Riv I-10 Existing Rock Slope Protection Replacement

08-RIV-10-R91.9 EA 1J710/PN 0818000098

Draft Initial Study with Proposed Mitigated Negative Declaration



Prepared by the State of California Department of Transportation

January 2022



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General Information About This Document

What's in this document:

The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts of alternatives being considered for the proposed Project in Riverside County in California. The document explains why the Project is being proposed, the alternatives being considered for the Project, the existing environment that could be affected by the Project, potential impacts of each of the alternatives, and proposed avoidance, minimization, and/or mitigation measures.

What you should do:

- Please read the document. To request a digital copy of this document, please submit your request to the Project email: 1J710.RSP@dot.ca.gov or by calling Antonia Toledo, Senior Environmental Planner, at: (909) 501-5741.
- Tell us what you think. If you have any comments regarding the proposed Project, please send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to:

Antonia Toledo, MS Environmental Branch Chief California Department of Transportation 464 W 4th St., 6th Floor, MS 820 San Bernardino, CA 92401

- Submit comments via email to: 1J710.RSP@dot.ca.gov
- Submit comments by the deadline: February 25, 2022

What happens next:

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

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For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please write to or call Caltrans, Attention: Terry Kasinga, Chief Public Affairs, 464 W 4th St, San Bernardino, CA 92401; phone number (909) 383-4646 (Voice), or use the California Relay Service 1-800-735-2929 (TTY), 1-800-735-2929 (Voice), or 711.

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[SCH Number] 08-RIV-10-R91.9 EA 1J710/PN 0818000098

Replace rock slope protection and make operation improvements on I-10 at post miles R91.9 in Riverside County

Draft INITIAL STUDY with Proposed Mitigated Negative Declaration

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

THE STATE OF CALIFORNIA Department of Transportation

1/12/2022	Craig WNTWORTH
Date	Craig Wontworth

Craig Wentworth
Acting Deputy District Director
District 8 Division of Environmental
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DRAFT Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

State Clearinghouse Number:

District-County-Route-Post Mile: 08-Riv-10-R91.7/R92.1

EA/Project Identification: EA 1J710

Project Description

The California Department of Transportation (Caltrans) proposes to reconstruct rock slope protection (RSP) and make safety and surface improvements to the Orris Ditch Bridges on I-10 at Post Mile (PM) R91.9 in Riverside County. Improvements include reconstruction of the existing RSP; upgrading the bridge railing; re-pavement of the roadway within Project limits with asphalt concrete; installation of Midwest Guardrail System with vegetation control; installation of new chain link fence in the median and along the access control line. The Orris Ditch Bridges will also be widened by nine inches on each side to accommodate the upgraded bridge railing.

Determination

An Initial Study has been prepared by Caltrans, District 8.

Pending public review and on the basis of this study, it is determined that the proposed action with the incorporation of the identified mitigation measures will not have a significant effect on the environment for the following reasons:

The proposed Project would have no impact on agricultural and forest resources, cultural resources, energy, land use and planning, mineral resources, noise, population and housing, recreation, tribal cultural resources, or wildfire.

The proposed Project would have less than significant impact to aesthetics, air quality, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology, public services, transportation, or utilities.

The proposed Project would have less than significant impacts with mitigation incorporated to biological resources.

To avoid and/or minimize potential impacts to biological resources, the following measures will be implemented:

- **BIO-1 Litter Control & Disposal**: The contractor shall comply with Caltrans Standard Special Provisions (SSP) 14-10.01. The contractor shall not allow litter, trash, or debris to accumulate anywhere on the site, including storm drain grates, trash racks, and ditch lines. Pick up and remove litter, trash, and debris from the job site at least once a week. Do not perform solid waste management in the median area unless there is construction activity present. Perform solid waste management monthly during the plant establishment period. The WPC manager must monitor solid waste storage and disposal procedures. If practicable, recycle nonhazardous waste and excess material. If recycling is not practicable, dispose of the material. Furnish enough closed-lid dumpsters of sufficient size to contain the solid waste generated by work activities. When waste reaches the fill line, empty the dumpsters. Dumpsters must be watertight. Do not wash out dumpsters at the job site. Furnish additional containers and more frequent pickup during the demolition phase of construction. Solid waste includes: 1. Brick 2. Mortar 3. Timber 4. Metal scraps 5. Sawdust 6. Pipe 7. Electrical cuttings 8. Nonhazardous equipment parts 9. Styrofoam and other packaging materials 10. Vegetative material and plant containers from highway planting 11. Litter and smoking material, including litter generated by the public 12. Other trash and debris. Furnish and use trash containers in the job-site yard, field trailers, and locations where workers gather for lunch and breaks.
- **BIO-2 Dewatering:** The contractor shall comply with Caltrans SSP 13-4.04G or the latest version for dewatering. Dewatering consists of discharging accumulated stormwater, groundwater, or surface water from excavations or temporary containment facilities. The contractor shall perform dewatering work as specified for the work items involved, such as a temporary ATS or dewatering and discharge. If dewatering and discharging activities are not specified for a work item and you perform dewatering activities:1. Conduct dewatering activities under the Department's Field Guide for Construction Site Dewatering.2. Ensure any dewatering discharge does not cause erosion, scour, or sedimentary deposits that could impact natural bedding materials.3. Discharge the water within the project limits. Dispose of the water if it cannot be discharged within project limits due to site constraints or contamination.4. Do not discharge stormwater or non-stormwater that has an odor, discoloration other than sediment, an oily sheen, or foam on the surface. Immediately notify the Engineer upon discovering any such condition.
- **BIO-3** Equipment Staging, Storing & Borrow Sites: All staging, storing, and borrow sites shall be approved by the Caltrans biologist.

- BIO-4 Temporary Artificial Lighting Restrictions: Artificial lighting shall be directed at the work site to minimize light spillover outside of the construction footprint if Project activities occur at night.
- Species Avoidance: If during Project activities a desert tortoise is discovered within the Project site, all construction activities must stop within 100 feet and the Caltrans biologist and Resident Engineer must be notified. Coordination with respective resource agencies may be required prior to restarting activities.
- Worker Environmental Awareness Program (WEAP): A Contractorsupplied biologist must present a biological resource information program/WEAP for desert tortoise, natural communities of concern, and other special status species/habitat prior to Project activities to all personnel that will be present within the Project limits for longer than 30 minutes at any given time.
- BIO-7 Biological Monitor: The Contractor-supplied biologist must monitor Project activities daily to ensure that measures are being implemented and documented and submit a weekly monitoring report for desert tortoises (and additional special-status species) during construction.
- **BIO-8** Predator Prevention: Project personnel are prohibited from feeding wildlife or bringing pets onto the job site.
- Rare Plant Surveys, Flagging and Fencing: Within 30 days prior to construction, and during the typical rare plant blooming season (March-July), a Contractor supplied biologist will conduct a pre-construction plant survey. Special-status plants must be flagged for visual identification to construction personnel for work avoidance. Special-status plants detected that feature multiple plants in a single location must be fenced with stakes and flagging to temporarily identify the Environmentally Sensitive Area (ESA).
- **BIO-10** Equipment Flagging: After each shift, order Project personnel to attach surveyor flagging tape to a conspicuous place on each piece of equipment to remind the operator to check under the equipment for desert tortoise before operating equipment during the next shift.
- **Pre-construction Surveys:** Pre-construction desert tortoise surveys must be conducted by a Contractor-supplied biologist within 7 days and immediately prior to Project activities. If a desert tortoise is located, the Resident Engineer and Caltrans biologist must be contacted and additional measures and/or agency coordination may be required.
- BIO-12 Deceased or Injured Tortoise Within the Project Site: The Contractor-supplied biologist will inform USFWS and CDFW of any injured or deceased desert tortoise (and other special-status species)

found on site (verbal notification within 24 hours and written notification within 5 days).

- **BIO-13** Partial Grouting of Rock Slope Protection: To address impacts to desert tortoise partial grouting, of rock slope protection shall be required following repair as directed by the Caltrans biologist.
- **Pre-Construction Nesting Bird Survey:** If Project activities cannot avoid the nesting season, generally regarded as Feb. 1 Sept. 30, then pre-construction nesting bird surveys must be conducted 3 days prior to construction by a Contractor-supplied biologist to locate and avoid nesting birds. If an active avian nest is located, a no construction buffer may be established and monitored by the Contractor-supplied biologist and/or monitored until the young have fledged.
- **BIO-15** Pre-Construction Burrowing Owl Survey: Two burrowing owl pre-construction surveys must be performed: one survey 14-30 days prior to Project activities, and one survey 24 hours prior to Project activities by a Contractor-supplied biologist.
- **BIO-16 Burrowing Owl:** If burrowing owls are found on site, coordination with CDFW will be conducted to determine the appropriate avoidance, minimization and mitigation measures required for the Project.
- BIO-17 Pre-construction Kit Fox Survey and Monitoring A Contractor-supplied biologist must conduct pre-construction surveys for desert kit fox within the Project site and biological study area boundaries no more than 30 days prior to the commencement of ground-breaking activities. Dens will be classified as inactive, potentially active, or active. Should dens be deemed active, additional surveys are required. If desert kit fox is present, the additional measures may be required.
- BIO-18 Desert Kit Fox Den Complex Monitoring, Passive Relocation, and Stop Work Restrictions:
 - a) All desert kit fox den complexes in the Project site identified as potentially active or definitely active must be monitored in accordance to CDFW guidelines.
 - b) If once the monitoring is concluded, no desert kit fox tracks are found at the burrow entrance, or no photos of the target species using the den are observed, the den can be excavated and backfilled by hand. If a den is identified as being active, it must further be classified as non-natal or natal den. Potential natal den complexes are to be monitored for a minimum of 3 additional days using infrared wildlife cameras and/or tracking medium to determine their status.

- c) If the den complex is determined to be natal during the denning period (February June), a 200-foot non-disturbance buffer zone will be established surrounding natal dens, and monitoring by infrared cameras or weekly visits by a Contractor-supplied biologist will continue until it has been determined that the young have dispersed. The final buffer distance may be determined in consultation with the BLM and CDFW.
- d) If the den complex within the Project site is determined to be nonnatal, passive hazing techniques must be used to discourage desert kit fox from using the den complex. Desert kit fox must be excluded from all den complexes within the Project site portion of the Project disturbance area.
- e) Inactive dens that are within the Project site must immediately be excavated by hand and backfilled to prevent reuse by desert kit fox.
- f) If desert kit fox tracks are observed or desert kit fox is captured in camera photos, then various passive hazing techniques will be implemented to deter desert kit fox from using the den complex.
- g) If desert kit fox are present and passive relocation techniques fail, the BLM and CDFW may be contacted to explore other relocation options such as trapping.
- h) If during construction activities a desert kit fox is within the Project site, all construction activities must stop, and the Contractor-supplied biologist must be notified. Consultation with resource agencies may be required, as appropriate.

Craig Wentworth

Acting Deputy District Director
District 8 Division of Environmental Planning
California Department of Transportation

CEQA Lead Agency

1/12/2022

Date

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Chapter 1 Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans) proposes to reconstruct Rock Slope Protection (RSP) and make safety and surface improvements to the Orris Ditch eastbound and westbound Bridges (Project), on Interstate 10 (I-10), in the desert region of Riverside County. Figure 1-1 and 1-2 show the Project vicinity and location. Caltrans is the lead agency under the California Environmental Quality Act (CEQA).

As a transcontinental west-east route, the I-10 freeway traverses eight states, from California's Pacific Coast, in Los Angeles County, to Florida's Atlantic Coast. Within Caltrans District 8, I-10 is 196 miles long and ranges from four mixed-flow lanes to eight mixed-flow and two High Occupancy Vehicle (HOV) lanes in the Inland Empire and desert regions of Riverside and San Bernardino counties. In District 8, I-10 traverses the cities of Montclair, Upland, Ontario, Fontana, Rialto, Colton, San Bernardino, Loma Linda, Redlands, Yucaipa, Calimesa, Banning, Beaumont, Palm Springs, Cathedral City, Rancho Mirage, Palm Desert, Indio, Coachella, and Blythe. I-10 serves as a primary connection for commuter traffic and movement of goods from seaports in District 7 to the rest of the United States. West of the Coachella Valley, I-10 serves as a means for regional commuter trips. East of Coachella Valley, the majority of trips are related to interstate travel with a substantial majority of those trips being related to goods movement. According to the Caltrans 2017 Transportation Concept Report (TCR), the proposed Project is a part of segment 14. Segment 14 consist of four lanes (two in each direction) with no HOV lanes and is planned to remain as four-lane highway in 2040, per the SCAG-RTP (Caltrans 2017).

1.2 Purpose and Need

1.2.1 Purpose

The purpose of the Project is to preserve the structural integrity of the Orris Ditch Bridges in a safe and economic manner to prevent future facility failures, and to upgrade the existing facility to current standards.

1.2.2 Need

The current rock slope protections at the Orris Ditch Bridges abutments are inadequate and have many misplaced rocks. The RSP locations were determined to be scour critical and are prone to undermining and scouring. If left unmitigated, the RSP will continue to deteriorate and eventually fail. Existing guard rail and bridge

railing do not meet current standards. The existing chain link fence and pavement have deteriorated and need repair.

1.3 Project Description

Two alternatives are being considered for this Project, one Build Alternative and one No-Build Alternative. The proposed Project proposes to reconstruct the existing RSP and make various upgrades to the Orris Ditch Bridges on I-10 (PM R91.9) in Riverside County. Figure 1-1 and 1-2 show the Project vicinity and Project location, respectively.

The Project proposes to reconstruct RSP and make safety and surface improvements to the Orris Ditch eastbound and westbound Bridges on I-10 at Post Mile (PM) R91.9 in Riverside County. Improvements include reconstruction of the existing RSP; upgrading the bridge railing; re-pavement of the roadway within Project limits with asphalt concrete; installation of Midwest Guardrail System with vegetation control; and installation of new chain link fence in the median and along the access control line. The Orris Ditch Bridges will also be widened by nine inches on each side to accommodate the upgraded bridge railing.

