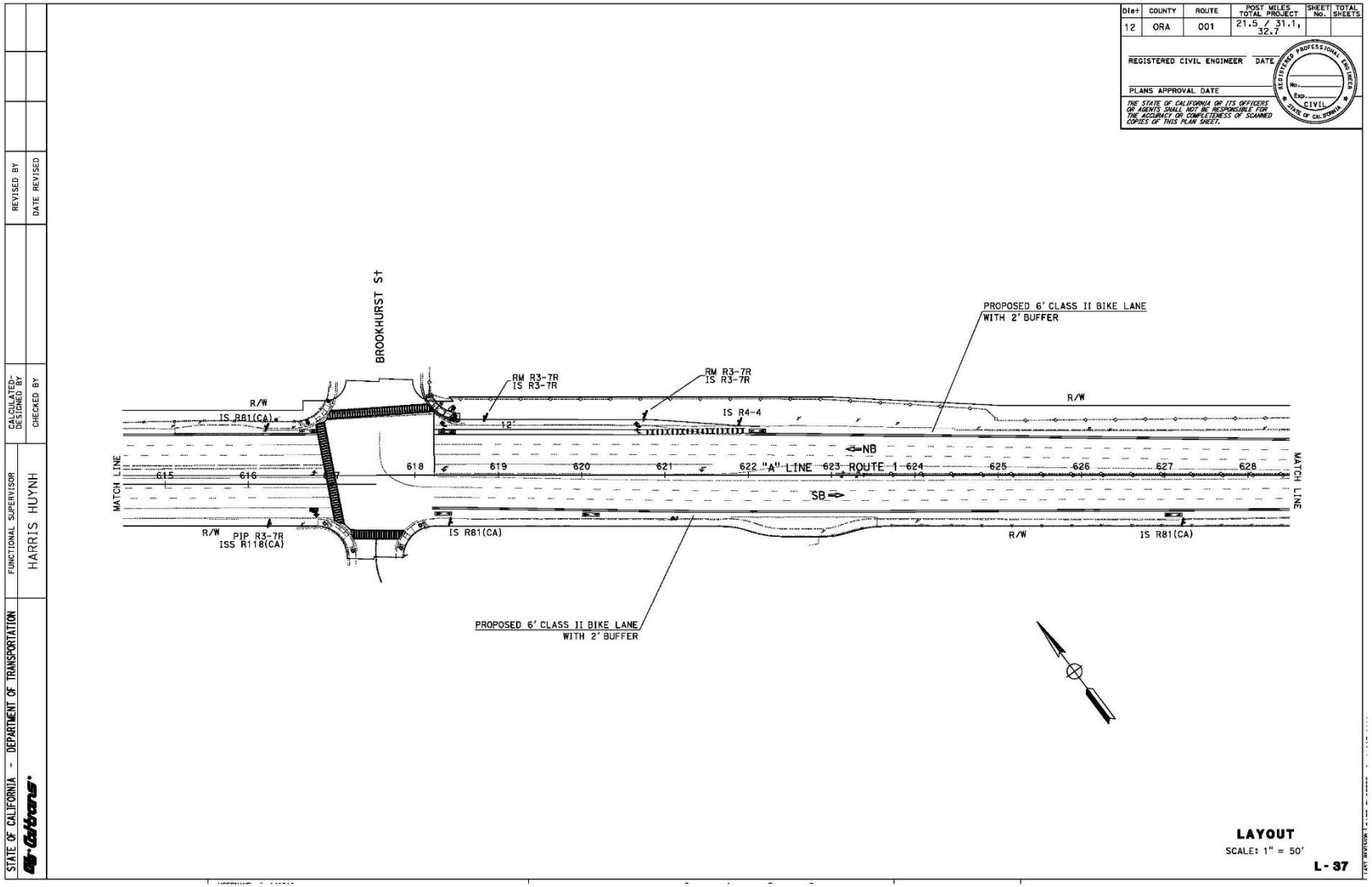
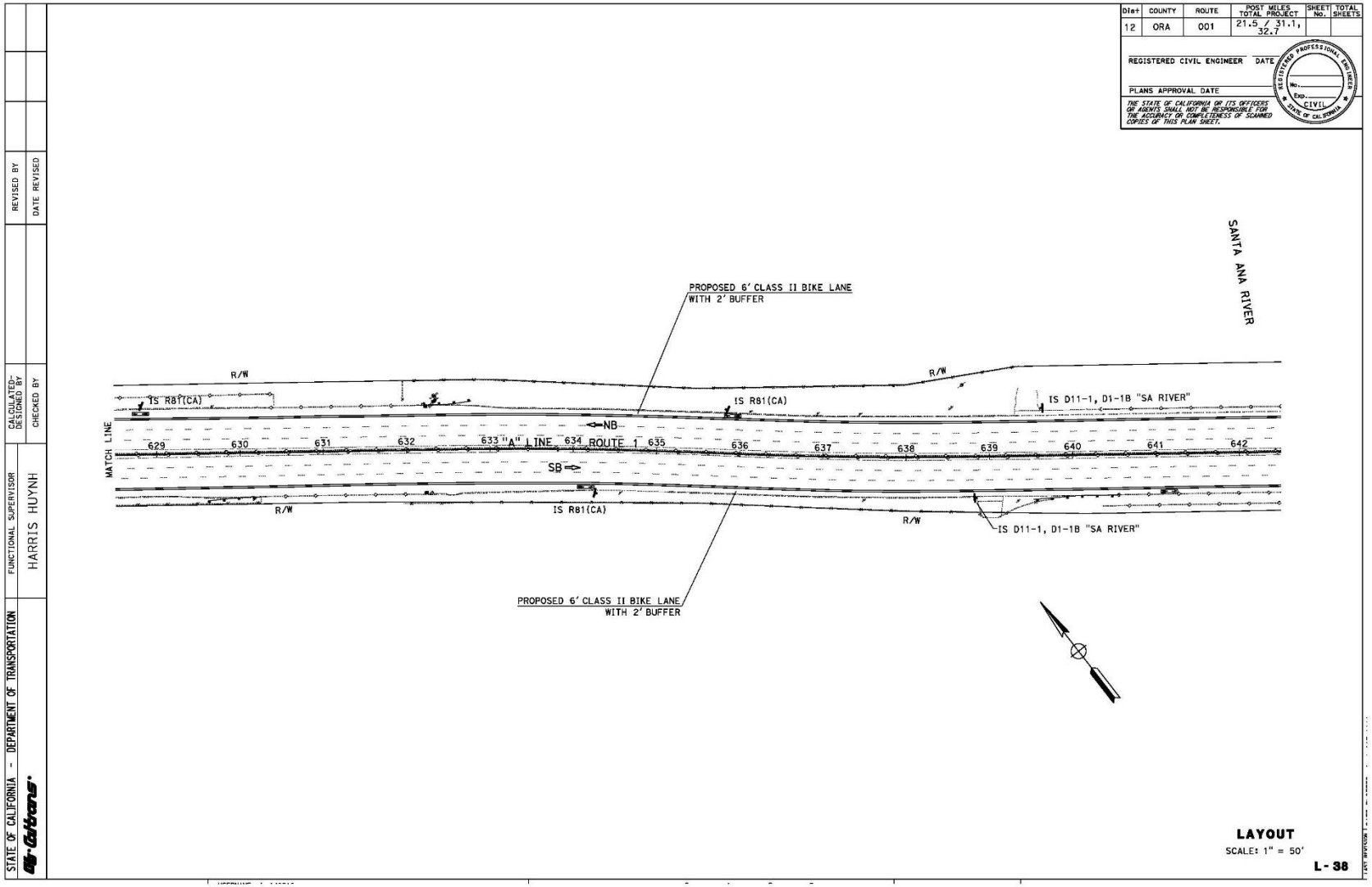
COUNTY
ORA
ROUTE
001
POST MILES TOTAL PROJECT
21.5 / 31.1, 32.7
SHEET No.
TOTAL SHEETS
REGISTERED CIVIL ENGINEER
DATE
PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.
REGISTERED PROFESSIONAL ENGINEER
No.
Exp.
CIVIL
STATE OF CALIFORNIA
REVISED BY
DATE REVISED
CALCULATED-DESIGNED BY
CHECKED BY
FUNCTIONAL SUPERVISOR
HARRIS HUYNH
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
PROPOSED 6' CLASS II BIKE LANE
WITH 2' BUFFER
R/W
IS R81(CA)
MATCH LINE
NB
SB
"A" LINE 609+ ROUTE T 610+ L 611
605
606
607
608
612
613
614
IS R4-4
PIP R3-7R
ISS R118(CA)
LAYOUT
SCALE: 1" = 50'
L - 36


