STATE CLEARINGHOUSE NUMBER: TBD
FEDERAL PROJECT NUMBER: BRLS-5079

COAST HIGHWAY (HILL STREET) BRIDGE REPLACEMENT PROJECT

Bridge No. 57C-0322

Initial Study with (Proposed) Mitigated Negative Declaration

OCTOBER 2024

Dewberry

PREPARED BY
Dewberry Engineers Inc.
11060 White Rock Road, Suite 200
Rancho Cordova, CA 95670-6061

CEQA LEAD AGENCY
City of Oceanside
300 North Coast Highway
Oceanside, CA 92054

Table of Contents

List of Tables

Appendices

Executive Summary

The City of Oceanside (City) proposes to replace the existing structurally deficient Coast Highway (Hill Street) Bridge (Bridge No. 57C0322) over the San Luis Rey River with a new concrete bridge (proposed project). The new bridge would conform to local, state, and federal environmental and planning policies using Highway Bridge Program (HBP) funds.

The Draft Initial Study/Mitigated Negative Declaration (IS/MND) was submitted to the State Clearinghouse on October 7, 2024 for a 30-day public review period that will end on November 5, 2024. During the public review period, the Draft IS/MND will be available for review on the City's website (www.ci.oceanside.ca.us/gov/dev/planning/ceqa) and at the following locations during regular business hours:

1. City of Oceanside Development Services Department: 300 North Coast Highway, Oceanside, California 92054
2. City of Oceanside Public Library- Civic Center: 330 North Coast Highway, Oceanside, California 92054
3. City of Oceanside Public Library- Mission Branch: 3861-B Mission Avenue, Oceanside, CA 92508

Comments can be submitted via email, subject line: Coast Highway Bridge Replacement Project, to Shannon Vitale at svitale@oceansideca.org, or by U.S. mail to City of Oceanside, Development Services Department, Planning Division, Attention: Shannon Vitale, 300 N. Coast Highway, Oceanside, California 92054. Comments will be accepted by the City until 5:00 p.m. on November 5, 2024.

The IS/MND prepared for the proposed project assesses the potential effects on the environment and the significance of those effects. Based on the results of the IS/MND, the proposed project would not have any significant impacts on the environment once mitigation measures are implemented. This conclusion is supported by the following findings:

- The proposed project would not impact agriculture and forestry resources, mineral resources, and population and housing.
- The proposed project would have a less-than-significant impact on aesthetics, air quality, cultural resources, energy, greenhouse gas emissions, hydrology and water quality, land use and planning, noise, public services, recreation, transportation, utilities and service systems, and wildfire.
- Once mitigation measures are implemented, the proposed project would have a less-than-significant impact on biological resources, geology and soils, hazards and hazardous materials, and tribal cultural resources.
- No substantial evidence exists that the proposed project would have a significant negative or adverse effect on the environment.

The proposed project would incorporate standard construction measures, best management practices, and project conditions, and all applicable mitigation measures, as described in Section 4 of the IS/MND. In addition to standard construction measures required by the California Department of Transportation (Caltrans) Standard Specifications and other applicable laws, regulations, and policies, the following mitigation measures, as outlined in Table ES-1, would be implemented as part of the proposed project to avoid or minimize potential environmental impacts. Implementation of these mitigation measures would reduce the potentially significant environmental impacts of the proposed project to less than significant levels.

Table ES-1. Summary of Mitigation Measures

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Biological Resources			
Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Potentially Significant Impact	**BIO-1**. Prior to the start of construction, any special-status plant species identified during the pre-construction surveys that cannot be avoided shall be salvaged for transplant or included in the seed or plant palette for revegetation, depending on species. Seed shall be collected from individuals within the project impact areas the year prior to start of construction. The species to be salvaged/transplanted include sticky dudleya, variegated dudleya, and San Diego ambrosia. Species to be included in the seed or plant palette include San Diego marsh-elder Nuttall's acmispon, and Lewis' evening-primrose.	Less Than Significant Impact
Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Potentially Significant Impact	**BIO-2.** After project permits are obtained and final design is complete, the City will purchase 0.30 acre of off-site mitigation credit from a mitigation bank within the San Luis Rey River watershed, such as the Brook Forest Conservation/Mitigation Bank (current pricing is $550,000 per acre), Wildlands San Luis Rey Mitigation Bank, and/or Wildlands Buena Creek Conservation Bank, to achieve no net loss of the resources. Upon construction completion, rehabilitation of southern riparian scrub within the Habitat Enhancement Area will be completed as required by the Conceptual Mitigation Plan and will occur at a 1:1 revegetation ratio for temporary impacts and a 3:1 revegetation and restoration ratio for permanent impacts, as outlined in the Conceptual Mitigation Plan.	Less Than Significant Impact
Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct	Potentially Significant Impact	**BIO-3.** The City will purchase 0.02 acre of off-site mitigation wetland credit from a mitigation bank within the San Luis Rey River watershed, such as the Brook Forest Conservation/Mitigation Bank (current pricing is $550,000 per acre), Wildlands San Luis Rey Mitigation Bank, and/or Wildlands Buena Creek Conservation Bank, to achieve	Less Than Significant Impact

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
removal, filling, hydrological interruption, or other means?		no net loss of the resources. Rehabilitation of freshwater marsh within the Habitat Enhancement Area will occur after construction completion at a 1:1 revegetation ratio for temporary impacts and a 3:1 revegetation and restoration ratio for permanent impacts, per the Conceptual Mitigation Plan (RECON 2023a).	
Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	Potentially Significant Impact	Implement Mitigation Measure BIO-1, BIO-2, and BIO-3.	Less Than Significant Impact
Geology and Soils			
Result in substantial soil erosion or the loss of topsoil?	Potentially Significant Impact	Implement Mitigation Measure BIO-2.	Less Than Significant Impact
Hazards and Hazardous Materials			
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?	Potentially Significant Impact	**HAZ-1**: Asbestos and Lead Containing Materials. A California-licensed abatement contractor will conduct a survey for lead containing materials prior to demolition (including concrete elements) and contractor will submit a National Emission Standard for Hazardous Air Pollutants (NESHAP) notification. Per Section 14-9.02 of the asbestos NESHAP regulation, all "demolition activity" requires written notification even if there is no asbestos present. This notification should be typewritten and postmarked or delivered no later than ten days prior to the beginning of the asbestos demolition or removal activity. If lead containing materials are found, the following will be required: • Building materials associated with paint on structures, and paint on utilities should be abated by a California-licensed abatement	Less Than Significant Impact

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		contractor and disposed of as a hazardous waste in compliance with SSP 14-11.13 and other federal and state regulations for hazardous waste. • A Lead Compliance Plan should be prepared by the contractor for the disposal of lead-based paint. The grindings (which consist of the roadway material and the yellow and white color traffic stripes) shall be removed and disposed of in accordance with Standard Special Provision 36-4 (Residue Containing High Lead Concentration Paints). In addition, the Lead Compliance Plan will also contain the following provision to address aerially-deposited lead: SSP 7-1.02K (6)(j)(iii) – Earth Material Containing Lead. • A California-licensed lead contractor should be required to perform all work that will disturb any lead-based paint as a result of planned or unplanned renovations in the Project area, including the presence of yellow traffic striping and pavement markings that may contain lead-based paint. All such material must be removed and disposed of as a hazardous material in compliance with SSP 14-11.12.	
		HAZ-2: Aerially Deposited Lead. The following actions are recommended for handling and disposal of soils that contain an elevated level of ADL during the pre-construction/pre-demolition phase: • A California-licensed abatement contractor will sample and test a representative sample of soils at the project site for hazardous levels of aerially deposited lead. Representative samples of exposed shallow soils shall be collected at multiple locations along the project site and analyzed for total lead and extractable lead concentrations. • If hazardous levels of aerially deposited lead are found in the soils at the project site, the following will be required:	

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		• Removal, disposal, storage and transportation of materials contaminated with hazardous levels of aerially-deposited lead should be performed in compliance with all applicable federal, state, and local laws, including but not limited to requirements of State Water Resources Control Board and California Regional Water Quality Control Board water quality control plans and waste discharge permits, Coastal Zone Permit requirements for ADL-contaminated soil, DFW permit requirements for ADL-contaminated soil, and all requirements of the applicable Air Quality Management District and/or the Air Pollution Control District. • Removal, disposal, storage, and transportation of materials contaminated with hazardous levels of aerially-deposited lead should be performed in compliance with the Soil Management Agreement for Aerially-deposited Lead-Contaminated Soils between Caltrans and the Department of Toxic Substance Control, if the project site is within the state right-of-way or Caltrans is acting as direct oversight for the project.	
Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Potentially Significant Impact	Implement Mitigation Measure HAZ-1 and HAZ-2.	Less Than Significant Impact
Hydrology and Water Quality			
Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river or through the addition of	Potentially Significant Impact	Implement Mitigation Measure BIO-1, BIO-2, and BIO-3.	Less Than Significant Impact

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
impervious surfaces, in a manner that 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 off-site?	Potentially Significant Impact	Implement Mitigation Measure BIO-1, BIO-2, and BIO-3.	Less Than Significant Impact
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?	Potentially Significant Impact	Implement Mitigation Measure BIO-1, BIO-2, and BIO-3.	Less Than Significant Impact
iv. Impede or redirect flood flows?	Potentially Significant Impact	Implement Mitigation Measure BIO-1, BIO-2, and BIO-3.	Less Than Significant Impact

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Tribal Cultural Resources Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resource 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:			
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, the lead agency shall consider the significance of the resources to a California Native American tribe.	Potentially Significant Impact	**TCR-1**: Prior to the issuance of a Grading Permit, the Applicant/Owner shall enter into a pre-excavation agreement, otherwise known as a Tribal Cultural Resources Treatment and Tribal Monitoring Agreement with the "Traditionally and Culturally Affiliated (TCA) Native American Monitor associated with a TCA Luiseño Tribe". A copy of the agreement shall be included in the Grading Plan Submittals for the Grading Permit. The purpose of this agreement shall be to formalize protocols and procedures between the Applicant/Owner and the "Traditionally and Culturally Affiliated (TCA) Native American Monitor associated with a TCA Luiseño Tribe" for the protection and treatment of, including but not limited to, Native American human remains, funerary objects, cultural and religious landscapes, ceremonial items, traditional gathering areas and tribal cultural resources, located and/or discovered through a monitoring program in conjunction with the construction of the proposed project, including additional archaeological surveys and/or studies, excavations, geotechnical investigations, grading, and all other ground disturbing activities. At the discretion of the Luiseño Native American Monitor, artifacts may be made available for 3D scanning/printing, with scanned/printed materials to be curated at a local repository meeting the federal standards of 36CFR79. **TCR-2**: Prior to the issuance of a Grading Permit, the Applicant/Owner or Grading Contractor shall provide a written and signed letter to the City of Oceanside Planning Division stating that a	Less Than Significant Impact

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		Qualified Archaeologist and Luiseño Native American Monitor have been retained at the Applicant/Owner or Grading Contractor's expense to implement the monitoring program, as described in the pre-excavation agreement. **TCR-3**: The Qualified Archaeologist shall maintain ongoing collaborative consultation with the Luiseño Native American monitor during all ground disturbing activities. The requirement for the monitoring program shall be noted on all applicable construction documents, including demolition plans, grading plans, etc. The Applicant/Owner or Grading Contractor shall notify the City of Oceanside Planning Division of the start and end of all ground disturbing activities. **TCR-4**: The Qualified Archaeologist and Luiseño Native American Monitor shall attend all applicable pre-construction meetings with the General Contractor and/or associated Subcontractors to present the archaeological monitoring program. The Qualified Archaeologist and Luiseño Native American Monitor shall be present on-site full-time during grubbing, grading and/or other ground altering activities, including the placement of imported fill materials or fill used from other areas of the project site, to identify any evidence of potential archaeological or tribal cultural resources. All fill materials shall be absent of any and all tribal cultural resources. **TCR-5**: In order for potentially significant archaeological artifact deposits and/or cultural resources to be readily detected during mitigation monitoring, a written "Controlled Grade Procedure" shall be prepared by a Qualified Archaeologist, in consultation with the	

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		Luiseño Native American monitor, other TCA Luiseño Tribes that have participated in the state-prescribed process for this project, and the Applicant/Owner, subject to the approval of City representatives. The Controlled Grade Procedure shall establish requirements for any ground disturbing work with machinery occurring in and around areas the Qualified Archaeologist and Luiseño Native American monitor determine to be sensitive through the cultural resource mitigation monitoring process. The Controlled Grade Procedure shall include, but not be limited to, appropriate operating pace, increments of removal, weight, and other characteristics of the earth disturbing equipment. A copy of the Controlled Grade Procedure shall be included in the Grading Plan Submittals for the Grading Permit. **TCR-6**: The Qualified Archaeologist or the Luiseño Native American monitor may halt ground disturbing activities if unknown tribal cultural resources, archaeological artifact deposits or cultural features are discovered. Ground disturbing activities shall be directed away from these deposits to allow a determination of potential importance. Isolates and clearly non-significant deposits will be minimally documented in the field, and before grading proceeds these items shall be secured until they can be repatriated. If items cannot be securely stored on the project site, they may be stored in off-site facilities located in San Diego County. If the Qualified Archaeologist and Luiseño Native American monitor determine that the unearthed tribal cultural resource, artifact deposits or cultural features are considered potentially significant TCA Luiseño Tribes that have participated in the state-prescribed consultation process for this project shall be notified and consulted regarding the respectful and dignified treatment of those resources. The avoidance and protection	

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		of the significant tribal cultural resource and/or unique archaeological resource is the preferable mitigation. If, however, it is determined by the City that avoidance of the resource is infeasible, and it is determined that a data recovery plan is necessary by the City as the Lead Agency under CEQA, TCA Luiseño Tribes that have participated in the state-prescribed consultation process for this project shall be notified and consulted regarding the drafting and finalization of any such recovery plan. For significant tribal cultural resources, artifact deposits or cultural features that are part of a data recovery plan, an adequate artifact sample to address research avenues previously identified for sites in the area will be collected using professional archaeological collection methods. The data recovery plan shall also incorporate and reflect the tribal values of the TCA Luiseño Tribes that have participated in the state-prescribed consultation process for this project. If the Qualified Archaeologist collects such resources, the Luiseño Native American monitor must be present during any testing or cataloging of those resources. Moreover, if the Qualified Archaeologist does not collect the tribal cultural resources that are unearthed during the ground disturbing activities, the Luiseño Native American monitor, may at their discretion, collect said resources and provide them to the appropriate TCA Luiseño Tribe, as determined through the appropriate process, for respectful and dignified treatment in accordance with the Tribe's cultural and spiritual traditions. Ground disturbing activities shall not resume until the Qualified Archaeologist, in consultation with the Luiseño Native American Monitor, deems the cultural resource or feature has been appropriately documented and/or protected.	

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		TCR-7: The landowner shall relinquish ownership of all tribal cultural resources unearthed during the cultural resource mitigation monitoring conducted during all ground disturbing activities, and from any previous archaeological studies or excavations on the project site to the appropriate TCA Luiseño Tribe, as determined through the appropriate process, for respectful and dignified treatment and disposition, including reburial at a protected location on-site, in accordance with the Tribe's cultural and spiritual traditions. All cultural materials that are associated with burial and/or funerary goods will be repatriated to the Most Likely Descendant as determined by the Native American Heritage Commission per California Public Resources Code Section 5097.98. No tribal cultural resources shall be subject to curation. **TCR-8**: Prior to the release of the grading bond, a monitoring report and/or evaluation report, if appropriate, which describes the results, analysis and conclusions of the archaeological monitoring program (e.g., data recovery plan) shall be submitted by the Qualified Archaeologist, along with the Luiseño Native American monitor's notes and comments, to the City of Oceanside Planning Division for approval. **TCR-9**: As specified by California Health and Safety Code Section 7050.5, if human remains are found on the project site during construction or during archaeological work, the person responsible for the excavation, or his or her authorized representative, shall immediately notify the San Diego County Office of the Medical Examiner by telephone. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent	

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		remains shall occur until the Medical Examiner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98. If such a discovery occurs, a temporary construction exclusion zone shall be established surrounding the area of the discovery so that the area would be protected, and consultation and treatment could occur as prescribed by law. If suspected Native American remains are discovered, the remains shall be kept in-situ, or in a secure location in close proximity to where they were found, and the analysis of the remains shall only occur on-site in the presence of a Luiseño Native American monitor. By law, the Medical Examiner will determine within two working days of being notified if the remains are subject to his or her authority. If the Medical Examiner identifies the remains to be of Native American ancestry, he or she shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC shall make a determination as to the Most Likely Descendent.	
Mandatory Findings of Significance			
Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major	Potentially Significant Impact	Implement Mitigation Measure BIO-1, BIO-2, BIO-3, TCR-1, TCR-2, TCR-3, TCR-4, TCR-5, TCR-6, TCR-7, TCR-8, and TCR-9.	Less Than Significant Impact

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
periods of California history or prehistory?			
Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	Potentially Significant Impact	Implement Mitigation Measure BIO-1, BIO-2, BIO-3, HAZ-1, HAZ-2, TCR-1, TCR-2, TCR-3, TCR-4, TCR-5, TCR-6, TCR-7, TCR-8, and TCR-9.	Less Than Significant Impact

Initial Study

1) **Project Title**:
   Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project

2) **Lead Agency Name and Address**:
   City of Oceanside
   300 North Coast Highway
   Oceanside, CA 92054

3) **Contact Person and Phone Number**:
   Shannon Vitale, AICP
   Senior Planner
   (760) 435-3927
   SVitale@oceansideca.org

4) **Project Location**:
   0.3 miles South of Harbor Drive, immediately west of I-5, City of Oceanside, San Diego County

   Latitude and Longitude:
   33.206019 (33°12'21.67"N), 117.385372 (117°23'7.34"W)

   U.S. Geological Survey (USGS) Quadrangle:
   Oceanside, California 7.5- minute USGS Quadrangle, T11S, R05W, Section 22

5) **Project Sponsor's Name and Address**:
   City of Oceanside
   300 North Coast Highway
   Oceanside, CA 92054

6) **General Plan Designation(s)**: Cal Trans Right-of-Way (CALTRAN), Downtown (DT), Residential (C-RL), and Open Space (C-OS)

7) **Zoning Designation(s)**: Cal Trans Right-of-Way (Civic/Public), Commercial (D-6A, D-6B, and D-6C), Residential (R-1 and RS), and Mixed Use (D-7B).

1. Introduction

The City of Oceanside (City) proposes to replace the existing structurally deficient Coast Highway (Hill Street) Bridge (Br. No. 57C0322) over the San Luis Rey River (proposed project). The proposed project is located on Coast Highway/Hill Street. For the purposes of this Initial Study and Mitigated Negative Declaration (IS/MND), the road will generally be referred to as Coast Highway.

The proposed project is funded by the federal-aid Highway Bridge Program (HBP) administered by the Federal Highway Administration (FHWA) through California Department of Transportation (Caltrans) Local Assistance. The proposed project would meet current applicable City, American Association of State Highway and Transportation Officials (AASHTO), FHWA, and Caltrans design standards. The bridge would be replaced close to the same location; just immediately west of the current bridge alignment to maintain service on the existing roadway and bridge during construction.

1.1 Project Location

The bridge is located approximately 0.3 miles south of Harbor Drive, immediately west of and parallel to Interstate 5 (I-5), in the City, San Diego County, California (Figure 1-1 and Figure 1-2).

1.2 Project Setting Overview

The general setting is a perennial river surrounded by commercial development and includes roadways, curbs, and a sidewalk on the west side. The Coast Highway Bridge currently carries vehicular, bicycle, and pedestrian traffic over the San Luis Rey River. There is a paved bicycle and pedestrian sidewalk undercrossing (pedestrian undercrossing) Coast Highway on the north side of the San Luis Rey River, near the top of the slope and there is a Class I multipurpose path, San Luis Rey River Trail (SLRRT), undercrossing Coast Highway on the south side of the San Luis Rey River. There is no curbside on-street parking allowed on the bridge or near the bridge on the approach roadways.

1.3 Discussion of CEQA and NEPA

This proposed project is to serve the agency objectives of the City as well as the surrounding objectives of Caltrans, the County of San Diego (County), and the California Coastal Commission. The City is the lead agency under the California Environmental Quality Act (CEQA). Caltrans, on behalf of the FHWA, is the lead agency under the National Environmental Policy Act (NEPA).

1.3.1 Discussion of the CEQA IS/MND

The environmental analyses contained in this IS/MND benefit from extensive field studies by Caltrans that were also coordinated with the City. The analyses also address the local, state, and federal regulatory frameworks, due to the multijurisdictional nature of the proposed project.

1.3.2 Discussion of the NEPA Categorical Exclusion

This document contains information regarding compliance with CEQA and other state laws and regulations. Separate environmental documentation, supporting a Categorical Exclusion determination, will be prepared by Caltrans in accordance with NEPA. When needed for clarity, or as required by CEQA, this document may contain references to federal laws and/or regulations (CEQA, for example, requires consideration of adverse effects on species identified as a candidate, sensitive, or special-status species by the U.S. National Marine Fisheries Service and the U.S. Fish and Wildlife Service—in other words, species protected by the Federal Endangered Species Act).

1.4 Project Background

In March 2017, the City issued a Notice of Preparation (NOP) for an Environmental Impact Report (EIR) and an Initial Study and held a public scoping meeting for the proposed project. Since the NOP and the scoping meeting, and pursuant to Section 15064 of the CEQA Guidelines, the City has been evaluating the potential project impacts to the environment. In conducting these evaluations, the City has determined that an EIR is no longer required, and that the appropriate environmental document for the proposed project is a Mitigated Negative Declaration (MND). Pursuant to Sections 15064(f) and Section 15070 of the CEQA Guidelines, the proposed project may potentially result in significant impacts; however, these impacts can be mitigated to less than significant levels. This IS/MND provides analysis of the proposed project's effects on the environment, provides project conditions that would be implemented, and recommends mitigation measures, where necessary, to reduce potential impacts.

2. Project Description

2.1 Existing Conditions

The Coast Highway Bridge (Br. No. 57C0322) is a 950-foot long five-span bridge with a cast-in-place concrete deck. The approach spans (Spans 1 and 5) are rolled steel girders. Spans 2, 3, and 4 are each 268-foot-long steel truss spans. The truss spans have a total depth of approximately 40 feet, constructed of dual simple span riveted steel trusses. Piers 3 and 4 are located in the main river supported on piles. Piers 2 and 5, located near the edges of the river are supported on spread footings. The existing abutments are seat type concrete abutments on spread footings. The Coast Highway Bridge is a total of approximately 49 feet wide, with a curb-to-curb width of approximately 40 feet providing two 12-foot traffic lanes plus 8-foot shoulders. It has a raised sidewalk along the west edge of deck. There is no curbside on-street parking allowed on the bridge. The bridge was constructed in 1929 and widened to the east in 1952. The widening was removed in 1971, and the Coast Highway Bridge was restored to its original configuration when Interstate 5 (I-5) was built adjacent to Coast Highway.

The following utilities are attached to the bridge:

- 12-inch gas line – attached to the lower portion of the truss along the east side of the bridge
- 12-inch waterline – attached to the lower portion of the truss along the east side of the bridge
- 10-inch waterline – attached to the lower portion of the truss along the west side of the bridge
- 14-inch sewer force main – attached to the lower portion of the truss along the west side of the bridge
- Electrical and telecommunications lines – attached under the top deck along the west side of the bridge

There are also two sewer lines in the bridge vicinity. One runs down the center of Coast Highway and terminates approximately 40 feet south of the bridge and does not cross the San Luis Rey River. The second sewer line runs under the bridge, on the downstream (west) side of the bridge.

An existing billboard is located south of Monterey Drive, west of Coast Highway, and north of the San Luis Rey River. This billboard would be removed during construction of the proposed project.

The San Luis Rey River Trail (SLRRT) is a Class I multipurpose path that runs along the southern riverbank and provides recreational and commuter uses for bicyclists and pedestrians. On the north side of the river, there is a paved bicycle and pedestrian sidewalk undercrossing (pedestrian undercrossing) near the top of the slope, which

crosses under the Interstate 5 (I-5) and Coast Highway bridges and provides access between the residential neighborhood to the east and San Luis Rey Drive to the west.

2.2 Project Objectives

The existing bridge was built in 1929 and is in poor structural condition. At 95 years old, the bridge is past its useful service life. The bridge is a “Fracture Critical” steel truss because it is structurally non-redundant and has steel members loaded in tension; if one of these members fractured, it would cause a collapse of a span.

The purpose of this proposed project is to remove the deteriorated, structurally deficient, fracture critical and seismically vulnerable, existing structure and replace it with a new bridge designed to current structural and geometric standards while minimizing adverse impacts on the San Luis Rey River and the surrounding riparian area. The replacement bridge would conform to local, state, and federal environmental and planning policies using Highway Bridge Program (HBP) funds.

The proposed project objectives are defined as:

- Remove the existing structural deficient, fracture critical, and seismically vulnerable bridge from service, and replace it with a new bridge built to current structural and geometric standards
- Improve public safety and pedestrian circulation through the addition of a raised sidewalk on the western side of the bridge
- Avoid adverse changes in traffic circulation and the community cohesion
- Minimize right-of-way take
- Minimize impacts to the river and riparian zone
- Offset the majority of project costs through state and federal funding
- Make the bridge more pedestrian and bicycle friendly
- Improve the user experience for pedestrians and bicyclists on the trail below the bridge
- Reduce visual impacts and optimize scenic resources including the views of the Pacific Ocean and the San Luis Rey River
- Provide a context sensitive design solution appropriate for the scenic setting
- Give the bridge its own character as a City street, separate from the I-5 Freeway

2.3 Proposed Project

The deck width on the new bridge would match existing conditions with two 12-foot-wide travel lanes and two 8-foot-wide shoulders for a curb to curb width of 40 feet, the same as the existing bridge. This roadway section would be consistent with City, American

Association of State Highway and Transportation Officials (AASHTO), Federal Highway Administration (FHWA), and California Department of Transportation (Caltrans) standards for a facility of this type, and also matches the existing curb and gutter line along Coast Highway. The shoulders may be reduced to 4 feet if required by Caltrans.

South of the bridge, there are sidewalks on each side of the street. However, north of the bridge there is only a single sidewalk on the west side of the street. New bridges and streets constructed to the City standard would generally have 6-foot-wide sidewalks on each side, and the HBP program would generally participate in sidewalks where sidewalks currently exist. To provide the necessary pedestrian circulation, to align with the sidewalk north of the bridge, and to address the project objectives of improving the user experience for pedestrians and optimizing views of scenic resources, as well as maximizing federal funding participation, a single 8-foot-wide sidewalk is proposed for the west side of the new bridge. The bridge barriers and railings would meet current crash testing requirements for vehicular and pedestrian railings and would be aesthetically pleasing. Coastal views would be considered when selecting bridge and rail types.

The proposed project would replace the bridge immediately west of the existing alignment to maintain service on the existing roadway and bridge during construction. The proposed project would be a cast-in-place post-tensioned concrete box girder bridge on column piers along a new alignment immediately west of the existing bridge. No additional traffic lanes are proposed for this project; the existing two-lane bridge would be replaced with another two-lane bridge.

Bridge construction would require construction of a temporary trestle adjacent to the existing bridge and along the new bridge to facilitate access. Cofferdams and bubble curtains may be required to construct some of the bridge concrete piers and supports. Cofferdams would be installed along the banks of the San Luis Rey River in order to construct the piers and supports on land while bubble curtains would be used to construct the piers and supports within the river.

2.3.1 Roadwork Approach Work

The proposed project would include new pavement, curbs, gutters, and sidewalks adjacent to the replacement bridge. The proposed project would conform back to the existing roadway. The curb-to-curb clear width of the street would match the width of the existing street and bridge. The approaches would transition as necessary to conform to the width of the sidewalk and roadway clear width on the bridge.

2.3.2 Roundabout

On the north end of the proposed project, a roundabout would be constructed at the Monterey Drive/Coast Highway intersection. The roundabout would be designed according to the FHWA roundabout design guidance. The proposed project would conform back to the existing roadway.

2.3.3 Utility Relocation

The existing utilities currently supported by the existing bridge would be relocated onto the new bridge. These utilities would remain in service during construction. Once the new bridge is complete, the utilities would be relocated from the existing bridge to their final locations in the new bridge. Accommodations for other utilities and future utilities on the new bridge would be accommodated as practical.

2.3.4 Right-of-Way

The existing right-of-way for Coast Highway is approximately 75 feet at the bridge and widens both north and south of the existing bridge. Permanent right-of-way acquisition is anticipated. During construction temporary construction easements and permits to enter and construct are anticipated to be required.

There are several areas identified as potential construction staging areas that may require temporary construction easements (TCEs) or encroachment permits from Caltrans. The following parcels are identified as potential staging areas:

- APN 143-010-150
- APN 143-040-450
- APN 143-040-550
- APN 143-090-180
- Portions of Caltrans Right-of-Way under I-5 bridges over the San Luis Rey River

2.3.5 Traffic Handling

Constructing the new bridge on a separate alignment immediately west of the existing bridge is proposed; therefore, traffic would remain on the existing bridge during construction. Once the proposed bridge is constructed, traffic would be cutover from the existing bridge onto the new bridge. During the cutover, delays and short-term closures would be necessary to make the transition from the existing bridge to the new bridge. A traffic handling plan would be submitted by the contractor for approval prior to construction beginning.

2.3.6 Demolition Activities

Once the traffic is fully transitioned onto the new bridge, the existing bridge would be demolished. Demolition of the existing bridge would be performed in accordance with the Caltrans Standard Specifications 60-2.01C (2nd paragraph) which states: “Remove piling, piers, abutments, footings, and pedestals to 1 foot below the ground line or 3 feet below finished grade, whichever is lower.” These may be modified to meet environmental permit requirements. All concrete and other debris resulting from the demolition of the existing bridge would be removed from the project site and properly disposed of by the contractor. Prior to construction, the contractor is required to prepare a bridge demolition plan in conformance with environmental permits and the Caltrans

Standard Specifications. Bridge demolition is anticipated to require construction of a temporary trestle adjacent to the existing bridge to facilitate demolition and provide temporary support during truss removal. Cofferdams and bubble curtains are anticipated to facilitate removal of the existing bridge concrete piers. Cofferdams would be installed along the banks of the river in order to facilitate demolition of the piers and supports on land while bubble curtains would be used to remove the piers and supports within the river. All demolition plans would be reviewed and approved by the Resident Engineer. Equipment used for demolition may include backhoes, excavators, hoe rams, hydraulic hammers, loaders, dump trucks, debris bins, flatbed trucks with cranes, forklifts, crawler cranes, air compressors, jackhammers, chipping guns, cutting torches, and saws.

2.3.7 Construction Activities

Construction would consist of the following activities in this general order:

2.3.7.1 Clearing, Grubbing, and Tree removals

Portions of existing roadway, sidewalks, curbs, gutters, hardscape, and landscaping in conflict with new construction would be removed. Areas around the corners of the new bridge would be cleared of vegetation, fencing, and planter beds to gain access for constructing the new bridge. The project site would be cleared of landscaping, vegetation (including trees), fencing, and planter beds. Vegetation and trees in the river within the footprint of the new bridge would be removed as shown on the plans and allowed by the environmental permits.

2.3.7.2 Construction Staging Areas/Site Access

Contractor lay down areas would be in flat, unused areas inside the proposed project limits. Access to the project site south of the San Luis Rey River would be achieved from SR-76 east of the project site. Temporary access would follow the San Luis River Trail under the I-5 and Coast Highway bridges. This path would provide good access from SR-76 and provide a relatively gradual slope for the access road. Access to the project site north of the San Luis Rey San Luis Rey River would be achieved from Oceanside Harbor Parking Lot #1, Monterey Drive, and San Luis Rey Drive.

2.3.7.3 Construction Access across the River

Stream flow in the San Luis Rey River would be maintained during construction. Temporary construction trestles would be used to provide access over the river. Along the riverbanks, grading would be necessary to provide access for construction equipment. Work would be in conformance with City specifications as well as California Department of Fish and Wildlife (CDFW), Regional Water Quality Control Board (RWQCB), United States Fish and Wildlife Service (USFWS), and National Marine Fisheries Service (NMFS) regulatory requirements. Materials to construct the trestles may consist of steel pilings, steel cap beams and stringers, and timber decking. All work would be contained within the approved proposed project area of disturbance. Equipment used may include light trucks, track mounted cranes, pile driving equipment,

forklifts, excavators, and loaders. The trestles would remain in place for the duration of construction which may include staying in place over at least two winter seasons.

2.3.7.4 New Bridge Foundations

Due to the scour and liquefaction potential of the soils at the project site, the foundations for the replacement bridge would be supported by large diameter piles. Cast-In-Drilled-Hole (CIDH) piles are recommended in the Preliminary Foundation Report for the proposed project. These piles could be up to approximately 180 inches in diameter and over 200 feet deep. Groundwater would be encountered during drilling for the CIDH piles. The CIDH pile construction may require the use of high-density drilling slurry and steel casings. Prior to construction, a pile installation plan would be prepared by the contractor for approval by the Resident Engineer, in conformance with applicable permits, project specifications, environmental measures and conditions. All drilling slurry from the CIDH pile construction would be contained and properly disposed of offsite.

Equipment used may include: a crane or excavator mounted drill rig for the piles, a crane to set the rebar cages in the drilled holes, dump trucks, compaction equipment, and a truck mounted concrete boom pump. If slurry is used, equipment may include mixing tanks, recirculating pumps, and holding tanks for the waste slurry to be trucked offsite.

2.3.7.5 New Bridge Construction

Cast-in-place concrete construction, which places concrete in-situ using temporary shoring called “falsework,” would be construction method for this proposed project. The basic construction sequence is described below:

The piers and abutments would be constructed on site by installing rebar, placing forms, and pouring concrete. Once the piers and abutments are complete, falsework would be constructed to support the wet concrete for the superstructure. As temporary works, the falsework is designed by the Contractor. It generally consists of timber or steel posts, steel cap beams, and steel stringers. Timber joists and plywood forms are placed on top of the steel stringers. Falsework spans are typically 20 to 60 feet long; however, longer spans are possible. The active river channel is approximately 150 feet wide, so it is likely that falsework supports would be installed within the river. At these locations, the falsework would be supported on piles, which are vibrated and driven into the ground. Falsework supports which are susceptible to flooding would be designed for stream flow and scour in case a flood event occurs during construction. Equipment used for the falsework construction may include light trucks, track mounted cranes, pile driving equipment, forklifts, generators, excavators, and loaders.

Once the falsework is complete, the majority of the work commences from on top of the falsework, above the San Luis Rey River. The girders are formed, rebar is placed, and the concrete is poured. Concrete is typically placed from the ends of the bridge using truck mounted concrete boom pumps. Since this bridge would be approximately 980 feet long, concrete to the center of the bridge may need to be pumped using a concrete

pump located on an access road or construction trestles below the bridge. For a multi-cell concrete box girder, the superstructure is placed in two pours, with the stem and soffit poured first and then the top deck placed in the second pour. Between the two concrete pours, utilities are installed in the cells. After the deck is complete and has reached the required strength, the superstructure is typically post-tensioned from abutment to abutment. Equipment used may include: light trucks, small cranes to lift rebar and forms into place, concrete trucks, and truck mounted concrete boom pumps.

After the bridge is prestressed, the falsework is removed, backfilled behind the abutments, and roadway base materials would be placed along the roadway approaches. The roadway would be prepared for final surfacing and the barriers and railings would be installed. Equipment used may include light trucks, small cranes and forklifts, loaders, dump trucks, pavers, and compaction equipment. Excavations up to 30 feet are necessary at the proposed bridge abutments and piers. Excavations for the approach roadway and utilities in the approach roadway may be up 15 feet.

The falsework would remain in place for the duration of the new bridge construction which may include staying in place over at least two winter seasons. The falsework could be removed before the existing bridge is demolished.

2.3.7.6 Landscaping

Below the bridge, the San Luis Rey River banks would be restored to its existing condition, with minimal changes to slopes and grades. Rock slope protection may be required along the slopes to protect the abutments. Areas that are disturbed during construction within the project boundary, including areas along the replacement bridge alignment, San Luis Rey River, and SLRRT, would be restored using local native riparian landscaping to revegetate the slopes and riverbanks as required by the Conceptual Mitigation Plan. Minor landscaping improvements may occur within the street corridor along the reconstructed bridge approaches. The roundabout at the northern end of the proposed project would include landscaping of native and naturalizing plants.

2.3.8 Mitigation Areas

The majority of mitigation is planned to be accomplished on-site within suitable areas within the proposed project area and on adjacent areas owned or managed by the City, referred to herein as the Habitat Enhancement Area. During final design, the Conceptual Mitigation Plan would be approved by the City, Caltrans, and permitting agencies (CDFW, USACE, RWQCB, and CCC). Upon completion of construction, the Conceptual Mitigation Plan would be implemented. The following revegetation efforts are proposed within temporary impact areas: creation and restoration of Diegan coastal sage scrub; re-establishment and restoration of freshwater marsh and southern riparian scrub; and restoration of open water. Vegetation within the Habitat Enhancement Area, located immediately west of the proposed project area and north of the San Luis Rey River, would be enhanced through removal of non-native plant species and planting of

native riparian plant species. Remaining mitigation is discussed in Section 4.4, Biological Resources.

2.4 Construction Schedule and Timing

Construction is currently scheduled to start in 2026 or beyond and take approximately 24 to 30 months to complete. An in-water work window would be determined during the environmental permitting process with the resource agencies. Temporary work such as the trestles and falsework that may need to stay in place over at least two winter seasons would be coordinated with the environmental permitting agencies and the USACE levee group. As in-water work window of June 1 to October 31 is anticipated.

The following environmental documents and permits are anticipated to be required:

Table 2-2: Permits and Approvals Needed

AGENCY	PERMIT/APPROVAL	STATUS
Caltrans	Approval of Categorical Exclusion (CE)	Follows approval of technical studies and receipt of the Biological Opinions.
Caltrans	Encroachment Permit	Application to follow approval of IS/MND and CE
National Marine Fisheries Service (NMFS)	Section 7 federal Endangered Species Act (ESA) Consultation for Threatened and Endangered Species	Biological Opinion follows the approval of the Biological Assessment
National Marine Fisheries Service (NMFS)	Section 7 federal Endangered Species Act (ESA) Consultation for Threatened and Endangered Species	Biological Opinion follows the approval of the Biological Assessment
U.S. Army Corps of Engineers (USACE)	Section 404 Permit	Application to follow approval of IS/MND and CE. Often completed during final design.
U.S. Army Corps of Engineers (USACE)	Section 408 Permission	Application to follow approval of IS/MND and CE. Often completed during final design.
Coastal Regional Water Quality Control Board	Section 401, Clean Water Quality Act (CWA), Water Quality Certification	Application to follow approval of IS/MND and CE. Often completed during final design.
California Department of Fish and Wildlife	Section 1602 Streambed Alteration Agreement	Application to follow approval of IS/MND and CE. Often completed during final design.
California Coastal Commission	Coastal Development Permit	Application to follow approval of IS/MND and CE. Often completed during final design.

3. Environmental Factors Potentially Affected

The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

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

3.1 Determination: (To be completed by Lead Agency Upon Completion of Public Review)

On the basis of this initial study:

- ☐ 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, no further environmental documentation is required.

NAME (PRINT)	DATE
SIGNATURE	**FOR**

4. Environmental Checklist

This section of the IS/MND evaluates the potential effects on the physical environment from the implementation of the Coast Highway (Hill Street) Bridge Replacement Project (proposed project). This analysis has been prepared to determine whether any of the conditions in CEQA Guidelines Section 15162 would occur as a result of the proposed project.

4.1 Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:

Issues	Determination
a) Have a substantial adverse effect on a scenic vista?	Less Than Significant Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No Impact
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?	Less Than Significant Impact
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less Than Significant Impact

This section incorporates the analysis, findings, and recommendations in the *North Coast Highway Bridge Replacement Project Visual Impact Assessment* (VIA) (Estrada Land Planning [Estrada] 2023). The analysis in the VIA and summarized here follows the guidance and the definitions outlined in the publication *Guidelines for the Visual Impact Assessment of Highway Projects* published by the U.S. Department of Transportation (USDOT) Federal Highway Administration (FHWA) in January 2015 (Estrada 2023).

4.1.1 Setting

Visual character is a description (not evaluation) of a site, and includes attributes such as form, line, color, and texture. Visual quality is the intrinsic appeal of a landscape or scene due to the combination of natural and built features in the landscape, and this analysis rates visual quality as high, moderate, or low. Visual sensitivity is the level of interest or concern that the public has for maintaining the visual quality of a particular aesthetic resource and is a measure of how noticeable proposed changes might be in a particular scene and is based on the overall clarity, distance, and relative dominance of

the proposed changes in the view, as well as the duration that a particular view could be seen.

4.1.1.1 Existing Conditions

The area landscape is characterized by coastal valleys, marine aquatic resources, and coastal scrub and riparian vegetation communities (Estrada 2023). The general setting of the proposed project is the San Luis Rey River, a perennial river, undercrossing I-5 and Coast Highway Bridge, surrounded by commercial development approximately 2,000 feet east of the Pacific Ocean within the California Coastal Zone. Land use at the project site is primarily urban roadways and commercial development with vegetated slopes down to the San Luis Rey River below the bridges. The San Luis Rey River, riparian areas, and valley slopes contain green and brown earth tones that contrast with the gray monotones of the bridges.

The San Luis Rey River Trail (SLRRT) runs along the southern riverbank and provides recreational and commuter uses for bicyclists and pedestrians. On the north side of the river, there is a paved bicycle and pedestrian sidewalk undercrossing (pedestrian undercrossing) near the top of the slope, which crosses under the I-5 and Coast Highway bridges and provides access from the residential neighborhood to the east to San Luis Rey Drive to the west.

