

Kern 46 Semitropic Capital Preventive Maintenance (CAPM)

On State Route 46 in Kern County

06-KER-46-PM 33.2/46.0

Project ID Number 0620000074

Initial Study with Proposed Negative Declaration



Prepared by the
State of California Department of Transportation

May 2024



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 Kern 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. Additional copies of the document and the related technical studies are available for review at the Caltrans District 6 office at 1352 West Olive Avenue, Fresno, California 93728; Wasco Public Library at 1102 7th Street, Wasco, California 93280; U.S. Postal Service at 21155 CA-46, Lost Hills, California 93249. This document may be downloaded at the following website:

<https://www.dot.ca.gov/caltrans-near-me/district-6/district-6-projects/06-1a680>

- 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: Judith Lopez, District 6 Environmental Division, California Department of Transportation, 2015 East Shields Avenue, Suite 100, Fresno, California 93726. Submit comments via email to: Judith.Lopez@dot.ca.gov.
- Submit comments by the deadline: October 19, 2024.

What happens next:

After comments are received from the public and the 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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Rehabilitate pavement, upgrade bridge rails and make additional roadway sign improvements on State Route 46 from post miles 33.2 to 46.0 in Kern County.

**INITIAL STUDY
with Proposed Negative Declaration**

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

THE STATE OF CALIFORNIA
Department of Transportation
and
Responsible Agency: California Transportation Commission



Jennifer Lugo
Environmental Office Chief, District 6
California Department of Transportation
CEQA Lead Agency

05/31/2024

Date

The following individual can be contacted for more information about this document:

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Proposed Negative Declaration

Pursuant to: Division 13, Public Resources Code

State Clearinghouse Number: pending.

District-County-Route-Post Mile: 06-KER-46-PM 33.2/46.0

EA/Project Number: EA 06-1A680 and Project ID Number 0620000074

Project Description

The California Department of Transportation (Caltrans) proposes to resurface the existing pavement on State Route 46 from 0.30 mile east of the West Side Canal to 1.0 mile west of Scofield near Wasco in Kern County.

Determination

An Initial Study has been prepared by Caltrans District 6. On the basis of this study, it is determined that the proposed action will not have a significant impact on the environment for the following reasons:

The project would have no impacts on aesthetics, agriculture and forestry resources, energy, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire.

The project would have less than significant impact to air quality, biological resources, cultural resources, and greenhouse gas emissions.

Jennifer Lugo
Environmental Office Chief, District 6
California Department of Transportation
CEQA Lead Agency

Date

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Chapter 1 Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans) proposes to resurface the existing pavement on State Route 46 from 0.30 mile east of the West Side Canal to 1.0 mile west of Scofield near Wasco in Kern County.

The project's estimated cost is \$20 million without escalation. The project is to be funded by the 2022 State Highway Operation and Protection Program and is scheduled to be delivered in the 2025-2026 fiscal year. In addition, it has been determined that this project is eligible for federal-aid funding.

1.2 Purpose and Need

The purpose and need sections discuss the reasons for the project and justify its development.

1.2.1 Purpose

The purpose of the project is to preserve and extend the service life of the existing pavement on State Route 46 to protect the state's investment in the facility and improve overall ride quality and minimize future maintenance needs.

1.2.2 Need

The pavement on State Route 46 in the project limits has deteriorated, resulting in poor ride quality and requiring elevated maintenance efforts and cost. There is also a need to replace obsolete changeable message sign elements, construct a maintenance vehicle pullout, upgrade existing guardrails, and replace the roadway signs to comply with Federal Highway Administration standards.

1.3 Project Description

The project proposes to perform Capital Preventive Maintenance (CAPM) on State Route 46 between post miles 33.2 and 46.0 in Kern County. Additional improvements include repair work at two bridges, upgrading bridge rails, guardrails, roadway signs, and Transportation Management System elements to current standards, and installing maintenance vehicle access to changeable message signs. See Figure 1-1 for the project vicinity map and Figure 1-2 for the project location map.

Figure 1-1 Project Vicinity Map

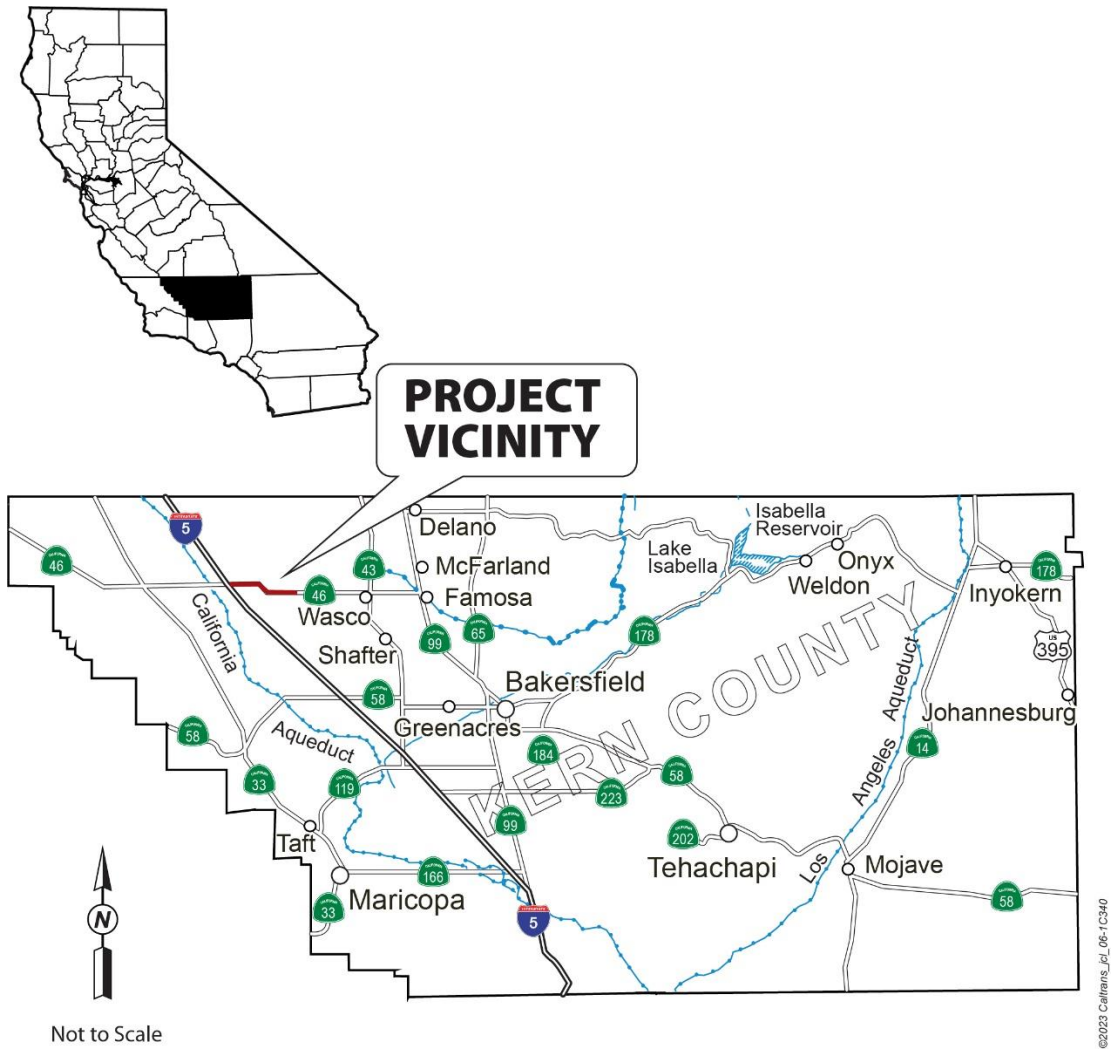
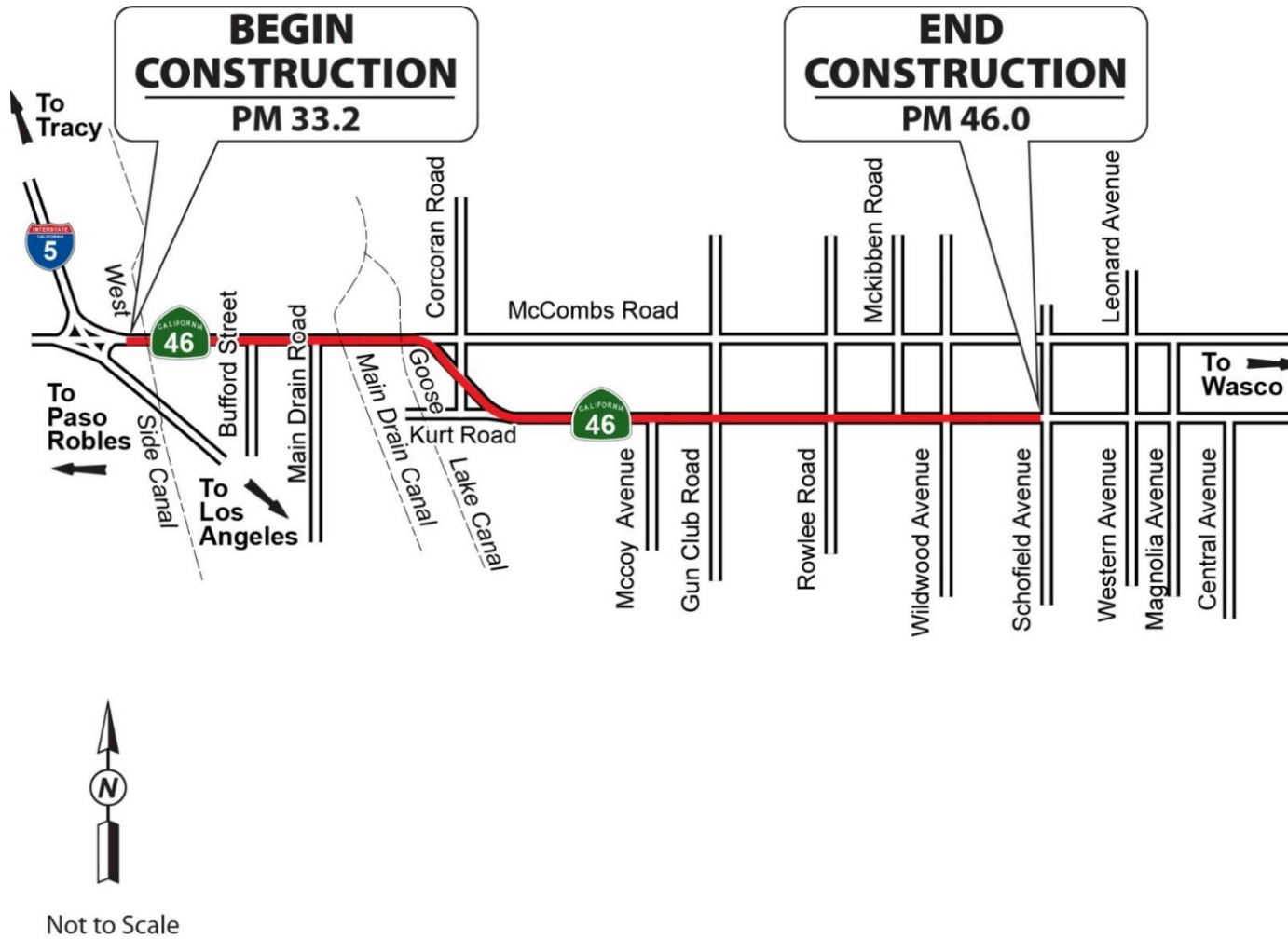


Figure 1-2 Project Location Map



1.4 Project Alternatives

A Build Alternative and a No-Build Alternative are being considered for the project.

1.4.1 Build Alternative

The Build Alternative would do the following:

- Reconstruct the existing pavement by cold planing (scraping off) up to 0.25 inch of the surface from the edge of pavement to edge of pavement on both eastbound and westbound State Route 46 from post miles 33.2 to 46.0. On the existing travel lanes, place 0.10 inch of rubberized hot mix asphalt (Type-G) on top of 0.25 inch of hot mix asphalt (Type-A) on eastbound and westbound State Route 46 from post miles 33.2 to 46.0.
- On the State Route 46 shoulders, place 0.10 inch of rubberized hot mix asphalt (Type-G) on top of 0.15 inch of hot mix asphalt (Type-A) on both eastbound and westbound State Route 46 from post miles 33.2 to 37.2.
- Place 0.10 inch of rubberized hot mix asphalt (Type-G) on both the eastbound and westbound State Route 46 shoulders from post miles 37.2 to 46.0.
- Dig out and replace with hot mix asphalt to repair localized pavement failure.
- Replace and upgrade (to Model-500) existing obsolete changeable message sign elements at post mile 34.60.
- Construct maintenance vehicle pullouts to provide access to the Transportation Management System elements.
- Replace existing bridge rails (MBBR) at Main Drain Canal (post mile 34.63) and Goose Lake Canal (post mile 35.13) with Type-842 concrete barrier.
- Upgrade existing guardrails at the changeable message sign at the bridge approach.
- Remove and replace existing non-standard roadside signs.
- At the bridge deck, scab onto the outside of the existing superstructure with a 1.75-foot- to 2-foot-wide section to support the bridge rail.
- Replace the existing metal bridge rails with Type-842 concrete barrier.
- Apply methacrylate on the concrete deck to seal the cracks in the deck slab.

Some additional excavation in front of the bridge footings would be necessary with the substructure rehabilitation (abutment spall repair, corrosive soil mitigation). It would be a ground-supported formwork erection/removal operation, with no heavy equipment on the canal bed.

No new right-of-way is required. Temporary short-term construction staging areas will be needed. Construction work is expected to occur at night, mainly for installing and removing temporary K-rail barriers for the bridge locations; then, the bridge work would occur during the day behind the K-rail barriers. The project would have one-way traffic control when the concrete overlay on the bridge occurs.

1.4.2 No-Build (No-Action) Alternative

The No-Build Alternative would maintain the existing facility in its present condition. The No-Build Alternative would not address the deteriorating pavement on State Route 46 nor the unsound concrete bridge footings and decayed timber abutments of the existing bridges. The No-Build Alternative would not replace the obsolete changeable message sign elements, construct a maintenance vehicle pullout to access Transportation Management System elements, upgrade existing guardrails, or replace the roadway signs. The No-Build Alternative would not meet the purpose and need of the project.

1.5 Standard Measures and Best Management Practices Included in All Build Alternatives

This project contains several standardized project measures that are used on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project.

The following are some of the standardized project measures that are expected on this project:

- 7-1.02K(6)(j)(iii) Earth Material Containing Lead-Lead Compliance Plan.
- 14-11.12 Removal of Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue: Includes specifications for removing, handling, and disposing of yellow thermoplastic and yellow-painted traffic stripe and pavement marking. The residue from the removal of this material is a generated hazardous waste (lead chromate). Removal of existing yellow thermoplastic and yellow-painted traffic stripe and pavement marking exposes workers to health hazards that must be addressed in a lead compliance plan.
- 14-11.13 for any bridge work that includes welding, cutting, or heating the surfaces coated, cleaning or other method that removes existing paint.

- 36-4 and/or 84-9.03B for work involving residue from grinding and cold-planing that contains lead from paint and thermoplastic.
- 14-11.14 Treated Wood Waste for handling and disposal of any potential wood waste generated during the project (guardrail segments, signposts). Please note that treated wood waste must be disposed of as a hazardous material at a California disposal site operating under a Department of Toxic Substances Control permit Class I landfill.
- Non-Standard Special Provision: Removal of Asbestos-Containing Materials for the removal of asbestos-containing materials at the Main Drain Bridge and the Goose Lake Canal Bridge.
- 13-1 (Water Pollution). If the project disturbs less than 1 acre of soil, a Water Pollution Control Plan is required for the contractor to address all potential water quality impacts that may occur when performing construction activities. If the project disturbs one acre or more of soil, then the following requirements would be required such as a Notification of Intent is to be submitted to the appropriate Regional Water Quality Control Board at least 30 days before the start of construction.
 - A Stormwater Pollution Prevention Plan is to be prepared and implemented during construction to the satisfaction of the Resident Engineer.
 - A Notice of Termination shall be submitted to the Regional Board upon completion of construction and site stabilization. A project will be considered complete when the criteria for final stabilization in the Construction General Permit are met.
- 14-1.02 Environmentally Sensitive Area: Pertains to Environmentally Sensitive Areas marked on the ground. Do not enter an Environmentally Sensitive Area unless authorized. If breached, notify the Resident Engineer.
- 14-6.03 Species Protection: A 500-foot no-disturbance buffer would be required to protect regulated species and their habitats that occur within or near the job site. Upon discovery of a regulated species, notify the Resident Engineer.
- As per 14-6.03B Standard Special Provision, a 500-foot no-disturbance buffer will be required around any burrowing owl burrows identified during pre-construction surveys.
- 14-6.03B Bird Protection-Species Protection: A 500-foot no-disturbance buffer would be required to protect migratory and nongame birds, their occupied nests, and their eggs. Upon discovery of an injured or dead bird or migratory or nongame bird nests that may be adversely affected by construction activities, immediately stop all work and notify the Resident

Engineer. Exclusion devices and nesting-prevention measures may be used as well as removing constructed and unoccupied nests.