Dist
12
COUNTY
ORA
ROUTE
001
POST MILES TOTAL PROJECT
21.5 / 31.1, 32.7
SHEET No.
TOTAL SHEETS
REGISTERED CIVIL ENGINEER
DATE
PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.
REGISTERED PROFESSIONAL ENGINEER
No.
Exp.
CIVIL
STATE OF CALIFORNIA
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
FUNCTIONAL SUPERVISOR
HARRIS HUYNH
CALCULATED-DESIGNED BY
CHECKED BY
REVISED BY
DATE REVISED
BROOKHURST St
RM R3-7R
IS R3-7R
RM R3-7R
IS R3-7R
PROPOSED 6' CLASS II BIKE LANE
WITH 2' BUFFER
R/W
IS R81(CA)
IS R4-4
12'
R/W
NB
SB
MATCH LINE
615
616
618
619
620
621
622 "A" LINE
623 ROUTE 1
624
625
626
627
628
MATCH LINE
R/W
PIP R3-7R
ISS R116(CA)
IS R81(CA)
R/W
IS R81(CA)
PROPOSED 6' CLASS II BIKE LANE
WITH 2' BUFFER
LAYOUT
SCALE: 1" = 50'
L - 37


Dist
12
COUNTY
ORA
ROUTE
001
POST MILES TOTAL PROJECT
21.5 / 31.1, 32.7
SHEET No.
TOTAL SHEETS
REGISTERED CIVIL ENGINEER
DATE
PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.
REGISTERED PROFESSIONAL ENGINEER
No.
Exp.
CIVIL
STATE OF CALIFORNIA
REVISED BY
DATE REVISED
CALCULATED-DESIGNED BY
CHECKED BY
FUNCTIONAL SUPERVISOR
HARRIS HUYNH
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
SANTA ANA RIVER
PROPOSED 6' CLASS II BIKE LANE WITH 2' BUFFER
R/W
IS R81(CA)
IS D11-1, D1-1B "SA RIVER"
MATCH LINE
NB
SB
629
630
631
632
633 "A" LINE
634 ROUTE 1
635
636
637
638
639
640
641
642
PROPOSED 6' CLASS II BIKE LANE WITH 2' BUFFER
LAYOUT
SCALE: 1" = 50'
L - 38

Appendix G – CE/CE- 0N850 SR-1/Seal Beach Boulevard Intersection Improvement Project

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CATEGORICAL EXEMPTION/CATEGORICAL EXCLUSION DETERMINATION FORM

12-ORA-1	24.8-32.7	0N850/12140000116	NA
Dist.-Co.-Rte. (or Local Agency)	P.M./P.M.	E.A/Project No.	Federal-Aid Project No. (Local Project)/Project No.