The existing views are comprised of a linear, fine-textured forms of the existing bridge, roadway surface, walkways, safety curbs and railings. The existing roadway form and alignment follow the topography apart from the bridge structures (Estrada 2023).

An existing billboard is located south of Monterey Drive, west of Coast Highway, and north of the San Luis Rey River. This billboard would be removed during construction of the proposed project.

4.1.1.2 Designated Scenic Resources

There are eight national scenic byways in California and none of them are located within San Diego County (FHWA 2021). The closest national scenic byway is the Arroyo Seco Historic Parkway, Route 110, located in Los Angeles County, approximately 76 miles to the northwest of the proposed project.

There are six officially designated state scenic highways within San Diego County. The closest designated state scenic highway is a 3.5-mile-long stretch of State Route 52 (SR-52), located approximately 30 miles southeast of the proposed project. Within the proposed project vicinity, I-5 and State Route 76 (SR-76) are considered eligible for listing as a state scenic highway (California Department of Transportation [Caltrans] 2024). The City of Oceanside General Plan (City General Plan) Environmental Resource Management Element identifies open space and scenic areas in the City that are to be protected, including the Pacific Ocean and San Luis Rey River (Oceanside 2002).

4.1.1.3 Sensitive Receptors

Receptors sensitive to visual change generally include people residing or working near the project site; these land uses include commercial, including hotels, and residential. In addition, the users of I-5, SR-76, Coast Highway, the pedestrian undercrossing, and the SLRRT would also be sensitive to visual change.

4.1.1.4 Key Views

The VIA analyzed five key views of the project site that would be most representative of viewers and the potential change in visual resources (Figure 4.1-1) (Estrada 2023). These key views include the following:

- Key View #1 – Viewing west from SR-76 (Figure 4.1-2). This view provides a clear vantage point of the scene with the proposed bridge behind the I-5 bridges in the middle ground of the view.
- Key View #2 – Viewing southwest from I-5 (Figure 4.1-3). This view provides a vantage point for viewing the proposed bridge from the freeway.
- Key View #3 - Viewing west from the North Coast Highway off-ramp (Figure 4.1-4). This view provides a vantage point for showing a representative view of the proposed bridge structure.
- Key View #4 - Viewing east from Pacific Street Bridge (Figure 4.1-5). The view from this vantage is presentative of the proposed bridge in the context of existing features.
- Key View #5 - Viewing northeast from the SLRRT (Figure 4.1-6). This view provides an unobstructed vantage point of nearly the entire proposed bridge structure and existing features.

4.1.2 Discussion

Potential impacts from the proposed project are discussed below in response to each of the CEQA checklist questions. Additionally, the Project Condition listed below will be implemented as part of the proposed project.

PROJECT CONDITIONS

1. The proposed bridge color scheme would follow City and Caltrans requirements. The proposed bridge would be designed to have similar visual effects as other bridges in City and will provide matte finishes to keep glare to a minimum. The proposed bridge color scheme and textures would be approved by the City and Caltrans during final design, and the California Coastal Commission (CCC) during the Coastal Development Permit application process.
2. New lighting facilities will be installed for safety. These lights will be directed downward and toward the roadway. Lighting on the pedestrian undercrossing will be similar to existing conditions, using recessed lights in the bridge barrier supports.

a) Have a substantial adverse effect on a scenic vista?

The City General Plan Environmental Resource Management Element identifies the Pacific Ocean and San Luis Rey River as scenic areas to be protected (Oceanside 2002). Stream flow in the San Luis Rey River would be maintained during construction. A temporary construction trestle would be used to provide access over the San Luis Rey River during construction. Views of the Pacific Ocean and San Luis Rey River may be obstructed by construction equipment, a temporary construction trestle, and by a cofferdam. The construction equipment, trestle, and cofferdam would be removed upon construction completion, a maximum of two winter seasons. Obstruction to views of the Pacific Ocean and San Luis Rey River would be temporary and return to existing conditions after construction. Construction impacts to scenic vistas and views would be temporary and less than significant. No mitigation measures are required.

As described above in Chapter 2, Project Description, one of the proposed project objectives is to reduce visual impacts and optimize scenic resources including the views of the Pacific Ocean and the San Luis Rey River. The bridge barriers and railings would meet current requirements for vehicular and pedestrian safety while balancing the open views of the Pacific Ocean afforded on the Coast Highway Bridge. Aesthetic treatment would be incorporated into the design to be similar in character to, and compatible with, other highway and local bridges in the area. The City and Caltrans would approve final colors and textures during final design. The City would also obtain a Coastal Development Permit from the CCC, which would further require the proposed project to provide appropriate colors, textures, and railings that meet existing safety standards while also affording visually pleasing elements that complement the existing views of the Pacific Ocean and the San Luis Rey River. In addition, the proposed bridge form and introduction of few simplistic columns would reduce distractions in the view of the San Luis Rey River and the Pacific Ocean, resulting in improved overall view intactness.

The existing billboard located on the northern end of the project site would be removed during construction. According to the City's Comprehensive Zoning Ordinance's Billboard Policy, the construction, erection, or use of any new billboard is prohibited and the relocation of billboards will be prohibited in the Coastal Zone (City of Oceanside 2021). The removal of the billboard would eliminate a feature that currently obstructs views to the south and west from Coast Highway and I-5. This would be a benefit to the views in the vicinity of the Pacific Ocean and San Luis Rey River.

The proposed project would not negatively alter the visual characteristics of the surrounding urban environment and would remove a feature that currently obstructs views in the vicinity of the Pacific Ocean and San Luis Rey River. Thus, less than significant impacts would occur to scenic vistas. No mitigation measures are required.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

As mentioned above, there are no national scenic byways or officially designated scenic highways within, of adjacent to, the proposed project site. Interstate 5 and SR-76 are eligible to be state scenic highways; however, they have not been officially a designated. The nearest officially designated state scenic highway is located approximately 30 miles southeast of the project site and does not have direct views of the proposed project.

The proposed project would not have adverse effects on the views of I-5 and SR-76 because the existing bridge would be replaced with a new bridge and operational views would be similar to existing conditions. In addition, the billboard currently visible from I-5 on the west side of Coast Highway would be removed, thus eliminating a feature that obstructs current views. The proposed project would be similar in aesthetic value and character to the surrounding roadway and urban environment as the existing Coast Highway Bridge. No impact would occur to a designated federal or state scenic highway, and no mitigation measures are required.

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?

The proposed project is located in an urbanized area of the City and is within the Coastal Zone. The San Luis Rey River runs underneath the existing bridge.

The proposed project would be used for transportation purposes, similar to existing conditions, and would be consistent with the City General Plan Public Utility and Transportation land use designation and the Caltrans Right-Of-Way zoning classification adjacent to the site (City of Oceanside 2015). For further discussion regarding impacts to the existing land uses at the project site, please refer to Section 4.11, Land Use and Planning. The proposed project would be replacing an existing two-lane bridge with a new two-lane bridge designed to be visually similar to existing conditions in form, line, color, texture, dominance, and scale. In addition, the proposed project would the billboard currently visible from I-5 on the west side of Coast Highway would be removed. According to the City's Comprehensive Zoning Ordinance's Billboard Policy, the construction, erection, or use of any new billboard is prohibited and the relocation of billboards will be prohibited in the Coastal Zone (City of Oceanside 2021).

The proposed project would be consistent with City, American Association of State Highway and Transportation Officials (AASHTO), FHWA, and Caltrans standards for a facility of this type, and also comply with federal, state, and City policies regarding

landscaping, architectural features, and coloring. The proposed project would not conflict with applicable zoning or other regulations governing scenic quality of the project site; therefore, impacts would be less than significant.

KEY VIEWS

As described above, there were five key views analyzed in the VIA (Figure 4.1-1) (Estrada 2023). Key View number (#) 1, located on SR-76 east of the project area and facing west, encompasses a view of the existing I-5 bridges in the foreground and the proposed replacement bridge location in the background (Figure 4.1-2). Figure 4.1-2 depicts that the proposed replacement bridge would reduce the dominance and scale of the Coast Highway Bridge. The proposed conditions for Key View #1 would provide for a more uninterrupted view and fluid architectural lines. Key View #2 and Key View #3 are both located on the I-5 bridges and face southwest and west respectively. Both Key View #2 and Key View #3 include views of the proposed bridge location in the foreground with the San Luis Rey River and Pacific Ocean in the background (Figure 4.1-3, Figure 4.1-4). The proposed bridge would increase in width by three feet to accommodate a wider pedestrian walkway. The proposed bridge deck has a slightly larger scale in views from I-5 than existing conditions. Key View #4 looks east towards the proposed bridge location from Pacific Street Bridge (Figure 4.1-5). Figure 4.1-5 shows how the proposed bridge blends in with the existing structures and features in the vicinity. Views of the proposed bridge from Pacific Street Bridge would be similar to existing conditions. Key View #5 views the proposed bridge from the SLRRT facing northeast (Figure 4.1-6). Figure 4.1-6 shows the proposed project would remove the green-painted steel girders, resulting in a more open view, with greater views of the natural landscape along the SLRRT.

The proposed project would replace the existing Coast Highway Bridge immediately west of the existing alignment. The views of the proposed bridge would be similar to existing views. The proposed bridge deck would increase in width by 3 feet but overall, the proposed bridge is of less stature and bulk, resulting in a less dominant bridge structure (Estrada 2023). Views of the proposed bridge would be less than significant. Further discussion of the proposed bridge type and changes to visual resources in the proposed project vicinity due to the proposed project are discussed below.

PROPOSED BRIDGE

The proposed project would be similar in form, line, color, texture, dominance, and scale as the existing structures thereby providing compatibility with the existing character of the corridor. The proposed bridge, which would be a haunched box girder bridge that includes the roadway, concrete barriers, railings, and light fixtures. The proposed bridge would include fluid architectural lines and forms and would improve existing views by only using a few columns. The existing green steel girder bridge would be removed. Aesthetic treatment on the proposed bridge would be incorporated into the design to be similar in character to, and compatible with, other highway and local bridges in the area. As discussed in Project Conditions, above, the City and Caltrans would approve final

colors and textures during final design. The City would also obtain a Coastal Development Permit from the CCC, which would further require the proposed project to provide appropriate colors, textures, and railings that meet existing safety standards while also affording visually pleasing elements that complement the existing views. The proposed bridge would improve the harmony between built and natural features in the view (Estrada 2023).

The proposed bridge would include a wider pedestrian walkway, resulting in an increase of three feet in bridge deck width from existing conditions; however, the haunched box girder bridge would be of lesser stature and bulk than the existing bridge. The proposed bridge would result in a less visually dominant structure (Estrada 2023). Therefore, the proposed project would be consistent with the scale of structures in the vicinity and would be similar in aesthetic value and character to the roadway and surrounding urban setting. Impacts would be less than significant, and no mitigation measures are required.

VEGETATION AND LANDSCAPING

Bridge construction would result in disturbance of natural and other landscapes. Impacts to the natural landscapes as they relate to plant and wildlife species are discussed in detail in Section 4.4, Biological Resources. As discussed in Chapter 2, Project Description, portions of existing roadway, sidewalks, curbs, gutters, hardscape, and landscaping in conflict with new construction would be removed. The site would be cleared of landscaping, vegetation (including trees), fencing, and planter beds. Vegetation and trees in the river within the footprint of the new bridge would also be removed as shown on the plans and allowed by the environmental permits.

The proposed bridge would be constructed 65 feet to the west allowing for greater views of natural features and vegetation below the bridge. After construction, all temporarily disturbed areas and impacted vegetation would be restored and returned to pre-project conditions, as discussed in Chapter 2, Project Description, and as required in the Project Conditions listed in Section 4.4, Biological Resources. Negative impacts to the visual character and quality of the project site due to the removal of landscaping and vegetation would be temporary. After construction completion, the visual character and quality would be similar to existing conditions. Impacts from the proposed project would be less than significant. No mitigation measures are required.

MONTEREY DRIVE AND COAST HIGHWAY INTERSECTION

The proposed project would include the addition of a roundabout on the north end of the proposed project at the intersection of Monterey Drive and Coast Highway (Figure 4.1-7). The proposed roundabout would be designed according to FHWA roundabout design guidance and would conform back to the existing roadway. The billboard in the vicinity of the roundabout would be removed. The proposed roundabout would include a landscaped center island. Landscaping of the proposed roundabout and northern bridge approach would be done with ornamental native and naturalizing plants. The landscaping would soften the extensive amount of pavement, and frame views of the

bridge. Landscaping would follow Caltrans and City standards, and landscaping plans would be finalized during final design.

CONCLUSION

The proposed project would not negatively alter the visual characteristics of the surrounding urban environment. The proposed project would have less than significant impact to the visual environment and no mitigation measures would be required.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Currently, lighting from adjacent facilities and from roadway traffic are the main sources of light and glare in the vicinity. Construction activities would occur during daylight hours and would not increase light. While glare may occur from the reflection of sunlight on construction equipment, by nature of the equipment, the glare would be similar to that occurring from vehicles using the area roadways. Any glare associated with construction activities would be temporary in nature and cease upon construction completion. Therefore, the proposed project would not significantly increase light and glare during construction.

After construction, operations of the proposed bridge would be similar to existing conditions. Roadway traffic and lighting from adjacent properties are the main sources of nighttime light at the proposed project site. The proposed project would not increase capacity along Coast Highway and therefore would not increase light from vehicular traffic. Street lighting for the proposed project would be coordinated and similar to existing street lighting on Coast Highway. The proposed project would implement the Project Condition listed above regarding light and glare. Recessed lights would be included in bridge barrier supports to improve the pedestrian undercrossing (Estrada 2023). The proposed project would not result in changes that would introduce new sources of light and glare (i.e., streetlamps, security lighting, or other structures) to the area. The proposed project would remove the existing billboard near the Monterey Drive and Coast Highway intersection. According to the City's Comprehensive Zoning Ordinance's Billboard Policy, the construction, erection, or use of any new billboard is prohibited and the relocation of billboards will be prohibited in the Coastal Zone (City of Oceanside 2021). The removal of the billboard would remove a source of light and glare adjacent to Coast Highway. The proposed project would have a less than significant impact and no mitigation measures are required.

4.1.3 References

California Department of Transportation (Caltrans). 2024. California State Scenic Highways. Online: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Date Accessed: January 21, 2024.

City of Oceanside. 2021. City of Oceanside Comprehensive Zoning Ordinance. Online: https://www.ci.oceanside.ca.us/government/development-se

rvices/planning/codes-regulations-maps/zoning-ordinance. Date Accessed: January 29, 2024.

City of Oceanside. 2015. Land Use and Zoning Map. Online: https://www.ci.oceanside.ca.us/residents/city-services/city-gis-maps. Accessed: January 13, 2024

City of Oceanside. 2002. Environmental Resource Management Element. Online: https://www.ci.oceanside.ca.us/home/showpublisheddocument/3862/637952805772100000. Date Accessed: January 12, 2024.

Estrada Land Planning (Estrada). 2024. North Coast Highway Bridge Replacement Project Final Visual Impact Assessment. February 2024.

Federal Highway Administration (FHWA). 2021. National Scenic Byways & All-American Roads. Online: https://fhwaapps.fhwa.dot.gov/bywaysp/state/CA/map. Date Accessed: January 13, 2024.

U.S. Department of Transportation (USDOT) Federal Highway Administration (FHWA). 2015. Guidelines for the Visual Impact Assessment of Highway Projects. Online: https://www.environment.fhwa.dot.gov/env_topics/other_topics/VIA_Guidelines_for_Highway_Projects.aspx. Date Accessed: January 13, 2024.

4.2 Agriculture and Forestry Resources

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

Issues	Determination
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?	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	No Impact

4.2.1 Setting

The City of Oceanside General Plan (City General Plan) land use designations include Cal Trans Right-of-Way (CALTRAN), Downtown (DT), Residential (C-RL), and Open Space (C-OS) (City of Oceanside 2015). The zoning classifications include Cal Trans Right-of-Way (Civic/Public), Commercial (D-6A, D-6B, and D-6C), Residential (R-1 and RS), and Mixed Use (D-7B). Properties surrounding the project site consist of hotels, motels, inns, commercial development, parking lot, and water area. The project site is designated as Urban and Built-Up Land and Other Land (California Department of Conservation [CDOC] 2022). There are no forestland, timberland, or timberland as defined by the Public Resources Code or the Government Code (Figure 4.2-1).

4.2.2 Discussion

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?**

and

b) **Conflict with existing zoning for agricultural use, or a Williamson Act contract?**

and

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))?**

and

d) **Result in the loss of forest land or conversion of forest land to non-forest use?**

and

e) **Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

No agricultural lands, forest lands, timberlands, or lands under Williamson Act contracts within or adjacent to the proposed project. No conversion of farmland to nonagricultural use or forestland to non-forest use would occur (Figure 4.2-1). No impact would occur, and no mitigation measures are required.

4.2.3 References

California Department of Conservation (CDOC). 2022. California Important Farmland Finder. https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed: March 10, 2023.

City of Oceanside. 2015. Land Use and Zoning Map. Online: https://www.ci.oceanside.ca.us/residents/city-services/city-gis-maps. Accessed: March 10, 2023

4.3 Air Quality

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

Issues	Determination
a) Conflict with or obstruct implementation of the applicable air quality plan?	Less Than Significant Impact
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?	Less Than Significant Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	Less Than Significant Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less Than Significant Impact

This section incorporates the analysis, findings, and recommendations in the *Air Quality Analysis for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project* (RECON Environmental Inc. [RECON] 2022).

4.3.1 Setting

The City is located at the western edge of the San Diego Air Basin (SDAB) near the coast. The SDAB is the air basin that encompasses all of San Diego County. The SDAB's western coastal areas are subject to westerly winds, which typically push air pollutants eastward. The SDAB's eastern areas are bordered by mountains to the north, east, and south which lead to restricted air flow. Westerly winds along the coastline and restricted air flow near the mountain range causes higher concentrations of air pollutants in the eastern portion of the SDAB, especially in the lower-lying areas, compared to coastal areas which tend to have better air quality (RECON 2022). The prevailing westerly wind pattern is sometimes interrupted by regional "Santa Ana" conditions. Santa Ana conditions occur when a strong high pressure system develops over the Nevada–Utah area and overcomes the prevailing westerly coastal winds, sending strong, steady, hot, dry northeasterly winds over the mountains and out to sea, resulting in pollutants being blown out over the ocean (RECON 2022).

The proposed project is under the jurisdiction of the San Diego Air Pollution Control District (SDAPCD). Air quality districts are public health agencies whose mission is to improve the health and quality of life for all residents through effective air quality management strategies.

The SDAPCD has 11 air quality monitoring stations throughout San Diego County. The Camp Pendleton monitoring station is the closest SDAPCD air quality monitoring station to the project site, located approximately one-mile northwest. The Camp Pendleton

monitoring station collects air quality measurements for ozone (O_2), Particulate Matter 2.5 microns or less in diameter ($PM_{2.5}$), and Nitrogen Dioxide ($NO_{2)}$ (Table 4.3-1).

Table 4.3-1: Summary of Air Quality Measurements Recorded at Camp Pendleton Monitoring Station

POLLUTANT/STANDARD	2016	2017	2018	2019	2020
Ozone					
Federal Max 8-hr (ppm)	0.073	0.081	0.068	0.064	0.074
Days 2015 Federal 8-hour Standard Exceeded (0.07 ppm)	4	4	0	0	3
Days 2008 Federal 8-hour Standard Exceeded (0.075 ppm)	0	1	0	0	0
State Max 8-hr (ppm)	0.073	0.082	0.069	0.065	0.074
Days State 8-hour Standard Exceeded (0.07 ppm)	5	5	0	0	3
Max. 1-hour (ppm)	0.083	0.094	0.084	0.075	0.094
Days State 1-hour Standard Exceeded (0.09 ppm)	0	0	0	0	0
$PM_{2.5}$*					
Federal Max. Daily ($\mu g/m^3$)	--	--	--	--	--
Measured Days Federal 24-hour Standard Exceeded (35 $\mu g/m^3$)	--	--	--	--	--
Calculated Days Federal 24-hour Standard Exceeded (35 $\mu g/m^3$)	--	--	--	--	--
Federal Annual Average ($\mu g/m^3$)	--	--	--	--	--
State Max. Daily ($\mu g/m^3$)	28.8	26.0	30.5	13.8	61.1
State Annual Average ($\mu g/m^3$)	--	--	--	--	--
NO_2					
Max 1-hour (ppm)	0.072	0.063	0.048	0.053	0.058
Days State 1-hour Standard Exceeded (0.18 ppm)	0	0	0	0	0
Days Federal 1-hour Standard Exceeded (0.100 ppb)	0	0	0	0	0
Annual Average (ppm)	0.006	0.006	--	0.005	0.006

ppm = parts per million; $\mu g/m^3$ = micrograms per cubic meter; -- = Not available.
*Calculated days value. Calculated days are the estimated number of days that a measurement would have been greater than the level of the standard had measurements been collected every day. The number of days above the standard is not necessarily the number of violations of the standard for the year.

Source: RECON 2022

The federal Clean Air Act (CAA) requires the U.S. Environmental Protection Agency (USEPA) to set National Ambient Air Quality Standards (NAAQS) for major pollutants that could be detrimental to the environment and human health. The California Ambient Air Quality Standards (CAAQS) are the state equivalent of the NAAQS. An air basin is in “attainment” (compliance) when the levels of the pollutant in that air basin are below NAAQS and CAAQS thresholds. Table 4.3-2 provides information on the NAAQS and Table 4.3-3 provides information on the CAAQS.

Table 4.3-2: NAAQS

POLLUTANT		STANDARD TYPE	AVERAGING TIME	CONCENTRATION THRESHOLD	FORM
Carbon monoxide (CO)		Primary	8 hours	9 ppm	Not to be exceeded more than once per year
			1 hour	35 ppm	
Lead (Pb)		Primary and secondary	Rolling 3-month average	0.15 µg/m^3	Not to be exceeded
Nitrogen dioxide (NO_2)		Primary	1 hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		Primary and secondary	1 year	53 ppb	Annual mean
Ozone (O_2)		Primary and secondary	8 hours	0.070 ppm	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
Particulate matter (PM)	$PM_{2.5}$	Primary	1 year	12.0 µg/m^3	Annual mean, averaged over 3 years
		Secondary	1 year	15.0 µg/m^3	Annual mean, averaged over 3 years
		Primary and secondary	24 hours	35 µg/m^3	98th percentile, averaged over 3 years
	PM_{10}	Primary and secondary	24 hours	150 µg/m^3	Not to be exceeded more than once per year on average over 3 years
Sulfur dioxide (SO_2)		Primary	1 hour	75 ppb	99th percentile of 1 hour daily maximum concentrations, averaged over 3 years
		Secondary	3 hours	0.5 ppm	Not to be exceeded more than once per year

Source: RECON 2022

Table 4.3-3: CAAQS

POLLUTANT		AVERAGING TIME	CONCENTRATION THRESHOLD
Carbon monoxide (CO)		8 hours	0.09 ppm
		1 hour	0.070 ppm
Lead (Pb)		1.5	0.15 µg/m^3
Nitrogen dioxide (NO_2)		1 hour	0.18 ppm
		Annual arithmetic mean	0.030 ppm
Ozone (O_2)		8 hours	0.09 ppm
		1 hour	0.070 ppm
Particulate matter (PM)	$PM_{2.5}$	Annual arithmetic mean	12.0 µg/m^3
	PM_{10}	24 hours	50 µg/m^3
		Annual arithmetic mean	20 µg/m^3
Sulfur dioxide (SO_2)		1 hour	0.25 ppm
		24 hours	0.04 ppm
Visibility reducing particles		9 hours	Extinction of 0.23 per kilometer
Sulfates		24 hours	25 µg/m3
Hydrogen sulfide		1 hour	0.03 ppm
Vinyl chloride		24 hours	0.01 ppm

Source: RECON 2022

The SDAPCD is responsible for implementing the State Implementation Plan (SIP) for the SDAB. SIPs are enforceable plans to help states stay within NAAQS air quality

standards (RECON 2022). The proposed project is located in a County that is currently in federal non-attainment for ozone. The proposed project is also located in an area that is currently in state non-attainment for ozone, $PM_{2.5}$, and PM_{10}. San Diego County was designated attainment or unclassified for all remaining pollutants (CARB 2022).

The SDAPCD established a Regional Air Quality Strategy (RAQS) to address and enforce state requirements. The RAQS also includes Transportation Control Measures (TCM) prepared by the San Diego Association of Governments (SANDAG) which regulates mobile source emissions (SDAPCD 2016). The RAQS and the TCM were put in place to help San Diego County be in attainment of CAAQS ozone requirements (RECON 2022). The SDAPCD does not provide specific thresholds for pollutant emissions, but it does include air quality analysis trigger levels for new or modified stationary sources (RECON 2022). Thresholds applicable to the proposed project are listed below in Table 4.3-4.

Table 4.3-4: Air Quality Impact Screening Levels

POLLUTANT	TOTAL EMISSIONS THRESHOLDS (LBS/DAY)
NO_X	250
SO_X	250
CO	550
PM_{10}	100
ROG[1]	250
$PM_{2.5}$	55

lb = pounds; ROG = reactive organic gases; CO = carbon monoxide; SO_x = oxides of sulfur; NO_x = oxides of nitrogen; PM_{10} = particulate matter less than 10 microns; $PM_{2.5}$ = particulate matter less than 2.5 microns.

Source: RECON 2022

4.3.1.1 Sensitive Receptors

Sensitive receptors are defined as facilities that house or attract children, the elderly, people with illness, or others who are especially sensitive to the effects of air pollutants. Sensitive receptor locations may include hospitals, schools, convalescent facilities, and residential areas. The Camp Pendleton Hospital is located approximately 0.34 mile to the north of the proposed project. The closest schools are Laurel Elementary School, located approximately 0.45 mile to the east of the proposed project, North Terrace Elementary School, located approximately 0.65-mile northeast of the proposed project, Oceanside High School, located approximately 0.75 mile southeast of the proposed project, and Mission Elementary School and Jefferson Middle School, both located approximately 1 mile east of the proposed project. There is a childcare agency, the Browne Child Development Center, located approximately 0.26 mile to the northeast of the proposed project. The only convalescent facility near the proposed project is Visiting Angels, a senior care and assisted living facility located approximately 0.46 mile to the southeast of the proposed project.

Nearby residences directly adjacent to the proposed project boundary include neighborhoods along San Luis Rey Drive to the northeast of the proposed project and Sandy Shores RV and Mobile Home Park to the northwest of the proposed project along Monterey Drive and Carmelo Drive. Other residences located to the northeast of the proposed project include those along San Rafael Drive, Monterey Drive, Capistrano Drive, and Sunset Drive. Neighborhoods along San Luis Rey Drive, San Rafael Drive, Monterey Drive, Capistrano Drive, and Sunset Drive are located between 250 feet and 2,640 feet northeast of the proposed project boundary. There are also residences located along Harbor Cliff Way approximately 500 feet to the southeast of the proposed project boundary.

4.3.2 Discussion

Potential air quality impacts generated by the proposed project are discussed below in response to each of the CEQA checklist questions. Additionally, the Project Conditions listed below will be implemented as part of the proposed project.

PROJECT CONDITIONS

1. All unpaved construction areas shall be watered, or other acceptable SDAPCD dust control agents may be applied, two times per day to reduce dust emissions. Additional watering or acceptable SDAPCD dust control agents shall be applied during dry weather or windy days until dust emissions are not visible.
2. A 15-mile-per-hour speed limit on unpaved surfaces shall be enforced.
3. When visible, dirt and debris spilled onto paved surfaces shall be swept up immediately to reduce resuspension of particulate matter caused by vehicle movement. Approach routes to construction sites shall be cleaned daily of construction-related dirt.
4. Disturbed areas shall be hydroseeded, landscaped, or developed as quickly as possible and as directed by the City and/or SDAPCD to reduce dust generation.

a) Conflict with or obstruct implementation of the applicable air quality plan?

The primary source of air pollution would occur during proposed construction as a result of construction activities (i.e., grading) and construction vehicle emissions. The proposed project would be consistent with the Air Quality Objectives in the City of Oceanside General Plan (City General Plan) and would not conflict with or obstruct implementation of the SIP, RAQS, TCM, or regional transportation plans. All construction equipment would be maintained in a manner consistent with state and federal regulations, and manufacturing guidelines applicable to off-road construction diesel equipment. The short-term construction impacts would be temporary and cease upon construction completion.

Once operation commences, the proposed project would not increase vehicle capacity or increase traffic and congestion because the proposed project would replace an existing two-lane bridge with a new two-lane bridge designed to current structural and geometric standards. The proposed project would not create new permanent sources of

emissions. The proposed project would be consistent with applicable air quality plans. Operational air emissions would be similar to existing conditions. There would be no long-term operational impacts from the proposed project. Impacts from the proposed project on applicable air quality plans would be less than significant, and no mitigation measures are required.

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?

The SDAPCD is designated in federal nonattainment for ozone and state nonattainment for ozone, $PM_{2.5}$, and PM_{10} (SDAPCD 2023). Construction phases occurring as part of the proposed project would generate temporary air quality emissions. Construction emissions were modelled using the Road Construction Emissions Model (RCEM), Version 9.0.0, by RECON and evaluated in the *Air Quality Analysis for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project* (RECON 2022). The RCEM was developed by the Sacramento Metropolitan Air Quality Management District (SMAQMD). For the purposes of the analysis, it was presumed that proposed project construction would last 30 months, the total proposed project area would be 16 acres, and the maximum area disturbed/day would be 5 acres. The proposed project would contribute to a temporary incremental increase in emissions. Construction operations in the SDAPCD are required to comply with Regulation 4, Rules 52, 54, and 55 and the proposed project would implement Project Conditions for fugitive dust control.

The SDAPCD does not provide specific CEQA thresholds; therefore, the SDAPCD's air quality analysis trigger levels for new or modified stationary sources are used as thresholds for the purposes of this analysis (RECON 2022). The proposed project construction emissions that are provided in Table 4.3-5 are compared with the thresholds.

Table 4.3-5: Maximum Daily Construction Emissions (pounds/day)

POLLUTANT	CONSTRUCTION EMISSION	THRESHOLD	EXCEED THRESHOLDS? (YES/NO)
ROG	5.24	250	No
NO_X	60.04	250	No
CO	39.09	550	No
SO_2	0.13	250	No
PM_{10}	52.37	100	No
$PM_{2.5}$	12.42	55	No

ROG = reactive organic gases; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = particulate matter less than 10 microns; $PM_{2.5}$ = particulate matter less than 2.5 microns.

Source: Recon 2022

The construction emissions are not projected to exceed the SDAPCD air quality analysis trigger thresholds, as shown in Table 4.3-5. Therefore, the proposed project

would have a less than significant impact on air quality emissions during construction and no mitigation measures would be required.

The proposed project would not increase vehicle capacity or increase traffic and congestion because the proposed project would replace an existing two-lane bridge with a new two-lane bridge designed to current structural and geometric standards. The proposed project would not create other permanent new sources of air quality emissions. Upon completion, operational air emissions would remain similar to existing conditions. The proposed project would have no long-term impact related to criteria air pollutant emissions. Air quality impacts during operation of the proposed project would be less than significant and no mitigation measures would be required.

c) Expose sensitive receptors to substantial pollutant concentrations?

Sensitive receptor locations located near the proposed project include a hospital, schools, a convalescent facility, and residential neighborhoods. Camp Pendleton Hospital, North Terrace Elementary School, Oceanside High School, Mission Elementary School, and residential neighborhoods are all located within one mile of the proposed project. During construction, air emissions would not exceed the SDAPCD thresholds (refer to Table 4.3-5). Thus, construction activities would not result in significant emission increases for at risk individuals. In addition, construction emissions are temporary in nature and would cease upon construction completion. Project Conditions, listed above, would be implemented during construction.

Sensitive receptors would not experience a permanent increase in air pollutant emissions as a result of the proposed project because project implementation would not result in a capacity increase for vehicles, an increase in average daily traffic (ADT), increase in vehicle miles travelled (VMT), or induce changes in the surrounding land uses. Therefore, operation of the proposed project would not result in new sources of emissions of criteria pollutants over time and would be similar to existing conditions. Operation of the proposed project would not expose sensitive receptors to substantial pollutant concentrations.

Overall, short-term (construction) and long term (operation) air quality emissions would not expose sensitive receptors to substantial pollutant concentrations. Impacts would be less than significant, and no mitigation measures are required.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

While offensive odors rarely cause any physical harm, they can be unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and air districts. Proposed project-related odor emissions would be predominately limited to the construction phases when emissions from equipment or construction materials may be evident in the immediate project area. Odors would be generated from vehicles and/or equipment exhaust emissions during construction, unburned hydrocarbons from tailpipes and paving/hot asphalt materials. Such odors are

temporary, and for the types of construction activities anticipated during the project construction phases, would generally occur at magnitudes that would not affect substantial numbers of people. Sensitive receptors near the project site including residences to the north and northeast, may be exposed to temporary odors associated with proposed project construction activities (RECON 2022). Odor emissions during the proposed project are not expected to result in nuisance odors. These odors dissipate upon ceasing the construction activity, such as at the end of each workday when construction equipment is shutdown.

The proposed project would not change the operations on surrounding roads, thus, odors and other emissions during project operation would be similar to existing conditions. Overall, implementation of the proposed project would not result in other emissions (such as odors) that would adversely affect a substantial number of people or sensitive receptors. Impacts would be less than significant, and no mitigation measures are required.

4.3.3 References

California Air Resources Board (CARB). 2022. Maps of State and Federal Area Designations. Online: https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations. Date Accessed: March 17, 2023.

City of Oceanside. 2002. General Plan. Online: https://www.ci.oceanside.ca.us/government/development-services/planning/general-plan. Date Accessed: October 16, 2023.

City of Oceanside. 2019. Energy Climate Action Element. Online: https://www.ci.oceanside.ca.us/home/showpublisheddocument/3858/637952805757770000. Date Accessed: October 20, 2023.

RECON Environmental, Inc. (RECON). 2022. Air Quality Analysis for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Oceanside, California. Date Accessed: March 17, 2023.

San Diego County Air Pollution Control District (SDAPCD). 2023. Attainment Status. Online: https://www.sdapcd.org/content/sdapcd/planning/attainment-status.html. Date Accessed: October 20, 2023.

4.4 Biological Resources

Would the project:

Issues	Determination
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, U.S. Fish and Wildlife Service, or NOAA Fisheries?	Less Than Significant with Mitigation Incorporated
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?	Less Than Significant with Mitigation Incorporated
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?	Less Than Significant with Mitigation Incorporated
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Less Than Significant Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	Less Than Significant with Mitigation Incorporated

Information in this section is summarized from the *Natural Environment Study* (NES; RECON Environmental Inc. [RECON] 2023a), the *NES Addendum* (RECON 2024), and the *Aquatic Resources Delineation* (an appendix to the NES) (RECON 2022).

4.4.1 Record Searches and Field Surveys

An evaluation of biological resources, consisting of background research and field investigation, was conducted to determine whether any special-status species or sensitive habitat occurs within the proposed project area.

4.4.1.1 Record Searches

Prior to conducting field surveys, maps, imagery, databases, and references reviewed included U.S. Geological Survey (USGS) topographic maps, soils maps, aerial photographs, California Natural Diversity Database (CNDDB), U.S. Fish and Wildlife (USFWS) All Species Occurrences Database, County of San Diego SanBIOS, the San Diego Natural History Museum's plant distribution mapping and voucher specimen lists

(2015), the California Native Plant Society (CNPS) database, the USFWS project-specific list of threatened and endangered species, and the National Marine Fisheries Service (NMFS) species list. Existing biological technical reports for the project area were also reviewed (RECON 2023 and 2024).

4.4.1.2 Field Surveys

An initial general biological survey was conducted in 2015, by RECON biologists, to map vegetation communities and land cover types, document observed plant and wildlife species, and conduct focused habitat assessments for species with potential to occur on site. Vegetation mapping was updated in October 2016 during field surveys for the jurisdictional wetland/waters delineation and in March 2017 to reflect the current proposed project area. Vegetation mapping was again updated in 2021 to refine mapping within the most up-to-date proposed project area. Focused surveys for special-status species were conducted between 2015 and 2021 (RECON 2023), as described below in Sections 4.4.2.2 and 4.4.2.3.

4.4.2 Setting

San Luis Rey River is the primary topographic feature within the biological study area (BSA). The topography is generally flat, with lowest elevations along the water's surface and the highest elevations within the developed areas of the northern portion of the BSA. Elevation within the BSA ranges from approximately zero to 70 feet above mean sea level.

4.4.2.1 Vegetation Communities and Land Cover Types

Nine vegetation communities or land cover types are present within the BSA, as shown in Figure 4.4-1 and summarized in Table 4.4-1 (RECON 2024).

Table 4.4-1: Summary of Vegetation Communities and Impacts within BSA

VEGETATION COMMUNITIES	ACRES
Wetland Vegetation Communities	
Freshwater Marsh	0.10
Disturbed Southern Riparian Scrub	1.17
Non-Native Riparian	4.17
Open Water	1.12
Subtotal Wetland	*6.56*
Upland Vegetation Communities	
Diegan Coastal Sage Scrub	1.11
Disturbed Diegan Coastal Sage Scrub	0.21
Eucalyptus Woodland	0.74
Disturbed Habitat	3.43
Urban (Developed)	9.00
Subtotal Upland	*14.49*
TOTAL*	**21.05***

VEGETATION COMMUNITIES	ACRES
*Total may differ due to rounding. **In the worst-case scenario, the replacement bridge will result in 110 square feet of permanent impacts to open water from installation of supports. However, removal of the existing bridge will entail removal of one bridge support (with an approximate footprint of 145 square feet) from the open water, resulting in a net decrease in the permanent footprint of the bridge within the open water of the river channel.	

Source: RECON 2024

Freshwater Marsh

Fresh water marsh within the BSA occurs as large patches within riparian scrub or woodland, or as narrow fringes along the river's edge. Common species include California bulrush (*Schoenoplectus californicus*), southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*), and southern cattail (*Typha domingensis*). Some plant species that are more typical of brackish or salt marsh are also present in scattered patches, including fleshy jaumea (*Jaumea carnosa*) and salt grass (*Distichlis spicata*).

Disturbed Southern Riparian Scrub

Disturbed southern riparian scrub occurs in relatively small patches in the western portion of the BSA, on the north and south banks of the San Luis Rey River. In the eastern portion of the BSA, this community is more expansive with connectivity to native marsh and stands of riparian woodland. This vegetation community contains a dense canopy ranging in height from approximately 15 to 20 feet and is dominated by narrow-leaf willow (*Salix exigua*) and arroyo willow (*Salix lasiolepis*). However, it is considered disturbed due to the presence of scattered invasive plant species such as saltcedar (*Tamarix ramosissima*) and giant reed (*Arundo donax*). This on-site community has an open to dense understory dominated by species such as mule fat (*Baccharis salicifolia*), southern cattail, California bulrush, western poison oak (*Toxicodendron diversilobum*), and coyote brush (*Baccharis pilularis*).

Non-native Riparian

This vegetation community occurs along the north bank of the San Luis Rey River, west of the Coast Highway Bridge, and contains a dense canopy ranging in height from approximately 15 to 30 feet and is dominated by plant species such as Brazilian pepper tree (*Schinus terebinthifolius*), saltcedar, giant reed, and Canary Island date palm (*Phoenix canariensis*). This community also contains scattered narrow-leaf willow, arroyo willow, and blue elderberry (*Sambucus nigra* ssp. *caerulea*), and an open to dense understory dominated by plant species such as mule fat, southern cattail, California bulrush, western poison oak, castor bean (*Ricinus communis*), garden nasturtium (*Tropaeolum majus*), and coyote brush.

Open Water

Open water occurs within the main channel of the San Luis Rey River, which bisects the BSA. Open water habitat provides water and a migration corridor for a variety of amphibians, reptiles, and fish. The San Luis Rey River flows in a westerly direction from headwaters originating in the Cleveland National Forest and empties into the Pacific

Ocean. Flow in the San Luis Rey River most commonly occurs between November and March of each rain year and is typically blocked by a sandbar during the dry season. At the time focused surveys were conducted in 2021, the river was closed off to the Pacific Ocean; however, there was still some tidal influence and water quality measurements collected in May 2021 indicated a highly saline system, but at about 50 percent of the levels for open ocean (RECON 2023 and 2024).

Within the central BSA, the San Luis Rey River is channelized. On either side of the river are narrow floodplain terraces, with some portions of the upper banks west of the Coast Highway Bridge lined with concrete riprap. Although the terraces may flood during peak river flow or high tides, the hydrology is primarily within the banks of the river and groundwater driven. The lack of predominately salt-tolerant vegetation also supports fresh groundwater hydrology.

Diegan Coastal Sage Scrub

The Diegan coastal sage scrub within the BSA has an open or broken canopy with low to moderately dense shrub cover, ranges in shrub height from approximately 1 to 4 feet and is dominated by the following plant species: California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), black sage (*Salvia mellifera*), coyote brush, deerweed (*Acmispon glaber*), and goldenbush (*Isocoma menziesii*). This vegetation community occurs on either side of the existing bike path west of the Coast Highway Bridge and on the slope between the river and State Route 76 (SR-76) east of the bridge. Irrigation pipes are present in the patch of habitat west of the bridge and north of the bike path, indicating this area was subject to restoration activity at some point. Historic aerials indicate the pipes were initially laid in 2008, and thus this is likely no longer an active restoration area.

One small area within the Diegan coastal sage scrub supports more of an upland-riparian transitional species composition. This area contains some of the same species as found in the undisturbed Diegan coastal sage scrub but also contains a mix of tall, dense vegetation associated with the adjacent riparian scrub habitat, such as mule fat and black elderberry (*Sambucus nigra*). This area occurs south of the river, south of the bike path, and west of the Coast Highway Bridge.