The estimated total cost of the Project is \$7,789,000. Project construction is scheduled to begin in the Fall of 2023/Winter 2024 and conclude by the Summer of 2024.

Figure 1-1 Project Vicinity Map

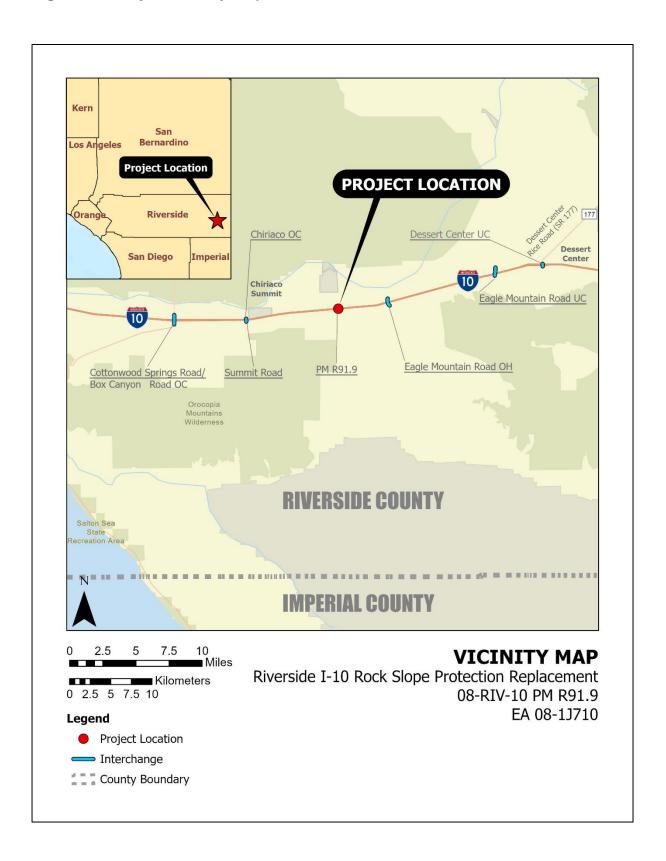


Figure 1-2 Project Location Map



1.4 Project Alternatives

Two alternatives are being considered for this Project, one Build Alternative and one No-Build Alternative.

1.4.1 Build Alternative

The Build alternative would include the following proposed improvements to the Orris Ditch Bridges:

- Reconstruct the existing RSP protecting the embankment slopes near the bridges.
- Upgrade bridge railing to a 42" high, type 842 barrier.
- Widen both sides of each bridge by 9 inches.
- Repave existing pavement with asphalt concrete.
- Install MGS with vegetation control.
- Install chain link fence in the median, at slope tops.
- Replace existing fence with a chain link fence at access control line.

1.4.2 No-Build (No-Action) Alternative

The No-Build Alternative would maintain the existing condition of the facilities and RSP. No improvements to the RSP, bridges, railings, pavement, or fences would be made under this alternative.

The No-Build alternative does not meet the Project purpose and need and the existing RSP would continue to deteriorate, resulting in operation deficiencies and the need for future maintenance measures.

1.4.3 Identification of a Preferred Alternative

After the public circulation period, all comments received will be considered, and Caltrans will select a preferred alternative and make the final determination of the project's effect on the environment. Under the California Environmental Quality Act (CEQA), if no unmitigable, significant, adverse impacts are identified, the Department will prepare a Negative Declaration (ND) or a Mitigated Negative Declaration (MND).

1.5 Discussion of the NEPA Categorical Exclusion

This document contains information regarding compliance with the California Environmental Quality Act (CEQA) and other state laws and regulations. Separate environmental documentation, supporting a Categorical Exclusion determination, will be prepared in accordance with the National Environmental Policy Act (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).

1.6 Permits and Approvals Needed

The following permits, licenses, agreements, and certifications are required for Project construction:

Agency	Permit/Approval	Status
California Department of Fish and Wildlife	1600 Lake and Stream Bed Alteration Agreement	Would be obtained during the Project design phase.
Colorado River Regional Water Quality Control Board (Region 7)	Section 401 Clean Water Act	Would be obtained during the Project design phase.
U.S. Fish and Wildlife Service (USFWS)	Streamlined Biological Opinion for desert tortoise	Would be obtained during the Project design phase.
U.S. Army Corps of Engineers	Approved Jurisdictional Delineation (AJD)	Would be obtained during the Project Design Phase
California State Water Resources Control Board	NPDES Statewide Storm Water Permit for Caltrans	Notice of intent will be implemented prior to the construction phase.
California State Water Resources Control Board	NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities	Notice of Intent will be implemented prior to the construction phase.

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Chapter 2 CEQA Evaluation

2.1 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed Project. Potential impact determinations include Potentially Significant Impact, Less Than Significant with Mitigation Incorporated, Less Than Significant Impact, and No Impact. In many cases, background studies performed in connection with a Project will indicate that there are no impacts to a particular resource. A No Impact answer reflects this determination. The questions in this checklist are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

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

2.1.1 Aesthetics

Considering the information included in the Questionnaire to Determine Visual Impact Assessment (VIA) Level (Caltrans 2021), the following significance determinations have been made:

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

Affected Environment

The proposed Project is located on the I-10, in the desert valley region of Riverside County. The Project area is rural and undeveloped. The nearest developed area is the Desert Center, located 10 miles east of the Project limits.

Environmental Consequences

a) No Impact

There are no scenic vistas within the Project area. Therefore, there would be no impacts to scenic vistas.

b) No Impact

The Project area is not on a listed state scenic highway. Additionally, all improvements will be within Caltrans right of way. Therefore, there will be no impacts to any scenic resources within a state scenic highway.

c) Less Than Significant

The proposed Project would replace and upgrade the bridge railing. However, viewer sensitivity in the area is low and the level of change to the visual environment is low. Therefore, impacts to the existing visual character and public views would be less than significant.

d) No Impact

The Project scope includes reconstruction of RSP and safety and surface improvements. No new light sources are proposed for the Project. Therefore, there would be no impact.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance or minimization measures are proposed for aesthetic resources.

2.1.2 Agriculture and Forest Resources

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

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

Affected Environment

The proposed Project is located in an undeveloped area of Riverside County. The Project area is zoned as Highway, Open Space Rural, and Conservation Habitat.

Environmental Consequences

a,b,c,d,e) No Impact

There is no prime farmland, unique farmland, farmland of statewide importance, or forest land located within the Project area or Project vicinity. Therefore, the Project will have no impact to farmland and forest land.

Avoidance,	Minimization,	and/or	Mitigation	Measures

No avoidance, minimization or mitigation measures are proposed for agricultural and forest resources.

2.1.3 Air Quality

Considering the information included in the Air Quality memo dated February 3, 2021 (Caltrans 2021), the following significance determinations have been made:

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

Affected Environment

The proposed Project is located in the Salton Sea Air Basin and under the jurisdiction of the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Control Board (CARB). The Project area is rural and there are no sensitive receptors or development in the Project area.

Environmental Consequences

a,c,d) No Impact

The proposed Project is not a capacity increasing Project and is not expected to generate any long-term changes to traffic volumes. Therefore, the Project is not expected to generate a significant amount of air pollutants. Additionally, the Project area is rural with no sensitive receptors. Pollutants generated during the construction of the Project is not anticipated to affect sensitive receptors or a substantial number of people.

b) Less Than Significant Impact

The proposed Project is included in the SCAG's 2021 Federal Transportation Implementation Plan (FTIP) as FTIP ID RIVLS06 and in the SCAG's 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) as RTP ID 30M0701 RIVLS06. The SCAG FTIP and RTP listing are included in Attachment C. Per the 2021 FTIP, the Project is exempt from air quality

conformity under 40 CFR 93.126, under the exempt Project type: Widening narrow pavements or reconstructing bridges (no additional travel lanes).

Temporary operation of construction vehicles, during the construction period, could generate fugitive dust. The Project will comply with all constructions SCAQMD standards and Caltrans standardized procedures for minimizing pollutants generated during construction. Therefore, impacts will be less than significant.

Avoidance, Minimization, and/or Mitigation Measures

To avoid and/or minimize impacts to air quality, the following measures would be implemented:

AQ-1: During construction, the contractor shall comply with Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reductions, and comply with all applicable laws and certify they are aware of all and will comply with all Air Resources Board (ARB) emission reduction regulations.

AQ-2: During construction, the contractor shall comply with Caltrans Standard Specifications, Section 14-9.02, "Air Pollution Control," for exhaust and particulate matter emissions control to comply with air-pollution-control rules, regulations, ordinances, and statutes.

2.1.4 Biological Resources

Considering the information included in the Natural Environmental Study Minimal Impacts (NESMI), dated September 9, 2021 (Caltrans 2021), the following significance determinations have been made:

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

Affected Environment

The proposed Project is located within the Colorado Desert Region, characterized by desert scrub, sandy desert terrain, and washes. A biological study area (BSA), the proposed Project limits plus a 500 feet buffer, was established for the proposed Project. The BSA supports two native plant communities: Creosote bush scrub - White Bursage Scrub Alliance and blue palo verde-ironwood woodland. The BSA is located within desert tortoise suitable habitat, designated desert tortoise critical

habitat, the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) Desert Tortoise and Linkage Conservation Area.

The NESMI identified three (3) State jurisdictional ephemeral drainage features, Orris Ditch and tributaries, and no jurisdictional wetlands were identified. Two minor ephemeral drainage features were also identified. The total drainage area within 50 feet of the Project area is 0.448 acres over 756.675 linear feet.

Environmental Consequences

a) Less Than Significant With Mitigation Incorporated

Reptiles

Desert tortoise, a Federally- and State-listed species, has potential to be present in the Project BSA. The entire Project area is located in the desert tortoise's historic range. Although no live desert tortoises or signs of desert tortoises were observed in the BSA during the 2021 survey, the entire Project impact area (PIA) is within United States Fish and Wildlife Service (USFWS) designated Chuckwalla Critical Habitat Unit. The entire BSA is also in desert tortoise critical habitat (DTCH). A total of 57.78 acres of desert tortoise critical habitat, excluding paved areas, is located within the BSA.

Construction activities, vegetation removal, ground disturbance, temporary access roads, equipment staging, and RSP repair, are expected to result in approximately 5.91 acres of temporary and 0.021 acres of permanent impacts to DTCH. Therefore, a determination has been made that the Project may affect and is likely to adversely affect desert tortoise and DTCH. Per the CVMSHCP, the Project will require a USFWS Streamlined Biological Opinion of the incidental take of desert tortoise. To avoid and minimize impacts to desert tortoise, measures BIO-1, -3, -5 through -8, and -10 through -13 will be implemented. Furthermore, Caltrans is obligated through CVMSHCP to contribute funds to the Coachella Valley Conservation Commission (CVCC) for the acquisition of conservation lands, management, and monitoring of these lands.

Birds

The BSA also contains suitable habitat for three bird species, burrowing owl, prairie falcon, and Bendire's thrasher. Burrowing owl is a State-designated Species of Special Concern, BLM Sensitive, and a USFWS Bird of Conservation Concern. Suitable habitat and potentially occupied burrows were observed throughout the BSA. Bendire's thrasher is a State-designated Species of Special Concern and is BLM sensitive. Suitable habitat was observed in the BSA, where suitable nesting substrate was present. Prairie falcon is a State-designated Watch List Species. The BSA does not contain suitable nesting habitat for prairie falcon but does contain foraging habitat for the species.

Construction impacts such as noise, ground vibrations from heavy equipment, night work, and human presence would result in temporary and permanent impacts to these bird species. Temporary impacts include avoidance of the immediate Project area and nest abandonment. Permanent impacts resulting from activities such as vegetation removal could result in destruction of nests or eggs. To avoid and/or minimize potential impacts to special-status birds, measures **BIO-3**, **-4**, **-6**, **-14**, **-15**, and **-16** would be implemented.

Mammals

The BSA has potential habitat features for five special status mammal species: desert bighorn sheep, pallid bat, Townsend's big-eared bat, gray fox, and kit fox. Desert bighorn sheep is a State-designated Fully Protected species and BLM sensitive. Presence of this species was reported in the Orocopia Mountains south of the BSA. Townsend's big-eared bat and pallid bat are both CDFW Species of Special Concern and BLM sensitive species. Neither species was observed in the Project area but vegetation and RSP within the BSA were determined to have low potential for roosting bats. Under CCR, Title 14, Division 1 (Subdivision 2), Chapter 5, Sections 460-464, take of kit fox and gray fox are prohibited. No fox or signs of fox presence were observed in the BSA during surveys. Reconstruction of RSP has the potential to temporarily and/or permanently impact potential bat roosting habitat. To avoid potential impacts to special-status mammals, measures BIO-1, -3, -4, -6, -7, -8, and -18 would be implemented.

Plants

No special-status plants have been identified in the BSA. However, measure **BIO-1**, **-3 and -9** would be implemented to avoid and/or minimize any potential impacts to sensitive plant species.

b) Less Than Significant With Mitigation Incorporated

Per the NESMI (Caltrans 2021), one community of special concern was identified in the BSA, blue palo verde-ironwood woodland. Another sensitive community, California fan palm oasis, was identified as a state-sensitive vegetation community in the record search but was not observed in the BSA. The Project BSA and PIA contain 10.51 acres and 2.86 acres of Blue palo verde-ironwood woodland respectively. Proposed RSP reconstruction would result in temporary and/or permanent impacts to woodlands surrounding the RSP. Construction of the proposed Project would temporary impact 20 and permanently impact two Blue palo verde trees. To avoid and minimize Project impacts to Blue palo verde-ironwood woodland, measures BIO-1, -3, and -6 would be implemented.