- 14-7.03 Discovery of Unanticipated Paleontological Resources: If paleontological resources are discovered at the job site, do not disturb the resources and immediately stop all work within a 60-foot radius of the discovery, secure the area, and notify the Resident Engineer. Do not move paleontological resources or take them from the job site.
- 14-8.02 Noise Control: Pertains to controlling and monitoring noise resulting from work activities. Noise levels are not to exceed 86 decibels at 50 feet from the job site from 9:00 p.m. to 6:00 a.m.
- 14-9.02 “Air Pollution Control” and Section 10-5 “Dust Control” pertain to dust control and dust palliative and require the contractor to comply with the air pollution control rules, ordinances, and regulations and statutes that apply to work performed under the contract. Notification must take place a minimum of 10 working days prior to starting demolition or renovation activities.
- Non-Standard Special Provision: Dust Control Plan, approved by the San Joaquin Air Pollution Control District, is needed if at least 2,500 cubic yards of material are moved in a day for at least three days of the project, or 5 or more acres of land will be disturbed during construction.
- To minimize delays and disruption to existing traffic patterns, the following steps will be taken during the implementation of the construction activities:
 - One- way traffic closures with temporary reversing traffic control will be required during the staged construction work.
 - Efforts will be made to keep two lanes open during daytime work, but one-lane closures for short periods may be necessary for pavement resurfacing. Construction staging and a Traffic Handling Plan will be implemented in detail in the Plans, Specifications, and Estimate phase of the project.

1.6 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, has been prepared in accordance with the National Environmental Policy Act. 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—that is, species protected by the Federal Endangered Species Act).

1.7 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-Streambed Alteration Agreement	The 1600 permit would be obtained before construction starts.
U.S. Fish and Wildlife Service	Section 7 Informal consultation for federally endangered species	A Letter of Concurrence for the San Joaquin kit fox, giant kangaroo rat, Tipton kangaroo rat, Buena Vista Lake ornate shrew and blunt-nosed leopard lizard was received from the U.S. Fish and Wildlife Service on February 7, 2024.
Regional Water Quality Control Board	Waste Discharge Requirement	The Waste Discharge permit would be obtained before construction starts.
State Office of Historic Preservation	Concurrence with Determinations of Eligibility	The Determinations of Eligibility were submitted to the State Historic Preservation Officer on January 1, 2024. The State Historic Preservation Officer formally responded on April 11, 2024, concurring with the Caltrans determinations for Main Drain Canal and Goose Lake Canal.

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 Significant and Unavoidable Impact, Less Than Significant Impact 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 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.

“No Impact” determinations in each section are based on the scope, description, and location of the proposed project as well as the appropriate technical report (bound separately) and no further discussion is included in this document.

2.1.1 Aesthetics

Considering the information in the Visual Assessment dated October 2023, the following significance determinations have been made:

Except as provided in Public Resources Code Section 21099:

Question—Would the project:	CEQA Significance Determinations for Aesthetics
a) Have a substantial adverse effect on a scenic vista?	No Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No Impact

Question—Would the project:	CEQA Significance Determinations for Aesthetics
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?	No Impact
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	No Impact

2.1.2 Agriculture and Forestry Resources

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

The project would not acquire additional right-of-way; therefore, it would not convert prime farmland, unique farmland, or farmland of statewide importance to nonagricultural use or conflict with existing zoning for agricultural use or a Williamson Act contract. There are no forest lands or timberlands within the project area that could be impacted. Considering the information from the Kern County Interactive Geographic Information System Map dated 2022 and Caltrans Right of Way datasheet, the following significant determinations have been made:

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

2.1.3 Air Quality

Considering the information in the Air Quality Memorandum dated July 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Air Quality
a) Conflict with or obstruct implementation of the applicable air quality plan?	No Impact
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	No Impact

Question—Would the project:	CEQA Significance Determinations for Air Quality
c) Expose sensitive receptors to substantial pollutant concentrations?	No Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less Than Significant Impact

Affected Environment

An Air Quality Report for the project was completed in July 2023. The purpose of the report was to document the expected air quality effects of the project and address both state and federal air quality standards with the intent to satisfy the requirements of CEQA and NEPA.

The project is on State Route 46 from 0.35 mile east of the West Side Canal to 1.0 mile west of Scofield Avenue (post miles 33.2 to 46.0) in Kern County.

The project area lies in a portion of the San Joaquin Valley Air Basin that is in nonattainment for particulate matter 2.5 and attainment/maintenance for particulate matter 10. However, according to the Environmental Protection Agency’s conformity guidance, particulate matter 2.5 hotspot analysis is required for Projects of Air Quality Concern in nonattainment and maintenance areas. Projects that are exempt or not Projects of Air Quality Concern do not require a hotspot analysis. According to 40 Code of Federal Regulations Section 93.126, the project is exempt under Table 2 titled “*Pavement resurfacing and/or rehabilitation.*” Therefore, it was determined that the project is “Not a Project of Air Quality Concern,” and it would not require consultation with the San Joaquin Valley Interagency Coordinating Committee.

Environmental Consequences

Build Alternative—Construction Phase

During construction, short-term degradation of air quality is expected from the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment powered by gasoline and diesel engines are also expected and would include carbon monoxide, nitrogen oxides, volatile organic compounds, directly emitted particulate matter 2.5 and particulate matter 10 and toxic air contaminants, such as diesel exhaust particulate matter. A temporary increase in traffic resulting from construction activities would create a localized increase in emissions from traffic.

Construction emissions were estimated for the Build Alternative. Construction emissions for the project were calculated using the Caltrans Construction Emissions Tool (CAL-CET) v1.0.2. Project construction is expected to

generate 397 tons of carbon dioxide during the 327 working days of the project schedule.

Avoidance, Minimization, and/or Mitigation Measures

Caltrans Standard Specifications pertaining to dust control and dust palliative requirements are a required part of all construction contracts and should effectively reduce and control emission impacts during construction. The provisions of Caltrans Standard Specifications Section 14-9.02 Air Pollution Control and Section 10-5 Dust Control require the contractor to comply with the air pollution control rules, ordinances, regulations, and statutes that apply to work performed under the contract, including those provided in Government Code Section 11017.

A non-standard special provision 14-9.04 (a Dust Control Plan) approved by the San Joaquin Valley Air Pollution Control District is required (a) if the project is a non-residential project which includes 5 acres or more of disturbed surface area or (b) if a project will move 2,500 cubic yards or more of bulk material on any three days of a project (consecutive or not), regardless of the disturbed surface area.

2.1.4 Biological Resources

Considering the information in the Natural Environment Study Minimal Impacts dated September 2023 and Letter of Concurrence dated February 2024, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Biological Resources
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 National Oceanic and Atmospheric Administration Fisheries?	Less Than Significant Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Less Than Significant Impact

Question—Would the project:	CEQA Significance Determinations for Biological Resources
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?	No Impact
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?	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact

Affected Environment

The following discussions of plant species, animal species, and threatened and endangered species are based on the Natural Environment Study Minimal Impacts dated September 2023.

The biological study area consists of a two-lane rural agricultural highway surrounded by low-row crops such as non-native annual grassland and orchards. A 200-foot buffer was added around the project impact area to account for impacts and potential changes in construction limits. The elevation of the biological study area ranges between 237 feet and 278 feet above sea level with moderately flat sloped landscape.

Several different vegetation community habitat types are found within the biological study area: intermixed saltbush scrub, alkali sink, disturbed emergent wetlands, agriculture, and disturbed (non-native) grasslands (see below for a discussion on each plant’s characteristics, habitat requirements’ growing season, blooming period, and recorded occurrences. See Table 2.1 for the list of proposed plants species, natural communities, and critical habitat potentially occurring or known to occur in the project area.

Field observations found there was no water in the canals during various biological surveys conducted in January, February, April, and June 2023. However, the local water storage district used the Main Drain Canal to deliver

water to customers north of the canal's intersection with State Route 46. Normally, this canal is not used for water delivery, but an abundance of water that year exceeded the water district's normal conveyance system. The canal will return to a dry state once water delivery is no longer necessary. Construction work will temporarily disturb a total of 0.33 acre of habitat. This total consists of 0.017 acre of intermixed grassland/alkali desert scrub and fresh emergent wetland associated with excavating four abutments at the Main Drain Canal and Goose Lake Canal bridges.

The project lies a couple miles south of the Kern National Wildlife Refuge and Semitropic Ecological Reserve, which are home to many sensitive and special-status species. There have been many recorded occurrences of listed species within and adjacent to the project biological study area. Most of these recorded occurrences are from decades ago and have not occurred within the Caltrans right-of-way. Within the project limits, changes in land use and other development, including improvements on State Route 46 and nearby properties, have reduced habitat quality within the biological study area. The potential for listed wildlife species to occur within the biological study area is generally limited to species with the ability to move through the project area.

General wildlife surveys were conducted in the biological study area to determine the level of disturbance, jurisdictional water potential, species richness, small-mammal trapping locations, and evidence of special-status species in January, February, and July 2023, respectively. In all the surveys, the length of the biological study area was walked where possible and driven through slowly by using the State Route 46 shoulder, as needed, to observe species and areas of interest within the biological study area. The surveys were also used to identify small-mammal trapping and blunt-nosed leopard lizard (*Gambelia sila*) survey sites in the biological study area. All signs of wildlife presence, such as scat, tracks, burrows, and nests, were documented. All general wildlife surveys followed the same methodology but focused on different species and areas of interest within the biological study area as needed. See Table 2.2 for the list of proposed animal species and critical habitat potentially occurring or known to occur in the project area.

Wetlands and Other Waters

Wetlands surveys were conducted in January 2023 for the portion of the Main Drain Canal and Goose Lake Canal within the biological study area. Both canal beds were densely vegetated with tumbleweed (*Salsola tragus*).

Apart from the Main Drain Canal and Goose Lake Canal drainages, other unnamed aquatic features occur within the biological study area, such as natural potholes-basins, and they will not be affected by the project due to their relatively small size and the nature of the proposed work at those locations (minimal to no off-road work outside of the canal beds).

Special-Status Plant Species

The plants listed are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the presence of habitat required by the special-status plants occurring onsite.

Nine plants were found to have historical records of occurrence or potential suitable habitat present in the biological study area: Earlimart orache (*Atriplex cordulata* var. *erecticaulis*), crownscale (*Atriplex coronat* var. *coronata*), lesser saltscale (*Atriplex minuscula*), recurved larkspur (*Delphinium recurvatum*), Hoover's eriastrum (*Eriastrum hooveri*), kern mallow (*Eremalche parryi* ssp. *kernensis*), San Joaquin woolly threads (*Monolopia congdonii*), California alkali grass (*Puccinellia simplex*), and San Joaquin bluecurls (*Trichostema ovatum*). No special-status plant species were found within the biological study area. Botanical surveys for special-status rare plants were conducted on April 19, 2023; no listed special-status plants were spotted during the survey.

Special-Status Animal Species

Animals are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special-status animals occurring onsite. The following discussions include those species that have the potential for presence, have habitat present, and/or have the potential to be impacted by the proposed project: San Joaquin antelope squirrel (*Ammospermophilus nelsoni*), California glossy snake (*Arizona elegans occidentalis*), burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), mountain plover (*Charadrius montanus*), short-nosed kangaroo rat (*Dipodomys nitratoides brevinasus*), giant kangaroo rat (*Dipodomys ingens*), Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*), blunt-nosed leopard lizard (*Gambelia sila*), coast horned lizard (*Phrynosoma blainvilli*), San Joaquin coachwhip (*Masticophis flagellum ruddocki*), Tulare grasshopper mouse (*Onychomys torridus tularensis*), San Joaquin pocket mouse (*Perognathus inornatus*), Buena Vista Lake ornate shrew (*Sorex ornatus relictus*), San Joaquin kit fox (*Vulpes macrotis mutica*), and American badger (*Taxidea taxus*).

Environmental Consequences

Wetlands and Other Waters

Wetlands and surface waters, including the Main Drain and Goose Lake Canals, were found within the biological study area. A wetland delineation survey was conducted to assess the water distribution of the Main Drain Canal, Goose Lake Canal, and all other aquatic features areas occurring within the biological study area. The Main Drain and Goose Lake Canals are similar in size, measuring 38 to 40 feet wide from bank to bank within the right-of-way. However, during the ordinary high-water mark survey, both canal

beds were densely vegetated with tumbleweed (*Salsola tragus*), which limited walking access in the canal beds and therefore limited the survey results.

In addition, other features present within the biological study area, such as natural potholes-basins, will be not affected by the project due to their relatively small size and the nature of the proposed work at those locations.

The excavation in front of the canal bridge abutments would result in temporary impacts in both canal beds. The work would be done during the dry season, so no temporary or permanent impacts to water flow in the canals are anticipated. During the excavation, soil disturbance and compaction would occur, but no vegetation or tree removal is anticipated. No special-status plant species or trees are present in the canal beds. If vegetation removal does occur, it will be limited to small, ruderal plants, such as tumbleweed and invasive grasses. The excavated areas would be backfilled with the removed soil once the work at the abutments is complete.

No waters are anticipated to be jurisdictional by the U.S. Army Corps of Engineers. It is anticipated that the California Department of Fish and Wildlife and the Regional Water Quality Board will take jurisdiction over identified waters. Waters within the project area are isolated and do not flow into any traditionally navigable water; therefore, Caltrans will not require a jurisdictional determination from the U.S. Army Corps of Engineers. A wastewater discharge certification application will be prepared for the Central Valley Regional Water Quality Control Board. A Streambed Alteration Agreement permit application will be prepared for the California Department of Fish and Wildlife. The following permits would be obtained:

- 401 Waste Discharge Requirement permit from the Regional Water Quality Control Board
- 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife

Special-Status Plant Species

No protocol-level botanical surveys were conducted for any special-status plant species. However, the botanical surveys were conducted in April 2023, focused on the species deemed to have suitable habitat present in the biological study area. The surveys were scheduled at that time to ensure that they were done during the spring blooming period (February to May). The portions of the biological study area directly adjacent to State Route 46 are too densely vegetated with invasive grasses, disturbed with agricultural activity, or developed with urban developments, making it difficult and unlikely for special-status plants to compete and grow within the biological study area. None of the special-status plant species discussed in this document were observed in the biological study area during surveys.

Table 2.1 List of Proposed Plants Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent ¹	Rationale
Plant Species					
Horn's milk-vetch	<i>Astragalus homii</i> <i>var. homii</i>	1B.1	Salty flats, lake shores, meadows and seeps, and playas. Found in alkaline areas and in lake margins. Blooms between 195-2,790 feet asl between May-October.	A	No salty flats, lake shores, meadows, seeps, or playas present in the BSA.
Earlimart orache	<i>Atriplex cordulata</i> <i>var. erecticaulis</i>	1B.2	Saline or alkaline soils. Valley and foothill grasslands between 130-330 feet asl. Species blooms between April-October.	HP	Non-native grassland habitat is present in the BSA.
Crownscale	<i>Atriplex coronata</i> <i>var. coronate</i>	4.2	Chenopod scrub, valley and foothill grassland, and vernal pools. Found in fine, alkaline soils and clay microhabitats. Bloom between 65-2,360 feet asl between March-October.	HP	Chenopod scrub and grassland habitat is present in BSA. Historic observed occurrences also present in BSA.
Lost Hills crownscale	<i>Atriplex coronata</i> <i>var. vallicola</i>	1B.2	Chenopod scrub, valley and foothill grassland, vernal pools. In dried ponds and powdery, alkaline soils that are vernal moist with <i>Frankenia</i> , <i>Atriplex</i> sp., and <i>Distichlis</i> . Blooms between	A	The species elevation range is above the elevation of the BSA. There are no vernal pools or dried ponds present in the BSA. The BSA's temperature range, pH, and max salinity are also outside of species tolerance.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent ¹	Rationale
			720-2,790 feet asl between April-August.		
Lesser saltscale	<i>Atriplex minuscula</i>	1B.1	Alkaline habitats associated with sandy, alkaline soils in chenopod scrub, playas, valley and foothill grasslands. Blooms between 50-655 feet asl in May-October.	HP	Chenopod scrub habitat is present in BSA.
Subtle orache	<i>Atriplex subtilis</i>	1B.2	Alkaline areas and saline depressions in Valley and foothill grasslands. Blooms between 0-165 feet asl in elevation during June-August.	A	Species elevation range is below the BSA's elevation. The BSA is also outside of the species tolerance for precipitation, temperature range, precipitation, wet season, and accumulated temperature.
California jewelflower	<i>Caulanthus californicus</i>	FE SE 1B.1	Chenopod scrub, valley and foothill grasslands. Flats and slopes, generally in non-alkaline grasslands. Species is found between 1,050-3,870 feet asl. Blooms between February-May.	A	BSA is below the species elevation range. No flats or slopes in BSA. Historic observations from 1935 are located about 1.7 miles west of the start of the project limits (PM 33.2), but the species is believed to be extirpated, as the location is disturbed now due to urban and agricultural development.