Disturbed Diegan Coastal Sage Scrub

The disturbed Diegan coastal sage scrub within the BSA contains a similar species composition and structure to that found in the undisturbed Diegan coastal sage scrub, but it has been subject to various types of disturbance resulting in a prevalence of invasive or ornamental species, such as black mustard (*Brassica nigra*), sweet fennel (*Foeniculum vulgare*), castor bean, pampas grass (*Cortaderia selloana*), and fountain grass (*Pennisetum setaceum*). This vegetation community occurs along a steep slope east of the Coast Highway Bridge in the northeastern portion of the BSA and in a couple of small patches in the southwestern portion of the BSA.

Eucalyptus Woodland

Eucalyptus woodland within the BSA occurs within larger areas of ornamental plantings and disturbance, mostly within the eastern portion of the BSA, between the bridge and SR-76. The trees within the eucalyptus woodland are red gum (*Eucalyptus camaldulensis*) with most individuals over 50 feet tall. The understory is a mix of bare ground, ornamental ground cover species such as Canary Island ivy (*Hedera canariensis*), and ruderal plant species.

Disturbed Habitat

Disturbed habitat is mostly mapped beneath the Coast Highway and Interstate 5 (I-5) bridges, where signs of vegetation maintenance is evident. Other areas of disturbed habitat occur adjacent to development. The disturbed habitat comprises a mix of bare ground and native and non-native grass and forb such as slender wild oat (*Avena barbata*), ripgut grass (*Bromus diandrus*), goldentop (*Lamarckia aurea*), crimson fountain grass (*Cenchrus setaceus*), iceplants (*Mesembryanthemum* spp.), fennel, tocalote (*Centaurea melitensis*), garland daisy (*Glebionis coronaria*), and black mustard. A few native species, such as laurel sumac (*Malosma laurina*), California sagebrush, and San Diego marsh-elder (*Iva hayesiana*), are also found scattered within the disturbed habitat, as this community often occurs in areas situated between the native vegetation along the river and the surrounding development.

Urban (Developed)

Urban/developed land includes commercial and residential development, roads and bridges, and paved bicycle/pedestrian paths (such as the Class I multipurpose San Luis Rey River Trail [SLRRT]). Large areas of ornamental plantings also occur within the developed areas in the southern portion of the BSA; these areas largely comprise low-lying ground covers such as Canary Island ivy and freeway iceplant (*Carpobrotus edulis*).

4.4.2.2 Special-Status Plant Species

Based on the results of the focused plant surveys conducted in 2015, 2017, and 2021, the NES identified seven special-status plant species that were observed within the BSA – San Diego ambrosia (*Ambrosia pumila*), sticky dudleya (*Dudleya viscida*), variegated dudleya (*Dudleya variegate*), Nuttall's acmispon (*Acmispon prostratus*), San Diego marsh-elder (*Iva hayesiana*), Lewis' evening-primrose (*Camissoniopsis lewisii*), and southwestern spiny rush. The remaining 38 special-status plant species were determined not likely to occur within the BSA due to a lack of suitable habitat and/or lack of detections during the 2015, 2017, and 2021 rare plant surveys (RECON 2023).

San Diego Ambrosia

San Diego ambrosia is a federally listed endangered, a California Rare Plant Ranks (CRPR) 1B.1 species (seriously threatened in California and elsewhere), and a North County Multiple Species Habitat Conservation Plan (MSHCP)-covered species. It is a rhizomatous herb in the Asteraceae family that typically blooms from April to October.

This species typically is found in disturbed areas along historic floodplains with sandy loam or clay soils, and sometimes in alkaline areas. This species is also reported from chaparral, coastal sage scrub, grassland, and around vernal pools. This species can be found at elevations ranging from 65 to 1,360 feet. San Diego ambrosia is known from Riverside and San Diego counties as well as Baja California, Mexico. This species is threatened by non-native plant species, road maintenance, foot traffic, vehicle impacts, and development (RECON 2023). An approximate total of 675 individual San Diego ambrosia plants were observed just outside the BSA in a scattered patch in the Diegan coastal sage scrub along the southern bank of the San Luis Rey River during rare plant surveys conducted in 2015; however, individuals of this species were not identified in the BSA during surveys conducted in 2015, 2017, or 2021 (RECON 2023).

Sticky Dudleya

Sticky dudleya is a CRPR 1B.2 species (moderately threatened in California and elsewhere) and an MSHCP-covered species. It is a perennial herb in the Crassulaceae family that typically blooms from May to June. This species is found in rocky areas in coastal bluff scrub, chaparral, coastal sage scrub, and cismontane woodland. Sticky dudleya is known from Orange and San Diego counties as well as from Baja California, Mexico at elevations ranging from 35 to 1,805 feet. This species is threatened by development and road construction (RECON 2023). Eight individual sticky dudleya were observed just outside the BSA in a scattered patch in the Diegan coastal sage scrub along the southern bank of the San Luis Rey River in 2015. This area was resurveyed in 2017 and 2021, and 24 individuals were detected.

Variegated Dudleya

Variegated dudleya is a CRPR 1B.2 species (moderately threatened in California and elsewhere). It is a perennial herb in the Crassulaceae family that typically blooms from May to June. It occurs in coastal sage scrub, grassland, and chaparral habitats below 500 feet. It usually grows in stony places lacking shrub cover, on isolated rocky substrate in grasslands, and on mima mounds near vernal pools. It often occurs on gravelly loam soils (RECON 2023). Variegated dudleya is known from San Diego County to Baja California, Mexico. Urban growth, development, and road construction threatens the continued existence of variegated dudleya in San Diego County (RECON 2023). Two individual variegated dudleya were observed in 2017, in the disturbed Diegan coastal sage scrub along the trail that runs along the northern bank of the San Luis Rey River east of I-5. These individuals were only identified during the 2017 rare plant survey within a larger patch of sticky dudleya. These individuals were not observed during the 2021 survey, although it is assumed that they are still present within the survey area.

Nuttall's Acmispon

Nuttall's acmispon is a CRPR 1B.1 species (seriously threatened in California and elsewhere), and an MSHCP-covered species. It is a prostrate annual or biennial herb in the Fabaceae family that blooms from March to June. Nuttall's acmispon is distributed

coastally in San Diego County and Baja California below 100 feet elevation. Coastal dunes and sandy coastal scrub are the preferred habitat for this species. Nuttall's acmispon is threatened by development, non-native plants, land management activities, and recreational use of beaches (RECON 2023). A total of two individual Nuttall's acmipson were observed adjacent to the BSA in in the Diegan coastal sage scrub immediately adjacent to the paved bike path that runs along the southern bank of the San Luis Rey River. Three individuals were detected during surveys conducted in 2021, both within and adjacent to the BSA in the same general vicinity. All individuals appear to be naturally occurring.

San Diego Marsh-Elder

San Diego marsh-elder is a CRPR 2B.2 species (moderately threatened in California but more common elsewhere). It is a perennial herb in the Asteraceae family that typically blooms from April to October. This species is found along ephemeral drainages, alkali marshes, and playas. San Diego marsh-elder is known from San Diego County and from Baja California, Mexico at elevations between 0 to 1,640 feet. This species is threatened by waterway channelization, coastal development, nonnative plant species, and vehicle activity. Thirty-two individual San Diego marsh-elder were observed in three locations within and adjacent to the BSA in 2015, at the edge of disturbed habitat and developed land, in the northern portion along Carmelo Drive. The other two locations were along the southern bank of the San Luis Rey River. These areas were resurveyed in 2017 and 2021, and 14 individuals were detected (RECON 2023).

Lewis' Evening-Primrose

Lewis' evening-primrose is a CRPR 3 species (more information is needed before accurately ranking this species). It is an annual herb in the Onagraceae family that blooms from March to May. This species typically is found in sandy or clay soils associated with coastal dunes as well as in coastal sage scrub, grassland, and foothill woodland habitats with suitable soils. Lewis' evening-primrose is known from southern California in Los Angeles, Orange, Riverside, San Diego, San Luis Obispo, and Ventura counties and into Baja California, Mexico. It is found at elevations between 0 and 985 feet (RECON 2023). A total of 164 individual Lewis' evening-primrose were observed in 2015, 2017, and 2021, within the BSA, in scattered patches in the Diegan coastal sage scrub immediately adjacent to the paved bike path that runs along the southern bank of the San Luis Rey River.

Southwestern Spiny Rush

Southwestern spiny rush is a CRPR 4.2 species (limited distribution and moderately threatened in California). It is a rhizomatous herb in the Juncaceae family that blooms from May to June. This species typically is found along ephemeral drainages, alkaline marshes and seeps, mesic areas of coastal dunes, and coastal salt marsh. Southwestern spiny rush is known from southern California in Imperial, Los Angeles, Orange, Santa Barbara, San Diego, San Luis Obispo, and Ventura counties; from

Nevada, Arizona, and Georgia; and from Baja California, Mexico; as well as into South America. It is found at elevations between 10 and 2,955 feet. This species is threatened by urbanization and flood control activities (RECON 2023). A total of 123 individual southwestern spiny rush were observed within the BSA, but outside the project impact area, scattered within the non-native riparian community along the northern bank of the San Luis Rey River with many of these individuals remapped during surveys conducted in 2017 and 2021.

4.4.2.3 Special-Status Wildlife Species

The NES identified eight special-status wildlife species that were detected in the BSA during the focused surveys conducted in 2015, 2017, and 2021 - light-footed Ridgway's rail (*Rallus obsoletus levipes*), yellow warbler (*Setophaga petechia*), western least bittern (*Ixobrychus exilis*), olive-sided flycatcher (*Contopus cooperi*), Clark's marsh wren (*Cistothorus palustris clarkae*), yellow-breasted chat (*Icteria virens*), least Bell's vireo (*Vireo bellii pusillus*), and coastal California gnatcatcher (*Polioptila californica californica*). An additional nine species or groups of species were identified with the potential to occur, based on the presence of suitable habitat, or with mapped critical habitat in the BSA (RECON 2023). These species include tidewater goby (*Eucyclogobius newberryi*); southern California steelhead (*Oncorhynchus mykiss*); groundfish, pelagic fish, and other Pacific coast salmon species; special-status reptiles; southwestern willow flycatcher (*Empidonax traillii extimus*); migratory birds and raptors; western mastiff bat (*Eumops perotis*); and Pacific pocket mouse (*Perognathus longimembris pacificus*).

Light-Footed Ridgway's Rail

Light-footed Ridgway's rail is federally and state listed as endangered, a California Department of Fish and Wildlife (CDFW) fully-protected species, and a MSHCP-covered species. Suitable habitat for this species includes coastal salt marsh traversed by tidal sloughs, typically characterized by cordgrass (*Spartinia foliosa*) and pickleweed (*Salicornia* spp.). Light-foot Ridgway's rail have been known to nest in freshwater marsh characterized by cattails (*Typha* sp.), bulrush (*Scirpus* sp.), and/or spiny rush (*Juncus acutus*) in San Diego County. This species is historically present in the area and one pair of light-footed Ridgway's rail was detected during the 2015 survey on the north bank of the San Luis Rey River in the western portion of the BSA in 2015. However, the 2017 and 2021 surveys did not detect any rails. The larger stands of freshwater marsh within the BSA provide suitable nesting habitat for this species. Light-footed Ridgway's rail has high potential to occur within the BSA.

Yellow Warbler

Yellow warbler is listed as a California species of special concern by CDFW. This species is an obligate riparian species, with breeding restricted to riparian woodlands. A localized resident in the summer and rate winter visitor, it becomes a migrant resident during spring and fall. This species was detected multiple times during the 2015, 2017, and 2021 avian species surveys within the riparian habitat of the BSA. It is assumed the

species is nesting within the BSA. All disturbed southern riparian scrub and non-native riparian habitat within the BSA is considered suitable nesting habitat for this species.

Western Least Bittern

Western least bittern is listed as a California species of special concern by CDFW. Typical habitat for the Western least bittern includes brackish lagoons in the coastal lowlands, and in lakes, ponds, and streams inland. This species was observed once during the 2015 avian surveys, but not in the following 2017 or 2021 surveys. The freshwater marsh within the BSA likely provides suitable nesting habitat, and the freshwater marsh, non-native riparian, and disturbed southern riparian scrub area are considered suitable foraging habitat.

Olive-Sided Flycatcher

Olive-sided flycatcher is listed as a California species of special concern by CDFW. Within San Diego County, the flycatcher's habitat is characterized by extensive coniferous woodlands in the San Diego Mountains where it inhabits and breeds. The species was observed once during the avian surveys conducted in 2015 utilizing a small patch of disturbed southern riparian scrub. This species was not observed in 2017 or 2021. The BSA contains potential foraging habitat during migration but low potential nesting habitat as the species prefers conifer stands in the mountains.

Clark's Marsh Wren

Clark's marsh wren is listed as a California species of special concern by CDFW. Marsh wrens utilize freshwater and brackish marshes found along lakes, ponds, and rivers, and are known to nest along the San Luis Rey and Santa Margarita rivers. Multiple of the species was observed during the 2015 and 2017 avian survey in large patches of freshwater marsh and in the edges of disturbed riparian scrub in the BSA. The species was not detected during the 2021 survey. Suitable nesting habitat within the BSA includes all freshwater marsh. Suitable foraging habitat within the BSA includes all freshwater marsh, disturbed southern riparian scrub, and non-native riparian.

Yellow-Breasted Chat

Yellow-breasted chat is listed as a California species of special concern by CDFW and is a MSHCP-covered species. This species' habitat is characterized by dense riparian woodland. In San Diego County, the yellow-breast chat is a localized summer resident. This species was detected within the BSA upstream of the Coast Highway Bridge during focused avian surveys conducted in 2017. Vegetation communities within the BSA provide nesting habitat for this species.

Least Bell's Vireo

Least Bell's vireo is a federal and state listed endangered species and is a MSHCP-covered species. This species habitat is characterized by willow-dominated woodland or scrub that typically exists along streams and rivers and is dependent upon riparian habitat during the breeding season. While no least Bell's vireo were detected within the

BSA during the 2015 or 2021 presence/absence surveys, a number of vireo were detected on the north bank of the San Luis Rey River east of I-5 in 2017. The BSA contains designated final critical habitat (FCH) for the least Bell's vireo, mapped within the western extent of the BSA. The disturbed southern riparian scrub and non-native riparian vegetation communities within the BSA may provide nesting habitat for this species.

Coastal California Gnatcatcher

The coastal California gnatcatcher is a federally listed threatened species, a California species of concern by CDFW and a MSHCP-covered species. Coastal California gnatcatcher habitat is characterized by coastal slopes and foothills, typically inhabiting coastal sage scrub dominated by California sagebrush. Although no coastal California gnatcatchers were detected during the 2015, 2017, and 2021 avian focused surveys; however, they were incidentally detected through vocalization during rare plant surveys in 2021(RECON 2023). The Diegan coastal sage scrub within the BSA provides moderate to high quality potential habitat for the coastal California gnatcatcher to nest. Disturbed Diegan coastal sage scrub provides low quality habitat and adjacent stands of disturbed southern riparian scrub may provide suitable foraging habitat. FCH is mapped within the western extent of the BSA.

Southwestern Willow Flycatcher

The southwestern willow flycatcher is a federally and state listed endangered species and a MSHCP-covered species. The southwestern willow flycatcher is a migrant species and is a rare summer breeding resident in southern California. This species has extremely localized breeding that typically occurs in patchy to dense, well-developed riparian woodlands that occur along streams, rivers, lakes, or other wetlands. Nesting habitat is typically restricted to willow thickets, and the species also occupies other woodlands. FCH for the southwestern willow flycatcher is mapped along the portion of the San Luis Rey River that occurs within the BSA. Although the BSA contains FCH and potential habitat, the species is not expected within the BSA due to low quality nesting habitat, lack of detection during protocol presence/absence surveys conducted during the 2015, 2017, and 2021 breeding seasons, lack of historical records of detection, and its recent population decline in the region (RECON 2023).

Tidewater Goby

The tidewater goby is a federally listed endangered species and a California species of special concern by CDFW. Its habitat is characterized by shallow, brackish basins, usually in areas of reduced tidal influence. The San Luis Rey River was designated as critical habitat for the species in 2013 and Final Critical Habitat (FCH) for the tidewater goby is mapped within the BSA. Historically, tidewater goby have been known to occur in the San Luis Rey River; however, between 2000 and 2021, results of tidewater goby surveys have mostly been negative, with only a 2010 survey yielding a positive detection (RECON 2023). Due to the good to moderate quality habitat present within the BSA, there is moderate potential for the tidewater goby to occur.

Southern California Steelhead

The southern California steelhead Distinct Population Segment is a federally listed endangered species. Its habitat is characterized by freshwater streams and rivers. The San Luis Rey River watershed is designated as high priority for recovery of the species by the Southern California Steelhead Recovery Plan as a part of a larger population recovery strategy; however, most recent detections of the species in the San Luis Rey River occurred in 2007. Surveys conducted in 2015, 2017, and 2021 concluded the BSA lacked suitable spawning and rearing habitats for southern steelhead (RECON 2023). The BSA would likely only serve as a movement corridor during sustained periods of high flow. Intermittent connection between the ocean and river limits the viability of the river as suitable habitat.

Groundfish, Pelagic Fish, and Other Pacific Coast Salmon Species

The portion of the San Luis Rey River that falls within the BSA is located within essential fish habitat (EFH) for the following three Fishery Management Plans: Pacific Coast Groundfish, Coastal Pelagic Species, and Pacific Coast Salmon. Due to long periods of disconnection from the ocean and the lack of marine influence, surveys conducted in 2017 and 2021 yielded no detections of the species managed under the EFH designations (RECON 2023). In the event of sustained high flow where marine influence is reestablished, the San Luis Rey River presents a low potential for EFH species to be present. These species would likely include coastal pelagic species, such as northern anchovy (*Engraulis mordax*) and Pacific sardine (*Sardinops sagax*). There is a minimal expectation that groundfish species or salmon species would likely be present even if the lagoon were open to tidal influences.

Special-Status Reptiles

Four special-status reptile species have moderate to high potential to occur within the BSA: Coronado skink (*Eumeces skiltonianus interparietalis*), two-striped garter snake (*Thamnophis hammondii*), south coast garter snake (*T. sirtalis* ssp. *Novum*), and red-diamond rattlesnake (*Crotalus ruber*). None of the special-status reptile species were detected during any of the surveys conducted in 2015, 2017, and 2021.

Coronado skink is a California species of special concern by CDFW. Typical habitat includes grasslands, open woodlands, forests, and broken chaparral habitats and is often associated with rocky habitats near streams. There are no historical occurrence records of Coronado skink within two miles of the proposed impact area; however, suitable habitats are present within and adjacent to the BSA for this species. The open to dense scrub habitat and wooded areas adjacent to water provide suitable habitat for Coronado skink.

Two-striped garter snake is a California species of special concern by CDFW. The species typically inhabits permanent freshwater streams, ponds, and lakes with rocky bottoms and mesic areas. There are historical records for the occurrence of this species along the San Luis Rey River in the vicinity of the BSA. There is moderate potential for the species to be present in the BSA due to suitable permanent water and freshwater marsh and riparian scrub habitats to provide opportunity for refuge and foraging.

South coast garter snake is a California species of special concern by CDFW. The species range in southern California is restricted to marsh and upland habitats near permanent sources of water that have good strips of riparian vegetation and may avoid restored marshlands. Several historical records of species occurrence were reported in CNDDB along the San Luis Rey River in 2006 and 2009, approximately three miles upstream of the BSA. The is moderate potential for the species to be present in the BSA due to suitable habitat and historical records within the vicinity.

Red-diamond rattlesnake is a California species of special concern by CDFW. The species typically inhabits desert scrub and riparian, coastal sage scrub, open chaparral, grassland, and agricultural fields. There are historical records for the occurrence of this species less than one mile from the BSA. The is moderate potential for this species to be present in the BSA due to suitable coastal sage scrub habitat.

Migratory Birds and Raptors

The BSA provides potential nesting habitat for migratory birds and raptors. Swallows, such as the barn swallow (*Hirundo rustica*) and cliff swallow (*Petrochelidon pyrrhonota*), and black phoebes (*Sayornis nigricans*) commonly nest on the undersides of bridges that cross over, or are in close proximity to, aquatic habitats such as rivers, streams, and lakes. Common raptors, such as red-shouldered hawk (*Buteo lineatus*) and red-tailed hawk (*Buteo jamaicensis*), and birds, such as tree swallows (*Tachycineta bicolor*) and sparrows (*Passer* spp.), commonly nest in large trees or large clumps of vegetation that overhang or are in close proximity (within 0.25 miles), to aquatic habitats such as rivers, streams, and lakes, as well as in close proximity to grasslands fields. All the habitat types within the BSA provide potential nesting and foraging habitat for birds listed by the Migratory Bird Treaty Act (MBTA). A variety of common and special-status resident and migratory bird species have been observed within the BSA. Several special-status raptor species were detected during surveys in 2017 and 2021, including Cooper's hawk (*Accipiter cooperi*) and osprey (*Pandion* spp.) (RECON 2023).

Western Mastiff Bat

Western mastiff bat is a California species of special concern by CDFW. The species is non-migratory, occurring in rugged, rocky areas where there are suitable rock crevices or buildings with sufficient shelter for day roosts. Bat reconnaissance surveys conducted in 2016 and 2021 did not detect bats or guano and determined the Coast Highway Bridge does not have hollow structures or open joints or crevices typical of other bridges bats are able to use (RECON 2023). Additionally, while it was determined there are a few small, shallow holes in the bridge along with a few cliff swallow nests that could potentially provide roosting opportunities for a small number of bats, no areas appear to be able to support an entire bat colony. There are historical records of this species foraging along the Santa Margarita River, approximately two miles north of the BSA. The species has low potential to roost and moderate potential to forage within the BSA.

Pacific Pocket Mouse

Pacific pocket mouse is a federally endangered, a California species of special concern by CDFW, and a MSHCP-cover species. The most common habitat type is open coastal sage scrub, but it has also been found in coastal stands, coastal dunes, and river alluvium, inhabiting vegetation dominated by California buckwheat and California sagebrush. Multiple Pacific pocket mouse occurrence records from the 1930s exist, and one of the closest records of this species consists of a historic observation in the vicinity of the Santa Margarita River mouth. The BSA was found to support potentially suitable habitat and soils for the Pacific pocket mouse; however, this habitat is considered marginally suitable and is restricted to the south side of the San Luis Rey River and west of the Coast Highway Bridge. Due to the level of past and ongoing disturbance and isolation from other stands of suitable habitat and recorded populations, there is a low potential for Pacific pocket mouse to occur in the BSA.

4.4.2.4 Aquatic Resources

The BSA contains aquatic resources that fall under the US Army Corps of Engineers (USACE), CDFW, Regional Water Quality Control Board (RWQCB), and California Coastal Commission (CCC). These include wetland waters of the U.S., non-wetland waters of the U.S., state streambed, and adjacent wetlands/riparian habitat. Table 4.4-2 summarizes potentially jurisdictional waters within the BSA by jurisdiction.

Table 4.4-2: Summary of Aquatic Resources in the BSA by Jurisdiction

JURISDICTIONAL WATERS	REVIEW AREA (ACRES)
USACE Jurisdiction	
Non-wetland Waters of the US	4.55
Wetland	8.32
USACE Total	**12.87**
CDFW/RWQCB Jurisdiction*	
Non-wetland Waters of the U.S. (Streambed)	4.55
State Wetlands (Riparian Habitat)	8.32
CDFW/RWQCB Total	**12.87**
CCC Jurisdiction**	
Wetlands	14.32
CCC Total	**14.32**
*CDFW and RWQCB area of jurisdiction overlaps all USACE jurisdictional waters. CDFW jurisdiction includes additional riparian habitat.	

SOURCE: RECON 2022.

4.4.2.5 Movement Corridors

Wildlife movement corridors link areas of suitable wildlife habitat that may otherwise be separated by rugged terrain, changes in vegetation, and/or areas of human disturbance or urban development. Topography and other natural factors, in combination with urbanization, can fragment or separate large open-space areas. The fragmentation of natural habitat creates isolated “islands” of habitat that may not provide sufficient area

to accommodate sustainable populations and can adversely impact genetic and species diversity. Movement corridors mitigate the effects of this fragmentation by allowing animals to move between remaining habitats, which in turn allows depleted populations to be replenished and promotes genetic exchange between separate populations.

Although the lower San Luis Rey River in the vicinity of the BSA serves as a movement corridor for terrestrial and avian wildlife species, the portion of the river that occurs within and adjacent to the BSA is immediately surrounded by urban development. The floodplain and adjacent slopes support a variety of native riparian and upland habitats that provide cover and movement opportunities for many terrestrial species. The San Luis Rey River provides additional movement opportunities for avian species that can cross barriers such as roadways, multiple undeveloped canyons, and may serve as a stepping-stone to reach neighboring habitats to the BSA.

For fish and other aquatic species, the portion of the San Luis Rey River that occurs within the BSA provides only intermittent connectivity between the river, canyon systems, and ocean due to the frequent, consistent blockages by a sandbar near the mouth of the river. Based on aerial imagery from 2012 to 2021, the sandbar appears to only be breached during very short periods of high flows or tides (RECON 2023).

4.4.3 Discussion

Potential impacts from the proposed project are discussed below in response to each of the checklist questions, along with mitigation measures, as necessary. Additionally, the Project Conditions listed below will be implemented as part of the proposed project.

PROJECT CONDITIONS

1. Prior to initiation of construction activities, temporary high visibility fencing (such as orange construction fencing or equivalent) shall be installed along the limits of disturbance adjacent to sensitive biological resource areas as depicted on the engineering plans. All construction (including access/staging areas) shall be restricted to approved work areas previously identified or developed areas. Equipment staging, storage, and maintenance shall be located outside the active river thalweg. Temporary fencing shall be removed at the completion of construction.
2. All equipment shall be washed prior to arriving at the project site and shall be free of sediment, debris, and foreign matter.
3. A qualified biologist shall monitor construction activities as needed to oversee avoidance of biologically sensitive areas, with full-time monitoring during initial vegetation removal, grubbing, and grading. Monitoring biologists shall be familiar with the special-status species known or with potential to occur on site. If a special-status species is encountered, work shall stop and the biological monitor shall determine next steps required, such as implement avoidance measures, contact Caltrans, the City, CDFW, USFWS, or NMFS, as appropriate.
4. The biological monitor shall provide environmental training for all construction personnel working on-site to review the purpose for resource protection, the biological resources occurring on-site, environmentally responsible practices and

project-specific protection measures and/or permit requirements, and communication protocol.

5. Conduct a focused rare plant survey in the spring prior to the start of construction to confirm extent of on-site populations of special-status plant species.
6. Prior to initiation of construction activities, a qualified biologist shall flag or fence special-status plant species that occur within the temporary impact to avoid the species.
7. The season prior to conducting work within the water of the San Luis Rey River, a team of qualified biologists, including at least one USFWS 10(a)(1)(A) permitted tidewater goby biologist, shall conduct fish surveys according to the USFWS Tidewater Goby Survey Protocol prior to initiation of work within the river. This shall include two sampling periods between July 1 and October 31, at least 30 days apart. Additionally, the protocol states:
    a. If gobies are not found within the two survey periods, and the project shall not be completed within 60 days of the last survey, a pre-project clearance survey may be required for any part of the BSA that may affect the tidewater goby. The need for this survey shall be evaluated on a case-by-case basis between the applicant and our field office [USFWS] that has jurisdiction over the area of interest.
    b. If tidewater goby is determined to be present within the San Luis Rey River, pile driving and construction of the bridge piles should take place behind a system of cofferdams and bubble curtains. Cofferdams shall be installed along the banks of the river for work around the piers and supports on land while bubble curtains shall be used for work on the piers and supports within the river. A 40-foot-wide channel shall be maintained within the middle of the existing river channel. Waters within the cofferdam shall be seined/pumped through fish screens by a qualified biologist during dewatering to remove and return any native fish to the river.
8. Focused surveys for steelhead shall be conducted concurrently with tidewater goby surveys the season prior to start of construction. In addition, up to 7 days prior to conducting work within the water of the San Luis Rey River, a team of qualified biologists, shall conduct focused fish surveys according to the accepted protocols. If southern steelhead is determined to be present within the San Luis Rey River, in-water pile driving should take place between July 1 and September 30 to the greatest extent possible to avoid or minimize work within the principal migration period of southern steelhead.
9. Temporary construction fencing shall be configured so that at least one unobstructed land passage remains open on each side of the river to facilitate wildlife movement.
10. Construction during the avian nesting season (January 1 through September 30, which represents a combined nesting season to cover potential early nesting activity of raptor species and the late nesting season of light-footed Ridgway's rail) shall be limited to daylight hours to avoid any lighting impacts to nesting birds. Outside the nesting season, construction lighting shall be the lowest illumination necessary to

allow for safe completion of work and directed away or shielded from the adjacent habitat within the river corridor.

11. All waste shall be removed from the BSA. All food-related trash shall be enclosed in sealed wildlife-proof containers and removed from the site daily. All construction related debris, excess materials, and building materials shall be removed from the project site for disposal at an authorized landfill or other disposal site in compliance with federal, state, and local laws and regulations.
12. No pets of construction personnel shall be allowed on the construction site.
13. All clearing/grubbing of vegetation, for both construction and implementation of the Conceptual Mitigation Plan (RECON 2023), shall take place between October 1 and December 31, outside the combined avian nesting season. Construction may occur during the bird breeding season.
14. A qualified biologist shall be on-site during: a) initial vegetation clearing/grubbing; b) daily during project construction within the river corridor; and c) weekly during project construction outside of the river corridor but within 500 feet of rail and vireo habitat, to monitor compliance with all measures. The qualified biologist shall either hold a valid USFWS Section 10(a) permit and CDFW MOU for specific species and/or be approved as qualified by the regulatory agencies.
15. The qualified biologist shall perform the following duties: Outside the bird breeding season, perform a minimum of three focused pre-construction surveys, on separate days, to determine the presence of the species in the project impact footprint.
    a. Surveys shall begin a maximum of 7 days prior to performing vegetation clearing/grubbing, and one survey will be conducted the day immediately prior to the initiation of vegetation clearing. If any individuals are found in the project impact footprint, the biological monitor shall direct construction personnel to begin vegetation clearing/grubbing in an area away from the birds.
    b. During project construction within the river corridor, before each workday begins, check to see if the species has entered the active work area. If any individuals are found within the active work area, direct construction personnel to begin work in an area away from the species.
    c. It shall be the responsibility of the biological monitor to implement measures (e.g., direct vegetation clearing away from individuals, flush birds out of the active work area, temporarily close or constrain the rail movement pathway as necessary) to avoid death and injury of the species from vegetation clearing/grubbing and construction work. The biological monitor shall also record the number and location of individuals disturbed by vegetation clearing/grubbing and project construction. The contractor shall notify the City and USFWS at least 7 days prior to initiation of surveys and within 24 hours of locating any of the species within the project footprint.
16. During the bird breeding season, perform a minimum of three focused pre-construction surveys, on separate days, in and adjacent to suitable habitat for the

species to determine the presence of the species in or within 500 feet of the project impact footprint.

a. Surveys shall begin a maximum of 7 days prior to performing construction within 500 feet of suitable habitat during the breeding season, and one survey shall be conducted the day immediately prior to the initiation of construction within 500 feet of suitable habitat during the breeding season.
b. Additional surveys shall be done once a week during project construction within 500 feet of suitable habitat during the breeding season. These additional surveys may be suspended as approved by the USFWS.

17. Noise monitoring shall occur during the breeding season and be reported daily to the regulatory agencies. If the qualified biological monitor suspects that noise reducing practices are ineffective, and project activities may be adversely affecting more birds than anticipated, culpable activities shall be suspended within 500 feet of active nests until nesting activity is completed and fledglings are no longer in the area or until effective avoidance and minimization measures can be identified, implemented, and demonstrated to be effective. If measures cannot be identified, implemented, and demonstrated to be effective to avoid adverse effects to the species, then project construction shall stop until consultation has been completed with the regulatory agencies to address unanticipated impacts to the species.
18. The summer prior to initiation of construction activities, pre-construction bat surveys shall be conducted to determine the presence or absence of roosting bats on or within the Coast Highway and I-5 bridges. These surveys shall be conducted by a biologist qualified to identify the species of bats present and shall consist of three nights of surveys within a two-week period between late July and early August.
    a. If surveys determine that no bats are roosting on the Coast Highway or I-5 bridges, no further measures are required.
    b. If bats are found utilizing the Coast Highway or I-5 bridges, the biologist shall determine if the bridges are being used for day roosts or maternal roosts. Appropriate measures shall be implemented, as determined by a qualified biologist based on the species involved, site conditions, and type of work to be conducted, including but not limited to monitoring by a qualified biologist during construction to check for bats leaving the colony during the day and/or implementation of exclusion measures (for day roosts only). If it is determined that construction activity may cause the abandonment of destruction of a maternal roost, construction activity shall be halted or amended (e.g., timing, location, and/or noise restrictions) until the biologist determines that bat pups have left the roost and are able to fend for themselves.

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, U.S. Fish and Wildlife Service, or NOAA Fisheries?

The following analyzes potential impacts to special-status species. Impacts specific to sensitive natural communities are discussed in detail under question b, while impacts to wetlands are discussed in detail under question c.

SPECIAL-STATUS PLANT SPECIES

As described above, there is the potential for seven special-status plant species to be present in the BSA. Construction activities involving disturbance of the vegetation communities within the BSA have the potential to affect six special-status plant species which include San Diego ambrosia, sticky dudleya, San Diego marsh-elder, Lewis' evening primrose, variegated dudleya, and Nuttall's acmispon. Southwestern spiny rush was not located in the impact area and is not expected to be impacted during construction.

The proposed project would implement Project Conditions, which include standard practices such as pre-construction surveys, fencing of sensitive areas, and biological monitoring during construction. The proposed project would obtain and comply with the National Pollutant Discharge Elimination System (NPDES) General Construction permit and associated Stormwater Pollution Prevention Plan (SWPPP). The proposed project would also be required to obtain and comply with the necessary permits from the USACE, CDFW, CCC, and San Diego RWQCB. However, there is the potential for the proposed project to impact the six special-status plan species within the construction area. Implementation of Mitigation Measure BIO-1 would reduce these impacts to less than significant levels.

SPECIAL-STATUS WILDLIFE SPECIES

There is the potential for several special-status wildlife species to be present in the BSA. The proposed project would implement Project Conditions listed above, as well as Project Conditions in Section 4.10, Hydrology and Water Quality, which include standard practices such as pre-construction surveys, fencing of sensitive areas, biological monitoring during construction, erosion protection for aquatic species, and providing for wildlife passage through the construction area. In addition, the proposed project would obtain and comply with the NPDES General Construction permit, and the necessary permits from the USACE, CDFW, CCC, and San Diego RWQCB. Impacts would be less than significant, and no mitigation measures are required. Specific wildlife species impacts are discussed below.

TIDEWATER GOBY, DESIGNATED CRITICAL HABITAT, SOUTHERN STEELHEAD, AND EFH

The likelihood of direct impacts to these species during pile driving and construction of the temporary falsework and trestle piles within the open water of the river is low. This is because individual juvenile and adult fish are mobile and would be able to avoid project activity within the water column. Tidewater goby burrows that support eggs may occur

within the immediate work area. The permanent footprint of the piles (110 square feet total) is not anticipated to result in a substantial loss of EFH, suitable breeding habitat or designated critical habitat for tidewater goby or spawning habitat for southern steelhead.

In general, potential effects of pile driving noise range from behavioral changes (e.g., startle response, avoidance of noise sources) to physical injury (e.g., auditory and non-auditory tissue damage, hearing loss) to mortality. As shown in the bioacoustics technical memorandum prepared for this project (Dewberry 2022), the projected peak pressure levels and accumulated sound exposure level (SEL) may exceed the NMFS cumulative SEL of 183 decibels (dB) (for fish less than 2 grams), for up to 681 feet from each pile within the water. Pile driving activities are temporary and sporadic and would be completed within a window of approximately 10 days.

Indirect temporary impacts may also occur as a result of construction activity if hazardous materials, sediment, or other construction-related runoff enters the river. Release of pollutants or sedimentation may reduce water quality, which could have an adverse effect on fish, designated critical habitat, and EFH within and downstream of the project impact area. Erosion and sediment control standard construction practices are provided as part of the project conditions.

The proposed project would result in no net loss of open water or streambed, and impacted vegetation will be restored on site. Adherence to permitting requirements and building/grading standards would include incorporation of appropriate, site-specific best management practices (BMPs). This in combination with the implementation of project conditions would result in no permanent loss of habitat is anticipated. Impacts would be less than significant, and no mitigation measures are required.

CORONADO SKINK, TWO-STRIPED GARTER SNAKE, SOUTH COAST GARTER SNAKE, AND RED DIAMOND RATTLESNAKE

Mortality or injury of Coronado skink, two-striped garter snake, south coast garter snake, and red diamond rattlesnake in upland habitats could occur by crushing by construction equipment or if displaced from cover, exposing them to predators and desiccation. Trenches left open during the night could trap reptiles moving through the construction area. Moreover, construction activities could temporarily impede the movement of juvenile and adult life stages of special-status reptiles dispersing between breeding areas and summer refugia sites. The proposed project would adhere to the project conditions listed above as well as to permitting requirements and building/grading standards. Impacts would be less than significant, and no mitigation measures are required.

LIGHT-FOOTED RIDGWAY'S RAIL, LEAST BELL'S VIREO, SOUTHWESTERN WILLOW FLYCATCHER, COASTAL CALIFORNIA

GNATCATCHER, DESIGNATED CRITICAL HABITAT, AND OTHER MIGRATORY BIRDS AND RAPTORS

If construction begins during the breeding season (February 1 through August 31), and birds are nesting in or immediately adjacent to the BSA, then disturbance associated with the use of heavy equipment in the BSA could adversely affect nesting birds. Indirect impacts to nesting birds during construction could extend up to 250 feet from the limits of construction. Potential impacts could include abandonment of nest sites and the mortality of young. The proposed project would adhere to the project conditions listed above as well as to permitting requirements and building/grading standards. Impacts on light-footed Ridgway's rail, least Bell's vireo, southwestern willow flycatcher, coastal California gnatcatcher, designated critical habitat and other migratory birds and raptors would be less than significant. No mitigation measures are required.

WESTERN MASTIFF BAT

Although the existing Coast Highway Bridge does not provide obvious potential for roosting bat colonies, removal of the bridge may result in direct impacts to small numbers of roosting bats. In addition, because the I-5 bridges have potential to support bat colonies and are located immediately adjacent to the existing Coast Highway Bridge, demolition and construction activities at the Coast Highway Bridge could potentially disrupt roosting and result in mortality to individual bats. Disruption of roosting would cause bats to relocate to another suitable roost site potentially exposing them to increased stress and chance of predation. The proposed project would adhere to the project conditions listed above as well as to permitting requirements and building/grading standards. Impacts would be less than significant, and no mitigation measures are required.

MITIGATION MEASURES

BIO-1. Prior to the start of construction, any special-status plant species identified during the pre-construction surveys that cannot be avoided shall be salvaged for transplant or included in the seed or plant palette for revegetation, depending on species. Seed shall be collected from individuals within the project impact areas the year prior to start of construction. The species to be salvaged/transplanted include sticky dudleya, variegated dudleya, and San Diego ambrosia. Species to be included in the seed or plant palette include San Diego marsh-elder Nuttall's acmispon, and Lewis' evening-primrose.

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?

While not considered a sensitive natural community, riparian habitat is regulated by CDFW under Section 1602 of the California Fish and Game Code (CFGC) for the purpose of protecting fish and wildlife resources. Within the BSA, non-native riparian habitat and disturbed southern riparian scrub would be permanently and temporarily

impacted as a result of bridge construction, construction access and staging areas (Table 4.4-3)

Table 4.4-3. Summary of Impacts to Riparian Vegetation Communities

VEGETATION COMMUNITIES	ACRES	TEMPORARY IMPACTS (ACRES)	PERMANENT IMPACTS (ACRES)
Disturbed Southern Riparian Scrub	1.17	0.94	0.19
Non-Native Riparian	4.17	1.10	0.19
Total	**5.34**	**2.04**	**0.38**

SOURCE: RECON 2024.

The proposed project would implement Project Conditions listed above, as well as Project Conditions in Section 4.10, Hydrology and Water Quality, which include standard practices such as pre-construction surveys, fencing of sensitive areas, biological monitoring during construction, and erosion protection. In addition, the proposed project would obtain and comply with the NPDES General Construction permit and the necessary permits from the USACE, CDFW, CCC, and San Diego RWQCB. The proposed project would also implement Mitigation Measure BIO-2. As all riparian vegetation within the project impact area comprises disturbed or non-native-dominated riparian habitat, the proposed mitigation is anticipated to result in a net gain of high quality native riparian habitat. Impacts in this regard would be less than significant with Mitigation Measure BIO-2 incorporated.

MITIGATION MEASURES

As detailed in the Conceptual Mitigation Plan (RECON 2023), mitigation for impacts to disturbed southern riparian scrub have been combined with mitigation for impacts to non-native riparian.

BIO-2. After project permits are obtained and final design is complete, the City will purchase 0.30 acre of off-site mitigation credit from a mitigation bank within the San Luis Rey River watershed, such as the Brook Forest Conservation/Mitigation Bank (current pricing is $550,000 per acre), Wildlands San Luis Rey Mitigation Bank, and/or Wildlands Buena Creek Conservation Bank, to achieve no net loss of the resources. Upon construction completion, rehabilitation of southern riparian scrub within the Habitat Enhancement Area will be completed as required by the Conceptual Mitigation Plan and will occur at a 1:1 revegetation ratio for temporary impacts and a 3:1 revegetation and restoration ratio for permanent impacts, as outlined in the Conceptual Mitigation Plan.

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?

Potentially jurisdictional features within the BSA include wetlands (freshwater marsh, disturbed southern riparian scrub, and non-native riparian habitat) and other waters of

the U.S. (San Luis Rey River). The proposed project would result in direct temporary and permanent impacts to USACE wetlands and non-wetland waters of the U.S, state wetlands (CDFW/RWQCB riparian vegetation communities and streambed), and CCC wetlands (Table 4.4-4). The proposed project has been designed to keep permanent impacts to the minimum necessary to fulfill the proposed project purpose and need.