As stated in response to Question a), the proposed Project would result in 5.91 acres of temporary and 0.021 acres of permanent impacts to DTCH. A

streamlined biological opinion for the incidental take of desert tortoise would be acquired during the design phase and measures **BIO-1**, -3, -5-, -6, -7, -8, -10, -11, -12, and -13 would be implemented to avoid and/or minimize any impacts to desert tortoise.

c) No Impact

There are no wetlands in the Project BSA. Therefore, no impacts to wetlands would occur.

d) Less Than Significant Impact

The proposed Project would require work in the channel. Vegetation removal, ground disturbance, and creation of a visual barrier would result in temporary impacts to wildlife movement through the channel. Although, the Project will temporarily impact wildlife movement, multiple other connectivity areas exist within the Project vicinity that would not be impacted by the proposed Project. Proposed improvements would not reduce the size of the Orris Ditch Bridges nor cover existing soft-bottoms. The Project would maintain hydrological processes and biological corridor functions. Therefore, the level of connectivity for wildlife would remain the same.

e) No Impact

The proposed Project would not conflict with any local policies or ordinances protecting biological resources.

f) No Impact

The proposed Project BSA is located within the CVMSHCP Desert Tortoise and Linkage Conservation Area. Proposed Project activities are included in the CVMSHCP as covered activities identified in Section 7.3.1.1 "Covered Operation, Maintenance, and Safety Activities with Existing Right-of-Way or Easements within the Conservation Areas." To ensure that the Project is consistent with the requirements of the CVMSHCP, Caltrans would obtain a Streamlined Biological Opinion from USFWS and continue to coordinate with the CVCC to ensure that all CVMSHCP requirements are met. Measures BIO-1 through BIO-18 would be implemented, as required by the CVMSHCP.

Avoidance, Minimization, and/or Mitigation Measures

The following measures are proposed for this Project to avoid and/or minimize impacts to biological resources:

BIO-1 Litter Control & Disposal: The contractor shall comply with Caltrans Standard Special Provisions (SSP) 14-10.01. The contractor shall not allow litter, trash, or debris to accumulate anywhere on the site, including storm drain grates, trash racks, and ditch lines. Pick up and remove litter, trash, and debris from the job site at least once a week. Do not

perform solid waste management in the median area unless there is construction activity present. Perform solid waste management monthly during the plant establishment period. The WPC manager must monitor solid waste storage and disposal procedures. If practicable, recycle nonhazardous waste and excess material. If recycling is not practicable, dispose of the material. Furnish enough closed-lid dumpsters of sufficient size to contain the solid waste generated by work activities. When waste reaches the fill line, empty the dumpsters. Dumpsters must be watertight. Do not wash out dumpsters at the job site. Furnish additional containers and more frequent pickup during the demolition phase of construction. Solid waste includes: 1. Brick 2. Mortar 3. Timber 4. Metal scraps 5. Sawdust 6. Pipe 7. Electrical cuttings 8. Nonhazardous equipment parts 9. Styrofoam and other packaging materials 10. Vegetative material and plant containers from highway planting 11. Litter and smoking material, including litter generated by the public 12. Other trash and debris. Furnish and use trash containers in the job-site yard, field trailers, and locations where workers gather for lunch and breaks.

- Dewatering: The contractor shall comply with Caltrans SSP 13-4.04G or **BIO-2** the latest version for dewatering. Dewatering consists of discharging accumulated stormwater, groundwater, or surface water from excavations or temporary containment facilities. The contractor shall perform dewatering work as specified for the work items involved, such as a temporary ATS or dewatering and discharge. If dewatering and discharging activities are not specified for a work item and you perform dewatering activities:1. Conduct dewatering activities under the Department's Field Guide for Construction Site Dewatering.2. Ensure any dewatering discharge does not cause erosion, scour, or sedimentary deposits that could impact natural bedding materials.3. Discharge the water within the project limits. Dispose of the water if it cannot be discharged within project limits due to site constraints or contamination.4. Do not discharge stormwater or non-stormwater that has an odor, discoloration other than sediment, an oily sheen, or foam on the surface. Immediately notify the Engineer upon discovering any such condition.
- **BIO-3** Equipment Staging, Storing & Borrow Sites: All staging, storing, and borrow sites shall be approved by the Caltrans biologist.
- BIO-4 Temporary Artificial Lighting Restrictions: Artificial lighting shall be directed at the work site to minimize light spillover outside of the construction footprint if Project activities occur at night.
- **Species Avoidance:** If during Project activities a desert tortoise is discovered within the Project site, all construction activities must stop within 100 feet and the Caltrans biologist and Resident Engineer must

be notified. Coordination with respective resource agencies may be required prior to restarting activities.

- Worker Environmental Awareness Program (WEAP): A Contractor supplied biologist must present a biological resource information program/WEAP for desert tortoise, natural communities of concern, and other special status species/habitat prior to Project activities to all personnel that will be present within the Project limits for longer than 30 minutes at any given time.
- BIO-7 Biological Monitor: The Contractor-supplied biologist must monitor Project activities daily to ensure that measures are being implemented and documented and submit a weekly monitoring report for desert tortoises (and additional special-status species) during construction.
- **BIO-8** Predator Prevention: Project personnel are prohibited from feeding wildlife or bringing pets onto the job site.
- Rare Plant Surveys, Flagging and Fencing: Within 30 days prior to construction and during the typical rare plant blooming season (March-July), a Contractor supplied biologist will conduct a pre-construction plant survey. Special-status plants must be flagged for visual identification to construction personnel for work avoidance. Special-status plants detected that feature multiple plants in a single location must be fenced with stakes and flagging to temporarily identify the Environmentally Sensitive Area (ESA).
- **BIO-10** Equipment Flagging: After each shift, order Project personnel to attach surveyor flagging tape to a conspicuous place on each piece of equipment to remind the operator to check under the equipment for desert tortoise before operating equipment during the next shift.
- **BIO-11 Pre-construction Surveys:** Pre-construction desert tortoise surveys must be conducted by a Contractor-supplied biologist within 7 days and immediately prior to Project activities. If a desert tortoise is located, the Resident Engineer and Caltrans biologist must be contacted and additional measures and/or agency coordination may be required.
- **BIO-12** Deceased or Injured Tortoise Within the Project Site: The Contractor-supplied biologist will inform USFWS and CDFW of any injured or deceased desert tortoise (and other special-status species) found on site (verbal notification within 24 hours and written notification within 5 days).
- **BIO-13** Partial Grouting of Rock Slope Protection: To address impacts to desert tortoise, partial grouting of rock slope protection shall be required following repair as directed by the Caltrans biologist.

- **Pre-Construction Nesting Bird Survey:** If Project activities cannot avoid the nesting season, generally regarded as Feb. 1 Sept. 30, then pre-construction nesting bird surveys must be conducted 3 days prior to construction by a Contractor-supplied biologist to locate and avoid nesting birds. If an active avian nest is located, a no construction buffer may be established and monitored by the Contractor-supplied biologist and/or monitored until the young have fledged.
- **BIO-15** Pre-Construction Burrowing Owl Survey: Two burrowing owl pre-construction surveys must be performed: one survey 14-30 days prior to Project activities, and one survey 24 hours prior to Project activities by a Contractor-supplied biologist.
- BIO-16 Burrowing Owl: If burrowing owls are found on site, coordination with CDFW will be conducted to determine the appropriate avoidance, minimization and mitigation measures required for the Project.
- Pre-construction Kit Fox Survey and Monitoring: A Contractor-supplied biologist must conduct pre-construction surveys for desert kit fox within the Project site and biological study area boundaries no more than 30 days prior to the commencement of ground-breaking activities. Dens will be classified as inactive, potentially active, or active. Should dens be deemed active, additional surveys are required. If desert kit fox is present, the additional measures may be required.
- BIO-18 Desert Kit Fox Den Complex Monitoring, Passive Relocation, and Stop Work Restrictions:
 - a) All desert kit fox den complexes in the Project site identified as potentially active or definitely active must be monitored in accordance to CDFW guidelines.
 - b) If once the monitoring is concluded, no desert kit fox tracks are found at the burrow entrance, or no photos of the target species using the den are observed, the den can be excavated and backfilled by hand. If a den is identified as being active, it must further be classified as non-natal or natal den. Potential natal den complexes are to be monitored for a minimum of 3 additional days using infrared wildlife cameras and/or tracking medium to determine their status.
 - c) If the den complex is determined to be natal during the denning period (February June), a 200-foot non-disturbance buffer zone will be established surrounding natal dens, and monitoring by infrared cameras or weekly visits by a Contractor-supplied biologist will continue until it has been determined that the young have dispersed. The final buffer distance may be determined in consultation with the BLM and CDFW.

- d) If the den complex within the Project site is determined to be nonnatal, passive hazing techniques must be used to discourage desert kit fox from using the den complex. Desert kit fox must be excluded from all den complexes within the Project site portion of the Project disturbance area.
- e) Inactive dens that are within the Project site must immediately be excavated by hand and backfilled to prevent reuse by desert kit fox.
- f) If desert kit fox tracks are observed or desert kit fox is captured in camera photos, then various passive hazing techniques will be implemented to deter desert kit fox from using the den complex.
- g) If desert kit fox are present and passive relocation techniques fail, the BLM and CDFW may be contacted to explore other relocation options such as trapping.
- h) If during construction activities a desert kit fox is within the Project site, all construction activities must stop, and the Contractor-supplied biologist must be notified. Consultation with resource agencies may be required, as appropriate.

2.1.5 Cultural Resources

Considering the information included in the Historic Property Survey Report dated September 10, 2021 (Caltrans 2021), the following significance determinations have been made:

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

Affected Environment

The proposed Project location is rural and undeveloped. An Area of Potential Effects (APE) was developed for the Project. The APE includes the maximum extent of ground disturbance and areas where indirect and/or cumulative effects may occur.

Environmental Consequences

a) No Impact

The Orris Ditch Bridges are listed in the Caltrans Historic Bridge Inventory as a Category 5 bridge, previously determined not eligible for listing in the National Register of Historic Places (NRHP). A search of the Caltrans Cultural Resources Database was conducted and revealed that the Project area is within the limits of the Desert Training Center (DTC). However, the area was highly disturbed by the construction of the I-10, roadway maintenance, and season waterway. No constituents of the DTC were located within the Project limits. No impacts to historical resources are anticipated.

b) No Impact

The Project area is highly disturbed. Therefore, no impact to buried archaeological deposits is anticipated. To avoid and/or minimize the impact to archaeological resources, **CUL-1** and **CUL-2** will be implemented. Therefore, potential impacts to the archaeological resources would be less than significant.

c) No Impact

Proposed work would occur entirely within Caltrans right of way. No human remains are anticipated; however, to avoid and/or minimize any potential effects to human remains, **CUL-2** would be followed in the event that human remains are encountered.

Avoidance, Minimization, and/or Mitigation Measures

To avoid and/or minimize any potential impacts to cultural resources, the following measures would be followed:

- **CR-1** Treatment of Previously Unidentified Cultural Resources. If buried cultural resources are encountered during Project activities, it is Caltrans policy that work stop within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find.
- CR-2 Treatment of Human Remains. In the event that human remains are found, the county coroner will immediately be notified and all construction activities within 60 feet of the discovery will stop. Pursuant to PRC Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), who will then notify the Most Likely Descendent (MLD). The person who discovered the remains will contact the District 8 Division of Environmental Planning; Andrew Walters, DEBC: (909) 260-5178, and Gary Jones, DNAC: (909) 261-8157. Further provisions of PRC 5097.98 are to be followed as applicable.

2.1.6 Energy

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

Affected Environment

The proposed Project area is rural and generally undeveloped. There are no residential communities in the Project area and the nearest development is the Desert Center, 10 miles east of the Project limits.

Environmental Consequences

a) No Impact

The Project scope includes reconstruction of existing rock slope protection and safety and surface improvements to the Orris Ditch Bridges. Construction and operation of the Project would not result in significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources.

b) No Impact

The Project does not conflict with or obstruct any state or local plan for renewable energy or energy efficiency.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation measures are proposed for energy resources.

2.1.7 Geology and Soils

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
ii) Strong seismic ground shaking?				
iii) Seismic-related ground failure, including liquefaction?			\boxtimes	
iv) Landslides?				
b) Result in substantial soil erosion or the loss of topsoil?				
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onor off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				\boxtimes
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				\boxtimes

Affected Environment

The proposed Project is located in the desert region of Riverside County. The Project area is rural and largely undeveloped, and the nearest development is the Desert Center, 10 miles east of the Project location. The Project is located approximately 20 miles east of the San Andreas fault and four miles east of the Chiriaco fault zone (Caltrans GIS Library).

Environmental Consequences

a) Less Than Significant Impact

The Project is not located in or in the vicinity of a fault zone. The nearest fault is the Hidden Springs Fault, west of the Project, in the Mortmar and Orocopia Canyon Fault Zones. The San Andreas fault is approximately 20 miles west of the Project limits. Per the Riverside County General Plan - Safety Element, the Project area has a moderate risk for liquefaction. However, the Project scope includes reconstruction of RSP and surface and safety improvements to the existing bridge. Therefore, no impacts related to a known fault, seismic activity, or landslides would occur.

b) Less Than Significant Impact

Although the Project area is generally flat and located and proposed improvements would occur largely on the existing bridge structure, construction activities and reconstructed RSP may result in the loss of topsoil and erosion.

c,d) No Impact

Per the Riverside County General Plan – Safety Element, the Project is not located in a liquefaction zone and the Project area has moderate susceptibility to liquefaction. Proposed improvements to the Orris Bridge structures would be made to the surface of the existing bridges and reconstruction of the existing RSP would reduce the potential for RSP failure. Therefore, no impacts related to expansive soils and liquefaction are anticipated.

e) No Impact

There are no septic tanks or alternative wastewater facilities located in the Project area.

f) No Impact

The Project would occur in a previously disturbed area. Therefore, destruction of unique paleontological or geological features are not anticipated as a result of the proposed Project.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation measures are proposed for geology and soils.