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Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent ¹	Rationale
Slough thistle	<i>Cirsium crassicaule</i>	1B.1	Chenopod scrub, freshwater marshes and swamps, and riparian scrub areas. Species is associated with sloughs, riverbanks, and marshy areas between 10-300 feet asl in elevation. Species blooms between May-August.	A	No suitable marshes, swamps, or riparian scrub areas present in the BSA.
Recurved larkspur	<i>Delphinium recurvatum</i>	1B.2	Chenopod scrub, cismontane woodland, and valley and foothill grasslands. Poorly drained, fine, alkaline soils in grasslands. Found between 35-3,640 feet asl. Species blooms between March and June.	HP	Chenopod scrub habitat is present within the BSA. Additionally, there is a recent observed occurrence just outside the BSA.
Kern mallow	<i>Eremalche parryi</i> <i>ssp. kernensis</i>	FE 1B.2	Dry, open, sandy to clay soils. Eroded hillsides and alkali flats. Usually found within valley saltbush scrub at the edge of balds. Blooms between 130 to 3,970 feet asl between March-May.	HP	Saltbush scrub and alkali habitat present in BSA.
Hoover's eriastrum	<i>Eriastrum hooveri</i>	FD 4.2	Chenopod scrub, valley and foothill grassland, pinyon and juniper	HP	Chenopod scrub and grassland habitat is present in BSA.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent ¹	Rationale
			woodlands. Alkaline flats above dry streambeds, sparsely vegetated alkaline alluvial fans, and sandy soils in the Temblor Range. Blooms between 130-3,510 feet asl between March-July.		
Cottony buckwheat	<i>Eriogonum gossypinum</i>	4.2	Chenopod scrub and valley and foothill grasslands in clay microhabitat. Species blooms at 260-3,480 feet asl between March-September.	A	The BSA lacks clay microhabitat and falls outside of species tolerance for location values. Additionally, there have been no historic or recent observed occurrences in the BSA.
Alkali-sink goldfields	<i>Lasthenia chrysantha</i>	1B.1	Alkali vernal pools and wet saline flats. Species blooms at 0-1,085 feet asl between February-June.	A	No alkali vernal pools or wet saline flats present in the BSA and BSA is outside of species tolerance for location values, such as precipitation.
Feris' goldfields	<i>Lasthenia ferrisiae</i>	4.2	Alkaline, clay vernal pools and wet saline flats between 215 to 2,000 feet asl. Species blooms between February-May.	A	No alkaline vernal pools or wet saline flats present in the BSA. Historic observations located outside of the BSA believed to be extirpated due to urban development.
Coulter's goldfields	<i>Lasthenia glabrata</i> <i>ssp. coulteri</i>	1B.1	Coastal salt marshes, playas, and vernal pools. Species is usually found on	A	No coastal salt marshes, playas, or vernal pools present in the BSA. No

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent ¹	Rationale
			alkaline soils between 0-2,295 feet asl and blooms between February-June.		recent or historic observed occurrences in or near BSA.
Munz's tidy-tips	<i>Layia munzii</i>	1B.2	Chenopod scrub, valley and foothill grassland. Hillsides, in white-grey alkaline clay soils, with grasses and chenopod scrub associates. Species blooms at 245 to 3,395 feet asl between March and April.	A	Some portions of the BSA fall under the species elevation range. Most of the BSA's location values are outside of species tolerance. Historic observations of species are present in and around the BSA but are anticipated to be extirpated.
San Joaquin woollythreads	<i>Monolopia congdonii</i>	FE 1B.2	Chenopod scrub, valley and foothill grassland. Alkaline or loamy plains; sandy soils with grasses and within chenopod scrub. Species blooms at 215-3,215 feet asl between February-May.	HP	Chenopod scrub and grassland habitat is present in BSA. Additionally, there have been recent observed occurrences in and just outside of the BSA.
California alkali grass	<i>Puccinellia simplex</i>	1B.2	Meadows and seeps, chenopod scrub, valley and foothill grasslands, vernal pools, saline flats, and mineral springs. Alkaline, vernal mesic areas such as sinks, flats, and lake margins. Species blooms at 15-4,560 feet asl between March and May.	HP	Chenopod scrub and valley and foothill grassland habitat is present in BSA. Historic observation from 1942 is also present in the BSA; the species is anticipated to be extant.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent ¹	Rationale
San Joaquin bluecurls	<i>Trichostema ovatum</i>	4.2	Chenopod scrub and valley and foothill grassland. Species blooms at 295-3,675 feet asl during July-October.	HP	Chenopod scrub and grassland habitat is present in BSA. Historic observations have been recorded in the BSA as well.
Kings gold	<i>Tropidocarpum californicum</i>	1B.1	Alkaline, sandy clay soil in chenopod scrub. Species blooms at 195-215 feet asl in March.	A	The BSA's elevation is outside of the species elevation range, and the BSA lacks clay soil. The BSA's location values, including wet season and max CaCO ₃ , are outside of the species tolerance. There are no observed occurrences in or around the BSA.
Habitats					
Alkali seep	<i>Alkali seep</i>	-	Meadows, seeps, and wetlands in alkaline areas	A	No meadows or seeps present in the BSA.
Buena Vista Lake orate shrew critical habitat	<i>Buena Vista Lake orate shrew critical habitat</i>	-	The primary constituent elements for Buena Vista Lake orate shrew critical habitat are: - A complex vegetative structure with a thick cover of leaf litter or dense mats of low-lying vegetation. Associated plant	A	According to the IPaC species list, critical habitat for the Buena Vista Lake orate shrew is present between PM 34.6-35.36 on SR 46. However, the primary constituent elements are not present in the BSA.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent ¹	Rationale
			<p>species can include, but are not limited to, Fremont cottonwoods, willows, glasswort, wild-rye grass, and rush grass. Although moist soil in areas with an overstory of willows or cottonwoods appear to be favored, such overstory may not be essential.</p> <ul style="list-style-type: none"> - Suitable moisture supplied by a shallow water table, irrigation, or proximity to permanent or semipermanent water; and - A consistent and diverse supply of prey. Although the specific prey species utilized by the Buena Vista Lake omeate shrew have not been identified, 		

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent ¹	Rationale
			omeate shrews are known to eat a variety of terrestrial and aquatic invertebrates, including amphipods, slugs, and insects		
Valley saltbush scrub	<i>Valley saltbush scrub</i>	-	Chenopod scrub	HP	Valley saltbush scrub habitat is present in the BSA.
Valley sink scrub	<i>Valley sink scrub</i>	-	Valley sink scrub habitat	A	Habitat is not present in the BSA. No sinks were observed.

Absent [A] - no habitat present and no further work needed. Habitat Present [HP] - habitat is or may be present. The species may be present. Present [P] - the species is present. Critical Habitat [CH] - project footprint is located within a designated critical habitat unit but does not necessarily mean that appropriate habitat is present. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Proposed (FP, FPE, FPT); Federal Candidate (FC), Federal Species of Concern (FSC); State Endangered (SE); State Threatened (ST); Fully Protected (FP); State Rare (SR); State Species of Special Concern (SSC); California Native Plant Society (CNPS); International Union for Conservation of Nature – Least Concern (IUCN_LC); Bureau of Land Management – Sensitive (BLM_S)

CNPS Rare Plant Ranks

- 1A – Plants presumed extirpated in California and either rare or extinct elsewhere
- 1B – Plants are rare, threatened, or endangered in California
- 2A – Plants presumed extirpated in California, but common elsewhere
- 2B – Plants are rare, threatened, or endangered in California, but common elsewhere
- 3 – Review List: Plants about which more information is needed
- 4 – Watch List: Plants of limited distribution

CNPS Threat Rank

- .1 – Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)
- .2 – Moderately threatened in California (over 20-80% of occurrences threatened/ low degree of immediacy of threat or no current threats known)
- .3 – Not very endangered in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

No special-status plant species are anticipated to be temporarily or permanently impacted. The project will be low intensity because it is focused on the paved roadway and is not anticipated to require any vegetation removal. Special-status plant species will be affected only if they are found occurring where off-road work, such as excavation in front of the canal bridge abutments, is set to occur. If they are discovered there, the implementation of the avoidance and minimization measures listed will ensure that there will be no long-term or permanent impacts.

Special-Status Animal Species

General wildlife surveys were conducted in January, February, July of 2023 in the biological study area to determine the level of disturbance, species richness, jurisdictional water potential, and wildlife and vegetation presence. In addition, surveys for the Swainson’s hawk, migratory birds and nesting birds occurred in February, April and June of 2023 to determine any presence of Swainson’s hawks and other migratory birds within the project limits.

In all the surveys, the length of the biological study area was walked where possible and driven through slowly by using the State Route 46 shoulder as needed to observe species and areas of interest.

Table 2.2 List of Proposed Animal Species and Critical Habitat Potentially Occurring or Known to Occur in the Project Area

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent ¹	Rationale
Animal Species					
Tricolored blackbird	<i>Agelaius tricolor</i>	ST	Requires open water, protected nesting substrate, and foraging area with insect prey within a few miles of colony. Occurs in swamps, marshes, and wetlands.	A	No marshes or swamps present in BSA, but recent observed occurrences indicate species may pass through the habitat.
Nelson’s (San Joaquin) antelope squirrel	<i>Ammospermophilus nelsoni</i>	ST	Western San Joaquin Valley in chenopod scrub with dry, sparsely vegetated loam soils. Need widely scattered shrubs, forbs, and grasses in gullies and washes.	HP	Sparse chenopod scrub and shrubs and grasses present in washes. There have also been historic observed occurrences in the BSA.
California glossy snake	<i>Arizona elegans occidentalis</i>	SSC	Species is common throughout southern California – especially in desert areas. Can also occur in chaparral, sagebrush, valley-foothill hardwood, pine-juniper, and annual grasses.	HP	Annual grasslands in BSA may offer marginally appropriate habitat for species.

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Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent ¹	Rationale
Burrowing owl	<i>Athene cunicularia</i>	SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation.	HP	Open, dry grasslands and scrubland with low-growing vegetation habitat present in the BSA.
Swainson's hawk	<i>Buteo swainsoni</i>	ST	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees.	HP	Agricultural areas and grassland habitat provides suitable foraging habitat.
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	FT	Small, clear-water sandstone-depression pools, grassed swale, earth slump, or basalt-flow depression pools.	A	No vernal pools present in BSA.
Mountain plover	<i>Charadrius montanus</i>	SSC	Short grasslands, freshly plowed fields, newly sprouted grain fields, and sometimes sod farms. Prefers grazed areas and areas with burrowing rodents.	HP	Suitable foraging habitat present in BSA with burrowing rodents and short grasslands.
Western snowy plover	<i>Charadrius nivosus nivosus</i>	FT	Sandy beaches, salt pond levees, and shores of large alkali lakes. Needs sandy,	A	No sandy beaches, salt pond levees, or large alkali lakes present in BSA.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent ¹	Rationale
			gravelly, or friable soils for nesting.		
Monarch butterfly	<i>Danaus plexippus</i>	FC	Open fields and meadows with milkweed.	A	No milkweed present in the BSA.
Giant kangaroo rat	<i>Dipodomys ingens</i>	FE SE	Annual grasslands on the western side of the San Joaquin Valley. Marginal habitat in alkali scrub. Mainly inhabit sandy loam soils on level or gently sloping ground.	HP	BSA contains grasslands with scattered valley saltbush scrub which may provide suitable habitat.
Short-nosed kangaroo rat	<i>Dipodomys nitratooides brevinasus</i>	SSC	Grasslands with scattered shrubs and desert-shrub associations on powdery soils. Need friable soils and favor gently sloping terrain. Usually found in saline soils around Soda Lake.	HP	BSA contains grasslands with scattered shrubs which may be suitable for burrows.
Tipton kangaroo rat	<i>Dipodomys nitratooides nitratooides</i>	FE	Saltbush scrub and sink scrub communities in the Tulare Lake Basin of the southern San Joaquin Valley. Need soft friable soils and burrows in elevated soil mounds at bases of shrubs.	HP	Intermixed valley saltbush scrub present in the BSA which may provide suitable burrowing habitat.
Snowy egret	<i>Egretta thula</i>	IUCN_LC	Colonial nester, with nest sites situated in protected beds of dense tules. Rookery sites	A	No suitable aquatic habitat (marshes, streams, etc.) present in BSA. No tules present in BSA either.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent ¹	Rationale
			situated close to foraging areas: marshes, tidal-flats, streams, wet meadows, and borders of lakes.		
Western pond turtle	<i>Emys marmorata</i>	SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6,000 ft elevation.	A	No suitable aquatic habitat present in BSA. The streams in the BSA are dry for most of the year and cannot support the species year-round.
Blunt-nosed leopard lizard	<i>Gambelia sila</i>	FE SE	Sparsely vegetated alkali and desert scrub habitats in areas of low topographic relief. Found in small mammal burrows or under shrubs and structures like fence posts.	HP	Sparse alkali vegetation and desert scrub habitat has been historically present in BSA – currently the BSA is too densely vegetated.
California condor	<i>Gymnogyps californianus</i>	FE	Ideal habitat consists of undeveloped land with large trees and rocky cliffs for roosting and nesting.	A	No rocky cliffs or large trees at a high enough altitude present in BSA.
Delta smelt	<i>Hypomesus transpacificus</i>	FT	Found on freshwater edge of saltwater-freshwater interface of streams. Usually found from Suisun Bay upstream through the Delta in Contra Cosa, San Joaquin, Solano, and Yolo Counties.	A	No suitable freshwater-saltwater stream interfaces present in the BSA. The streams in the BSA are ephemeral and cannot support the species year-round.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent ¹	Rationale
San Joaquin coachwhip	<i>Masticophis flagellum ruddocki</i>	SSC	Open, dry habitats with little or no tree cover. Found in valley grassland and saltbush scrub in the San Joaquin Valley. Needs mammal burrows for refuge and oviposition sites.	HP	Valley grassland and saltbush scrub present in the BSA.
Black-crowned night heron	<i>Nycticorax nycticorax</i>	IUCN_LC	Colonial nester, usually in trees and occasionally in tule patches. Rookery sites are located adjacent to foraging areas: lake margins, mud-bordered bays, and marshy spots.	A	No tule patches or suitable aquatic foraging habitat present in BSA.
Tulare grasshopper mouse	<i>Onychomys torridus tularensis</i>	SSC	Hot, arid valleys and scrub deserts in the southern San Joaquin Valley. Found in areas with abundant arthropods.	HP	Suitable foraging habitat present in the BSA.
San Joaquin pocket mouse	<i>Perognathus inornatus</i>	BLM_S IUCN_LC	Grassland, oak savanna and arid scrubland in the southern Sacramento Valley, Salinas Valley, San Joaquin Valley and adjacent foothills, south to the Mojave Desert. Associated with fine-textured, sandy, friable soils.	HP	Grassland and arid scrubland present in the BSA.

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Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent ¹	Rationale
Coast horned lizard	<i>Phrynosoma blainvilli</i>	SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	HP	Washes with scattered low bushes present in BSA.
White-faced ibis	<i>Plegadis chihi</i>	IUCN_LC	Shallow freshwater marsh. Dense tule thickets for nesting and interspersed areas of shallow water for foraging.	A	No tule thickets or freshwater marsh present in BSA.
Buena Vista Lake ornate shrew	<i>Sorex ornatus relictus</i>	FE SSC	Marshlands and riparian areas in the Tulare Basin. Species prefers moist soil and uses stumps, logs, and litter for cover.	HP	Buena Vista Lake ornate shrew critical habitat is present in riparian areas in the BSA on the westbound shoulder side of SR 46 between PMs 34.6-35.36.
Western spadefoot	<i>Spea hammondi</i>	SSC	Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	A	No vernal pools present in BSA.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent ¹	Rationale
American badger	<i>Taxidea taxus</i>	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats with friable soils. Species needs sufficient food, friable soils, and open, uncultivated ground. Species preys on burrowing rodents and digs burrows.	HP	Friable soils and suitable prey base present in the BSA.
Le Conte's thrasher	<i>Toxostoma lecontei</i>	SSC	Species is a desert resident. Open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats. Species commonly nests in dense, spiny shrub, or densely branched cactus in desert wash habitat, usually 2-8 feet above ground.	A	No desert succulent habitat present in washes in BSA. No suitable nesting substrate present in BSA.
San Joaquin kit fox	<i>Vulpes macrotis mutica</i>	FE ST	Chenopod scrub, valley and foothill annual grasslands or grassy open stages with scattered shrubby vegetation. Species needs a suitable prey base and loose-textured sandy soils for burrowing.	HP	Annual grasslands and suitable prey base present within the BSA.

San Joaquin Antelope Squirrel

Suitable San Joaquin antelope squirrel habitat was observed throughout the biological study area. Small burrows, likely small mammal burrows, were observed in the biological study area in the two canal beds and around the undeveloped land adjacent to State Route 46 between post miles 36.8 and 37.5. However, no San Joaquin antelope squirrel individuals or any signs that would conclusively identify San Joaquin antelope squirrel presence during field visits was found.

Since most of the project activities will be focused on the paved roadway, the project would only temporarily impact the San Joaquin antelope squirrel by construction-related noise, vibration, and increased human presence.

California Glossy Snake

The only observed closest occurrence of a California glossy snake was in 1996 about 7 miles south of State Route 46; since then, there has been no recent occurrence within the biological study area. The species has suitable habitat, including saltbush species (*Atriplex* spp.) and grassland, near post mile 36.98. However, no California glossy snake individuals or any signs of individuals were observed during field visits. Based on the lack of occurrences in both the database query and field survey results, along with the disturbed nature of the project area, California glossy snakes or their habitats are not anticipated to be impacted by the project. Most of the work will be limited to the roadway, and there will be no vegetation removal that would alter habitat conditions for the California glossy snake. Temporary impacts include disturbances from construction activity and machinery, but the level of disturbance will return to baseline levels shortly after construction is complete.

Burrowing Owl

A total of 19 observed burrowing owl occurrences were found within the project limits, 14 of which were recent. Most of the recent observed occurrences were found north of State Route 46, 1 to 5 miles north of the State Route 46 and Dairy Avenue intersection at post mile 36.83 in the biological study area. Also, historic occurrences are present 3.1 miles southwest, 6 miles northwest, and 5.1 miles west of the start of the project limits at post mile 33.2, respectively.

During the January field visit, burrows large enough to house the burrowing owl were found near the undeveloped land adjacent to the eastbound shoulder of State Route 46 at post mile 36.9. The burrows were inspected during general wildlife surveys and were thought to be inactive, as there were no signs of recent activity. Signs indicative of burrowing owl presence, such as whitewash, feathers, or small mammal bones, were not seen near the entrances of the larger burrows. Even though no burrowing owls or burrows were seen, the smaller (likely small mammal) burrows in the area suggest

that a suitable prey base is present to provide an appropriate foraging habitat for the burrowing owl.

Burrowing owls are not anticipated to face any long-term or permanent impacts from the project since the project will largely be limited to on-pavement work, reducing the probability of impacting the burrowing owl or its habitat. If burrowing owls are present in the project limits, temporary impacts may include a reduction in foraging habitat near and during construction activity, and the sounds and vibrations from construction machinery and personnel will likely deter them away from the area.