PROJECT DESCRIPTION: (Briefly describe project including need, purpose, location, limits, right-of-way requirements, and activities involved in this box. *Use Continuation Sheet, if necessary.)*

This project proposes to modify the traffic signals, install additional lighting, refresh existing pavement stripes, align intersection stripes, update ADA features to current standards and upgrade ground mounted signs to the current required reflectivity at two locations on State Route 1 in the cities of Seal Beach and Huntington Beach. The purpose of the project is to reduce the frequency and severity of injury collisions at the proposed intersections. The project is needed because the two locations have a higher than state average collision rate for similar facilities. Project is funded with state and federal funds. Total DSA is less than 1 acre. A permanent easement and temporary construction easement will be required.

CEQA COMPLIANCE *(for State Projects only)*

Based on an examination of this proposal and supporting information, the following statements are true and exceptions do not apply (See 14 CCR 15300 et seq.):

- If this project falls within exempt class 3, 4, 5, 6 or 11, it does not impact an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law.
- There will not be a significant cumulative effect by this project and successive projects of the same type in the same place, over time.
- There is not a reasonable possibility that the project will have a significant effect on the environment due to unusual circumstances.
- This project does not damage a scenic resource within an officially designated state scenic highway.
- This project is not located on a site included on any list compiled pursuant to Govt. Code § 65962.5 ("Cortese List").
- This project does not cause a substantial adverse change in the significance of a historical resource.

CALTRANS CEQA DETERMINATION (Check one)

☐ **Not Applicable – Caltrans is not the CEQA Lead Agency**

☐ **Not Applicable – Caltrans has prepared an Initial Study or Environmental Impact Report under CEQA**

☐ **Exempt by Statute.** (PRC 21080[b]; 14 CCR 15260 et seq.)
Based on an examination of this proposal, supporting information, and the above statements, the project is:

☒ **Categorically Exempt. Class 15301 (c).** (PRC 21084; 14 CCR 15300 et seq.)

☐ **Categorically Exempt. General Rule exemption.** [This project does not fall within an exempt class, but it can be seen with certainty that there is no possibility that the activity may have a significant effect on the environment (CCR 15061[b][3].)

Smita Deshpande		Simin Arazbegi	
Print Name: Senior Environmental Planner or Environmental Branch Chief		Print Name: Project Manager	
Signature	Date: Nov 3, 2017	Signature	Date: Nov. 8, 2017

NEPA COMPLIANCE

In accordance with 23 CFR 771.117, and based on an examination of this proposal and supporting information, the State has determined that this project:

- does not individually or cumulatively have a significant impact on the environment as defined by NEPA, and is excluded from the requirements to prepare an Environmental Assessment (EA) or Environmental Impact Statement (EIS), and
- has considered unusual circumstances pursuant to 23 CFR 771.117(b).

CALTRANS NEPA DETERMINATION (Check one)

☒ **23 USC 326:** The State has determined that this project has no significant impacts on the environment as defined by NEPA, and that there are no unusual circumstances as described in 23 CFR 771.117(b). As such, the project is categorically excluded from the requirements to prepare an EA or EIS under the National Environmental Policy Act. The State has been assigned, and hereby certifies that it has carried out the responsibility to make this determination pursuant to Chapter 3 of Title 23, United States Code, Section 326 and a Memorandum of Understanding dated May 31, 2016, executed between the FHWA and the State. The State has determined that the project is a Categorical Exclusion under:

- ☒ **23 CFR 771.117(c): activity (c)(27)**
- ☐ **23 CFR 771.117(d): activity (d)(__)**
- ☐ **Activity ___ listed in Appendix A of the MOU between FHWA and the State**

☐ **23 USC 327:** Based on an examination of this proposal and supporting information, the State has determined that the project is a Categorical Exclusion under 23 USC 327. The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated December 23, 2016 and executed by FHWA and Caltrans.

Smita Deshpande		Simin Arazbegi	
Print Name: Senior Environmental Planner or Environmental Branch Chief		Print Name: Project Manager/DLA Engineer	
Signature	Date: Nov 3, 2017	Signature	Date: Nov. 8, 2017

Date of Categorical Exclusion Checklist completion: 10/27/17

Date of ECR or equivalent : NA

Briefly list environmental commitments on continuation sheet. Reference additional information, as appropriate (e.g., CE checklist, additional studies and design conditions).

CATEGORICAL EXEMPTION/CATEGORICAL EXCLUSION DETERMINATION FORM
Continuation Sheet

12-ORA-1	24.8-32.7	0N850/12140000116	NA
Dist.-Co.-Rte. (or Local Agency)	P.M./P.M.	E.A/Project No.	Federal-Aid Project No. (Local Project)/Project No.

Continued from page 1:

There are no significant environmental consequences anticipated with the proposed project.

In addition to the measures given in the Caltrans Standard Specifications, measures related to construction noise, air pollution control, water pollution control, erosion, cultural resources, biological resources, and any subsequent requirements will be implemented as project features to the proposed project.