2.1.8 Greenhouse Gas Emissions

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

Affected Environment

The Project area is undeveloped and rural. The primary use of this portion of the I-10 is the transportation of goods.

Environmental Consequences

a) Less Than Significant Impact

The Project is not a capacity-increasing Project and would not generate additional vehicle miles traveled or increase operational emissions. Emissions from construction related activities are anticipated during construction of the Project; however, these emissions would be temporary. Construction of the proposed project is expected to last for 110 working days.

b) No Impact

The Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing greenhouse gas emissions.

Avoidance, Minimization, and/or Mitigation Measures

The following measures would avoid and/or minimize Project impacts from GHG emissions during construction.

- **TR-1 Traffic Management Plan**: A traffic management plan shall be implemented to reduce travel delays and idling.
- AQ-1 Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction, require contractors to comply with all applicable laws and certify they are aware of all and will comply with all ARB emission reduction regulations.
- AQ-2 Caltrans Standard Specification Section 14-9.02, Air Pollution Control, requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes.

2.1.9 Hazards and Hazardous Materials

Considering the information included in the Initial Site Assessment Checklist, dated March ,2021 and the Site Investigation and Hazardous Materials Survey Report, dated May 10,2021 (Caltrans 2021), the following significance determinations have been made:

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

Affected Environment

An Initial Site Assessment (ISA) Checklist (Caltrans 2021) and Site Investigation and Hazardous Materials Survey Report (Caltrans 2021) were prepared for the proposed Project. Per the ISA checklist and the Site Investigation and Hazardous Materials Survey Report, the proposed Project has minimal risk for potential involvement with hazardous materials.

Environmental Consequences

a) Less Than Significant Impact

A Site Investigations and Hazardous Materials Survey Report (May 2021) was prepared for the proposed Project. No soil samples showed characteristics of California or Resource Conservation and Recovery Act (RCRA) hazardous waste and no asbestos containing materials were detected in the samples analyzed for the bridge. Paint in the Project area was also tested for lead based paint but did not meet the definition for lead based paint. Aerially deposited lead (ADL) soils may be present within the Project area at nonhazardous concentrations. The report indicated that the soil may be re-used as unregulated materials or disposed at an off-site land fill. To prevent or minimize potential effects from ADL soils, proposed work would be conducted under a lead compliance plan (HAZ-1).

Proposed improvements include upgrading existing guardrail with MGS. Removal of existing wood guard rail post would generate treated wood waste (TWW). To avoid or minimize potential effects from TWW, TWW generated for this Project would be handled in accordance with measure **HAZ-4** for TWW.

b) No Impact

Per the ISA checklist (March 2021), the Project area has minimal risk for potential hazardous waste involvement. Tested soil samples contained nonhazardous levels of ADL. The Department of Toxic Substance Control (DTSC) allows for the unregulated reuse of soils with ADL concentrations below 80mg/L. Nonhazardous ADL soils will be reused onsite or shipped to a disposal facility. The Project would not result in an accidental release or upset of hazardous materials. Therefore, the proposed Project would not create a significant hazard to the public or environment.

c) No Impact

There are no existing or proposed schools within a quarter mile of the Project limits. The Project would not expose any school to hazardous emissions, materials, substances, or waste.

d) No Impact

Per the ISA Checklist, the proposed Project would not affect sites listed on the Cortese List and has a low potential to encounter hazardous waste.

e) No Impact

The Project is not located within an airport land use plan or within two miles of a public airport. The nearest airport, Chiriaco Airport, is approximately 2.5

miles west of the Project and would not expose individuals to excessive airport related noise or hazards.

f) Less Than Significant Impact

To avoid and/or minimize impacts to emergency response and emergency evacuation plans, one lane will remain open, in each direction, at all times. A TMP (TR-1) will be implemented to avoid and or minimize any potential impacts to emergency responses and evacuations. Therefore, impacts to emergency response and evacuation plans will be less than significant.

g) No Impact

The Project is not located in a state or local designated high fire risk severity zone (CALFIRE 2021). No wildfire impacts are anticipated.

Avoidance, Minimization, and/or Mitigation Measures

To avoid and/or mitigate any potential impacts from hazardous waste, the following measures would be implemented:

- **HAZ-1** The Project contractor shall prepare and follow a lead compliance plan under Section 7-1.02K(6)(j)(iii) of Caltrans' Standard Specifications.
- **HAZ-2** Prior to bridge rehabilitation activities, the contractor will comply with Caltrans Standard Specification 14-9.02 for NESHAP notification and comply with all local, state, and federal permit requirements and regulations.
- HAZ-3 If suspect asbestos-containing materials are discovered during construction, the material shall be assumed to contain asbestos, unless additional sampling and analysis determine otherwise. Demolition, management and disposal of any encountered asbestos containing materials (ACMs) or assumed ACMs shall be conducted in accordance with federal, state, and local regulations.
- **HAZ-4** The contractor shall comply with Caltrans SSP 14-11.14 for the handling, storage, transportation, and disposal of treated wood waste.
- **TR-1** A Traffic Management Plan will be developed for the Project and implemented to reduce travel delays and idling.

2.1.10 Hydrology and Water Quality

Considering the information included in the Scoping Questionnaire for Water Quality Issues, dated August 31, 2021, the following significance determinations have been made:

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
 a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? 				
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) result in substantial erosion or siltation on- or off-site;				
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;				
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				
(iv) impede or redirect flood flows?				
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				

Affected Environment

The proposed Project is located in the Hayfield Planning Area of the Colorado River Basin and is under the jurisdiction of the Colorado River Basin Regional Water Quality Control Board. Ground water depth in the Hayfield Planning Area ranges from 400 feet below the ground's surface to ground surface. Runoff from higher elevations is the main source of ground water recharge. Precipitation in the Project area is approximately three inches per year and most of the precipitation is lost through evaporation and evapotranspiration. Per the Federal Emergency

Management Agency (FEMA) Flood Risk Maps, the Project is not located in a 100-year floodplain.

Environmental Consequences

a) No Impact

There are no location specific water quality requirements for the Hayfield Planning Area and no receiving waters are listed for 303(d) impairment. Additionally, the Project will comply with the requirements of the Statewide Stormwater Water Quality Management Plan (SWMP).

b) No Impact

The proposed Project would not induce population growth or development in the area, increasing the local demand for groundwater. Additionally, the increase in impervious surface, as a result of the proposed Project, is minimal and would not significantly affect groundwater recharge.

c) Less Than Significant Impact

The proposed improvements would occur predominantly within existing facility footprint. However, reconstruction of RSP would add 0.8 acres of new impervious surface area. This increase is less than the one acre requirement for additional treatment area. The reconstructed RSP will be in the same location as the existing RSP. Therefore, the proposed Project would not substantially alter the existing drainage pattern of the site.

d) No Impact

The proposed Project is not located in a flood hazard, tsunami or seiche zone area; therefore, no impact would occur.

e) No Impact

The proposed Project would not conflict with or obstruct the implementation of a water quality control or groundwater management plan.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance or minimization measures are proposed for Project for hydrology and water quality.

2.1.11 Land Use and Planning

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

Affected Environment

The Project is located in an unincorporated portion of Riverside County and is governed by both the County General Plan and the Desert Center Area Plan. The Project area is zoned as Highway, Open Space Rural, and Conservation Habitat.

Environmental Consequences

a) No impact

The Project is not located within or in the vicinity of an established community. Therefore, the Project would not physically divide an established community.

b) No Impact

The Project will be entirely within Caltrans right of way and no property acquisitions would be required for the Project.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance, minimization, and/or mitigation measures are proposed for land use and planning:

LU-1 Prior to Project construction, all staging and storage areas will be environmentally cleared.

2.1.12 Mineral Resources

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				\boxtimes
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?				\boxtimes

Affected Environment

The proposed Project is located in a rural, undeveloped region of Riverside County. Per the Riverside County Map My County tool, the Project area is zoned as Highway, Open Space Rural, and Conservation Habitat.

Environmental Consequences

a,b) No Impact

The Project is not located in an area zoned for mineral importance. Construction of the proposed Project would not result in the loss of availability of any locally-important mineral resource recovery sites.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization or mitigation measures are required for mineral resources.

2.1.13 Noise

Considering the information included in the noise memorandum, dated January 21, 2021 (Caltrans 2021), the following significance determinations have been made:

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

Affected Environment

The Project area is generally rural and is not located within or adjacent to any residences, schools, businesses, or other sensitive receptors. The nearest airports are the Chiriaco Summit Airport, approximately 2.5 miles west of the Project limits, and Julian Hines-Hayfield Private Airfield, approximately 2 miles north of the Project.

Environmental Consequences

a) No Impact

There are no sensitive receptors within or near the Project area. The Project is not near any residence or businesses. The nearest development is the Desert Center, 10 miles east of the Project limits. No impact is anticipated.

b) No Impact

While increased ground-borne vibrations or ground-borne noise levels may occur, there are no sensitive receptors within the Project vicinity. Therefore, no impact would occur.

c) No Impact

Although the Julian Hines-Hayfield Private Airfield is within two miles of the Project area, there are no sensitive receptors in the vicinity of the Project area. Therefore, no impacts are anticipated.

Avoidance, Minimization, and/or Mitigation Measures

The following measure will be implemented to minimize construction generated noise:

NOI-1 To minimize potential construction generated noise, the residential engineer shall implement Caltrans Standard Specification 14-8.02 and SSP 14-8.02.

2.1.14 Population and Housing

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

Affected Environment

The Project area is zoned as Highway, Open Space Rural, and Conservation Habitat. The closest development area is the Desert Center, 10 miles east of the Project.

Environmental Consequences

a) No Impact

The Project area is located in an unincorporated area of Riverside County and the Desert Center area planning boundaries. The surrounding area is rural and undeveloped. The Project scope of work involves non-capacity increasing improvements to an existing highway. Therefore, no population growth is anticipated as result of the Project.

b) No Impact

There are no residence or businesses within the Project area and all proposed work will occur within Caltrans right of way. No property acquisitions are anticipated. Therefore, no impact would occur.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization or mitigation measures are proposed for the Project.

2.1.15 Public Services

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

Affected Environment

The Project area is rural and undeveloped. There are no residential communities or businesses in the Project area. The nearest business development is the Desert Center, approximately 10 miles east of the Project. The nearest school, Eagle Mountain Elementary School, is approximately 12.5 miles northeast of the Project limits.

Environmental Consequences

a, b) Less Than Significant Impact

There is potential for increased travel and response times during the construction of the proposed Project. To reduce potential impacts to public services, one lane in each direction would remain open during construction. Additionally, implementation of **TR-1** would minimize any traffic impacts during the construction of the proposed Project. Therefore, impacts to emergency response would be less than significant.

c, d, e) No Impact

There are no schools, parks or public facilities within the Project vicinity. The nearest school, Eagle Mountain Elementary School, is approximately 12.5 miles northeast of the Project limits. No impact to schools, parks, or public facilities is anticipated.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and/or minimization measures are proposed for public services:

TR-1 A Traffic Management Plan will be developed for the Project and implemented to reduce travel delays and idling.

2.1.16 Recreation

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

Affected Environment

The Project area is rural and there are no parks or recreational facilities in the Project area.

Environmental Consequences

a, b) No Impact

There are no neighborhood and regional parks or recreational facilities within the Project vicinity. Therefore, the Project would not lead to substantial or accelerated deterioration nor require the construction or modification of recreational facilities. No Impact would occur.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization or mitigation measures are proposed for recreation.

2.1.17 Transportation

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?				
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				\boxtimes
d) Result in inadequate emergency access?				

Affected Environment

The Project is an unincorporated portion of Riverside County. I-10, within the Project area, is a four-lane highway, two lanes in each direction. Per the SCAG-RTP, I-10 is planned to remain a four-lane highway in year 2040.

Environmental Consequences

a) No Impact

The proposed improvements would occur predominately on the existing travel way, zoned for Highways. Improvements outside of the travel way consist of the reconstruction of the RSP and replacement of the existing access fence with a chain link fence. The proposed work would be entirely within Caltrans right of way. The proposed Project is included in the 2021 SCAG FTIP and RTP as ID RIVLS06. The proposed project description and cost are inconsistent with the 2021 SCAG FTIP and RTP. Caltrans will coordinate with SCAG to amend the FTIP and RTP to reflect the latest project description and cost. Measure **TRA-2** will be implemented to amend the FTIP and RTP prior to project approval and adoption of the final environmental document.

b) No Impact

The proposed Project is not a capacity increasing Project and proposed improvements consist of reconstruction of RSP, and safety and surface improvements to the existing facility. The Project is not anticipated to induce additional vehicle miles traveled.

c) No Impact

The proposed Project would not change the existing geometric design of the highway facility or introduce new or increased hazards on the existing facility.

d) No Impact

There is potential for construction activities to cause disruptions or delays to emergency access during the construction of the Project. Disruption would be temporary and full access would resume after construction of the Project. To minimize the disruption to emergency access, **TR-1** will be implemented to avoid and/or minimize potential disruptions and delays to emergency access during Project construction.

Avoidance, Minimization, and/or Mitigation Measures

To avoid and/or minimize impacts to transportation, the following measures would be implemented.

- **TR-1** A Traffic Management Plan will be developed for the Project and implemented to reduce travel delays and idling.
- TR-2 Prior to project approval and adoption of the final environmental document, Caltrans will coordinate with SCAG to amend the FTIP and RTP for the project description and cost to be consistent with this IS.