Swainson's Hawk

There have been recent sightings of Swainson's hawks just west and outside of the start of the project limits and within the biological study area. Most recently, in 2020, two adult Swainson's hawks and a juvenile were spotted nesting in the riparian habitat next to the Kern River Canal, just west of post mile 33.2. Two other recent occurrences were documented in 2016 and 2022, 8 miles northeast and 9.6 miles north-northwest of the start of the project limits, respectively.

During field visits and windshield surveys, suitable nesting trees for the Swainson's hawk were seen in the biological study area and west of post mile 36.11. Numerous cellphone towers and large mature trees, such as pine (*Pinus* sp.) and eucalyptus (*Eucalyptus* sp.), have the potential to provide suitable nesting habitat for Swainson's hawks on the east side of post mile 36.11. One active nest was spotted in a eucalyptus tree adjacent to a residential property, about 135 feet from the edge of eastbound State Route 46 at post mile 45.83. Based on limited survey observations, the nesting raptor is presumed to be a red-tailed hawk. However, a conclusive identification could not be made due to a lack of visibility from the shoulder and roadway. No other active raptor nests were observed anywhere in the project limits. A few red-tailed hawks were observed foraging in the biological study area, but no confirmed Swainson's hawk.

Within the project limits, suitable foraging habitat such as open fields and agricultural areas generally provide a suitable prey base.

The project is not anticipated to impact the Swainson's hawk or its habitat directly or permanently throughout the project limits. No tree removal is anticipated because the work will be within the existing right-of-way and mostly limited to the existing pavement. If a Swainson's hawk is nesting in the biological study area, it may face temporary disturbances from construction activities and machinery, such as reduced foraging habitat near the work and exposure to loud noises and vibrations.

Mountain Plover

Mountain plover occurrences were found from 1974 and 2006 in or directly east of the Kern National Wildlife Refuge over 7 miles north of where the Goose Lake Canal intersects with State Route 46 at post mile 35.13. The short grasslands and agricultural fields adjacent to State Route 46 from post miles 33.2 to 36.12 and post miles 36.85 to 37.5 may offer suitable foraging habitat for the mountain plover.

No mountain plovers, mountain plover nests, or any signs of mountain plovers were spotted during surveys of the project limits. Given the lack of occurrences in the biological study area and distance of the most recent documented occurrences, mountain plovers are not anticipated to be present within the project area. A “no effect” determination was made for the mountain plover per the biological assessment dated October 2023. No consultation is required.

The project will not permanently impact the mountain plover or mountain plover habitat. Project activities will be of low impact and duration throughout the project limits; there will be no vegetation or tree removal and a minimal amount of off-road work. Off-road work will be largely contained to the Main Drain and Goose Lake Canal bridge abutments in the dry season where there is low-quality habitat for the mountain plover. The agricultural fields and grasslands adjacent to State Route 46, where the habitat is more suitable for mountain plovers, will not be changed as a result of the project. Construction activity, including noise, vibrations, and the spread of dust, may cause temporary negative impacts and disturb mountain plovers attempting to forage or nest within the biological study area.

Short-nosed Kangaroo Rat

No recent or historic sightings of the short-nosed kangaroo rat were found within the biological study area. Four documented sightings of the short-nosed kangaroo rat were found along the California Aqueduct, more than 3.5 miles south-southwest of the start of the project limits.

No short-nosed kangaroo rats were spotted during field visits. However, surveys were not conducted during the time of day when the short-nosed kangaroo rat is most active above ground. Short-nosed kangaroo rats are presumed to be absent from the biological study area based on negative field survey and database query results. Therefore, the short-nosed kangaroo rat is not anticipated to be adversely affected by the project. Temporary impacts to the short-nosed kangaroo rat may include increased exposure to construction-related noise and vibration, and a decrease in foraging habitat.

Giant Kangaroo Rat

Three sightings of the giant kangaroo rat from 2006 occurred near the biological study area. All three sightings were 0.66 to 1.5 miles south of State

Route 46. During recent surveys, no giant kangaroo rat individuals or any signs of giant kangaroo rat, such as tail drag and dust-baths near small burrow entrances, were found. Although no giant kangaroo rats were seen within the biological study area, there is potential for them to be present because of the suitable habitat present.

Since there were no giant kangaroo rat sightings within the biological study area and no individuals or signs of their presence were observed during surveys, it is unlikely that the giant kangaroo rat will occur. However, protocol surveys will be conducted to confirm their absence. If giant kangaroo rats are determined to be present in the biological study area, they may face temporary disturbances from construction machinery and personnel. The most likely temporary disturbances will be an increase in vibration and noise, and a reduction in foraging habitat.

A “may affect, not likely to adversely affect” determination was made for the giant kangaroo rat per the biological assessment dated October 2023. Informal consultation with the U.S. Fish and Wildlife Service was completed in February 2024.

Tipton Kangaroo Rat

The Kern National Wildlife Refuge and Northern Semitropic Ridge region have had numerous Tipton kangaroo rat sightings and captures dating back to 1975. More recently, in 2007, eight Tipton kangaroo rat individuals were captured in that area, which overlaps with the biological study area near the Goose Lake Canal drainage area, directly north of State Route 46. Suitable habitat and burrows were present in the biological study area as well as at Goose Lake Canal and Main Drain Canal. However, no Tipton kangaroo rat individuals or signs of presence were spotted during surveys. Tipton kangaroo rats are not anticipated to occur in the biological study area, but additional trapping surveys will be conducted to confirm absence and ensure no impacts occur to the species.

The Tipton kangaroo rat is not expected to be impacted by the project. If Tipton kangaroo rats or burrows are present in off-road work areas, they may face adverse impacts. Impacts may include a temporary reduction in foraging habitat and a temporary increase in construction-related disturbances, such as vibrations and noise levels. If Tipton kangaroo rats are burrowing in the off-road work areas, their burrows have the potential to be damaged or destroyed by construction activities unless avoidance and minimization measures are used.

A “may affect, not likely to adversely affect” determination was made for the Tipton kangaroo rat per the biological assessment dated October 2023. Informal consultation with the U.S. Fish and Wildlife Service was completed in February 2024.

Blunt-nosed Leopard Lizard

There have been 25 recorded blunt-nosed leopard lizard sightings within the project limits, including 21 historic and 4 recent encounters. There has been only one historic occurrence within the 200-foot biological study area. Some undeveloped areas still occur farther away from the roadway. However, during field visits in 2023, the undeveloped portions have become densely vegetated due to heavy rainfall earlier in the year, making the habitat unsuitable for the blunt-nosed leopard lizard.

There are no documented recent sightings within the biological study area. One documented sighting from 2003 is near the Northern Semitropic Ridge, east of Goose Lake Canal, about 4.40 miles north of the start of the project limits at post mile 3.2. Two 2019 sightings are in the Semitropic Ecological Reserve, about 3 miles north of the Goose Lake Canal and State Route 46 junction. Similarly, an occurrence from 2011 is 2.35 miles north of the start of the project limits, between the Kern River channel and Goose Lake Canal. No blunt-nosed leopard lizards were spotted during any field visits, including botanical and reconnaissance surveys, which consisted of walking transects in and around the off-road work areas (the Main Drain and Goose Lake canals), along with some other areas in the western portion of the project limits.

The project is not anticipated to have any permanent impacts on the blunt-nosed leopard lizard or its habitat. The project will be focused on the paved roadway and will not require vegetation removal, reducing the likelihood of damaging suitable habitat for the blunt-nosed leopard lizard. Temporary impacts in the biological study area may include increased noise and vibration from construction machinery and activity, which could cause blunt-nosed leopard lizards to avoid the area. However, since the project is on State Route 46, a busy roadway, there is a high pre-existing level of disturbance that is not anticipated to increase much because of the project.

A “may affect, not likely to adversely affect” determination was made for the blunt-nosed leopard lizard per the biological assessment dated October 2023. Informal consultation with the U.S. Fish and Wildlife Service was completed in February 2024.

Coast Horned Lizard

There were 6 documented sightings of the coast horned lizard within the project limits, 4 of which are recent and located north of the biological study area, between the Northern Semitropic Ridge and Kern National Wildlife Refuge. These sightings were recorded between 2006 and 2008 in alkaline scrub habitat and are presumed to be extant (still existing). No coast horned lizard sightings or individuals have been recorded within the biological study area during field surveys. During field visits, the habitat in the undeveloped portion of the project limits (between post miles 33.20 and 35.84 and post

miles 36.85 and 37.50) has become dominated by invasive grasses, including areas where scattered vegetation in sandy areas was once prominent. Therefore, the biological study area provides marginal habitat for the coast horned lizard.

Coast horned lizards are not anticipated to be directly or permanently impacted by the project. They are not anticipated to occur in the biological study area, and the proposed work would occur on the paved roadway for most of the project limits. The level of disturbance caused by construction activities is not anticipated to increase significantly over the current baseline conditions on State Route 46.

San Joaquin Coachwhip

There was no recorded San Joaquin coachwhip presence within the biological study area. The only nearby documented sighting is from 2002 adjacent to and west of the California Aqueduct; this occurrence is 3.47 miles west of the start of the project limits. Another recent recorded sighting was from 2005, near the Semitropic Ridge, about 3.85 miles north of the State Route 46 and Main Drain Canal junction. Both of these documented sightings presume a nearby presence of the San Joaquin coachwhip, which has the potential to occur within the biological study area because of suitable habitat in the short grasslands.

During field surveys, marginally suitable habitat for the San Joaquin coachwhip was spotted in the western half of the biological study area. There are short grasslands between post miles 33.2 and 37.5 that can support coachwhips. However, the excessive rains have led to the rise of dense vegetation where the short grasslands have historically been in and around the biological study area, which is unsuitable for coachwhips. Also, the vehicle traffic on State Route 46 has caused the suitable habitat to deteriorate, further limiting habitat quality. No coachwhips or signs of them were spotted during the field surveys.

With the pre-existing level of disturbance and danger posed from vehicles on State Route 46, it is unlikely that the San Joaquin coachwhip will exist close by the road. The project will be limited to the paved roadway for most of the project limits, so the likelihood of negatively altering coachwhip habitat is also low. Temporary impacts to the San Joaquin coachwhip include increased noise, vibration, and dust, and may include a reduction in foraging habitat. No San Joaquin coachwhip or its habitat is anticipated to be directly or permanently impacted by the project.

Tulare Grasshopper Mouse

There was 1 recorded occurrence of the Tulare grasshopper mouse within the project limits. In 2003, a Tulare grasshopper mouse was trapped about 2.5 miles north of the State Route 46 and Main Drain Canal junction in the biological study area. This location was high-quality habitat, consisting of

alkaline shrubs such as iodine bush (*Allenrolfea occidentalis*) and seepweed (*Suaeda* spp.). There is suitable habitat present in the biological study area that can support Tulare grasshopper mice, but no sightings occurred during field surveys. The lack of signs in the biological study area and negative field survey results suggest that Tulare grasshopper mice are not anticipated to be adversely impacted by the project. Construction machinery and personnel may temporarily reduce foraging and dispersal habitat, as Tulare grasshopper mice will likely avoid the areas with disturbances. The habitat in the canal beds may also face soil compaction and disturbance, but the conditions will return to baseline levels shortly after construction is completed.

San Joaquin Pocket Mouse

There were 11 recorded sightings of the San Joaquin pocket mouse within the project limits. Of those, 7 are recent sightings, including 5 occurrences from 2013. There are no recorded sightings of the San Joaquin pocket mouse in the biological study area. The nearest documented sightings were in 2010 and 2013, about 2 miles north of the biological study area. The biological study area has suitable habitat, but no San Joaquin pocket mice or conclusive signs of their presence were observed during survey visits.

San Joaquin pocket mice are not anticipated to occur in the off-road work areas; therefore, they are not anticipated to be directly affected by the project. If they are present in the biological study area, they may face temporary and indirect disturbances, such as increased exposure to noise and vibration from construction machinery and personnel. They also may face a temporary reduction in foraging, dispersal, and burrowing habitat, as there may be inadvertent collapsing of potential dens and removal of food items during construction. No permanent impacts to the San Joaquin pocket mouse are anticipated.

Buena Vista Lake Ornate Shrew

There was one historic sighting of the Buena Vista Lake ornate shrew from 1999, outside of the biological study area, in the Kern National Wildlife Refuge, 7.8 miles north of State Route 46. Although there has been no record of signs of the shrew in the project limits, suitable habitat is present in the biological study area. Critical habitat for the Buena Vista Lake ornate shrew lies between post miles 34.6 and 35.36. However, no individuals or signs of presence were observed during surveys in the canal beds. Therefore, it is unlikely that the Buena Vista Lake ornate shrew will occur within the biological study area.

There are no anticipated permanent or direct impacts to the Buena Vista Lake ornate shrew or its critical habitat. The critical habitat area is between post miles 34.60 and 35.36. The project will consist of excavating in front of the canal bridge abutments, and the maintenance pullout will be constructed in a previously paved spot. All the excavated areas will be refilled once construction is complete. No Buena Vista Lake ornate shrews were spotted in

the biological study area, and they are not anticipated to occur or be adversely impacted by the proposed work. Temporary disturbances include an increase in noise and vibration, and a decrease in foraging and dispersal habitat. A “may affect but not likely to adversely affect” determination was made for the Buena Vista Lake ornate shrew per the U.S. Fish and Wildlife Service Letter of Concurrence dated February 2024. No consultation is required.

San Joaquin Kit Fox

A total of 46 San Joaquin kit fox recorded sightings have been documented in the project area. Of those, there are only 3 recent sightings from 2004 and 2 from 2007. One of the occurrences from 2007 has an occurrence range shown to be just about 100 feet north of the 200-foot biological study area between post miles 34.63 and 35.82. The project limits contain suitable habitat—non-native grasslands—for the San Joaquin kit fox. During wildlife surveys, no San Joaquin kit foxes or dens were found within the right-of-way or 200-foot biological study area. During the January field visit, small burrows were spotted adjacent to the State Route 46 roadway between post miles 36.85 and 37.50. However, these burrows likely belong to small mammals, as they do not possess the conventional keyhole-shaped entrance that is indicative of San Joaquin kit fox burrows. Also, other signs of San Joaquin kit fox presence, such as scat, tracks, and large amounts of removed dirt near the entrance, were not found in the biological study area. After the January field visit, these areas became densely vegetated and were not easily accessible. However, given that there were recent recorded sightings and San Joaquin kit foxes are known to disperse, the species has the potential to occur within the project limits.

The project is not anticipated to impact any San Joaquin kit fox directly or permanently or impact its habitat. The project does not involve off-road work near any potential San Joaquin kit fox dens. Any dispersing San Joaquin kit foxes traveling through the biological study area may face temporary disturbances from construction-related noise, activity, and vibrations. Due to the night work included in the project, there is a higher chance of encountering San Joaquin kit foxes (a species active at night). With the proposed avoidance and minimization measures, no impacts to the San Joaquin kit fox, its dens or habitat are anticipated to occur. A “may affect, not likely to adversely affect” determination was made for the San Joaquin kit fox per the biological assessment dated October 2023. Informal consultation with the U.S. Fish and Wildlife Service was completed in February 2024.

American Badger

A record of 1 observed American badger sighting from 2007 was found, about 7.5 miles directly north of State Route 46 at post mile 38.9 between Dairy Avenue and Gun Club Road. The record stated that the badger was spotted in an area with non-native grassland and saltbush scrub. Also, some relatively

large burrow openings were found in the undeveloped lands adjacent to State Route 46 between post miles 36.85 and 37.5. However, there were no confirmed signs revealing badger presence at those burrow sites or elsewhere in the biological study area. Although no American badgers or any signs of their presence were spotted in the project limits, the species still has the potential to occur within the biological study area, which contains non-native grasslands and a likely prey base (small mammals, as inferred by smaller burrows in the area) that are both suitable habitat for American badgers.

The project is not anticipated to impact the American badger or American badger habitat directly or permanently. Given the regular level of disturbance from State Route 46, American badgers are unlikely to occur within the biological study area. Also, there were no dens or badger signs observed in areas where off-road work is set to occur. There will be night work on the project, which increases the likelihood of the badgers being temporarily impacted by construction activities. Temporary impacts include additional noise, vibration, lighting, and human activity in the work areas. These temporary impacts are anticipated to deter American badgers from the area.

Migratory and Nesting Birds

There have been recent recorded occurrences of migratory birds, such as the Swainson's hawk, burrowing owl, and mountain plover, throughout the project area. No burrowing owls or mountain plovers were spotted within the biological study area, and there were no confirmed Swainson's hawk sightings. The nesting raptor at post mile 45.83 is presumed to be a red-tailed hawk but could be a Swainson's hawk. The nesting raptor could not be conclusively identified due to a lack of visibility but will be re-assessed during pre-construction surveys if the nest is still active. Aside from the special-status migratory and nesting bird species, swallow (*Petrochelidon pyrrhonota*) and house finch (*Haemorhous mexicanus*) nests were spotted underneath the Main Drain and Goose Lake Canal bridge. House finches were found nesting in the ends of the guardrail on the westbound lane atop the Goose Lake Canal during the April 2023 field visit. However, in the July 2023 site visit, the two previously spotted house finch nests looked unkept and unoccupied. There was a nest sighted approximately 400 feet south of post mile 36.112, adjacent to a pistachio orchard. Some signs of activity, such as dead prey and droppings, were present underneath the nest; the nest seemed to be abandoned and destroyed, likely as a result of heavy winds or storms. No birds were seen at that nest through all of the conducted surveys.