Table 4.4-4: Summary of Impacts to Aquatic Resources

JURISDICTIONAL WATERS	PERMANENT IMPACTS (ACRES)	TEMPORARY IMPACTS (ACRES)
USACE Jurisdiction		
Non-wetland Waters of the U.S.	– *	0.93
Wetland	0.35	1.86
USACE Total Impacts	**0.35**	**2.79**
CDFW/RWQCB Jurisdiction†		
Streambed	–*	0.93
State Wetlands (Riparian Habitat)	0.37	1.86
CDFW/RWQCB Total Impacts	**0.37**	**2.79**
CCC Jurisdiction		
Wetlands ‡	0.37*	2.79
CCC Total Impacts	**0.37**	**2.79**

*Total may differ due to rounding.
*In the worst-case scenario, the replacement bridge will result in 110 square feet of permanent impacts to open water from installation of supports. However, removal of the existing bridge will entail removal of one bridge support (with an approximate footprint of 145 square feet) from the open water, resulting in a net decrease in the permanent footprint of the bridge within the open water of the river channel.
† CDFW/RWQCB area of jurisdiction overlaps all USACE jurisdictional waters.
‡ CCC Wetlands overlap all CDFW/RWQCB area of jurisdiction.

SOURCE: RECON 2024.

The proposed project would implement Project Conditions listed above, as well as Project Conditions in Section 4.10, Hydrology and Water Quality, which include standard practices such as pre-construction surveys, fencing of sensitive areas, biological monitoring during construction, and erosion protection. In addition, the proposed project would obtain and comply with the NPDES General Construction permit and the necessary permits from the USACE, CDFW, CCC, and San Diego RWQCB. In addition, through the project-specific habitat re-establishment, creation, enhancement, and restoration, the proposed project would result in no net loss of native habitat. Implementation of Mitigation Measure BIO-3 would minimize impacts to aquatic resources. Impacts would be less than significant with Mitigation Measure BIO-3 incorporated.

MITIGATION MEASURES

BIO-3. The City will purchase 0.02 acre of off-site mitigation wetland credit from a mitigation bank within the San Luis Rey River watershed, such as the Brook Forest Conservation/Mitigation Bank (current pricing is $550,000 per acre), Wildlands San Luis

Rey Mitigation Bank, and/or Wildlands Buena Creek Conservation Bank, to achieve no net loss of the resources. Rehabilitation of freshwater marsh within the Habitat Enhancement Area will occur after construction completion at a 1:1 revegetation ratio for temporary impacts and a 3:1 revegetation and restoration ratio for permanent impacts, per the Conceptual Mitigation Plan (RECON 2023).

d) Would the proposed project 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?

As discussed above, the lower San Luis Rey River in the vicinity of the BSA and adjacent floodplains and slopes within the BSA serve as a movement corridor for terrestrial and avian wildlife species. Relatively unimpeded waterways such as San Luis Rey River provide important movement and cover corridors, which allow dispersal and subsequent gene flow between wildlife populations separated by roads and populated areas. The proposed project would not remove, degrade, or otherwise interfere substantially with the structure or function of these wildlife movement corridors, though some direct and indirect temporary impacts may occur to wildlife movement as a result of vegetation removal, construction activity, and habitat restoration/enhancement. However, all temporary impact areas will be revegetated following the completion of construction, restoring the area to functional pre-construction conditions. The proposed project would implement Project Conditions listed above, as well as Project Conditions in Section 4.10, Hydrology and Water Quality, which include standard practices such as pre-construction surveys, fencing of sensitive areas, biological monitoring during construction, and erosion protection. In addition, the proposed project would obtain and comply with the NPDES General Construction permit and the necessary permits from the USACE, CDFW, CCC, and San Diego RWQCB. In addition, upon construction completion, the proposed project would revegetate and restore the disturbed areas per the Conceptual Mitigation Plan (RECON 2023) as approved by the City, Caltrans, and regulatory agencies. Impacts would be less than significant, and no mitigation measures would be required.

e) Would the proposed project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The City of Oceanside General Plan (City General Plan) Environmental Resource Management Element (City of Oceanside 2002) serves as a guide for conservation of natural resources and open space under the City and its sphere of influence. The proposed project would be consistent with federal, state, and City plans, policies, and regulations, including, but not limited to, the City General Plan, the City Street Tree Removal Policy, the MSHCP, CEQA, and NEPA. The proposed project would also obtain and comply with the NPDES General Construction permit and the necessary permits from the USACE, CDFW, CCC, and San Diego RWQCB. Therefore, the

proposed project would not conflict with local policies or ordinances. No impact would occur, and no mitigation measures are required.

f) Would the proposed project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The proposed project is a covered activity under the MSHCP which includes goals and policies for the protection of multiple special-status species and sensitive natural communities. All special-status species and sensitive natural communities protected under the MSHCP are discussed above, under questions a through c, and are evaluated in detail in the NES prepared for the proposed project (RECON 2023 and 2024). The proposed project has been designed to avoid or minimize potential impacts to both MSHCP-covered species, as well as federal and state protected species. Project timing, pre-construction surveys, and implementation of buffers around any potential habitat, nests or roost sites would avoid potential impacts to these species as outlined in the Project Conditions above and in Section 4.10, Hydrology and Water Quality. The proposed project would obtain and comply with the NPDES General Construction permit and permits from USACE, CDFW, CCC, and San Diego RWQCB. In addition, upon construction completion, the proposed project would implement the Conceptual Mitigation Plan (RECON 2023) as approved by the City, Caltrans, and regulatory agencies. In addition, Mitigation Measure BIO-1 through BIO-3 would further reduce impacts to special-status species and sensitive natural communities covered by the MHSCP. Therefore, impacts would be less than significant with mitigation measures incorporated.

MITIGATION MEASURES

Implement Mitigation Measures BIO-1, BIO-2, and BIO-3.

4.4.4 References

Dewberry Engineers Inc. (Dewberry). 2022. Hydroacoustics Technical Memorandum. Provided as Appendix I of the Natural Environment Study (NES prepared by RECON.

RECON Environmental, Inc. (RECON). 2022. Aquatic Resource Delineation Report for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Oceanside, California.

RECON. 2023. Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Oceanside, California Natural Environment Study (NES).

RECON. 2024. Addendum to Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Oceanside, California Natural Environment Study (NES).

4.5 Cultural Resources

Would the project:

Issues	Determination
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	Less Than Significant Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Less Than Significant Impact
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	Less Than Significant Impact

Information in this section is summarized from the *Historic Property Survey Report* (HPSR) (RECON Environmental Inc. [RECON] 2023), *Supplemental HPSR* (RECON 2023), and the *Archaeological Survey Report* (ASR) for the Proposed Coast Highway (Hill Street) Bridge Replacement Project (RECON 2023). Some information from these studies is considered confidential under the California Public Resources Code (PRC) and the Code of Federal Regulations (CFR) in compliance to the Freedom of Information Act and the California Public Records Act in order to protect the integrity of tribal cultural resources, and thus, would not be available to the public (7 PRC 21082.3 and 36 CFR 800.11).

4.5.1 Record Searches and Field Surveys

4.5.1.1 Record Searches

Prior to the field surveys, an archaeological record search was requested in 2016 from the South Coastal Information Center (SCIC), of the California Historical Resources Information System (CHRIS) with a one-mile radius search buffer of the Area of Potential Effects (APE). The search was completed on July 24, 2016, by SCIC personnel.

The Native American Heritage Commission (NAHC) was contacted in June 2016 and August 2022 requesting the identification of spiritually significant and/or sacred sites or traditional use areas. The 2016 response from the NAHC indicated negative results for the quadrangle where the APE is located. The 2022 NAHC search result, on the other hand, was positive.

4.5.1.2 Field Surveys

The on-foot surveys of the survey area, including the original APE, were conducted on August 2, 2016, November 1, 2016, November 11, 2021, and September 16, 2022. The revised APE was established in October 2023 to include a revised boundary due to minor design changes determined since the original HPSR.

The August 2, 2016 survey used transects separated by 15-meter intervals and concentrated on the open and undeveloped areas of the APE south of the intersection of Monterey Drive and Coast Highway, along both banks of the San Luis Rey River, east of Interstate 5 (I-5), and south of the San Luis River. The November 1, 2016 survey

accommodated an expanded survey area of the APE and focused on a southwest/northeast trending dirt maintenance road on the north side of the San Luis Rey River, east of I-5. The third survey on November 11, 2021 of the APE, included a visual inspection of the habitat enhancement area. A pedestrian survey of the habitat enhancement area was not feasible because of the flooded conditions at the time of the field visit. The final survey on September 16, 2022 was a site condition assessment visit to the two previously recorded resources (CA-SDI-14058 and CA-SDI-15870).

During the first two surveys, the field team navigated the survey area by means of a sub-meter global positioning system (GPS) unit, a handheld Trimble GEO 7 series with Floodlight satellite shadow reduction technology. During the 2021 site visit, the field crew used an Apple iPad running ESRI's ArcGIS Collector application.

4.5.2 Setting

A cultural resource is a broad term that includes prehistoric, historic, and traditional cultural properties that reflect the physical evidence of past human activity across the landscape. Cultural resources, along with prehistoric and historic human remains and associated grave goods, must be considered under federal, state, and local regulations, including National Environmental Policy Act (NEPA), National Historic Preservation Act of 1966 (NHPA), and California Environmental Quality Act (CEQA). Cultural resources that are listed on, or eligible for inclusion in, the National Register of Historic Places (NRHP) are also considered eligible for listing in the California Register of Historic Resources (CRHR).

4.5.2.1 Ethnography

The Luiseño (a group of the Southern California Shoshonean or Uto-Aztecan-speaking population) were ethnographically found within the boundaries of present-day northern San Diego, southern Orange, and southeastern Riverside counties.

The Luiseño are linguistically and culturally related to the Gabrieliño and Cahuilla and appear to be the direct descendants of Late Prehistoric populations. Historically, the Luiseño social structure was the clan triblet. The triblet was composed of patrilineally related people who were politically and economically autonomous from neighboring triblets. Unlike other Takic-speaking tribes that surrounded them, the Luiseño do not appear to have been organized into exogamous moieties (descent groups that married outside one's birth group) but may have been loosely divided into mountain-oriented groups and ocean-oriented groups (RECON 2023). One or more clans would reside together in a village (RECON 2023). A heredity village chief held a position that controlled economic, religious, and warfare powers (RECON 2023).

A wide variety of plants growing in the various biotic communities between the coast and mountains were utilized by the Luiseño, including acorns, annual grasses, seeds, yucca, chia, lemonade berry, manzanita, and other wild greens and fruits (RECON 2023). These resources become available at different times of the year, which prompted moves to different campsites. In addition to plant-associated moves, trips to coastal

camps to exploit marine resources such as shellfish, fish, and marine mammals took place. Animal resources used by the Luiseño included most of the mammals occurring in their territory, except for predator animals and tree squirrels. Reptiles were also avoided as a food source (RECON 2023).

4.5.2.2 Prehistory

The prehistoric cultural sequence in northern San Diego County is generally conceived as composed of three basic periods: (1) the Paleoindian Period, dated between about 11,500 and 8,500 years ago and manifested by the artifacts of the San Dieguito Complex; (2) the Archaic Period, lasting from about 8,500 to 1,500 years ago and identified by the cobble and core technology of the La Jollan and Pauma complexes; and (3) the Late Prehistoric Period, lasting from about 1,500 years ago to historic contact (i.e., 500 to 1769) and represented by the San Luis Rey Complex (RECON 2023). This period is associated with the appearance of ceramics, small arrow points, and cremation burial practices in the archaeological record (RECON 2023).

The Paleoindian Period in San Diego County is most closely associated with the San Dieguito Complex (RECON 2023). The San Dieguito assemblage consists of well-made scraper planes, choppers, scraping tools, crescentics, elongated bifacial knives, and leaf-shaped points. The San Dieguito people lived in small, mobile bands and were hunters and gatherers (RECON 2023).

The Archaic Period in coastal San Diego County brings an apparent shift toward a more generalized economy and an increased emphasis on seed resources, small game, and shellfish. The local cultural manifestations of the Archaic Period are called the La Jollan Complex along the coast and the Pauma Complex inland (RECON 2023). The La Jollan assemblage is dominated by rough, cobble-based choppers and scrappers, and slab and basin metates. Elko series projectile points appeared late in the period (RECON 2023). For coastal La Jolla Complex sites, large deposits of marine shell demonstrate the importance of shellfish gathering to the coastal Archaic economy.

The Late Prehistoric Period in northern San Diego and Orange counties is represented by the San Luis Rey Complex. San Luis Rey I sites are associated with bedrock outcrops and often have recognizable midden soils (RECON 2023). Features may include cremations and bedrock mortars. The artifact assemblage includes metates, Cottonwood Triangular type projectile points, drills, bifacially flaked knives, bone awls, occasional steatite arrow shaft straighteners, and bone and shell ornaments (RECON 2023). San Luis Rey II consists of the same assemblage with the addition of Tizon Brown Ware ceramics, red and black pictographs, cremation remains in urns, and historic materials such as glass beads and metal objects (RECON 2023). The projectile points commonly found in San Luis Rey assemblages, Cottonwood Triangular and, less frequently, Desert Side-notched forms, are both smaller than earlier types, suggesting the introduction of bow-and-arrow technology into the region (RECON 2023).

4.5.2.3 History

The Spanish Period in California (1769-1821) represents a time of European exploration and settlement. Military and religious contingents established the San Diego Presidio and the San Diego Mission in 1769. In 1798, Mission San Luis Rey de Francia was founded on the San Luis Rey River in the present-day City of Oceanside. The mission system also introduced horses, cattle, sheep, and agricultural goods and implements as well as new construction methods and architectural styles (RECON 2023). Also, with the arrival of the Spanish came devastating epidemics and very high death rates. According to the available mission records, the worst years were in 1806-1808 and again in 1827-1828 when a measles epidemic spread through southern California. An estimated 33.5 percent of the Native American population along the coast died (RECON 2023).

During the Mexican Period (1821-1848), the mission system was secularized by the Mexican government, opening vast tracts of former mission lands for private use and expansion of the rancho system. The southern California economy became increasingly based on cattle ranching. The Mexican Period ended when Mexico signed the Treaty of Guadalupe Hidalgo on February 2, 1848, concluding the Mexican-American War (1846-1848; RECON 2023).

Rancho Santa Margarita y Las Flores, the closest rancho to the project site, is less than one mile to the north of the proposed project APE. Rancho Santa Margarita y Las Flores was originally two grants. Las Flores was under Mission San Luis Rey control but became a free town under Native American control after the missions were secularized. Rancho Santa Margarita was given to the Pico brothers, Pio and Andres, in 1841, and Las Flores was added in 1844, making the rancho a total of 133,440 acres. The rancho passed through several owners through the years. In 1941, the U.S. government purchased the 9,000 acres to establish the Naval Ammunition Depot at Fallbrook, and a year later, in 1942, the U.S. government purchased the remaining rancho acreage in San Diego County for the establishment of Marine Corps Base, Camp Joseph H. Pendleton (RECON 2023).

The great influx of Americans and Europeans, beginning with the Gold Rush in the summer of 1848, eliminated many remaining vestiges of Native American culture. The American homestead system encouraged settlement beyond the coastal plain into areas where Native Americans had retreated to avoid the worst of Spanish and Mexican influences (RECON 2023). Mission San Luis Rey was left mostly abandoned from 1846 until 1892, although in 1865, President Abraham Lincoln executed the title deeds, which returned it to the Catholic Church (RECON 2023). The mission was restored in 1892 to 1893 by two Franciscans from Mexico and rededicated on May 12, 1893 (RECON 2023). Most communities and ranches were not established until the land booms of the 1880s following completion of the Santa Fe and Southern Pacific railroads. A rural community cultural pattern existed in San Diego County from approximately 1870 to 1930 (RECON 2023).

4.5.2.4 Record Search Results

Twelve prehistoric sites, four historic sites, four prehistoric isolates, five historic buildings/structures, and one site consisting of both prehistoric and historic components were identified within one mile of the APE. Of these sites, two prehistoric shell scatters (CA-SDI-14058 and CA-SDI-15870) are recorded within the APE. CA-SDI-14058 was recorded as a shell scatter with fire affected rock in 1994, and CA-SDI-15870 was recorded as a light density shell scatter with no artifacts in 2000.

The bridge itself has been listed as Category 5 in the Caltrans Historic Highway Bridge Inventory, and therefore determined not eligible for listing on the NRHP.

4.5.2.5 Field Survey Results

The APE was inspected for evidence of archaeological materials such as flaked and ground stone tools, ceramics, and milling features. The APE had been disturbed by the construction of the Coast Highway, I-5, a flood control project for the San Luis River, underground utility work, a maintenance road under the bridge and interstate, the San Luis Rey River Trail, State Route 76 (SR-76), Monterey Drive, Capistrano Drive, Capistrano Park, Oceanside Harbor Parking Lot #1, and residential and commercial development. There is a 3.24-acre habitat enhancement area that contains dense vegetation.

During the initial 2016 survey, shellfish fragments were identified within the previously recorded sites, CA-SDI-14058 and CA-SDI-15870. However, during the September 16, 2022 site visit, conditions were similar to those of the initial survey, and it was determined that both sites were not significant and are considered non-sites (RECON 2023).

4.5.3 Discussion

Potential impacts from the proposed project are discussed below in response to each of the CEQA checklist questions. Additionally, the Project Conditions listed below will be implemented as part of the proposed project if previously undocumented buried cultural resources are identified during construction activities.

PROJECT CONDITIONS

1. If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. Depending on the nature of the find, a qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric or historic archaeology, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no work radius as appropriate, using professional judgment.
2. If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately, and no agency notifications are required.

3. If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify the lead agency. If the find is determined to be eligible for inclusion in the NRHP or CRHR, the lead agency shall consult on a finding of eligibility and implement appropriate treatment measures. Work may not resume within the no-work radius until the lead agency, through consultation as appropriate, determines that the site either: 1) is not eligible for the NRHP or CRHR; or 2) that the treatment measures have been completed to its satisfaction.
4. If the find includes human remains, or remains that are potentially human, he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the San Diego County Coroner (in accordance with § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California PRC, and AB 2641 will be implemented.
5. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the Native American Heritage Commission (NAHC), which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate information center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?

As mentioned above, the results from the SCIS and sacred lands file record searches were positive for the proposed project area; none of the historic sites, buildings/structures, or the prehistoric/historic site are located within the APE. These site are located within one mile of the APE; however, the proposed project would not impact these sites. Construction activity would remain witin the APE boundary and the proposed project would replace the existing bridge, thus upon construction completion, the proposed project area would operate similarly to existing conditions. The Coast Highway Bridge is listed as Category 5 on the Caltrans Historic Highway Bridge Inventory; therefore, it is not eligible for listing on the NRHP. Thus, the proposed project would not cause a substantial adverse change in the significant impact on historical resources.

The likelihood of encountering previously undocumented buried historic archaeological deposits in the APE is considered low. Nonetheless, there remains a chance that construction activities associated with the proposed project could result in accidentally discovering archaeological resources. If cultural or tribal cultural resources are discovered during ground-disturbing activities, Project Conditions identified above would be implemented. The proposed project impacts would be less than significant. No mitigation measures are required.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

As mentioned aboe, the results from the SCIS and sacred lands file record searches uidentified 12 prehistoric sites, 4 prehistoric isolates, and 1 site consisting of both prehistoric and historic components were identified within one mile of the APE. Of these sites, two prehistoric shell scatters (CA-SDI-14058 and CA-SDI-15870) are recorded within the APE. CA-SDI-14058 was recorded as a shell scatter with fire affected rock, and CA-SDI-15870 was recorded as a light density shell scatter with no artifacts. Based on the 2022 survey and review of historic aerial photographs, these resources are considered non-sites. The mapped location, a knoll top, for CA-SDI-14058 has no topsoil, suggesting that no site material remains. The mapped location of CA-SDI-15870 was underwater until 1963, after which the existing southern bank of the San Luis Rey River was manufactured to divert the flow of the river. The presence of embedded construction debris along with shellfish fragments implies that imported soils were used to build the southern bank, indicating that CA-SDI-15870 is a non-site. Therefore, the proposed project would not cause a substantial adverse change in the significance of an archaeological resource.

The likelihood of encountering previously undocumented buried archaeological deposits in the project site is considered low because the majority of the project site is adjacent to the San Luis Rey River and prehistoric sites are not often found on the creek banks due to the possibility of flooding. Nonetheless, there remains a chance that construction activities associated with the proposed project could result in accidentally discovering archaeological resources. If cultural or tribal cultural resources are discovered during ground-disturbing activities, Project Conditions identified above would be implemented. The proposed project impacts would be less than significant, and no mitigation measures are required.

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

No formal cemeteries or human remains were identified during the field investigation and no burial sites are likely to be encountered during construction activities. Therefore, no impact would occur in this regard and no mitigation measures are required.

In the event of an unanticipated discovery of human remains, implementation of Project Conditions identified above would be implemented. The proposed project impacts would be less than significant, and no mitigation measures are required.

4.5.4 References

RECON Environmental, Inc. (RECON). 2023. Archeological Survey Report (ASR). May 2023.

RECON. 2023. Historic Property Survey Report (HPSR). May 2023.

RECON. 2023. Supplemental Historic Property Survey Report (HPSR). December 2023.

4.6 Energy

Would the project:

Issues	Determination
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less Than Significant Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact

4.6.1 Setting

In 1975, the California State Legislature adopted Assembly Bill (AB) 1575 in response to the oil crisis of the 1970s. Public Resources Code Section 21100(b)(3) and the California Environmental Quality Act (CEQA) Guidelines Appendices F and G require a description of the wasteful, inefficient, and unnecessary consumption of energy caused by a project. CEQA Guidelines Appendix F provides guidance for assessing potential impacts within Environmental Impact Reports (EIRs) that a project could have on energy supplies. Appendix G provides guidance related to energy resources within the context of the Initial Study (IS). Both aim to focus on conservation of energy by ensuring projects consider the efficiency of energy use.

Energy resources include electricity, natural gas, fossil fuels, and other fuels. The production of electricity requires the consumption or conversion of energy stored in natural resources such as water, wind, oil, gas, coal, solar radiation, certain minerals (for nuclear power), and geothermal energy. Production of energy and energy use both result in pollution and depletion of these renewable and nonrenewable resources. The use of energy from transportation facilities in the vicinity of the proposed project is mainly a result of vehicles travelling on Coast Highway, Interstate 5 (I-5), and State Route 76 (SR-76), San Luis Rey Drive, Monterey Drive, Costa Pacifica Way, and Harbor Drive.

San Diego Gas and Electric (SDG&E) is the primary provider of electric and natural gas services in the City. According to the California Energy Commission (CEC), the total estimated usage for both residential and nonresidential uses for San Diego County was approximately 19,765 million kilowatt hours (kWh) in 2021. Of the 19,765 million kWh consumed, approximately 7,480 million kWh was from residential use and approximately 12,285 kWh was from non-residential use (CEC 2020). The CEC does not provide approximate energy usage data for only the City.

4.6.2 Discussion

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

There would be no roadway closures or detours during construction. The Class I multipurpose San Luis Rey River Trail (SLRRT) would remain open during construction for non-motorized uses. While the paved bicycle and pedestrian sidewalk undercrossing (pedestrian undercrossing) would be closed during construction, a detour around the construction area would be available for pedestrians and bicyclists. Energy in the form of gasoline and diesel fuel would be consumed by construction worker vehicles and large construction equipment. Construction workers would commute to the construction site; however, it is anticipated that construction workers would come from nearby communities. Construction workers' energy use would not increase as compared to existing conditions because the nature of the job is to move from construction site to construction site within the greater Oceanside area. Diesel construction equipment would be used; however, compliance with local, state, and federal regulations (e.g., limit engine idling times, require the recycling of construction debris, etc.) would reduce short-term energy demand during the proposed project's construction to the extent feasible. All standard BMPs to minimize energy waste would be implemented to limit idling times and require equipment to meet current standards and manufacturing recommendations. Construction of the proposed project would not result in wasteful or inefficient use of energy. Therefore, impacts would be less than significant, and no mitigation measures are required.

The proposed project would replace the existing bridge with a new bridge designed to current structural and geometric standards. The proposed bridge would be placed immediately west of the current bridge and would not increase the number of travel lanes. As discussed in detail in Section 4.17, Transportation, the proposed project would not result in an increase of roadway capacity, an increase in Average Daily Traffic (ADT), or an increase Vehicle Miles Traveled (VMT). The proposed project would not introduce new uses of energy and would not induce changes such that the surrounding land uses would be altered beyond what is currently planned in the City General Plan and accounted for in the City of Oceanside General Plan (City General Plan) Energy and Climate Action Element (City of Oceanside 2019a). Upon construction completion, energy use in the proposed project area would be similar to existing conditions. No operation impacts would occur, and no mitigation measures are required.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Standard construction BMPs and existing industry-standard measures would be implemented by the City's contractor to reduce excessive energy consumption during construction. The proposed project would not result in increased roadway capacity, increased ADT, or increased VMT. Operations of the proposed project would not result

in new energy demands over time beyond what is currently planned. The proposed project does not conflict with any local, state, or federal regulations regarding energy use, energy efficiency or construction regulations, including the City General Plan Energy Climate Action Element (City of Oceanside 2019a) and the City's Climate Action Plan (City of Oceanside 2019b). Impacts to energy use to the extent feasible. The proposed project has no impact, and no mitigation measures are required.

4.6.3 References

California Energy Commission (CEC). 2020. Electricity Consumption by County. Online: https://ecdms.energy.ca.gov/elecbycounty.aspx. Accessed: February 27, 2023.

City of Oceanside. 2002. General Plan. Online: https://www.ci.oceanside.ca.us/government/development-services/planning/general-plan. Date Accessed: October 20, 2023.

City of Oceanside. 2019a. Energy Climate Action Element. Online: https://www.ci.oceanside.ca.us/home/showpublisheddocument/3858/637952805757770000. Date Accessed: October 20, 2023.

City of Oceanside. 2019b. Final Oceanside Climate Action Plan. Online: https://www.ci.oceanside.ca.us/home/showpublisheddocument/3850/637952805731930000. Date Accessed: January 28, 2024.

4.7 Geology and Soils

Would the project:

Issues	Determination
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.	Less Than Significant Impact
ii) Strong seismic ground shaking?	Less Than Significant Impact
iii) Seismic-related ground failure, including liquefaction?	Less Than Significant Impact
iv) Landslides?	Less Than Significant Impact
b) Result in substantial soil erosion or the loss of topsoil?	Less Than Significant with Mitigation Incorporated
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?	Less Than Significant Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Less Than Significant Impact
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?	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Less Than Significant with Mitigation Incorporated

4.7.1 Setting

4.7.1.1 Geology

The project site is located within the Peninsular Ranges Geomorphic Province (California Department of Conservation [CDOC] 2002), one of the largest geomorphic units in western North America. It extends approximately 975 miles from the north and northeast adjacent to the Transverse Range geomorphic province to the tip of the Baja

California Peninsula. Specifically, this province is located in southwestern California, extending from the Transverse Ranges (approximately the Los Angeles Basin) in the north to the Gulf of California in the south and from the Pacific Ocean (including islands Santa Catalina, Santa Barbara, San Clemente, and San Nicolas) in the west to the Colorado Desert Province (which includes the Salton Sea) in the east (CDOC 2002). The Geomorphic Province contains three geomorphic regions, the low-lying Coastal Plain, the mountainous Peninsular Range, and the Desert Salton (Imperial) Basin (San Diego County 2011). The proposed project is located in the coastal plain geomorphic region and is within the Coastal Zone. The proposed project crosses the San Luis Rey River, at the western edge of the Peninsular Ranges Geomorphic Province.

The Geologic Map of California identifies the project site within the Qoa and Q geologic units (CDOC 2015). Both geologic units are considered Quaternary deposits of marine and nonmarine (continental) sedimentary rock, mostly of alluvium deposits. They are estimated as Pleistocene (Qoa) and Pleistocene-Holocene (Q) age (CDOC 2015).

4.7.1.2 Soils

The Natural Resource Conservation Service (NCRS) classifies soils in the area of the proposed project as shown below in Table 4.7-1. The Custom Soil Report identified six types of soil within the proposed project area (Figure 4.7-1).

Table 4.7-1: Soil Types within the Proposed Project Area

SOIL MAP SYMBOL AND NAME	DESCRIPTION	SOURCE MATERIAL	DRAINAGE	SLOPES	PERCENT OF PROJECT AREA
HrE2: Huerhuero Loam	Permeability is low to moderate; Runoff is very high	Calcareous alluvium derived from sedimentary rock	Moderately well drained	15-30%	6.9%
Md: Made Land	Made land	Variable			13.7%
MIC: Marina Loamy Coarse Sand	Permeability is moderately high to high; Runoff is medium	Eolian sands derived from mixed sources	Somewhat excessively drained	2-9%	16.3%
TeF: Terrace Escarpments	Landform (escarpments)	Variable			12.9%
Tf: Tidal Flats	Landform (tidal flats)	Variable	Very poorly drained		34.6%
TuB: Tujunga Sand	Permeability is high to very high; Runoff is negligible	Alluvium derived from granite	Somewhat excessively drained	0-5%	15.5%

Source: NCRS 2023; USDA 2019

4.7.1.3 Seismicity

The potential for seismic ground shaking in California is expected. California requires special design considerations for all structural improvements in accordance with the

provisions in the California Building Code. The geologic structure of the entire Southern California area is dominated mainly by Northwest-southeast oriented fault blocks. These faults, the San Andreas Fault which runs through most of California, the Rose Canyon fault which runs parallel to the San Diego County coast and crosses through downtown San Diego, and the Elsinore and San Jacinto faults located in east San Diego County between Oceanside and the San Andreas Fault (California Earthquake Authority [CEA] 2024, City of Oceanside 2002). No active or potentially active fault is known to exist at the project site nor is the site situated within an Alquist-Priolo Earthquake Fault Zone or a Special Studies Zone (CDOC 2024 and 2022). The nearest earthquake hazard fault zone is the Rose Canyon Fault Zone, located within the Pacific Ocean, west of the project site (City of Oceanside 2002; CDOC 2015a). The beginning portion of the Rose Canyon Fault Zone that is located parallel to the San Diego County coastline is located approximately 4 miles to the west of the proposed project. The portion of the Rose Canyon Fault Zone that runs through downtown San Diego is located 25 miles to the south of the proposed project (CEA 2024).

4.7.1.4 Liquefaction

Liquefaction is a state of almost complete failure of saturated sandy soil due to seismic shaking. It is the process in which water is combined with unconsolidated soils, generally from ground motion and pressure, which causes the soils to behave like quicksand. Liquefaction potential is determined from a variety of factors, including soil type, soil density, depth to the groundwater table, and the duration and intensity of ground shaking. Liquefaction is most likely to occur in deposits of water saturated alluvium or areas of considerable artificial fill. The proposed project area is located in the Peninsular Ranges Geomorphic Province, characterized by alluvial Coastal deposits. The depth to the groundwater table in the proposed project area is generally greater than 78 inches (CDOC 2022). The City of Oceanside General Plan (City General Plan) identifies the proposed project area as subject to liquefaction (City of Oceanside 2002); however, the California Department of Conservation (CDOC) California State Geoportal Seismic Hazards Program: Liquefaction Zones, does not identify the project site as within a liquefaction zone (CDOC 2022).

4.7.1.5 Landslide

According to the California Geological Survey (CGS) Information Warehouse, the proposed project is in a marginally susceptible landslide area (CDOC 2015b). The closest reported landslide was in 2016 and occurred approximately 1.5 miles southeast of the project site along Canyon Drive (CDOC 2023).

4.7.1.6 Paleontology

Paleontological resources are the fossilized evidence of organisms preserved in the geologic (rock) record. Fossils are considered nonrenewable resources that are protected by federal, state, and local environmental laws and regulations. Sedimentary rocks, and some volcanic and metamorphic rocks, have potential to yield significant

fossiliferous deposits. The potential paleontological importance of the proposed project area can be assessed by identifying if the rock units are Pleistocene or older (older than 11,000 years) sedimentary deposits within the underlying landform. Based off the rock unit's potential for having significant paleontological resources, the following standard assessments are applied (Society of Vertebrate Paleontology 2010):

- **High Potential:** Rock units in which vertebrate or significant invertebrate, plant, or trace fossils have been previously recovered and Rock units that include sedimentary formations, low-grade metamorphic rocks, and volcaniclastic formations that are temporally (over 11,000 years old) and lithological suitable for fossil preservation.
- **Low Potential:** Rock units that have been previously determined by scientific consensus to have a low probability to yield significant paleontological resources.
- **No Potential**: Certain rock units have no potential to preserve organisms in the fossil record, such as high-grade metamorphic rocks, intrusive igneous rocks, and most volcanic rocks.
- **Undetermined Potential:** Unknown or undetermined sensitivity indicates that the rock unit has not been sufficiently studied or lacks good exposures to warrant a definitive rating.

A search of the University of California Museum of Paleontology (UCMP) collections database identified 14,801 paleontological specimens and 1,781 paleontological localities within San Diego County (UCMP 2023). The UCMP did not identify any evidence of significant paleontological resources in the proposed project vicinity. The proposed project area does not appear significantly sensitive for paleontological resources.

As mentioned above, the project site is underlain with Quaternary units of the Pleistocene (Qoa) and Pleistocene-Holocene (Q) age (CDOC 2015). Holocene alluvium is generally too young to preserve paleontological resources, and therefore has low paleontological sensitivity. However, the potential for finding paleontological resources increases with depth as the sediments may transition into older Pleistocene sediments, and therefore, the paleontological sensitivity increases to moderate or high at depth.

4.7.2 Discussion

Potential impacts from the proposed project are discussed below in response to each of the CEQA checklist questions, along with mitigation measures, as necessary. Additionally, the Project Conditions listed below will be implemented as part of the proposed project.

PROJECT CONDITIONS

1. As part of final design, a geotechnical investigation will be conducted by Earth Mechanics to access the site-specific geology and soils for the bridge supports. Six test boreholes will be drilled west of the existing bridge to attain soils samples. The

soils samples will determine the underlying geology at the project site as well as the geotechnical parameters of the design of the proposed Coast Highway Bridge will require.

2. If paleontological resources are discovered during earth-moving activities, the construction crew shall immediately cease work in the vicinity of the find and shall notify the City public works and planning departments.
    a. The project contractor shall retain a qualified, and City-approved paleontologist to evaluate the resource and identify next steps. These steps include, but are not limited to, preparing a proposed mitigation plan in accordance with current Society of Vertebrate Paleontology guidelines. The proposed mitigation plan may include a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings.
    b. The mitigation plan and its recommendations that are determined to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resources were discovered.

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.

and

ii) Strong seismic ground shaking?

As mentioned above, the proposed project is not located within an Alquist-Priolo Fault-Rupture Hazard Zone and is not located on any known earthquake fault zone; therefore, fault rupture would not occur within the project site. The beginning portion of the Rose Canyon Fault Zone that is located parallel to the San Diego County coastline is located approximately 4 miles to the west of the proposed project. The portion of the Rose Canyon Fault Zone that runs through downtown San Diego is located 25 miles to the south of the proposed project (CEA 2024). Surface rupture due to faulting within the proposed project is not expected to occur.

In addition, the proposed project would be replacing the existing bridge with a new bridge and would not be capacity increasing. Therefore, the proposed project would not introduce additional people to the area beyond what currently existing.

The proposed project would comply with local and state design requirements for active seismic areas, as stipulated in the design standards, including the California Building Code, and the proposed design would meet current applicable City, American

Association of State Highway and Transportation Officials (AASHTO), Federal Highway Administration (FHWA), and the California Department of Transportation (Caltrans) design standards. The proposed project would comply with Project Conditions, listed above, for safe bridge design. Impacts from the proposed project are less than significant, and no mitigation measures are required.

iii) Seismic-related ground failure, including liquefaction?

Low lying areas of the project site, particularly along San Luis Rey River, are most susceptible to liquefaction, although there are no reports of damage due to liquefaction in the proposed project vicinity. However, as discussed in Chapter 2, Project Description, due to the scour and liquefaction potential of the soils at the project site, the foundations for the replacement bridge would be supported by large diameter piles. Cast-In-Drilled-Hole (CIDH) piles are recommended in the Preliminary Foundation Report for the proposed project. These piles could be up to approximately 180 inches in diameter and over 200 feet deep. Prior to construction, a pile installation plan would be prepared by the contractor for approval by the Resident Engineer. The proposed project would comply with applicable permits, project specifications, and Project Conditions listed above. Therefore, the proposed project is anticipated to have a less than significant impact and no mitigation measures are required.

iv) Landslides?

The proposed project would replace an existing bridge to meet current structural and geometric standards; therefore, the potential risk of landslides would be similar to existing conditions, very low. Impacts would be less than significant, and no mitigation measures are required.

b) Result in substantial soil erosion or the loss of topsoil?

Construction activities involving soil disturbance, excavation, cutting/filling, demolition, paving, and grading activities have the potential to result in erosion or loss of topsoil. The proposed project will comply with City, County, FHWA, AASHTO, and Caltrans design criteria and construction standards. The proposed project would also be required to obtain and comply with the necessary permits from the U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), California Coastal Commissions (CCC), and San Diego Regional Water Quality Control Board (RWQCB), and a National Pollutant Discharge Elimination System (NPDES) General Construction permit and associated Stormwater Pollution Prevention Plan (SWPPP). In addition, the proposed project would implement Project Conditions outlined in Sections 4.3, Air Quality, and 4.10, Hydrology and Water Quality, as well as Mitigation Measure BIO-2. Therefore, the potential erosion impacts from construction activities would be less than significant with the implementation of Project Conditions and Mitigation Measure BIO-2.

Upon construction completion, the roadways and pedestrian and bicycle facilities would operate similar to existing conditions. Areas of disturbance would be revegetated as discussed in Section 4.4, Biological Resources, and required in the Project Conditions and Mitigation Measure BIO-2. Therefore, operations would not result in a significant

increase in the potential for soil erosion as compared to existing conditions. Operational impacts would be less than significant, and no mitigation measures are required.

MITIGATION MEASURES

Implement Mitigation Measure BIO-2.

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?

As discussed in Chapter 2, Project Description, due to the scour and liquefaction potential of the soils at the project site, the foundations for the replacement bridge would be supported by large diameter piles. Cast-In-Drilled-Hole (CIDH) piles are recommended in the Preliminary Foundation Report for the proposed project. These piles could be up to approximately 180 inches in diameter and over 200 feet deep. Prior to construction, a pile installation plan would be prepared by the contractor for approval by the Resident Engineer. The proposed project would comply with applicable permits, project specifications, and Project Conditions listed above. Therefore, the proposed project would not cause unstable soil conditions. Additionally, no habitable structures are included in the proposed project, and the hazard to life from lateral spreading, subsidence, liquefaction, or collapse would be the same as existing conditions in the proposed project area. Impacts would be less than significant, and no mitigation measures are required.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

The extent of shrinking and swelling is influenced by the environment, such as wet or dry weather cycles, and by the amount of clay in the soil. This physical change in the soils can react unfavorably with building foundation, concrete walkways, swimming pools, roadways, and masonry walls. The soils identified in Table 4.7-1, above, are mostly loam, loamy coarse sand, sand, and tidal flats, with low clay content with low plasticity (19.2 percent or lower) resulting in a low shrink-swell potential. The risk to life or property to expansive soil and liquefaction potential would be similar to existing conditions. The proposed project would implement Project Conditions listed above, to identify site-specific shrink-swell potential. The proposed project would replace the existing bridge with a new bridge that would comply with local and state design requirements for active seismic areas, as stipulated in the design standards, including the California Building Code, and the proposed design would meet current applicable City, AASHTO, FHWA, and Caltrans design standards. Therefore, the proposed project would not create a risk of life or property due to being located on expansive soils. Impacts would be less than significant and no mitigation measures are required.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?

No wastewater systems or septic tanks would be affected by the proposed project. The proposed project does not involve the construction of septic tanks, alternative wastewater disposal systems, or connection to sewer systems. There would be no impact as a result of the proposed project and no mitigation measures are required.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

There are no unique geological features or resources within the proposed project area. Therefore, no impact would occur to a unique geological feature.

The proposed project is located in an urban setting and is underlain with Quaternary units of the Pleistocene (Qoa) and Pleistocene-Holocene (Q) age (CDOC 2015). As mentioned above, multiple paleontological resources have been identified in San Diego County; however, these discoveries are not within the proposed project vicinity. As mentioned above, the proposed project is underlain by Quaternary aged alluvial deposits which is geologically immature and unlikely to contain fossilized organisms. The San Diego County General Plan's Conservation and Open Space Element describes fossils as "typically occurring in undisturbed sedimentary rock layers beneath the soil and sometimes may be found in surface outcrops" (San Diego County 2011). The proposed project construction and proposed alignment would not disturb or alter bedrock only for bridge foundations; however, the proposed project area does not appear significantly sensitive for paleontological resources and is in an area that has been previously disturbed by urban development. The proposed project would implement Project Conditions, as outlined above. The proposed project construction would not disturb or alter surface outcrops. Directly or indirectly destroying a unique paleontological resource or site is not expected. Impacts would be less than significant, and no mitigation measures are required.

The likelihood of encountering previously undocumented paleontological resources is considered low. Nonetheless, there remains a chance that construction activities associated with the proposed project could result in accidentally discovering paleontological resources. If paleontological resources are discovered during ground-disturbing activities, the Project Conditions identified above would be implemented. The proposed project impacts would be less than significant, and no mitigation measures are required.

4.7.3 References

California Department of Conservation (CDOC). 2024. California Earthquake Hazards Zone Application – Earthquake Zones of Required Investigation. Online: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Date Accessed: February 1, 2024.