2.1.18 Tribal Cultural Resources

Considering the information included in the Historical Property Survey Report (HPSR), dated September 10,2021, the following significance determinations have been made:

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				\boxtimes
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.				\boxtimes

Affected Environment

The proposed Project is located in an unincorporated, desert region of Riverside County. Proposed improvements would occur entirely within Caltrans right of way. A letter to the Native American Heritage Commission (NAHC) was sent on February 3, 2021 for a Sacred Lands File and Native American Contacts List Request.

Environmental Consequences

a) No Impact

Two properties were identified in the HPSR, the Orris Ditch Bridges and the DTC. The Orris Ditch Bridges were previously determined ineligible for listing in the NRHP and there are no features of the DTC within the Project APE. Therefore, there would be no impact to historical resources.

b) No Impact

A letter to the Native American Heritage Commission was sent on February 3, 2021 for a Sacred Lands File and Native American Contacts List Request. Letters were sent to five tribes on February 18, 2021 for AB 52 consultation. Letters were sent to Anthonly Madrigal of the 29 Palms Band of Mission

Indians, David Saldivar of the Augustine Band of Cahuilla Mission Indians, Yvonne Markle of the Cabazon Band of Mission Indians, Bryan Etsitty of the Colorado River Indian Tribes, and Joseph Ontiveros of the Soboba Band of Luiseno Indians. As of the date of this document, no responses have been received.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance or minimization measures are proposed for tribal resources.

2.1.19 Utilities and Service Systems

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

Affected Environment

The Project area is rural and undeveloped. The closest developments include the Chiriaco Airport, the Julian Hines-Hayfield Private Airfield and the Desert Center.

Environmental Consequences

a) Less Than Significant Impact

Construction of the proposed Project may require relocation of utilities. Any relocation of utilities will be coordinated with the utility owners, during the design phase, to avoid and/or minimize any service disruptions. The proposed Project would not result in the construction of new or expanded utilities.

b) No Impact

The Project would not require a water supply.

c) No Impact

The Project would not generate additional waste water demands.

d) No Impact

It is Caltrans' policy to recycle and reuse materials whenever possible. However, some solid waste would be generated and require temporary use of local landfills with adequate capacity.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are proposed for utilities.

2.1.20 Wildfire

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

Affected Environment

The proposed Project is located in the desert region of Riverside County. The Project area is designated as "Non-burnable" or "Very Low" wildfire hazard potential in the US Forest Service Wildfire Hazard Potential Map, Version 2020 (3/8/21) and moderate and other moderate under the CALFIRE Local Responsibility Area Fire Hazard Severity Zones Map.

Environmental Consequences

a-d) No Impact

The Project is not located in or near a state or local responsibility area classified as a very high fire severity zone. Per the Riverside County General Plan Safety Element, the Project area consist of federal responsibility areas classified as moderate and local responsibility areas classified as "all others." Therefore, the Project would have no impact to wildfires.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization or mitigation measures for wildfires are proposed.

2.1.21 Mandatory Findings of Significance

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to 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?				
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				\boxtimes

Environmental Consequences

a) Less Than Significant With Mitigation Incorporated

Biological Resources

Desert tortoise, a federally- and state-listed species is presumed present within the proposed Project BSA which includes 57.78 acres of DTCH. The proposed Project has the potential to temporarily impact 5.91 acres of DTCH and permanently impact 0.021 acres of DTCH. The proposed Project is a covered Project under the CVMSHCP and will comply with all CVMSHCP requirements. In addition, measures **BIO-1 through BIO-18** would be implemented to avoid, minimize, and mitigate impacts to biological resources. Therefore, the proposed Project would have less than significant impact to biological resources with mitigation incorporated.

Historical Resources

Two properties were identified in the APE, the Orris Ditch Bridges and DTC. The Orris Ditch Bridges were determined to be ineligible for listing in the NRHP and no elements of the DTC are located within the Project limits. Therefore, the Project would have no impact to historical resources.

b) Less Than Significant With Mitigation Incorporated

Caltrans Project, EA 1H200, has a similar scope to replace RSP and at 24 bridges on I-10 in Riverside County between post miles R92.9 and R101.1. EA 1H200 is currently in the design phase and is expected to begin construction in year 2024. The proposed Project has the potential to have cumulative considerable impacts to biological resources due to the potential of both Projects to impact desert tortoise and DTCH. The EA 1H200 Project area contains desert tortoise suitable habitat and "may affect, is likely to adversely affect" desert tortoise. Although both Projects are within desert tortoise suitable habitat and desert tortoise are presumed present. Project activity for 1H200 would be restricted to the highway facility, median and the wash/ditch area. Activities for this Project would also be restricted to the median, highway facility, and wash/ditch area, with the exception of the Project activities for installation of the chain link fence. Additionally, avoidance, minimization, and mitigation measures to reduce the impact to desert tortoise are proposed for both Projects. Therefore, cumulative impacts to desert tortoise and DTCH would be less than significant with mitigation incorporated.

c) No impact

The proposed Project is located in a rural, desert area. The Project area is zoned as Open Space, Highway, and Habitat Conservation. There are no communities within the Project vicinity. Therefore, there would be no adverse effects to human beings.

Avoidance, Minimization, and/or Mitigation Measures

Measures **BIO-1** through **BIO-18** are proposed for biological resources.

Chapter 3 Climate Change

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

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988 led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs generated by human activity, including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF₆), and various hydrofluorocarbons (HFCs). CO₂ is the most abundant GHG; while it is a naturally occurring component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO₂.

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

REGULATORY SETTING

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

Federal

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

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

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea-level change, and other changes in environmental conditions pose to

valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, Project development and design, and operations and maintenance practices (FHWA 2019). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—"the triple bottom line of sustainability" (FHWA n.d.). Program and Project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

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

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

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

State

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

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

Assembly Bill (AB) 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals

outlined in EO S-3-05, while further mandating that the California Air Resources Board (ARB) create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code [H&SC] Section 38551(b)). The law requires ARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

EO S-01-07 (January 18, 2007): This order sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by the year 2020. ARB re-adopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the governor's 2030 and 2050 GHG reduction goals.

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

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

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

EO B-30-15 (April 2015) establishes an interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 GHG emissions reductions targets. It also directs ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent (MMTCO₂e). Finally, it

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

requires the Natural Resources Agency to update the state's climate adaptation strategy, *Safeguarding California*, every 3 years, and to ensure that its provisions are fully implemented.

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

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

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

SB 743, Chapter 386 (September 2013): This bill changes the metric of consideration for transportation impacts pursuant to CEQA from a focus on automobile delay to alternative methods focused on vehicle miles travelled, to promote the state's goals of reducing greenhouse gas emissions and traffic related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety.

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

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

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

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

ENVIRONMENTAL SETTING

The proposed Project is located in the Chuckwalla Valley region of Riverside County, near the southern border of Joshua Tree National Park. The Project area is rural and generally undeveloped. I-10 is the only highway in the immediate Project vicinity. It is a major east-west route for interstate travel and goods movement between the west coast and the rest of the United States, as well as commuter trips within the region. The next closest highway is SR 177, at the Desert Center, approximately 10 miles east of the Project. There are no residential communities in the Project vicinity and the nearest development is the Desert Center. Transportation development in the Project area is guided by the Southern California Association of Governments (SCAG) 2020-2045 RTP/SCS.

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

National GHG Inventory

The U.S. EPA prepares a national GHG inventory every year and submits it to the United Nations in accordance with the Framework Convention on Climate Change. The inventory provides a comprehensive accounting of all human-produced sources of GHGs in the United States, reporting emissions of CO₂, CH₄, N₂O, HFCs, perfluorocarbons, SF₆, and nitrogen trifluoride. It also accounts for emissions of CO₂ that are removed from the atmosphere by "sinks" such as forests, vegetation, and soils that uptake and store CO₂ (carbon sequestration). The 1990-2019 inventory found that overall GHG emissions were 6,558 million metric tons (MMT) in 2019, down 1.7 percent from 2018 but up 1.8% from 1990 levels. Of these, 80 percent were CO₂, 10 percent were CH4, and 7 percent were N2O; the balance consisted of fluorinated gases. CO₂ emissions in 2019 were 2.2 percent less than in 2018, but 2.8 percent more than in 1990. As shown on Figure #3-1, the transportation sector accounted for 29 percent of U.S. GHG emissions in 2019 (U.S. EPA 2021a, 2021b).



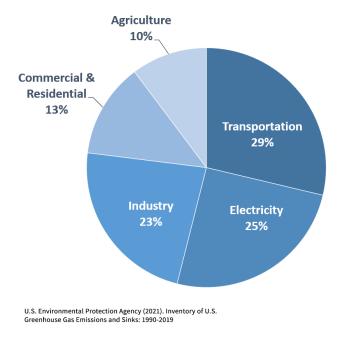


Figure 3-1. U.S. 2019 Greenhouse Gas Emissions (Source: U.S. EPA 2021c)

State GHG Inventory

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

The 2020 edition of the GHG emissions inventory reported emissions trends from 2000 to 2018. It found total California emissions were 425.3 MMTCO₂e in 2018, 0.8 MMTCO₂e higher than 2017 but 6 MMTCO₂e lower than the statewide 2020 limit of 431 MMT CO₂e. The transportation sector was responsible for 41 percent of total GHGs. Transportation emissions decreased in 2018 compared to the previous year, which is the first year over year decrease since 2013. Overall statewide GHG emissions declined from 2000 to 2018 despite growth in population and state economic output (ARB 2020a).

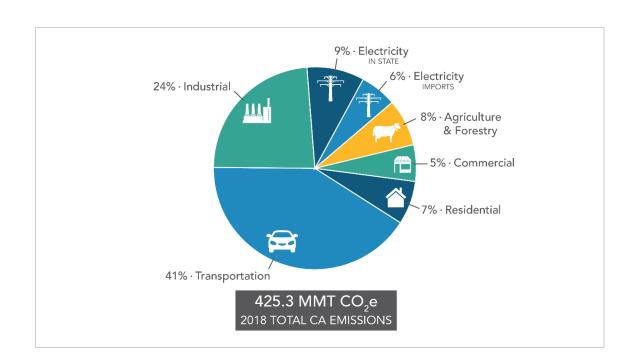


Figure 3-2. California 2018 Greenhouse Gas Emissions by Economic Sector (Source: ARB 2020b)

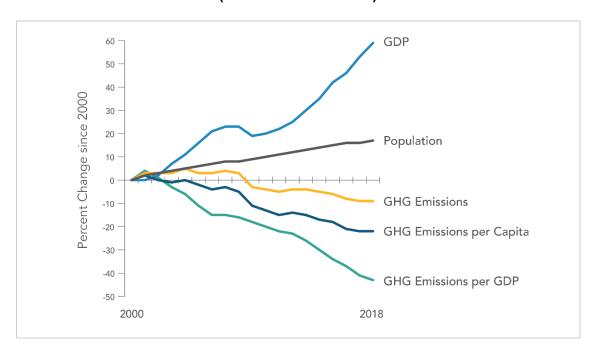


Figure 3-3. Change in California GDP, Population, and GHG Emissions since 2000 (Source: ARB 2020b)

AB 32 required ARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020, and to update it every 5 years. ARB adopted the first scoping plan in 2008.

The second updated plan, *California's 2017 Climate Change Scoping Plan*, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15 and SB 32. The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions.

Regional Plans

ARB sets regional targets for California's 18 MPOs to use in their Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) to plan future Projects that will cumulatively achieve GHG reduction goals. Targets are set at a percent reduction of passenger vehicle GHG emissions per person from 2005 levels. The regional reduction target for SCAG is eight percent by 2020 and 19 percent by 2035 (ARB 2019).

The proposed Project is included in *Connect SoCal*, the 2020-2045 RTP/SCS for SCAG region, including Riverside County. Connect SoCal goals for GHG reduction include: improve mobility, accessibility, reliability, and travel safety for people and goods, reduce greenhouse gas emissions and improve air quality, adapt to a changing climate and support an integrated regional development pattern and transportation network, leverage new transportation technologies and data-driven solutions that result in more efficient travel, and encourage development of diverse housing types in areas that are supported by multiple transportation options (SCAG 2020).

Riverside County's Climate Action Plan (2019) recommends GHG reduction targets aligned with State goals. It proposes reducing GHG emissions down to 15 percent below 2008 baseline levels within Riverside County by 2020, 49 percent below 2008 levels by 2030, and 83 percent below 2008 levels by 2050, consistent with AB 32. It provides measures for new residential and commercial development Projects to follow to meet the County's GHG reduction targets, such as providing alternative transportation options, including transit, ride-share, and bike-to-work programs, and building- and water-energy efficiency measures for construction and operations.

PROJECT ANALYSIS

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

The CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Pub. Resources Code, § 21083(b)(2)). As the California Supreme Court explained, "because of the global scale of climate change, any one Project's contribution is unlikely to be significant by

itself." (Cleveland National Forest Foundation *v.* San Diego Assn. of Governments (2017) 3 Cal.5th 497, 512.) In assessing cumulative impacts, it must be determined if a Project's incremental effect is "cumulatively considerable" (CEQA Guidelines Sections 15064(h)(1) and 15130).

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

Operational Emissions

The purpose of the proposed Project is to preserve the structural integrity of rock slope protection and improve the safety of the Orris Ditch Bridges. The Project would not increase the vehicle capacity of the highway facility. This type of Project generally causes a minimal or no increase in operation GHG emissions. Because the Project would not increase the number of travel lanes on the Orris Ditch Bridges and I-10, no increase in vehicle miles traveled (VMT) would occur as result of Project implementation. While some GHG emissions during the construction period would be unavoidable, no increase in operational GHG emissions is expected.