The project has the potential to directly impact the swallow and house finch nests if construction is to occur during the migratory nesting season. The canal bridge guardrails are set to be removed and replaced, and work underneath the canal bridges could also result in destruction of the swallow nests. No other nests in the biological study area are anticipated to be directly

impacted because the amount of off-road work will be limited, and no tree or vegetation removal is anticipated.

Avoidance, Minimization, and/or Mitigation Measures

Wetlands and Other Waters

There would be some project work in the channels, so a 1602 Lake and Streamed Alteration permit would be required from the California Department of Fish and Wildlife. A Wastewater Discharge Requirement permit may also be required from the Regional Water Quality Control Board. Caltrans will coordinate with the regulatory agencies to obtain the appropriate permits regarding in-channel work.

The following avoidance and minimization measures are proposed for wetlands and other waters:

1. A Stormwater Pollution Prevention Plan will be made specifically for this proposed project to reduce impacts to the ephemeral canals.
2. Best Management Practices specifically developed for the proposed project will be followed by the Contractor. These include, but are not limited to:
 - Spill Prevention Plan with measures to minimize risk of fluids or other materials (e.g., oils, cement, and fuel) from entering the aquatic resources.
 - Installation of measures to ensure water quality is protected.
 - Installation of temporary erosion control features.
3. Temporary silt fencing installation within the project impact area will protect adjacent portions of the waterways from construction-related disturbances.

The following avoidance and minimization measures will be incorporated to minimize impacts to multi-species/general, wetlands and other waters:

1. ***Environmental Awareness Training.*** Prior to the start of work/ground disturbance, a qualified biologist will provide worker environmental awareness training for all construction personnel, including contractors, subcontractors, and contractors' representatives, covering the status of all the species; how to identify the species and their habitats; the importance of avoiding impacts to the species; the laws that protect them; and what to do if an individual is encountered during construction. New construction personnel who are added to the project after the training is first conducted also will be required to take the training. Caltrans will keep documentation of the training on file, including sign-in sheets, and will make these available to the Service upon request.

2. *Pre-construction General Surveys.* A qualified biologist will conduct a general pre-construction visual survey covering all suitable species habitat within the project footprint no more than 30 days prior to the beginning of ground disturbance and/or construction activities.
3. *Pre-construction Botanical Surveys.* No more than one year prior to the start of ground disturbance and/or construction, a qualified biologist or botanist will conduct a protocol-level botanical survey of the project footprint during the appropriate blooming season for rare plants, and in accordance with the most recent and accepted botanical survey protocols and/or guidance.
 - a. *Environmentally Sensitive Areas.* In the unlikely event that a listed plant species is detected, individuals will be flagged, and construction activities will avoid them by 25 feet to protect individual plants and prevent disturbance to the seedbank. These areas will be designated as Environmentally Sensitive Areas using high visibility flagging/markings. If work must occur closer than 25 feet, Caltrans will contact the Service to discuss how to proceed before starting work in those areas, including the potential initiation of formal consultation for the species.
4. *Staging.* All staging and storage areas will be surveyed and approved for use by a qualified biologist prior to the start of construction and will be designated clearly with stakes or flagging.
5. *Inspection of Structures and Equipment.* All construction pipes or similar structures with a diameter of 4 inches or greater that are stored on the construction site overnight will be inspected thoroughly for any species before burying, capping, moving, or otherwise using the structures. Vehicles and other equipment that could provide shade or shelter also will be inspected for animal presence prior to use. If an individual is discovered during these inspections, the structure or vehicle will not be disturbed until the individual leaves of its own accord.
6. *Escape Ramps.* To prevent the inadvertent entrapment of any of the species during construction of the project, all excavated, steep-walled openings (e.g., holes, basins, trenches) more than 3 inches deep will be covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth fill or planks. Before any such openings are filled, they will be inspected thoroughly for trapped wildlife. If at any time a trapped or injured species is discovered, Caltrans will stop work immediately and contact the Service.
7. *Limit Artificial Lighting.* The use of temporary artificial lighting at night will be limited, except when necessary for construction, or for driver and pedestrian safety. Any artificial lighting used during construction will be confined to areas within the construction footprint and directed away from surrounding sensitive habitat. Caltrans will limit non-target casting of

stationary light by using shielding around the light source to further confine the illumination.

8. *Trash Disposal.* All food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in closed, secured containers, and removed daily from the project site to avoid attracting predator species.
9. *Prohibition of Pets, Firearms, and Pesticides.* To eliminate the potential for disturbance or injury to, or death of, any of the species resulting from the presence of pets and firearms, neither (except for firearms carried, or working animals handled, by authorized law enforcement officials) will be allowed on the project site. No rodenticides or herbicides will be used on the project site during construction.
10. *Vehicle Speed Limits.* All project-related vehicles will observe a daytime speed of no more than 20 miles per hour and a nighttime speed of no more than 10 miles per hour in all project areas, except on the highway. Off-road travel outside of designated project areas will be prohibited. Project personnel will be provided with guidance on vehicle use and speed limits.
11. *Revegetation.* Following the completion of construction, Caltrans will recontour temporarily disturbed areas within the project footprint if necessary and hydroseed them using a weed-free native plant seed mix to promote revegetation.
12. *Reporting.* Caltrans will report any new sightings of listed species to the California Natural Diversity Database (Database). A copy of the reporting form and a topographic map clearly marked with the location of the observation will be provided to the Service.

Special-Status Animal Species

The following avoidance and minimization measures are proposed for the San Joaquin antelope squirrel, California glossy snake, burrowing owl, Swainson's hawk, mountain plover, short-nosed kangaroo rat, giant kangaroo rat, Tipton kangaroo rat, San Joaquin coachwhip, Tulare grasshopper mouse, San Joaquin pocket mouse, Buena Vista Lake ornate shrew, San Joaquin kit fox, American badger, blunt-nosed leopard lizard, and coast horned lizard:

San Joaquin Antelope Squirrel

Before construction, small mammal burrows that fall within the project impact area will be flagged. General pre-construction surveys will be conducted prior to the start of construction in areas where potential burrows in the off-road work areas cannot be avoided by 50 feet. Negative findings for the San Joaquin antelope squirrel are anticipated but if the surveys confirm the species presence in the off-road project area, the California Department of Fish Wildlife will be consulted, and Caltrans will seek incidental take coverage prior to the start of work in those areas. A Workers Environmental Awareness

Training will be provided to educate construction personnel on the San Joaquin antelope squirrel. If San Joaquin antelope squirrels are captured within the biological study area, additional avoidance and minimization measures, such as environmental sensitive area fencing and biological monitoring during construction, will be implemented as needed, if feasible. No compensatory mitigation is proposed.

California Glossy Snake

Pre-construction surveys for the California glossy snake and any signs of its presence will be conducted no more than 30 days prior to the start of construction. No compensatory mitigation is proposed because no individuals were observed within the biological study area.

Burrowing Owl

No compensatory mitigation is proposed because there will be no permanent or cumulative effects to the burrowing owl or its habitat as a result of the project. However, the following avoidance and minimization measures will be implemented to lower the potential of temporary disturbances to burrowing owls, should they be present in the biological study area during construction:

1. Pre-construction surveys will be required no more than 30 days prior to the start of construction.
2. Per 14-6.03B Standard Special Provision, a 500-foot no-disturbance buffer will be required around any burrowing owl burrows identified during pre-construction surveys.
3. A Workers Environmental Awareness Training will be provided to work site personnel by a qualified biologist to ensure the understanding of the species, protection measures, and consequences of violations of those measures.

Swainson's Hawk

No compensatory mitigation is proposed. The following avoidance and minimization measures will ensure that no long-term or direct impacts to the Swainson's hawk or its habitat will occur:

1. If construction is to occur within the migratory nesting bird season (February 1 to September 30), pre-construction surveys for nesting birds must be conducted no more than 30 days prior to the start of construction.
2. Protocol-level Swainson's hawk surveys will occur 1 year prior to the start of construction.
3. A Workers Environmental Awareness Training will be provided to work site personnel by a qualified biologist to ensure the understanding of the species, protection measures, and consequences of violations of those measures.

4. Swainson's hawk nests will be protected by a minimum of a 500-foot-radius no-disturbance buffer throughout the migratory nesting bird season per the 14-6.03B SSP. If Swainson's hawks are nesting in the buffer during construction and construction needs to occur within the buffer, a qualified biologist will monitor the nest to determine whether construction activities are disturbing normal Swainson's hawk activity. If construction activities are deemed to disturb Swainson's hawks, the work will be halted until they return to normal behavior or until the young have successfully fledged.
5. Any trimming, cutting, or removal of potential nest trees will be performed outside of the nesting season or with biologist approval during the nesting season. At this time, no tree removal is anticipated.

Mountain Plover

If construction is set to occur outside of the migratory nesting bird season, pre-construction surveys for the mountain plover will be conducted in the migratory nesting bird season prior to the start of construction. If construction is set to occur during the migratory nesting bird season, pre-construction surveys will be conducted no more than 30 days prior to the start of construction to confirm the absence of mountain plover nests and activity within the biological study area. If work runs into the nesting season and mountain plovers are identified nesting within the biological study area, the project may require a no-disturbance buffer around identified nests or presence of a biological monitor depending on the scope of work in that area. No permanent impacts to mountain plovers are anticipated. Therefore, no compensatory mitigation is proposed.

Short-nosed Kangaroo Rat

Small mammal burrows that fall within the project impact area will be flagged prior to the start of construction. Protocol small mammal trapping, following the U.S. Fish and Wildlife Service 2013 guidelines, will be conducted in the year prior to the start of construction in the project impact area where burrows cannot be avoided by 50 feet. Although negative trapping results are anticipated, if short-nosed kangaroo rats are captured, additional avoidance and minimization measures will be required. Regardless of trapping results, a Workers Environmental Awareness Training will be provided to construction personnel to educate them on the short-nosed kangaroo rat. If short-nosed kangaroo rats are trapped within the project impact area, the use of a biological monitor during construction and burrow avoidance through environmental sensitive area fencing may be implemented, if feasible. No compensatory mitigation is proposed.

Giant Kangaroo Rat and Tipton Kangaroo Rat

Below are measures for the giant kangaroo rat and Tipton kangaroo rat:

1. *Pre-construction Survey.* The protocol surveys will be conducted following the U.S. Fish and Wildlife Service's (2013) Survey Protocol for Determining Presence of San Joaquin Kangaroo Rats . A Workers Environmental Awareness Training will be provided to educate construction personnel on the giant kangaroo rat. Also, a biological monitor during construction and burrow avoidance through Environmentally Sensitive Area fencing will be implemented as needed, if feasible. In the closest appropriate season prior to the start of ground disturbance and/or construction activities, a qualified biologist who holds a Section 10(a)(1)(A) permit will conduct trapping surveys for both species in all suitable habitat within the project footprint (i.e., west of post mile 37.5). If the giant kangaroo rat and/or Tipton kangaroo rat are detected onsite either during surveys or during construction, Caltrans will stop work where the species occurs and consult with the California Department of Fish and Wildlife as well as the U.S. Fish and Wildlife Service to discuss possible initiation of formal consultation or seek incidental take coverage.
2. *Monitoring.* A qualified biologist will be onsite to monitor initial ground disturbance in all areas with suitable habitat for the kangaroo rats. If either species is observed during the pre-construction survey or at any other time during construction, the biologist will remain onsite daily to monitor the species (including any nighttime work). Compensatory mitigation is not proposed.

Blunt-nosed Leopard Lizard

Although no blunt-nosed leopard lizards or any signs of the species presence were observed during the field surveys, Caltrans will coordinate with the California Department of Fish and Wildlife and U.S. Fish and Wildlife Service to conduct protocol-level surveys prior to the start of construction to ensure no impacts to the species occur.

1. *Pre-construction Survey.* No more than one year prior to the start of ground disturbance and/or construction, a qualified biologist will conduct a protocol-level survey for the leopard lizard in all suitable habitat within the project footprint (i.e., west of post mile 37.5), in accordance with the most recent and accepted survey protocols and/or guidance. If the leopard lizard is detected onsite either during surveys or during construction, Caltrans will stop work where the species occurs and contact the Service to discuss possible initiation of formal consultation.
2. *Monitoring.* A qualified biologist will be onsite to monitor initial ground disturbance in all areas with suitable habitat for the leopard lizard. If the species is observed during the pre-construction survey or at any other time during construction, the biologist will remain onsite daily to monitor the species.

Coast Horned Lizard

Pre-construction surveys for the coast-horned lizard will be conducted no more than 30 days prior to the start of construction. Compensatory mitigation is not proposed because no coast horned lizards are anticipated to occur or be impacted in the biological study area.

San Joaquin Coachwhip

Pre-construction surveys for the San Joaquin coachwhip, especially in areas where off-pavement work is set to occur, will be conducted no more than 30 days prior to the start of construction.

Tulare Grasshopper Mouse

Potential Tulare grasshopper mouse burrows that fall in the project impact area will be flagged prior to the start of construction. Protocol pre-construction small mammal trapping surveys will be conducted the year prior to the start of construction where burrows cannot be avoided by 50 feet. Negative trapping survey results are anticipated for the Tulare grasshopper mouse but, if captured, additional avoidance and minimization measures will be implemented. A Workers Environmental Awareness Training will be provided to educate construction personnel on the Tulare grasshopper mouse. A biological monitor and Environmentally Sensitive Area fencing for burrow avoidance during construction will be implemented as needed, if feasible. No compensatory mitigation is proposed.

San Joaquin Pocket Mouse

Prior to the start of construction, potential San Joaquin pocket mouse burrows in the project impact area will be flagged and protocol small mammal trapping surveys will be conducted where burrows in the biological study area cannot be avoided by 50 feet in the year prior to the start of construction. If the species is detected during the surveys, additional avoidance and minimization measures will be implemented. A Workers Environmental Awareness Training will be provided to construction personnel, but biological monitoring and Environmentally Sensitive Area fencing will be implemented as needed, if feasible. No compensatory mitigation is proposed.

Buena Vista Lake Ornate Shrew

Small mammal burrows that fall within the project impact area will be flagged and protocol pre-construction trapping surveys will be conducted where burrows cannot be avoided by 50 feet in the year prior to the start of construction.

Field survey and database query results suggest that Buena Vista Lake ornate shrews will not occur in the biological study area, but the trapping survey results will confirm their absence or presence from the biological study area. If the species is captured during the small mammal trapping surveys, Caltrans will consult with the U.S. Fish and Wildlife Service prior to beginning

work in areas with burrows that cannot be avoided. Construction personnel will be provided with a Workers Environmental Awareness Training detailing information about the Buena Vista Lake ornate shrew. Additional avoidance and minimization measures, including biological monitoring and Environmentally Sensitive Area fencing during construction will be implemented as needed, if feasible. The following measures are proposed to avoid adverse effects to the Buena Vista Lake ornate shrew:

1. *Pre-construction Survey.* In the closest appropriate season prior to the start of ground disturbance and/or construction activities, a qualified biologist who is experienced conducting specialized camera surveys for the Buena Vista Lake ornate shrew in accordance with the most recent and accepted guidance, will set up camera traps at the Main Drain Canal and Goose Lake Canal bridge locations. Stations will be operated for at least seven nights (Cypher *et al.*, 2023).
2. *Restrict Staging Area Locations.* No staging of equipment, vehicles, or materials will occur at or around the Main Drain Canal or Goose Lake Canal.
3. *Construction Timing.* Caltrans will confine work at the Main Drain Canal and Goose Lake Canal bridges to the period when the canals are dry.
4. *Use of Hand Tools.* For any vegetation that needs to be removed at the Main Drain Canal and Goose Lake Canal bridge locations, Caltrans will remove all vegetation by hand to allow Buena Vista Lake ornate shrews to move out of the way and leave the site unharmed.
5. *Monitoring.* A qualified biologist will be present onsite during all vegetation removal and ground-disturbance at both the Main Drain Canal and Goose Lake Canal bridge locations (for both daytime and nighttime work). The biologist also will monitor the canal banks and channels before any heavy equipment/machinery enter them.

San Joaquin Kit Fox

No compensatory mitigation is proposed since there will be no long-term or permanent impacts to the San Joaquin kit fox or its habitat. The following measures, based on the U.S. Fish and Wildlife Service's February 2024 Letter of Concurrence Recommendations for Protection of the Endangered San Joaquin Kit Fox, will be implemented:

1. Project-related vehicles should observe a speed limit of 20 miles per hour throughout the site in all the project areas, except on county roads and state and federal highways; this is particularly important at night when kit foxes are most active. Night-time construction should be minimized to the extent possible. However, if night work does occur, then the speed limit should be reduced to 10 miles per hour. Off-road traffic outside of the designated project areas should be prohibited.

2. To prevent inadvertent entrapment of kit foxes or other animals during the construction phase of a project, all excavated, steep-walled holes or trenches more than 2-feet deep should be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks shall be installed. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals.
3. Kit foxes are attracted to den-like structures such as pipes and may enter stored pipes and become trapped or injured. All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at a construction site for one or more overnight periods should be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a kit fox is discovered inside a pipe, that section of pipe should not be moved until the Service has been consulted. If necessary, and under the direct supervision of the biologist, the pipe may be moved only once to remove it from the path of construction activity, until the fox has escaped.
4. All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in securely closed containers and removed daily from a construction or project site.
5. No firearms shall be allowed on the project site.
6. No pets, such as dogs or cats, should be permitted on the project site.
7. Use of rodenticides and herbicides in project areas should be restricted. This is necessary to prevent primary or secondary poisoning of kit foxes and the depletion of prey populations on which they depend. All uses of such compounds should observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other state and federal legislation, as well as additional project-related restrictions deemed necessary by the Service. If rodent control must be conducted, zinc phosphide should be used because of a proven lower risk to kit fox.
8. A Workers Environmental Awareness Training would be provided to worksite personnel by a qualified biologist to ensure the understanding of the species, protection measures, and consequences of violations of those measures.
9. New sightings of kit foxes shall be reported to the California Natural Diversity Database. A copy of the reporting form and a topographic map clearly marked with the location of where the kit fox was observed should also be provided to the Service.