Technical Studies/Memorandums completed:

Natural Environmental Study - No Effect Technical Memo, B. Barrera, September 2017
Environmental Engineering Memo, P.Chang, September 2017
Water Quality Technical Memo, H. Salas, October 2017
Section 106 Screening Memo, J. Wright, September 2017

Appendix H – United States Fish and Wildlife Service Species List

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
Phone: (760) 431-9440 Fax: (760) 431-5901
http://www.fws.gov/carlsbad/

In Reply Refer To:
Consultation Code: 08ECAR00-2021-SLI-1501
Event Code: 08ECAR00-2021-E-03521
Project Name: SR-1 Bike Lane Project

September 29, 2021

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

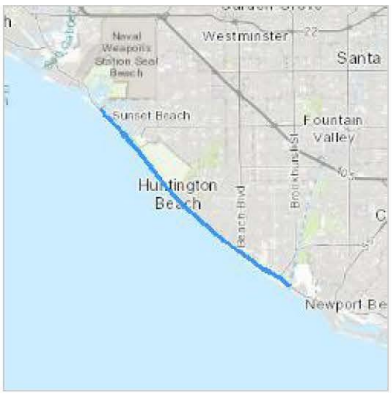
This species list is provided by:

Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
(760) 431-9440

Project Summary

Consultation Code: 08ECAR00-2021-SLI-1501
Event Code: Some(08ECAR00-2021-E-03521)
Project Name: SR-1 Bike Lane Project
Project Type: TRANSPORTATION
Project Description: This project consists of bike lane improvements along SR-1.
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@33.6775352,-118.02921729527955,14z



Counties: Orange County, California

Endangered Species Act Species

There is a total of 11 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Pacific Pocket Mouse *Perognathus longimembris pacificus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8080	Endangered

Birds

NAME	STATUS
California Least Tern *Sterna antillarum browni* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Light-footed Clapper Rail *Rallus longirostris levipes* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6035	Endangered
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered
Western Snowy Plover *Charadrius nivosus nivosus* Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is **final** critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8035	Threatened

Crustaceans

NAME	STATUS
San Diego Fairy Shrimp *Branchinecta sandiegonensis* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6945	Endangered

Flowering Plants

NAME	STATUS
Salt Marsh Bird's-beak *Cordylanthus maritimus ssp. maritimus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6447	Endangered
San Diego Button-celery *Eryngium aristulatum var. parishii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5937	Endangered
Ventura Marsh Milk-vetch *Astragalus pycnostachyus var. lanosissimus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1160	Endangered

Critical habitats

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Western Snowy Plover *Charadrius nivosus nivosus* https://ecos.fws.gov/ecp/species/8035#crithab	Final

Ryan Villanueva

From:	NMFS SpeciesList - NOAA Service Account <nmfs.wcrca.specieslist@noaa.gov>
Sent:	Tuesday, June 8, 2021 10:09 PM
To:	Ryan Villanueva
Subject:	Federal ESA - - NOAA Fisheries Species List Re: Caltrans: SR-1 Bicycle and Safety Improvements Project

Please retain a copy of each email request that you send to NOAA at nmfs.wcrca.specieslist@noaa.gov as proof of your official Endangered Species Act SPECIES LIST. The email you send to NOAA should include the following information: your first and last name; email address; phone number; federal agency name (or delegated state agency such as Caltrans); mailing address; project title; brief description of the project; and a copy of a list of threatened or endangered species identified within specified geographic areas derived from the NOAA Fisheries, West Coast Region, California Species List Tool. You may only receive this instruction once per week. If you have questions, contact your local NOAA Fisheries liaison.

1

Ryan Villanueva

From: Ryan Villanueva
Sent: Tuesday, June 8, 2021 10:09 PM
To: nmfs.wcrca.specieslist@noaa.gov
Subject: Caltrans: SR-1 Bicycle and Safety Improvements Project

Hello,

This email contains the search results generated from the NOAA Fisheries California Species List Tool for the Newport Beach and Seal Beach, California 7.5-minute topographic quadrangles. This species list was generated for the SR-1 Bicycle and Safety Improvements Project located in the City of Huntington Beach, California. The project is proposed by Caltrans District 12.

Federal Agency:
Federal Highway Administration
California Division
650 Capitol Mall, Suite 4-100
Sacramento, CA 95814

State Agency:
Caltrans, District 12
1750 East 4th Street, Suite 100
Santa Ana CA 92705
Contact: Kedest Ketsela
(424) 413-1167

Quad Name **Newport Beach (digital)**
Quad Number **33117-F8**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) - **X**
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) - **X**

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) - X
Range White Abalone (E) - X

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) - X
Olive Ridley Sea Turtle (T/E) - X
Leatherback Sea Turtle (E) - X
North Pacific Loggerhead Sea Turtle (E) - X

ESA Whales

Blue Whale (E) - X
Fin Whale (E) - X
Humpback Whale (E) - X
Southern Resident Killer Whale (E) - X
North Pacific Right Whale (E) - X
Sei Whale (E) - X
Sperm Whale (E) - X

ESA Pinnipeds

Guadalupe Fur Seal (T) - X
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH -
Groundfish EFH - X
Coastal Pelagics EFH - X
Highly Migratory Species EFH - X

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office
562-980-4000

MMPA Cetaceans - X
MMPA Pinnipeds - X

Quad Name **Seal Beach**
Quad Number **33118-F1**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) - X
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) - X

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) - X
Range White Abalone (E) - X

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) - X
Olive Ridley Sea Turtle (T/E) - X
Leatherback Sea Turtle (E) - X
North Pacific Loggerhead Sea Turtle (E) - X