Construction Emissions

Construction GHG emissions would result from material processing, on-site construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

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

The Sacramento Metropolitan Air Quality Management District (SMAQMD) Road Construction Emission Model, Version 8.1.0 was used to estimate the construction emissions for the proposed Project. Construction of the proposed Project is expected last 100 working days and generate 325.64 tons of CO2e.

To minimize traffic delays, a Traffic Management Plan was created for the proposed Project and one lane, in each direction, will remain open during construction. All construction contracts include Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the Project and to certify they are aware of and will comply with all ARB emission reduction regulations; and Section 14-9.02, Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations,

ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions.

CEQA Conclusion

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

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

GREENHOUSE GAS REDUCTION STRATEGIES

Statewide Efforts

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

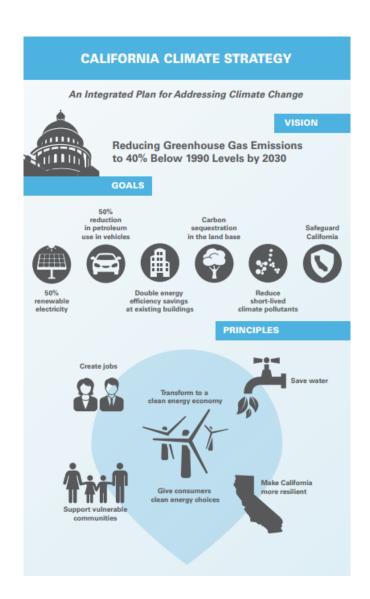


Figure 3-4. California Climate Strategy

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

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

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

Caltrans Activities

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

CALIFORNIA TRANSPORTATION PLAN

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

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

CALTRANS STRATEGIC PLAN

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

FUNDING AND TECHNICAL ASSISTANCE PROGRAMS

In addition to developing plans and performance targets to reduce GHG emissions, Caltrans also administers several sustainable transportation planning grants. These grants encourage local and regional multimodal transportation, housing, and land use planning that furthers the region's RTP/SCS; contribute to the State's GHG reduction targets and advance transportation-related GHG emission reduction Project types/strategies; and support other climate adaptation goals (e.g., Safeguarding California).

CALTRANS POLICY DIRECTIVES AND OTHER INITIATIVES

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

Project-Level GHG Reduction Strategies

The following measures will also be implemented in the Project to reduce GHG emissions and potential climate change impacts from the Project:

TR-1: A traffic management plan would be implemented to reduce travel delays and idling.

AQ-1: Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction, require contractors to comply with all applicable laws and certify they are aware of all and will comply with all ARB emission reduction regulations.

AQ-2: During construction, the contractor shall comply with Caltrans Standard Specifications, Section 14-9.02, "Air Pollution Control," for exhaust and particulate matter emissions control to comply with air-pollution-control rules, regulations, ordinances, and statutes.

ADAPTATION

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges combined with a rising sea level can inundate highways. Wildfire can

directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

Federal Efforts

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

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

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

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

State Efforts

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

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

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

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

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

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

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

Caltrans Adaptation Efforts

CALTRANS VULNERABILITY ASSESSMENTS

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

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

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments will guide analysis of at-risk assets and development of adaptation plans to reduce the likelihood of damage to the State Highway System, allowing Caltrans to both reduce the costs of storm damage and to provide and maintain transportation that meets the needs of all Californians.

Project Adaptation Analysis

SEA-LEVEL RISE

The proposed Project is outside the coastal zone and not in an area subject to sealevel rise. Accordingly, direct impacts to transportation facilities due to Projected sea-level rise are not expected.

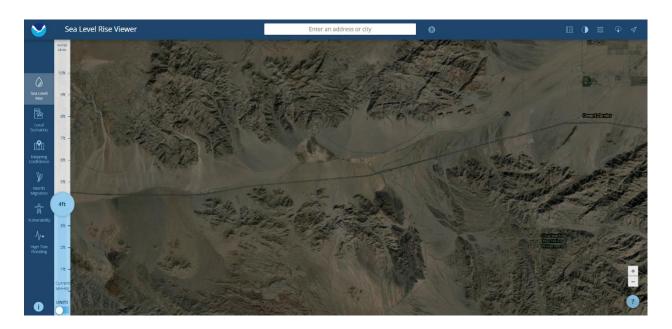


Figure 3-5: NOAA Sea-Level Rise Viewer: EA 08-1J710- Riv I-10 Existing Rock Slope Protection Replacement

Floodplains

The purpose of the Project is to preserve the structural integrity of bridges by replacing the deteriorating rock slope protection in the channel.

Western Regional Climate Center (WRCC) data for the Hayfield Pumping Plant (now called the Julian Hinds Pumping Plant), at the foot of the mountains about 2.5 miles north of the Project site, shows average monthly precipitation of less than 1 inch and average annual precipitation of 4.13 inches from 1933 to 2016. Maximum 1-day precipitation from 1933 to 2012 ranged from 0.53 to 3.87 inches, with highest single-day rainfall occurring in September 1976 (WRCC no date; WRCC 2012). The Caltrans District 8 Climate Change Vulnerability Assessment interactive mapping estimates that 100-year storm precipitation is projected to increase by about 3.2% by 2055, and 1.7% by 2085.

The Project site is at an elevation of approximately 1,400 feet, between mountains of Joshua Tree National Park to the north that rise to as much as 5,350 feet, and hills to the south that reach more than 3,200 feet in elevation. The scour damage

appears to be caused by an outdated RSP design coupled with high velocities and poor soil conditions.

The Project is located in Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) panel 06065C2400G. The FIRM panel shows the Project area as Zone D, "an area of minimal flood hazard" (FEMA 2021). The Project's floodplain encroachment report and location hydraulic study concluded that the Project would have no effect on water surface elevation.

Replacing the degraded rock slope protection in the channel will improve protection of the bridge abutments. The RSP replacement will be designed in accordance with FHWA guidance for the 200-year discharge and associated velocities, providing an additional safety factor above the anticipated changes in 100-year storm precipitation. Therefore, the Project is expected to remain resilient to projected changes in precipitation over its design life.

Wildfire

According to the CALFIRE Fire Hazard Severity Zone Map, the proposed Project is not located in a state or locally designated high fire risk severity zone (CALFIRE 2021).

Wildfire modeling for the Caltrans District 8 Climate Change Vulnerability Assessment Report shows an increase in the miles of the state highway system exposed to moderate to very high wildfire concern for the RCP 8.5 scenario. However, the Project is not located in an area of medium to very high level of wildfire concern for year 2085.

Chapter 4 List of Preparers

Bacson Quach, Project Manager

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Amy Lee, Associate Environmental Planner – Generalist

Tatiana Torres, Associate Environmental Planner – Generalist

Hannah Duarte, Associate Environmental Planner - Generalist

Yingshi Huang, Environmental Planner – Generalist

Andrew Walters, Senior Environmental Planner – Cultural

Ashley Bowman, Associate Environmental Planner – Cultural

Bahram Karimi, Associate Environmental Planner – Paleontological Studies

Nancy Frost, Senior Environmental Planner – Biology

Elmer Llamas, Associate Environmental Planner – Biology

Olufemi Odufalu, Senior Transportation Engineer – Environmental Engineering

Christopher Gonzalez, Transportation Engineer – Air Quality

Farhana Islam, Transportation Engineer – Noise

Donald Cheng, Transportation Engineer – Hazardous Waste

Gabriela Cardenas, Landscape Associate – Landscape Architecture

Hoon Park, Senior Transportation Engineer – Design

Ronald Pham, Transportation Engineer – Design

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Chapter 5 Distribution List

A public notice for this IS was distributed to federal, state, regional and local agencies, elected officials, and utility and service providers. Additionally, property owners and occupants within 500 feet of the Project limits were also sent a notice.

Jefferey Van Wagenen	Riverside County Administrative Center
County Executive Officer	4080 Lemon Street – 4th Floor
	Riverside, California 92501
Riverside County Transportation	P.O. Box 12008
Commission	Riverside, CA 92502-2208
Supervisor V. Manuel Perez	4 th District, Riverside County
·	73-710 Fred Waring Drive,
	Suite 222
	Palm Desert, CA 92260
Assembly Member Eduardo Garcia	48220 Jackson Street
	Suite A3
	Coachella CA, 92236
Senator Melissa A. Melendez	45-125 Smurr Street
	Suite B
	Indio, CA 92201
Raul Ruiz	445 East Florida Ave – 2 nd Floor
	Hemet, CA 92543
California Highway Patrol	79650 Varner Road
	Indio, CA 92203
California Highway Patrol	430 S. Broadway
	Blythe, CA 92225
Captain Brian Holmes	Riverside County Sheriff
	Colorado River Station
	260N. Spring Street
B: :1 0	Blythe, CA 92225
Riverside County Fire Department	43880 Tamarisk Dr.
Station 49	Desert Center, CA 92239
Regional Manager Leslie MacNair	California Department of Fish and
	Wildlife
	3602 Inland Empire Blvd
	Suite C-220
Degianal Director David Cours	Ontario, CA 91764
Regional Director, Paul Souza	Palm Springs Fish and Wildlife Office
	777 E. Tahquitz Canyon Way, Suite 208
Motropoliton Wotor District	Palm Springs, CA 92262 P.O. Box 54152
Metropolitan Water District	Los Angeles, CA 90054
Nancy Wright	Colorado River Basin Regional Water
inancy wright	Quality Control Board
	Quality Control Dodiu

	73-720 Fred Waring Dr., Suite 100
	Palm Desert, CA 92260
Fairman & Tahereh Moinfair	26661 Las Tunas Dr.
	Mission Viejo, CA 92692
Imperial Irrigation District	P.O. Box 937
	Imperial, CA 92251
Caro & Rebecca Minas	2537 Saint Andrews Dr.
	Glendale, CA 91206
Wilddesert Holdings	3301 Industrial Ave.
	Rocklin, CA 95765
James & Laurie Rote	11179 S. Summit St, Apt. 1702
	Olathe, KS 66215

Appendix A Title VI Policy Statement

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

Gavin Newsom, Governor

DEPARTMENT OF TRANSPORTATION

OFFICE OF THE DIRECTOR P.O. BOX 942873, MS-49 SACRAMENTO, CA 94273-0001 PHONE (916) 654-6130 FAX (916) 653-5776 TTY 711 www.dot.ca.gov



November 2019

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."

Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 324-8379 or visit the following web page:

https://dot.ca.gov/programs/business-and-economic-opportunity/title-vi.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, at 1823 14th Street, MS-79, Sacramento, CA 95811; (916) 324-8379 (TTY 711); or at Title.VI@dot.ca.gov.

Toks Omishakin Director

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability'

Appendix B Environmental Commitments Record

Permit Type	Agency	Date Received	Expiration	Notes
1600	California Department of Fish & Wildlife			
401	Regional Water Quality Control Board			
Incidental Take	California Department of Fish & Wildlife			
Permit	diii e			

Date of	ECR:10/12/2
Date:	

Construction

ENVIRONMENTAL COMMITMENTS RECORD

08-RIV-10 PM R91.9

Project Phase: PA/ED (*DED/FED*) PS&E Submittal

(Riv I-10 Existing Rock Slope Protection Replacement)

EA 08-1J710 PN 0818000098

Generalist: Amy Lee

						Action(s)	PS&E	Construction		r: IRD
						Taken to	Task	Task		nmental
						Implement	Complete	Complete	Comp	liance
			Responsible for Development		SSP	Measure/if checked				
Avoidance,		Environmental	and/or		or	No, add				
Minimization, and/or	_	Analysis	Implementation	Timing/	NSSP	Explanation	Date /	Date /		
Mitigation Measures	Page	Source	of Measure	Phase	:	here	Initials	Initials	YES	NO
CULTURAL RESOURC	<u>ES</u>									
CUL-1: Stop work if	DED	District	District Cultural	Design/						
buried cultural	Pg.	Environmental	Studies/ District	Constru						
resources are	23	Cultural	Design/ Resident	ction						
encountered during		Resources	Engineer/							
construction until a			Contractor							
qualified archaeologist										
can evaluate the										
nature and significance										
of the find. In the event										

that human remains,							
including isolated,							
disarticulated bones or							
fragments, are							
discovered during							
construction-related							
activity, cease in the							
vicinity of the human							
remains.							
CUL-2: In the event	DED	District	District Cultural	Final			
that human remains	Pg.	Environmental	Studies/ District	Design,			
are found, the county	23	Cultural	Design/ Resident	Constru			
coroner shall be		Resources	Engineer/	ction			
notified and ALL			Contractor				
construction activities							
within 50 feet of the							
discovery shall stop.							
Pursuant to Public							
Resources Code							
Section 5097.98, if the							
remains are thought to							
be Native American,							
the coroner will notify							
the Native American							
Heritage Commission							
(NAHC) who will then							
notify the Most Likely							
Descendent (MLD).							
The person who							
discovered the remains							
will contact the District							
8 Division of							
Environmental							
Planning; Andrew							
Walters, DEBC:							
(909)260-5178 and							

Gary Jones, DNAC: (909)261-8157. Further provisions of PRC								
5097.98 are to be								
followed as applicable.								
Tollowed de applicable.								
BIOLOGICAL RESOUR	CES							
BIO-1 Litter Control &	DED	NESMI	District Design /	Final	14-			
Disposal: The	Pg.1	(9/9/2021)	District Biology /	Design,	10.01			
contractor shall comply	9		Resident	Constru				
with Caltrans Standard			Engineer /	ction				
Special Provisions			Contractor	01.011				
(SSP) 14-10.01. The			Contractor					
contractor shall not								
allow litter, trash, or								
debris to accumulate								
anywhere on the site,								
including storm drain								
grates, trash racks,								
and ditch lines. Pick up								
and remove litter,								
trash, and debris from								
the job site at least								
once a week. Do not								
perform solid waste								
management in the								
median area unless								
there is construction								
activity present.								
Perform solid waste								
management monthly								
during the plant								
establishment period.								
The WPC manager								
must monitor solid								

waste storage and					
disposal procedures. If					
practicable, recycle					
nonhazardous waste					
and excess material. If					
recycling is not					
practicable, dispose of					
the material. Furnish					
enough closed-lid					
dumpsters of sufficient					
size to contain the					
solid waste generated					
by work activities.					
When waste reaches					
the fill line, empty the					
dumpsters. Dumpsters					
must be watertight. Do					
not wash out					
dumpsters at the job					
site. Furnish additional					
containers and more					
frequent pickup during					
the demolition phase of					
construction. Solid					
waste includes: 1.					
Brick 2. Mortar 3.					
Timber 4. Metal scraps					
5. Sawdust 6. Pipe 7.					
Electrical cuttings 8.					
Nonhazardous					
equipment parts 9.					
Styrofoam and other					
packaging materials					
10. Vegetative material					
and plant containers					
from highway planting					