CDOC. 2023. Landslides. Online: https://www.conservation.ca.gov/cgs/landslides. Date Accessed: November 10, 2023.

CDOC. 2022. Liquefaction Zones. Online: https://gis.data.ca.gov/datasets/b70a766a60ad4c0688babdd47497dbad/about?layer=0. Date Accessed: October 25, 2023.

CDOC. 2015a. Fault Activity Map of California. Online: https://maps.conservation.ca.gov/cgs/fam/. Date Accessed: October 25, 2023.

CDOC. 2015b. Department of Conservation California Geological Survey (CGS) Information Warehouse. Online: https://www.arcgis.com/home/item.html?id=998ea7bff3854164a5a227edd2c3d0de. Date Accessed: November 10, 2023.

CDOC. 2015. Geologic Map of California. Online: https://maps.conservation.ca.gov/cgs/gmc/. Date Accessed: October 25, 2023.

CDOC. 2002. California Geomorphic Provinces. Online: https://www.coastal.ca.gov/coastalvoices/resources/California_Geomorphic_Provinces.pdf. Date Accessed: October 25, 2023.

California Division of Mines and Geology. 2007. Geologic Map of the Oceanside Quadrangle, California, 1:100,000. Online: https://www.conservation.ca.gov/cgs/rgm. Date Accessed: October 25, 2023.

California Earthquake Authority (CEA). 2024. California Earthquake Risk Map & Faults by County. Online: https://www.earthquakeauthority.com/california-earthquake-risk/faults-by-county. Date Accessed: January 10, 2024.

City of Oceanside. 2002. City General Plan Public Safety Element. Online: https://www.ci.oceanside.ca.us/government/development-services/planning/general-plan.

International Conference of Building Officials. 1994. Uniform Building Code. Online: https://www.najah.edu/media/cms_page_media/482/UBC_Volume2.pdf. Date Accessed: November 10, 2023.

San Diego County. 2011. General Plan. Online: https://www.sandiegocounty.gov/content/sdc/pds/generalplan.html#Elements. Date Accessed: October 25, 2023.

San Diego County. 2007. Guidelines for Determining Significance Paleontological Resources. Online: https://www.sandiegocounty.gov/dplu/docs/Paleo-Guidelines.pdf. Date Accessed: November 17, 2023.

United States Department of Agriculture (USDA). 2019. Soil Survey of Oceanside, California. Online: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Date Accessed: October 25, 2023.

University of California Museum of Paleontology (UCMP). 2023. UCMP Specimen Search. Online: https://ucmpdb.berkeley.edu/. Date Accessed: October 25, 2023.

4.8 Greenhouse Gas Emissions

Would the project:

Issues	Determination
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less Than Significant Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less Than Significant Impact

This section incorporates the analysis, findings, and recommendations in the *Air Quality Analysis for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project* (RECON Environmental Inc. [RECON] 2022).

4.8.1 Setting

Greenhouse Gases (GHGs) are used to describe atmospheric gases naturally contained within the earth's atmosphere that absorb solar radiation and subsequently emit radiation in the thermal infrared region of the energy spectrum, trapping heat in the Earth's atmosphere. Anthropogenic GHG emissions of particular interest include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases.

CO_2, CH_4, and N_2O trap solar radiation and the earth's own radiation in the atmosphere, preventing it from passing through the earth's atmosphere and into space. GHGs are vital to life on earth; however, increasing GHG concentrations are causing an increase in average global temperatures. In general, CH_4 has 21 times the warming potential of CO_2, and N_2O has 310 times the warming potential of CO_2. Carbon dioxide equivalent (CO_2e) represents CO_2 plus the additional warming potential from CH_4 and N_2O. The common unit of measurement is metric tons of CO_2e ($MTCO_2e$).

As the average temperature of the earth increases, climate patterns may be affected, including changes in precipitation patterns, accumulation of snowpack, and intensity and duration of spring snowmelt, as well as increased intensity of low precipitation and droughts. Human-made GHG emissions occur primarily through the combustion of fuels, mainly associated with transportation, residential energy, and agriculture.

Climate change could impact the natural environment in California by triggering, among other things:

- Rising sea levels along the California coastline;
- Extreme-heat conditions, such as heat waves and very high temperatures, which could last longer and become more frequent;
- Increase in heat-related human deaths, an increase in infectious diseases, and a higher risk of respiratory problems caused by deteriorating air quality;

- Reduced snowpack and stream flow in the Sierra Nevada mountains, affecting winter recreation and water supplies;
- Potential increase in the severity of winter storms, affecting peak stream flows and flooding;
- Changes in growing season conditions that could affect California agriculture, causing variations in crop quality and yield; and
- Changes in distribution of plant and wildlife species due to changes in temperature, competition from colonizing species, changes in hydrologic cycles, changes in sea levels, and other climate-related effects.

California's primary legislation for reducing GHG emissions is the California Global Warming Solutions Act (Assembly Bill [AB] 32), which set a goal for the state to reduce GHG emissions to 40 percent of 1990 emission levels by 2030. The California Air Resources Board (CARB), among other state agencies, has enacted regulations in order to achieve these targets. In December 2022, CARB adopted the third and newest update to the Climate Change Scoping Plan, the 2022 Scoping Plan for Achieving Carbon Neutrality. The 2022 Scoping Plan for Achieving Carbon Neutrality sets a plan for reducing GHG emissions by 85 percent below 1990 levels no later than 2045 pursuant to AB 1279 (CARB 2022).

The proposed project is located in the City of Oceanside and is included in the San Diego Association of Governments (SANDAG) Regional Plan. The SANDAG Regional Plan includes GHG emission targets (SANDAG 2021). The SANDAG recognizes on-road transportation as one of the biggest causes of regional GHG emissions. To combat on-road transportation GHG emissions, the SANDAG includes a Sustainable Communities Strategy (SCS) which focuses on development patterns and transportation networks to reach GHG emission targets (SANDAG 2021).

The proposed project lies at the western edge of the San Diego Air Basin (SDAB) and is under the jurisdiction of the San Diego Air Pollution Control District (SDAPCD). Air quality districts are public health agencies whose mission is to improve the health and quality of life for all residents through effective air quality management strategies. The SDAPCD is the local agency with primary responsibility for compliance with the federal and state standards for GHG emissions. SDAPCD created the Regional Air Quality Strategy (RAQS) to enforce state requirements for air quality. The RAQS also includes Transportation Control Measures (TCM) prepared by SANDAG which regulates mobile source emissions (SDAPCD 2016). The RAQS and the TCM were put in place to help San Diego County be in attainment of CAAQS ozone requirements (RECON 2022). The SDAPCD does not provide specific thresholds for determining the significance of GHG impacts under CEQA, but they do establish Air Quality Analysis trigger levels for new or modified stationary sources (RECON 2022). Thresholds applicable to the proposed project are listed in Table 4.3-4 in Section 4.3, Air Quality. In addition, SDAPCD participates in the Climate Initiative Vision Action Team, SANDAG's Sustainable

Communities Strategy (SCS), and local climate action plans such as the Oceanside Regional Climate Action Plan (CAP) (SPACD 2023).

The City has a Climate Action Plan (CAP), which provides a framework for the City to reduce GHG emissions while simplifying the review process for new development. The City's CAP seeks to align with state efforts to reduce GHG emissions while balancing a variety of community interests. The CAP outlines measures that the City will take to make progress towards meeting California's 2050 GHG reduction goal (City of Oceanside 2019).

The City's CAP relies on a screening threshold based on land use size and a CAP Consistency Checklist to determine whether a project's GHG emissions would be consistent with the estimated GHG emissions in the City's CAP. Previous projects that have been approved by the City, have used a GHG threshold of 900 MT CO_2e annually with construction-related emissions amortized over 30 years. Thus, this proposed project uses the same GHG construction emission threshold, where if GHG emissions during project construction are less than 900 MT CO_2e, further GHG analysis and CAP consistency analysis is not warranted.

4.8.2 Discussion

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

GHG emissions associated with the proposed project would occur over the short term from construction activities, consisting primarily of emissions from equipment exhaust. Construction activities such as site preparation, site grading, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, and motor vehicles transporting the construction workers would produce combustion emissions from various sources. GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically uses fossil-based fuels to operate. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

The *Air Quality Analysis for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project* (RECON 2022) analysis used the Road Construction Emissions Model (RCEM), Version 9.0.0, which was developed by the Sacramento Metropolitan Air Quality Management District (SMAQMD) to model the proposed project construction emissions. It was assumed for the purposes of the analysis that proposed project construction would last 30 months, the total proposed project area would be 16 acres, and the maximum area disturbed/day would be 5 acres. The RCEM projected that a maximum of 13,299.64 pounds per day (lbs/day) of CO_2e would be generated, totaling 2,021.15 $MTCO_2e$ over the entire construction period. When amortized over a 30-year period, the proposed project during construction would generate 67.4 $MTCO_2e$ annually over the duration of the project construction. Therefore, GHG emissions would

not exceed the 900 $MTCO_2e$ annually with construction-related emissions amortized over 30 years threshold.

Project construction is considered short-term in nature, and would not generate substantial air quality pollutant concentrations, including GHG emissions, as discussed under Section 4.3, Air Quality. In addition, the construction GHG emissions associated with the proposed project would not exceed the 900 $MTCO_2e$ annually with construction-related emissions amortized over 30 years threshold. Construction impacts from the proposed project would be less than significant, and no mitigation measures are required.

The proposed project would remove the deteriorated, structurally deficient, fracture critical and seismically vulnerable, existing structure and replace it with a new bridge designed to current structural and geometric standards. The proposed project would not increase vehicle capacity or increase traffic and congestion. The proposed project would not create new demand for energy, alter any surrounding land use, or create any other permanent source of GHG emissions. Upon completion, the proposed project would not change operational GHG emissions compared to existing conditions. Therefore, operational impacts would be less than significant, and no mitigation measures are required.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Construction and operation of the proposed project would not conflict with or obstruct implementation of regional plans including the RAQS, the TCM, and regional transportation plans (RECON 2022). Given the levels of emissions during construction as outlined above in question a and in Section 4.3, Air Quality, and the implementation of Project Conditions as listed in Section 4.3, Air Quality, along with compliance with federal, state, and local regulation policies, the proposed project would be consistent with the Oceanside Regional Climate Action Plan. The proposed project would not conflict with any identified plans adopted for the reduction of GHG emissions. Impacts are less than significant, and no mitigation measures are required.

4.8.3 References

California Air Resources Board. 2022. 2022 Scoping Plan for Achieving Carbon Neutrality. Online: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents. Date Accessed: October 20, 2023.

California Air Resources Board. 2017. California's 2017 Climate Change Scoping Plan. Online: https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/scoping_plan_2017.pdf. Date Accessed: October 20, 2023.

City of Oceanside. 2002. General Plan. Online: https://www.ci.oceanside.ca.us/government/development-services/planning/general-plan. Date Accessed: October 20, 2023.

City of Oceanside. 2019. Energy Climate Action Element. Online: https://www.ci.oceanside.ca.us/home/showpublisheddocument/3858/637952805757770000. Date Accessed: October 20, 2023.

City of Oceanside. 2019. Final Oceanside Climate Action Plan. Online: https://www.ci.oceanside.ca.us/home/showpublisheddocument/3850/637952805731930000. Date Accessed: January 28, 2024.

RECON. 2022. Air Quality Analysis for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Oceanside, California. October 20, 2023.

San Diago Air Pollution Control District (SPACD). 2023. Climate and Pollution. Online: https://www.sdapcd.org/content/sdapcd/planning/climate-and-pollution.html. Date Accessed: January 28, 2024.

San Diego Association of Governments (SANDAG). 2021. Regional Plan Appendix X: 2016 Greenhouse Gas Emissions Inventory and Projections for the San Diego Region. Online: https://www.sandag.org/regional-plan/sustainable-growth-and-development/greenhouse-gas-emission-targets. Date Accessed: October 20, 2023.

4.9 Hazards and Hazardous Materials

Would the project:

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

This section incorporates the analysis, findings, and recommendations in the *Initial Site Assessment (ISA) for the North Coast Highway (Hill Street) Bridge Replacement Project* (Drake Haglan and Associates [DHA] 2017).

4.9.1 Record Searches and Field Surveys

A database report was obtained from Environmental Database Resources, Inc., on June 7, 2016, which consists of information compiled from various government records. Databases searched included National Priorities List (NPL), Geotracker (State Water Resources Control Board), Envirostor (California Department of Toxic Substances Control), and numerous other databases for information about known and potential contaminated sites near the proposed project area.

Reconnaissance of the project site occurred on November 4, 2016 by Ninyo and Moore and on February 16, 2017 by DHA. Staff were able to observe the exterior of the bridge

and portions of the immediately adjacent properties that border the project site. The perimeter of the project site was observed for current land uses.

4.9.2 Setting

The proposed project is located approximately 0.3 mile south of Harbor Drive, immediately west of and parallel to Interstate 5 (I-5), in the City, San Diego County, California. The project site spans over the San Luis Rey River. The proposed project consists of California Department of Transportation (Caltrans) and City right-of-way (ROW), downtown, residential, and open space land uses.

4.9.2.1 Records Search Results

The records search revealed the following potential contaminated areas within ¼-mile to 1-mile of the project site:

- one (1) Active Superfund site (Final NPL)
- three (3) federal Resource Conservation and Recovery Act (RCRA) generator sites
- five (5) state- and tribal- equivalent CERCLIS (Envirostor) sites
- eight (8) state and tribal leaking storage tank lists (San Diego Co. SAM) sites
- 11 state and tribal leaking storage tank lists (LUST) sites
- seven (7) state and tribal leaking storage tank lists (SLIC) sites
- these (3) underground storage tanks (USTs) and aboveground storage tanks (ASTs)
- seven (7) HIST CORTESE list sites
- two (2) Notify 65 (Safe Drinking Water and Toxic Enforcement Act) incident listings
- one (1) EDR High Risk Historical Records (EDR MGP) list site; and,
- Six (6) orphan sites (hazardous substance release sites or properties without financially viable response parties).

The Camp Pendleton Marine Corps Base was noted in the ISA report as a facility of concern. The Camp Pendleton Marine Corps Base site was found to be listed as an Active Superfund site (Final NPL), Federal CERCLIS list (SEMS) site; Federal RCRA CORRACTS facility; Federal RCRA non-CORRACTS TSD facility; Federal institutional controls/engineering controls registry (LUCIS, US ENG CONTROLS, US INST CONTROL) site; state- and tribal –equivalent NPL (RESPONSE) site; and an Other Ascertainable Records (FUDS, DOD, and ROD) site. The Camp Pendleton Marine Corps Base has served as a training base since its establishment in 1941 and encompasses approximately 125,000 acres in San Diego County. The installation is

bordered by the City of San Clemente to the north, the City of Oceanside to the south, and the City of Fallbrook to the east.

4.9.2.2 Field Survey Results

Properties surrounding the project site consist primarily of hotels, motels, and inns. The existing bridge is painted but no creosote treated timber or asbestos containing materials were observed. However, the existing expansion joint material in the bridge may contain asbestos. Overall, no potential Recognized Environmental Conditions (RECs) were observed on the project site or occupying adjacent parcels.

Several utilities run through the project site, including a 12-inch gas line and 12-inch water line attached to the lower portion of the truss along the east side of the bridge; a 12-inch and a 10-inch water line attached to the lower portion of the truss along the west side of the bridge; and electrical and telecommunication lines attached under the top deck along the west side of the bridge. There are no overhead utilities located within the project area. No large power substations or step-down transformers, which are known to contain polychlorinated biphenyls (PCBs), were observed during both site visits.

4.9.2.3 Historical Property Uses

Historical information was reviewed to develop a history of previous land uses near the proposed project and to assess these uses for potential hazardous materials impacts that may affect the proposed project. No Sanborn fire insurance maps coverage exists for the project site (DHA 2017). Based on topographic maps and aerial photographs, the historical land use in the proposed project area transitioned from the small ocean community of Oceanside surrounded by open space in 1893 to the predominantly urban residential and commercial City by 1939. Historical topographic maps, as well as aerial photographs dating back to 1939, show Coast Highway and the San Luis Rey River in their current alignment, along with the existing bridge. Land use in the proposed project vicinity has remained relatively unchanged since 1939 with the continued expansion of the City (DHA 2017).

4.9.2.4 Hazardous Materials

Asbestos Containing Materials

Asbestos containing materials (ACMs) were banned by the U.S. Environmental Protection Agency (EPA) in 1989. Revisions to regulations issued by the Occupational Safety & Health Administration (OSHA) on June 30, 1995 require that all thermal systems insulation, surfacing materials, and resilient flooring materials installed prior to 1981 be considered Presumed Asbestos Containing Materials (PAC) and treated accordingly. In order to rebut the designation as PAC, OSHA requires that these materials be surveyed, sampled, and assessed in accordance with 40 Code of Federal Regulations (CFR) 763 (Asbestos Hazard Emergency Response Act [AHERA]). ACMs

have also been documented in the rail shim sheet packing, bearing pads, support piers, and expansion joint material of bridges.

Lead Based Paint

Lead has been used in commercial, residential, roadway, and ceramic paint; in electric batteries and other devises; as a gasoline additive; for weighting; in gunshot; and other purposes. It is recognized as toxic to human health and the environment and is widely regulated in the U.S. Structures constructed prior to 1978 are presumed to contain lead-based paint (LBP) unless proven otherwise, although structures constructed after 1978 may also contain lead-based paints. Additionally, pavement striping and thermoplastic paint used on roadways often contain lead.

Aerially Deposited Lead

Areas adjacent to roadways heavily used prior to 1978 could potentially contain aerially deposited lead (ADL) due to the use of lead as a gasoline additive during this time.

Polychlorinated Biphenyls (PCBs)

Polychlorinated biphenyls (PCBs) are man-made organic chemicals that were previously used in industrial and commercial products. PCBs were found to have both carcinogenic and non-carcinogenic negative health effects in the 1969s. In 1979, the Toxic Substance Control Act was passed which included banning production of PCBs. Transformers and capacitors constructed prior to 1979 are likely to contain PCBs. Based on the site visits conducted as part of the proposed project, PCBs are unlikely to occur within the project site.

4.9.2.5 Airports

The closest public airport to the proposed project is the Bob Maxwell Memorial Airfield at Oceanside Municipal Airport which is located approximately 1.75 miles northeast of the project site. According to the Oceanside Municipal Airport Land Use Compatibility Plan (Oceanside ALUCP), the project site is not located within any of the airport's safety zones, nor is it located in any of the noise exposure contours of the airport (Airport Land Use Commission San Diego County 2010).

4.9.2.6 Wildfires

California and San Diego County map the Fire Hazard Severity Zones within San Diego County. According to the California Department of Forestry and Fire Protection (CalFire), the Fire Hazard Severity Zones are based on an evaluation of fire history, existing and potential fuel, flame length, blowing embers, terrain, weather, and the likelihood of buildings igniting. The project site is located in a Local Responsibility Area (LRA) non-Very High Fire Hazard Severity Zone (Non-VHFHSZ) (CalFire 2022).

4.9.2.7 Evacuation Routes/Emergency Evacuation Plans

The City of Oceanside General Plan (City General Plan) Public Safety Element defines evacuation routes as main through streets and highways within the city. Hill Street,

where the project is located, as well as I-5 just to the east of the project site are considered evacuation routes by the City.

The San Diego County Emergency Plan, San Diego County Multi-Jurisdictional Hazard Mitigation Plan, and City General Plan Public Safety Element serves as the main emergency plans that are applicable to the proposed project.

- **San Diego County Emergency Plan:** Is a comprehensive emergency management system that provides for planned response to disaster situations associated with natural disasters, technological incidents, and nuclear defense operations. The Plan includes operational concepts relating to various emergency situations, identifies components of the Emergency Management Organization and describes the overall responsibilities for protecting life and property and assuring the overall well-being of the population. The plan also identifies the source of outside support that might be provided (through mutual aid and specific statutory authorities) by other jurisdictions, state and federal agencies and the private sector. The City participates in this plan.
- **San Diego County Multi-Jurisdictional Hazard Mitigation Plan:** This plan was prepared in July 2010 to meet federal and state requirements for disaster preparedness to make the county eligible for funding and technical assistance from state and federal hazard mitigation programs. The plan includes a risk assessment to enable local jurisdictions to identify and prioritize appropriate mitigation actions that will reduce losses from potential hazards, including flooding, earthquakes, fires, and man-made hazards. To address potential hazards, the plan then incorporates mitigation goals and objectives, mitigation actions and priorities, an implementation plan, and documentation of the mitigation planning process for each of the twenty-one participating jurisdictions. The City participates in this plan.
- **City General Plan – Public Safety Element:** This General Plan Element identifies hazards, such as earthquakes, fires, and tsunamis, and provides guidance for proper mitigation measures, such as evacuation routes, to ensure safety. Along with long range policies regarding seismic, flooding, and fire hazards, this element also includes a Public Safety Plan. The Public Safety Plan includes maps of indicating areas that have increased susceptibility to these hazards and relocation routes during emergency evacuations.

4.9.3 Discussion

Potential impacts from the proposed project are discussed below in response to each of the CEQA checklist questions, along with mitigation measures, as necessary. Additionally, the Project Conditions listed below will be implemented as part of the proposed project.

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Hazardous and non-hazardous waste would be used and transported to and from the project site during the three construction phases. Heavy machinery used during site preparation would contain fuel, oil, and lubricants. Various materials such as adhesives, solvents, and paints, would also be used. The amount and types of hazardous materials would be limited and would be on-site only for the duration of construction activities. The types of hazardous waste that would be used are not acutely hazardous substances as defined in the California Health and Safety Code (which references federal regulations). The use, storage, transportation, and disposal of hazardous materials would comply with all applicable laws and regulations. When used properly, the types and amounts of hazardous materials that would be used during construction would not pose a substantial health risk to construction workers, residents, employees, visitors, and school-age children on the project site and in adjacent areas.

Minor fuel or oil spills could occur during construction activities. The release, even if accidental, of hazardous materials into the environment is regulated through existing federal, state, and local laws. These regulations require emergency response from local agencies to contain hazardous materials in the event of an accidental release. The use of handling of hazardous materials during construction activities would occur in accordance with applicable federal, state, and local laws, including the California Occupational Safety and Health Administration (CalOSHA) requirements. The proposed project would obtain and comply with the Stormwater Pollution Prevention Plan (SWPPP), as part of the National Pollutant Discharge Elimination System (NPDES) General Construction Permit. Construction impacts regarding a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials are less than significant, and no mitigation measures are required.

Upon construction completion, roadway operation would not create a significant hazard to the public or environment through the routine transport, use or disposal of hazardous materials, similar to existing conditions. The proposed project would be used for recreation and commuting purposes and would replace an existing structurally deficient bridge. Operation of the proposed project would involve minimal use of hazardous materials, which would be limited to maintenance products for landscaping and occasional cleaning. Operational impacts of the proposed project from the routine transport use or disposal of hazardous materials would be less than significant, and no mitigation measures are required.

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?

The proposed project has the potential to use a variety of hazardous materials during construction activities. The ISA discussed the presence of LBP in roadway striping, the presence of ADL along the existing roadway, and the presence of asbestos containing materials in the Coast Highway Bridge as potential environmental issues within the proposed project area (DHA 2017).

ASBESTOS CONTAINING MATERIALS (ACM)

The Occupational Safety and Health Administration (OSHA) requires that all thermal systems insulation, surfacing materials, and resilient flooring materials installed prior to 1981 be considered Presumed ACM and treated accordingly. Bridges built prior to 1981 sometimes have ACMs within their rail shim sheet packing, bearing pads, support piers, and/or expansion joint materials. The Caltrans Historic Bridge Inventory indicates that the North Coast Highway Bridge over the San Luis Rey River was built in 1929 and reconstructed in 1971. On November 4, 2016, Ninyo & Moore collected 15 bulk samples of building materials on the Hill Street Bridge that are scheduled for demolition and that were suspected to be asbestos containing (DHA 2017). Based on the analytical results from this survey and the age of the bridge, ACMs are presumed to be located within the Coast Highway Bridge. Impacts relating to the release of ACM into the environment would be less than significant with the implementation of Mitigation Measure HAZ-1.

LEAD BASED PAINT (LBP)

Structures constructed prior to 1978 are presumed to contain LBP unless proven otherwise, although structures constructed after 1978 may also contain lead-based paints. LBP may be present along Coast Highway and on the Coast Highway Bridge. Impacts relating to the release of LBP into the environment would be less than significant with the implementation of Mitigation Measure HAZ-1.

AERIALLY DEPOSITED LEAD (ADL)

The ISA reviewed historical aerial imagery and historical topographic maps. Based on the review of historical images and maps of the project site, Coast Highway was historically, a major route across the San Luis Rey River within the City and is immediately adjacent to the heavily traveled Interstate 5 (I-5). Although unlikely, it is possible lead contaminated soils exceeding action levels may be encountered during project construction. Impacts relating to the release of ADL into the environment would be less than significant with the implementation of Mitigation Measure HAZ-2.

UTILITIES AND POLYCHLORINATED BIPHENYLS (PCBS)

There were no overhead utilities, large power substations, or step-down transformers (all of which are known to contain PCBs) observed within the project area. No spills or hazardous materials response events related to transformers were noted in the ISA or record searches (DHA 2017). Impacts relating to utilities or PCBs would be less than significant, and no mitigation measures are required.

All hazardous materials would be stored, handled, and transported per federal, state, and local regulatory requirements. Implementation of construction BMPs, compliance with the vehicle manufacturer's specifications, and compliance with applicable regulations would result in impacts that are less than significant.

The proposed project would replace the existing Coast Highway Bridge with a new bridge designed to current structural and geometric standards. Operation of the proposed project would be similar to existing conditions. There are no known hazardous waste sites or RECs within the proposed project. Operation of the proposed project would not be used by motor vehicles that often carry hazardous material, and the proposed project would not increase the number of vehicles using the surrounding roadways. Impacts of the proposed project on the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be less than significant. No mitigation measures are required for proposed project operations.

MITIGATION MEASURES

HAZ-1. *Asbestos and Lead Containing Materials.* A California-licensed abatement contractor will conduct a survey for lead containing materials prior to demolition (including concrete elements) and contractor will submit a National Emission Standard for Hazardous Air Pollutants (NESHAP) notification. Per Section 14-9.02 of the asbestos NESHAP regulation, all "demolition activity" requires written notification even if there is no asbestos present. This notification should be typewritten and postmarked or delivered no later than ten days prior to the beginning of the asbestos demolition or removal activity.

If lead containing materials are found, the following will be required:

1. Building materials associated with paint on structures, and paint on utilities should be abated by a California-licensed abatement contractor and disposed of as a hazardous waste in compliance with SSP 14-11.13 and other federal and state regulations for hazardous waste.
2. A Lead Compliance Plan should be prepared by the contractor for the disposal of lead-based paint. The grindings (which consist of the roadway material and the yellow and white color traffic stripes) shall be removed and disposed of in accordance with Standard Special Provision 36-4 (Residue Containing High Lead Concentration Paints). In addition, the Lead Compliance Plan will also contain the following provision to address aerially-deposited lead: SSP 7-1.02K (6)(j)(iii) – Earth Material Containing Lead.
3. A California-licensed lead contractor should be required to perform all work that will disturb any lead-based paint as a result of planned or unplanned renovations in the Project area, including the presence of yellow traffic striping and pavement markings that may contain lead-based paint. All such material must be removed and disposed of as a hazardous material in compliance with SSP 14-11.12.

HAZ-2. *Aerially Deposited Lead.* The following actions will be required for handling and disposal of soils that contain an elevated level of ADL during the pre-construction/pre-demolition phase:

1. A California-licensed abatement contractor will sample and test a representative sample of soils at the project site for hazardous levels of aerially deposited lead. Representative samples of exposed shallow soils shall be collected at multiple locations along the project site and analyzed for total lead and extractable lead concentrations.
2. If hazardous levels of aerially deposited lead are found in the soils at the project site, the following will be required:
    a. Removal, disposal, storage and transportation of materials contaminated with hazardous levels of aerially-deposited lead should be performed in compliance with all applicable federal, state, and local laws, including but not limited to requirements of State Water Resources Control Board and California Regional Water Quality Control Board water quality control plans and waste discharge permits, Coastal Development Permit requirements for ADL-contaminated soil, California Department of Fish and Wildlife permit requirements for ADL-contaminated soil, and all requirements of the applicable Air Quality Management District and/or the Air Pollution Control District.
    b. Removal, disposal, storage, and transportation of materials contaminated with hazardous levels of aerially-deposited lead should be performed in compliance with the Soil Management Agreement for Aerially-deposited Lead-Contaminated Soils between Caltrans and the Department of Toxic Substance Control, if the project site is within the state right-of-way or Caltrans is acting as direct oversight for the project.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The proposed project is not located within 0.25 mile of an existing or proposed school. The closest schools are North Terrace Elementary School, located approximately 0.65 mile northeast of the proposed project, Oceanside High School, located approximately 0.75 mile southeast of the proposed project, and Mission Elementary School, located approximately 1 mile east of the proposed project. It is not anticipated that construction activities would emit hazardous emissions that would impact these schools. Common materials used at construction sites, such as gasoline, diesel fuel, and other materials, would not be stored at the project site except temporarily in construction staging areas. As stated above, implementation of construction BMPs, compliance with vehicle manufacturers' specifications, and compliance with applicable regulations would reduce the potential for hazardous materials or emissions to be released. ACM, LBP, and ADL could be present in the existing bridge and has the potential to be released during construction phases (specifically removal/demolition of the existing bridge); however,

with implementation of Mitigation Measures HAZ-1 and HAZ-2, release of such material and potential to impact nearby schools would be reduced. Construction impacts would be less than significant with mitigation measures incorporated.

Operations at the project site would be similar to existing conditions. As such, project operation would not emit hazardous emissions or handle hazardous materials, substances, or wastes within one-quarter mile of an existing school.

MITIGATION MEASURES

Implement Mitigation Measures HAZ-1 and HAZ-2.

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?

The proposed project is not located on a site included in the Hazardous Waste and Substances Site List pursuant to Government Code Section 65962.5 on the Department of Toxic Substances Control (DTSC) site (DTSC 2021).

As mentioned above, the ISA conducted a records search in the vicinity of the project area. Due to the long history of this densely developed area, findings within ¼ mile of the proposed project were considered to have potential impact (DHA 2017).

Based on the status of each site and information found in the records search, the ISA found no federal Resource Conservation and Recovery Act (RCRA) generator sites, state- and tribal- equivalent CERCLIS (Envirostor) sites, state and tribal leaking storage tank lists (San Diego Co. SAM) sites, state and tribal leaking storage tank lists (SLIC) sites, USTs and ASTs, HIST CORTESE list sites, Notify 65 incident listings, or orphan sites that had the potential to impact the soils or groundwater of the proposed project (DHA 2017).

The ISA found 11 state and tribal leaking storage tank lists (LUST) sites, 5 of the 11 sites were closed cases. The remaining six LUST sites were determined to have a very low potential to impact the soil or groundwater at the project site. The ISA found one EDR site on the EDR High Risk Historical Records list that is unlikely to impact the soils or groundwater at the project site. The EDR site is an EDR manufactured gas plant (EDR MGP) site and is located approximately one mile from the proposed project. Based on the location of the EDR MGP facility and groundwater flow, any potential contamination is unlikely to impact the soil or groundwater of the proposed project (DHA 2017).

The Camp Pendleton Marine Corps Base was noted in the ISA report as a facility of concern. Industrial and other support operations have generated hazardous wastes, including waste oils, contaminated fuels and other petroleum products, cleaning solvents, and pesticide rinsate. Camp Pendleton is participating in the Installation Restoration Program (IRP), established in 1978. Under this program, the Department of Defense seeks to identify, investigate, and clean up contamination from hazardous

materials. As part of IRP studies, the Navy identified a number of potentially contaminated areas, including eight areas where wastes containing DDT, heptachlor, 2,4-T, lindane, zinc, lead, trichloroethylene, methyl ethyl ketone, benzene, and xylene had been deposited. Other potential contaminants of concern (COCs) include explosives (UXO, MEC Munitions Debris (MD). Currently the San Luis Rey River basin is not contaminated with hazardous materials from base operation and does not have the potential to impact the soils or groundwater of the project site (DHA 2017).

There are two active sites currently listed on the DTSC Envirostor website within two miles of the proposed project, the former Tri-City Plating, Inc. facility and a now vacant site at 3390 Alex Road. The former Tri-City Plating, Inc. facility, located approximately 1.75 miles southeast of the proposed project, was used to manage hazardous waste associated with chrome plating for automobile wheels. The Tri-City Plating, Inc. facility had potentially contaminated groundwater and soil. 3390 Alex Road is a vacant site located approximately 2.4 miles northeast of the proposed project and was historically used for industrial and manufacturing operations. The parcel located at 3390 Alex Road had multiple hazardous waste violations (Envirostor 2024). Both active Envirostor sites are located more than one mile from the proposed project area, are under active remediation, and are not expected to cause contamination of the soil or ground water at the proposed project.

There is one active site currently listed on the SWRCB Geotracker website within two miles of the proposed project, a retail gasoline sales facility at 802 North Coast Highway. The facility is owned by Thrifty Oil Co. (Thrifty) Service Station 401 and is located approximately 800 feet south of the proposed project. The site was formally ARCO facility #9749. The active commercial petroleum facility had an unauthorized release of hazardous materials in 1997 that impacted soil (Geotracker 2024). The active Geotracker site has been under remediation and monitoring since 1998 and has been recommended for removal from the Geotracker site. The Geotracker site is not expected to contaminate soil or ground water at the proposed project.

No additional open sites within 0.25 mile of the proposed project were found on Envirostor or Geotracker websites that would impact the proposed project (Envirostor 2024, Geotracker 2024).

No sites were identified that are anticipated to have contaminated the soil or groundwater of the project site nor is the project site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Thus, no impact would occur, and no mitigation measures are required.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two nautical 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?

The nearest airport, Bob Maxwell Memorial Airfield at Oceanside Municipal Airport, is located approximately 1.75 miles northeast of the project site. The Oceanside Municipal Airport (OKB) has put in place noise abatement procedures for arriving and departing aircraft (OKB 2023). The proposed project is not located within the safety zone of the OKB nor is it within the noise contours of the OKB. Impacts relating to noise from the proposed project on the existing noise sensitive area created from the airport are discussed in Section 4.13, Noise. Construction and operation of the proposed project would not result in a safety hazard or excessive noise for people residing or working within an airport land use plan or within two miles of an airport. No impact would occur, and no mitigation measures are required.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The proposed project would replace the existing Coast Highway Bridge with a new bridge designed to current structural and geometric standards. To maintain traffic flows across the San Luis Rey River, the new bridge would be constructed immediately west of the existing bridge. Once the proposed bridge is constructed, traffic would be cutover from the existing bridge onto the new bridge. During the cutover, delays and short-term closures would be necessary to make the transition. A traffic handling plan would be submitted by the contractor for approval prior to construction beginning (refer to Project Conditions in Section 4.17, Transportation). Once the traffic is fully transitioned onto the new bridge, the existing bridge would be demolished. No detour would be necessary for vehicular traffic during construction. Temporary lane closures or intermittent traffic disruptions may occur along adjacent roadways, including San Luis Rey Drive, Monterey Drive, and Riverside Drive, when construction equipment is moving from the staging areas to the construction areas. Access for emergency vehicles would be maintained at all times during construction; however, there is potential for minor delays. Construction traffic control is not anticipated to significantly interfere with emergency response times or emergency evacuation plans. Information regarding emergency response times is available in Section 15, Public Services, and Section 17, Transportation. The proposed project would be coordinated with the San Diego County Sherriff Department, City Police, City Fire, other law enforcement (California Highway Patrol [CHP]), and emergency service providers within the area. Construction impacts on emergency access, emergency response plans, or emergency evacuation plans would be minimal and temporary in nature; therefore, impacts are less than significant, and no mitigation measures are required.

The proposed project would not increase capacity along Coast Highway that could increase traffic or congestion. The proposed project would not impair an adopted

emergency response plan or emergency evacuation plan in the long term, as operations of the replacement bridge would be similar to existing conditions. The proposed project has incorporated the possibility of Sea Level Rise (SLR) into project design as the bottom elevation of the bridge would be developed 49 feet above the surface level of the San Luis Rey River and would have a clearance of approximately 16 feet above water surface elevation during a 100-year storm event plus SLR; refer to Section 4.10, Hydrology and Water Quality, and Chapter 5, Sea Level Rise. The proposed project design would serve communities in Oceanside by remaining open in an extreme event in order to provide access and emergency routes away from flood areas. The proposed project is consistent with Coastal Act Section 30253(a) and (b) and would minimize risks to life and property in areas of high geologic, flood, and fire hazards by remaining open during an extreme event in order to serve the communities and provide access away from flooded areas. Therefore, the proposed project would have a less than significant impact to emergency response plans or emergency evacuations plans upon the completion of construction. No mitigation measures are required.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

According to CalFire, the proposed project is located in an LRA and is designated as a Non-VHFHSZ (CalFire 2022). The nearest moderate, high, or very high fire hazard zone is classified as moderate and is located approximately 0.75 mile northeast of the project site. Furthermore, the majority of the area surrounding the project site is highly urbanized and is not occupied by natural vegetation acting as fuel loads, which could spread a wildfire. Therefore, the proposed project would not expose people or structures to a significant risk from wildland fires, beyond what is currently present. Refer to Section 4.20, Wildfire, for additional information. Impacts would be less than significant in this regard and no mitigation measures are required.

4.9.4 References

Airport Land Use Commission, San Diego County. 2010. Oceanside Municipal Airport Land Use Compatibility Zone. Online: https://www.san.org/DesktopModules/Bring2mind/DMX/API/Entries/Download?EntryId=16149&Command=Core_Download&language=en-US&PortalId=0&TabId=807. Date Accessed: February 1, 2024.

ASTM. 2021. ASTM Practice E 1527-21. 2021: Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. Online: https://www.astm.org/e1527-21.html?gclid=CjwKCAiA9qKbBhAzEiwAS4yeDdGwdTuG0K-zFqrQiGiNoutb2SlfgPTVkSlvzjgfkkUeYJaIWRSvYxoC5LsQAvD_BwE. Date Accessed: December 1, 2023.

California Department of Forestry and Fire Protection (CalFire). 2023. Fire Hazard Severity Zones Map 2022. Online: https://osfm.fire.ca.gov/fire-hazard-severity-zone-maps-2022/. Date Accessed: November 7, 2023.

CalFire. 2009. Very High Fire Hazard Severity Zones in Local Responsibility Area Oceanside. Online: https://34c031f8-c9fd-4018-8c5a-4159cdff6b0d-cdn-endpoint.azureedge.net/-/media/osfm-website/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-map/upload-4/oceanside.pdf. Date Accessed: February 1, 2024.

California State Water Resources Control Board. 2024. Geotracker. Online: http://geotracker.waterboards.ca.gov/. Date Accessed: January 8, 2024.

California State Water Resources Control Board. 2024. Envirostor. Online: http://www.Envirostor.dtsc.ca.gov/public/. Date Accessed: January 8, 2024.

Department of Toxic Substances Control (DTSC). 2023. Hazardous Waste and Substances Site List. Online: https://dtsc.ca.gov/dtscs-cortese-list/. Date Accessed: November 6, 2023.

Drake Haglan and Associates (DHA). 2017. North Coast Highway (Hill Street) Bridge Replacement Project Initial Site Assessment (ISA).

Ninyo & Moore. 2017. Hazardous Materials Testing Services Hill Street Bridge North Coast Highway. Oceanside, CA.

Oceanside Municipal Airport (OKB). 2023. OKB Traffic Pattern Noise Abatement. Online: https://okbairport.com/aircraft-operations#530b7f44-51d5-4870-9ed1-7c1671a317e8. Date Accessed: March 21, 2023.

4.10 Hydrology and Water Quality

Would the project:

Issues	Determination
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Less Than Significant Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Less Than Significant Impact
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;	Less Than Significant with Mitigation Incorporated
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	Less Than Significant with Mitigation Incorporated
(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	Less Than Significant with Mitigation Incorporated
(iv) impede or redirect flood flows?	Less Than Significant with Mitigation Incorporated
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Less Than Significant Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less Than Significant Impact

This section incorporates, and summarizes, the analysis, findings, and recommendations in the *Water Quality Assessment Report* (Dewberry 2022) and the *Sea Level Rise Analysis* (Dewberry 2023).

4.10.1 Setting

The proposed project is located approximately 2,000 feet east of the Pacific Ocean, immediately west of Interstate 5 (I-5) and crosses the San Luis Rey River in the City, San Diego County, California, within the Coastal Zone. The San Luis Rey River is the primary aquatic feature and flows throughout the year.

4.10.1.1 Regional Hydrology

The proposed project area is located in the Mission hydrologic sub-area (HSA) of the Lower San Luis hydrologic area (HA), within the San Luis Rey hydrologic unit (HU). The

Mission HSA drains an area of approximately 47 square miles while the Lower San Luis HA drains approximately 187 square miles. The San Luis Rey HU drains an area of approximately 560 square miles.

The proposed project is located in the Guajome Lake-San Luis Rey River subwatershed within the Lower San Luis Rey watershed (Figure 4.10-1). The Guajome Lake-San Luis Rey River sub-watershed drains an area of approximately 41 square miles while the Lower San Luis Rey watershed drains an area of approximately 136 square miles.

The San Luis Rey River headwaters are in the Palomar Mountain Range and Cleveland National Forest, near Palomar Mountain and the Santa Rosa Mountains. The mouth of the San Luis Rey River, on the Pacific Ocean, is approximately 2,000 feet west of the proposed project. The San Luis Rey River is over 69 miles long and drains approximately 560 square miles (Dewberry 2022).