ESA Whales

Blue Whale (E) - X
Fin Whale (E) - X
Humpback Whale (E) - X
Southern Resident Killer Whale (E) - X
North Pacific Right Whale (E) - X
Sei Whale (E) - X
Sperm Whale (E) - X

ESA Pinnipeds

Guadalupe Fur Seal (T) - **X**
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH -
Groundfish EFH - **X**
Coastal Pelagics EFH - **X**
Highly Migratory Species EFH - **X**

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office
562-980-4000

MMPA Cetaceans - **X**
MMPA Pinnipeds - **X**

Ryan Villanueva | Senior Biologist
LSA | 1500 Iowa Ave., Ste. 200
Riverside, CA 92507
951-781-9310 Tel
626-257-0215 Mobile
Website

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Long Beach (3311872) OR Los Alamitos (3311871) OR Newport Beach (3311768) OR Laguna Beach (3311757) OR Tustin (3311767))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Allen's pentachaeta *Pentachaeta aurea ssp. allenii*	PDAST6X021	None	None	G4T1	S1	1B.1
American badger *Taxidea taxus*	AMAJF04010	None	None	G5	S3	SSC
aphanisma *Aphanisma blitoides*	PDCHE02010	None	None	G3G4	S2	1B.2
bank swallow *Riparia riparia*	ABPAU08010	None	Threatened	G5	S2	
Belding's savannah sparrow *Passerculus sandwichensis beldingi*	ABPBX99015	None	Endangered	G5T3	S3	
big free-tailed bat *Nyctinomops macrotis*	AMACD04020	None	None	G5	S3	SSC
big-leaved crownbeard *Verbesina dissita*	PDAST9R050	Threatened	Threatened	G1G2	S1	1B.1
Brand's star phacelia *Phacelia stellaris*	PDHYD0C510	None	None	G1	S1	1B.1
burrowing owl *Athene cunicularia*	ABNSB10010	None	None	G4	S3	SSC
California black rail *Laterallus jamaicensis coturniculus*	ABNME03041	None	Threatened	G3G4T1	S1	FP
California brown pelican *Pelecanus occidentalis californicus*	ABNFC01021	Delisted	Delisted	G4T3T4	S3	FP
California horned lark *Eremophila alpestris actia*	ABPAT02011	None	None	G5T4Q	S4	WL
California least tern *Sternula antillarum browni*	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
California Orcutt grass *Orcuttia californica*	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
chaparral ragwort *Senecio aphanactis*	PDAST8H060	None	None	G3	S2	2B.2
chaparral sand-verbena *Abronia villosa var. aurita*	PDNYC010P1	None	None	G5T2?	S2	1B.1
cliff spurge *Euphorbia misera*	PDEUP0Q1B0	None	None	G5	S2	2B.2
coast horned lizard *Phrynosoma blainvillii*	ARACF12100	None	None	G3G4	S3S4	SSC
coast woolly-heads *Nemacaulis denudata var. denudata*	PDPGN0G011	None	None	G3G4T2	S2	1B.2

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
coastal cactus wren *Campylorhynchus brunneicapillus sandiegensis*	ABPBG02095	None	None	G5T3Q	S3	SSC
coastal California gnatcatcher *Polioptila californica californica*	ABPBJ08081	Threatened	None	G4G5T3Q	S2	SSC
Cooper's hawk *Accipiter cooperii*	ABNKC12040	None	None	G5	S4	WL
Coulter's goldfields *Lasthenia glabrata ssp. coulteri*	PDAST5L0A1	None	None	G4T2	S2	1B.1
Coulter's saltbush *Atriplex coulteri*	PDCHE040E0	None	None	G3	S1S2	1B.2
Crotch bumble bee *Bombus crotchii*	IIHYM24480	None	Candidate Endangered	G3G4	S1S2	
Davidson's saltscale *Atriplex serenana var. davidsonii*	PDCHE041T1	None	None	G5T1	S1	1B.2
decumbent goldenbush *Isocoma menziesii var. decumbens*	PDAST57091	None	None	G3G5T2T3	S2	1B.2
estuary seablite *Suaeda esteroa*	PDCHE0P0D0	None	None	G3	S2	1B.2
ferruginous hawk *Buteo regalis*	ABNKC19120	None	None	G4	S3S4	WL
Gambel's water cress *Nasturtium gambelii*	PDBRA270V0	Endangered	Threatened	G1	S1	1B.1
globose dune beetle *Coelus globosus*	IICOL4A010	None	None	G1G2	S1S2	
grasshopper sparrow *Ammodramus savannarum*	ABPBXA0020	None	None	G5	S3	SSC
green turtle *Chelonia mydas*	ARAAA02010	Threatened	None	G3	S4	
hoary bat *Lasiurus cinereus*	AMACC05030	None	None	G3G4	S4	
Horn's milk-vetch *Astragalus hornii var. hornii*	PDFAB0F421	None	None	GUT1	S1	1B.1
intermediate mariposa-lily *Calochortus weedii var. intermedius*	PMLIL0D1J1	None	None	G3G4T2	S2	1B.2
Laguna Beach dudleya *Dudleya stolonifera*	PDCRA040P0	Threatened	Threatened	G1	S1	1B.1
least Bell's vireo *Vireo bellii pusillus*	ABPBW01114	Endangered	Endangered	G5T2	S2	
light-footed Ridgway's rail *Rallus obsoletus levipes*	ABNME05014	Endangered	Endangered	G3T1T2	S1	FP
Los Angeles sunflower *Helianthus nuttallii ssp. parishii*	PDAST4N102	None	None	G5TX	SX	1A