11. Litter and smoking material, including litter								
generated by the								
public 12. Other trash and debris. Furnish								
and use trash								
containers in the job-								
site yard, field trailers,								
and locations where								
workers gather for								
lunch and breaks								
BIO-2 Dewatering:	DED	NESMI	District Design /	Final	13-			
Comply with 2018	Pg.	(9/9/2021)	District Biology /	Design,	4.04G			
Caltrans SSP 13- 4.04G or latest version	19		Resident	Constru				
for dewatering.			Engineer /	ction				
Dewatering consists of			Contractor					
discharging								
accumulated								
stormwater,								
groundwater, or								
surface water from								
excavations or								
temporary containment facilities.								
The contractor shall								
perform dewatering								
work as specified for								
the work items								
involved, such as a								
temporary ATS or								
dewatering and								
discharge.								
If dewatering and								
discharging activities								
are not specified for a								

work item and you					
perform dewatering					
activities:					
Conduct dewatering					
activities under the					
Department's Field					
Guide for Construction					
Site Dewatering.					
2. Ensure any					
dewatering discharge					
does not cause					
erosion, scour, or					
sedimentary deposits					
that could impact					
natural bedding					
materials.					
3. Discharge the water					
within the Project					
limits. Dispose of the					
water if it cannot be					
discharged within					
Project limits due to					
site constraints or					
contamination.					
4. Do not discharge					
stormwater or non-					
stormwater that has an					
odor, discoloration					
other than sediment,					
an oily sheen, or foam					
on the surface.					
Immediately notify the					
Engineer upon					
discovering any such					
condition.					

	1		T		I	I	I I	
BIO-3 Equipment	DED	NESMI	District Design /	Final				
Staging, Storing &	Pg.	(9/9/2021)	District Biology /	Design,				
Borrow Sites: All	20		Resident	Constru				
staging, storing, and			Engineer /	ction				
borrow sites shall be			Contractor	ouo				
approved by the			Contractor					
Caltrans biologist.								
BIO-4 Temporary	DED	NESMI	District Design /	Final				
Artificial Lighting	Pg.	(9/9/2021)	District Biology /	Design,				
Restrictions: Artificial	20	(0/0/2021)	Resident	Constru				
lighting shall be				ction				
directed at the work			Engineer /	Cuon				
site to minimize light			Contractor					
spillover outside of the								
construction footprint if								
Project activities occur								
at night.								
BIO-5 Species	DED	NESMI	District Design /	Constru				
Avoidance: If during	Pg.	_						
Project activities a	20	(9/9/2021)	District Biology /	ction				
desert tortoise is	20		Resident					
discovered within the			Engineer /					
			Contractor					
Project site, all								
construction activities								
must stop within 100 feet and the Caltrans								
biologist and Resident								
Engineer must be notified. Coordination								
with respective								
resource agencies may								
be required prior to								
restarting activities.	DED	NICOM	District Design /	0				
BIO-6 Worker	DED	NESMI	District Design /	Constru				
Environmental	Pg.	(9/9/2021)	District Biology /	ction				
Awareness Program	20							

(WEAP): A Contractor			Resident				
supplied biologist must			Engineer /				
present a biological			Contractor				
resource information							
program/WEAP for							
desert tortoise, natural							
communities of							
concern, and other							
special status							
species/habitat prior to							
Project activities to all							
personnel that will be							
present within the							
Project limits for longer							
than 30 minutes at any							
given time.							
BIO-7 Biological	DED	NESMI	District Design /	Constru			
Monitor: The	Pg.	(9/9/2021)	District Biology /	ction			
Contractor-supplied	20	,	Resident				
biologist shall monitor			Engineer /				
Project activities daily			Contractor				
to ensure that							
measures are being							
implemented and							
documented and							
submit a weekly							
monitoring report for							
desert tortoises (and							
additional special-							
status species) during							
construction.		_		_			
BIO-8 Predator	DED	NESMI	District Design /	Constru			
Prevention: Project	Pg.	(9/9/2021)	District Biology /	ction			
personnel are	20		Resident				
prohibited from feeding							

wildlife or bringing pets onto the job site.			Engineer / Contractor				
BIO-9 Rare Plant Surveys, Flagging and Fencing: Within 30 days prior to construction and during the typical rare plant blooming season (March-July), a Contractor supplied biologist will conduct a pre-construction plant survey. Special-status plants must be flagged for visual identification to construction personnel for work avoidance. Special- status plants detected that feature multiple plants in a single location must be fenced with stakes and flagging to temporarily identify the Environmentally Sensitive Area (ESA).	DED Pg. 20	NESMI (9/9/2021)	District Design / District Biology / Resident Engineer / Contractor	Final Design/ Constru ction			
BIO-10 Equipment Flagging: After each shift, order Project personnel to attach surveyor flagging tape to a conspicuous place on each piece of	DED Pg. 20	NESMI (9/9/2021)	District Design / District Biology / Resident Engineer / Contractor	Constru ction			

equipment to remind the operator to check under the equipment for desert tortoise before operating equipment during the next shift.							
BIO-11 Pre- construction Surveys: Pre- construction desert tortoise surveys must be conducted by a Contractor-supplied biologist within 7 days and immediately prior to Project activities. If a desert tortoise is located, the Resident Engineer and Caltrans biologist must be contacted and additional measures and/or agency coordination may be required.	DED Pg. 21	NESMI (9/9/2021)	District Design / District Biology / Resident Engineer / Contractor	Final Design/ Constru ction			
BIO-12 Deceased or Injured Tortoise Within the Project Site: The Contractor-supplied biologist will inform USFWS and CDFW of any injured or deceased desert tortoise (and other special-status species)	DED Pg. 21	NESMI (9/9/2021)	District Design / District Biology / Resident Engineer / Contractor	Construction			

found on site (verbal notification within 24 hours and written notification within 5 days).							
BIO-13 Partial Grouting of Rock Slope Protection: To address impacts to desert tortoise, partial grouting of rock slope protection shall be required following repair as directed by the Caltrans biologist.	DED Pg. 21	NESMI (9/9/2021)	District Design / District Biology / Resident Engineer / Contractor	Construction			
BIO-14 Pre- Construction Nesting Bird Survey: If Project activities cannot avoid the nesting season, generally regarded as Feb. 1 – Sept. 30, then pre-construction nesting bird surveys must be conducted 3 days prior to construction by a Contractor-supplied biologist to locate and avoid nesting birds. If an active avian nest is located, a no construction buffer may be established and monitored by the Contractor-supplied	DED Pg. 21	NESMI (9/9/2021)	District Design / District Biology / Resident Engineer / Contractor	Final Design/ Constru ction			

biologist and/or monitored until the young have fledged.							
BIO-15 Pre- Construction Burrowing Owl Survey: Two burrowing owl pre- construction surveys must be performed: one survey 14-30 days prior to Project activities, and one survey 24 hours prior to Project activities by a Contractor-supplied biologist.	DED Pg. 21	NESMI (9/9/2021)	District Design / District Biology / Resident Engineer / Contractor	Final Design/ Constru ction			
BIO-16 Burrowing Owl: If burrowing owls are found on site, coordination with CDFW will be conducted to determine the appropriate avoidance, minimization and mitigation measures required for the Project.	DED Pg. 21	NESMI (9/9/2021)	District Design / District Biology / Resident Engineer / Contractor	Construction			
BIO-17 Pre- construction Kit Fox Survey and Monitoring: A Contractor-supplied biologist must conduct pre-construction	DED Pg. 21	NESMI (9/9/2021)	District Design / District Biology / Resident Engineer / Contractor	Final Design/ Constru ction			

surveys for desert kit fox within the Project site and biological study area boundaries no more than 30 days prior to the commencement of ground-breaking activities. Dens will be classified as inactive, potentially active, or active. Should dens be deemed active, additional surveys are required. If desert kit fox is present, the additional measures							
may be required. BIO-18 a) All desert kit fox den complexes in the Project site identified as potentially active or definitely active must be monitored in accordance to CDFW guidelines.	DED Pg. 22	NESMI (9/9/2021)	District Design / District Biology / Resident Engineer / Contractor	Constru ction			
BIO-18 b) If once the monitoring is concluded, no desert kit fox tracks are found at the burrow entrance, or no photos of the target species using the den are observed, the den can be	DED Pg. 22	NESMI (9/9/2021)	District Design / District Biology / Resident Engineer / Contractor	Constru ction			

excavated and							
backfilled by hand. If a							
den is identified as							
being active, it must							
further be classified as							
non-natal or natal den.							
Potential natal den							
complexes are to be							
monitored for a							
minimum of 3							
additional days using							
infrared wildlife							
cameras and/or							
tracking medium to							
determine their status.							
BIO-18 c) If the den	DED	NESMI	District Design /	Constru			
complex is determined	Pg.	(9/9/2021)	District Biology /	ction			
to be natal during the	22	(S/S/ZSZ1)	Resident				
denning period			Engineer /				
(February - June), a							
200-foot non-			Contractor				
disturbance buffer							
zone will be							
established							
surrounding natal							
dens, and monitoring							
by infrared cameras or							
weekly visits by a							
Contractor-supplied							
biologist will continue							
until it has been							
determined that the							
young have dispersed.							
The final buffer							
distance may be							
determined in							

consultation with the							
BLM and CDFW.							
BIO-18 d) If the den complex within the Project site is determined to be nonnatal, passive hazing techniques must be used to discourage desert kit fox from using the den complex. Desert kit fox must be excluded from all den complexes within the Project site portion of the Project disturbance	DED Pg. 22	NESMI (9/9/2021)	District Design / District Biology / Resident Engineer / Contractor	Construction			
area. BIO-18 e) Inactive dens that are within the Project site must immediately be excavated by hand and backfilled to prevent reuse by desert kit fox.	DED Pg. 22	NESMI (9/9/2021)	District Design / District Biology / Resident Engineer / Contractor	Construction			
BIO-18 f) If desert kit fox tracks are observed or desert kit fox is captured in camera photos, then various passive hazing techniques will be implemented to deter desert kit fox from using the den complex.	DED Pg. 22	NESMI (9/9/2021)	District Design / District Biology / Resident Engineer / Contractor	Construction			

BIO-18 g) If desert kit fox are present and	DED Pg.	NESMI (9/9/2021)	District Design / District Biology /	Constru				
passive relocation techniques fail, the BLM and CDFW may be contacted to explore other relocation options such	22	(3/3/2021)	Resident Engineer / Contractor	CHOIT				
as trapping. Biology-18 h) If during construction activities a desert kit fox is within the Project site, all construction activities must stop, and the Contractor-supplied biologist must be notified. Consultation with resource agencies may be required, as appropriate	DED Pg. 22	NESMI (9/9/2021)	District Design / District Biology / Resident Engineer / Contractor	Construction				
TRAFFIC AND TRANSF	PORTA	TION/BICYCLE A	AND PEDESTRIAN	FACILITIES	<u> </u>			
TR-1: A Traffic Management Plan (TMP) will be developed for the Project and implemented to reduce travel delay.	DED Pg. 47	NA	District Design / District Traffic Management / District Environmental Planning / Resident Engineer / Contractor	Final Design, Constru ction				
TR-2: Prior to project approval and adoption of the final	DED Pg. 47	NA	District Project Management/					

environmental document, Caltrans will coordinate with SCAG to amend the FTIP and RTP for the project description and cost to be consistent with this			District Environmental Panning					
NOISE AND VIBRATIO	<u>N</u>							
NOI-1: To minimize potential construction generated noise, the residential engineer shall implement Caltrans Standard Specification 14-8.02 and SSP 14-8.02.	DED pg. 41	Noise Memorandum (1/21/2021)	District Design / District Environmental Engineering / Resident Engineer / Contractor	Final Design/ Constru ction	14- 8.02			
HAZARDOUS WASTE	/ MATE	RIALS						
HAZ-1: The Project contractor shall prepare and follow a lead compliance plan under Section 7-1.02K(6)(j)(iii) of Caltrans' Standard Specifications.	DED Pg. 33	Site Investigation and Hazardous Materials Survey Report (5/10/2021)	District Design / District Environmental Engineering / Resident Engineer / Contractor	Final Design/ Constru ction	7- 1.02K (6)(j)(i ii)			
HAZ-2: Prior to bridge rehabilitation activities, the contractor will comply with Caltrans Standard Specification 14-9.02 for NESHAP	DED Pg. 33	Site Investigation and Hazardous Materials Survey Report (5/10/2021)	District Design / District Environmental Engineering / Resident	Final Design/ Constru ction	14- 9.02			

notification and comply with all local, state, and			Engineer /					
federal permit			Contractor					
requirements and								
regulations.								
HAZ-3: If suspect	DED	Site	District Design /	Final				
asbestos containing	Pg.	Investigation	District	Design/				
materials are	34	and Hazardous	Environmental	Constru				
discovered during		Materials	Engineering /	ction				
construction, the		Survey Report	Resident					
material shall be		(5/10/2021)	Engineer /					
assumed to contain			Contractor					
asbestos, unless			Contractor					
additional sampling								
and analysis determine								
otherwise. Demolition,								
management and disposal of any								
encountered ACMs or								
assumed ACMs shall								
be conducted in								
accordance with								
federal, state, and local								
regulations.								
HAZ-4:The contractor	DED	ISA Checklist	District Design /	Final	14-			
shall comply with	Pg.	(9/28/2021)	District	Design/	11.14			
Caltrans SSP 14-11.14	34		Environmental	Constru				
for the handling,			Engineering /	ction				
storage, transportation,			Resident					
and disposal of treated wood waste.			Engineer /					
wood waste.			Contractor					