4.10.1.2 Local Hydrology

Precipitation and Climate

The basic source of all water in San Diego County is precipitation, primarily in the form of rain. Precipitation and temperature extremes increase to the east, with mountains that receive frost and snow in the winter. The average annual precipitation is less than 12 inches, resulting in a borderline arid climate. Rainfall is strongly concentrated in the cooler half of the year, particularly from December through March, although precipitation is lower than any other part of the U.S. west coast. While the summer months are virtually rainless, subtropical moisture from the North American Monsoon usually results in increased humidity and thunderstorms for at least a few days each summer. Rainfall is highly variable from year to year and from month to month, and San Diego County is subject to both droughts and floods.

Average monthly temperatures range from 57.3 degrees Fahrenheit (°F) in January to 72°F in August. On average, 344 days a year are hotter than 60°F, but only 25 days are hotter than 80°F. Late summer and early autumn are typically the hottest times of the year with an average high of 78°F in August and 77°F in September. Temperatures occasionally reach 90° or higher in July and August.

Surface Waters

The San Luis Rey River rises in two main branches. The main stem starts east of Rocky Mountain in the Cleveland National Forest and flows generally south-southwest. The West Fork's headwaters rise as a pair of tiny streams, Fry Creek and Iron Springs Creek, to the north of Palomar Mountain, which combine to form the West Fork, which flows southeast through the Mendenhall Valley. The West Fork joins the main stem at Lake Henshaw, a reservoir formed by a dam across the main stem San Luis Rey River. The San Luis Rey River flows generally southwest, through the City where it has been channelized and altered over time. The San Luis Rey River empties into the Pacific Ocean (Dewberry 2022).

Surface water flows consist of surrounding tributaries supplied by intermittent releases from the Henshaw Dam and surfacing groundwater in the confluence of Couser Canyon Creek (Dewberry 2022). Within the City, the San Luis Rey River is fed by its main tributary, Pilgrim Creek; Henshaw Dam and the Escondido Canal diversion dam are the primary hydrologic controls of the river (Dewberry 2022). There is little water in the San Luis Rey River during most of the year; however, very large flows can occur during winter storms.

Floodplain

The portion of the proposed project over the San Luis Rey River is within areas inundated by 100-year flooding; however, Coast Highway and the bridge are above the surface water elevation for the 100-year flooding event. The surrounding area is outside of the 100-year floodplain but within the 500-year floodplain (Dewberry 2022).

Groundwater Hydrology

The northern portion of the proposed project area lies within the San Luis Rey Valley Groundwater Basin. The San Luis Rey Valley Groundwater Basin underlies an east-west-trending alluvium-filled valley located along the western coast of San Diego County. The major hydrologic feature is the San Luis Rey River, which drains the valley overlying the basin.

The basin is bound on the east, northeast, and southeast by the contact of alluvium with impermeable Mesozoic granitic and pre-Cretaceous metamorphic rocks. In the northwest and southwest of the lower portion of the basin, alluvium is in contact with semi-permeable Eocene marine deposits and Tertiary nonmarine deposits. The basin is bound on the west by the Pacific Ocean (Dewberry 2022). The San Luis Rey River Groundwater Basin is recharged by precipitation, imported irrigation water applied on upland areas, and by storm flow in the San Luis Rey River and its tributaries. Movement of groundwater in the alluvial aquifer is westward towards the Pacific Ocean. Water levels in the basin declined drastically in the 1950s and 1960s due to groundwater development and over pumping. Since the advent of imported water sources, groundwater levels have risen to near pre-development levels and averages range from 0 to 20 feet below land surface.

4.10.1.3 Water Quality

Surface Water Quality

Existing water quality conditions within the San Luis Rey River are moderate to low with unknown sources of indicator bacteria, trash, bifenthrin, chloride, nitrogen, phosphorus, and total dissolved solids being the main pollutants. Urban runoff and storm sewers are likely sources of these pollutants. The San Luis Rey River is included in the 2018 California 303(d) list of impaired waters and is a waterbody with TMDL requirements (Dewberry 2022; State Water Resources Control Board 2024).

Beneficial Uses

Beneficial uses applied to the surface waters of the San Luis Rey River identified in the Water Quality Control Plan for the San Diego Basin (Basin Pan) include agriculture and industrial service supply; water contact recreation such as canoeing and rafting; noncontact water recreation such as hiking; warm freshwater habitat; and wildlife habitat for rare, threatened, and/or endangered species, as well as common species (Dewberry 2022).

Groundwater in the San Diego Region can have as many as six designated beneficial uses. Beneficial uses for groundwater within the San Luis Rey HU include municipal and domestic, agricultural, and industrial service supply (Dewberry 2022).

Water Quality Objectives/Standards

Water quality objectives for inland surface and groundwaters in the region have been set for thermal plan, agricultural supply, un-ionized ammonia, bacteria, biostimulatory substances, boron, chlorides, color, dissolved oxygen, floating material, fluoride, pH, inorganic chemicals, sodium adsorption ratio, pesticides, phenolic compounds, radioactivity, secondary drinking water standards, sediment, suspended and settleable solids, sulfate, tastes and odors, temperature, total dissolved solids, toxicity, toxic pollutants, trihalomethanes, and turbidity (Dewberry 2022).

4.10.2 Discussion

Potential impacts from the proposed project are discussed below in response to each of the CEQA checklist questions, along with mitigation measures, as necessary. Additionally, the Project Conditions listed below will be implemented as part of the proposed project.

PROJECT CONDITIONS

1. All temporarily disturbed areas will be returned to pre-project conditions upon completion of construction. These areas will be properly protected from washout and erosion using erosion control devices including, but not limited to coir netting, hydroseeding, and revegetation. In sloped areas, additional erosion control measures will be applied, which will include erosion control blankets and fiber rolls.
2. Existing vegetation will be protected using temporary fencing, or other similar protection devices, to reduce potential for erosion and sedimentation.
3. Exposed soils will be covered by visqueen or other suitable material, or other methods will be used to reduce erosion and runoff during rainfall events. Exposed soils will be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by winds and construction activities such as traffic and grading activities.
4. During construction, erosion and sediment control measures (e.g., straw wattles, gravel bags, silt fencing) shall be in place and in functional condition throughout all phases of construction where sediment run-off from exposed slopes could enter the San Luis Rey River or aquatic habitats.

5. The contractors will develop and implement a toxic materials control and spill response plan to regulate the use of hazardous materials, such as the petroleum-based products used as fuel and lubricants for equipment and other potentially toxic materials associated with Project construction.
6. Before any ground-disturbing activities, the City shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP), as required under the Construction General Permit Order 2009-0009-DWQ (as amended by Order No. 2010-0014-DWQ and 2012-0006-DWQ), that includes erosion control measures and construction waste containment measures to ensure that waters of the state are protected during and after construction. The SWPPP shall follow guidance in the current version of the Caltrans Stormwater Quality Handbook and the California Stormwater Quality Association (CASQA) BMP Handbook. The SWPPP shall include site design to minimize offsite storm water runoff that might otherwise affect adjacent lake or stream habitat.

   The SWPPP shall require that the construction contractor implement BMPs to protect water quality within San Luis Rey River. Caltrans and CASQA have developed resources for preventing water pollution during construction activities. Based on review of the Project, the following or equivalent BMPs will be used by the construction contractor when developing the SWPPP:
   a. Silt fence
   b. Hydraulic mulch
   c. Hydroseeding
   d. Fiber rolls
   e. Dewatering operations
   f. Pile driving operations
   g. Material and equipment use over water
   h. Structural Demolition/Removal Over or Adjacent to Water
   i. Other spill control and prevention measures

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Construction of the proposed project would result in temporary disturbance within and adjacent to the San Luis Rey River. Grubbing and clearing activities, as well as installation of temporary falsework and temporary trestles, could result in a temporary increase in turbidity in and around the area of the construction footprint. In addition, the use of construction equipment and other vehicles could result in spills of oil, grease, gasoline, brake fluid, antifreeze, or other vehicle-related fluids and pollutants. Improper handling, storage, or disposal of fuels and materials or improper cleaning of machinery could cause surface water and groundwater quality degradation. Lastly, large pieces of construction equipment may compress soil within the staging areas, which could lead to a reduction in permeability, an increase in runoff, and an increase in the potential for

erosion to occur from the portions of the project site outside of the channel during proposed project construction.

If dewatering is necessary, cofferdams along the bank would be used to locally dewater isolated parts of the channel along the banks so that the proposed construction/ demolition activities could occur. Short-term increases in turbidity are anticipated to occur during localized dewatering activities, during the first flush of the stream channel when the cofferdams are removed, and during the first rainstorms which may mobilize disturbed sediments within the proposed project area. Turbidity increase could affect water quality downstream of the project site. Additionally, dewatering discharge could result in an adverse effect on water quality if the effluent contains chemical pollutants or high levels of sediment. While sediment is the primary pollutant of concern, all dewatering effluents such as nitrogen, oil and grease, total petroleum hydrocarbons, and sulfides could potentially impact water quality. The proposed project would also be required to obtain and comply with the necessary permits from the U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), California Coastal Commissions (CCC), and San Diego Regional Water Quality Control Board (RWQCB).

The proposed project would incorporate the project conditions listed above. In addition, the proposed project would obtain and comply with the National Pollutant Discharge Elimination System (NPDES) General Construction permit and associated SWPPP. The proposed project would also be required to obtain and comply with the necessary permits from the USACE, CDFW, CCC, and San Diego RWQCB. Adherence to permitting requirements and building/grading standards would include incorporation of appropriate, site-specific BMPs and the above listed project conditions, thus, the proposed project construction would not substantially degrade water quality or exceed waste discharge requirements. Impacts are less than significant. No mitigation measures are required.

The proposed project would not degrade surface water quality after construction because during operation, the proposed project would be similar to existing conditions. The proposed project would not degrade groundwater quality after construction because the proposed project would be a bridge replacement project and would not increase capacity, add lanes, or substantially widen the bridge. In addition, the proposed project would not include the addition of new facilities, wells, or increased impervious surfaces in the area. Operations of the road would be similar to existing conditions upon construction completion and vehicle capacity and use on Coast Highway would be similar to existing conditions. Impacts are less than significant. No mitigation measures are required.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The proposed project area is not actively used for groundwater recharge. No wells would be constructed nor would new connections to existing water facilities be required. Construction activities would not intercept or alter groundwater recharge, discharge, or flow conditions. Construction activities may require the use of water for dust control or other activities. Water used during construction would be trucked to the project site, thus no groundwater use would be required. Water use at the proposed project site would cease upon completion of construction. Therefore, water use at the project site would not substantially decrease water supply or reduce groundwater recharge. Impacts would be less than significant. No mitigation measures are required.

The proposed project is similar in size and scale as the existing bridge and roadway approaches. No groundwater wells would be constructed nor would new connections to existing water facilities be required. The proposed project's increase in impervious surface would be approximately 0.17 acres. The increase of impervious surfaces by less than two acres covering the length of the proposed project would be negligible in association with groundwater recharge because the proposed project is in an urban area with compacted and disturbed soils, and is not in an area actively used for groundwater recharge. Impacts would be less than significant. No mitigation measures are required.

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?

Construction activities involving excavation, cutting/filling, and grading activities, which could result in increased erosion and sedimentation into San Luis Rey River. The proposed project would comply with City, state, and federal requirements and would implement project conditions and BMPs pertaining to stormwater runoff and erosion control prevention, such as the use of silt fencing and fiber rolls, through the development of a SWPPP as part of the NPDES permit. Any temporary construction areas would be revegetated, as required through project conditions listed in Section 4.4, Biological Resources, and through Mitigation Measures BIO-1, BIO-2, and BIO-3.

Therefore, after implementation of construction BMPs, project conditions and Mitigation Measures BIO-1, BIO-2, and BIO-3, impacts related to stormwater runoff, erosion, or siltation on- or off-site would be less than significant.

The proposed project would increase impervious surfaces by approximately 0.17 acre. The proposed project is located within an urban area, within existing commercial and residential land uses and roadways that contain impervious surfaces, thus, the increase in impervious surfaces would cause a negligible increase in surface water runoff leaving the project site. The proposed project would maintain the existing drainage pattern and would not include features that would contribute to flooding on- or off-site. It would not change the surrounding land use in such a way that runoff would exceed the existing or planned storm drainage systems or provide substantial additional sources of polluted runoff. The proposed project area would be revegetated, as required through project conditions listed in Section 4.4, Biological Resources, and through Mitigation Measures BIO-1, BIO-2, and BIO-3; therefore, the proposed project would not result in increased erosion or siltation during operations. Thus, operational impacts related to stormwater runoff, erosion, or siltation on- or off-site would be considered less than significant with the implementation of project conditions as listed above, project conditions as listed in Section 4.4, Biological Resources, and Mitigation Measures BIO-1, BIO-2, and BIO-3.

MITIGATION MEASURES

Implement Mitigation Measures BIO-1, BIO-2 and BIO-3.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

The portion of the proposed project over the San Luis Rey River is within the California tsunami hazard area, while the surrounding areas are outside of the tsunami hazard area (California Department of Conservation [CDOC] 2022). The project site is not located within a seiche zone. The portion of the proposed project over the San Luis Rey River is within areas inundated by 100-year flooding and expected to experience sea level rise (SLR), while the surrounding areas have been determined to be outside of the 100-year floodplain but within the 500-year floodplain (Dewberry 2022 and 2023).

Construction of the proposed project has the potential to expose bare soil and potentially generate other water quality pollutants that could be released into the San Luis Rey River during a flood or tsunami event. Construction materials, such as asphalt and concrete, and equipment fluids could be exposed during a flood event. A flood event or a tsunami could result in the release of pollutants due to project inundation. The proposed project would implement construction BMPs, as listed in the project conditions above. The proposed would be required to obtain and comply with the necessary permits, including the NPDES permit, with an associated SWPPP, as well as permits from USACE, CDFW, CCC, and the San Diego RWQCB, to reduce contaminated storm water runoff and any adverse effects before, during, and after construction. In addition, the proposed project would comply with current building/grading standards. Therefore, construction of the proposed project would not

result in the release of pollutants due to inundation. Impacts would be less than significant. No mitigation measures are required.

As mentioned above, the proposed project over the San Luis Rey River is within the California tsunami hazard area, areas inundated by 100-year flooding, and within the Coastal Zone. The proposed bridge has been designed to accommodate the 100 year-storm event plus SLR of either 7 feet or 10.2 feet by year 2100. The proposed project would have approximately 16 feet of clearance above water surface elevation (Dewberry 2023). Furthermore, the proposed project has been designed to match with adjacent facilities over the San Luis Rey Rive, such as the I-5 bridges and North Pacific Street Bridge. The effects associated with inundation of the project site due to flooding or a tsunami would be minimal and would not introduce people to tsunami and flood areas, beyond what currently exists with the roadways, the SLRRT, and the pedestrian undercrossing. Impacts would be less than significant. No mitigation measures are required. See Chapter 5, Sea Level Rise, for additional details.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The proposed project would construct a new bridge designed to current structural and geometric standards. During construction, the proposed project would adhere to, and implement, permitting requirements, building/grading standards, and site-specific BMPs. In addition, the proposed project would be required to obtain and comply with the NPDES permit, as well as permits from USACE, CDFW, CCC, and San Diego RWQCB. Therefore, the proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan, including the San Luis Rey River Watershed Management Area Water Quality Improvement Plan. The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Operation of the proposed project would be similar to existing conditions. The construction and operational impacts would be less than significant. No mitigation measures are required.

4.10.3 References

California Department of Conservation (CDOC). 2022. San Diego County Tsunami Hazard Areas. Online: https://www.conservation.ca.gov/cgs/landslides. Date Accessed: January 25, 2024.

Dewberry. 2023. Sea Level Rise Analysis for the Coast Highway (Hill Street) Bridge Replacement Project.

Dewberry. 2022. Water Quality Assessment Report for the Coast Highway (Hill Street) Bridge Replacement Project.

State Water Resources Control Board (SWRCB). 2024. California 2020 Integrated Report, Clean Water Act Section 305(b) and 303(d), San Diego. Online: https://waterboards.ca.gov/rwqcb9/water_iossues/programs/303d_list/index.html. Date Accessed: January 21, 2024.

4.11 Land Use and Planning

Would the project:

Issues	Determination
a) Physically divide an established community?	Less Than Significant Impact
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	No Impact

4.11.1 Setting

The proposed project is located in the City of Oceanside (City), near the northwestern boundary, in San Diego County. The proposed project is located in the California Coastal Zone. According to the City of Oceanside General Plan (City General Plan), land use designations within 500 feet of the project site include Downtown, Residential, Harbor, Open Space, Public Utility and Transportation. The project site is located on land uses designated as Cal Trans Right-of-Way (CALTRANS), Downtown (DT), Residential (C-RL), and Open Space (C-OS). The City's zoning classifications within 500 feet of the project site include High Density Residential, Open Space, Mixed Use, Single Family Residential, Visitor Serving Commercial, Harbor, and Caltrans Right-Of-Way. The project site is located on zone classifications as Cal Trans Right-of-Way (Civic/Public), Commercial (D-6A, D-6B, and D-6C), Residential (R-1 and RS), and Mixed Use (D-7B) (Figure 4.11-1 and Figure 4.11-2).

The general setting is a perennial river surrounded by commercial development and includes roadways, curbs, and a sidewalk on the west side. The Coast Highway Bridge currently carries vehicular, bicycle, and pedestrian traffic over the San Luis Rey River. There is a paved concrete bicycle and pedestrian sidewalk (pedestrian undercrossing) undercrossing Coast Highway on the north side of the San Luis Rey River, near the top of the slope and there is a Class I multiuse path, San Luis Rey River Trail (SLRRT), undercrossing Coast Highway on the south side of the San Luis Rey River. The SLRRT runs along the southern riverbank of the San Luis Rey River and provides recreational and commuter uses for bicyclists and pedestrians. The pedestrian undercrossing crosses under the Interstate 5 (I-5) and Coast Highway bridges and provides coastal access to the residential neighborhood to the east of the proposed project.

4.11.2 Discussion

a) Physically divide an established community?

The proposed project would replace the deteriorated, structurally deficient, fracture critical and seismically vulnerable, existing Coast Highway Bridge over the San Luis Rey River with a new bridge that meets applicable City, AASHTO, and Caltrans design criteria and standards.

During construction, the SLRRT would undergo short and intermittent closures, at a maximum time of 10 minutes, and occur when construction equipment must cross the trail. Pedestrians and bicyclists would have continued access to and along the SLRRT for commuting and recreational purposes. As discussed in the Project Conditions in Section 4.16, Recreation, routes through the construction area on SLRRT would be posted (signs and/or flaggers) on the trail to alert SLRRT users of the temporary changes to the path during construction. The pedestrian undercrossing would be closed during construction. Detour pedestrian routes would be finalized before construction and be posted prior to the start of construction, as discussed in the Project Conditions in Section 4.16, Recreation. Pedestrians from residential streets along San Rafael Drive and San Luis Rey Drive would have continued access around the project site. Closure of the pedestrian undercrossing would be temporary and would return to pre-construction conditions upon construction completion. Therefore, construction activities would not physically divide an established community. Impacts are less than significant, and no mitigation measures are required.

Operation of the new bridge would be similar to existing conditions as no new lanes are being added. The proposed project would improve safety for vehicular traffic along Coast Highway at the proposed project. The proposed project would not change the physical arrangement of the area or physically divide an established community as it is replacing an already existing bridge. No impacts would occur, and no mitigation measures are required.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The proposed project would replace the old fracture critical existing bridge over San Luis River with a new bridge meeting designed to meet geometric standards. The proposed project would be considered a compatible use with the surrounding land use designations and zone classifications. Thus, the proposed project would not conflict with the City General Plan, City Zoning Ordinance, or other applicable plans, policies, or regulations. The proposed project would have no impact, and no mitigation measures are required.

4.11.3 References

City of Oceanside. 2015. Land Use and Zoning Map. Online: https://www.ci.oceanside.ca.us/residents/city-services/city-gis-maps. Accessed: March 10, 2023

4.12 Mineral Resources

Would the project:

Issues	Determination
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?	No Impact
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?	No Impact

4.12.1 Setting

The California Surface Mining and Reclamation Act (SMARA) was enacted by the California legislature to regulate activities related to mineral resource extraction. The act requires the prevention of adverse environmental effects caused by mining, the reclamation of mined lands for alternative land uses, and the elimination of public health and safety hazards from the effects of mining activities.

A provision of SMARA requires the California Geological Survey (formerly California Division of Mines and Geology) to classify the regional significance of mineral resources and create mineral land classification reports. Four Mineral Resource Zones (MRZ) have been designated for all minerals that occur or expected to occur in the Western San Diego County Production Consumption Region that reflect the mineral resource significance of an area (California Department of Conservation [CDOC] 1982). These designations are intended to preserve known mineral resources for future mining and to prevent encroachment of urban development that would compromise the resource's value. The four classifications are: MRZ-1 Areas of no mineral significance; MRZ-2 Areas of identifies mineral resource significance; MRZ-3 Areas of undetermined mineral resource significance; and MRZ-4 Areas of unknown mineral resource significance.

The project site is not located in an MRZ, an Aggregate Resource Area, or an Aggregate Resource Area with an active PCC-grade aggregate operator (CDOC 1996). The closest MRZ is an MRZ-2 area northeast of the proposed project, upstream near Douglas Drive. The MRZ-2 classification includes areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists. MRZ-2 areas were determined to contain mineral resources of statewide or regional significance by the State Mining and Geology Board (San Diego County 2011). Upstream from the City, the San Luis Rey River channel is one of the most important sources of sand and gravel resources for the northern production consumption (P-C) region (CDOC 1982). The proposed project is located downstream and is not included in the MRZ.

The San Diego County General Plan (County General Plan) Conservation and Open Space Element states that although all types of mineral resources are economically important, construction materials, industrial and chemical mineral materials, and metallic

and rare metals, the constriction aggregate mineral resources found in San Diego County are an essential part of its economy (San Diego County 2011). Aggregate reserves, used for the infrastructure development, have decreased significantly in the region (CDOC 1996, CDOC 1982).

The City of Oceanside General Plan (City General Plan) states that certain channel and floodplain areas of the San Luis Rey River contain deposits of construction quality sand. The proposed project area is located in an area with non-construction quality sand (City of Oceanside 2002). The proposed project is not located in a City designated mineral resource area (City of Oceanside 2002).

The CDOC Geologic Energy Management Division's (CalGEM) Well Finder (WellSTAR) is an online database that records the locations of oil and gas wells and other related facilities throughout California (CDOC 2023). There are two well records located near the proposed project. There is a record of an oil and gas well operated by C.R. Schuster located approximately 1,100 feet east of the proposed project area on the north side of the San Luis Rey River. This well has a designated idle status. Records from the CDOC show that this well was previously known as "the Ganymede well" and drilling operations have ceased at the site since 1929 (CDOC 2005a). There is a record of an oil and gas well operated by Oceanside Oil and Gas Syndicate located approximately 1.5 miles east of the proposed project area along Mesa Drive. This well has a designated idle status. Records from the CDOC show that this well location was located under the current alignment of Mesa Drive. The records show that the well was abandoned around 1925 and has been inactive since (CDOC 2005b). There was no visual indication of either well or record found of oil, gas, or water seepage at either well location. There are no current offshore oil support facilities or oil and gas facilities that are in operation within the City (CDOC 2023).

4.12.2 Discussion

a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?

and

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?

The proposed project is not located within an existing MRZ or a proposed MRZ (CDOC 1996, CDOC 2018). The proposed project is not located within a mineral resource recovery site delineated by the County General Plan or any other applicable land use plan (San Diego County 2011, City of Oceanside 2002). The project site does not include regional or statewide significant mineral lands. Construction activities would be temporary in nature and would not conflict with or limit access to mineral resources. Operation of the proposed project would be similar to existing conditions. The proposed project would not result in the loss of availability of resources that are of value to the

region or the state and would not otherwise interfere with or preclude access to mineral resources. No impacts would occur, and no mitigation measures are required.

4.12.3 References

California Department of Conservation (CDOC). 2023. Well Finder (WellSTAR). Online: https://www.conservation.ca.gov/calgem/Pages/Wellfinder.aspx. Date Accessed: October 25, 2023.

CDOC. 2018. Candidate Areas for Updated Designation in the Western San Diego County Production Consumption (P-C) Region, California - Northern Part. Online: https://www.conservation.ca.gov/smgb/Pages/Western-SD-Designation.aspx. Date Accessed: October 24, 2023.

CDOC. 2017. Update of Mineral Land Classification: Portland Cement Concrete-Grade Aggregate in the Western San Diego County Production-Consumption Region, California. Online: https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Reports/SR_240-MLC-Report.pdf. Date Accessed: October 24, 2023.

CDOC. 2005a. WellStats Orphan Well Entry Project Record 07300045. Online: https://maps.conservation.ca.gov/doggr/wellfinder/. Date Accessed: October 25, 2023.

CDOC. 2005b. WellStats Orphan Well Entry Project Record 07300037. Online: https://maps.conservation.ca.gov/doggr/wellfinder/. Date Accessed: October 25, 2023.

CDOC. 1996. Update of Mineral Land Classification: Aggregate Materials in The Western San Diego County Production-Consumption Region. Date Accessed: October 24, 2023.

CDOC. 1982. Mineral Land Classification: Aggregate Materials in the Western San Diego County Production-Consumption Region. Online: https://ia800303.us.archive.org/1/items/minerallandclass1434cali/minerallandclass1434cali.pdf. Date Accessed: March 14, 2023.

City of Oceanside. 2002. General Plan. Online: https://www.ci.oceanside.ca.us/government/development-services/planning/general-plan. Date Accessed: October 16, 2023.

San Diego County. 2011. General Plan. Online: https://www.sandiegocounty.gov/content/sdc/pds/generalplan.html#Elements. Date Accessed: October 25, 2023.

4.13 Noise

Would the project result in:

Issues	Determination
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Less Than Significant Impact
b) Generation of excessive groundborne vibration or groundborne noise levels?	Less Than Significant Impact
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 nautical miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	Less Than Significant Impact

This section incorporates the analysis, findings, and recommendations in the *Noise Analysis for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project* (RECON Environmental Inc. [RECON] 2022).

4.13.1 Setting

4.13.1.1 Fundamentals of Noise

Noise is defined as unwanted sound, and thus is a subjective reaction to characteristics of a physical phenomenon. A frequency weighting measure that simulates human perception is commonly used to describe noise environments and to assess impacts on noise-sensitive areas. It has been found that A-weighting of sound levels best reflects the human ear's reduced sensitivity to low frequencies, and correlates well with human perceptions of the annoying aspects of noise. The A-weighted decibel scale (dBA) is cited in most noise criteria. The decibel (dB) notation used for sound levels describes a logarithmic relationship of acoustical energy, for example, a doubling of acoustical energy results in an increase of three dB, which is considered barely perceptible. A ten-fold increase in acoustical energy equals a ten dB change, which is subjectively like a doubling of loudness. Table 4.13-1, Typical Noise Levels, identifies decibel levels for common sounds heard in the environment.

Table 4.13-1: Typical Noise Levels

COMMON OUTDOOR ACTIVITY	NOISE LEVEL (DBA)	COMMON INDOOR ACTIVITY
Jet flyover at 1,000 feet	110	Rock band
Gas lawnmower at three feet	100	
Diesel truck at 50 feet at 50 mph	90	Food blender at three feet
Noisy urban area, daytime	80	Garbage disposal at three feet

COMMON OUTDOOR ACTIVITY	NOISE LEVEL (DBA)	COMMON INDOOR ACTIVITY
Gas lawnmower, 100 feet	70	Vacuum cleaner at ten feet
Commercial area		Normal speech at three feet
Heavy traffic at 300 feet	60	Large business office
Quiet urban daytime	50	Dishwasher next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime		
Quiet rural nighttime	30	Library
		Bedroom at night, concert hall (background)
	20	Broadcast/recording studio
	10	
Lowest threshold of human hearing	0	Lowest threshold of human hearing

Source: RECON 2022

Several time-averaged scales represent noise environments and consequences of human activities. The most commonly used noise descriptors are equivalent A-weighted sound level over a given time period (Leq); maximum sound level (L_{max}); day-night level (L_{dn}); and Community Noise Equivalent Level (CNEL). The following defines these noise descriptors:

- **Equivalent Sound Level (L_{eq}):** Represents an average of the sound energy occurring over a specified period. L_{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound that actually occurs during the same period. The 1-hour A-weighted equivalent sound level is the energy average A-weighted sound levels occurring during a 1-hour period and is the basis for noise abatement criteria used by Caltrans and the Federal Highway Administration (FHWA).
- **Maximum Sound Level (L_{max}):** The highest instantaneous sound level measured during a specified period.
- **Day-Night Level (L_{dn}):** The energy average of A-weighted sound levels occurring over a 24-hour period, with a 10-dB penalty applied to A-weighted sound levels occurring during nighttime hours between 10:00 p.m. and 7:00 a.m.
- **Community Noise Equivalent Level (CNEL):** Similar to L_{dn}, CNEL is the energy average of the A-weighted sound levels occurring over a 24-hour period, with a 10 dB penalty applied to A-weighted sound levels occurring during the nighttime hours between 10:00 p.m. and 7:00 a.m., and a 5 dB penalty applied to the A-weighted sound levels occurring during evening hours between 7:00 p.m. to 10:00 p.m.

Noise levels are generally considered low when ambient levels are below 45 dBA, moderate in the 45 to 60 dBA range, and high above 60 dBA. Although people often accept the higher levels associated with very noisy urban residential and residential-commercial zones, they nevertheless are considered to be adverse levels of noise with

respect to public health because of sleep interference. For purposes of this analysis, direct roadway noise impacts would be considered significant if increases in roadway traffic noise levels attributed to the proposed project were greater than 3 dBA CNEL at an existing noise-sensitive land use.

4.13.1.2 Fundamentals of Vibration

Vibration refers to groundborne noise and perceptible motion. Groundborne vibration is almost exclusively a concern inside buildings and is typically not perceived as an outdoor issue. The motion may be discernible but without the effects associated with the shaking of a building there is less adverse reaction. Vibration energy propagates from a source through intervening soil and rock layers, to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Building vibration may be perceived by the occupants as motion of building surfaces, rattling of items on shelves or hanging on walls, or as a low-frequency rumbling noise. The rumble noise is caused by the vibrating walls, floors, and ceilings radiating sound waves. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by 10 dB or less. This is an order of magnitude below the damage threshold for normal buildings.

Groundborne vibration is typically generated by construction equipment during construction activities and occasional traffic on rough roads. Issues with groundborne vibration and noise from these typical sources are localized; within 100-feet of the source generating the vibration and never greater than 200 feet from a source. When roadways are smooth, vibration from traffic, even heavy trucks, is rarely perceptible. It is assumed for most projects that the roadway surface will be smooth enough that groundborne vibration from street traffic would not exceed impact criteria; however, project construction could result in groundborne vibration that could be perceptible and annoying.

Groundborne vibration has the potential to disturb people as well as to damage buildings. The effects of ground-borne vibration can include perceptible movement of floors in buildings, rattling of windows, shaking of items on shelves or hanging on walls, and low-frequency noise. Although it is possible for vibrations from construction projects to cause building damage, the vibrations from construction activities are almost never of sufficient amplitude to cause more than minor cosmetic damage to buildings (RECON 2022). Although the perceptibility threshold is approximately 65 VdB (VdB is the vibration velocity level as measured in the decibel scale), human response to vibration is not usually substantial unless the vibration exceeds 70 VdB. A vibration level that causes annoyance is well below the damage risk threshold for typical buildings (100 VdB) (RECON 2022). Table 4.13-2 shows typical human responses to groundborne noise and vibration.

Table 4.13-2: Human Response to Groundborne Noise and Vibration

VIBRATION VELOCITY LEVEL	NOISE LEVEL		HUMAN RESPONSE
	LOW FREQ[1]	MID FREQ[2]	
65 VdB	25 dBA	40 dBA	Approximate threshold of perception for many humans. Low-frequency sound: usually inaudible. Mid-frequency sound: excessive for quiet sleeping areas.
75 VdB	35 dBA	50 dBA	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find transit vibration at this level annoying. Low-frequency noise: tolerable for sleeping areas. Mid-frequency noise: excessive in most quiet occupied areas.
85 VdB	45 dBA	60 dBA	Vibration tolerable only if there are an infrequent number of events per day. Low-frequency noise: excessive for sleeping areas. Midfrequency noise: excessive even for infrequent events for some activities.

Source: RECON 2022

Notes: [1] Approximate noise level when vibration spectrum peak is near 30 Hertz. [2] Approximate noise level when vibration spectrum peak is near 60 Hertz.

Table 4.13-3 shows typical construction equipment used in project construction and the vibration they generate as measured from a distance of 25 feet in both PPV and VdB.

Table 4.13-3: Vibration Generating Construction Equipment

CONSTRUCTION EQUIPMENT	REFERNECE PPV AT 25 FEET (INCHES/SECOND)	VIBRATION LEVEL IN VDB
Vibratory Roller	0.21	106
Large Bulldozer	0.089	99
Caisson Drilling	0.089	99
Loaded Trucks	0.076	98
Jackhammer	0.035	91
Small Bulldozer	0.003	70
Pile Driver	1.1	121
Crack-and-seat operations	2.4	128

Source: Caltrans 2020

For this analysis, vibrations associated with construction activity would be considered significant if they resulted in a vibration level greater than 0.20 inches/second PPV.

4.13.1.3 Sensitive Noise Receptors

Some land uses are considered more sensitive to ambient noise levels than others because of the amount of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities typically involved. Residences, transient lodging, schools, rest homes, churches and hospitals are generally more sensitive to noise than commercial and industrial land uses. Eighteen sensitive receptors were

identified in the project vicinity consisting of hotel, commercial, residential, and restaurant uses. Table 4.13-4 lists the sensitive receptors and their locations.

Table 4.13-4: Sensitive Receptors Information

SENSITIVE RECEPTOR NUMBERS	LAND USE	ADDRESS
1	Residential	501 San Luis Rey Drive
2	Residential	505 San Luis Rey Drive
3	Residential	510 San Luis Rey Drive
4	Residential	519 Monterey Drive
5	Residential	516 Monterey Drive
6	Residential	515 Capistrano Drive
7	Commercial	1415 Coast Highway
8	Hotel	1401 Coast Highway
9	Residential	1429 Coast Highway
10	Hotel (Façade)	1401 Carmelo Drive
11a	Hotel (Façade)	1301 Carmelo Drive
11b	Hotel (Façade)	
11c	Hotel (Façade)	
11d	Hotel Pool	
11e	Hotel Basketball Court	
11f	Hotel Tennis Court	
12a	Hotel Façade	1103 Coast Highway
12b	Hotel Façade	
12c	Hotel Pool	
12d	Hotel Façade	
13	Commercial	936 Coast Highway
14	Residential	815 Harbor Cliff Way
15	Residential	1019 Costa Pacifica Way
16	Commercial	282/284/315 Harbor Drive
17	Restaurant	314 Harbor Drive
18	Residential	1200 Harbor Drive

Source: RECON 2022

4.13.1.4 Existing Noise Environment

Noise levels at the project site and in the vicinity are primarily dominated by vehicular traffic along Coast Highway, Interstate 5 (I-5), and State Route 76 (SR-76). Long-term and short-term noise monitoring was not performed as part of the project; as such, the existing ambient noise levels were modeled based on the existing traffic volumes on roadways and freeways in the project vicinity. Table 4.13-5 lists the range of existing ambient noise levels at each of the sensitive receptors in the project vicinity.

Table 4.13-5: Existing Ambient Noise Level at Sensitive Receptors

SENSITIVE RECEPTOR NUMBERS	LAND USE	EXISTING AMBIENT NOISE LEVEL (CNEL)
1	Residential	78
2	Residential	75
3	Residential	76
4	Residential	78
5	Residential	77
6	Residential	78
7	Commercial	78
8	Hotel	76
9	Residential	68
10	Hotel (Façade)	66
11a	Hotel (Façade)	61 to 71
11b	Hotel (Façade)	
11c	Hotel (Façade)	
11d	Hotel Pool	
11e	Hotel Basketball Court	
11f	Hotel Tennis Court	
12a	Hotel Façade	67 to 73
12b	Hotel Façade	
12c	Hotel Pool	
12d	Hotel Façade	
13	Commercial	71
14	Residential	71
15	Residential	60
16	Commercial	55
17	Restaurant	53
18	Residential	62

Source: RECON 2022

As shown above, existing ambient noise levels in the project vicinity range between 61 to 78 CNEL. Figure 4.13-1 Existing Ambient Noise Levels shows the location of the sensitive receptors and the ambient noise level contours that the sensitive receptors are exposed to.

4.13.1.5 Regulatory Setting

State and local agencies that govern the proposed project area have policies and standards regarding noise levels for land use types as well as construction operations. Caltrans Standard Specification, 14-8.02, Noise Control, states that projects: “Do not exceed 86 dBA L_{max} at 50 feet from the job site from 9:00 PM to 6:00 AM.” Receptors that are located beyond 50 feet of a project area do not need to be considered unless there is a reasonable expectation that noise impacts would extend beyond that boundary.”

The City of Oceanside’s (City) Noise Control Ordinance, Chapter 38 of the Municipal Code, regulates operational noise and sets noise standard thresholds outlined in Table 4.13-6. The City Noise Control Ordinance sets maximum one-hour average sound level

thresholds for different land uses. The City Manager holds the power to make an exception for construction of a project that furthers public interest (RECON 2022).

Table 4.13-6: City Exterior Noise Standards

ZONE	APPLICABLE LIMIT [DB(A) L_{EQ}]	TIME PERIOD
Residential Estate, Single-Family Residential, Medium Density	50	7:00 a.m. to 9:59 p.m.
Residential, Agricultural, Open Space	45	10:00 p.m. to 6:59 a.m.
High Density, Residential Tourist	55	7:00 a.m. to 9:59 p.m.
	50	10:00 p.m. to 6:59 a.m.
Commercial	65	7:00 a.m. to 9:59 p.m.
	60	10:00 p.m. to 6:59 a.m.
Industrial	70	7:00 a.m. to 9:59 p.m.
	65	10:00 p.m. to 6:59 a.m.
Downtown	65	7:00 a.m. to 9:59 p.m.
	55	10:00 p.m. to 6:59 a.m.

Source: RECON 2022

Section 38.16 of the Noise Ordinance prohibits nuisance noise as recommended in the City of Oceanside General Plan (City General Plan) Noise Element. It is unlawful for any person to make, continue, or cause to be made or continued, within the limits of the City, any disturbing, excessive, or offensive noise which causes discomfort or annoyance to reasonable persons of normal sensitivity (RECON 2022). Section 38.17 specifically prohibits the operation of any pneumatic or air hammer, pile driver, steam shovel, derrick, steam, or electric hoist, parking lot cleaning equipment or other appliance, the use of which is attended by loud or unusual noise, between the hours of 10:00 p.m. and 7:00 a.m. (RECON 2022).

The City General Plan Noise Element establishes the following noise level regulations for construction related noise and general noise:

- It should be unlawful for any person within any residential zone of 500 feet therefrom to operate any pile driver, power shovel, pneumatic, power hoist, or other construction equipment between 8:00 p.m. and 7:00 a.m. generating an ambient noise level of 50 dBA at any property line, unless an emergency exists.
- It should be unlawful for any person to operate any construction equipment at a level in excess of 85 dBA at 100 feet from the source.
- It should be unlawful for any person to engage in construction activities between 6:00 p.m. and 7:00 a.m. when such activities exceed the ambient noise level by 5 dBA. A special permit may be granted by the Director of Public Works if extenuating circumstances exist.
- Noise levels shall not be so loud as to cause danger to public health in all zones except manufacturing zones where noise levels may be greater.
- Noise shall be controlled at the source where possible.

- Noise shall be intercepted by barriers or dissipated by space where the source cannot be controlled.
- Noise shall be reduced from structures by the use of soundproofing where other controls fail or are impractical.
- Noise levels shall be considered in the approval of any projects or activities, public or private, which requires a permit or other approval from the City.
- Noise levels shall be considered in any changes to the Land Use and Circulation Elements of the General Plan.
- Noise levels of City vehicles, construction equipment, and garbage trucks shall be reduced to acceptable levels.

4.13.2 Discussion

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

During project construction, there are typically two types of short-term noise that is generated. The first type is regarding construction workers and equipment travel to and from the project site, resulting in an incremental noise increase along roads used for construction commutes. Typically, such construction workers/equipment pass-by on roads generates a relatively high single-event noise exposure of 84 dBA L_{max} as measured at 50-feet from passing construction trucks. This maximum noise level represents less than a 3 dBA long term hourly/daily ambient noise level (L_{eq}) change to exposed areas. As such, workers/equipment trips during the project construction would not generate a substantial temporary noise increase.

The second type of noise generated during project construction is typically from construction equipment used during specific construction phases. Construction of the proposed project is anticipated to occur under three phases: falsework, abutment and bridge construction, and paving. Various types of construction equipment would be used during these three construction phases, all generating different levels of noise depending on how many pieces of equipment are used simultaneously and their location compared to nearby sensitive receptors. Table 4.13-7 shows the construction equipment that would be used during the three project construction phases.

Table 4.13-7: Equipment Used During Construction

CONSTRUCTION EQUIPMENT	NOISE LEVEL (DBA LMAX @ 50 FEET)	NOISE LEVEL (DBA LEQ @ 50 FEET)
Pile Driver	101.3	94.3
Generator	82	79
Dozer	85	81

CONSTRUCTION EQUIPMENT	NOISE LEVEL (DBA LMAX @ 50 FEET)	NOISE LEVEL (DBA LEQ @ 50 FEET)
Frontend Loader	80	76
Excavator	85	81
Concrete Truck	85	81
Street Sweeper	80	70
Paver	85	82
Roller	85	82

Source: RECON 2022

Noise at the construction site would be intermittent and its intensity would vary depending on the type and location of construction equipment being used. The degree of construction noise impacts may vary for different areas of the project area and also vary depending on the construction activities. Based on the construction equipment that would be used during the three phases of project construction, Table 4.13-8 shows the estimated noise levels that would be generated at the sensitive receptors during each construction phase.