In addition to the measures listed above, pre-construction surveys for the San Joaquin kit fox will be conducted no more than 30 days prior to the start of construction. If San Joaquin kit fox dens are observed during pre-construction

surveys, the following Environmentally Sensitive Area exclusion buffers must be implemented around the corresponding den type:

- Potential den – 50 feet
- Atypical den – 50 feet
- Known den – 100 feet
- Natal/pupping den (occupied and unoccupied) – U.S. Fish and Wildlife Service must be contacted

These measures also apply:

1. *Pre-construction Survey.* A qualified biologist will conduct a pre-construction survey no more than 30 days prior to the beginning of ground disturbance and/or construction activities. The survey for the kit fox will be performed throughout the project footprint, as well as in areas 200 feet out from the edge of the footprint that are accessible and/or visible with binoculars. Caltrans will provide the Service with email notification of the survey results.
2. *Den Avoidance.* Disturbance to any known or natal dens identified during pre-construction surveys and/or construction will be avoided. Caltrans will implement the following for any potential, known, or natal dens discovered within, or outside of, the project footprint:
 - a. *Potential Dens.* Prior to the start of work, all potential dens detected within the project footprint will be monitored by a qualified biologist for kit fox presence for four consecutive nights using a remote sensor camera. If there is no detection of the kit fox or other animal activity, these potential dens will be either 1) protected by 50-foot exclusion zones, or 2) plugged temporarily or collapsed (provided there is no other animal activity present) to discourage the kit fox from denning during construction and then re-checked immediately prior to groundbreaking to ensure they remain plugged or collapsed and do not show evidence of animal entry or use. If the kit fox is detected using any dens, sub-measure b) below will apply.
 - b. *Known and Natal Dens.* Any known dens will be protected by 100-foot exclusion zones and natal dens will be protected by 200-foot exclusion zones. The exclusion zones will be demarcated by types of fencing or flagging that do not entangle the kit fox or prevent ingress/egress. If either den type is detected onsite, Caltrans will contact the Service to discuss how to proceed, including possible initiation of formal consultation if known and/or natal dens cannot be avoided by construction.
3. *Monitoring.* If any known dens are detected, a qualified biologist will be present onsite during initial and all subsequent ground-disturbing activities

in those areas. Otherwise, the biologist will be available on-call throughout construction if the kit fox is observed either onsite or near the project footprint.

American Badger

Pre-construction surveys for the American badger and den presence will be conducted no more than 30 days prior to the start of construction. No compensatory mitigation is proposed for the American badger.

Special-Status Plant Species

The following avoidance and minimization measures are proposed to protect special-status plant species:

1. Pre-construction botanical surveys for special-status plant species in the biological study area will be completed during the spring blooming period prior to the start of construction.
2. If construction begins during the spring blooming period and special-status plant species are identified where excavation will occur, those plants will be flagged and avoided, if possible, or excavated along with enough surrounding soil to ensure the root structure remains intact. If removed, the plants and soil will be placed in a safe location near the worksite and kept moist. Once construction is complete, the excavated plants will carefully be replaced within or as close to the original location as possible.
3. If construction begins after the spring blooming period and special-status plant species had been identified in areas where excavation will occur, the topsoil around the special-status plant species will be removed and stored safely near the work area. The topsoil will be replaced once construction is complete to maintain the native seed bank.

Migratory and Nesting Birds

Caltrans Standard Special Provision 14-6.03 “Bird Protection” will be included in the construction contract. This provision includes the appropriate exclusionary measures and monitoring that will be required for cliff swallows. If construction occurs into the migratory nesting bird season, pre-construction surveys for migratory nesting birds will be conducted no more than 30 days prior to the start of construction. If migratory nesting birds are identified within the biological study area, additional avoidance and minimization measures will be required. If the swallows and house finches are observed nesting under the canal bridges and in the guardrail at the time of construction, nest exclusion measures will be required to preclude the birds from reentering and nesting in the work area. A 100- and 500-foot no-work buffer will be implemented around passerine and raptor nests, respectively. Other avoidance and minimization measures, such as a biological monitor, will be implemented as needed. No compensatory mitigation is proposed.

2.1.5 Cultural Resources

Considering the information in the Historic Property Survey Report dated March 2024, Archaeological Survey Report dated March 2024, Historic Resources Evaluation Report dated March 2024 and State Office of Historic Preservation Concurrence dated April 2024, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Cultural Resources
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	Less Than Significant Impact
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	No Impact

Affected Environment

The Historic Property Survey Report, prepared in March 2024, summarizes the Archaeological Survey Report and Historic Resource Evaluation Report.

The Area of Potential Effects lies on State Route 46 between post miles 33.20 and 46.00. Within this area, land use is primarily commercial agricultural and row crops. The vertical Area of Potential Effects is proposed up to 0.35 feet for disturbance of pavement to a maximum of 8 feet for message sign replacement at post mile 34.60. The Area of Potential Effects includes the project limits within the existing right-of-way and extends into those parcels from which new right-of-way and/or temporary construction easements would be acquired.

A Historic Property Survey Report was completed in March 2024 and summarized the cultural resource identification efforts carried out for the project. An Area of Potential Effects was established to account for both direct and indirect effects from construction activities that may potentially impact cultural resources should any be present. Both archaeological and built environment resources were considered within the Area of Potential Effects for this undertaking. Within the Area of Potential Effects, two previously identified but unevaluated linear features (canals) were identified. Due to proposed work within the channel of both canals for bridge maintenance and repair, they were recorded and evaluated (both linear features in their entirety and the discussion of both together).

An Archaeological Survey Report investigation was completed to identify any archaeological sites within the project Area of Potential Effects. The scope of investigation for this project included a cultural resource records data search of the Southern San Joaquin Valley Information Center, California State University, Bakersfield. In addition, a records search for previous inventories and recorded archaeological and historical sites along the project on State Route 46 and consultation with Native American groups also occurred.

The records search at the Southern San Joaquin Valley Information Center, a background literature search, a topographic and historical map review, and a California Register of Historic Resources online database search identified nine archaeological resources within a 100-foot radius of the highway centerline. Five of the archaeological resources intersect State Route 46. The remaining four archaeological resources are isolates outside of the Caltrans right-of-way.

Consultation with Native American tribes was initiated by Caltrans on January 12, 2024, with more effort on February 27, 2024. Also, Caltrans consulted with the City of Wasco Community Development Department and Kern County Planning and Natural Resources Department on January 11, 2024; to date, no response has been received from either consultation party.

Archaeological Resources

Nine archaeological resources were identified within a 100-foot radius of the highway centerline. Five of the archaeological resources intersect State Route 46, and the remaining four archaeological resources are isolates that lie outside of the Caltrans right-of-way. No archaeological resources eligible for the National Register of Historic Places or California Register of Historical Resources have been recorded within the archaeological study area.

Architectural Resources

Caltrans identified two historic features that cross the Area of Potential Effects on State Route 46 between post miles 34.63 and 35.14. While the Area of Potential Effects extends to the entirety of both features, the Area of Direct Impact is limited to around the abutments of the two bridges: Bridge Number 50-0027 and Bridge Number 50-0028, both Category 5 bridges, are not eligible for listing in the National Register of Historic Places.

The two historical property features—Main Drain Canal and Goose Lake Canal—were previously recorded but unevaluated. As part of the pedestrian (walk-through) survey, the two historic features have been formally documented and evaluated on State of California Department of Parks and Recreation Form 523. These properties were also evaluated in accordance with Section 15064.5(a)(2)-(3) of the California Environmental Quality Act Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code, which resulted in the determination that the properties are not historical resources for the purposes of California

Environmental Quality Act. Each resource's name, address/location and community are as follows:

- Main Drain Canal—crosses State Route 46 at post mile 34.63; Community: Semitropic, California
- Goose Lake Canal—crosses State Route 46 at post mile 35.14; Community: Semitropic, California

The State Historic Preservation Officer provided concurrence for the determination of eligibility on April 11, 2024, for the project (see Appendix C).

Environmental Consequences

Archaeological Resources

Caltrans has made a determination of “No Historic Properties Affected.” There are five archaeological resources within the State Route 46 right-of-way; proposed work would be done on existing pavement, with no major ground-disturbing construction activities within the Area of Potential Effects. No archaeological resources or known prehistoric sites eligible for the National Register of Historic Places or California Register of Historical Resources have been recorded within the archaeological study area.

Architectural Resources

The Main Drain Canal and Goose Lake Canal have been determined not eligible for inclusion in the National Register of Historic Places as a result of this study, and they are not historical resources under the California Environmental Quality Act.

Caltrans has made a determination of “No Historic Properties Affected.” All five of the archaeological sites within the project Area of Potential Effects are being considered eligible for inclusion in the National Register of Historic Places for the purposes of this project only because they will be protected in their entirety from any potential effects through the establishment of an Environmentally Sensitive Area, in accordance with Section 106 Programmatic Agreement Stipulation VIII.C.3. Archaeological and Native American monitoring will ensure the Environmentally Sensitive Area is maintained.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measures will be incorporated into the project to avoid or minimize cultural impacts:

- If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.

- Archaeological sites will be protected from any potential effects through establishment of an Environmentally Sensitive Area.

If human remains are discovered, California Health and Safety Code Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the county coroner should be contacted. If the coroner thinks the remains to be Native American, the coroner will notify the Native American Heritage Commission, who, pursuant to Public Resources Code Section 5097.98, will then notify the Most Likely Descendant. The Caltrans Archaeologist and cultural staff will work cooperatively with the Native American Heritage Commission, tribal organizations, and landowners in carrying out responsibilities.

No mitigation measures will be required.

2.1.6 Energy

Construction activities will cause a temporary increase in energy consumption, but it will not be significant. The project would preserve and extend the service life of the existing pavement and address the damage on existing bridge structures. The project would also upgrade existing safety features such as metal beam guardrails, roadway signs, and Transportation Management System elements to current standards. The project would not increase capacity. Considering the reasons provided and guidance from the Caltrans Standard Environmental Reference, Volume 1, Chapter 13-Energy, and the Energy Memo to file, dated June 2022, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Energy
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact

2.1.7 Geology and Soils

Considering the information in the California Geological Survey webpage, Faulting in California, the California Department of Conservation Map Data Viewer webpage, and the Paleontological Identification Report dated June 21, 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Geology and Soils
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.	No Impact
ii) Strong seismic ground shaking?	No Impact
iii) Seismic-related ground failure, including liquefaction?	No Impact
iv) Landslides?	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	No Impact
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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	No Impact

2.1.8 Greenhouse Gas Emissions

Considering the information in the Climate Change report dated May 2024, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Greenhouse Gas Emissions
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less Than Significant Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	No Impact

Affected Environment

State Route 46 within the project limits is a rural highway that provides east-west access for agricultural uses across the San Joaquin Valley. In addition, State Route 46 provides local traffic—farming vehicles, heavy trucks and pickups—alternative access to Interstate 5, State Route 43 and State Route 99. It facilitates the movement of agricultural goods through the valley. Land uses designated for the area are rural settlements and grazing lands for cattle. The project is within the San Joaquin Valley Air Pollution Control District.

Environmental Consequences

Operational climate change emissions do not need to be estimated because this is not a capacity-increasing project. This project is not expected to cause any operational effects on air pollutants. Construction greenhouse gas emissions would result from material processing, onsite construction equipment, and traffic delays due to construction. These emissions would 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 life, improved Traffic Management Plans, and changes in materials, the greenhouse gas emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

Per Caltrans protocol, carbon dioxide emissions generated from construction equipment (which are used to gauge impacts to climate change) were estimated using the Caltrans Construction Emissions Tool (CAL-CET) v1.1. The estimated carbon dioxide construction emissions are 397 U.S. tons over a 327-day work period.

Avoidance, Minimization, and/or Mitigation Measures

While the project would produce greenhouse gas emissions during construction, it is not expected to cause an increase in operational greenhouse gas emissions. The project would not conflict with any applicable

plan, policy, or regulation adopted to reduce the emissions of greenhouse gases. With the implementation of construction greenhouse gas reduction measures, the impacts would be less than significant.

Caltrans Standard Specifications Section 14-9.02 Air Pollution Control requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Measures that reduce construction vehicle emissions also help reduce greenhouse gas emissions.

2.1.9 Hazards and Hazardous Materials

Considering the information in an Initial Site Assessment Compliance Memorandum dated May 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Hazards and Hazardous Materials
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	No Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	No Impact

Question—Would the project:	CEQA Significance Determinations for Hazards and Hazardous Materials
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	No Impact

2.1.10 Hydrology and Water Quality

Considering the information in the Water Compliance Memorandum dated July 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Hydrology and Water Quality
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water or groundwater quality?	No Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation onsite or offsite;	No Impact
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite;	No Impact
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	No Impact

Question—Would the project:	CEQA Significance Determinations for Hydrology and Water Quality
(iv) impede or redirect flood flows?	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No Impact

2.1.11 Land Use and Planning

Considering the information in the Kern County General Plan-Lerdo Area dated September 2009 and the Caltrans Draft Project Report dated October 2021, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Land Use and Planning
a) Physically divide an established community?	No Impact
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	No Impact

2.1.12 Mineral Resources

Considering the information in the Kern County General Plan-Lerdo Area dated September 2009 and the Caltrans Draft Project Report dated October 2021, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Mineral Resources
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?	No Impact
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	No Impact

2.1.13 Noise

Considering the information in the Noise Compliance Study dated July 2023, the following significance determinations have been made:

Question—Would the project result in:	CEQA Significance Determinations for Noise
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?	No Impact
b) Generation of excessive groundborne vibration or groundborne noise levels?	No Impact
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two 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?	No Impact

2.1.14 Population and Housing

Considering the information in the Kern County General Plan-Lerdo Area dated September 2009 and the Caltrans Draft Project Report dated October 2021, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Population and Housing
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	No Impact
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact

2.1.15 Public Services

Considering the information in the Kern County General Plan-Lerdo Area dated September 2009 and the Caltrans Draft Project Report dated October 2021, the following significance determinations have been made:

Question:	CEQA Significance Determinations for 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: Fire protection?	No Impact
Police protection?	No Impact
Schools?	No Impact
Parks?	No Impact
Other public facilities?	No Impact

2.1.16 Recreation

Considering the information in the Kern County General Plan-Lerdo Area dated September 2009 and the Caltrans Draft Project Report dated October 2021, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Recreation
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?	No Impact
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	No Impact

2.1.17 Transportation

Considering the information in the Kern County General Plan-Lerdo Area dated September 2009 and the Caltrans Draft Project Report dated October 2021, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Transportation
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	No Impact
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	No Impact
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	No Impact
d) Result in inadequate emergency access?	No Impact

2.1.18 Tribal Cultural Resources

Considering the information in the Archaeological Survey Report-Consultation with Native American Contact list dated March 2024, 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:

Question:	CEQA Significance Determinations for Tribal Cultural Resources
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	No Impact

Question:	CEQA Significance Determinations for Tribal Cultural Resources
<p>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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p>	<p>No Impact</p>

2.1.19 Utilities and Service Systems

Considering the information in the Draft Project Report dated December 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Utilities and Service Systems
<p>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?</p>	<p>No Impact</p>
<p>b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?</p>	<p>No Impact</p>
<p>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?</p>	<p>No Impact</p>
<p>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?</p>	<p>No Impact</p>
<p>e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?</p>	<p>No Impact</p>

2.1.20 Wildfire

Considering the information in the California Department of Forestry and Fire Protection’s online Fire Hazard Severity Zone Maps dated September 2023, the following significance determinations have been made:

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

Question—Would the project:	CEQA Significance Determinations for Wildfire
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	No Impact
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	No Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	No Impact
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	No Impact

2.1.21 Mandatory Findings of Significance

Question:	CEQA Significance Determinations for Mandatory Findings of Significance
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	Less Than Significant Impact
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.)	No Impact
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	No Impact

a) Less Than Significant Impact—The project would not 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. However, less than significant impacts to habitat for wildlife species may occur as a result of this project. A Letter of Concurrence from the U.S. Fish and Wildlife Service regarding project impacts on five federally endangered species was received on February 7, 2024. With avoidance and minimization efforts in place, less than significant impacts are expected. See Section 2.1.4 Biological Resources, the Special-Status Animal Species subsection, for more information on this topic.

The project would have impacts to the Main Drain Canal and Goose Lake Canal because it is anticipated that the current proposed design of

preventative pavement rehabilitation work would upgrade bridge rails, repair spalling concrete and place waterproofing membrane at the wing walls, replace guardrails and roadway signs, and upgrade Transportation Management System elements. A Letter of Concurrence from the State Office of Historic Preservation regarding project impacts on cultural resources was received on April 11, 2024, and determined that no architectural properties or resources eligible for the National Register of Historic Place would be impacted by the project. No mitigation is required. See Section 2.1.5 Cultural Resources, the Architectural Resources subsection, for more information on this topic.

During construction, short-term degradation of air quality is expected from the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. While the project would produce greenhouse gas emissions during construction, it is not expected to cause an increase in operational greenhouse gas emissions. Caltrans Standard Specifications Section 14-9.02 Air Pollution Control requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. With the implementation of construction greenhouse gas reduction measures, the impacts would be less than significant See Section 2.1.8 Greenhouse Gas Emissions, for more information on this topic.

Chapter 3 **Coordination**

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

3.1 Biological Resources

May 27, 2024—Caltrans obtained an updated special-status species list through the California Natural Diversity Database.

February 7, 2024—Caltrans obtained an Informal Consultation Letter of Concurrence from the U.S. Fish and Wildlife Service.