AIR QUALITY

AO 4. Columna		Via Orielia	District Decision /	Tine!	1 7	I		
AQ-1: Caltrans	DED	Air Quality	District Design /	Final	7-			
Standard	Pg.	Memorandum	District	Design,	1.02A			
Specifications Section	14	(2/3/2021)	Environmental	Constru	, 7-			
7-1.02A and 7-1.02C,			Engineering /	ction	1.02C			
Emissions Reductions,			Resident					
require contractors to			Engineer /					
comply with all			Contractor					
applicable laws and								
certify they are aware								
of all and will comply with all ARB emission								
reduction regulations.	DED	Air Quality	District Design /	Final	14-			
AQ-2: During construction, the	DED	Air Quality Memorandum	District Design /	Final Design,	9.02			
contractor shall comply	Pg. 14	(2/3/2021)	District	Constru	9.02			
with Caltrans Standard	14	(2/3/2021)	Environmental	ction				
Specifications, Section			Engineering /	Clion				
14-9.02, "Air Pollution			Resident					
Control," for exhaust			Engineer /					
and particulate matter			Contractor					
emissions control to								
comply with air-								
pollution-control rules,								
regulations,								
ordinances, and								
statutes.								
	ı							
Land Use and Planning	4							
LU-1: Prior to Project	DED	NA	District Design /	Final				
construction, all	Pg.		District	Design,				
staging and storage	38		Environmental	Constru				
areas will be			Planning /	ction				
environmentally			Resident					
cleared.			Engineer /					
			Contractor					

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Appendix C SCAG FTIP and RTP/SCS Listings

2021 Federal Transportation Improvement Program Riverside County Project Listing State (in \$000`s)

PHASE	FUND SOURCE	PRIOR	20/21	21/22	22/23	23/24	24/25	25/26	FUTURE	TOTAL
CON	SHOPP - ADVANCE CONSTRUCTION	\$169,495	\$378,619	\$451,669	\$0	\$0	\$0	\$0	\$0	\$999,783
TOTAL	TOTAL	\$169,495	\$378,619	\$451,669	\$0	\$0	\$0	\$0	\$0	\$999,783

FTIP ID	LEAD AGENCY	COUNTY	CONFORM CATEGORY	MODELING	AIR BASIN	TOTAL PROJECT COST	RTP ID	SYSTEM
RIVLS06	CALTRANS	Riverside	EXEMPT - 93.126	NO	SSAB	\$61,716	30M0701	State
PRIMARY PROGRAM CODE			PROJECT LIMITS			FTIP AMENDMENT		
SHP04 - SAFETY							Commission (RCTC) - 21-00	

DESCRIPTION

GROUPED PROJECTS FOR BRIDGE REHABILITATION AND RECONSTRUCTION - SHOPP PROGRAM: PROJECTS ARE CONSISTENT W/40 CFR 93.126 EXEMPT TABLE 2 - WIDENING NARROW PAVEMENTS OR RECONSTRUCTING BRIDGES (NO ADDITIONAL TRAVEL LANES).

PHASE	FUND SOURCE	PRIOR	20/21	21/22	22/23	23/24	24/25	25/26	FUTURE	TOTAL
CON	SHOPP - ADVANCE	\$35,478	\$2,936	\$23,302	\$0	\$0	\$0	\$0	\$0	\$61,716
	CONSTRUCTION									
TOTAL	TOTAL	\$35,478	\$2,936	\$23,302	\$0	\$0	\$0	\$0	\$0	\$61,716

TABLE 2 Financially-Constrained RTP/SCS Projects - Continued

System	Lead Agency	RTP ID	Route #	Route Name	From	То	Description	Completion Year	Project Cost (\$1,000's)
County: Rivers	side								
STATE HIGHWAY	CALIMESA	3200S001	10	SANDALWOOD DRIVE	SHADY BROOK ROAD	CALIMESA BLVD.	IN RIVERSIDE COUNTY IN THE CITY OF CALIMESA - RECONSTRUCTION OF EXISTING INTERCHANGE AT I-10 AT SANDALWOOD DRIVE, IMPROVE EXISTING OVERCROSSING FROM SHADY BROOK ROAD TO CALIMESA BLVD. AND RAMP REALIGNMENT FOR ALL FOUR RAMPS WITH MINOR RAMP WIDENING.	2030	\$42,000
STATE HIGHWAY	CALIMESA	RIV060116- RIV060116	10		CALIMESA BLVD	ROBERTS RD	I-10/CHERRY VALLEY BLVD IC: REPLACEMENT OF EXISTING CURVED OVERCROSSING EXTENDING 500 LINEAR FEET FROM ROBERTS ROAD (SOUTH) TO APPROXIMATELY 1000 FT E/O CALIMESA BLVD. ASSOCIATED PROJECT IMPROVEMENTS INCLUDE REALIGNMENT OF CALIMESA BLVD AND RAMP REALIGNMENT/WIDENING FOR ALL FOUR RAMPS	2030	\$34,543
STATE HIGHWAY	CALIMESA	RIV060117- RIV060117	10		WOODHOUSE RD	CALIMESA BLVD	ON I-10/SINGLETON RD IC: RECONSTRUCT/WIDEN 2 TO 4 THROUGH LANES (WOODHOUSE TO CALIMESA BLVD), RECONSTRUCT/WIDEN RAMPS – EB ENTRY 1 TO 2 LNS W/ HOV PREFERENTIAL LN, WB EXIT 1 TO 3 LNS, ADD EB EXIT RAMP (3 LNS), WB ENTRY RAMP (2 LNS W/ HOV PREFERENTIAL LN), INCLUDE EXTENDED RAMP ACCEL/DECEL LNS, RELOCATE CALIMESA BLVD/ SINGLETON RD INTERSECTION, ADD SB EXTENDED DEDICATED RIGHT-TURN LN (EA: 0F980)	2035	\$38,400
STATE HIGHWAY	CALIMESA	RIV131201- RIV131201	10		7TH PLACE	CALIMESA BLVD.	IN RIVERSIDE COUNTY IN THE CITY OF CALIMESA - RECONSTRUCTION OF EXISTING INTERCHANGE AT I-10/COUNTY LINE EXTENDING 1300 LINEAR FEET FROM COUNTY LINE LANE TO APPROX. 300 FT. W/O CALIMESA BLVD. THE PROJECT WILL INCLUDE RAMP REALIGNMENT FOR ALL FOUR RAMPS WITH MINOR RAMP WIDENING.	2030	\$15,000
STATE HIGHWAY	CALTRANS	30M07 01-RIVLS03A	999				GROUPED PROJECTS FOR PAVEMENT RESURFACING AND/OR REHABILITATION - SHOPP ROADWAY PRESERVATION PROGRAM: PROJECTS ARE CONSISTENT WITH 40 CFR PART 93.126 EXEMPT TABLES 2 CATEGORIES - PAVEMENT RESURFACING AND/OR REHABILITATION, EMERGENCY RELIEF (23 U.S.C. 125), WIDENING NARROW PAVEMENTS OR RECONSTRUCTING BRIDGES (NO ADDITIONAL TRAVEL LANES).	2021	\$7,600
STATE HIGHWAY	CALTRANS	30M0701-RIVLS02	999				GROUPED PROJECTS FOR PAVEMENT RESURFACING AND/OR REHABILITATION - SHOPP ROADWAY PRESERVATION PROGRAM: PROJECTS ARE CONSISTENT W/ 40 CFR PART 93.126 EXEMPT TABLE 2 - PAVEMENT RESURFACING AND/OR REHABILITATION, EMERGENCY RELIEF (23 USC 125), WIDENING NARROW PAVEMENTS OR RECONSTRUCTING BRIDGES (NO ADDITIONAL TRAVEL LANES).	2024	\$974,278
STATE HIGHWAY	CALTRANS	30M0701-RIVLS06	999				GROUPED PROJECTS FOR BRIDGE REHABILITATION AND RECONSTRUCTION - SHOPP PROGRAM: PROJECTS ARE CONSISTENT W/40 CFR 93.126 EXEMPT TABLE 2 - WIDENING NARROW PAVEMENTS OR RECONSTRUCTING BRIDGES (NO ADDITIONAL TRAVEL LANES).	2024	\$90,082

Appendix D List of Acronyms

AB	Assembly Bill					
ADL	aerially deposited lead					
APE	area of potential effects					
BMPs	best management practices					
BSA	biological study area					
CAL FIRE	California Department of Forestry and Fire Protection					
Caltrans	California Department of Transportation					
CARB	California Air Resources Board					
CDFW	California Department of Fish and Wildlife					
CEQA	California Environmental Quality Act					
CFR	Code of Federal Regulations					
CH ₄	methane					
CO	carbon monoxide					
CO ₂	carbon dioxide					
CO ₂ e	carbon dioxide equivalent					
CVMSHCP	Coachella Valley Multiple Species Habitat Conservation Plan					
CTP	California Transportation Plan					
DOT	Department of Transportation					
DTCH	Desert Tortoise Critical Habitat					
DTC	Desert Training Center					
ECR	Environmental Commitments Record					
ESA	Environmentally Sensitive Area					
EO	Executive Order					
FHWA	Federal Highway Administration					
FIRM	Flood Insurance Rate Map					
FTIP	Federal Transportation Improvement Program					
GHG	greenhouse gas					
HFCs	hydrofluorocarbons					
HOV	High Occupancy Vehicle					
IPCC	Intergovernmental Panel on Climate Change					
ISA	Initial Site Assessment					
LCFS	low-carbon fuel standard					
LRA	local responsibility area					
MGS	Midwest Guardrail System					
MLD	Most Likely Descendant					
MMTCO ₂ e	million metric tons of carbon dioxide equivalent					
MPO	Metropolitan Planning Organization					
MRZ	Mineral Resource Zone					
N ₂ O	nitrous oxide					
NAC	noise abatement criteria					

NAHC	Native American Heritage Commission					
NEPA	National Environmental Policy Act					
NESMI	Natural Environmental Study Minimal Impacts (NESMI)					
NOX	nitrogen oxides					
NRHP	National Registor of Historic Places					
PDT	Project Development Team					
PIA	Projet Impact Area					
PM	Post Mile					
PM10	particulate matter 10 micrometers or less					
PM2.5	particulate matter 2.5 micrometers or less					
PMP	Paleontological Mitigation Plan					
PRC	Public Resources Code					
RCRA	Resource Conservation and Recovery Act					
RSP	Rock Slope Protection					
RTP	Regional Transportation Plan					
RTPA	Regional Transportation Planning Agency					
RWQCB	Regional Water Quality Control Board					
SB	Senate Bill					
SCAG	Southern California Association of Governments					
SCAQMD	South Coast Air Quality Management District					
SCS	Sustainable Communities Strategy					
SF6	sulfur hexafluoride					
SLF	Sacred Lands File					
SLR	sea-level rise					
SO2	sulfur dioxide					
SSP	Standard Special Provisions					
SWMP	Statewide Stormwater Permit					
TCEs	Temporary Construction Easements					
TCR	Transportation Concept Report					
TDM	Transportation Demand Management					
TMP	Traffic Management Plan					
USC	United States Code					
USEPA	U.S. Environmental Protection Agency					
USFWS	U.S. Fish and Wildlife Service					
USGCRP	U.S. Global Change Research Program					
VMT	Vehicle Miles Traveled					
WEAP	Worker Environmental Awareness Program					

Appendix E List of Technical Studies

The following technical studies were used in the preparation of this document:

Air Quality Memo (February 2021)

Noise Study Memo (January 2021)

Scoping Questionnaire for Water Quality Issues (September 2021)

Natural Environmental Study (NESMI) (September 2021)

Historical Property Survey Report (September 2021)

Initial Site Assessment (ISA) Checklist (March 2021)

Site Investigation and Hazardous Materials Survey Report (May 2021)

Questionnaire to Determine Visual Impact Assessment (VIA) Level (January 2021)

Paleontology Memo (April 2021)

To obtain a copy of one or more of these technical studies/reports or the Initial Study, please send your request to:

Antonia Toledo, MS
Senior Environmental Planner
California Department of Transportation, District 8
464 W. 4th St., 6th Floor MS820
San Bernardino, CA 92401

Or send your request via email to:

Antonia.Toledo@dot.ca.gov

Or call: (909) 501-5741

Please provide the following information in your request:

Project title

General location information

District number-county code-route-post mile

Project ID number

Appendix F References

CALFIRE FHSZ Map

https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/. Accessed August 16, 2021

California Air Resources Board (ARB). 2019a. California Greenhouse Gas Emissions Inventory–2019 Edition.

https://ww3.arb.ca.gov/cc/inventory/data/data.htm. Accessed: August 21, 2019. California Air Resources Board (ARB). 2019b. California Greenhouse Gas Emissions for 2000 to 2017. Trends of Emissions and Other Indicators. https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2017/ghg_inventory_trends_00-17.pdf. Accessed: August 21, 2019.

California Air Resources Board (ARB). 2019c. SB 375 Regional Plan Climate Targets. https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets. Accessed: August 21, 2019.

California Department of Conservation Landslide Inventory Map https://maps.conservation.ca.gov/cgs/lsi/app/. Accessed December 29, 2020

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