Table 4.13-8: Estimated Construction Noise Levels at Sensitive Receptors

SENSITIVE RECEPTOR NUMBERS	FALSEWORK PHASE NOISE LEVELS (DBA LEQ)	ABUTMENT AND BRIDGE CONSTRUCTION PHASE NOISE LEVELS (DBA LEQ)	PAVING PHASE NOISE LEVELS (DBA LEQ)
1	63	58	59
2	62	57	58
3	59	56	58
4	58	55	58
5	55	53	56
6	54	52	55
7	56	55	60
8	58	64	72
9	59	57	65
10	58	55	59
11a-11f	56-68	52-68	54-67
12a-12d	58-69	57-77	56-77
13	57	65	60
14	53	50	50
15	57	51	51
16	52	48	49
17	50	47	48
18	54	49	50

Source: RECON 2022

As shown above, the sensitive receptors in proximity to the proposed project would be exposed to temporary increases in noise levels during each construction phase. Specifically, the Roadway Inn (sensitive receptor 12a-12d) would be exposed to the

highest construction noise levels, up to 77 dBA Leq, during the abutment/bridge construction and paving phases. This would represent a negligible 4 dBA L_{eq} temporary noise increase at this sensitive receptor based on the existing ambient noise level in the project area. The sensitive receptors located in the residential zone to the project's northeast and west would not be exposed to construction noise levels that would exceed existing ambient noise levels. Thus, construction noise generated by the proposed project would not exceed Caltrans or City construction noise thresholds for sensitive receptors located within the vicinity of the proposed project. Overall, noise construction impacts would be less than significant, and no mitigation measures are required.

The proposed project would replace the existing Coast Highway Bridge over San Luis River and construct a new bridge designed to current structural and geometric standards. Operations would be similar to existing conditions upon construction completion. The proposed project would not increase capacity along Coast Highway that could increase ambient noise levels. Table 4.13-9 shows the noise levels at each of the sensitive receptors once the project is operational and the noise level change compared to existing ambient noise levels. Figure 4.13-2 depicts the noise contours at each of the sensitive receptors once project operation commences.

Table 4.13-9: Existing Plus Project Noise Levels at Sensitive Receptors

SENSITIVE RECEPTOR NUMBERS	ADDRESS	LAND USE	NOISE LEVEL CNEL		
			Existing	Existing Plus Project	Change
1	501 San Luis Rey Drive	Residential	78	78	0
2	505 San Luis Rey Drive	Residential	75	75	0
3	510 San Luis Rey Drive	Residential	76	76	0
4	519 Monterey Drive	Residential	78	78	0
5	516 Monterey Drive	Residential	77	77	0
6	515 Capistrano Drive	Residential	78	78	0
7	1415 Coast Highway	Commercial	78	78	0
8	1401 Coast Highway	Hotel	76	76	0
9	1429 Coast Highway	Trailer Park Residential	68	68	0
10	1401 Carmelo Drive	Hotel Facade	66	66	0
11a	1301 Carmelo Drive	Hotel Facade	65	65	0
11b		Hotel Facade	70	70	0
11c		Hotel Facade	71	71	0
11d		Hotel Pool	62	62	0
11e		Hotel Basketball Court	62	62	0
11f		Hotel Tennis Court	61	61	0
12a	1103 Coast Highway	Hotel Facade	69	72	3
12b		Hotel Facade	73	74	1
12c		Hotel Pool	67	67	0
12d		Hotel Facade	71	71	0
13	936 Coast Highway	Commercial	71	71	0
14	815 Harbor Cliff Way	Residential	71	71	0
15	1019 Costa Pacifica Way	Residential	60	60	0
16	282/284/315 Harbor Drive	Commercial	55	55	0
17	314 Harbor Drive	Restaurant	53	53	0

18	1200 Harbor Drive	Residential	62	62	0

Source: RECON 2022

As shown above, the majority of the sensitive receptors in the project vicinity would not be exposed to a noise level change once project operation commences. The Roadway Inn (sensitive receptor 12a-12d) would be exposed to a 1 dBA CNEL to 3 dBA CNEL noise level increase due to the alignment of the bridge moving further west and closer to the hotel compared to the existing project alignment. As discussed in the noise analysis, a change of 3 dBA CNEL is considered a barely perceptible change in noise levels to the average human. Therefore, the maximum estimated increase of noise levels by 3 dBA CNEL, is considered negligible. Thus, operation of the proposed project would not generate a substantial permanent increase in ambient noise levels at sensitive receptors in the project vicinity in excess of state and local standards. Impacts would be less than significant, and no mitigation measures are required.

b) Generation of excessive groundborne vibration or groundborne noise levels?

During construction of the proposed project, vibration impacts from the proposed project may impact the surrounding land uses. Groundborne vibration generated by construction projects is usually highest during pile driving, soil compacting, jackhammering, and demolition-related activities. Vibrations associated with construction activity would be considered significant if they resulted in a vibration level greater than 0.20 inches/second PPV.

Pile driving activities associated with project construction during the falsework phase would generate the highest groundborne vibration levels in the project area. The maximum construction vibration during the abutment/bridge construction and paving phases would occur from equipment use similar to a large bulldozer or loaded truck. The nearest sensitive receptor to the proposed project during the falsework phase, the Worldmark Oceanside Hotel (sensitive receptor 11) would be located approximately 250 feet from the nearest pile driving activity area. Based on pile driving activity generating a vibration level of 1.1 inches/second PPV at 25 feet, it can be estimated that the nearest sensitive receptor would be exposed to vibration levels equating to 0.05 inches/second PPV. The nearest sensitive receptors to the area where abutment/bridge construction and paving phases would occur is approximately 50-feet. Based on large bulldozer/loaded trucks being used and generating vibrations during these construction phases, it is estimated that the nearest sensitive receptors would be exposed to vibration levels equating to 0.04 inches/second PPV or less. Thus, construction activities occurring for the proposed project would not generate excessive groundborne vibration or groundborne noise levels that exceed the threshold of 0.20 inches/second PPV. Impacts would be less than significant, and no mitigation measures are required.

Upon construction completion, vibrations would be similar to existing conditions and impacts would not be significant from the bridge. No mitigation measures are required.

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 nautical 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?

The closest public airport to the proposed project is the Bob Maxwell Memorial Airfield at Oceanside Municipal Airport which is located approximately 1.75 miles northeast of the project site. The Oceanside Municipal Airport (OKB) has put in place noise abatement procedures for arriving and departing aircraft (OKB 2023). These procedures mark the area along the north and south side of the San Luis River between the church and I-5 as the most noise sensitive area. The airport indicates not to "overfly this area" this area and to avoid flying over sensitive receptors such as houses (OKB 2023).

The proposed project is located in a high noise environment due to its proximity to I-5 and Oceanside Municipal Airport. The proposed project would not include development of residential units, or commercial or industrial structures for employment, but rather would replace the existing Coast Highway Bridge over San Luis River. Operations would be similar to existing conditions upon construction completion and would not increase capacity along Coast Highway. No new population or jobs would be created by this proposed project that would result in new or expanded populations being introduced into an area near the airport and marked as noise sensitive. Operation of the proposed project would not expose people to noise levels beyond existing conditions. Impacts would be less than significant in this regard, and no mitigation measures are required.

4.13.3 References

Caltrans. 2020a. Traffic Noise Analysis Protocol. Online: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/traffic-noise-protocol-april-2020-a11y.pdf. Date Accessed: February 1, 2024.

Caltrans. 2020. Transportation and Construction Vibration Guidance Manual. Online: https://dot.ca.gov/programs/environmental-analysis/noise-vibration/guidance-manuals. Date Accessed: February 2, 2024.

RECON Environmental Inc. (RECON). 2022. Noise Analysis for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project. Date Accessed: March 17, 2023.

Oceanside Municipal Airport (OKB). 2023. OKB Traffic Pattern Noise Abatement. Online: https://okbairport.com/aircraft-operations#530b7f44-51d5-4870-9ed1-7c1671a317e8. Date Accessed: March 21, 2023.

4.14 Population and Housing

Would the project:

Issues	Determination
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)?	No Impact
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact

4.14.1 Setting

According to the U.S. 2020 Decennial Census, San Diego County has a total population of 3,298,634 individuals and the City has a total population of 174,068 individuals and a total of 67,371 housing units (U.S. Census 2020). The project site is located in census tracts 186.01, 186.15, and 184. Census tract 186.01 encompasses the proposed project area north of the San Luis Rey River and has an estimated population of 4,622 individuals and a total of 1,575 housing units. Census tract 186.15 and 184 encompass the proposed project area south of the San Luis Rey River, to the east and west side of Coast Highway, with an estimated population of 2,814 and 3,561 individuals, and total housing units of 953 and 2,051, respectively.

According to the 2021 American Community Survey, 10.6 percent (%) of individuals in San Diego County are below the poverty threshold. Near the proposed project area, 9.3% of the individuals in census tract 186.01, 18.1% of the individuals in census tract 186.15, and 18.3% of the individuals in census tract 184 are below the poverty threshold (ACS 2021).

4.14.2 Discussion

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)?

and

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

During construction, construction workers would be coming from the surrounding area and not have to relocate. There would be no increase of people or housing in the area due to proposed project construction. The proposed project would replace the existing Coast Highway Bridge over San Luis River and construct a new bridge designed to

current structural and geometric standards. Operations would be similar to existing conditions upon construction completion. The proposed project would not increase capacity along Coast Highway. The proposed project would not provide new housing units or businesses, nor would the proposed project extend existing roads or infrastructure. The proposed project would not remove existing housing units or businesses. The proposed project would only replace the existing Coast Highway Bridge with a new bridge. The proposed project would not induce substantial unplanned population growth in the area, nor would it displace substantial numbers of existing people or housing units. The proposed project would have no impact, and no mitigation measures are required.

4.14.3 References

United States Census Bureau (US Census Bureau). 2021. American Community Survey (ACS). Online: https://data.census.gov/map?q=oceanside%20ca&t=Income%20and%20Poverty&g=050XX00US06073$1400000&tid=ACSST1Y2022.S1701&layer=VT_2022_140_00_PY_D1&mode=thematic&loc=33.2062,-117.3773,z13.5115. Date Accessed: December 4, 2023.

US Census Bureau. 2020. Decennial Census. Online: https://data.census.gov/table?q=United%20States&g=040XX00US06_050XX00US06073_160XX00US0653322&y=2020&d=DEC%20Redistricting%20Data%20(PL%2094-171). Date Accessed: December 4, 2023.

4.15 Public Services

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 following public services:

Issues	Determination
a) Fire protection?	Less Than Significant Impact
b) Police protection?	Less Than Significant Impact
c) Schools?	No Impact
d) Parks?	Less Than Significant Impact
e) Other public facilities?	No Impact

This section incorporates the analysis, findings, and recommendations from the *Community Impact Assessment Memorandum for the Coast Highway (Hill Street) Bridge Replacement Project* (Dewberry 2024a) and the *Traffic Technical Memorandum for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project* (Dewberry 2024b).

4.15.1 Setting

4.15.1.1 City of Oceanside Fire Department & Police Department

Emergency fire and medical services within the City are provided by the Oceanside Fire Department (OFD). The OFD has 8 firehouses serviced by 115 full-time personnel, 34 full and part-time emergency medical technicians, seven full-time lifeguard personnel, 76 part-time lifeguard personnel, with an additional staff of eight providing support (OFD 2023). Police protection services in the City are provided by the Oceanside Police Department (OPD). OPD is comprised of 219 sworn officers and 115 professional staff members (OFD 2023).

4.15.1.2 Schools

The City is served primarily by the Oceanside Unified School District (OUSD). The OUSD consists of fifteen elementary schools, four middle schools, two comprehensive high schools, one adult transition program, and one alternative education school (OUSD 2022). The closest schools to the proposed project are Laurel Elementary School, located approximately 0.45 miles to the east of the proposed project, North Terrace Elementary School, located approximately 0.65 mile to the northeast, Oceanside High School, located approximately 0.75 mile to the southeast, and Mission Elementary School and Jefferson Middle School, both located approximately 1 mile to the east.

4.15.1.3 Parks

The San Luis Rey River Trail (SLRRT), a Class I multiuse path, is identified within the City of Oceanside General Plan (City General Plan) and the City Parks and Recreational Master Plan. The City-maintained SLRRT begins on the east at the State Route 76 (SR-76)/North Santa Fe Avenue intersection and ends on the west at the Neptune Street/North Cleveland Street intersection, a length of approximately nine miles. At the western terminus of the SLRRT, North Cleveland Street is a designated bicycle route south to the Oceanside Transit Center. Within and adjacent to the project site, the SLRRT parallels the southern riverbank, a former railroad corridor, providing recreational and commuter uses for bicyclists and pedestrians.

Oceanside Parks and Recreation Department works to provide community engagement through parks, beaches, recreation facilities, senior centers, community pools, and programs (City of Oceanside 2024). Oceanside Harbor, Oceanside Harbor Beach, Strand Beach, Oceanside City Beach, and Oceanside Municipal Fishing Pier are located within an approximately one-mile radius of the project site. These recreational facilities are serviced by street parking along San Luis Rey Drive and Carmelo Drive. Capistrano Park is a community park, located approximately 0.3 miles to the northeast of the project site, which provides the local community with outdoor greenspace, baseball fields, tennis courts, a playground, and picnic tables. There are public parking lots within 0.5 to 1 mile of the proposed project, including the Oceanside Harbor Parking Lots 1, 4, 5, 6, 7, 8a, 8b, 9, and 10. The City also provides for other trails and 2 golf courses (Dewberry 2024a and 2024b).

4.15.2 Discussion

a) Fire Protection?

and

b) Police Protection?

During construction, Coast Highway and the SLRRT would remain open, and detours would not be required. Construction of the proposed project could result in accident or emergency incidents that would require emergency response, such as fire, police, medical, or hazardous waste services; however, construction activities would be short in duration. Construction Traffic Control would be present while traffic is moved onto the new alignment. Traffic control is not anticipated to significantly interfere with fire and police response times. The SLRRT would undergo short and intermittent closures, at a maximum time of 10 minutes, and occur when construction equipment must cross the trail. Pedestrians and bicyclists would have continued access to and along the SLRRT for commuting and recreational purposes. As discussed in the Project Conditions in Section 4.16, Recreation, routes through the construction area on SLRRT would be posted (signs and/or flaggers) on the trail to alert SLRRT users of the temporary changes to the path during construction. SLRRT intermittent closures would not interfere with fire and police response times.

Once the proposed bridge is constructed, traffic would be transitioned from the existing bridge onto the new bridge. During the cutover, delays and short-term closures as necessary to make the transition. Lane closures would be temporary in nature and would cease upon construction completion. A traffic handling plan (refer to Project Conditions in Section 4.17, Transportation) would be submitted by the contractor for approval prior to construction beginning. The proposed project would be coordinated with the OFD, OPD, and other law enforcement or emergency services providers within the area. Any increase in police or fire services due to construction activities would be temporary, ceasing upon completion of the proposed project. Therefore, construction impacts would be less than significant. No mitigation measures are required.

Operations would be similar to existing conditions upon construction completion. The demands on fire and police protection services upon completion of construction would be similar to existing conditions. No operations impact would occur. The proposed project would have a less than significant impact on fire protection and police protection, and no mitigation measures are required.

c) Schools?

Construction workers are anticipated to come from surrounding areas, and thus would not relocate to the proposed project vicinity. Temporary increase in school services would not occur. The proposed project would not increase population, refer to Section 4.14, Population and Housing. Upon construction completion, the proposed project operations would not result in an increase in school age children beyond what OUSD currently provides. There would be no impact in regard to school service needs and no mitigation measures are required.

d) Parks?

The proposed project would not increase population, refer to Section 4.14, Population and Housing, and thus would not result in an increase in demand on parks and recreational facilities (refer to Section 4.16, Recreation, for further details). The proposed project would not require the construction or expansion of recreational facilities beyond what is already proposed. The nearest parks and recreation facilities to the proposed project are the SLRRT, Oceanside Harbor, Oceanside Harbor Beach, and Capistrano Park.

The SLRRT parallels the southern riverbank and is located within and adjacent to the proposed project corridor. During construction, pedestrians and bicyclists would have continued access to and along the SLRRT for commuting and recreational purposes; however, there would be short and intermittent trail closures along the SLRRT, at a maximum time of 10 minutes. These short-duration closures would occur when staging equipment must cross or use the trail. As discussed in the Project Conditions in Section 4.16, Recreation, routes through the construction area would be posted (signs and/or flaggers) on the trail to alert SLRRT users of the temporary changes to the path during construction (Dewberry 2024a). Operation of the path would be similar to existing

conditions upon construction completion. Impacts to the SLRRT from the proposed project would be less than significant.

Oceanside Harbor is located approximately 450 feet to the west of the proposed project and Oceanside Harbor Beach is located approximately 0.25 miles to the west of the proposed project. Staging areas for proposed project construction would impact a portion of the Oceanside Harbor Parking Lot #1, a public parking lot located at 101-499 Riverside Drive that provides harbor and beach access through an undercrossing located on the west side of the lot. Parking spaces in the parking lot would be impacted by construction equipment and would be temporarily unavailable. While this could lead to a shortage of parking and affect demand to the Oceanside Harbor and the Oceanside Harbor Beach, street parking and public parking lots provided by the City within 0.7 miles on both the north and south sides of San Luis Rey River, along with e-bike rentals, and the gO'side shuttle service, would help minimize impacts to parking availability. In addition, areas near the harbor would remain available during construction for passenger drop-off, similar to existing conditions. Refer to Section 4.16, Recreation, and Section 4.17, Transportation, for more information on parking impacts. Therefore, the combination of the available City parking, e-bike rentals, and the gO'side shuttle service should adequately service the public need for harbor and beach access during construction. Once the proposed project construction is complete, the construction equipment would be removed from Oceanside Harbor Parking Lot #1, and parking space availability would return to pre-construction conditions (Dewberry 2024b). Operation of Oceanside Harbor Parking Lot #1 would be similar to existing conditions upon construction completion. Impacts would be less than significant, and no mitigation measures are required.

Capistrano Park is a community park located approximately 0.3 miles to the northeast of the proposed project. Capistrano Park has its own contained parking lot. The proposed project would not impact parking, access, or visitors for Capistrano Park and therefore there would be no impact.

e) Other Public Facilities?

The proposed project would use a portion of Oceanside Harbor Parking Lot #1 as a staging area, thus reducing parking availability, as discussed in question d, above. This may increase public use of other City parking lots and public transportation services, such as the City's gO'side Shuttle Program, as discussed above. These impacts would be temporary and cease upon construction completion. Impacts would be temporary and less than significant.

Construction workers are anticipated to come from surrounding areas, and thus would not relocate to the proposed project vicinity. Temporary increase in other public services, such as libraries, public transportation, and other City services would not occur. Impacts would be less than significant.

Operations of the proposed project would be similar to existing conditions upon construction completion. The proposed project would not increase the need for other

public services, as service needs would be similar to existing conditions. The proposed project would have no impact to other public services upon the completion of construction. The proposed project would not increase the population, refer to Section 4.14, Population and Housing, and thus, would not result in an increase in the number of people that would use public services such as libraries, public transportation, and other City services. The proposed project would have less than significant impact on other public services and facilities; no mitigation measures are required.

4.15.3 References

City of Oceanside. 2024. Parks and Recreation. Online: https://www.ci.oceanside.ca.us/government/parks-recreation. Date Accessed: January 5, 2024.

City of Oceanside. 2019. Parks and Recreation Master Plan. Online: https://www.ci.oceanside.ca.us/government/parks-recreation/parks-and-recreation-master-plan. Date Accessed: January 5, 2024.

Dewberry. 2024a. Community Impact Assessment Memorandum for the Coast Highway (Hill Street) Bridge Replacement Project.

Dewberry. 2024b. Traffic Technical Memorandum for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project.

Oceanside Fire Department (OFD). 2023. About Us. Online: https://fire.ci.oceanside.ca.us/department-overview/about-us. Date Accessed: December 6, 2023.

Oceanside Police Department (OPD). 2023. About OPD. Online: https://www.oceansidepolice.com/about-opd. Date Accessed: December 6, 2023.

Oceanside Unified School District (OUSD). 2022. About OUSD. Online: https://www.oside.us/domain/64. Date Accessed: January 3, 2024.

4.16 Recreation

Issues	Determination
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?	Less Than Significant Impact
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?	Less Than Significant Impact

This section incorporates the analysis, findings, and recommendations from the *Community Impact Assessment Memorandum for the Coast Highway (Hill Street) Bridge Replacement Project*, the *Section 4(f) Temporary Occupancy Memorandum for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project*, and the *Traffic Technical Memorandum for the Coast Highway (Hill Street) Bridge Replacement Project* (Dewberry 2024a, Dewberry 2024b, Dewberry 2024c).

4.16.1 Setting

The San Luis Rey River Trail (SLRRT), a Class I multiuse path, is identified within the City of Oceanside General Plan (City General Plan) and the City Parks and Recreational Master Plan. The City-maintained SLRRT begins on the east at the State Route 76 (SR-76)/North Santa Fe Avenue intersection and ends on the west at the Neptune Street/North Cleveland Street intersection, a length of approximately nine miles. At the western terminus of the SLRRT, North Cleveland Street is a designated bicycle route south to the Oceanside Transit Center. Within and adjacent to the project site, the SLRRT parallels the southern riverbank, a former railroad corridor, providing recreational and commuter uses for bicyclists and pedestrians.

There is a paved concrete bicycle and pedestrian sidewalk undercrossing (pedestrian undercrossing) on the north side of the San Luis Rey River near the top of the slope, providing access under Interstate 5 (I-5) and Coast Highway, connecting with the sidewalk on Monterey Drive. This pedestrian undercrossing provides connectivity between the east and west sides of I-5 and Coast Highway.

Oceanside Harbor, Oceanside Harbor Beach, Strand Beach, Oceanside City Beach, and Oceanside Municipal Fishing Pier are located within an approximately one-mile radius of the project site. These recreational facilities are serviced by street parking along San Luis Rey Drive and Carmelo Drive. The Worldmark Oceanside Hotel provides garage parking for their guests. There are public parking lots within 0.5 to 1 mile of the proposed project, including the Oceanside Harbor Parking Lots 1, 4, 5, 6, 7, 8a, 8b, 9, and 10 (Dewberry 2024a and 2024c).

4.16.2 Discussion

Potential impacts from the proposed project are discussed below in response to each of the CEQA checklist questions. Additionally, the Project Conditions listed below will be implemented as part of the proposed project.

PROJECT CONDITIONS

1. During construction, the contractor shall place temporary signage to inform SLRRT users of on-site detour, suggested construction zone procedures and other necessary information.
2. Flaggers will be located on the east and west sides of the construction zone to stop SLRRT users during construction closures. These closures will last no longer than 10 minutes.
3. The temporary signage and flagger requirements will be included in the required standard traffic management plan, provided by the contractor. This plan will be approved by the City prior to construction. The traffic management plan will include information identifying phases of the proposed project, construction scheduling, and appropriate alternative routes, including additional parking locations, routes for SLRRT, detour routes for the pedestrian undercrossing, and emergency services.

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?

The proposed project is a bridge replacement project. It is anticipated that construction workers would come from the surrounding areas to the construction site and would not relocate to the City as a result of the proposed project. Therefore, the proposed project would not result in an increase in population such that it would contribute to exceeding the use capacities of existing neighborhood or regional parks and lead to, or contribute to, their physical deterioration.

The SLRRT would remain open for bicycle and pedestrian use during and after construction, thus, providing for continued non-vehicular access to the beaches and other parts of the City. Closures on the SLRRT would be required. These closures would be short and intermittent, at a maximum time of 10 minutes, and occur when construction equipment must cross the trail. Pedestrians and bicyclists would have continued access to and along the SLRRT for commuting and recreational purposes. As discussed in the Project Conditions, above, routes through the construction area on SLRRT would be posted (signs and/or flaggers) on the trail to alert SLRRT users of the temporary changes to the path during construction.

The pedestrian undercrossing on the north side of the San Luis Rey River would be closed during construction. Detour pedestrian routes would be finalized before construction and be posted prior to the start of construction. Pedestrians from residential streets along San Rafael Drive and San Luis Rey Drive would have continued beach access around and under I-5 and Coast Highway. Closure of the

pedestrian undercrossing would be temporary and would return to pre-construction conditions upon construction completion.

Temporary impacts on parking, especially in the summer months, would occur as construction staging areas would use public parking spaces at Oceanside Harbor Parking Lot #1 because of the height of construction equipment and topography requirements for construction equipment access. While this could lead to a shortage of parking and affect demand to nearby recreational areas including the harbor, beaches, and fishing pier, street parking and public parking lots provided by the City within 0.7 miles on both the north and south sides of San Luis Rey River, along with e-bike rentals, and the gO'side shuttle service, would help minimize impacts to parking and allow for continued access to nearby recreational areas, including to the beach and SLRRT.

Impacts to parking, SLRRT, and the pedestrian undercrossing would return to pre-construction conditions upon completion of the proposed project. In addition, the new bridge would not increase capacity, add lanes, or substantially widen the bridge, which could indirectly lead to population growth, and an increase in demand of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. The proposed project would not result in increased use of existing regional or neighborhood parks and recreation facilities such that substantial physical deterioration of the facility would occur or be accelerated. Impacts would be less than significant, and no mitigation measures are required.

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 proposed project does not include the creation of recreational facilities. The proposed project is a bridge replacement project. While construction workers would be brought to the area during the construction season, based on the temporary nature of construction, they are anticipated to come from the surrounding areas, and thus would not relocate. The pedestrian undercrossing would be closed during construction and the SLRRT and Oceanside Harbor Parking Lot #1 would experience temporary impacts, as discussed above. However, access to the SLRRT, beaches, and other recreational facilities would be maintained during construction. Therefore, an increased demand on recreational facilities resulting in the need for new or improved facilities would not occur.

The proposed project would not contribute to an increase in population during construction or operations, thus, it would not result in an increase in demand on existing recreational facilities. Operations of the SLRRT, pedestrian undercrossing, and Oceanside Harbor Parking Lot #1 would return to pre-construction conditions upon completion of construction. Thus, the proposed project would not result in an increase in substantially affecting recreational users' access to recreational facilities. No additional recreational facilities would be required to be created as a result of the proposed

project. The proposed project would have a less than significant impact in this regard and no mitigation measures are required.

4.16.3 References

Dewberry. 2024a. Community Impact Assessment Memorandum for the Coast Highway (Hill Street) Bridge Replacement Project (Bridge No. 57C-0322) Federal Project Number BRLS-5079.

Dewberry. 2024b. Section 4(f) Temporary Occupancy Memorandum for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project (BRLS-5079(030)).

Dewberry. 2024c. Traffic Technical Memorandum for the Coast Highway (Hill Street) Bridge Replacement Project (Bridge No. 57C-0322) Federal Project Number BRLS-5079.

4.17 Transportation

Would the project:

Issues	Determination
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Less Than Significant Impact
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	Less Than Significant Impact
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less Than Significant Impact
d) Result in inadequate emergency access?	Less Than Significant Impact

This section incorporates the analysis, findings, and recommendations from the *Community Impact Assessment Memorandum for the Coast Highway (Hill Street) Bridge Replacement Project* and the *Traffic Technical Memorandum for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project* (Dewberry 2024a, Dewberry 2024b).

4.17.1 Setting

4.17.1.1 Roadways

Coast Highway is a two-lane roadway that is classified as a “collector” and accommodates an average daily traffic (ADT) of approximately 10,000 vehicles a day and a level of service (LOS) rating “D” (Dewberry 2024b). Monterey Drive is a two-lane roadway connecting to Carmelo Drive/San Luis Rey Drive and is not classified in the City of Oceanside General Plan (City General Plan). Carmelo Drive turns into San Luis Rey Drive at Monterey Drive; it is a two-lane roadway connecting Harbor Drive to Oceanside Harbor Parking Lot #1; it is not classified in the City General Plan. Interstate 5 (I 5) is an eight-lane divided freeway with auxiliary lanes in both directions and is classified as a “freeway” by the City General Plan. State Route 76 (SR-76) is four-lane divided roadway that is classified as “Expressway 76” by the City General Plan (City of Oceanside 2012).

4.17.1.2 Parking Facilities

There is street parking along San Luis Rey Drive and Carmelo Drive. The Worldmark Oceanside Hotel provides garage parking for their guests. There are public parking lots within 0.5 miles of the proposed project, including the Oceanside Harbor Parking Lots 1, 4, 5, 6, 7, 8a, 8b, 9, and 10 (Dewberry 2024a and 2024b).

4.17.1.3 Public Transit Services

The City provides a gO'side Shuttle Program that allows people to request fully electric shuttles ahead of time through the "Ride Circuit" app or by calling (760) 547-7870. These shuttles provide an alternative mode of transportation for beach goers at a low fare, $3.00 per rider (Dewberry 2024a and 2024b). The City also has e-bike rental operations available around town including Rent O'side, Socal Bicycle Imports, Podego, and Mostly E-bikes (Dewberry 2024).

4.17.1.4 Bicycle and Pedestrian Facilities

The San Luis Rey River Trail (SLRRT), a class I multiuse path, is identified within the City General Plan and the City Parks and Recreational Master Plan. The City-maintained SLRRT begins on the east at the SR 76/North Santa Fe Avenue intersection and ends on the west at the Neptune Street/North Cleveland Street intersection, a length of approximately nine miles. At the western terminus of the SLRRT, North Cleveland Street is a designated bicycle route south to the Oceanside Transit Center. Within and adjacent to the project site, the SLRRT parallels the southern riverbank, a former railroad corridor, providing recreational and commuter uses for bicyclists and pedestrians.

There is a pedestrian undercrossing on the north side of the San Luis Rey River near the top of the slope, providing access under I-5 and Coast Highway, connecting with the sidewalk on Monterey Drive. This pedestrian undercrossing provides connectivity between the east and west sides of I-5 and Coast Highway.

4.17.1.5 Evacuation Routes/Emergency Evacuation Plans

The City General Plan Public Safety Element defines evacuation routes as main through-streets and highways within the city. Hill Street, where the project is located, as well as I-5 immediately east of the project site are considered evacuation routes by the City.

The San Diego County Emergency Plan, San Diego County Multi-Jurisdictional Hazard Mitigation Plan, and Oceanside General Plan Public Safety Element serves as the main emergency plans that are applicable to the proposed project.

- **San Diego County Emergency Plan:** Is a comprehensive emergency management system that provides for planned response to disaster situations associated with natural disasters, technological incidents, and nuclear defense operations. The Plan includes operational concepts relating to various emergency situations, identifies components of the Emergency Management Organization and describes the overall responsibilities for protecting life and property and assuring the overall well-being of the population. The plan also identifies the source of outside support that might be provided (through mutual aid and specific statutory authorities) by other jurisdictions, state and federal agencies and the private sector. The City participates in this plan.

- **San Diego County Multi-Jurisdictional Hazard Mitigation Plan:** This plan was prepared in July 2010 to meet federal and state requirements for disaster preparedness to make the county eligible for funding and technical assistance from state and federal hazard mitigation programs. The plan includes a risk assessment to enable local jurisdictions to identify and prioritize appropriate mitigation actions that will reduce losses from potential hazards, including flooding, earthquakes, fires, and man-made hazards. To address potential hazards, the plan then incorporates mitigation goals and objectives, mitigation actions and priorities, an implementation plan, and documentation of the mitigation planning process for each of the twenty-one participating jurisdictions. The City participates in this plan.
- **City General Plan – Public Safety Element:** This General Plan Element identifies hazards, such as earthquakes, fires, and tsunamis, and provides guidance for proper mitigation measures, such as evacuation routes, to ensure safety. Along with long range policies regarding seismic, flooding, and fire hazards, this element also includes a Public Safety Plan. The Public Safety Plan includes maps of indicating areas that have increased susceptibility to these hazards and relocation routes during emergency evacuations.

4.17.2 Discussion

Potential impacts from the proposed project are discussed below in response to each of the CEQA checklist questions. Additionally, the Project Conditions listed below will be implemented as part of the proposed project.

PROJECT CONDITIONS

1. During construction, the contractor shall place temporary signage to inform traffic of the construction schedule and timing, road closure, on-site detour, suggested construction zone procedures and other necessary information.
2. Prior to the start of construction, the contractor shall coordinate with the City of Oceanside Police and Fire departments (OPD and OFD), local public and private ambulance and paramedic providers, and Oceanside Unified School District to prepare and submit a standard traffic handling plan that will be approved by the City prior to construction. The traffic handling plan will include information identifying phases of the proposed project, construction scheduling, and appropriate alternative routes, including additional parking, routes for SLRRT, detour routes for the pedestrian undercrossing, and emergency services. The traffic handling plan will also include information regarding construction period emergency access.

a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The proposed project would replace the existing bridge with a new bridge designed to current structural and geometric standards. The proposed bridge would be placed in

close proximity to the existing location; immediately west of the current bridge alignment, to maintain service on the existing roadway and bridge during construction. As discussed in Section 4.16, Recreation, the SLRRT would remain open for bicycle and pedestrian use during construction, with short and intermittent closures of no more than 10 minutes when construction equipment must cross the trail. The pedestrian undercrossing on the north side of the San Luis Rey River would be closed during construction and a detour provided. Operations of the roadways, SLRRT, and pedestrian undercrossing would be similar to existing conditions upon construction completion. The proposed project would comply with federal, state, and City programs, plans, ordinances, or policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The proposed project would have less than significant impact and no mitigation measures are required.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Transportation projects that can be presumed to lower vehicle miles traveled (VMT) or have no effect on it, such as bicycle and pedestrian projects, transit improvements, and minor operational improvements, as defined in the State of California Governor's Office of Planning and Research (OPR) Technical Advisory (OPR 2018), should be expected to cause a less than significant impact. According to CEQA Guidelines section 15065.3, subsection (b)(2), a transportation project that can be presumed to lower VMT or have no effect on it should be presumed to cause a less than significant impact. The proposed project would replace an existing two-lane bridge with a new two-lane bridge designed to current structural and geometric standards. During construction, Coast Highway would remain open to vehicle use and SLRRT would remain open to bicycle and pedestrian use, while the pedestrian sidewalk undercrossing would be closed. VMT would not be increased during construction due to vehicular detours.

Construction workers are anticipated to come from surrounding areas, and thus would not relocate to the proposed project vicinity. Construction workers' VMT would not increase compared to current conditions because of the nature of their job, moving from construction site to construction site within the greater Oceanside area. Therefore, construction workers' VMT would not be increased as a result of the proposed project.

Parking availability in the proposed project vicinity would be impacted during construction as construction staging areas would use public parking spaces at Oceanside Harbor Parking Lot #1. Street parking and public parking lots provided by the City within 0.7 miles on both the north and south sides of San Luis Rey River would be available during construction. Increased VMT as a result of parking displacement would be reduced to less than significant with the use of gO'side shuttle service. Downtown City public parking lots including the Oceanside Civic Center parking lot, located approximately 0.5 mile to the southeast of the proposed project, and the Oceanside Transportation Center parking lot, located approximately 0.7 mile to the south of the proposed project, would provide parking for visitors or workers during construction and would be serviced by the gO'side shuttle service.

Operations of the roadways, parking lots, SLRRT, and the pedestrian undercrossing would be similar to existing conditions upon construction completion. The bridge would be replaced by a new bridge and would not increase vehicle capacity. Therefore, the proposed project would not increase roadway capacity or change long-term traffic patterns after construction. The proposed project would have a less than significant impact on VMT; no mitigation measures are required.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

During construction, Coast Highway would remain open to vehicular traffic. As discussed in Section 4.16, Recreation, the SLRRT would remain open for bicycle and pedestrian use during construction, with short and intermittent closures of no more than 10 minutes when construction equipment must cross the trail. The pedestrian undercrossing on the north side of the San Luis Rey River would be closed during construction and a detour provided. As discussed in the Project Conditions, above, routes through the construction area on SLRRT would be posted (signs and/or flaggers) on the trail to alert SLRRT users of the temporary changes to the path during construction. These closures and route changes would be temporary in nature and would return to pre-construction conditions upon completion. Therefore, the proposed project would not increase hazards due to geometric design or incompatible use during construction.

The proposed project would remove the deteriorated, structurally deficient, fracture critical and seismically vulnerable, existing structure and replace it with a new bridge designed to current structural and geometric standards. On the north end of the proposed project, a roundabout would be constructed at the Monterey Drive/Coast Highway intersection. The proposed project would comply with City, California Department of Transportation (Caltrans), Federal Highway Administration (FHWA), and American Association of State Highway and Transportation Officials (AASHTO) current design criteria and standards. This work is warranted for the safe replacement of the Coast Highway Bridge and the improvements to the Monterey Drive/Coast Highway intersection. The proposed project would not increase hazardous conditions due to geometric design. The proposed project would have less than significant impact and no mitigation measures are required.

d) Result in inadequate emergency access?

As discussed in Chapter 2, Project Description, Section 4.9, Hazards and Hazardous Materials, and Section 2.2.15, Public Services, during construction, service on the existing roadway and bridge would be maintained during construction and detours would not be required. Implementation of the staging areas would not reduce lanes along adjacent roadways, such as San Luis Rey Drive, Monterey Drive, and Riverside Drive, or result in the closure of other roadways; however, temporary lane closures or intermittent traffic disruptions may occur along these roadways when construction equipment is moving from the staging areas to the construction areas. Construction of

the proposed project could result in accident or emergency incidents that would require emergency response, such as fire, police, medical, or hazardous waste services; however, construction activities would be short in duration. A traffic handling plan would be submitted by the contractor for approval prior to construction beginning, refer to the project conditions listed above. The proposed project would be coordinated with the OFD, OPD, and other law enforcement or emergency services providers within the area, refer to Section 4.15, Public Services. During the transition to the new bridge, traffic would be temporarily affected with delays and short-term closures as necessary to make the transition. Construction Traffic Control would be present while traffic is moved onto the new alignment. Lane closures would be temporary in nature and would cease upon project completion. Emergency access would be maintained at all times throughout construction of the proposed project. Impacts during proposed project construction on emergency access would be minimal and temporary in nature and no detour would be required. Construction impacts on emergency access would be less than significant, and no mitigation measures are required.

Emergency access within and around the project site would be similar to existing conditions upon completion of construction. No operational impact would occur to emergency access. The proposed project would have a less than significant impact on emergency access, and no mitigation measures are required.

4.17.3 References

City of Oceanside. 2012. Oceanside General Plan Circulation Element. September 2012. Online: https://www.ci.oceanside.ca.us/government/public-works/transportation-engineering-section/circulation-element. Date Accessed: February 1, 2024.

Dewberry. 2024a. Community Impact Assessment (CIA) Memorandum.

Dewberry. 2024b. Traffic Technical Memorandum.

4.18 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:

Issues	Determination
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	Less Than Significant Impact
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.	Less Than Significant with Mitigation Incorporated

Information in this section is summarized from the *Historic Property Survey Report* (HPSR) (RECON Environmental Inc. [RECON] 2023), *Supplemental HPSR* (RECON 2023), and the *Archaeological Survey Report* (ASR) for the Proposed Coast Highway (Hill Street) Bridge Replacement Project (RECON 2023). Some information from these studies is considered confidential under the California Public Resources Code (PRC) and the Code of Federal Regulations (CFR) in compliance to the Freedom of Information Act and the California Public Records Act to protect the integrity of tribal cultural resources, and thus, would not be available to the public (7 PRC 21082.3 and 36 CFR 800.11).

4.18.1 Record Searches and Field Surveys

4.18.1.1 Record Search

The Native American Heritage Commission (NAHC) was contacted in June 2016 and August 2022 requesting the identification of spiritually significant and/or sacred sites or traditional use areas and a list of local Native American tribes, bands, or individuals who may have concerns regarding cultural resources.

An archaeological record search was requested from the South Coastal information Center (SCIC), of the California Historical Resources Information System (CHRIS) with a one-mile radius search buffer of the APE. The search was completed on July 24, 2016 by SCIC personnel.

4.18.1.2 Field Surveys

Intensive archaeological field survey of the proposed project area, including the original APE, were conducted on August 2, 2016, November 1, 2016, and November 11, 2021. The revised APE was established in October 2023 to include a revised boundary due to minor design changes determined since the original HPSR.

The August 2, 2016 survey used transects separated by 15-meter intervals and concentrated on the open and undeveloped areas of the APE south of the intersection of Monterey Drive and Coast Highway, along both banks of the San Luis Rey River, east of Interstate 5 (I-5), and south of the San Luis River. The November 1, 2016 survey accommodated an expanded survey area of the APE and focused on a southwest/northeast trending dirt maintenance road on the north side of the San Luis Rey River, east of I-5. The third survey on November 11, 2021 of the APE, included a visual inspection of the habitat enhancement area. A pedestrian survey of the habitat enhancement area was not feasible because of the flooded conditions at the time of the field visit. The final survey on September 16, 2022 was a site condition assessment visit to the two previously recorded resources (CA-SDI-14058 and CA-SDI-15870).

During the first two surveys, the field team navigated the survey area by means of a sub-meter global positioning system (GPS) unit, a handheld Trimble GEO 7 series with Floodlight satellite shadow reduction technology. During the 2021 site visit, the field crew used an Apple iPad running ESRI's ArcGIS Collector application.

4.18.2 Setting

A tribal cultural resource (TCR) is defined as a site, feature, place, cultural landscape, or sacred place or object that has cultural value to California Native American tribes. To be considered a TCR, the resource must be included in or determined eligible for inclusion in the California Register of Historic Resources (CRHR) or is in included in a local register of historical resources. Pursuant to PRC Section 2107, a TCR is defined as either:

1) A site, feature, place, cultural landscape, sacred place, or object that has cultural value to California Native American Tribes that is included or determined to be eligible for inclusion in the CRHR or a local register of historical resources.
2) A resource determined by the lead agency to be significant and is supported by substantial evidence.
3) A geographically defined cultural landscape that meets the criteria set forth in PRC §21074.
4) A historical resource described in PRC §21084.1, a unique archeological resource or "nonunique archaeological resource" described in PRC §21083.2 (g) and (h).