Selected Elements by Common Name

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lucky morning-glory *Calystegia felix*	PDCON040P0	None	None	G1Q	S1	1B.1
Lyon's pentachaeta *Pentachaeta lyonii*	PDAST6X060	Endangered	Endangered	G1	S1	1B.1
many-stemmed dudleya *Dudleya multicaulis*	PDCRA040H0	None	None	G2	S2	1B.2
mesa horkelia *Horkelia cuneata var. puberula*	PDROS0W045	None	None	G4T1	S1	1B.1
Mexican long-tongued bat *Choeronycteris mexicana*	AMACB02010	None	None	G3G4	S1	SSC
mimic tryonia (=California brackishwater snail) *Tryonia imitator*	IMGASJ7040	None	None	G2	S2	
monarch - California overwintering population *Danaus plexippus pop. 1*	IILEPP2012	Candidate	None	G4T2T3	S2S3	
mud nama *Nama stenocarpa*	PDHYD0A0H0	None	None	G4G5	S1S2	2B.2
Nuttall's scrub oak *Quercus dumosa*	PDFAG050D0	None	None	G3	S3	1B.1
orange-throated whiptail *Aspidoscelis hyperythra*	ARACJ02060	None	None	G5	S2S3	WL
Orcutt's pincushion *Chaenactis glabriuscula var. orcuttiana*	PDAST20095	None	None	G5T1T2	S1	1B.1
osprey *Pandion haliaetus*	ABNKC01010	None	None	G5	S4	WL
Pacific pocket mouse *Perognathus longimembris pacificus*	AMAFD01042	Endangered	None	G5T1	S1	SSC
Parish's brittlescale *Atriplex parishii*	PDCHE041D0	None	None	G1G2	S1	1B.1
prostrate vernal pool navarretia *Navarretia prostrata*	PDPLM0C0Q0	None	None	G2	S2	1B.2
red-diamond rattlesnake *Crotalus ruber*	ARADE02090	None	None	G4	S3	SSC
Riverside fairy shrimp *Streptocephalus woottoni*	ICBRA07010	Endangered	None	G1G2	S1S2	
Robinson's pepper-grass *Lepidium virginicum var. robinsonii*	PDBRA1M114	None	None	G5T3	S3	4.3
salt marsh bird's-beak *Chloropyron maritimum ssp. maritimum*	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2
salt spring checkerbloom *Sidalcea neomexicana*	PDMAL110J0	None	None	G4	S2	2B.2
San Bernardino aster *Symphyotrichum defoliatum*	PDASTE80C0	None	None	G2	S2	1B.2

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Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
San Diego button-celery *Eryngium aristulatum var. parishii*	PDAPI0Z042	Endangered	Endangered	G5T1	S1	1B.1
San Diego fairy shrimp *Branchinecta sandiegonensis*	ICBRA03060	Endangered	None	G2	S2	
San Gabriel chestnut *Glyptostoma gabrielense*	IMGASB1010	None	None	G2	S2	
sandy beach tiger beetle *Cicindela hirticollis gravida*	IICOL02101	None	None	G5T2	S2	
senile tiger beetle *Cicindela senilis frosti*	IICOL02121	None	None	G2G3T1T3	S1	
silver-haired bat *Lasionycteris noctivagans*	AMACC02010	None	None	G3G4	S3S4	
south coast marsh vole *Microtus californicus stephensi*	AMAFF11035	None	None	G5T2T3	S1S2	SSC
south coast saltscale *Atriplex pacifica*	PDCHE041C0	None	None	G4	S2	1B.2
Southern California legless lizard *Anniella stebbinsi*	ARACC01060	None	None	G3	S3	SSC
southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	ABPBX91091	None	None	G5T3	S3	WL
southern California saltmarsh shrew *Sorex ornatus salicornicus*	AMABA01104	None	None	G5T1?	S1	SSC
Southern Coast Live Oak Riparian Forest *Southern Coast Live Oak Riparian Forest*	CTT61310CA	None	None	G4	S4	
Southern Coastal Salt Marsh *Southern Coastal Salt Marsh*	CTT52120CA	None	None	G2	S2.1	
Southern Cottonwood Willow Riparian Forest *Southern Cottonwood Willow Riparian Forest*	CTT61330CA	None	None	G3	S3.2	
Southern Dune Scrub *Southern Dune Scrub*	CTT21330CA	None	None	G1	S1.1	
Southern Foredunes *Southern Foredunes*	CTT21230CA	None	None	G2	S2.1	
Southern Sycamore Alder Riparian Woodland *Southern Sycamore Alder Riparian Woodland*	CTT62400CA	None	None	G4	S4	
southern tarplant *Centromadia parryi ssp. australis*	PDAST4R0P4	None	None	G3T2	S2	1B.1
steelhead - southern California DPS *Oncorhynchus mykiss irideus pop. 10*	AFCHA0209J	Endangered	None	G5T1Q	S1	
summer holly *Comarostaphylis diversifolia ssp. diversifolia*	PDERI0B011	None	None	G3T2	S2	1B.2
Swainson's hawk *Buteo swainsoni*	ABNKC19070	None	Threatened	G5	S3	