3.2 Cultural Resources

April 11, 2024—The State Historic Preservation Officer formally responded, finding concurrence with Caltrans' determinations for the Main Drain Canal and Goose Lake Canal.

January 1, 2024—Caltrans submitted the Determinations of Eligibility to the State Historic Preservation Officer on January 1, 2024.

January 12, 2023—Native American consultation was initiated through letters and emails to tribal representatives. Seven tribal representatives identified by Native American Heritage Commission correspondence were contacted for initial project outreach.

December 12, 2021—A Sacred Lands File and Native American Contact List Request was sent to the Native American Heritage Commission.

June 2024—The Notice of Availability of Initial Study with Proposed Negative Declaration and Opportunity for Public Hearing/Meeting for this project will be distributed to federal, state, regional, and local agencies and elected officials, tribal groups, and interested groups, organizations, and individuals.

3.2.1 U.S. Fish and Wildlife Service Letter of Concurrence



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Suite W-2605
Sacramento, California 95825-1846
SFWO_mail@fws.gov



In Reply Refer to:
2023-0022561-S7-001

February 7, 2024
Sent Electronically

Roland Garcia
Acting Chief, Central Region Biology Branch
California Department of Transportation, District 6
2015 East Shields Avenue, Suite 200
Fresno, California 93726
roland.garcia@dot.ca.gov

Subject: Informal Consultation for the Semitropic Capital Preventive Maintenance Project, Kern County, California (California Department of Transportation 06-KER-46-PM 33.2/46.0; EA 06-1A680)

Dear Roland Garcia:

This is the U.S. Fish and Wildlife Service's (Service) response to the California Department of Transportation's (Caltrans) October 5, 2023, letter requesting the initiation of consultation on its action to construct the proposed Semitropic Capital Preventive Maintenance (CAPM) Project (project) in Kern County, California. This response is provided under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act), and in accordance with the implementing regulations pertaining to interagency cooperation (50 CFR 402).

Caltrans has assumed the Federal Highway Administration's responsibilities for section 7 consultation per the Act, in accordance with 23 U.S.C. 327, and as described in the *Memorandum of Understanding between the Federal Highway Administration and Caltrans concerning the State of California's participation in the Surface Transportation Project Delivery Program pursuant to 23 U.S.C. 327* (signed on October 1, 2012; renewed for a term of five years on December 23, 2016, and finalized on March 30, 2017; and signed for a new term of 10 years on May 27, 2022).

Pursuant to 50 CFR 402.12(j), Caltrans submitted a biological assessment for our review of the findings presented therein. These findings concluded that the project may affect but is not likely to adversely affect five federally endangered species:

- San Joaquin kit fox (kit fox) (*Vulpes macrotis mutica*),
- giant kangaroo rat (giant k-rat) (*Dipodomys ingens*),
- Tipton kangaroo rat (Tipton k-rat) (*Dipodomys nitratoides nitratoides*),
- Buena Vista Lake ornate shrew (ornate shrew) (*Sorex ornatus relictus*), and
- blunt-nosed leopard lizard (leopard lizard) (*Gambelia sila*).

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In considering Caltrans' request, we based our evaluation on the following: (1) Caltrans' October 5, 2023, request letter and its October 2023 *Semitropic CAPM Biological Assessment*; (2) email correspondence between the Service and Caltrans, including additional project information provided by Caltrans on November 27, 2023, in response to the Service's questions and comments; and (3) other information available to the Service.

Description of the Proposed Action

Caltrans proposes to carry out pavement and bridge rehabilitation work on a 12.8-mile segment of State Route (SR) 46 between postmiles 33.2 and 46.0 that passes through the unincorporated community of Semitropic, west of the town of Wasco in Kern County. Activities will include repairing two bridge decks; upgrading bridge rails; repairing spalling concrete; placing waterproofing membrane at the bridge abutments; replacing/upgrading guardrails, roadway signs, and Transportation Management System elements to meet current standards; and installing maintenance vehicle access to the changeable message sign. Specifically, Caltrans will:

- Cold-plane (remove) the existing pavement (including travel lanes and shoulders) on both eastbound and westbound sides along the entire length of the project.
- Add new layers of hot mix asphalt overlaid by rubberized hot-mix asphalt on the travel lanes and shoulders.
- Repair localized areas of pavement failure by digging out the affected pavement and replacing it with hot mix asphalt.
- Replace the existing shoulder backing as needed along the entire project length.
- Replace the existing changeable message sign at postmile 34.60.
- Construct a maintenance vehicle pullout at postmile 34.60 (in an existing vehicle access area) to provide improved access to the changeable message sign and other Transportation Management System elements.
- Replace the existing metal beam guardrails at postmile 34.60 with Midwest Guardrail Systems.
- Replace 42 existing non-standard roadway signs throughout the project extent (except for between postmiles 37.2-37.3 due to the presence of sensitive cultural resources). At each location, this will involve installing a 6x8 inches post plus setting up a work area of approximately 10 feet by 10 feet for equipment use and personnel foot traffic.
- Repair the Main Drain Canal Bridge (# 50-0028) and Goose Lake Canal Bridge (# 50-0027) structures.
 - Replace the asphalt concrete surface of the bridge deck.
 - Apply methacrylate to the concrete deck to seal cracks in the deck slab.
 - Replace the existing metal bridge rails with a concrete barrier.
 - Widen each bridge by scabbing onto the outside of the bridge deck a 2-foot wide section to support the upgraded bridge rails. Formwork will be connected to the existing bridge at the edge of the deck. All work can be done from the roadway, but it may involve operating machinery from within the channel.
 - Remove vegetation to gain access to the abutments.
 - Excavate soil areas in front of the abutments (down the concrete-lined embankments under the bridge) to expose the top 3 feet of the abutment piles. Caltrans will install galvanic anodes and wrap the abutment piles and wingwalls with waterproofing membranes, and then backfill the excavated areas.

All proposed work will be contained within the existing right-of-way. Except for the bridge abutment and widening activities, work will be restricted to the paved highway and previously disturbed shoulder areas. Work will involve the use of heavy equipment, including, but not limited to, a backhoe, small excavator, asphalt milling machine, asphalt paver, asphalt roller, concrete truck, flatbed/pickup trucks, and water truck. Caltrans will implement traffic control (likely one-way lane closures) and install temporary k-rail for the bridge work. No access roads, detours, or utility relocation are anticipated.

At this time, Caltrans has identified a staging area on an empty parcel of land located within the right-of-way, adjacent to the eastbound shoulder near postmile 37.52. The parcel is situated between two agricultural fields and is regularly maintained. Additional nightly staging areas will be used. However, locations for these have not been identified yet. This will depend on Caltrans' decisions during the final phases of project design and on the construction contractor, but selected areas will be in previously disturbed areas within the right-of-way and have little to no vegetation.

Caltrans anticipates that construction will begin in the spring of 2027 and take approximately 222 days to complete. A small amount of nighttime work (approximately four nights) will be needed to install and remove temporary k-rail at the bridge locations. The bridge work will coincide with when the canals are dry.

The 769.5-acre action area includes: 1) the approximately 166-acre project footprint, which is the immediate area that will be impacted by construction activities, equipment, and personnel- the footprint consists of a 12.8-mile segment of SR 46 and Caltrans' existing right-of-way (covering all staging areas); and 2) lands and waterways up to 200 feet out from the project footprint where the farther-reaching effects of construction activities such as temporary noise, vibrations, visual disturbance, and water quality changes have the potential to extend.

Conservation Measures

Caltrans and its contractor will implement the following measures to avoid adverse effects to the kit fox, giant k-rat, Tipton k-rat, ornate shrew, and leopard lizard. For this consultation, a "qualified biologist," as referenced in this document, refers to an individual who, at a minimum, holds a four-year degree in a relevant biological field and who has demonstrated knowledge of, and experience with, the species as referenced.

General/Multi-Species:

- 1) *Environmental Awareness Training.* Prior to the start of work/ground disturbance, a qualified biologist will provide worker environmental awareness training for all construction personnel, including contractors, subcontractors, and contractors' representatives, covering the status of all the species; how to identify the species and their habitats; the importance of avoiding impacts to the species; the laws that protect them; and what to do if an individual is encountered during construction. New construction personnel who are added to the project after the training is first conducted also will be required to take the training. Caltrans will keep documentation of the training on-file, including sign-in sheets, and will make these available to the Service upon request.
- 2) *Preconstruction General Surveys.* A qualified biologist will conduct a general preconstruction visual survey covering all suitable species habitat within the project

footprint no more than 30 days prior to the beginning of ground disturbance and/or construction activities.

- 3) *Preconstruction Botanical Surveys.* No more than one year prior to the start of ground disturbance and/or construction, a qualified biologist or botanist will conduct a protocol-level botanical survey of the project footprint during the appropriate blooming season for rare plants, and in accordance with the most recent and accepted botanical survey protocols and/or guidance.
 - a) *Environmentally Sensitive Areas.* In the unlikely event that a listed plant species is detected, individuals will be flagged, and construction activities will avoid them by 25 feet to protect individual plants and prevent disturbance to the seedbank. These areas will be designated as environmentally sensitive areas using high visibility flagging/markings. If work must occur closer than 25 feet, Caltrans will contact the Service to discuss how to proceed before starting work in those areas, including the potential initiation of formal consultation for the species.
- 4) *Staging.* All staging and storage areas will be surveyed and approved for use by a qualified biologist prior to the start of construction and will be designated clearly with stakes or flagging.
- 5) *Inspection of Structures and Equipment.* All construction pipes or similar structures with a diameter of four inches or greater that are stored on the construction site overnight will be inspected thoroughly for any species before burying, capping, moving, or otherwise using the structures. Vehicles and other equipment that could provide shade or shelter also will be inspected for animal presence prior to use. If an individual is discovered during these inspections, the structure or vehicle will not be disturbed until the individual leaves of its own accord.
- 6) *Escape Ramps.* To prevent the inadvertent entrapment of any of the species during construction of the project, all excavated, steep-walled openings (e.g., holes, basins, trenches) more than three inches deep will be covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth fill or planks. Before any such openings are filled, they will be inspected thoroughly for trapped wildlife. If at any time a trapped or injured species is discovered, Caltrans will stop work immediately and contact the Service.
- 7) *Limit Artificial Lighting.* The use of temporary artificial lighting at night will be limited, except when necessary for construction, or for driver and pedestrian safety. Any artificial lighting used during construction will be confined to areas within the construction footprint and directed away from surrounding sensitive habitat. Caltrans will limit non-target casting of stationary light by using shielding around the light source to further confine the illumination.
- 8) *Trash Disposal.* All food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in closed, secured containers, and removed daily from the project site to avoid attracting predator species.
- 9) *Prohibition of Pets, Firearms, and Pesticides.* To eliminate the potential for disturbance or injury to, or death of, any of the species resulting from the presence of pets and firearms, neither (except for firearms carried, or working animals handled, by authorized

law enforcement officials) will be allowed on the project site. No rodenticides or herbicides will be used on the project site during construction.

- 10) *Vehicle Speed Limits.* All project-related vehicles will observe a daytime speed of no more than 20 miles per hour and a nighttime speed of no more than 10 miles per hour in all project areas, except on the highway. Off-road travel outside of designated project areas will be prohibited. Project personnel will be provided with guidance on vehicle use and speed limits.
- 11) *Revegetation.* Following the completion of construction, Caltrans will recontour temporarily disturbed areas within the project footprint if necessary and hydroseed them using a weed-free native plant seed mix to promote revegetation.
- 12) *Reporting.* Caltrans will report any new sightings of listed species to the California Natural Diversity Database (Database). A copy of the reporting form and a topographic map clearly marked with the location of the observation will be provided to the Service.

Kit fox:

- 1) *Preconstruction Survey.* A qualified biologist will conduct a preconstruction survey no more than 30 days prior to the beginning of ground disturbance and/or construction activities. The survey for the kit fox will be performed throughout the project footprint, as well as in areas 200 feet out from the edge of the footprint that are accessible and/or visible with binoculars. Caltrans will provide the Service with email notification of the survey results.
- 2) *Den Avoidance.* Disturbance to any known or natal dens identified during preconstruction surveys and/or construction will be avoided. Caltrans will implement the following for any potential, known, or natal dens discovered within, or outside of, the project footprint:
 - a) *Potential Dens.* Prior to the start of work, all potential dens detected within the project footprint will be monitored by a qualified biologist for kit fox presence for four consecutive nights using a remote sensor camera. If there is no detection of the kit fox or other animal activity, these potential dens will be either 1) protected by 50-foot exclusion zones, or 2) plugged temporarily or collapsed (provided there is no other animal activity present) to discourage the kit fox from denning during construction and then re-checked immediately prior to groundbreaking to ensure they remain plugged or collapsed and do not show evidence of animal entry or use. If the kit fox is detected using any dens, sub-measure b) below will apply.
 - b) *Known and Natal Dens.* Any known dens will be protected by 100-foot exclusion zones and natal dens will be protected by 200-foot exclusion zones. The exclusion zones will be demarcated by types of fencing or flagging that do not entangle the kit fox or prevent ingress/egress. If either den type is detected on-site, Caltrans will contact the Service to discuss how to proceed, including possible initiation of formal consultation if known and/or natal dens cannot be avoided by construction.
- 3) *Monitoring.* If any known dens are detected, a qualified biologist will be present on-site during initial and all subsequent ground-disturbing activities in those areas. Otherwise, the biologist will be available on-call throughout construction if the kit fox is observed either on-site or near the project footprint.

Giant k-rat and Tipton k-rat:

- 1) *Preconstruction Survey*. In the closest appropriate season prior to the start of ground disturbance and/or construction activities, a qualified biologist who holds a section 10(a)(1)(A) permit will conduct trapping surveys for both species in all suitable habitat within the project footprint (i.e., west of postmile 37.5). If the giant k-rat and/or Tipton k-rat are detected on-site either during surveys or during construction, Caltrans will stop work where the species occurs and contact the Service to discuss possible initiation of formal consultation.
- 2) *Monitoring*. A qualified biologist will be on-site to monitor initial ground disturbance in all areas with suitable habitat for the k-rats. If either species is observed during the preconstruction survey or at any other time during construction, the biologist will remain on-site daily to monitor the species (including any nighttime work).

Ornate shrew:

- 1) *Preconstruction Survey*. In the closest appropriate season prior to the start of ground disturbance and/or construction activities, a qualified biologist who is experienced conducting specialized camera surveys for the ornate shrew in accordance with the most recent and accepted guidance, will set up camera traps at the Main Drain Canal and Goose Lake Canal bridge locations. Stations will be operated for at least seven nights (Cypher *et al.*, 2023).
- 2) *Restrict Staging Area Locations*. No staging of equipment, vehicles, or materials will occur at or around the Main Drain Canal or Goose Lake Canal.
- 3) *Construction Timing*. Caltrans will confine work at the Main Drain Canal and Goose Lake Canal bridges to the period when the canals are dry.
- 4) *Use of Hand Tools*. For any vegetation that needs to be removed at the Main Drain Canal and Goose Lake Canal bridge locations, Caltrans will remove all vegetation by hand to allow ornate shrews to move out of the way and leave the site unharmed.
- 5) *Monitoring*. A qualified biologist will be present on-site during all vegetation removal and ground-disturbance at both the Main Drain Canal and Goose Lake Canal bridge locations (for both daytime and nighttime work). The biologist also will monitor the canal banks and channels before any heavy equipment/machinery enter them.

Leopard lizard:

- 1) *Preconstruction Survey*. No more than one year prior to the start of ground disturbance and/or construction, a qualified biologist will conduct a protocol-level survey for the leopard lizard in all suitable habitat within the project footprint (i.e., west of postmile 37.5), in accordance with the most recent and accepted survey protocols and/or guidance. If the leopard lizard is detected on-site either during surveys or during construction, Caltrans will stop work where the species occurs and contact the Service to discuss possible initiation of formal consultation.
- 2) *Monitoring*. A qualified biologist will be on-site to monitor initial ground disturbance in all areas with suitable habitat for the leopard lizard. If the species is observed during the

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preconstruction survey or at any other time during construction, the biologist will remain on-site daily to monitor the species.

Determination

Habitat and land cover types within the 769.5-acre action area consist of agricultural lands (orchards, vineyards, and irrigated row and field crops); intermixed annual grasslands and alkali desert scrub; fresh emergent wetlands; saline emergent wetlands; disturbed, non-native annual grasslands; valley foothill riparian; and paved roadway. The action area also contains several canals, including the Main Drain and Goose Lake Canals, which flow underneath SR 46 at postmiles 34.63 and 35.13, respectively. Starting east of postmile 36.1 to the end of the project at postmile 46.0, most of the habitat within and adjacent to the action area (except for between postmiles 36.85-37.45) consists of agricultural lands and rural development so the majority of the action area is highly disturbed and provides no suitable habitat for any of the species.

Within the action area, construction work will temporarily disturb a total of 0.33 acre of habitat. This total consists of 0.017 acre of intermixed grassland/alkali desert scrub and fresh emergent wetland associated with excavating four abutments at the Main Drain and Goose Lake Canal Bridges, 0.034 acre of agricultural land due to staging, 0.1 acre of intermixed grassland/alkali desert scrub and agricultural habitats due to installing the roadway signs, and 0.18 acre of agricultural land due to working on the maintenance vehicle pullout and Transportation Management System elements. Only the bridge sites and some of the road sign locations contain habitat that is suitable for the species. Construction will result in no permanent loss of habitat.