The CEQA Guidelines state that California Native American tribes traditionally and culturally affiliated with a geographic area may have expertise concerning their TCRs. Lead agencies shall consult with these tribes who respond in writing and requests the consultation within 30 days of receipt of the formal notification of the project (PRC Section 21080.3.1). Traditionally and culturally affiliated tribes of a project area may

suggest mitigation measures, including, but not limited to, those recommended in PRC Section 21084.3.

The Ethnography, Prehistory, and History of the proposed project area are discussed in detail in Section 4.5, Cultural Resources.

4.18.2.1 Assembly Bill (AB) 52 Consultation

Assembly Bill 52 (AB 52) went into effect on July 1, 2015 and established a consultation process with all California Native American Tribes on the NAHC List for federal and non-federal tribes (13.5 PRC §§ 21073, 21074, 21083.3, 21084). Once the tribe is notified of a project, the tribe has 30 days to request a consultation. The consultation process ends when either the parties agree to mitigation measures or avoid a significant effect on tribal cultural resources or a party, acting in good faith, and after reasonable effect, concludes that mutual agreement cannot be reached.

The City, acting as the CEQA lead agency, mailed letters on March 2, 2017 to initiate consultation pursuant to AB 52. The City coordinated with Caltrans, the NEPA lead agency, to have the letters comply with Section 1066 of the NHPA, as well. Thus, 44 Tribal members received letters pursuant to Section 106 of the NHPA and AB 52. Two responses were received within the 30-day response period identified in the consultation letter. Mr. Vincent Whipple from the Rincon Band of Luiseño Indians responded on March 30, 2017 via email. Mr. Whipple indicated that the Rincon Band believes that there is a possibility of inadvertent cultural findings at the proposed project location and therefore recommends that a Luiseño Tribal Monitor be present during all ground-disturbing activities. Ms. Merri Lopez-Keifer, chief legal counsel for the San Luis Rey Band, requested tribal consultation regarding mitigation measures, significant project effects, and cultural resources assessment for the project via a letter dated March 27, 2017.

The City sent follow-up consultation letters on December 29, 2022 to 16 Tribal members and initial consultation letters to 13 Tribal members pursuant to Section 106 of the NHPA and AB 52. The Pechanga Band of Indians responded via two emails (one for Section 106 and one for AB 52) on January 27, 2023 from Juan Ochoa requesting consultation and additional information. The San Luis Rey Band of Mission Indians also requested AB-52 consultation and any completed cultural resources assessments via email on March 6, 2023 and via a letter dated March 6, 2023.

4.18.2.2 Record Search Results

The 2016 response from the NAHC indicated negative results for the quadrangle where the Area of Potential Effects (APE) is located; however, the 2022 NAHC search result was positive. Twelve prehistoric sites, four historic sites, four prehistoric isolates, five historic buildings/structures, and one site consisting of both prehistoric and historic components were identified within one mile of the APE. Of these sites, two prehistoric shell scatters were previously recorded within the APE (CA-SDI-14058 and CA-SDI-15870). CA-SDI-458 was recorded as a shell scatter with fire affected rock, and CA-

SDI-15870 was recorded as a light density shell scatter with no artifacts. The searches found no TCRs in or adjacent to the APE. Information regarding cultural resources can be found in Section 4.5, Cultural Resources.

4.18.2.3 Field Survey Results

The APE was inspected for evidence of archaeological materials such as flaked and ground stone tools, ceramics, and milling features. The APE had been disturbed by the construction of the Coast Highway, I-5, a flood control project for the San Luis River, underground utility work, a maintenance road under the bridge and interstate, the San Luis Rey River Trail, State Route 76 (SR-76), Monterey Drive, Capistrano Drive, Capistrano Park, Oceanside Harbor Parking Lot #1, and residential and commercial development. There is a 3.24-acre habitat enhancement area that contains dense vegetation.

During the initial 2016 survey, shellfish fragments were identified within the previously recorded sites, CA-SDI-14058 and CA-SDI-15870. However, during the September 16, 2022 site visit, conditions were similar to those of the initial survey, and it was determined that both sites were not significant and are considered non-sites (RECON 2023).

4.18.3 Discussion

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)?

As discussed above, 12 prehistoric sites, 4 historic sites, 4 prehistoric isolates, fi5ve historic buildings/structures, and 1 site consisting of both prehistoric and historic components were identified within one mile of the APE. Of these sites, two prehistoric shell scatters were previously recorded within the APE (CA-SDI-14058 and CA-SDI-15870). Based on the 2022 survey and review of historic aerial photographs, these resources are considered non-sites; refer to Section 4.5, Cultural Resources, for a detailed discussion. No historical or archaeological resources are present in the project site and therefore, the proposed project would not cause a substantial adverse change in the significance of an archaeological or historical resource.

Also, because the majority of the project site is adjacent to the San Luis Rey River and prehistoric sites are not often found on the creek banks due to the possibility of flooding. Thus, the likelihood of encountering previously undocumented buried archaeological deposits in the project site is considered low. Nonetheless, there remains a chance that construction activities associated with the proposed project could result in accidentally discovering archaeological resources. If cultural or tribal cultural resources are discovered during ground-disturbing activities, Project Conditions identified in Section 4.5, Cultural Resources, would be implemented. Impacts are considered less than significant, and no mitigation measures are required.

For a detailed description of historical resources, refer to Section 4.5, Cultural Resources, of this document.

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.

As mentioned above, 12 prehistoric sites, 4 historic sites, 4 prehistoric isolates, fi5ve historic buildings/structures, and 1 site consisting of both prehistoric and historic components were identified within one mile of the APE. Of these sites, two prehistoric shell scatters were previously recorded within the APE (CA-SDI-14058 and CA-SDI-15870); however, these sites were determined to be non-sites based on recent survey data and historical photographs review. No archaeological or tribal cultural resources were identified as a result of the field surveys, record searches or consultation.

Mr. Whipple from the Rincon Band of Luiseño Indians indicated that the Rincon Band believes that there is a possibility of inadvertent cultural findings at the project site and recommends that a Traditionally and Culturally Affiliated (TCA) Native American Monitor associated with a TCA Luiseño Tribe be present during all ground-disturbing activities. Due to the concern of the Rincon Band of Luiseño Indians, the proposed project could result in impacts to TCRs. The implementation of Mitigation Measure TCR-1 would reduce impacts to TCRs to a less than significant level.

While the likelihood of encountering previously undocumented buried TCR in the project site is considered low, there remains a chance that construction activities associated with the proposed project could result in accidentally discovering archaeological or tribal cultural resources. If cultural or tribal cultural resources are discovered during ground-disturbing activities, Project Conditions identified in Section 4.5, Cultural Resources, and Mitigation Measures TCR-1, TCR-2, TCR-3, TCR-4, TCR-5, TCR-6, TCR-7, TCR-8, and TCR-9 would be implemented. Impacts would be less than significant with mitigation implementation.

For a detailed description of historical resources, refer to Section 4.5, Cultural Resources, of this document.

MITIGATION MEASURES

TCR-1. Prior to the issuance of a Grading Permit, the Applicant/Owner shall enter into a pre-excavation agreement, otherwise known as a Tribal Cultural Resources Treatment and Tribal Monitoring Agreement with the “Traditionally and Culturally Affiliated (TCA) Native American Monitor associated with a TCA Luiseño Tribe.” A copy of the agreement shall be included in the Grading Plan Submittals for the Grading Permit. The purpose of this agreement shall be to formalize protocols and procedures between the

Applicant/Owner and the "Traditionally and Culturally Affiliated (TCA) Native American Monitor associated with a TCA Luiseño Tribe" for the protection and treatment of, including but not limited to, Native American human remains, funerary objects, cultural and religious landscapes, ceremonial items, traditional gathering areas and tribal cultural resources, located and/or discovered through a monitoring program in conjunction with the construction of the proposed project, including additional archaeological surveys and/or studies, excavations, geotechnical investigations, grading, and all other ground disturbing activities. At the discretion of the Luiseño Native American Monitor, artifacts may be made available for 3D scanning/printing, with scanned/printed materials to be curated at a local repository meeting the federal standards of 36CFR79.

TCR-2. Prior to the issuance of a Grading Permit, the Applicant/Owner or Grading Contractor shall provide a written and signed letter to the City of Oceanside Planning Division stating that a Qualified Archaeologist and Luiseño Native American Monitor have been retained at the Applicant/Owner or Grading Contractor's expense to implement the monitoring program, as described in the pre-excavation agreement.

TCR-3. The Qualified Archaeologist shall maintain ongoing collaborative consultation with the Luiseño Native American monitor during all ground disturbing activities. The requirement for the monitoring program shall be noted on all applicable construction documents, including demolition plans, grading plans, etc. The Applicant/Owner or Grading Contractor shall notify the City of Oceanside Planning Division of the start and end of all ground disturbing activities.

TCR-4. The Qualified Archaeologist and Luiseño Native American Monitor shall attend all applicable pre-construction meetings with the General Contractor and/or associated Subcontractors to present the archaeological monitoring program. The Qualified Archaeologist and Luiseño Native American Monitor shall be present on-site full-time during grubbing, grading and/or other ground altering activities, including the placement of imported fill materials or fill used from other areas of the project site, to identify any evidence of potential archaeological or tribal cultural resources. All fill materials shall be absent of any and all tribal cultural resources.

TCR-5. In order for potentially significant archaeological artifact deposits and/or cultural resources to be readily detected during mitigation monitoring, a written "Controlled Grade Procedure" shall be prepared by a Qualified Archaeologist, in consultation with the Luiseño Native American monitor, other TCA Luiseño Tribes that have participated in the state-prescribed process for this project, and the Applicant/Owner, subject to the approval of City representatives. The Controlled Grade Procedure shall establish requirements for any ground disturbing work with machinery occurring in and around areas the Qualified Archaeologist and Luiseño Native American monitor determine to be sensitive through the cultural resource mitigation monitoring process. The Controlled Grade Procedure shall include, but not be limited to, appropriate operating pace, increments of removal, weight, and other characteristics of the earth disturbing

equipment. A copy of the Controlled Grade Procedure shall be included in the Grading Plan Submittals for the Grading Permit.

TCR-6. The Qualified Archaeologist or the Luiseño Native American monitor may halt ground disturbing activities if unknown tribal cultural resources, archaeological artifact deposits or cultural features are discovered. Ground disturbing activities shall be directed away from these deposits to allow a determination of potential importance. Isolates and clearly non-significant deposits will be minimally documented in the field, and before grading proceeds these items shall be secured until they can be repatriated. If items cannot be securely stored on the project site, they may be stored in off-site facilities located in San Diego County. If the Qualified Archaeologist and Luiseño Native American monitor determine that the unearthed tribal cultural resource, artifact deposits or cultural features are considered potentially significant TCA Luiseño Tribes that have participated in the state-prescribed consultation process for this project shall be notified and consulted regarding the respectful and dignified treatment of those resources. The avoidance and protection of the significant tribal cultural resource and/or unique archaeological resource is the preferable mitigation. If, however, it is determined by the City that avoidance of the resource is infeasible, and it is determined that a data recovery plan is necessary by the City as the Lead Agency under CEQA, TCA Luiseño Tribes that have participated in the state-prescribed consultation process for this project shall be notified and consulted regarding the drafting and finalization of any such recovery plan. For significant tribal cultural resources, artifact deposits or cultural features that are part of a data recovery plan, an adequate artifact sample to address research avenues previously identified for sites in the area will be collected using professional archaeological collection methods. The data recovery plan shall also incorporate and reflect the tribal values of the TCA Luiseño Tribes that have participated in the state-prescribed consultation process for this project. If the Qualified Archaeologist collects such resources, the Luiseño Native American monitor must be present during any testing or cataloging of those resources. Moreover, if the Qualified Archaeologist does not collect the tribal cultural resources that are unearthed during the ground disturbing activities, the Luiseño Native American monitor, may at their discretion, collect said resources and provide them to the appropriate TCA Luiseño Tribe, as determined through the appropriate process, for respectful and dignified treatment in accordance with the Tribe's cultural and spiritual traditions. Ground disturbing activities shall not resume until the Qualified Archaeologist, in consultation with the Luiseño Native American Monitor, deems the cultural resource or feature has been appropriately documented and/or protected.

TCR-7. The landowner shall relinquish ownership of all tribal cultural resources unearthed during the cultural resource mitigation monitoring conducted during all ground disturbing activities, and from any previous archaeological studies or excavations on the project site to the appropriate TCA Luiseño Tribe, as determined through the appropriate process, for respectful and dignified treatment and disposition, including reburial at a protected location on-site, in accordance with the Tribe's cultural

and spiritual traditions. All cultural materials that are associated with burial and/or funerary goods will be repatriated to the Most Likely Descendant as determined by the Native American Heritage Commission per California Public Resources Code Section 5097.98. No tribal cultural resources shall be subject to curation.

TCR-8. Prior to the release of the grading bond, a monitoring report and/or evaluation report, if appropriate, which describes the results, analysis and conclusions of the archaeological monitoring program (e.g., data recovery plan) shall be submitted by the Qualified Archaeologist, along with the Luiseño Native American monitor's notes and comments, to the City of Oceanside Planning Division for approval.

TCR-9. As specified by California Health and Safety Code Section 7050.5, if human remains are found on the project site during construction or during archaeological work, the person responsible for the excavation, or his or her authorized representative, shall immediately notify the San Diego County Office of the Medical Examiner by telephone. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the Medical Examiner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98. If such a discovery occurs, a temporary construction exclusion zone shall be established surrounding the area of the discovery so that the area would be protected, and consultation and treatment could occur as prescribed by law. If suspected Native American remains are discovered, the remains shall be kept in-situ, or in a secure location in close proximity to where they were found, and the analysis of the remains shall only occur on-site in the presence of a Luiseño Native American monitor. By law, the Medical Examiner will determine within two working days of being notified if the remains are subject to his or her authority. If the Medical Examiner identifies the remains to be of Native American ancestry, he or she shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC shall make a determination as to the Most Likely Descendent.

4.18.4 References

RECON Environmental, Inc. (RECON). 2023. Archeological Survey Report (ASR). May 2023.

RECON. 2023. Historic Property Survey Report (HPSR). May 2023.

RECON. 2023. Supplemental Historic Property Survey Report (HPSR). December 2023.

4.19 Utilities and Service Systems

Would the project:

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

4.19.1 Setting

Construction and demolition debris are a major contributor to landfill waste in California. California Green Building Standards Code (CAL Green) requires that construction and demolition materials are recycled. The City has made waste diversion a priority and requires Waste Management Plans to be submitted before project construction (City of Oceanside 2023). There are a total of 16 construction and demolition debris buy back and recycling facilities located in San Diego County (City of Oceanside 2023). There are three construction and demolition debris buy back and recycling facilities in the City: Agri-Service El Corazon Composting Facility; Evergreen Nursery; and Moody's Recycling (City of Oceanside 2023). Agri-Service El Corazon Composting Facility and Moody's Recycling are both located at 3210 Oceanside Boulevard (approximately 3.5 miles east of the project site). Between the two facilities, they accept lumber, wood pallets, yard waste debris, asphalt, clear dirt fill, concrete, rock, and sand waste debris. Evergreen Nursery, located at 3231 Oceanside Boulevard (approximately 3.8 miles east of the project site), accepts yard waste debris.

San Diego County has 55 active landfills, 2 of which are located within 10 miles of the project site. The closest landfill to the proposed project, Waste Management North County Limited Volume Transfer Operation, is located approximately 2.25 miles southeast of the project site, at 2403 B Industry Street, Oceanside (CalRecycle 2019).

The Waste Management of North County Limited Volume Transfer Operation Station is a transfer garbage dump and solid waste operation landfill that takes food wastes, metals, inert waste, and construction and demolition waste types. The second closest landfill to the proposed project, El Corazon Compost Facility, shares the same address with the Agri-Service El Corazon Composting Facility and Moody's Recycling (CalRecycle 2019). In addition to the construction waste listed above, this facility also accepts waste types that include liquid waste, green materials, and food wastes.

The City's Water Utilities Department is responsible for water and wastewater services in the proposed project area. San Diego Gas and Electric (SDGE) is the primary provider of electric and natural gas services in the City (refer to Section 4.6, Energy, for additional details). Telecommunication services in the City include telephone, cable TV, and internet service, and are available from a variety of providers, including Cox, Spectrum, AT&T, and SiFi (City of Oceanside 2023b).

The existing utilities attached to the Coast Highway Bridge include: 12-inch gas line, 12-inch waterline, 10-inch waterline, 14-inch sewer force main, and electrical and telecommunications lines. There are also two sewer lines in the bridge vicinity. One runs down the center of Coast Highway and terminates approximately 40 feet south of the Coast Highway Bridge and does not cross the San Luis Rey River. The second sewer line runs under the Coast Highway Bridge, on the downstream (west) side of the bridge.

4.19.2 Discussion

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Non-potable water use would be required for fugitive dust control during project construction. See Section 4.3, Air Quality, for more information regarding fugitive dust control. Water supplies during construction are typically trucked to the site from outside sources that supply water for construction activities. This use of water would occur during the construction period and would cease upon construction completion.

Potable water would be required during construction for workers. Typically, potable water is brought to the site in bottles or other potable water vessels. Water use at the project site would cease upon completion of construction. No new or expanded water facilities would be required. During construction, portable toilets are typically used at construction sites; however, they are removed once construction is completed. These facilities are operated by private companies that provide cleaning services; thus, the proposed project would not increase wastewater service demand during construction. No new or expanded facilities would be required. The proposed project would not result in the need for new or expanded water, wastewater treatment, or other utility facilities.

Impacts from the proposed project would be less than significant, and no mitigation measures are required.

The 12-inch gas line, 12-inch waterline, 10-inch waterline, 14-inch sewer force main, and electrical and telecommunications lines attached to the existing bridge would remain in service throughout construction and would ultimately be relocated to the new bridge. Because the proposed project would replace the existing bridge with a new bridge designed to meet current structural and geometric standards, the proposed project would not require expansion or construction of electrical or other utility facilities.

As discussed in Section 4.10, Hydrology and Water Quality, the proposed project would increase impervious surfaces by approximately 0.17 acre. The proposed project is located within an urban area, within existing commercial and residential land uses and roadways that contain impervious surfaces, thus, the increase in impervious surfaces would cause a negligible increase in surface water runoff. Therefore, the proposed project would not increase the amount or rate of stormwater runoff such that new or expanded stormwater drainage facilities would be needed. The proposed project would not generate wastewater and therefore would not require the construction of additional wastewater or water treatment facilities. The impacts would be less than significant, and no mitigation measures are required.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Construction demand for small volumes of non-potable and potable water would be used daily as needed by the contractor for dust suppression and for construction worker consumption, respectively, during project construction. This use of water would occur during the construction period of the proposed project and would cease upon construction completion. Operations would be similar to existing conditions upon construction completion. The proposed project would not use water at the project site; therefore, no water supplies would be depleted as a result of the proposed project. There would be no impact to existing water supplies and no mitigation measures are required.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

During construction, portable toilets would be used at construction sites; however, they are removed once construction is completed. These facilities are operated by private companies that provide cleaning services; thus, the proposed project would not increase wastewater service demand during construction. The operation of the proposed project would not generate wastewater. No restrooms are proposed as part of the proposed project. Thus, operations would not require wastewater treatment services, nor would they generate or increase wastewater service demand. The

proposed project would have no impact on wastewater treatment provider's existing commitments. There would be no impact, and no mitigation measures are required.

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?

The proposed project would generate waste from construction activities and bridge demolition. Solid waste associated with construction activities would be disposed following the City's guidelines and California state standards. A Waste Management Plan, including the Waste Management Form linked on the City website, will be submitted to the City to comply with City and state requirements (City of Oceanside 2023). San Diego County construction and demolition debris buy back and recycling facilities, including Agri-Service El Corazon Composting Facility, Evergreen Nursery, and Moody's Recycling, along with the Waste Management of North County Limited Volume transfer garbage dump, would have capacity to accept waste generated from the construction and demolition of the proposed project. Solid waste generation would cease upon completion of construction. The proposed project would not result in long-term demands for solid waste disposal services beyond what currently exists. Therefore, the proposed project's impact on solid waste generation would be less than significant and no mitigation measures are required.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The proposed project contractor would comply with all federal, state, and local waste management and reduction statutes and regulations related to solid waste. This includes, but is not limited to, CAL Green, the 1989 California Integrated Waste Management Act (AB 939) requiring specific waste diversion goals for local agencies, the City General Plan, the City's Waste Management Plan, and the City's Zero Waste Program. All recyclables and organics collected from the project site would be taken to the appropriate facilities. As discussed under question d, above, the proposed project would not generate substantial amounts of solid waste. Therefore, the proposed project would not conflict with statutes and regulations related to solid waste. Impacts in this regard are less than significant and no mitigation measures are required.

4.19.3 References

California Department of Resources Recycling and Recovery (CalRecycle). 2019. SWIS Facility/Site Search. Online: https://www2.calrecycle.ca.gov/SolidWaste/Site/Search. Date Accessed: December 1, 2023.

City of Oceanside. 2023. Construction and Demolition Requirements. Online: https://www.ci.oceanside.ca.us/government/development-services/building/construction-and-demolition-requirements. Date Accessed: January 5, 2023.

City of Oceanside. 2023b. High Speed Internet Coming to Oceanside. Online: https://www.ci.oceanside.ca.us/Home/Components/News/News/309/14. Date Accessed: January 30, 2024.

City of Oceanside. 2020. Water Utilities. Online: https://www.ci.oceanside.ca.us/government/water-utilities. Date Accessed: December 1, 2023.

4.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

Issues	Determination
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	Less Than Significant Impact
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	Less Than Significant Impact
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?	Less Than Significant Impact
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?	Less Than Significant Impact

4.20.1 Setting

4.20.1.1 Fire Hazard Zones

The California Department of Forestry and Fire Protection (CalFire) identifies the project site and vicinity as being located in “urban unzoned” fire hazard severity zone (CalFire 2022). The project site is located in a Local Responsibility Area (LRA) and includes urban unzoned severity classification. The classification of a zone as moderate, high, or very high fire hazard is based on a combination of how a fire will behave and the probability of flames and embers threatening buildings. Urban areas are treated differently in the model used to create the classifications, but the model does recognize the influence of burning embers traveling into urban areas, which is a major cause of fire spread. The nearest moderate, high, or very high fire hazard zone is classified as moderate and is located approximately 0.75 miles northeast of the proposed project.

Although this CEQA topic only applies to areas within an SRA or Very High Fire Hazard Severity Zones, out of abundance of caution, these checklist questions are analyzed below.

4.20.1.2 Evacuation Routes/Emergency Evacuation Plans

The City of Oceanside General Plan (City General Plan) Public Safety Element defines evacuation routes as main through streets and highways within the city. Hill Street, where the project is located, as well as I-5 just to the east of the project site are considered evacuation routes by the City.

The San Diego County Emergency Plan, San Diego County Multi-Jurisdictional Hazard Mitigation Plan, and City General Plan Public Safety Element serves as the main emergency plans that are applicable to the proposed project.

- **San Diego County Emergency Plan:** Is a comprehensive emergency management system that provides for planned response to disaster situations associated with natural disasters, technological incidents, and nuclear defense operations. The Plan includes operational concepts relating to various emergency situations, identifies components of the Emergency Management Organization and describes the overall responsibilities for protecting life and property and assuring the overall well-being of the population. The plan also identifies the source of outside support that might be provided (through mutual aid and specific statutory authorities) by other jurisdictions, state and federal agencies and the private sector. The City participates in this plan.
- **San Diego County Multi-Jurisdictional Hazard Mitigation Plan:** This plan was prepared in July 2010 to meet federal and state requirements for disaster preparedness to make the county eligible for funding and technical assistance from state and federal hazard mitigation programs. The plan includes a risk assessment to enable local jurisdictions to identify and prioritize appropriate mitigation actions that will reduce losses from potential hazards, including flooding, earthquakes, fires, and man-made hazards. To address potential hazards, the plan then incorporates mitigation goals and objectives, mitigation actions and priorities, an implementation plan, and documentation of the mitigation planning process for each of the twenty-one participating jurisdictions. The City participates in this plan.
- **City General Plan – Public Safety Element:** This General Plan Element identifies hazards, such as earthquakes, fires, and tsunamis, and provides guidance for proper mitigation measures, such as evacuation routes, to ensure safety. Along with long range policies regarding seismic, flooding, and fire hazards, this element also includes a Public Safety Plan. The Public Safety Plan includes maps of indicating areas that have increased susceptibility to these hazards and relocation routes during emergency evacuations.

4.20.2 Discussion

Potential impacts from the proposed project are discussed below in response to each of the CEQA checklist questions. Additionally, the Project Conditions listed below will be implemented as part of the proposed project.

PROJECT CONDITIONS

1. Prior to the start of construction, the contractor shall coordinate with the Oceanside Fire Department to prepare a Fire Safety Plan for use during construction. The Fire Safety Plan shall contain notification procedures and emergency fire precautions including, but not limited to, the following:

a. All internal combustion engines, stationary and mobile, shall be equipped with spark arresters. Spark arresters shall be in good working order.
b. Light trucks and cars with factory-installed (type) mufflers shall be used only on roads where the roadway is cleared of vegetation. Said vehicle types shall maintain their factory-installed (type) muffler in good condition.
c. Equipment parking areas (staging areas) shall be cleared of all extraneous flammable materials.
d. Personnel shall be trained in the practices of the Fire Safety Plan relevant to their duties. Construction personnel shall be trained and equipped to extinguish small fires in order to prevent them from growing into more serious threats.
e. Smoking shall be prohibited in vegetated areas and shall be limited to paved areas or areas cleared of all vegetation.

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

As discussed in Chapter 2, Project Description, Section 4.9, Hazards and Hazardous Materials, Section 4.15, Public Services, and Section 4.17, Transportation, during construction, service on the existing roadway and bridge would be maintained and detours would not be required. For further discussion regarding impacts to the emergency service providers, such as Oceanside Fire Department (OFD) and Oceanside Police Department (OPD), please refer to Section 4.15, Public Services. Once the proposed bridge is constructed, traffic would transition from the existing bridge onto the new bridge, so that the existing bridge can be demolished. During the transition to the new bridge, traffic would be affected with delays and short-term closures as necessary to make the transition. Lane closures would be temporary in nature and would cease upon proposed project completion. A traffic handling plan (refer to Project Conditions in Section 4.17, Transportation) would be submitted by the contractor for approval prior to construction beginning. As part of the traffic handling plan, the proposed project contractor would coordinate with the OFD, OPD, other law enforcement or emergency services providers, and the Oceanside Unified School District. Thus, construction traffic control is not anticipated to significantly interfere with an emergency response plan or emergency evacuation plan. Impacts would be less than significant, and no mitigation measures are required.

The proposed project would not increase capacity along any of the adjacent roadways that could increase traffic and congestion. The proposed project would not impair an adopted emergency response plan or emergency evacuation plan, as operations on Coast Highway would remain the same as existing conditions. The proposed bridge has been designed to accommodate the 100 year-storm event plus sea level rise (SLR) of either 7 feet or 10.2 feet by year 2100. The proposed project would have approximately 16 feet of clearance above water surface elevation (Dewberry 2023). In case of an extreme event, the City would implement the appropriate adaption strategies, such as deploying water pumps, removing existing sediment under the existing bridge at San

Luis Rey River, and temporary road closures with alternative routes. However, the proposed project design would serve the communities by remaining open in an extreme event in order to provide access and emergency routes away from flood areas (Dewberry 2023). See Chapter 5, Sea Level Rise of this IS/MND for additional details. Therefore, the proposed project would have no impact to emergency response plans or emergency evacuation plans upon the completion of construction. The proposed project would have less than significant impact, and no mitigation measures are required.

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?

and

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?

Construction activities involving vehicles, heavy machinery, and personnel smoking at the project site could result in the ignition of a fire. During construction, heavy equipment and passenger vehicles driving on vegetated areas prior to clearing and grading could increase the risk of fire. Heated mufflers and improper disposal of cigarettes could potentially ignite surrounding vegetation. Proposed project coordination with the appropriate City departments (e.g., OFD, OPD), the payment of City fees, and the implementation of Project Conditions would minimize the potential for construction activities to result in severe fires. Impacts would be less than significant, and no mitigation measures are required.

The proposed project would replace the existing bridge with a new bridge designed to current structural and geometric standards. The proposed bridge would be placed immediately west of the existing location; immediately west of the current bridge alignment, to maintain service on the existing roadway and bridge during construction. The project site slope, prevailing winds, and other factors that exacerbate wildfire risks and expose the project site and surrounding area to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire would be similar to existing conditions upon construction completion. Therefore, the proposed project would have no impact in this regard and no mitigation measures are required.

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?

The proposed bridge would be placed immediately west of the existing location; immediately west of the current bridge alignment, to maintain service on the existing

roadway and bridge during construction. The proposed project would not increase stormwater runoff, result in drainage pattern changes, or result in a population increase that would ultimately expose people or structures to significant risk from post-fire instability (refer to Section 4.10, Hydrology and Water Quality, for details). During construction, workers would be present onsite; however, this increase in workers would be temporary in nature as it would last approximately 24 to 30 months. The risks associated with runoff, slope instability, and drainage changes within the project site during construction would be similar to existing conditions. During construction, the contractor would obtain and comply with the National Pollutant Discharge Elimination System (NPDES) General Construction permit and associated Stormwater Pollution Prevention Plan (SWPPP). The proposed project would also be required to obtain and comply with the necessary permits from the U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), California Coastal Commission (CCC), and San Diego Regional Water Quality Control Board (RWQCB). Therefore, the proposed project would have a less than significant impact with mitigation measures incorporated.

The proposed project would not construct habitable structures, and operations of the roadways would remain similar to existing conditions upon construction completion. The operations of the proposed project would not increase or change the exposure of people or structures to risks from post-fire slope instability or drainage changes beyond the current risk level. Therefore, the proposed project would have a less than significant impact with mitigation measures incorporated.

4.20.3 References

California Department of Forestry and Fire Protection (CalFire). 2022. Fire Hazard Severity Zones Map. Online: https://osfm.fire.ca.gov/fire-hazard-severity-zone-maps-2022/. Date Accessed: November 7, 2023.

Dewberry. 2023. Sea Level Rise Analysis for the Coast Highway (Hill Street) Bridge Replacement Project.

4.21 Mandatory Findings of Significance

Issues	Determination
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	Less Than Significant with Mitigation Incorporated
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	Less Than Significant Impact
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	Less Than Significant with Mitigation Incorporated

4.21.1 Setting

Per CEQA statutes and guidelines, the Lead Agency must summarize the finding of significance from earlier sections and must consider potential cumulatively considerable effects for environmental impact reports (EIRs). Even though this environmental document is an Initial Study/Mitigated Negative Declaration (IS/MND) and not an EIR, the potential for cumulatively considerable effects is analyzed below.

4.21.2 Discussion

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

The information in Section 4.4 Biological Resources, analyzes the potential effects of the proposed project on biological resources, including vegetation communities and land cover types, special-status plant species, special-status wildlife species, aquatic resources, and movement corridors. Section 4.4, Biological Resources, identified project conditions and best management practices (BMPs), as well as requires the implementation of mitigation measures. The impacts to biological resources would be

less than significant with the incorporation of the Mitigation Measures BIO-1, BIO-2, and BIO-3. Section 4.5, Cultural Resources, and Section 4.18, Tribal Cultural Resources, analyze effects on cultural and tribal cultural resources including the possibility of encountering human remains. Section 4.5, Cultural Resources, determined that impacts would be less than significant, and no mitigation measures are required. Section 4.18, Tribal Cultural Resources, requires the implementation of mitigation measures. The impacts to tribal cultural resources would be less than significant with the incorporation of the Mitigation Measures TCR-1 through TCR-9. Therefore, per the impact discussions in the Biological, Cultural Resources, and Tribal Cultural Resources sections, the potential of the proposed project to substantially degrade the environment or eliminate major periods of California history or prehistory would be less than significant with incorporated Mitigation Measures BIO-1 through BIO-3 and TCR-1 through TCR-9.

MITIGATION MEASURES

Implement Mitigation Measures BIO-1, BIO-2, BIO-3, TCR-1, TCR-2, TCR-3, TCR-4, TCR-5, TCR-6, TCR-7, TCR-8, and TCR-9.

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)?

The proposed project would remove the existing bridge structure and replace it with a new bridge designed to current structural and geometric standards. The proposed project would conform to local, state, and federal environmental and planning policies, as discussed in Sections 4.1 through 4.20, above. Operations would be similar to existing conditions upon construction completion, as discussed in Sections 4.1 through 4.20, above. These impacts would be site specific and would be mitigated to less than significant levels, where necessary. No other projects are proposed that would overlap or interact with the proposed project; therefore, the proposed project would not be cumulatively considerable, and no mitigation measures are required for cumulative impacts.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

The proposed project would not cause substantial adverse effects on human beings. As discussed in Sections 4.1 through 4.20, above, the potential impacts to human beings would be mitigated to a less than significant level. Therefore, impacts would be less than significant with the incorporation of mitigation measures, where required.

MITIGATION MEASURES

Implement Mitigation Measures BIO-1, BIO-2, BIO-3, HAZ-1, HAZ-2, TCR-1, TCR-2, TCR-3, TCR-4, TCR-5, TCR-6, TCR-7, TCR-8, and TCR-9.

5. Sea Level Rise

5.1 Introduction

Information in this section is summarized from the *Sea Level Rise Analysis Technical Memorandum for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project* (Dewberry 2023).

The proposed project is located immediately west of I-5 and crosses the San Luis Rey River approximately 2,000 feet east of the Pacific Ocean in the City, San Diego County, California, within the Coastal Zone.

5.2 Sea Level Rise Screening Criteria

Projects that are within the California Coastal Zone are required to conduct a sea level rise (SLR) analysis. In order to analyze the level of impacts and risk to SLR projections for the proposed project, the following screening criteria were used:

- Project design life of 75+ years
- Redundancy/alternative routes
- Anticipated Travel Delays
- Goods movement/interstate commerce
- Evacuations/emergencies
- Traveler safety, in delaying the project to incorporate SLR design
- Expenditure of public funds
- Scope of project
- Interconnectivity issues with local streets and roads
- Environmental constraints, i.e., increase in project footprint into environmentally sensitive areas

5.3 Proposed Project Design

The proposed project elevation for the bottom of the bridge is 49 feet. The proposed bridge has been designed to accommodate the 100-year storm event plus SLR with a clearance of approximately 16 feet above water surface elevation, in order to remain open to provide access and emergency routes away from flood areas. The proposed project has also been designed to match with adjacent projects such as the I-5 Bridge over San Luis Rey River, and North Pacific Street Bridge over San Luis Rey River. This proposed project design would comply with applicable City, American Association of State Highway and Transportation Officials (AASHTO), FHWA, and Caltrans design standards (Dewberry 2023).

5.4 Adaption Strategies

The proposed project would remain open to serve the communities as a route away from flooding. In case of an extreme event, the City would implement different strategies such as deploying water pumps, removing existing sediment under the existing bridge at San Luis Rey River, and temporary road closures to minimize impacts during extreme events. In addition, alternative routes exist so that traffic could be rerouted during periods of minor to moderate inundation. These strategies are considered appropriate for the SLR risk level identified at the project site (Dewberry 2023).

5.5 Sea Level Rise Discussion

Policies and guidance for SLR include the 2018 California Coastal Commission Policy Sea Level Rise Policy Guidance, 2018 California Ocean Protection Council (OPC) and California Natural Resources Agency SLR Guidance (2018 OPC Guidance), National Oceanic and Atmospheric Administration (NOAA) predictions of sea level rise, and Section 30253 of the California Coastal Act (Dewberry 2023).

This analysis utilizes the 2018 State of California Sea Level Rise Guidance prepared by the California Ocean Protection Council (OPC) and the California Natural Resources Agency (2018 OPC Guidance) probabilistic approach to determine the probability of inundation for the proposed project. The California Coastal Commission (CCC) recommends that the Extreme Risk Aversion H++ scenario be used for projects with little to no adaptive capacity, which may include highways.

Coast Highway (Hill Street) is considered a local highway. The bottom elevation of the proposed Coast Highway Bridge is set at approximately 49 feet above sea level; hence, vulnerability to SLR is relatively low. Two scenarios were determined to be appropriate: (1) the 1 in 200 chance scenario (0.5% probability) Medium-High Risk Aversion with high emissions; and (2) the Extreme Risk Aversion H++ scenario. Under these scenarios, SLR inundation would not exceed 7 feet by year 2100 under the first scenario and would not exceed 10.2 feet by year 2100 under the second scenario.

Table 5-1 provides the depth below bottom chord for the proposed bridge under the mean higher high-water (MHHW) level, 100-year storm level, MHHW level plus SLR, and 100-year storm plus SLR for both scenarios. The proposed project would accommodate projected SLR of either 7 feet or 10.2 feet by year 2100 and would not be affected by SLR during its life cycle (Dewberry 2023).

Table 5-1. Water Elevations and Freeboard

	Elevation (ft) [NAVD 88]	Depth Below Bottom Chord (ft)
Bottom Chord	49.00	-
MHHW	5.17	43.83
100-Year Storm	22.65	26.35
1. MHHW + 7.0 ft SLR	12.17	36.83
2. MHHW + 10.2 ft SLR	15.37	33.63
3. 100-Year + 7.0 ft SLR	29.65	19.35
4. 100-Year + 10.2 ft SLR	32.85	16.15

Source: Dewberry 2023

The 2022 NOAA current sea level viewer was used to identify the impact that the OPC guidance of 7 feet SLR has on the proposed project (Dewberry 2023). Figure 5-1 shows that 7 feet of SLR would affect the San Luis Rey River and banks within the proposed project area. The proposed project would be approximately 19 feet above the water surface elevation under the 100-year storm plus SLR scenario. Therefore, the proposed bridge would not experience water inundation from SLR during its life cycle.

Figure 5-1. Sea Level Rise at 7 feet (Source: Dewberry 2023)

The 2023 NOAA current sea level viewer was used to identify the impact that the OPC guidance of 10.2 feet SLR has on the proposed project (Dewberry 2023). Figure 5-2 shows that 10 feet of SLR would affect the San Luis Rey River and banks within the proposed project area. In addition, low lying areas west and east of the proposed project could be vulnerable. The proposed project would be approximately 16 feet above the water surface elevation under the 100-year storm plus SLR scenario. Therefore, the proposed bridge would not experience water inundation from SLR during its life cycle.

Figure 5-2. Sea Level Rise at 10 feet (Source: Dewberry 2023)

5.6 Consistency with the Coastal Act

The proposed project is consistent with Coastal Act Section 30253(a) and (b). The proposed project would minimize risks to life and property in areas of high geologic, flood, and fire hazards by remaining open during an extreme event in order to serve the communities and provide access away from flooded areas (Dewberry 2023). In addition, the proposed project would assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs (Dewberry 2023).

5.7 References

Dewberry. 2023. Sea Level Rise Analysis Technical Memorandum. March 14, 2023.

5. List of Preparers and Reviewers

The Draft IS/MND was prepared by Dewberry in cooperation with the other members of the environmental study team. The Draft IS/MND technical team and other environmental study team members provided technical expertise, as presented below.

CEQA Lead Agency – City of Oceanside

Project Engineer	Luis Cardenas
Senior Planner	Shannon Vitale

Moffat and Nicole

Principal in Charge	Jared Cole
Project Manager	Alexandra Ford

Dewberry

Environmental Project Manager	Christa Redd
Senior Environmental Scientist	Chris Graham
Senior Biologist/Senior Environmental Scientist	Jeff Bray
Senior Biologist/Environmental Scientist	Lindsay Tisch
Cultural Resources/Environmental Scientist	Jennifer Howry
Environmental Scientist	Isabella Ciraulo
Environmental Scientist	Samantha Burns
Graphics/GIS Specialist	Isabella Ciraulo

Recon

Project Manager/Senior Biologist	Wendy Loeffler
Senior Cultural Resources Specialist	Carmen Zepeda-Hermen
Senior Air Quality/Noise Specialist	Jessica Flemming

Other Contributors

Parking and Trail Surveys	VRPA Technologies
Aesthetics	Estrada Land Planning

Appendix A

Figures

Appendix B

Responses to Comments
(Reserved)

Appendix C

List of Technical Studies

The following technical studies were used in the preparation of this document are available upon request. For copies of these documents, please contact:

Shannon Vitale, AICP
City of Oceanside
Development Services Department
Planning Division
svitale@oceansideca.org

Please note that any studies documenting known and potential cultural resources in the proposed project area will not be made available to the public to protect Native American tribal rights and interests.

- Air Quality Analysis for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project
- Community Impact Assessment Memorandum for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project
- Historic Property Survey Report for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project, which includes:
    - Archaeological Survey Report (ASR) for the Proposed Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project
- Supplemental Historic Property Survey Report for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project
- Initial Site Assessment for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project
- Natural Environment Study for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project, which includes:
    - Conceptual Mitigation Plan for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project
    - Aquatic Resources Delineation Report for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project
    - Hydroacoustics Technical Memorandum for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project
    - Noise Analysis of Sensitive Biological Areas for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project
    - Survey Reports for rare plants, fish, light-footed Ridgway's rail, least Bell's vireo, southwestern willow flycatcher, coastal California gnatcatcher, and bat
- Addendum to Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project Natural Environment Study
- Noise Analysis for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project
- Sea Level Rise Analysis for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project
- Section 4(f) Temporary Occupancy Memorandum
- Traffic Technical Memorandum for the Coast Highway (Hill Street) Bridge over San Luis Rey River Replacement Project

- Visual Impact Assessment for the North Coast Highway Bridge Replacement Project
- Water Quality Technical Assessment Report for the Coast Highway (Hill Street) Bridge Replacement Project