Selected Elements by Common Name

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Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
tidewater goby *Eucyclogobius newberryi*	AFCQN04010	Endangered	None	G3	S3	
tricolored blackbird *Agelaius tricolor*	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
Valley Needlegrass Grassland *Valley Needlegrass Grassland*	CTT42110CA	None	None	G3	S3.1	
wandering (=saltmarsh) skipper *Panoquina errans*	IILEP84030	None	None	G4G5	S2	
western beach tiger beetle *Cicindela latesignata latesignata*	IICOL02113	None	None	G2G4T1T2	S1	
western mastiff bat *Eumops perotis californicus*	AMACD02011	None	None	G4G5T4	S3S4	SSC
western pond turtle *Emys marmorata*	ARAAD02030	None	None	G3G4	S3	SSC
western ridged mussel *Gonidea angulata*	IMBIV19010	None	None	G3	S1S2	
western snowy plover *Charadrius nivosus nivosus*	ABNNB03031	Threatened	None	G3T3	S2	SSC
western spadefoot *Spea hammondii*	AAABF02020	None	None	G2G3	S3	SSC
western tidal-flat tiger beetle *Habroscelimorpha gabbii*	IICOL02080	None	None	G2G4	S1	
western yellow bat *Lasiurus xanthinus*	AMACC05070	None	None	G4G5	S3	SSC
western yellow-billed cuckoo *Coccyzus americanus occidentalis*	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
white-tailed kite *Elanus leucurus*	ABNKC06010	None	None	G5	S3S4	FP
yellow rail *Coturnicops noveboracensis*	ABNME01010	None	None	G4	S1S2	SSC
yellow warbler *Setophaga petechia*	ABPBX03010	None	None	G5	S3S4	SSC
yellow-breasted chat *Icteria virens*	ABPBX24010	None	None	G5	S3	SSC

Record Count: 99

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Inventory of Rare and Endangered Plants of California

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Scientific Name | Common Name | Family | Lifeform | Blooming Period | Fed List | State List | Global Rank | State Rank | CA Rare Plant Rank | General Habitats | Micro Habitats | Lowest Elevation | Highest Elevation | CA Endemic | Date Added | Photo

Search:

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	PHOTO
Abronia maritima	red sand-verbena	Nyctaginaceae	perennial herb	Feb-Nov	None	None	G4	S3?	4.2	 ©2003 Christopher L. Christie
Abronia villosa var. *aurita*	chaparral sand-verbena	Nyctaginaceae	annual herb	(Jan)Mar-Sep	None	None	G5T2?	S2	1B.1	No Photo Available
Aphanisma blitoides	aphanisma	Chenopodiaceae	annual herb	Feb-Jun	None	None	G3G4	S2	1B.2	No Photo Available
Astragalus hornii var. *hornii*	Horn's milk-vetch	Fabaceae	annual herb	May-Oct	None	None	GUT1	S1	1B.1	No Photo Available
Astragalus pycnostachyus var. *lanosissimus*	Ventura Marsh milk-vetch	Fabaceae	perennial herb	(Jun)Aug-Oct	FE	CE	G2T1	S1	1B.1	No Photo Available
Atriplex coulteri	Coulter's saltbush	Chenopodiaceae	perennial herb	Mar-Oct	None	None	G3	S1S2	1B.2	No Photo Available
Atriplex pacifica	south coast saltscale	Chenopodiaceae	annual herb	Mar-Oct	None	None	G4	S2	1B.2	No Photo Available
Atriplex parishii	Parish's brittlescale	Chenopodiaceae	annual herb	Jun-Oct	None	None	G1G2	S1	1B.1	No Photo Available
Atriplex serenana var. *davidsonii*	Davidson's saltscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G5T1	S1	1B.2	No Photo Available
Calochortus	Catalina	Liliaceae	perennial	(Feb)Mar-	None	None	G3G4	S3S4	4.2	

catalinae	mariposa lily		bulbiferous herb	Jun						No Photo Available
▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	PHOTO
Calochortus weedii var. *intermedius*	intermediate mariposa-lily	Liliaceae	perennial bulbiferous herb	May-Jul	None	None	G3G4T2	S2	1B.2	No Photo Available
Calystegia felix	lucky morning-glory	Convolvulaceae	annual rhizomatous herb	Mar-Sep	None	None	G1Q	S1	1B.1	No Photo Available
Camissoniopsis lewisii	Lewis' evening-primrose	Onagraceae	annual herb	Mar-May(Jun)	None	None	G4	S4	3	No Photo Available
Centromadia parryi ssp. *australis*	southern tarplant	Asteraceae	annual herb	May-Nov	None	None	G3T2	S2	1B.1	No Photo Available
Chaenactis glabriuscula var. *orcuttiana*	Orcutt's pincushion	Asteraceae	annual herb	Jan-Aug	None	None	G5T1T2	S1	1B.1	No Photo Available
Chloropyron maritimum ssp. *maritimum*	salt marsh bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	May-Oct(Nov)	FE	CE	G4?T1	S1	1B.2	No Photo Available
Cistanthe maritima	seaside cistanthe	Montiaceae	annual herb	(Feb)Mar-Jun(Aug)	None	None	G3G4	S3	4.2	No Photo Available
Comarostaphylis diversifolia ssp. *diversifolia*	summer holly	Ericaceae	perennial evergreen shrub	Apr-Jun	None	None	G3T2	S2	1B.2	No Photo Available
Convolvulus simulans	small-flowered morning-glory	Convolvulaceae	annual herb	Mar-Jul	None	None	G4	S4	4.2	No Photo Available
Deinandra paniculata	paniculate tarplant	Asteraceae	annual herb	(Mar)Apr-Nov	None	None	G4	S4	4.2	No Photo Available
Dichondra occidentalis	western dichondra	Convolvulaceae	perennial rhizomatous herb	(Jan)Mar-Jul	None	None	G3G4	S3S4	4.2	No Photo Available
Dudleya multicaulis	many-stemmed dudleya	Crassulaceae	perennial herb	Apr-Jul	None	None	G2	S2	1B.2	No Photo Available
Dudleya stolonifera	Laguna Beach dudleya	Crassulaceae	perennial stoloniferous herb	May-Jul	FT	CT	G1	S1	1B.1	No Photo Available
Eleocharis parvula	small spikerush	Cyperaceae	perennial herb	(Apr)Jun-Aug(Sep)	None	None	G5	S3	4.3	No Photo Available
Eryngium aristulatum var.	San Diego button-celery	Apiaceae	annual/perennial herb	Apr-Jun	FE	CE	G5T1	S1	1B.1	No Photo