Habitat in the action area is already highly fragmented due to the presence of SR 46. No new hardscape will be added during construction (i.e., no road widening) so the project is unlikely to contribute to further fragmentation, reduce existing habitat connectivity, or hinder species movement in the area. The action area experiences an elevated level of ongoing disturbance (e.g., ground, noise, visual) from 1) high-volume traffic on the highway as well as vehicle activity along the shoulders; 2) routine highway maintenance in the right-of-way; and 3) human activity associated with agriculture and rural development, all of which contribute to the impaired quality of the habitat. This disturbance has resulted in areas of compacted soils in the right-of-way as well as sections of bare ground, particularly in areas closer to the roadway where higher levels of vehicle traffic occur. Accordingly, the footprint is less likely to provide consistently usable foraging or denning habitat for any of the species. Therefore, the anticipated small-scale, temporary construction impacts to limited suitable habitat are unlikely to result in adverse effects to the kit fox, giant k-rat, Tipton k-rat, ornate shrew, and leopard lizard.

Kit fox, giant-rat, Tipton k-rat, and leopard lizard. Adverse effects to these four species from daytime and nighttime interactions with project equipment, structures, crews, and construction activities (e.g., vehicle strikes, movement barriers, and disturbances due to increased noise, vibrations, and lighting) are unlikely to occur because:

- 1) The proposed construction activities will be small in scale and scope and low intensity. The extent of off-pavement work will be very minimal.
- 2) Caltrans' biologists detected no kit foxes, no potential dens, and no other kit fox sign such as scat, tracks, dirt aprons, and prey remains during recent general wildlife surveys of the action area in January, February, and July 2023.
- 3) The action area is not located in any of the core or satellite recovery units for the kit fox, which are identified as the distinct geographic units supporting kit fox populations

throughout its historical range (Service, 2020c). Therefore, the likelihood is low that the kit fox is present in the project footprint. Even if the species does occur, it is far more likely to move through the footprint than inhabit or use the area to den/forage, so any occurrence is likely to be transitory.

- 4) There are six major geographic units where the giant k-rat is still known to occur; these units represent the current range of the species (Service, 2020b). The action area is located far outside of these units, so the giant k-rat is unlikely to be present on-site.
- 5) There are no recent or historical records of the giant k-rat within five miles of the action area (Database, 2024).
- 6) Although the biologists detected burrows, they observed no other sign specific to giant k-rat and Tipton k-rat presence (e.g., tail drag markings and dust baths near burrow entrances) or to leopard lizard presence. They found only a handful of scattered burrows in the canal beds, but those at the Main Drain Canal likely already have been disturbed/eliminated by recent non-Caltrans activities (vegetation clearing and water conveyance). The biologists also observed a cluster of burrows outside of the project footprint in the adjoining lands between postmiles 36.85 and 37.5, but these were larger and more consistent with use by California ground squirrels (*Otospermophilus beecheyi*). These burrows will not be disturbed by construction since they are located more than 50 feet away from the pavement and the work along this segment will be confined to the paved roadway.
- 7) Even though the Main Drain Canal, Goose Lake Canal, and other areas west of postmile 37.5 contain suitable grassland/alkali desert scrub habitat for the leopard lizard, giant k-rat, and Tipton k-rat, most areas were too densely vegetated at the time of Caltrans' various surveys in 2023 to be suitable for any of the species.
- 8) Caltrans will implement its proposed conservation measures, which will avoid potential effects to the species.

The Service concurs with Caltrans' conclusion that the action may affect but is not likely to adversely affect the kit fox, giant k-rat, Tipton k-rat, and leopard lizard because the potential for the action to affect these species is discountable. This conclusion is based on the reasons described in this section.

Ornate shrew. The ornate shrew was last detected in the vicinity of the action area in 2017 (Service, 2020a), approximately 0.29 mile north of SR 46, between the Main Drain and Goose Lake Canals. The species also was detected west of the action area in 2014 and 2017 at the Kern River Overflow Canal near the intersection of SR 46 and Interstate-5 (Service, 2020a). So, it is likely that the species still occurs in this general area.

Habitat around the Main Drain Canal and Goose Lake Canal is suboptimal and changes in water flows to the site since about 2017 have likely eliminated most of the wetland areas that provide suitable habitat for the ornate shrew (Service, 2020a). The Main Drain Canal at SR 46 is located adjacent to a rural residential property, so there is considerable human disturbance in this area. Most of the vegetation in the Main Drain Canal (largely dense stands of tumbleweed) was removed as of April 2023 as a result of non-Caltrans activities, so there is little vegetative cover left to provide protection for the species from predators and to support their invertebrate prey source. The Goose Lake Canal, which is densely vegetated, is situated within a more natural area, so likely provides higher quality habitat for the species. However, the Goose Lake Canal and Main Drain Canal are both man-made and normally are kept dry where they intersect with SR 46, so typically they do not provide the habitat elements near which the ornate shrew most

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commonly has been found: open water with a dense vegetative understory or deep layer of leaf litter with moist soils and dense cover (Service, 2020a).

Caltrans' biologists observed no water in the canals during various surveys they conducted in January, February, April, and June 2023. But Caltrans learned that later in 2023, the local water storage district used the Main Drain Canal to deliver water to customers north of the canal's intersection with SR 46. Normally this canal is not used for water delivery, but an abundance of water that year exceeded the water district's normal conveyance system. The canal will return to a dry state once water delivery is no longer necessary.

Caltrans proposes to work in and around the canals when they are dry, hence the ornate shrew is less likely to occupy or use these areas in this state; furthermore, since the bridge abutment work at both sites will occur underneath the bridge structures where there is little low-lying vegetation present, suitable cover habitat for the ornate shrew is already limited. Additionally, the proposed work activities at the bridge/canal sites will be small in scale and low intensity. And the extent of impacts occurring off-pavement will be very small and only temporary in nature. Caltrans also will implement additional conservation measures, such as removing any remaining vegetation by hand, to ensure that there are no adverse effects to the species.

The Service concurs with Caltrans' conclusion that the action may affect but is not likely to adversely affect the ornate shrew because the potential for the action to affect this species is discountable. This conclusion is based on the reasons described in this section.

Closing Statement

This concludes the Service's review of Caltrans' action to construct the Semitropic CAPM Project and the Service's consideration of the project's effects on the kit fox, giant k-rat, Tipton k-rat, ornate shrew, and leopard lizard. No further coordination with the Service under the Act is necessary at this time. If 1) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered, 2) if the action is subsequently modified in a manner that causes an effect to listed species or critical habitat that was not considered in this written concurrence, or 3) if a new species is listed or critical habitat is designated that may be affected by the identified action, then reinitiation of consultation will occur. Note that take of listed species is not exempted from the prohibitions described under section 9 of the Act. If conditions change so that the project may adversely affect listed species, initiation of formal consultation, as provided in 50 CFR 402.14, is required.

If you have questions regarding this letter, please contact Jen Schofield (jen_schofield@fws.gov) or me (patricia_cole@fws.gov) by email or at (916) 414-6544.

Sincerely,

**PATRICIA
COLE**

Patricia Cole

Supervisor, San Joaquin Valley Division

Digitally signed by
PATRICIA COLE
Date: 2024.02.07 11:45:35
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cc:

Mary Trask, California Department of Fish and Wildlife Region 4, Fresno, California.
Rails, Roads, and Renewables Program, California Department of Fish and Wildlife Region 4,
Fresno, California.

Literature Cited

- Cypher, B., L. Saslaw, N. Deatherage, T. Westall, E. Kelly, L. Parker, and J. Maldonado. 2023. Buena Vista Lake Shrew Conservation: Locating Extant Populations using Non-Invasive Survey Techniques and Developing Genetic Tools to Facilitate Population Studies. California State University- Stanislaus, Endangered Species Recovery Program. Stanislaus, California.
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- [Service] U.S. Fish and Wildlife Service. 2020b. Species Status Assessment Report for the Giant Kangaroo Rat (*Dipodomys ingens*). Version 1.0. August 2020.
- [Service] U.S. Fish and Wildlife Service. 2020c. Species Status Assessment Report for the San Joaquin kit fox (*Vulpes macrotis mutica*). Version 1.0. August 2020.

3.2.2 State Office of Historic Preservation Letter of Concurrence



State of California • Natural Resources Agency

Gavin Newsom, Governor

DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION

Armando Quintero, Director

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April 11, 2024

VIA EMAIL

In reply refer to: FHWA _2024_0312_001

Ms. Aubrie Morlet, Branch Chief
Southern San Joaquin Valley Cultural Resources Branch
Caltrans District 6
2015 East Shields Avenue, Suite A-100
Fresno, CA 93726-5428

Subject: Determinations of Eligibility for the Proposed Semitropic CAPM Project, Kern County, CA

Dear Ms. Morlet:

Caltrans is initiating consultation regarding the above project in accordance with the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation, the California State Historic Preservation Officer (SHPO), and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as)*, *Pertains to the Administration of the Federal-Aid Highway Program in California (PA)*, the California Environmental Quality Act (CEQA) and the January 2015 *Memorandum of Understanding Between the California Department of Transportation and the California State Historic Preservation Office Regarding Compliance with Public Resources Code Section 5024 and Governor's Executive Order W-26-92 (5024 MOU)*. As part of your documentation, Caltrans submitted a Historic Property Survey Report (HPSR), an Archaeological Survey Report, and a Historic Resources Evaluation Report for the proposed project.

Caltrans proposes to perform preventative maintenance on State Route (SR) 46 between post miles (PM) 33.20 and 46.00 funded by the Capital Preventive Maintenance (CAPM) program. Improvements will include replacing existing travel lane and shoulder pavement, repairing two bridge decks, upgrading bridge rails, repairing spalling concrete and placing waterproofing membrane at the wing walls, replacing guardrails, roadway signs, and upgrade Transportation Management System (TMS) elements to meet current standards, and installation of a maintenance vehicle pullout to access the Changeable Message Sign (CMS).

Consultation and identification efforts resulted in the identification of two architectural resources not previously evaluated for eligibility for listing on the National Register of Historic Places (NRHP). Two additional architectural resources, Bridge Number 50 0027

Ms. Morlet
April 11, 2024
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and Number 50 0028, have been previously determined to be Category 5 bridges (not eligible for NRHP) and it has been determined that these evaluations remain valid.

Nine archaeological resources, including one ethnographic location, are within the project study area. The ethnographic location is associated with one of the identified archaeological resources. Five archaeological resources intersect SR 46 and are within the APE. There will be no ground-disturbing activities in any location identified as having cultural resources. Pedestrian survey of the project postmiles did not identify any previously unrecorded prehistorical, or historical archaeological resources. All five of the archaeological sites, including the ethnographic location, are being considered eligible for inclusion in the NRHP for the purposes of this project only because they will be protected in their entirety from any potential effects through the establishment of an Environmentally Sensitive Area (ESA), in accordance with Section 106 PA Stipulation VIII.C.3.

Pursuant to Stipulation VIII.C.6 of the Section 106 PA, Caltrans requests concurrence that the following properties are not eligible for the National Register of Historic Places (NRHP):

- Main Drain Canal
- Goose Lake Canal

Based on review of the submitted documentation, I concur with the above determinations.

If you have any questions, please contact Natalie Lindquist at natalie.lindquist@parks.ca.gov.

Sincerely,



Julianne Polanco
State Historic Preservation Officer

3.2.3 Native American Heritage Commission List of Native American Tribes in the Project Area



STATE OF CALIFORNIA

Gavin Newsom, Governor

NATIVE AMERICAN HERITAGE COMMISSION

January 10, 2023

Travis Samonas
California Department of Transportation

Via Email to: Travis.Samonas@dot.ca.gov

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Sara Dutschke
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COMMISSIONER
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Nomlaki

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Luiseño

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
[Vacant]

COMMISSIONER
[Vacant]

EXECUTIVE SECRETARY
Raymond C. Hitchcock
Miwok/Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

Re: Semitropic Capital Preventative Maintenance (CAPM) 06-1A680 Project, Kern County

Dear Mr. Samonas:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Cameron.vela@nahc.ca.gov.

Sincerely,

Cameron Vela

Cameron Vela
Cultural Resources Analyst

Attachment

Native American Heritage Commission
 Native American Contact List
 Kern County
 1/13/2023

<p>Big Pine Paiute Tribe of Owens Valley Sally Manning, Environmental Director P. O. Box 700 Big Pine, CA, 93513 Phone: (760) 938 - 2003 s.manning@bigpinepaiute.org</p>	Paiute-Shoshone	<p>Santa Rosa Rancheria Tachi Yokut Tribe Leo Sisco, Chairperson P.O. Box 8 Lemoore, CA, 93245 Phone: (559) 924 - 1278 Fax: (559) 924-3583</p>	Southern Valley Yokut
<p>Big Pine Paiute Tribe of the Owens Valley Danelle Gutierrez, Tribal Historic Preservation Officer P.O. Box 700 Big Pine, CA, 93513 Phone: (760) 938 - 2003 Fax: (760) 938-2942 d.gutierrez@bigpinepaiute.org</p>	Paiute-Shoshone	<p>Tejon Indian Tribe Octavio Escobedo, Chairperson P.O. Box 640 Arvin, CA, 93203 Phone: (861) 834 - 8566 oescobedo@tejonindiantribe-nsn.gov</p>	Kitanemuk
<p>Big Pine Paiute Tribe of the Owens Valley James Rambeau, Chairperson P. O. Box 700 Big Pine, CA, 93513 Phone: (760) 938 - 2003 Fax: (760) 938-2942 j.rambeau@bigpinepaiute.org</p>	Paiute-Shoshone	<p>Tejon Indian Tribe Colin Rambo, P.O. Box 640 Arvin, CA, 93203 Phone: (861) 834 - 8566 colin.rambo@tejonindiantribe-nsn.gov</p>	Kitanemuk
<p>Chumash Council of Bakersfield Julio Quair, Chairperson 729 Texas Street Bakersfield, CA, 93307 Phone: (861) 322 - 0121 chumashtribe@sbloglobal.net</p>	Chumash	<p>Tule River Indian Tribe Neil Peyron, Chairperson P.O. Box 589 Porterville, CA, 93258 Phone: (559) 781 - 4271 Fax: (559) 781-4610 neil.peyron@tulerivertribe-nsn.gov</p>	Yokut
<p>Kitanemuk & Yowlumne Tejon Indians Delia Dominguez, Chairperson 115 Radio Street Bakersfield, CA, 93305 Phone: (826) 339 - 6785 2deedominguez@gmail.com</p>	Kitanemuk Southern Valley Yokut	<p>Tule River Indian Tribe Kerri Vera, Environmental Department P. O. Box 589 Porterville, CA, 93258 Phone: (559) 783 - 8892 Fax: (559) 783-8932 kerri.vera@tulerivertribe-nsn.gov</p>	Yokut
		<p>Tule River Indian Tribe Joey Garfield, Tribal Archaeologist P. O. Box 589 Porterville, CA, 93258 Phone: (559) 783 - 8892 Fax: (559) 783-8932 joey.garfield@tulerivertribe-nsn.gov</p>	Yokut

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.34 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Semitropic Capital Preventative Maintenance (CAPM) 06-1A680 Project, Kern County.

Native American Heritage Commission
Native American Contact List
Kern County
1/13/2023

Xolon-Salinan Tribe

Donna Haro, Tribal Headwoman
P. O. Box 7045 Salinan
Spreckels, CA, 93962
Phone: (925) 470 - 5019
dhxolonaakletse@gmail.com

Xolon-Salinan Tribe

Karen White, Chairperson
P. O. Box 7045 Salinan
Spreckels, CA, 93962
Phone: (831) 238 - 1488
xolon.salinan.heritage@gmail.com

yak tityu tityu yak tilhini –

Northern Chumash Tribe

Mona Tucker, Chairperson
660 Camino Del Rey Chumash
Arroyo Grande, CA, 93420
Phone: (805) 748 - 2121
olivas.mona@gmail.com

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Semitropic Capital Preventative Maintenance (CAPM) 06-1A680 Project, Kern County.

PROJ-2023-
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Appendix A Title VI Policy Statement

CALIFORNIA STATE TRANSPORTATION AGENCY

GAVIN NEWSOM, GOVERNOR

California Department of Transportation

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



September 2023

NON-DISCRIMINATION POLICY STATEMENT

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

Caltrans will make every effort to ensure nondiscrimination in all of its services, programs and activities, whether they are federally funded or not, and that services and benefits are fairly distributed to all people, regardless of race, color, or national origin. In addition, Caltrans will facilitate meaningful participation in the transportation planning process in a non-discriminatory manner.

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

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 639-6392 or visit the following web page: <https://dot.ca.gov/programs/civil-rights/title-vi>.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Civil Rights, at PO Box 942874, MS-79, Sacramento, CA 94274-0001; (916) 879-6768 (TTY 711); or at Title.VI@dot.ca.gov.

A handwritten signature in black ink, appearing to read 'Tony Tavares', written over a white background.

TONY TAVARES
Director

"Provide a safe and reliable transportation network that serves all people and respects the environment"

List of Technical Studies Bound Separately

Air Quality Memorandum: July 2023

Noise Compliance Memorandum: July 2023

Water Quality Memorandum: July 2023

Energy Memorandum to file: June 2023

Natural Environmental Study (Minimal Impacts): September 2023

Biological Assessment: October 2023

Wetland Assessment: January 2023

Preliminary Location Hydraulic Study: January 2024

Historic Property Survey Report: May 2024

Archaeological Survey Report: March 2024

Historic Resource Evaluation Report: March 2024

Initial Site Assessment Compliance Memorandum: May 2023

Visual Assessment Memorandum: October 2023

Paleontological Identification Report Compliance Study: June 2023

Climate Change: January 2024

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

Judith Lopez, Senior Environmental Scientist
District 6 Environmental Division
California Department of Transportation
2015 East Shields Avenue, Suite 100, Fresno, California 93726

Or send your request via email to: judith.lopez@dot.ca.gov

Or call Judith Lopez at: 559-240-5068

Please provide the following information in your request:

Kern Semitropic CAPM
On State Route 46 in Kern County
06-KER-46-PM 33.2-46.0
EA: 06-1A680
Project ID number 0620000074