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	PHOTO
parishii										Available
Euphorbia misera	cliff spurge	Euphorbiaceae	perennial shrub	(Oct)Dec-Aug	None	None	G5	S2	2B.2	No Photo Available
Harpagonella palmeri	Palmer's grapplinghook	Boraginaceae	annual herb	Mar-May	None	None	G4	S3	4.2	No Photo Available
Helianthus nuttallii ssp. *parishii*	Los Angeles sunflower	Asteraceae	perennial rhizomatous herb	Aug-Oct	None	None	G5TX	SX	1A	No Photo Available
Hordeum intercedens	vernal barley	Poaceae	annual herb	Mar-Jun	None	None	G3G4	S3S4	3.2	No Photo Available
Horkelia cuneata var. *puberula*	mesa horkelia	Rosaceae	perennial herb	Feb-Jul(Sep)	None	None	G4T1	S1	1B.1	No Photo Available
Isocoma menziesii var. *decumbens*	decumbent goldenbush	Asteraceae	perennial shrub	Apr-Nov	None	None	G3G5T2T3	S2	1B.2	No Photo Available
Juglans californica	Southern California black walnut	Juglandaceae	perennial deciduous tree	Mar-Aug	None	None	G4	S4	4.2	No Photo Available
Juncus acutus ssp. *leopoldii*	southwestern spiny rush	Juncaceae	perennial rhizomatous herb	(Mar)May-Jun	None	None	G5T5	S4	4.2	No Photo Available
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	None	None	G4T2	S2	1B.1	No Photo Available
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	Brassicaceae	annual herb	Jan-Jul	None	None	G5T3	S3	4.3	No Photo Available
Lycium californicum	California box-thorn	Solanaceae	perennial shrub	Mar-Aug(Dec)	None	None	G4	S4	4.2	No Photo Available
Malacothrix saxatilis var. *saxatilis*	cliff malacothrix	Asteraceae	perennial rhizomatous herb	Mar-Sep	None	None	G5T4	S4	4.2	No Photo Available
Nama stenocarpa	mud nama	Namaceae	annual/perennial herb	Jan-Jul	None	None	G4G5	S1S2	2B.2	No Photo Available
Nasturtium gambelii	Gambel's water cress	Brassicaceae	perennial rhizomatous herb	Apr-Oct	FE	CT	G1	S1	1B.1	No Photo Available
Navarretia prostrata	prostrate vernal pool	Polemoniaceae	annual herb	Apr-Jul	None	None	G2	S2	1B.2	No Photo

SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	PHOTO
	navarretia									Available
Nemacaulis denudata var. *denudata*	coast woolly-heads	Polygonaceae	annual herb	Apr-Sep	None	None	G3G4T2	S2	1B.2	No Photo Available
Orcuttia californica	California Orcutt grass	Poaceae	annual herb	Apr-Aug	FE	CE	G1	S1	1B.1	No Photo Available
Pentachaeta aurea ssp. *allenii*	Allen's pentachaeta	Asteraceae	annual herb	Mar-Jun	None	None	G4T1	S1	1B.1	 ©2008 Bob Allen
Pentachaeta lyonii	Lyon's pentachaeta	Asteraceae	annual herb	(Feb)Mar-Aug	FE	CE	G1	S1	1B.1	No Photo Available
Phacelia ramosissima var. *austrolitoralis*	south coast branching phacelia	Hydrophyllaceae	perennial herb	Mar-Aug	None	None	G5?T3Q	S3	3.2	No Photo Available
Phacelia stellaris	Brand's star phacelia	Hydrophyllaceae	annual herb	Mar-Jun	None	None	G1	S1	1B.1	No Photo Available
Quercus dumosa	Nuttall's scrub oak	Fagaceae	perennial evergreen shrub	Feb-Apr(May-Aug)	None	None	G3	S3	1B.1	No Photo Available
Senecio aphanactis	chaparral ragwort	Asteraceae	annual herb	Jan-Apr(May)	None	None	G3	S2	2B.2	No Photo Available
Sidalcea neomexicana	salt spring checkerbloom	Malvaceae	perennial herb	Mar-Jun	None	None	G4	S2	2B.2	No Photo Available
Suaeda esteroa	estuary seablite	Chenopodiaceae	perennial herb	(Jan-May)Jul-Oct	None	None	G3	S2	1B.2	No Photo Available
Suaeda taxifolia	woolly seablite	Chenopodiaceae	perennial evergreen shrub	Jan-Dec	None	None	G4	S4	4.2	No Photo Available
Symphyotrichum defoliatum	San Bernardino aster	Asteraceae	perennial rhizomatous herb	Jul-Nov	None	None	G2	S2	1B.2	No Photo Available
Verbesina dissita	big-leaved crownbeard	Asteraceae	perennial herb	(Mar)Apr-Jul	FT	CT	G1G2	S1	1B.1	No Photo Available

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